Eurasian Studies in Business and Economics 2/2 *Series Editors:* Mehmet Huseyin Bilgin · Hakan Danis

Mehmet Huseyin Bilgin Hakan Danis Ender Demir Ugur Can *Editors*

Business Challenges in the Changing Economic Landscape - Vol. 2

Proceedings of the 14th Eurasia Business and Economics Society Conference





Eurasian Studies in Business and Economics 2/2

Series Editors

Mehmet Huseyin Bilgin, Istanbul, Turkey Hakan Danis, San Francisco, CA, USA

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Proceedings of the 14th Eurasia Business and Economics Society Conference



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Preface

We are excited to organize our 14th Conference on October 23, 24, and 25, 2014, at Hotel Silken Diagonal in Barcelona, Spain. We are honored to have received top-tier papers from distinguished scholars from all over the world. We regret that we were unable to accept more papers than we have. In the conference, 437 papers will be presented and 745 colleagues from 61 countries will attend the conference.

We are pleased to announce that distinguished researchers *Jonathan Batten* and *José-Luis Peydró* will join the conference as keynote speakers.

Prof. Batten is professor of finance in the Department of Banking and Finance at *Monash University*, Australia. He is a well-known academician who has published articles in many of the leading economics and finance journals and currently serves as the editor of *Emerging Markets Review* and associate editor of the *Journal of Banking & Finance*, *Journal of the Asia Pacific Economy*, and *Research in International Business and Finance*.

Prof. Peydró is a prominent academician specializing in the fields of banking, systemic risk, financial crises, and monetary policy. He is currently professor at *Universitat Pompeu Fabra*, part-time professor of banking and finance at *Cass Business School*, *City University* (London), advisor at *Bank of Spain*, and affiliated professor at *Barcelona Graduate School of Economics*. Previously, he was a visiting scholar at the *University of Chicago* and consultant at the *Federal Reserve Board* and *International Monetary Fund*. He also serves as the associate editor of the *Review of Finance* and associate editor of the *Spanish Review of Financial Economics*. His research has appeared in many of the leading economics and finance journals such as *Econometrica*, *Review of Financial Studies*, *Journal of Finance*, *American Economic Review*, and *Journal of International Economics*.

EBES conferences have been an intellectual hub for academic discussion for our colleagues in the areas of economics, finance, and business. Participants have found an excellent opportunity for presenting new research, exchanging information, and discussing current issues. We believe that our future conferences will improve further the development of knowledge in our fields. In addition, based on the contribution of the paper to the field, the *EBES Award Committee* has selected

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one of the papers for the *Best Paper Award*. The Best Paper Award winner will be announced during the conference.

We would like to thank all presenters, participants, board members, and keynote speakers and are looking forward to seeing you all again at the upcoming EBES conferences.

Best regards,

Istanbul, Turkey

Ender Demir

Eurasia Business and Economics Society (EBES)

Eurasia Business and Economics Society (EBES) is a scholarly association for scholars involved in the practice and study of economics, finance, and business worldwide. EBES was founded in 2008 with the purpose of not only promoting academic research in the field of business and economics but also encouraging the intellectual development of scholars. In spite of the term "Eurasia," the scope should be understood in its broadest term as having a global emphasis.

EBES aims to bring worldwide researchers and professionals together through organizing conferences and publishing academic journals and to increase economics, finance, and business knowledge through academic discussions. To reach its goal, EBES benefits from its executive and advisory boards which consist of well-known academicians from all around the world. Every year, with the inclusion of new members, our executive and advisory boards became more diverse and influential. I would like to thank them for their support.

EBES conferences and journals are open to all economics, finance, and business scholars and professionals around the world. Any scholar or professional interested in economics, finance, and business around the world is welcome to attend EBES conferences. Since 2012, EBES has been organizing three conferences every year: one in Istanbul (possibly in the early summer) and two in Europe or Asia (possibly in January and in fall).

In 2011, EBES began publishing two academic journals. One of those journals, Eurasian Business Review—EBR, is in the fields of industry and business, and the other one, Eurasian Economic Review—EER, is in the fields of economics and finance. Both journals are published biannually and we are committed to having both journals included in SSCI as soon as possible. Both journals are published by Springer and currently indexed in the Cabell's Directory, Ulrich's Periodicals Directory, RePEc, EBSCO Business Source Complete, ProQuest ABI/Inform, IBSS: International Bibliography of the Social Sciences, and EconLit. In 2011, EBES also started to publish the EBES Anthology annually to give opportunity for the papers presented at the EBES conferences.

Furthermore, in 2014 EBES partnered with Springer which has started to publish EER and EBR, along with a new conference proceedings series: *Eurasian Studies in*

Business and Economics. The new series includes selected papers from the EBES conferences and expects its first title to be released early next year. The proceedings are already indexed in the Thompson Reuters Proceedings Index and both EBES and the Springer expect that the series will benefit greatly from the partnership.

On behalf of the EBES officers, I sincerely thank you for your participation and look forward to seeing you at our future conferences. In order to improve our future conferences, we welcome your comments and suggestions. Our improvement is only possible with your valuable feedback and support.

I hope you enjoy the conference and Barcelona!

With my very best wishes,

Jonathan Batten

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Part I Management

Comparative Research on Leadership Profile of Estonian and Finnish Female Top Executives

Mari Kooskora and Marta Piigli

Abstract Despite the progress made at board level with female representation on average in EU, there still remains a gap between those in the top of the list and the last. Within the EU, Finland is leading the way with more than 29.1 % of women on boards; yet neighboring country Estonia, with both language and cultural proximity with 8.1 % is far lower than EU average of 16.6 %. In order to identify the reasons for the gap among the member states a high level comparative research was conducted on the example of Estonia and Finland with the focus on high end top female executives, managing companies with an international scope with a turnover up to billion euros and thousands of employees. The research set out to identify the similarities and differences in the context of Estonian and Finnish top female executives with the aim to assess whether the leadership profile is influenced by the context and what are the possible effects on their leadership profile. In order to reach the study objectives, a mixed-method research was conducted. The results of the in-depth interviews supported by the leader's personality profile test analysis revealed an overlapping leadership profile of the two nationalities, with significant differences due to the historical background.

Keywords Leadership • Female leadership studies • Estonia–Finland historical differences • Personality profile • Empirical research • Combined research methodology

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1 Introduction

Leadership is said to be one of the most observed and least understood phenomenon on earth (e.g. Burns 1978) having presented a major challenge to researchers and generating as many definitions as there are authors who have covered the subject (Nirenberg 2001). While contemporary views of good leadership encourage teamwork and collaboration and emphasize the ability to empower, support, and engage employees (Eagly and Carli 2003), we can see an increasing interest in female leadership (see Rosener 1995; Oakley 2000; Eagly 2007; Prime et al. 2009; Zenger and Folkman 2012).

It can be argued that although men and women are entering the labour force in equal numbers the majority of top management positions still belong to men. Studies show that women account more than 50 % of the labor force in most of the European countries, Japan and U.S already since 1997 reaching to 58.3 in 2007. Moreover, the proportion of women between the ages of 25 and 54 in the EU who are in paid employment has continued to increase over the past 15 years before consolidating at just above 70 % since 2007 (Eurostat 2013b). Whereas making half of the work force and even more than half of university graduates both in European Union (EU) and the United States (US) there are many women in the lower level of organizations, however, the higher the level, the smaller the percentage of women can be found, eventually making only a 3 % at the executive level (European Commission 2010, 2012, 2014).

Although numerous studies have proven women performance levels to be at least the same if not better than their male counterparts (Eagly and Carli 2003; Eagly 2007; Ibarra and Obodaru 2009; Zenger and Folkman 2012); and that having more women on the corporate boards increases the companies' overall results (Yoy et al. 2007; Ozanian 2010), women advancement is still lagging behind (Carter and Wagner 2011). We can argue, that while an increasing number of women are becoming well educated and have positions at all hierarchical levels in organizations, 38 % of businesses do not have any women in senior management roles, and that figure has remained practically unchanged since 2004 (Sealy and Vinnicombe 2012). For example, though women comprised over a third of the workforce in the United States, they held a mere 14.3 % of executive officer positions at Fortune 500 companies and only 8.1 % of executive officer top-earner positions. Of the FTSE 100, women held only 15 % of board seats and 6.6 % of executive positions in 2012 (see Grant Thornton International 2013). Moreover, in the Asia Pacific region, the percentage of women on boards was about half that in Europe, Australia and North America (Gladman and Lamb 2013).

The fact that the majority of top management positions in almost all countries are still primarily held by men and female managers tend to be concentrated in lower management positions and hold less authority than men, has however, gained significant prominence especially in recent years. We can see this in increasing number of research conducted and in a range of initiatives countries and companies are pursuing to increase women's representation into senior leadership (Catalyst 2014).

However, in spite of those initiatives, the latest EU-wide figure assures that men still rule the boardrooms of Europe, holding over 82 % of board positions in large, publicly listed companies and there are only five EU countries—Finland, France, Latvia, Sweden and the Netherlands—where women account for at least a quarter of board members, and fewer than 3 % of Europe's largest companies have a woman CEO (Catalyst 2014). Within EU, the number of women on boards is still a mere 16.6 % with an annual increase rate of 1.7 percentage points and despite the progress made at board level with female representation on average in EU, there still remains a gap between those in the top of the list and the last (European Commission 2013a; Eurostat 2013a).

Furthermore, a significant disparity is seen between two neighboring countries with both language and cultural proximity, as Finland is leading the way with more than 29.1 % of women on boards; yet in Estonia, with 8.1 % is far lower than EU average of 16.6 % (European Commission 2013a, b). Moreover, while in Finland there is at least one woman on the boards of all major companies, more than half of companies in Estonia have no women on their boards.

In order to identify the reasons for this gap among these two EU member states we conducted a comparative mixed-method research among Estonian and Finnish high end top female executives who are managing companies with an international scope with a turnover up to billion euros and thousands of employees. Our research set out to identify the similarities and differences in the context of Estonian and Finnish top female executives with the aim to find out whether there are differences in their leadership profiles and in which extent these leaders are influenced by the historical and cultural contexts.

We can argue that the majority of research on the topic of female leaders has addressed different obstacles in career building e.g. glass ceiling or the labyrinth metaphor (Bass 1999; Carli and Eagly 2001; Eagly and Carli 2007; Pesonen et al. 2009); the presence of pay gap (Perry and Gundersen 2011) or focusing on the comparison of leadership style differences of male and female leaders (Vinnicombe and Singh 2002; Manning 2002; Eagly et al. 2003; Prime et al. 2009; Lopez-Zafra et al. 2012; Katila and Eriksson 2013). However, with leadership gender differences being in frequent discourse, only a few (Caliper 2005; Elenurm and Vaino 2011; Burke and Attridge 2011) have concentrated solely on those female executive examples who have reached the top with the aim of analyzing their leadership style and the reason for choosing one over another. Thus the uniqueness of our study rests in the scope of the research and the perspective from which the researched issues are viewed.

Our discussion starts with a brief overview of studies conducted on leadership and about the main issues that have been dwelt in female leadership research. This is followed by describing the research methodology and main results we got by conducting a study among a sample of female top executives in Finland and Estonia.

2 Studies on Leadership and Female Leadership

Leadership has been defined, constructed and researched from a vast number of conceptual perspectives (Klenke 1993) including trait (McCrae and Costa 1987) and contingency theories (Tannenbaum and Schmidt 1973; Fiedler 1964), situational (Hersey and Blanchard 1969), path-goal (House 1971), behavioural (McGregor 1960) and managerial approaches (Blake and Mouton 1964), transactional, transformational, charismatic and self-leadership (Avolio et al. 1991; Bennis and Nanus 1985; Burns 1978).

Throughout many decades researchers and practitioners have offered a variety of definitions and emphasised different aspects within the leadership process (e.g., Burns 1978; Ciulla 2004; Rost 1991; Yukl et al. 2002). Leadership has been described as an art by Mary Parker Follett in 1920s, (Graham 1995), character (Drucker 1999), relationship (Kouzes and Posner 1987), vision (Bennis 1994, 2009), responsibility (Maak and Pless 2006), and challenge (London 1999). It can be also approached as a process of social interaction (Humphrey et al. 2008) that relies on the character (Drucker 2007), behaviour and traits of the leader (Horner 1997), includes selecting the right people (Pfeffer and Veiga 1999) and is the result of the work and cooperation of the group members (Crevani et al. 2010) where the relationship is built on trust between the leader and the followers (Kouzes and Posner 2012; Hurley 2012).

Furthermore, the discussions about leadership and considerable amount of the contemporary research in leadership have focused on the transformational leadership style (Burns 1978; Yammarino and Atwater 1997; Antonakis et al. 2009; Burke and Attridge 2011; Hautala 2005; Kouzes and Posner 2012) lately tackling the areas of well-being (Huhtala et al. 2011), ethical and responsible leadership (Trevino et al. 2003; Thorne 2010; Kooskora 2010, 2012), psychological capital (Luthans et al. 2010) and gender differences in leadership styles (Eagly et al. 2003; Lopez-Zafra et al. 2008). While contemporary views of good leadership encourage teamwork and collaboration and emphasise the ability to empower, support, and engage employees (Eagly and Carli 2003), we can see an increasing interest in female leadership (see Rosener 1995; Oakley 2000; Caliper 2005; Eagly 2007; Prime et al. 2009; Burke and Attridge 2011; Zenger and Folkman 2012).

Additionally, low figures of women in high-up positions have generated studies analyzing the possible reasons behind the low number. Research on the topic of female managers has addressed different obstacles, e.g. the glass ceiling (see Bass and Avolio 1994; Townsend and Wasserman 1997; Bartol et al. 2003; Weyer 2007) or the labyrinth metaphor (Eagly and Carli 2007), the presence of pay gap (Catalyst 2014) or focusing on the comparison of leadership style differences of male and female leaders (Oakley 2000; Stelter 2002).

Moreover, the reasons for women's poor representation in top management have been studied all over the world and the number of studies has grown significantly during the recent years. Accruing from works published decades ago by Donnell and Hall (1980), Dobbins and Platz (1986), Rosener (1990), Gallese (1991),

Gardner et al. (1994), Adler (1997), Oakley (2000) and several others, this field has attracted attention world-wide. Number of studies have been conducted globally (e.g. Oakley 2000; Schein 2001; Stelter 2002; Weyer 2007), by regions (Mathur-Helm 2006) and also focusing on different countries, for example, US (Mattis 2000); Canada (Burke and McKeen 1996); UK (Singh and Vinnicombe 2000); Ireland (Cross and Linehan 2006); Germany (Holst 2006); Australia (Nesbit and Seeger 2007); Malaysia (Ismail and Ibrahim 2008), Sudan (Kargwell 2008), China (Aaltio and Huang 2007). Whereas in all those findings the common position is that women do not reach senior management and highest top because they face more obstacles to be overcome than men.

Considering the situation in two countries under discussion Estonia and Finland, we can see that in Estonia, Bass' (1999) suggestion about women having to put in an extra effort is supported by previous research where Elenurm and Vaino (2011) concluded that females have to prove themselves more than males to advance. They also added that prejudice and stereotyping as well as family responsibilities were obstacles for female executives in Estonia. The low number of female executives in Estonia may also be consequent to the change in the political ground as the transition from a control-led to a market-based economy has impacted Estonian women more negatively than Estonian men (Alas and Rees 2005). Finland on the other hand, is an advanced society in terms of equality between men and women, suggesting that Finland has a strong tradition of egalitarianism, where gender balance is explicitly on the governmental agenda (Pesonen et al. 2009).

Deriving from these ideas we conduct a study among female top executives in Estonia and Finland and in the next section we present our research methodology, introduce the Finnish version of the LPI and the development of the semi-structured interviews we used as the research tools.

3 Research Methodology and Design

The purpose of our study is to identify the similarities and differences in the leadership styles of female executives in Estonia and Finland and to define their predominant leadership profile. The Finnish and Estonian perspective is analyzed through a questionnaire results spectrum as well as analyzed in light of the qualitative interview data. Our study focuses on Estonian and Finnish female executives who are managing companies of international scope with up to billion euro turnover and thousands of employees. The target respondents of the study are top female executives/senior leaders of Estonian and Finnish medium and large privately-held and public profit-making companies. Pre-defined respondents are regionally publicly acknowledged leaders who are leading regionally commonly known successful companies or business units. The segmentation into two groups allows comparing the results of both Estonian and Finnish female leaders analyzing possible differences and similarities of the two groups and defining a possible overall leadership profile of those female leaders.

A combined research method is used in the study to cover different research aspects. The leadership style of the sample respondents is analyzed by the Finnish version (Hautala 2005) of Leadership Practices Inventory (LPI) allowing to measure different factors of transformational leadership profile, and to define the leaders' leadership profile.

The original version on the LPI (Posner and Kouzes 1988) has been developed with the aim to find the personal best of leaders by analysing what do the leaders do when they are at their best as a leader. In their studies, Kouzes and Posner (1987) note base similarities of leadership behavior, which emerge when people are accomplishing extraordinary things in different organizations. The authors (ibid) discover that the executives who persuade others to join them follow a certain path: the vision-involvement-persistence (VIP) model and identify five fundamental practices that enable leaders to get extraordinary things done—challenging the process, inspiring a shared vision, enabling others to act, modelling the way, and encouraging the heart. By examining the LPI's reliability and validity in developing their scale, Kouzes and Posner (2012) have found LPI to be internally reliable; the six statements of each leadership practice highly correlated with one another; the test-retest reliability high; the five scales generally independent; and the LPI having both face validity and predictive validity (Judge and Piccolo 2004).

A modified Finnish version of LPI (Hautala 2005) is prepared to be adapted to Finnish culture. In the development of the Finnish model data was gathered from a total of 900 leaders and subordinates. Compared to the original LPI test the factors load differently in the Finnish sample and the items in the Finnish test are reduced to 25 questions from initial 30 questions. In the Finnish version the enabling behavior included items from 'encouraging the heart' and the rewarding behaviour is experienced differently than in the original version. In more recent studies Kouzes and Posner (2012) indicate that 'encouraging the heart' has two sub-dimensions: (a) recognising contributions and (b) celebrating accomplishments. In Finland 'recognising contributions' loaded in 'enabling' and 'celebrating accomplishments' form a different factor which is named 'rewarding'. The differences are found more inside the dimensions than in the overall order of factors (Hautala 2005).

The leadership style in our study is analyzed by using the Finnish version of LPI and in the context of transformational leadership and although we do not suggest that transformational leadership style or Kouzes and Posner's (2012) five practices of leadership are definite equals of good leadership, earlier research (Burns 1978; Yammarino and Atwater 1997; Antonakis et al. 2009; Hautala 2005) has supported the results, moreover, previous contemporary research have found female leaders to be more likely to use transformational leadership style.

We maintain, that the LPI test allows us to analyze and measure different factors of the transformational profile and to compare the possible similarities and differences between the Estonian and Finnish respondents of the study. Furthermore, the Finnish version LPI has been validated in terms of culture and language and has previously proven to be successful (Järlström 2000, 2002; Hautala 2005; Brandt et al. 2011).

Due to the geographical proximity of the two countries as well as both languages belonging to the Finno-Ugric language group the Finnish validated forms of the LPI are considered suitable for both respondent groups. For Estonian respondents the LPI test is translated and edited into Estonian language and pre-tested for its validity. The survey questionnaire is divided into two sections: (a) the Leadership Practices Inventory Test (LPI) and (b) demographics. The items of the LPI questionnaire are rated on a Likert-scale. The Finnish modified LPI 25 statements are measured in five key practices of exemplary leaders: (1) Enabling, (2) Visioning, (3) Challenging, (4) Modelling, (5) Rewarding. The key practices of exemplary leaders are measured based on two to ten statements in the test. The paired samples *t*-test is performed by SPSS statistical analysis program, in order to look for differences and the statistical significance of differences between two groups of Finnish and Estonian female leaders. F-value of the *t*-test indicates if there are statistical differences between the groups which are compared.

In addition to the aforementioned method, semi-structured interviews are conducted to get a deeper insight to the LPI test data results. The semi-structured interview with open questions allows longer discussions and provides valuable data based on the respondents self-perceptions, which is used to compare the test results and the interview answers for gaining a deeper meaning and insight to the view on different factors of the leadership profile. The chosen interview method allows us to assess the acknowledgement of female executives choices of leadership style, and whether they have felt the need to develop any characteristics to better comply with their view on ideal leader and find out if the results of self-analysis results comply with results of the LPI test results.

The open questions of semi-structured interview are pre-categorized to meet the study goals into the following categories: (1) Leadership ideal; (2) Self-analysis; (3) Situational leadership; (4) Self-awareness and values; (5) Empathy; (6) Trust; (7) Corporate relationships; (8) CSR and ethics. The interview guide consists of 13 questions. Moreover, collecting qualitative data through conducting semi-structured interviews enables us to better analyze the feelings, perceptions, emotions and experiences of these female executives.

A total number of 12 female executive respondents were pre-defined as a qualitative sample of the study, divided into two sub-groups of six Estonian and six Finnish leaders. Although the sample size of 12 may seem to be too small, considering the fact that it includes most influential of the female executives who have reached to higher top management positions in those countries, we consider it as sufficient and representative. Moreover, we assume that the in-depth personal interviews with all of the respondents supporting the LPI test results gives the data a qualitative value as well as allows to draw conclusions and detect possible trends by the data analysis.

It was pre-agreed with each of the respondents that the names of the respondents, company names and exact citations will be confidential and are not revealed in the study. The interviews were conducted from February to March 2014. The interview sessions lasted approximately from 45 min to 1 h. A digital recorder was used to record all interviews and a total of 11.2 h of recorded interviews were transcribed

on 153 pages of literal data. Thematic analysis is used to analyze the gathered data and all the respondents are given a code according to the nationality of the respondent: 1-6 EST and 1-6 FIN.

The respondents of the study are female executives with a 5–25 years leadership experience with the mean of 14 years and the mean age of the respondents is 46 ranging from 32 to 53 years of age. The companies that are or have been led by the respondents of the study are up to 1 billion euro in turnover, with a total number of employees up to more than 2000 and immediate subordinates of 15 persons. Considering the fact that similarly to other EU countries the majority of enterprises in both Estonia and Finland are micro (over 93 %) and small (5.6 %), whereas the amount of middle size (1.1 %) and large companies (0.1 %) is significantly smaller (European Commission 2013a; Statistical Yearbook of Estonia 2014), our sample includes those female leaders who have much impact in their industries. Among those 12 respondents six have a master's degree, four bachelor's degree and two a diploma of professional higher education, thus all of them are university graduates.

In the next section chapter we present an analysis of the collected data, summarise the research findings and make some recommendations for further research.

4 Overview of the Study Results and Discussion

Based on the results of both LPI test and data acquired from in-depth interviews, we can state that the overall transformational leadership profile overlaps among both respondent groups in most factors, with having slight differences in 'Rewarding' and 'Challenging' (see Table 1 for LPI test results). The leadership style described by the respondents of the current study supports the characteristics associated to transformational leadership and follow the vision-involvement-persistence (Kouzes and Posner 2012) model in all five practices.

The LPI test reveals significant difference in the scores for Rewarding factor loadings of the Estonian (M = 37.50, SD = 9.87) and the Finnish (M = 26.66, SD = 4.08) respondents; t (5) = 3.606, p = 0.015. These results suggest that Estonian respondents put more effort in the celebration of accomplishments than the Finnish respondents. There is also a difference in the Challenging factor loadings of the Estonian (M = 35, SD = 6.70) and the Finnish (M = 40, SD = 1.58) respondents; t (5) = 2.0, p = 0.102. Although the difference is not significant, the Challenging factor is rated higher by the Finnish than by the Estonian respondents.

There are no differences in the factor loadings for Enabling comparing Estonian $(M=42.33,\ SD=4.32)$ and the Finnish $(M=43.66,\ SD=3.82)$ respondents t (5)=0.517; Visioning comparing Estonian $(M=32,\ SD=4.56)$ and the Finnish $(M=32.66,\ SD=2.42)$ respondents t (5)=0.500; and in Modeling factors comparing Estonian $(M=42.5,\ SD=5.0)$ and the Finnish respondents $(M=43.33,\ SD=4.65)$; t (5)=0.542.

These LPI test results have found support from our conducted semi-structured in-depth interviews with all respondents. The acquired data is used to give a deeper

Table 1 The LPI test results

Key practices	Estonian respondents	Finnish respondents		
Enabling				
Mean	42.330	43.660		
SD	4.320	3.820		
t-Value		0.517		
Visioning				
Mean	32.000	32.660		
SD	4.560	2.420		
t-Value		0.500		
Challenging				
Mean	35.000	40.000		
SD	6.700	1.580		
t-Value		2.000		
Modelling				
Mean	42.500	43.330		
SD	5.000	4.650		
t-Value		0.542		
Rewarding				
Mean	37.500	26.660		
SD	9.870	4.080		
t-Value	3.606			

Source: Authors' calculations

meaning and explanation to the results of the LPI test. Next, we discuss these interview results, by illustrating statements with short quotations from the interviews.

In defining ideal leaders' characteristics and leadership style both Estonian and Finnish respondents find experience to be the base of their view. Finnish leaders' added "gut-feeling" that has developed from both, one's own personal experience, but is also "a summary of everything seen, heard, read and consciously analyzed" (FIN 1) and the importance to "keep to one's own natural style as much as it is possible to be perceived as honest" (FIN 3). Finnish respondents have gained assurance to their leadership style comparing the new people-oriented style to the capitalistic yet army-like task-oriented view on leadership in the early 1990s, as expressed by one interviewee "I remember our HR manager asking during recruiting about the army and what rank the person was in the army as it was considered as a big plus" (FIN 2). The Finnish respondents find that "with the new model of the world more women leaders have entered the field bringing along also more dimensions into leadership, mainly a more people-oriented view" (FIN 4, FIN 2).

Estonian context however is different, after regaining its independence from the former Soviet Union in 1991 there were fundamental changes in the practice of management in Estonia (Alas and Rees 2005) and a rapid economic catch-up process of the country's economy has been followed by a steep Gross Domestic Product decline during the years of the global economic crisis (Elenurm and Vaino 2011).

Thus it makes it impossible for the Estonian leaders' to compare the leadership styles in similar time span. Therefore Estonian respondents emphasized the importance of having good reading material as the theoretical base for leadership (EST 4, EST 6) and a source of confidence for the beginners (EST 1). Referring to coming from the different past, Estonian respondents emphasized the importance of rewarding (EST 1, EST 2, EST 4, and EST 6), positive feedback and empathy (EST 2, EST 4, EST 5), to take a more people-oriented view than managers used to do earlier, the components of an ideal leadership profile were: self-awareness; ability to see and visualize the big picture; outbound communication skills; people-orientation and enabling others (EST 3, EST 4, EST 6).

However the leadership style seen by the Finnish interviewees has to be based mostly on personality and it is important to work in a style that comes naturally to oneself (FIN 1, FIN 2, and FIN 4). Conscious development on the other hand is seen as a must to perform better (FIN 1, FIN 5). As people-oriented view is seen part of ideal leadership style, the Finnish respondents have worked on being more people-oriented and to intuitively know people (FIN 3, FIN 5, and FIN 6). It is seen important to build bridges between people (FIN 2) for a better cooperation and the leaders state having learned not to micro-manage and to delegate. The outbound communication mentioned in leadership ideal is turned around to listening and asking questions during characteristics development (FIN 1, FIN 3) as engaged people are seen to perform better and believe in the targets they have set themselves (FIN 2, FIN 4, FIN 6). The respondents report to have learned to be more patient and calm (FIN 3, FIN 6) in reactions and brought out the need to balance directness (FIN 1, FIN 2).

In the ideal leadership style both Estonian and Finnish respondents note the importance of the people-oriented view ("it is very important to be people-oriented", EST 6) with the emphasis on enabling others, hiring the right people ("find the right people", EST 4) and giving them enough space (EST 3, EST 4, EST 6) yet take caution not to get too disconnected. Estonian leaders emphasize the importance of empathy ("Empathy is something that may not grow in time, but you can learn to control it and use it in the right places" (EST 4); "I lead people by feeling them" (EST 2); "An ideal leader would have to be immensely empathetic" (EST 5), whereas Finnish leaders consider clarity more important, "For me leadership is mainly about clarity of the communication" (FIN 3).

Clarity in the communication is also supported both by Estonian and Finnish respondents, and when Estonians consider presenting skills to be very important, "I have seen leaders fail in having the courage to present their ideas", (EST 2), Finnish leaders find that excellent presenting skills are good but not vital. The significance of listening ("I have learned that people around me know more and my task is to listen", EST 6) and giving positive feedback and rewarding are emphasized by all Estonian respondents, ("I try to consciously emphasize positive feedback, reward and recognition", EST 1), however Finnish respondents also stress the importance of giving both positive and negative feedback ("Positive feedback is easier to give, but you have to be able to give negative feedback", FIN2). Both groups see communication as an important part in visualizing future targets ("If people don't

understand where we are going, why we are going and what is expected from them, then we will get nowhere", EST 4) and self-awareness ("Knowing yourself gives you inner self-confidence", EST 1), as the base for being able to successfully lead others.

The Finnish respondents see practical mind and being close to targets as their strongest characteristics whereas Estonians noted empathy and patience as their strengths. Both groups see empathy or knowing people better as an important part of people-oriented view ("Empathy is important in getting the connection with the people and in creating a safe yet challenging environment", FIN 3). Estonian respondents emphasize empathy itself by definition more frequently with the need to develop conscious empathy to better lead the people. Defining empathy as commonly perceived inherent female characteristic, both Estonian and Finnish leaders note the importance of it being aligned to company goals. Using intuition and empathy to knowingly manage emotions and critical situations as described by the respondents of the present study is also seen inherent to transformational leadership where intuition and sensitivity to the needs of others is integrated to transformational leadership (Bass 1996; Bass and Avolio 1993; Avolio and Bass 2004) and where people who master emotional intelligence have an advantage for solving problems adaptively (Salovey and Mayer 1989).

Self-confidence and self-awareness noted as characteristics of a successful leader in the current study will if balanced, make it easier to see and understand the emotions of everyone in the organization which in its turn makes leading people easier (Kooskora 2012). Our study has shown that sometimes the leaders need to use a more task-oriented style, especially in the critical situations, which supports the view that authoritarian leadership can be effective as the leader creates good structure, and determines what needs to be done without consulting subordinates (Evans and Evans 2002). However, it is added that in critical situations it is very important to communicate and having an inner balance and own values aligned with those of the organization helps to cope with difficult situations. Critical situations are mentioned to be the most common incentive to define one's values as to be able to work efficiently, though one's own values should have to be aligned with the company's values ("Your own ethical values have to be aligned to the company's values; otherwise it's not possible to work", EST 3). This view is also in line with Kooskora's (2013) statement that in order to be sustainable and make the right turn in a crisis situation organizations need to define their core values and principles.

Trust and networking are both seen as important leadership tools by the interviewees. Gained with time, trust becomes an extremely powerful leadership tool yet in order to gain trust in the first place a leader has to keep one's promises and make sure to keep them clear and realistic. "I would lose trust if I make people go against their own personal values" (EST 6). Whilst trust is seen important internally, networking is reported as a very important tool both internally and externally. Supporting internal networking, leaders see it as a means to create natural synergy within the organization. "It gets the team to work together and find solutions rather than point fingers at each other" (EST 6).

In describing their own strongest characteristics as a leader, the interviewees see themselves as: straightforward, self-confident, an inspiring communicator, empathetic and patient. The same directness, straightforwardness and rationality are mentioned as the leaders' strongest characteristics adding that it is important to be honest and stay close to the facts. Respondents stress that people need to perceive the leader as stable and always knowing what to expect from the leader. The interviewees see themselves as clear and direct in communications with the ability to get the team together whilst also giving people respect and room to act. People-oriented leadership style is considered as the strongest, among the ideal and the developed characteristics. Although rationality and being straightforward is reported as one of the strongest characteristics, the need to develop listening and patience can be associated to the need to mitigate these strong characteristics in order to be more aligned with the softer people-oriented view.

To conclude, the overall results of the study support the findings of previous research that have been conducted on the topic of female leadership. The reason behind the need to balance directness although being straightforward can be explained by previous research (Lopez-Zafra et al. 2012) which states that although scoring high in transformational leadership style femininity predicts also transactional leadership, where directness would be essential. The results of the current study also support previous research by Zenger and Folkman (2012) where women are prone to takes initiative, practice self-development, display high integrity and honesty and drive for results. The conclusion that a leader needs to stay true to one's natural style in order to be perceived honest supports pervious research (Eagly and Johnson 1990; Vinnicombe and Singh 2002; Prime et al. 2009) stating that female managers are tempted to change themselves to be more masculine that may backfire. Moreover the results of the current study support previous research on Finnish leaders transformational leadership profile analysis (Hautala 2005) and also partially support previous research on female executives in Estonia, where team building and effective negotiating skills are considered to be of primary importance, followed by the ability to clearly define measurable goals, coordinate, and to be improvement-oriented; also valuing highly business ethics, diplomatic communication and being open-minded (Elenurm and Vaino 2011).

For the Estonian respondents, the characteristics listed as ideal, strongest and among developed characteristics is empathy and for the Finnish respondents it is people-oriented actions. By their nature, both characteristics belong to a people-oriented approach. The difference in the people-oriented view of the Estonian and Finnish female leaders is their view on Rewarding and Challenging. Estonian leaders see Rewarding as very important and have also developed themselves in encouraging people more in order to get better results. Finnish leaders however find Rewarding to give a positive boost and consider giving negative feedback as well as being open to finding new and innovative ways of working important to improve the organization's performance levels. The same differences were detected in the results of the LPI questionnaires filled in by the interviewees. Estonian leaders scored higher than the Finnish leaders in Rewarding and the opposite was true in Challenging where Finnish leaders scored higher than Estonian leaders.

The difference in scores of Rewarding and Challenging factors both in the LPI test results and supported by the interview results between Finnish and Estonian respondents can be explained by the commonly supported view that Estonians are not good in giving or receiving recognition. The reason behind this is that the people in transition society were influenced by the memory of communist totalitarian society where the difference from democracy lays in the lack of freedom of choice and one's own opinion, which has left traces on the communication (Tampere 2006) and peoples' mindset (Kooskora 2008a). Authors' own experience allows to conclude that Estonia's fear of changes is associated to downsizing during the recession, which can also be the reason why Estonians crave for positive feedback over negative feedback on their performance, thus resulting in higher scores in Rewarding. Negative feedback is often perceived as a prerequisite to negative changes rather than an opportunity to find new ways. Our respondents also confirmed, that the reason behind the low number of female leaders in Estonia is mainly in the overall perception of 'real' leaders, who have to be masculine, even rough and able to make tough choices (see also Kooskora 2008b), and it is still difficult to overcome the stereotypes in the society and see people-oriented leaders as strong and successful.

Finally, lower scores in Challenging of the Estonian respondents compared to Finnish respondents can be explained by the very fast adaptation to Western-style economies. Eastern European democracies in their 20 years of development often went through stages that required many more years for an average Western economy (Tampere 2013), thus a constant need to keep the pace and meet the targets may result in not taking enough time to stress the importance to think about new and challenging ways of working by the Estonian leaders. Finnish however, having had a stable economy (Pesonen et al. 2009) dare to take more time in questioning their way of working and developing new ideas.

5 Conclusion

Based on the sample of successful female executives in two neighboring countries the results of both LPI test and data acquired from in-depth interviews reveal that the overall transformational leadership profile overlaps in both respondent groups with differences in Rewarding and Challenging factors where the difference can be explained by the difference in cultural history. The leadership style described by the respondents of the current study is associated to transformational leadership and follows the vision-involvement-persistence model in all five practices.

The successful leadership style used and seen as ideal by the interviewed female leaders supports the people-oriented view where a leader enables others, hires the right people, fosters cooperation and gives people enough room to act. The successful leader as being described by our respondents is able to see the big picture, visualize clear future targets and is able to communicate it clearly and inspiringly to others. The respondents stress that the successful leader is straightforward and

direct in communication and is able to give both positive and negative feedback; at the same time being patient, listening to others and being able to balance directness using intuition and empathy to knowingly manage emotions and critical situations. In their view the leader has to consciously develop leadership skills, but be honest, self-confident and stay true to oneself. Our respondents of the current study assured also that in order to work efficiently the values of the leader have to be aligned with the company's values and that both trust and networking are considered important leadership tools.

Being straightforward is considered important by all of the respondents as one of their strongest characteristics, needing control rather than development. Thus, based on the results of the current study, being straightforward might be considered as a prerequisite of becoming a leader and developing other characteristics might result in being a successful leader. This result gives impetus for future research ideas, to investigate the relationship of Rewarding and Challenging in Estonian organizations; to investigate the characteristics and leadership style with a wider scope in the Scandinavian and Baltic area in a gendered and a gender-neutral approach; also to investigate the relationship of straightness as the possible predictive characteristics to leadership in a gendered and a gender-neutral approach.

The primary limitation of the study is the small sample size as a larger sample with more diversity would have benefited the results, however we have to consider the fact that the number of top female executives in this region is really limited and our sample includes these well-known and most influential leaders who already have proven success. Moreover conducting and analysing these in-depth-personal interviews with all those successful female leaders has given us rich and valuable data that also supports the earlier findings by other researchers studying female leadership.

The other limitation of the study is related to the biased characteristics assessment due to self-analysis and personal perceptions revealed during the interviews, conducting a 360° assessment would have given more reliable results. However in the study, the LPI test provides credibility to the analysis as the findings from the interviews and the LPI support one-another and LPI method has been proven reliable by earlier studies conducted on this topic.

Our study confirmed, that although there are some differences in the leadership profiles of two respondent groups, that can be explained by the historical context, both groups of successful female leaders mainly use transformational leadership style. Whereas the reason behind the low number of female leaders in Estonia is particularly in the overall perception of 'real' leaders, who have to be masculine, even rough and able to make tough choices, and it is still difficult to overcome these stereotypes in the society and see people-oriented leaders as strong and successful.

We hope that the success factors deriving from our study results may prove to be useful information to create female role-models and to be used in female support programs, for possible career driven females as well as universities, government agencies and other possible interest groups.

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Tools and Actions for Increasing the Effectiveness of the Strategy Implementation

Joanna Radomska

Abstract The aim of this paper is to examine the interrelationships between the tools and actions used by companies to implement the development concept. The analysis of the literature indicates that there are certain deficiencies in this area. Many studies emphasize the barriers that hinder the strategy implementation, while relatively little attention is paid to methods for supporting this process. Based on the research results, the existence of relations between the following factors was demonstrated: the use of implementation programmes and the regularity of measurements of the implementation works, the use of BSC and the inclusion of a wide group of employees in the strategy development stage, the use of strategy maps and a reduction in the employee resistance to the changes, the introduction of a system for monitoring the business environment and an increase in the regularity in measuring the progress of the implementation, the appointment of interdepartmental teams responsible for the strategy implementation and the use of informal communication. However there was no evidence that the use of the strategic controlling has any impact on the improvement in the effectiveness of the strategy implementation by linking the remuneration level with the degree of implementation of strategic objectives.

Keywords Strategy execution • Tools • Strategic management • Implementation • Informal communication

1 Introduction

The subject of strategy implementation is one of the research trends in the field of strategic management. This is a timely topic, especially in the context of the unsatisfactory results achieved by companies that seem to have significant difficulties with the implementation of development concepts. Such difficulties may be caused by mistakes made at the stage of the strategy formulation or by variable

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implementation conditions, however some researchers indicated the fact that too little attention is paid to the actions aimed at translating the vision and the strategy into operational activities (Hussey 1997). The studies show that the percentage of implementation failures ranges from 50 % to 80 % (Beer and Nohria 2000; Raps 2004; Carlopio 2003). However, the vast majority of publications focus on the subject of to the implementation (Hussey 1999; Al-Ghamdi 1998). Most frequently mentioned obstacles and barriers include: strategy, structure, systems, style, staff (Higgins 2005) and communication (Schaap 2006; Rapert et al. 2000) or coordination (Hrebiniak 2008). Relatively little attention is paid to the aspects related to tools and in particular to their mutual relationships and links with the actions supporting the implementation of the development concept. Thus the purpose of this paper is to fill the existing cognitive gap by analysing the tools and actions used at the strategy implementation stage, as well as and their mutual correlations.

2 Literature Review

One of the barriers mentioned as crucial for the success of the implementation process is the participation and involvement of employees. It is estimated that only 20 % of them demonstrate enthusiasm and support for the strategy implementation (Speculand 2006a). In particular, this concerns the difference in the perception of the strategy formulation as a stage implemented by senior managers and strategists, which covers the macro level and requires advanced knowledge and skills. However, a certain discord can be observed between their presence and their involvement—or rather the delegation of their executive duties to lower-level employees, and thus to the operational level (the micro perspective). Hence, there appear concepts of creating social-psychological models of the strategic implementation process, in which the perspective of participation of employee groups and individual employees is taken into account (Carlopio and Harvey 2012). This is even more important because, as emphasized by Finkelstein and Borg (2004), executive managers do not always implement the strategy in accordance with intent of its creators. What's more, the research results indicate that 82 % of managers perceive the strategy implementation as a stage, over which they have lost control (Sinclair and Zairi 1995).

There are many tools dedicated to the strategy creation process, which are characterized by a various degree of complexity. Some of them are treated as a basic set (SWOT analysis, PEST, Porter's five forces, Ansoff matrix or BCG matrix). More advanced and more difficult tools are also recommended: e.g. strategic clock, value chain analysis, game theory, scenario planning or the cultural web (Tassabehji and Isherwood 2014). However, the analysis of the literature indicates that the catalogue of tools for implementing the strategy is much poorer.

One of such tools is "Implementation Compass" used to give the strategy a certain structure that facilitates its realization. The critical elements here include factors, such as: People, BizCase, Communication, Measurement, Culture, Process,

Reinforcement, Review. Therefore these are the areas, to which managers should pay attention and which should be analysed by them in the context of strengths and weaknesses. Thanks to this, they will be able to plan actions to achieve the expected results (Speculand 2006b). However this tool seems to have strongly limited usability, as it does not give any guidelines on how to measure the implementation of various areas and does not indicate mutual relationships between them.

Another tool used to involve employees in implementation activities is Performance contract. It is a document that aims at joint establishment of the manner of implementing the strategic plan and ensuring the regularity of the measurements (Dandira 2011). A natural consequence of such a contract is the introduction of a link between the incentive system and the results obtained. Measurements can be performed with the use of strategic controlling (Ramsey and Duhe 2010).

Attention is drawn also to the importance of measuring the results achieved and to creation of the tools dedicated to this purpose (Sharma et al. 2005). De Feo and Janssen (2001) put emphasis on the need to ensure the regularity in measuring the implementation of the strategic objectives and thus the entire strategy, as well as on the monitoring of the company's environment. They indicate the importance of activities such as: deploy goals, measure progress with key performance indicators, and review progress. However, Emett and Tayler (2013) emphasize that excessive analysing of the data obtained may lead to a lack of objectivity and too great optimism in relation to the strategic initiatives undertaken. Results of many studies indicate that the following elements deserve a special attention: setting goals and objectives and then measuring them regularly, as well as using the tools that improve communication between individual units, which appears to be more important than the communication of the strategy itself (Aaltonen and Ikävalko 2002).

The support for the strategy implementation may include the use of scheduling, budgeting and formal implementation programs to this end. It should serve the purpose of appropriate allocation of resources and identification of key performance indicators (Saunders and Mann 2008).

The most popular tool associated with the strategy implementation, which is also most frequently mentioned in the literature as a performance measurement system, is the balanced scorecard (Gomes et al. 2004). This is also proved by the studies indicating that it is used by as much as 44 % of organizations in the United States (Rigby 2001), while in the group of large companies this percentage is 35 % (Marr et al. 2004). In Europe, it is estimated that this percentage is approx. 57 % in the UK and 28 % in Germany (Speckbacher et al. 2003; Rigby 2001). In 2007, according to the studies described by Thompson and Mathys (2008), 40 % of companies from the Fortune Top 1000 list published by Fortune Magazine used a balanced scorecard. The popularity of this tool results from its transparency and ease of use. However, it should be emphasized that many variations and modifications of this tool have been created. Their usage should be preceded by a thorough analysis of the specific features of a given organization, because it is not a miracle cure to the problems with the strategy implementation (Perkins et al. 2014). Further studies concerning modifications of the original concept of the balanced scorecard focus on

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the use of intangible assets, including human capital (skills, talent), information capital (systems, networks) and organization capital (including culture, leadership, aligning people with strategic goals) (Kaplan and Norton 2004b). Thus, there is a need to modify the original assumptions of the concept by the inclusion of the employee participation aspect. Creation of diverse, interdepartmental employee teams responsible for the implementation of the development concept may serve this purpose too.

Another tool used by organizations is a strategy map. Its usability stems primarily from the fact that it can be used as an early warning system that shows the degree of the achievement of goals or indicates emerging problems (Markiewicz 2013). Therefore, some researchers draw attention to an appropriate structure of the strategy map in the form of a single-page graphic presentation showing the elements that should be implemented in order to ensure the efficiency of the strategy implementation process (Niven 2005). Scholey (2005) indicates that it is a way to eliminate the gaps in communication through the use of images as relatively clear information carriers. It is also a tool that can be used for presenting how the organization creates a value (Kaplan and Norton 2004a). It supports BSC thanks to its flexibility, the oprationalization of the strategic management process and indication of certain decision-making powers (Free and Ou 2011). It indicates primarily the relationships and interdependencies between BSC components (Norreklit 2003; Bourguignon et al. 2004). However, it should be remembered that the map should be updated when revising the strategy and introducing its successive modifications (Rompho 2012).

As indicated by researchers, strategy implementation tools are often used as a source of information about causes of failures and thus contrary to their purpose. Instead of anticipating potential results, they point out the effects of the actions taken *post factum* (Speculand 2011). Therefore, many companies do not attach proper attention to them. The studies conducted show that the vast majority of companies use less complicated tools, which results from the fact that they don't have sufficient managerial knowledge, as well as from the communication difficulties accompanying more advanced solutions (Isherwood 2011).

Therefore it is worth to analyse the intercorrelations between the use of tools and the activities that support the strategy implementation.

3 Data, Methods and Hypotheses

The group of respondents included managers of 200 companies that have been operating for at least 5 years and are listed among the 500 largest Polish companies in the ranking of the "Polityka" weekly magazine (101 entities) and in the "Forbes Diamonds 2013" ranking (99 companies). The first ranking takes account of the revenues on sales, the total revenues of the companies, the gross and net profit, as well as the employment level. On the other hand, the "Diamonds" list included the companies with the fastest increase in their value. The group of respondents

included 68 small businesses (up to 49 employees), 63 medium-sized companies (50–249 employees) and 69 large enterprises (employing over 250 people).

The study was conducted using the PAPI (Paper and Pencil Interview) technique—the survey was carried out with the use of a method based on collecting the data in an open (overt) and standardized way. The questions in the questionnaire were of nominal nature (the respondents declared the existence of specific obstacles) and of ordinal variable nature (the respondents indicated the strength of their impact in a 5-point scale). In order to test the hypotheses, Kendall's tau-b correlation coefficient was calculated.

The following research hypotheses have been proposed:

- **H₁:** The use of implementation programs increases the regularity of measuring the implementation work.
- **H₂:** The use of the Balanced Scorecard has an influence on the inclusion of a wide group of employees into the strategy development stage.
- **H₃:** The use of a strategy map reduces the employee resistance to changes associated with the development concept being implemented.
- **H₄:** The introduction of a system monitoring the business environment increases the regularity of measuring the implementation progress.
- **H₅:** Appointment of interdepartmental teams responsible for the strategy implementation increases the use of informal communication.
- **H**₆: The use of scheduling and budgeting as implementation tools has an influence on the assignment of implementation measures and indicators to strategic goals.
- H₇: The use of the strategic controlling has an impact on the improvement in the effectiveness of the strategy implementation by linking the remuneration level with the degree of the implementation of strategic objectives.

4 Research Results and Discussion

As an introduction to the analysis of the results, it is worth mentioning that the companies surveyed, due to their presence in prestigious rankings and thus their market position, can be considered as representatives of the group of entities that are successful in the implementation activities. The results show that the average degree of the strategy implementation is 74 %, which can be regarded as good. The companies participating in the survey indicate the use of implementation tools, however the number of the entities declaring their use in specific configurations is different.

Detailed results are presented in Table 1.

As indicated by the results of the survey, 6 of 7 hypotheses can be tested positively as they are statistically significant. The results obtained for the hypothesis 1 indicate the existence of a strong positive correlation between the variables analysed, which means that it was tested positively. The regularity of measuring the implementation work increases along with an increase in the use of implementation

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Hypothesis	tau-b Kendall	p-Value	N
H1	0.716	0.00	94
H2	0.502	0.00	58
Н3	0.643	0.00	63
H4	0.493	0.00	96
H5	0.321	0.00	103
Н6	0.242	0.009	93
H7	0.107	0.328	74

programs. This is consistent with studies of other authors, which indicate the existence of such a relationship. Therefore, it can be stated that the introduction of formal implementation tools in the form of implementation programs or strategic projects has a favourable effect on measurements of achievements and the realization of goals, which translates into greater knowledge about the degree of implementation as well as necessary adjustments. In consequence, this offers an opportunity to take actions ex ante. A relatively high percentage of the entities declaring the existence of such a relationship (47 %) proves that managers are aware of the mutual relation between these two elements.

The hypothesis 2 can also be tested positively as there is an average positive correlation between the variables analysed. Thus it can be concluded that the implementation of the strategy with the use of the balanced scorecard augments the actions aimed at the inclusion of a wide group of employees into the strategy development stage. In this case, the percentage of the entities declaring the existence of such a relationship is much smaller (29 %), but it should be emphasized that this is a substantial majority of the companies that use BCS (72 entities representing 36 % of the total population). It can therefore be concluded that more and more organizations are aware of the importance of the aspect of the employee participation and take actions to eliminate the employee resistance to changes. In consequence, these actions contribute to reducing the risk of failure in the strategy implementation or the risk of implementing the strategy inconsistently with the original assumptions.

Similar conclusions apply to the use of the strategy map. The results obtained when testing the hypothesis 3 indicate the existence of an average positive relationship between the use of this tool and a reduction in the employee resistance to changes associated with the implementation of the development concept. The percentage of the companies that use strategy maps (80 entities, 40 %) and the percentage of the companies declaring the existence of such a relationship (31.5 %) are similar. This means, according to studies conducted by other authors, that this is a way to support the process of communicating the strategy and facilitate its transposition to the level of operating activities.

Somewhat lower results were obtained when testing the hypothesis 4 (0.493), which indicates the existence of an average positive relationship between the introduction of a system for monitoring the business environment and an increase of the regularity in measuring the implementation progress. It can therefore be

presumed that creating a system for warning about changes occurring in the environment, which are crucial from the viewpoint of the development concept implementation, offers an opportunity to formalize the measurement of the realization of goals. Thanks to this, the measurement is performed on a regular basis, with the required frequency. The system for monitoring the environment may consist of various activities, including the work of units appointed especially for this purpose or outsourcing the work to specialized entities. It is certainly a costly and time-consuming activity, but it brings effects in the form of discipline and offers an opportunity to anticipate the necessary modifications of the strategy.

The hypothesis 5 can also be tested positively, although in this case the strength of the relationship between the variables analysed is somewhat weaker (0.321). However this is an average correlation, so there is a positive relationship between the establishment of interdepartmental teams responsible for the strategy implementation and an increased use of informal communication. This is declared by slightly more than half of the companies surveyed (51.5 %), which may indicate that the communication barrier is a noticeable element that negatively affects the strategy implementation. Therefore, the actions aimed at the elimination of this barrier include the establishment of teams composed of representatives of different departments (e.g., marketing, finance, sales, production, R&D or finance departments). This ensures a diversity and comprehensiveness in the perception of the issues associated with the use of resources dedicated to the strategy implementation, as well as greater acceptability of the decisions made. This of course may extend the time required to complete the work, but the informal communication seems to have a substantial impact on the effectiveness of the implementation activities.

The hypothesis 6 has a low level of correlation (0.242). Therefore it indicates the existence of a weak positive relationship between the variables. However, the result obtained allows accepting it. So the use of scheduling and budgeting as implementation tools increases the frequency of the assignment of implementation measures and indicators to strategic goals. The schedule and budget, perceived by some organizations as tools for implementing the strategy, are actually based on such indicators and measures. Hence, this translates to the strategic level and concerns the goals set in relation to the strategy being implemented. Although these are not typical implementation tools, their appropriate use may improve the effects of the implementation as well as introduces order and method to the entire implementation process.

The last of the hypotheses cannot be accepted, because it is not statistically significant, and the calculated level of correlation does not indicate the existence of the relationships assumed. Therefore, it cannot be stated that the use of the strategic controlling has any impact on the improvement in the effectiveness of the strategy implementation by linking the remuneration level with the degree of the implementation of strategic objectives. Although the presence of the strategic controlling is declared by almost half of the entities (99, i.e. 49.5 %), there is no relationship between its use and designing incentive systems based on the effectiveness of the strategy implementation. Such a solution seems to be a relatively clear way to

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ensure a higher effectiveness of the actions taken, which is proved by the percentage of companies having payroll system built in such a way (136 companies, that is 68 %). However, this is not equal with the consequences associated with the use of controlling.

5 Conclusions

The research results show that the use of tools and actions for improving the implementation results is not a common practice. In particular, this concerns the aspects associated with the communication and employee participation, which more often appear to be key barriers to the implementation. The analysis of the correlations obtained showed that there are certain dependencies which seem to be crucial for the success of the strategy implementation process. The conclusions concern the tools that have a positive impact on the measurement of the implementation results and reduce the employee resistance to changes. It is crucial to emphasize that a comprehensive, holistic outlook on the tools and their mutual relationships is necessary in the strategy implementation process. In such a case, it may appear that slight corrections in the actions taken will significantly improve their efficiency. Further studies should focus on searching for other relationships and the existence of differences in these relationships in companies of various sizes or operating in different industries.

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Importance of Hospital Way-Finding System on Patient Satisfaction

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Abstract The basic function of the hospitals is to ensure the patient satisfaction. Patient satisfaction is a strategic element for hospitals to reach their missions and for the survival of the management. One way of ensuring patient satisfaction in hospital clinics, polyclinics and laboratories is proper way-finding systems with reasonable distances in the route. Because of complaints and dissatisfaction of patients from the hospital's way-finding systems, some routing arrangements were made in Konya Selcuk University Medical Faculty Hospital. As a result of this arrangements, satisfaction levels of 1121 patients from the distance levels between clinics, polyclinics and laboratories in Selcuk University Medical Faculty Hospital was intended to measure. The study was administered on 1121 patients between August-June 2013 in Selcuk University Medical Faculty Hospital using face to face interview method. According to the results, it can be concluded that after the arrangements of the hospital's way-finding systems, patient satisfaction of hospital way-finding systems gets high rates as they mostly responded "good and very good" to the questions. Moreover, after the arrangements of the hospital's way-finding systems, the number of patient's complaints has decreased to zero level.

Keywords In-hospital way-finding systems • Patient satisfaction • Routing

1 Introduction

1.1 Patient Satisfaction

The hospitals, which play an important role in the health sector, are health care institutions offering medical, rehabilitative, care outpatient or inpatient services, hosting medical, administrative and support staff on-site, and serving 24 h 7 days for especially the sick and wounded people who want to check their health status and seek for information (Terekli et al. 2013). Satisfaction concept in provision of

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health care service in these complex structured hospitals has been an issue which gained importance in recent years (Ozer and Cakil 2007; Bleich et al. 2009). Patient satisfaction is defined as the "basic criteria indicating the quality of care in which the main authority is the patient and which provides information whether the patient's values and expectations are met or not" (Ozcan et al. 2008). In the global competitive environment, the companies should ensure customer satisfaction in order to survive and increase their profitability (Ozveri and Dincel 2012). Certain satisfaction measures are used to ensure patient satisfaction. The dimensions of patient satisfaction include: art of care (caring attitude); technical quality of care; accessibility and convenience; finances (ability to pay for services); physical environment; availability; continuity of care; efficacy and outcome of care (Debono and Travaglia 2009).

Patient satisfaction is a highly desirable outcome of clinical care in the hospital and may even be an element of health status itself. A patient's expression of satisfaction or dissatisfaction is a judgment on the quality of hospital care in all of its aspects whatever its strengths and limitations. Patient satisfaction is an indication that should be indispensable to the assessment of the quality of care in hospitals (Tasneem et al. 2010). The degree of patient satisfaction can be used as a means of assessing the quality of health care and the personnel. It reflects the ability of the provider to meet the patients' needs. There are various factors which influence customer's expectations of services. They include efficiency, confidence, helpfulness and personal interest reliability (Sreenivas and Babu 2012).

One of the measures of patient satisfaction is service delivery style designed to meet the expectations of these patients (Ozcan et al. 2008). In the aforementioned design, the distance between clinics, and test units and the referrals are important. Because, in the process of admission to hospital the patient first applies to outpatient clinics. The patient then goes to radiology, laboratory, and pathology units for the tests asked by the outpatient clinics doctor. After completing his tests in these units, the patient shows the results to the outpatient clinics doctor. According to the results, the doctor decides whether the patient will stay in hospital or not. If hospitalization is decided for the patient, the patient goes to hospitalization. In the meantime, tests and treatment should be fast for the patient. If the patient admitted to the hospital first time, if he is old or an oncology patient, the distance between the clinics, outpatient clinics, and test units should be short and referrals should be made in a way that can be understood easily by the patients and their relatives.

1.2 The Patient Information System in Routing

Hospitals should offer accurate solutions for information, wayfinding and identification in all kinds of architectural and ambient settings. Hospital managers should examine the layout in the eye of patients. The connections, transitions, entrance–exit, inter-relations of venues must be analyzed. Signage requirements for the relevant venues must be determined in line with the analysis conducted. These

are; determination of patient and stuff requirements and objectives, analysis of target consumers and target audience oriented conceptual design, incorporation of brand and visual identity elements, analysis of environmental structures, detailing of visual design properties, construction of the design strategy, field assessment and feedbacks.

Reaching the possible highest perceptibility and patient-hospital relationship is the key factor in wayfinding settings in hospitals. Following the assessment of the wayfinding project together with the managers, architects and technical stuff, all elements constituting the whole (dimensions, numbers, colors, venues) are detailed and the project is finalized.

1.2.1 Information Design

It has been determined that the point of focus in the studies carried out on patient satisfaction are communication and giving information to patient. Thus, planning information design in hospitals becomes more of an issue. Information designs guide us through all areas of life at all times. They enable us to easily reach our destination and find our way through public spaces. People are provided with safe and sound living conditions in societies guided adequately and accurately. A good information makes strolling in avenue more pleasant, decreases working costs and also accidents, and prevents delays and frustration. In brief, information design provides convenience for the human being.

1.2.2 Wayfinding Design

The signs, maps, brands and similar tools that guide us through our destination in almost all kinds of settings are all together called "wayfinding elements", and production and positioning of these elements with a certain strategy is called "wayfinding system". The elements contained in a signage system have to be compatible with the elements of landscape architecture, illumination system, visual identity and architectural design of that particular venue, and the wayfinding system has to be built in a way so as to respond to the requirements of the target audience. A good wayfinding system adds an easily perceivable dimension to hospitals, schools, public areas, shopping centers, museums, public transportation centers—in fact, the entire city. Wayfinding systems are reliable and smart guides that accompany the visitors, employees and residents of venues.

1.2.3 Identification Design

Identification design is a system composed of visual elements aimed at adequate expression of institutions for their target audiences in line with their visual identities, as well as making themselves visible. The elements of identification design are visible proof of institutionalization. The initial elements bringing together

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corporate identity elements and the target audience are the signs aimed at "information", "wayfinding" and "identification" used by enterprises in the ambient and architectural structures.

2 Methodology

2.1 Aim Study

General behaviors and complaints of patients are important issues in determining patient satisfaction. As Debono and Travaglia (2009) mentioned, patient complaints and satisfaction data are used for two purposes. Firstly to evaluate patient care and secondly to predict patient 'consumer' behavior. In this manner, we used patient complaints and behavioral outputs about wayfinding problems in the hospital to design a new referral system.

Selcuk University Medical Faculty Hospital intended to avoid some difficulties related to referrals. Since the patients do not know exactly where they will go in the hospital, approximately 1000 questions per week are being asked to hospital staff. This situation is too much occupying the hospital staff. According to the information received from the patients' rights unit, approximately 50 complaints are being made per month related to referral problems. To avoid this situation, some arrangements have been made at the hospital. The following arrangements are made in order to improve the referral system in the hospital: (a) "You are here" boards are attached; (b) Electronic intelligent referral signs are made; (c) Brochures, showing the hospital plan and units in detail, and giving brief information about the units, were distributed to patients; (d) Colored lines that facilitate transition among the blocks are drawn.

As a result of these arrangements performed by hospital management, it has been targeted to ease access of patient and relatives to service, referring patients and relatives in right way, decreasing the questions asked to health staff and reducing the patient complaints regarding this issue. Questions were addressed to the patients to measure satisfaction levels of the patients with regard to hospital signage as a result of these arrangements made in the Faculty of Medicine of Selcuk University. This study was conducted to determine the level of patient satisfaction about hospital referrals, and the distance between clinics, outpatient clinics and test units as a result of these arrangements made in Selcuk University Faculty of Medicine Hospital.

2.2 Data Collection Method and Tool

The study was conducted on 1121 patients who admitted to Selcuk University Medical Faculty Hospital between June and August 2013, using face to face

interviews technique. Total 1121 patients consist of 365 patients admitted to clinics, 350 patients admitted to outpatient clinics, and 406 patients admitted to the tests units. As a means of data collection, the patients of clinics, outpatient clinics and test units who agreed to participate in the research were asked two questions developed by the researchers. These questions were asked after the examination. The following are the questions asked to the patients: Do you think the location of outpatient clinics, the distance between interrelated clinics and the distance between clinics, laboratories and radiology unit are set appropriately? Are the help desk and referral signs sufficient enough to make you reach the place you want to go?

The research units consist of laboratories, microbiology, pathology and radiology; and the clinics and outpatient clinics consist of the ENT, Gynecology and Obstetrics, Oncology, Radiation Oncology, Dermatology, General Surgery, Internal Medicine, Anesthesia, Pediatrics, Infectious Diseases, Cardiology, Cardiovascular Diseases, Physical Therapy and Rehabilitation, Pediatric Surgery, Chest Disease, Neurosurgery, Neurology, Orthopedics, Urology and Psychiatry. The data were entered into SPSS software after control. Percentage and frequency distribution of the data was performed and the findings obtained were analyzed.

3 Findings

Percentages of the questions addressed to the patients who applied to the examination units, clinic units and laboratory units were calculated. Among these calculated percentages, the answers given by the patients who applied to the clinic units are shown in Table 1.

Table 1 shows the answers of 365 patients of clinics to the first question "Do you think the location of outpatient clinics, the distance between interrelated clinics and the distance between clinics, laboratories and radiology unit are set appropriately?". 0 % very poor, 9.86 % poor, 3.56 % I have no idea, 48.5 % good, 38 % very good. The answers of 365 patients of clinics to the second question "Are the help desk and referral signs sufficient enough to make you reach the place you want to go?" are as

Table 1 The distribution of patients according to clinical service location

	Clinics				
	1st question		2nd que	2nd question	
	N	%	N	%	
Very poor	0	0	0	0	
Poor	36	9.86	11	3	
Have no idea	13	3.56	8	2.2	
Good	177	48.5	155	42.5	
Very good	139	38	191	52.3	
Total	365	100	365	100	

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Table 2 The distribution of patients according to their positions policlinic services

	Policlinics				
	1st question		2nd que	2nd question	
	N	%	N	%	
Very poor	4	1.14	4	1.14	
Poor	44	12.6	22	6.3	
Have no idea	40	11.4	22	6.3	
Good	193	55.1	137	39.14	
Very good	69	19.7	165	47.1	
Total	350	100	350	100	

Table 3 The distribution of patients according to the positions laboratories service

	Laboratories				
	1st question		2nd que	2nd question	
	N	%	N	%	
Very poor	5	1.23	4	0.9	
Poor	56	13.8	6	1.5	
Have no idea	4	1	12	3	
Good	252	62	178	44	
Very good	89	22	206	51	
Total	406	100	406	100	

follows: 0 % very poor, 3 % poor, 2.2 % I have no idea, 42.5 % good, 52.3 % very good. The answers given by the patients who applied to the polyclinic units addressed to them are shown in Table 2.

Table 2 shows the answers of 350 patients of outpatient clinics to the first question "Do you think the location of outpatient clinics, the distance between interrelated clinics and the distance between clinics, laboratories and radiology unit are set appropriately?". 1.14 % very poor, 12.6 % poor, 11.4 % I have no idea, 55.1 % good, 19.7 % very good. The answers of 350 patients of clinics to the second question "Are the help desk and referral signs sufficient enough to make you reach the place you want to go?" are as follows: 1.14 % very poor, 6.3 % poor, 6.3 % I have no idea, 39.14 % good, 47.1 % very good.

The answers given by the patients who applied to the laboratory units addressed to them are shown in Table 3. As seen in the table, 23 % very poor, 13.8 % poor, 1 % I have no idea, 62 % good, 22 % very good. The answers of 406 patients of test units to the second question "Are the help desk and referral signs sufficient enough to make you reach the place you want to go?" are as follows: 0.9 % very poor, 1.5 % poor, 3 % I have no idea, 44 % good, 51 % very good.

4 Conclusions and Recommendations

At the present time, when there is a dense competition among health institutions, hospitals have to be attentive to work as patient-orientation and providing quality services to them to be preferred by patients. One of the most important factors that

differs a health institution from another is producing and offering higher quality than its competitors. Whether the quality of the offered service is satisfactory or not is decided by patients.

Excessive specialization and division of labor in hospitals makes the architecture complex. Within this complex structure, the patients and their relatives may have difficulty in finding the place they are looking for (Filik et al. 2013). Therefore, there should be guide signs in the hospital enabling the patients to find the place they are looking for and the architecture of the hospital must be in accordance with the guidance. The presence of these features in a hospital has a direct effect on patient satisfaction.

Analyzing the results of the study, it is observed that most of the patients, responded as "good and very good". Considering the percentages of very good and good answers in terms of the convenience of the distances between outpatient clinics and laboratories, radiology units, 87 % of patients admitted to the clinics answered "very good and good", 74.8 % of patients admitted to the outpatient clinics answered "very good and good", and 84 % of patients admitted to the test units answered "very good and good". Analyzing the answers to the question asked in order to measure the efficiency of help desks and guide signs, it is observed that 94.8 % of patients who admitted to the clinics, 86.2 % of patients who admitted to the outpatient clinics and 95 % of patients who admitted to the test units answered "very good and good". When examining the results, it is observed that the satisfaction rate is high. Filik et al. (2013), the responses to the question "I can easily find the place I look for with the help of the guide signs in your hospital" were as 22.8 % disagree, 7.5 undecided, 69.7 agree. In a study carried out by Ozcan et al. (2008), in Silvan State Hospital about the satisfaction of patients from the guide signs, the satisfaction rates found out to be as: 36 % very satisfied, 50 % satisfied, 18 % below my expectations, 3 % dissatisfied, 10 % unanswered.

Studies related to patient satisfaction examined and showed many determinants of patient satisfaction. Bleich et al. (2009)) stated that, all these determinants combined, which was mostly explained by patient experience and patient expectation, explained 17.5 % of the variation in satisfaction with the health-care system. Tasneem et al. (2010),considered different parameters of patient satisfaction and all aspects pertaining to the patients were duly reflected in the data collection form i.e. the treatment provided by doctors, hospital environment and facilities, accessibility of facilities, services in emergency etc. It was seen that the patient satisfaction regarding treatment of doctors in government hospitals was above 77 % whereas at DHQ level it was 95 %. Sreenivas and Babu (2012) studied on interpersonal skills of the medical personnel and demonstrated the importance of patients' feedback in hospital settings. The findings indicate areas for improvement including removal of poor interpersonal relationships between providers and patients. These skills are improved among the medical personnel.

This research, which was conducted after taking some measures in order to improve the in-hospital referral system, showed that the complaints about referrals has been reduced to almost zero and questions to the hospital staff is reduced. Hence, it was observed that patients find their ways easily without the necessity of asking to anybody. Again, it was observed that both patients and health staff benefit

from the arrangements carried out with hospital guidance system. Furthermore, it was thought that existence of patient guidance staff in patient admission unit will also increase patient satisfaction as well as arrangement of guidance boards inside the hospital. Staff experienced on this issue can be appointed in these locations by locating patient welcoming and guidance banks in the key locations of polyclinic services with the purpose of providing convenience for the patients coming to hospital for examination and treatment. The staff appointed in these locations can accompany especially old, urgent and handicapped patients and thus the transactions of them in the hospital can be completed easily. Well informed and valued patients have more confidence both in the treatment and care, and the health institution rendering this service and health team.

In conclusion, patient satisfaction is a multi-dimensional concept including service delivery, informing patient and guiding them to the place wanted, interaction of the patient with service providers, existence of service, continuance of the service, sufficiency of the service providers and their communicational skills. Consequently, patient satisfaction is accepted as a result of health services and generally as an indicator of quality of services.

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Managing Sustainability to Be First: The Toyota Case

Maria Garbelli

Abstract Sustainability matters along with attention to a company's social and environmental commitment and the related (complex) performance is far from new in the literature, but the last years have pressed both academics and managers by urgent issues such as climate changes and disasters, poverty, economic and social crisis in many countries, human rights violations, health concerns and so on. Also, the end of twentieth century saw unprecedented changes in corporate strategy and management towards sustainable thinking—the emergence of sustainability as corporate strategy, and making sustainability an integral part of a company's business strategy in order to gain bottom-line benefits and to accomplish new law requirements. In such a global, unstable, market, sustainability becomes an investable concept, crucial in driving interest and investments to the mutual benefit of companies and investors. Toyota's commitment for a sustainable management has been developed since decades ago and continues nowadays, representing a perfect example for the whole market, and witnessing the urgency of an integrated approach along the supply chain, in order to gain competitive advantage through 'sustainability'.

Keywords Sustainability • Global markets • Performance • Toyota

1 Introduction

Global firms are increasingly called upon to sustain preventative actions and adopt a sustainable approach to their development and resource use. Resulting from a series of worldwide political processes, Sharpley (2000) created a model of sustainable development with the aim of uniting the most important needs of our time (Table 1). Sustainability has been defined by the World Commission on Environment and Development(WCED 1987, p. 45) as "development that meets the needs of current generations without compromising the ability of future generations to meet their

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Table 1 A model of sustainable development: principles and objectives

Fundamental principles	Holistic approach: development and environmental issues integrated within a global social
	Futurity: focus on long-term capacity for continuance of the
	global ecosystem
	Equity: development that is fair and equitable and which provides opportunities for access to and use of resources for all
	members of all societies both in the present and future
Development objectives	Improvement of quality of life for all people: education, life
	expectancy, opportunities to fulfill potential Satisfaction of basic needs: concentration on the nature of what
	is provided rather than income
	Self-reliance: political freedom and local decision making for
	local needs
	Endogenous development
Sustainability objectives	Sustainable population levels
	Minimal depletion of non-renewable resources
	Sustainable use of renewable resources
	Pollution emissions within the assimilative capacity of the environment
Requirements for sustain-	Adoption of a new social paradigm relevant of sustainable living
able development	International and national political and economic systems dedicated to equitable development and resource use
	Technological systems that can search continuously for new
	solutions to environmental problems
	Global alliance facilitating integrated development policies at local nation and international levels

Source: Sharpley (2010)

own needs": in other words, it means thinking, working, and living in ways that don't use more resources and energy than you need. Since 1972 (Stockholm UN Conference on the Human Environment), the term sustainability—and the related commitment—has become an international trend and businesses' explicit commitment (Drexhage and Murphy 2010).

In the past decade, the interpretation of sustainability has occurred in various ways and in multiple contexts. The meaning of the term is equivalent to permanence and implies notion of durability, stability and eternalness. In fact the very term 'sustainability' derives from the word sustainable (sustain: to give support to, able: from Latin, to have, to hold) and the suffix ity (from latin'sitatem referred to the 'quality of being'). As noted (Fig. 1), the term as commonly used today appears to have first been used in the early 1970s (one noteworthy development at this time was the United Nations Conference in the Human Environment held in Stockholm in 1972), and drew upon the environmental discourse of the 1960s typified by emerging green movements.

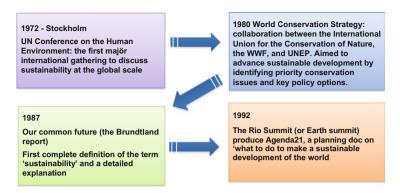


Fig. 1 International steps toward a sustainable world

2 Literature Review

In 1987, the World Commission on Environment and Development released Our Common Future (the Brundtland Report), and first officially introduced the term 'sustainability', which was further promoted with the publication of the World Conservation Strategy in 1980. Time after time, markets and companies have increased their commitment to this concept, going beyond strict legal accomplishments. This embodies the promise of societal evolution towards a more equitable and wealthy world in which the natural environment and our cultural achievements are preserved for generations to come. It grounds the development debate in a global framework, within which a continuous satisfaction of human needs constitutes the ultimate goal. The report makes an explicit connection between accepted models of development and the deterioration of the environment (Table 1).

In a study conducted at Boston College in association with Ernst & Young, 579 global companies (39 % of which were American) were asked to explain the 'ways that sustainability reporting provided value', and answered as Improved reputation, Increased employee loyalty, Reduced inaccurate information about the organization's CSP, Ability for the organization to refine its corporate vision or strategy, and Increased consumer loyalty.

In fact, there is a partial misunderstanding between Corporate Social Responsibility and sustainability, as the first is commonly identified as the social, ethical and environmental commitment of a company. In fact, such a definition partially overlaps the sustainability's one, as the sustainable approach is based mainly on three pillars, strictly related each other:

- Environmental protection;
- Social equity;
- Economic development.

At the business level, the term 'corporate responsibility' refers to a business approach that creates long-term shareholders (but stakeholders' at the same time)

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value, by embracing opportunities and managing risks deriving from economic social and environmental developments. According to the literature trend on the topic, sustainability performance can be defined as 'the performance of a company in all dimensions and for all drivers of corporate sustainability' (Schaltegger and Wagner 2006, p. 2). As it can be noted, the concept extends beyond the boundaries of a single company and typically addresses the performance of both upstream suppliers and downstream customers in the value chain (Fiksel et al. 1999)—what we call global networks.

Accordingly, corporate sustainability can be defined as "meeting the needs of a firm's direct and indirect stakeholders, including shareholders, clients, employees, and so on, without compromising its ability to meet the needs of future stakeholders as well" (Dyllick and Hockerts 2002, p. 131. In the last years, companies have faced growing pressure to tell the world how their actions affect society and the environment. This interest has led a number of companies to actively account for and manage their sustainability footprint. Amongst the sustainability issues which have emerge, Kolk (2010) has recently mentioned the following:

- Green issues (e.g. climate change, pollution, resource depletion);
- The potential impact on people (inside and outside the company); and
- Societal repercussions of the company's activity leading to responses on the part of regulators and other stakeholders.

The same Author declines those issues as global, regional or local. Dyllick and Hockerts (2002) identify six criteria for managers aiming for corporate sustainability, namely eco-efficiency, socio-efficiency, eco-effectiveness, socio-effectiveness, sufficiency and ecological equity. They also mention the following three key elements:

- Integrating the economic, ecological and social aspects in a 'triple bottom line';
 this means that sustainability can be divided into environmental sustainability,
 social sustainability and economic sustainability (Elkington 1997; Gladwin et al. 1995);
- Integrating the short-term and long-term aspects;
- Consuming the income and not the capital.

In their study, the Authors assert that corporate sustainability implies a 'broader interpretation' of the concept of capital than is used normally by either economists or ecologists. They identify three different kind of capital, as follows:

¹ 'The greatest pressure, at least externally, is coming from national regulators in the countries where firms operate. But pression is also coming from stakeholders—shareholders, business partners, and employees—and increasingly, from the companies themselves as they struggle to successfully combine performance and purpose in the post-recession world' (The Economist 2010).

- · Economic capital
- Social capital: This can be divided into human capital (primarily concerning aspects such as skills, motivation, loyalty and so on, of employees and business partners) and societal capital, which refers to the quality of public services such as a good educational system, infrastructure, a culture supportive of entrepreneurship and so on; and
- Natural capital: There are two types of natural capital. First, it take the form of
 natural resources (consumed in many business processes), whether renewable
 (such as wood, fish, corn) or non-renewable (fossil fuel, soil quality). On the
 other hand, natural capital can also take the form of ecosystem services (soil
 remediation, water purification, reproduction of plants or animals).

According to this perspective, it is possible to identify different kind of companies—depending on their inclination. Economically sustainable companies guarantee cash flows sufficient to ensure liquidity at all times while producing a persistent above average return to shareholders. Ecologically sustainable companies use only natural resources, which are consumed at a rate below the natural reproduction, or at a rate below the development of substitutes. They do not cause emissions, which accumulate in the environment at a rate beyond the capacity of the natural system to absorb and assimilate these emissions. Finally, they do not engage in activity that degrades ecosystem services. Socially sustainable companies add value to the communities within which they operate by increasing the human capital of individual partners, as well as furthering the societal capital of these communities. They manage social capital in such a way that stakeholders can understand its motivations and can broadly agree with the company's value system.

Literature agrees to consider different steps (or level) toward a sustainable management, from a strict regulatory compliance to a proactive approach on risk management (Table 2). In fact, a reactive attitude is demonstrated by the already cited regulatory compliance, or simple acts of philanthropy—which are usually developed side by side with a complex and wide system of communications on the business action.

This is a form of weak sustainability (Table 3), with a clear commitment:

- Environmental dimension: the exploitation rate of non-renewable resources is high, while there are some attempts of use of renewable resources.
- Social dimension: the concept of social capital is taken on account but it is not a basic part of the overall corporate strategy
- Economic dimension: deep attention to all forms of economic and financial capital

When a reactive attitude goes toward a proactive ones, integrating brand protection, operational excellence and risk management, it is possible to talk of strong sustainability, qualified by a clear distinction among economic, natural and social capital and the links between; the preservation of non-renewable resources; and effective commitment to preserve, promote and sustain social capital (Bottero and Mondini, 2008).

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Table 2 Levels of sustainability

Level	Main drivers	Main output	Main target stakeholders
Regulatory compliance	Compliance Avoiding fines Liability protection	Regulatory reports	• Governments • Regulatory authorities
Brand protection	Reputation enhancement Market share protection Share value protection	Annual report Sustainability report	• Shareholders • Customers • Public • NGOs
Operational excellence	Energy cost savings Savings on cost of materials Reduction of costs associated to incidents and accidents	Annual report Sustainability report	Shareholders Capital markets
Risk Management	Natural capital risks Water risks Supply chain sustainability Identification of cost-reduction and revenue opportunities	Integrated report Disclosure of material issues Non-financial disclosures	Shareholders Capital markets

Source: http://enterprisesustainabilitymanagement.com

Table 3 Weak sustainability versus strong sustainability

Weak sustainability	String sustainability
Manufactured capital of equal value can	The existing stock of natural capital must be
replace natural capital	maintained and enhanced because the functions
Environmental dimension	it performs cannot be duplicated by the
The exploitation rate o non renewable	manufactured capital
resources must not exceed the development	Non-renewable resources must be preserved.
rate of alternative renewable resources	The exploitation rate of renewable resources
Economic dimension	must not exceed their development rate. The
Respect of the critical threshold value for any	pollution rate must not reduce the carrying
form of capital	capacity of the environmental system
Social dimension	The different forms of capital must be con-
Social capital is taken into account	served. An increase in economic capital is only
-	possible if it does not affect the natural and
	social capital
	Social capital must be conserved in time.
	Cooperation, coordination and collaboration
	initiatives are promoted, according to bottom-
	up models

Source: Bottero and Mondini (2008)

Financial markets are increasingly interested in sustainable approaches, and a new kind investor—the social responsible investor—is asking for investments with both financial goals and social and environmental requirements in mind. As stated by SustainAbility, 'corporate sustainability performance is an investable concept. This is crucial in driving interest and investments in sustainability to the mutual benefit of companies and investors. As this benefit circle strengthens, it will have a

positive effect on the societies and economies of both the developed and developing world'. For this reason, corporate sustainability leaders achieve long-term shareholder value by gearing their strategies and management towards harnessing the market's potential for sustainable products and services while at the same time successfully reducing and avoiding sustainability costs and risks.

Leading sustainability companies display high levels of competence in addressing global and industry challenges in a variety of areas, as described in the following:

- Strategy: Integrating long-term economic, environmental and social aspects in their business strategies while maintaining global competitiveness and brand reputation:
- Finance: Meeting shareholders' demands for sound financial returns, long-term economic growth, open communication and transparent financial accounting;
- Customer and product: Fostering loyalty by investing in customer relationship management and product and service innovation which focuses on technologies and systems using financial, natural and social resources in an efficient, effective and economic manner over the long term;
- Governance and stakeholder: Setting the highest standards of corporate governance and stakeholder engagement, including corporate codes of conduct and public reporting; and
- Human: Managing human resources to maintain workforce capabilities and employee satisfaction through best-in-class organizational learning and knowledge management practices and remuneration and benefit programs (Patari et al. 2012).

The relationship between a firm's sustainability efforts (in many studies strictly identified with environmental ones) and its financial performance has gained increasing interest amongst academics and in the media in recent years. One of the first questions to address concerns the direction of the relationship. According to Freeman's 'good management' theory—and the stakeholder approach² adopted, investments in sustainability can lead to good environmental performance, and ultimately, to better economic performance. A few years after this theory was put forward, the slack resources theory was developed, which claimed that high economic performance frees resource to be invested in sustainability, in order to improve environmental performance. In the late 1990s, Klassen and McLaughlin (1996) identified a direct connection between corporate strategy, environmental management (and performance) and ultimately financial performance, and Miles and Covin (2000) confirmed this hypothesis (Fig. 2).

² The stakeholders approach indicates that organisations are not only accountable to its shareholders but should also balance a multiplicity of stakeholders interests that can affect or are affected by the achievement of an organisation's objectives (Freeman 1984).

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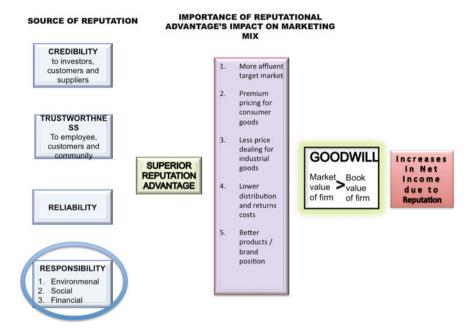


Fig. 2 Sustainability and value creation. Source: adapted Miles and Covin (2000)

Most recently, Patari et al. (2012)—focusing on the energy industry, in which sustainability issues are of special interest, but where the association between firm performance and sustainable development has not yet been studied—show evidence of a positive association between sustainable development and firms' financial performance, especially when performance is measured as the market capitalization value.

3 Methodology

In order to investigate the phenomenon of value creation through sustainability, empirical research was carried out with a single case, which is a global witness of a sustainable management, integrating the basic principles and pillars of sustainability in its strategy and operation, offering an innovative (and largely imitated) sustainable business model. The global automotive sector has been chosen as it is taking positive steps towards a circular economy through remanufacturing, recycling³ (through end-of-life vehicles [ELVs] recycling programs) and material

³ One remanufactured part uses 80 % less energy, 88 % less water, 92 % fewer chemical products and generates 70 % less waste during production compared to a new part (Perella 2014).

innovation, in order to realize a sustainable mobility.⁴ Indeed, within Europe, end-of-life legislation dictates that 85 % of a car must be recycled, and this is expected to increase to 95 % in 2015. On the other hand, oil accounted for 95 % of global energy used for transportation. This is why 'with long-term goals around fuel efficiency, superior energy use, and the reduction of toxic emissions, the automotive industry has been able to turn such consideration points into areas of environmental leadership. The industry as a whole has launched a competitive range of high-profile alternative fuel vehicles—from electric models to hybrids—and even some with internal combustible engines'.

Several manufacturers (including Toyota, Honda, Volkswagen, BMW, Ford, Mercedes-Benz, Nissan and Hyundai) are involved in trials working with vehicle dismantlers, shredders and recyclers to ascertain the best methods for high value extraction of mechanical and increasingly, mechanical/electronic (mechatronic) hybrid parts. Toyota is the focus of the practical case examined in this paper. The research has been conducted on line within the company's website, by examining both the same website (both the global, the Italian and the Japanese ones, Toyota's online pressroom and Toyota's sustainability section), the document released on the topic and the most relevant opinion leaders' website for our research. The paper does not take on account User Generated Contents.

4 Results

Toyota is one of the 'best known' companies in terms of sustainability, and it exhibits excellent performance in its industrial market (Ricotti 2010), having adopted a management approach towards sustainability in 1993 (when it published its first Environmental Action Plan, followed by its first Environmental Report in 1994) and putting the customer first in its Total Quality programme.

Toyota's production system is 'an integrated socio-technical system (...) that comprises its management philosophy and practices. The Toyota Production System (TPS) (Womack et al. 1990) organizes manufacturing and logistics for the automobile manufacturer, including interaction with suppliers and customers' (Basak et al. 2013). Its 'lean' philosophy is based on the following three pillars:

⁴ Toyota seems to be the leader on the movement from a traditional transport way, the so called 'conventional approach—transport planning and engineering, to a new, unconventional one: sustainable mobility (Banister 2008). Despite a lack of clear definition on the wider concept of sustainable transportation, we can adopt the Sustainable mobility one, which fits our research aim: it 'means transporting people in eco-friendly ways. It means using mass transit in urban environments, particularly electrified trams and trolleys and light rail trains for beyond downtown. As it relates to personal transportation, it's using electric drivetrains—all-electric vehicles, hybrids, plug-in hybrids and fuel cell hybrid vehicles—as well as alternative liquid and gaseous fuels for internal combustion engine vehicles. The goal: To reduce the impact of transportation on the climate and eventually replace petroleum-based fuels—also mitigating the global strife associated with petroleum-based fuels' (Gable 2014).

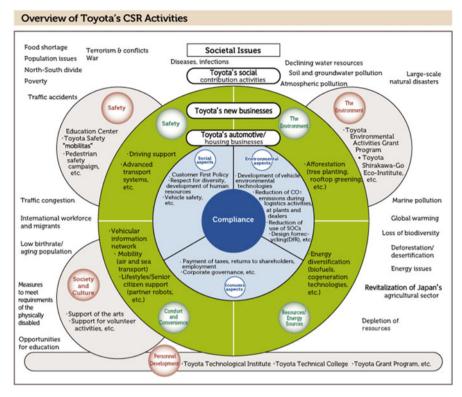


Fig. 3 Toyota's CSR activities. Source: www.toyota-global.com

Increasing value;

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- Reducing waste; and
- Respecting people.

The innovative company's target is production of easily recycled cars by thinking about the future use of parts and by minimising waste (Ricotti 2010). On its website, Toyota explicitly states its commitment to sustainability in three areas, namely CSR, environmental protection and its citizenship programme, as described below (Figs. 3 and 4):

4.1 CSR Initiatives

This area concerns information regarding the people, policies, organisations and initiatives related to Toyota's CSR. Toyota commitment to CSR was declared in 2005 in the report titled 'CSR Policy: Contribution towards Sustainable Development'. This document (revised in 2008), along with the Toyota Way and Toyota Code of Conduct, communicates the company's values.



Fig. 4 Toyota's environmental initiatives. Source: www.toyota-global.com

Since its foundation, Toyota has continuously strived to contribute to the sustainable development of society through the manufacture and provision of innovative and quality products and services that lead the times. Cars are useful because they afford us freedom of mobility. On the other hand, they impact society and the environment in various ways. Always bearing this in mind, we listen carefully to our customers and neighbours in local communities to pursue our business, seeking harmony with people, society, and the global environment, as well as the sustainable development of society through monozukuri (manufacturing).

(...) Toyota aims to become a company that is admired and trusted by society by ensuring that all employees recognize and put into practice our CSR Policy. We also share it with our consolidated subsidiaries and take appropriate action. And we expect our business partners to support this initiative and act in accordance with it.

In addition, we participated in the formulation of and observe the standards outlined in the Charter of Corporate Behaviour of the Nippon Keidanren (Japan Business Foundation), an alliance of leading Japanese corporations (...). The basis of our rationale is our CSR Policy. We share it with our consolidated subsidiaries and take appropriate action (by complying with local, national and international laws and regulations). And we expect our business partners to support this initiative and act in accordance with it.

4.2 Environmental Responsibility

From the development of sustainable vehicles and making manufacturing plants sustainable to vehicle recycling, 'eco-driving' educational programmes and reforestation, Toyota is actively engaged in a wide variety of programmes to improve the environment. The main aims for environmental protection can be summarised as follows:

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- To establish a low-carbon society (reduce GHG emissions);
- To establish a recycling-based society (enhancing resource recycling through

 (a) recycling automobile shredder residue from ELVs;
 (b) research and development related to recycling technologies;
 and (c) resource recycling of rare metal and rare earth);

 To engage in environmental protection and establish a society in harmony with nature.

These aims have been developed all over the world with local, national and international partners. The Japanese manufacturer intends to reduce the environmental impact at every stage of the vehicle lifecycle (development and design, procurement, production and logistics, sales), promoting both recycling and environmental management.

4.3 Corporate Citizenship

Toyota declares its goal, both individually and with partners, to promote and engage in social contribution activities that help strengthen communities and contribute to the enrichment of society.

The Basic Principles and Policies of Social Contribution Activities, which were originally adopted in 1995, were revised in April 2005. These are positioned below the Guiding Principles at Toyota and the explanatory Contribution towards Sustainable Development is intended to clarify the objectives of Toyota's stance concerning social contribution activities as well as the scope of those activities. The central theme of the principles is 'creating a prosperous society and achieving sustainable development'. This fundamental notion is shared throughout Toyota at a global level.

Toyota has already achieved several goals, such as the following:

- More than 10 % of its sales are of hybrid vehicles;
- The brands Toyota and Lexus have eight hybrid fuel models, to increase to 20 up to the end of 2014, along with the first fully hydrogen fuel;
- Workers' safety conditions in its manufacturing plants have been improved 33 % over 2011; and
- All the European manufacturing and logistics plants are ISO 14001 certified.

The Best Global Green Brands report ranked Toyota in first place for the last 3 years, both in effective action and customer perception. This score is particularly due to the energy-saving, sustainable hybrid-electric Prius. Interbrand—a global branding agency, which examines both performance and brand perception related to sustainability—argue that despite its excellent position as the top Best Global Green Brand for the third year in a row, Toyota is losing ground to auto rivals Nissan, Ford, and Honda in overall environmental sustainability performance, but

leads them in perceived performance thanks to a single sub-brand: the Prius, with more than 2.9 million models sold worldwide in 2012 (1.2 million in the US alone). It scores #1 for perception in its home country, where it's exploring the future of mobility at the Toyota Ecoful Town, a low-carbon pilot project in Toyota City, Japan. The world's biggest auto maker—and Asia's biggest manufacturer—aims to produce even more efficient, cleaner-emitting cars and further reduce its operational impact. It's rolling out more than 20 new hybrid models in the next 3 years (including a refreshed RAV4 EV this year) and a full hydrogen car in 2015, while developing new fuel-cell technologies, lithium-air batteries, and LED lighting technologies. Operationally, Toyota reduced greenhouse gas emissions and energy and water consumption, and kept millions of pounds of cardboard and wood out of landfills by using reusable metal containers for shipping and distribution. Partnerships such as TogetherGreen with the US National Audubon Society also help build goodwill with consumers.

Amongst the more recent sustainability initiatives, Toyota also launched its first Toyota Material Handling Europe sustainability report. The document focuses on Toyota's factories and the performance of four European countries. Following the submission of the report, Toyota Material Handling Europe was awarded Gold Level for its sustainability performance by EcoVadis (a company monitoring the sustainability profile of suppliers across 150 sectors and 95 countries). Toyota also ranks highly in the four assessment categories in the material handling sector (Environment, Labour Practices, Fair Business Practices and Suppliers), and in 2013, was awarded Gold Level for its sustainability performance.

5 Discussion and Conclusion

Sustainability has become an urgent issue to be pursued (and well communicated) by businesses all around the world. This trend is well far from being a simple act of corporate philanthropy, but demonstrates a more deep engagement on sustainability. As literature and practice demonstrate, a sustainable approach to management fosters shareholders value (and stakeholders' as well), and it is appreciated by financial markets investors.

The research presents Toyota's approach on sustainability, and the search for a competitive advantage based on its development at a large scale in the company—starting from the high levels to the operationals, as a relevant example of corporate sustainable management, showing how the company has modified its strategic and operational impact by adopting an innovative sustainable business model. Such a strategy as produced a strong image for the company, both at national and global scale, serving as a base in case of crisis management.

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The Importance of the Evaluation of R&D in Relation to the Competitiveness of the Czech Republic

Ruzena Stemberkova, Petr Zdralek, Pavla Matulova, Petra Maresova, and Kamil Kuca

Abstract The Czech Republic considers the development of science and research as one of its priorities. To ensure the quality of results and the efficiency of public support, the best R&D results are considered to be: in particular articles in impact and selected peer-reviewed scientific journals, patents and similarly protected results (patent applications, granted patents, industrial designs) and licenses and applied outputs. The aim of the study is to analyze the state of innovation activities in relation to European Union countries. For this purpose, the analysis of selected indicators will be used: the proportion of R&D expenditure in relation to GDP and patent activity in the country. The processing of this issue was based on a literature research of professional literature articles on this topic from international databases (e.g. Eurostat). The analysis showed that Germany, the Nordic countries of Europe and France were among the countries with good results in the observed indicators of innovation activity in the EU. On the basis of the case study it was found, that profits from the commercialization of inventions are usually shared between the originator, the research department at which the invention was created and the headquarters of the University.

Keywords Competitiveness • Patent • Remuneration of originators • Evaluation of R&D • Technology

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1 Introduction

Science and research is an important area in relation to the economies within the EU. The issue of the economic aspects of the management of R&D is met by the public almost daily.

It ensures and improves the competitiveness of individual countries, as well as expanding and improving the social life of the population (Slany et al. 2007). The studies in this area are focused on attitudes of companies, if specific type of organizational culture is facilitated by significant management practice factors and enhances efficient technology transfer (Nguyen and Aoyama 2014). Another paper combines the field of technology transfer and technology-specific aspects with sustainable development objectives (Blohmke 2014). Technology transfer offices (TTOs) are of strategic importance to universities committed to the commercialization of academic knowledge. Within the university, TTOs' relationship with academics and management is single agent-multiple principal. When two principals exist in an agency relationship, conflicting expectations can naturally arise. Taking Taiwan's universities as a research base, Hsu et al. (2015) intend to identify the critical drivers affecting the performance of university technology transfer. Kalar and Antoncic (2015) aim to provide an insight into academics' perceptions of an entrepreneurial university. In spite of all the initiatives, environmental changes and desire to create entrepreneurial universities, there is limited research on how the entrepreneurial orientation within a university may influence academics' engagement indifferent activities (Matulova et al. 2014; Štemberková et al. 2015).

The evaluation of this issue is based on the national documents in each state. In the Czech Republic, this primarily concerns patents, industrial designs, recognized animal breeds and plant varieties, impact publications or reviewed papers in scientific journals. In the context of this paper past experience will be summarized and the Czech Republic will be compared in the context of European countries with practical applications and case studies: a comparison of the directives rewarding business inventions and designs in the environment of selected universities (due to the fact that these internal measures were mostly formed in the last 2 or 3 years in academic institutions). The aim of the paper is to analyze the evaluation of the results of R&D at universities in the Czech Republic, also set in a comparison of the number of patent applications filed in European countries. A comparison of financial resources employed of individual European Union member states leads to their improved competitiveness. During the preparation of this paper, a combination of qualitative—quantitative research using the Eurostat database and individual universities, preceded by research literature available on the topic was used.

A university in the Czech Republic pursuant to Act No. 111/1998 Coll. as amended by the subsequent regulations on universities, is an institute of higher learning which can perform all types of study programs and the related scientific, research, and other creative activities, non-university college undergraduate and graduate degree programs and the related scientific creative activity.

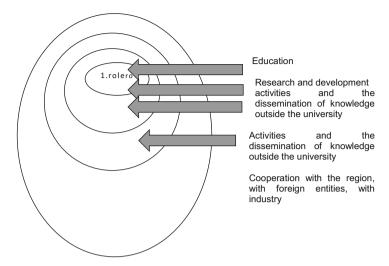


Fig. 1 Role of the university

Universities are usually perceived as educational and research institutions, whose knowledge is freely distributed, particularly through publications and educational activities (Cada 2013). In this case, the first and second roles of universities are often spoken about. In the course of time the view that universities also fulfill a third role began to prevail (see Fig. 1).

This third role is the transfer of technology, namely the transfer of knowledge into practice. Intellectual property protection is thus rapidly gaining in importance in the environment of universities. The transfer of technology does not only have its commercial objectives, its mission is also to spread the good name of universities, knowledge dissemination, collaboration with industry and ultimately increase the competitiveness of the region. Intellectual property protection is only an intermediate step, resulting in the application of research results in practice (Cada 2014; Horacek et al. 2005).

Public aid recipients which are legal entities are required to regulate their method of management of R&D results in their internal regulations. The issue of employee inventions and securing patent protection or the protection of intellectual property is undoubtedly a part of such regulation. As a result of this relatively newly imposed obligation (from 30.6.2009) it is good practice for universities to have a directive on a system of commercialization of research results and/or intellectual property protection. This is one of the reasons why centers or technology transfer offices were created at universities. This specialized department can ensure a wide range of services, cooperate with domestic and foreign companies and initiate and support the transfer of technology, knowledge and know-how from the university precisely to these companies. The core of the main content of these centers consists in underpinning the process of identifying a research finding that may be useful in practice. Subsequently, those applications with commercial potential are verified.

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Fig. 2 Communication between University and Company. *Source*: Stemberkova and Nemcova (2013)

From the organizational point of view, the centers are mostly formed from their regular employees, i.e. those who are a stable and permanent part of the center (legal and financial management, IP managers and commercialization). The second part of the workforce is made up of technology scouts, which are the staff at the faculties who follow events directly within research teams and thereby provide them with the first information as well as mediating daily contact between the faculties and the department offices or technology transfer centers (see Fig. 2).

The amount of reasonable remuneration for the originator should be calculated with respect to the statutory criteria. These criteria are intentionally flexible in order to apply a fairly general standard for a particular variable reality. However, if a formula for calculating the remuneration is not exactly prescribed, it opens up the space to disputes; the originator and the employer may have very different views on what is appropriate. Unless they agree, the parties may appeal to the courts. Universities often choose the specification of claims to remuneration and their amount through internal regulations.

2 Methodology

The processing of this issue was based on literature research of professional literature and articles on this topic. The series of documents discussing the evaluation of R&D in the Czech Republic was analyzed as well as internal documents and measures of individual universities in the Czech Republic relating to the protection and management of intellectual property. Last but not least the Ministry of Education, Youth and Sport in Prague was consulted as well as the National Industrial Property Office.

3 The Level of R&D in the Czech Republic and in the Countries of the European Union

The Czech Republic considers the development of science and research as one of its priorities. To ensure the quality of results and the efficiency of public support, the best R&D results are considered to be: in particular articles in impact and selected peer-reviewed scientific journals, patents and similarly protected results (applications, patents, industrial designs, recognized plant varieties or breeds of animals) and licenses and applied outputs.

3.1 The Status of Research and Development in the European Union

EU strategy—Europe 2020 sets out a vision for a common European social market economy for the twenty-first century. One of the main and key objectives of this policy is to maintain an R &D intensity of 3 %, which should be achieved by the EU in 2020. In 2012, the Commission adopted a communication on strengthening the European Research Area (ERA). The ERA represents a single research area open to the whole world. It is based on the internal market, in which researchers, scientific knowledge and technology circulate freely. Individual communications will be implemented by EU Member States, the Commission itself, and research organizations. The completion of the ERA is planned by the end of 2014, as requested by the European Council. The following Fig. 3 shows R&D expenditure in relation to GDP.

The highest spending, regardless of whether these costs come from the private or public sector, is in the Nordic countries and in Germany and France. The Czech Republic is below average. When comparing the number of applications filed between EU member states to the European Patent Office, it is found that by far the highest number of patent applications was filed in Germany in 2011, about

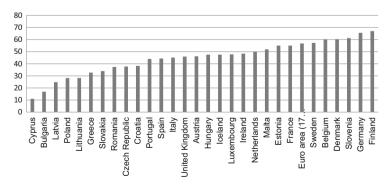


Fig. 3 Gross domestic expenditure on R&D (percent of GDP)

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22,257 (41.2 % of the total in the EU—28), followed by France (8615), United Kingdom (4966), Italy (3865) and the Netherlands (3239). For other countries, the highest number of patent applications was recorded in the United States (26,064) and Japan (17,896), followed by rapidly developing China (5283) and South Korea (4527).

It is very interesting to highlight the statistics to the proportion of the population living in the state. Primacy is again occupied by Germany where there are 272 applications per million inhabitants, followed by Sweden (260) and Finland (243). If we follow and compare the number of patent applications (see Table 1) filed at the European Patent Office in 2005 and 2011, we find that it declined in the 15 Member States of the EU, of which the largest contraction in relative terms was recorded in Croatia (-54.4 %), in Bulgaria (-52.0 %), Luxembourg (-46.3 %), and if we further compare the evaluation in absolute terms, the highest decline was in Germany (-1698), Italy (-1039) and the UK (-668). Conversely, an increase or growth in applications, if we compare the absolute expression, was recorded in the remaining 11 Member States as seen from Table 1 in Spain, Poland and France. While comparing the relative numbers the largest increase was recorded in Estonia, Poland and in the Czech Republic.

Eurostat has recently started to compile statistics and data on patent applications in metropolitan areas, in other words, geographic analysis based on data for one or more NUTS level three regions. Seen from this perspective, it is not surprising. Capitols usually appear at the top of the ranking (see Fig. 4) for example, in Paris, Berlin, London, Stockholm, Brussels, Helsinki, Copenhagen and Vienna. In the context of the above graphs, the TOP 30 includes 15 German metropolitan areas, and 6 of them are located in the TOP 10. In France, a traditionally high concentration of research centers is in the metropolitan area of Paris, which is reflected in the 1333 patent applications that were registered there, the highest among all metropolitan areas of the EU. Another two French metropolitan areas, Grenoble and Lyon, appear in the top 30. Similarly, three Swedish metropolitan areas are classified in the top 30, namely Stockholm, Gothenburg and Malmö. High-tech patent applications represent 49.2 % of the total number of patent applications in Malmö, which is the highest share recorded in the TOP 30 metropolitan areas. In 14 of the other top 30 metropolitan areas, the percentage of patent applications in the field of high technology was between 20 % and 40 %. On the contrary, Turin (Italy) showed only 3.6 % of high-tech patent applications.

4 Case Study

4.1 University of South Bohemia in České Budějovice

The University of South Bohemia has released completely new measures from the Rector on the management of intangible assets, which are more fully developed,

Table 1 Patent applications filed at the EPO when compared with 2005 and 2011

	Number of ap	plications	Per million i	nhabitants
EU—28	2005	2011	2005	2011
Belgium	1505	1265	144	115
Bulgaria	24	11	3	2
Czech republic	109	183	11	17
Denmark	1181	1139	218	205
Germany	23,955	22,257	290	272
Estonia	6	59	5	44
Ireland	277	359	67	78
Greece	111	85	10	7
Spain	1361	1630	32	35
France	8374	8615	133	133
Croatia	33	15	8	3
Italy	4904	3865	84	64
Cyprus	17	_	22	_
Latvia	19	20	8	10
Lithuania	9	7	3	2
Luxemburg	102	55	221	107
Hungary	135	183	13	18
Malta	11	_	28	_
Netherlands	3494	3239	214	194
Austria	1517	1630	185	194
Poland	128	376	3	10
Portugal	124	75	12	7
Romania	29	33	1	2
Slovenia	109	132	54	64
Slovakia	31	23	6	4
Finland	1323	1308	253	243
Sweden	2417	2448	268	260
United Kingdom	5634	4966	94	79
Iceland	31	_	107	_
Lichtenstein	26	29	738	801
Norway	491	651	107	132
Switzerland	3201	2918	432	371
Turkey	166	450	2	6
Australia	1123	827	55	37
Brazil	203	267	1	1
Canada	2465	2141	76	62
China	1663	5283	1	4
India	590	965	1	1
Israel	1413	1011	211	130
Japan	21,859	17,896	171	140
Russia	305	243	2	2

(continued)

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	Number of a	pplications	Per million i	inhabitants
South Korea	5136	4527	107	91
Taiwan	750	1438	33	62
United States	36,892	26,604	125	84

Table 1 (continued)

Source: Eurostat

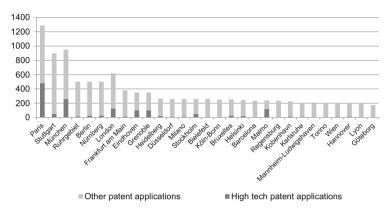


Fig. 4 TOP 30 European cities—number of patent applications handed in to the EPO (2010). *Source*: Eurostat

unlike the original, which rather only discussed and defined the concepts from the field of intellectual property. Under the original directive, the rewarding of originators was not established nor was a diagram or process of commercialization for individual cases presented.

The University of South Bohemia therefore prepared the payment of reasonable remuneration for its originators in two steps. The first step is, if USB decides to exercise its right, the employee loses the right to dispose of the results, but has the right to place their name as the originator of the outcome and the right to reasonable remuneration. Under the measure, the rector determines (see Table 2) the amount of remuneration for the disposal of intangible assets determined for each faculty dean. The researcher/originator of the result is notified about this decision in writing by completing the form "application of the research results of originators".

4.2 Palacky University, Olomouc

At Palacky University in Olomouc, the following approach is applied. If the University exercises its right to protect industrial property, it is entitled to remuneration. In the event that the subject of industrial property was created by

Net revenue SBU	Amount of the remuneration of originators	Share of the workplace of the originator	Share of TTO SBU ^a	Contribution to the USB license fund ^b
Up to 100,000 CZK	70 %	10 %	10 %	10 %
100,000 CZK to 1 million CZK	55 %	20 %	15 %	10 %
Over 1 million CZK	40 %	34 %	20 %	6 %

Table 2 Remuneration at the University of South Bohemia in České Budějovice

Remuneration resulting from the commercial application of industrial property is paid to all participants by the end of April of the following calendar year

Table 3 Remuneration at Palacky University

Net income after tax from the use of industrial property rights	Originator	Workplace of the originator	Faculty	VTP UP
Up to 1 million CZK	60 %	20 %	10 %	10 %
From 1 million to 5 million CZK	600,000 CZK + 35 % of the amount above 1 million CZK	200,000 CZK + 45 % of the amount above 1 million CZK	10 %	10 %
Over 5 million CZK	2 million CZK + 20 % of the amount above 5 million CZK	2 million CZK + 60 % of the amount above 5 million CZK	10 %	10 %

Source: Rector's directive UP No. B3-09/1 (http://www.upol.cz/fileadmin/user_upload/english/english-guidelines/PRB3-09-1.pdf)

co-originators, each of them shall be paid remuneration. The rules for the distribution of remuneration are negotiated by the co-originators in the Contract on co-shares from co-origination. Remuneration from the commercial application of industrial property is determined as a percentage of net income after tax. The amount of remuneration is determined according to the following criteria (see Table 3).

Remuneration resulting from commercial application of industrial property is billed and paid to all interested parties billed and paid from the actual payments received on a quarterly basis on the last day of the following quarter.

At the same time, I would like to note that if the originator effectively cooperates with the university in the steps leading to the use of industrial property, namely providing all necessary assistance so that the object can be properly and effectively utilized. In this case, it is possible to grant originators a special bonus.

^aUnused TTO contributions are transferred to the USB license fund at the end of the year (if they exist)

^bUntil the time of the creation of the university license fund, these funds belong to the workplace of the originator

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Net revenue for the Brno University of technology (CZK)	The percentage rate of remuneration of net revenue for the originator	The percentage rate of remuneration of net revenue for the workplace, where the originator worked at the time of the creation of the invention (faculty department or part of the University of Technology)	The percentage rate of remuneration of net revenue for the patent and licensing fund of BUT and the UTT workplace
The first 100,000 CZK	70 %	15 %	15 %
Another 400,000 CZK	50 %	25 %	25 %
Over 500,000 CZK	34 %	33 %	33 %

Table 4 Remuneration at the Brno University of technology

4.3 Brno University of Technology

At the Brno University of Technology, a combination of the two approaches was chosen (Table 4), namely a flat-rate remuneration and remuneration from the use of the invention. The flat rates are set as a fixed amount, remuneration from use is set as a percentage of the share of profits, which the University has from the commercial application of the invention. Originators receive their first reward for the application of rights. This remuneration is intended to compensate scientists for the time and effort devoted to fulfill its reporting obligations and completing the required forms and preparing patent applications. Its amount is symbolic. The statutory criteria to some extent reflects the terms of the scope of tasks the originator, when the science and research are regarded as one of the main activities of the academic staff. An additional lump sum remuneration awaits the originator when the patent is granted. This remuneration at BUT reflects the criterion of the technical and economic importance of the invention—this both demonstrates that the invention has met the conditions of patentability and successfully passed the examination, and that the employer is willing to protect the invention using other resources.

It is alleged that in practice BUT employees accept the stated model well, and if there is any dispute concerning the interpretation of internal guidelines—the amount of remuneration is not challenged as inappropriate.

4.4 Summary

On the basis of the case study it was found, that profits from the commercialization of inventions are usually shared between the originator, the Research Department at

which the invention was created and the headquarters of the University. The remuneration of originators is their private income and is not earmarked. Conversely, the part designated for research facilities is expected to be used for the further funding of R&D activities. The headquarters of the University provides support services to all departments from its share. The amount of the individual shares is a matter of internal policy of each school. I consider the gradual implementation of the remuneration of individual originators in the university environment in the Czech Republic to be a great success. The legislation in the Czech Republic is thereby fulfilled, which stipulates the obligation to pay, albeit very vaguely. Perhaps within the scope of the unification of interpretations of the individual universities, it would be worth it for the Czech government to more precisely specify the implementing regulation of this obligation and set a clear intention on this issue. It is clear that the financial amounts at the universities are determined in different ways. At some universities there is a one-time only remuneration associated with the direct sales of the R&D results and some universities in the Czech Republic divide the remuneration into several phases. We believe that this approach is more transparent and also better for the motivation of researchers. I perceive the spreading of the good reputation of the university through successful commercialization as a very important aspect of this process, which as a result increases the public awareness of the innovators. It is obvious (and many universities count on this), that the methodology of remuneration will have to be revised over time and the different academic institutions evaluated and then possibly modify or propose other changes to it.

For this reason, it is good that a remuneration system was introduced at the universities which did not have it during the last 3 years, since researchers could dispose of the research results often in the favor of their own established companies after a period of 3 months (the period in which the employer can claim the right to the results of R&D).

It would be worth comparing the method of remuneration with other universities in Europe, especially in those countries where R&D expenditures are much higher than the Czech Republic and where TT centers have been working for a long time. Their system will already be time-tested and possibly modified.

5 Conclusion

The aim of this paper was to study the situation of R&D in the Czech Republic, the comparison of the remuneration of bearers of intellectual property in a case study and thus increasing their motivation and comparing this issue with some selected European countries. The analysis showed that the studied issue meets the basic prerequisites for increasing competitiveness. One of the countries that has built its strong position in terms of the evaluation of submitted patent applications to the EPO is Germany and its major cities, followed by France and the Nordic countries of Europe.

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In the ongoing process of globalization and reducing economic growth, intellectual property protection, commercialization and the application of these results in order to increase the competitiveness of individual countries is becoming more important. The possibility of obtaining competitive advantages through the mutual cooperation of the economic segment and the academic environment can occur.

One form of increase in the university environment is to establish the transparent remuneration of the originators of R&D results. Innovation, research and development are among the objectives and pillars of the European Commission for the construction of an internal high quality, efficient and effective European area.

It would be worth comparing the method of remuneration with other universities in Europe, especially in those countries where R&D expenditures are much higher than in the Czech Republic and where TT centers have been working for a long time.

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The Specific of Cartel Markets in the Countries of Developing Culture of Competition

Jurgita Bruneckiene and Irena Pekarskiene

Abstract One of the most harmful competition infringements are cartels, which make damages to national economy. In some markets the cartels are detected fast enough, while in others they exist for decades. It is important to identify and explore the characteristics of the markets with increased cartelization risks. The theoretical identification of evidence suggesting the existence of a cartel in a market and factual comparison with the real market situation may represent the preliminary stage in the cartel detection process and verification of cartel existence. The paper analyzes the characteristics of cartel markets, the factors, indicating higher risks of market exposure to cartelization as compared to other markets and the economic factors evidencing cartel existence. The empirical analysis is based on Lithuanian cases. This country is chosen because it corresponds to the features of the small economy with developing culture of competition. On the base of the theoretical analysis, the Lithuanian markets, where cartels were not found, but there's a greater chance that the cartels operate in these markets, are identified. The key economic factors, which have an impact on "Lithuanian" cartel formation, are presented also in the article.

Keywords Cartels • Cartel markets • Cartel detection • Developing culture of competition

1 Introduction

Not every price elevation in a market is associated with cartels. However, particularly in the public space, price increases are often explained by the existence of cartels as this is one of the easiest and simplest explanations. Such reasoning considerably affects the repute of and trust in undertakings operating in relevant markets. Therefore, blaming undertakings for the participation in cartels should be

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preceded by a market analysis and identification of incontrovertible economic evidence of the cartel existence.

Research studies show that the dividing line between arrangements, concerted actions and equal conduct of competitors is quite blurred. As the problem has not been finally resolved in the economic or legal literature, the rule of reason often comes into play. In accordance with the focal point theory, firms may act in a coordinated manner taking into account mutual public announcements, without the need to communicate directly (keep direct contacts). Friederiszick and Röller (2010) and Stanikūnas (2009) argue that if dynamic price stabilization is reached through direct communication, it is the legal prerequisite for a cartel infringement, or through coordination via observing and following other firms' behavior in the market—it is referred as tacit coordination or coordinated effects, and is assessed within dominance assessments or merger proceedings, but is not considered a cartel agreement. Hence, even though coordinated firms' behavior is as detrimental as cartels, charges of anti-competitive conduct must be based on evidence. Unless there is evidence of direct or indirect communication, firms' synchronized conduct is often recognizable as not transgressing the rules of competition.

Studies have revealed that theoretical identification of evidence suggesting the existence of a cartel in a market and factual comparison with the real market situation may represent the preliminary stage in the cartel detection process and verification of cartel existence. This is what led researchers to take a closer look at cartel markets and identify symptoms that may serve as the first warning signal of the existence of the cartel in the market to competition authorities or other parties concerned.

This paper analyzes the situation of cartels in the country of small economy with developing culture of competition. The empirical analysis is based on Lithuanian cases. This country is chosen because it corresponds to the features of the small economy with developing culture of competition. In Lithuania, the Law on Competition became effective in 1999 and the competition has not been treated as a value yet. It should be noted that the Lithuanian academic community does not have a high scientific experience in antitrust economics. Novosad (2012), Degutis (2010), Stanikūnas (2009), and Klimašauskienė (2006) analyze the legal, rather than economic aspects of problems. The lack of methodological framework is becoming one of the main obstacle for the increasing the effectiveness of the disclosure of the cartel in the market.

The objective of the article is to distinguish the factors, indicating higher risks of market exposure to cartelization and economic factors, evidencing cartel existence, and the theoretical findings apply to Lithuania, as the country of developing culture of competition. The methods of systemic, comparative and logical analysis of scientific literature, empirical research, employing systemic analysis of external secondary data were used in the research.

In view of various definitions of a cartel and different approaches to it met in the academic literature, it is important that every research would contain a definition of cartel, reflecting the specific view of the author to the research problem, revealing its specific character and context of research. The authors of the article,

summarizing the analysis of various scientific and legal sources, the cartel define as an agreements or concerted practices between two or more legally independent firms operating on the same market on the fixing of prices (consumer overcharging or reductions in prices for suppliers), the restriction of output or sales quotas, and the allocation of markets in order to generate higher profits, restrict competition and autonomy of decision making. This definition of cartels is in accord with the concept of hard-core cartels.

2 Cartel Markets and Factors, Indicating Higher Risks of Market Exposure to Cartelization

Competition authorities have been facing two key problems impeding the analysis of markets with potential cartels and the efficiency of detection thereof, namely resource (human, financial, time) constraints and imperfect information. In order to avoid wasting of resources and to use them on a targeted basis, competition supervisory authorities, considering scarce information on markets, have to decide which market or case is to be investigated so that detection is almost 100 % guaranteed. Otherwise, the limited resources of competition authorities would be spent in vain and society would suffer the costs of errors: inefficient use of budget funds (competition authorities are funded from the national budget) and reduced probability to detect cartels in other markets (investigation conducted in one market limits the resources available for detection efforts in another market).

Martin (2000) argues that cartels can set lower prices than those estimated on the basis of the profit maximization rule for the mere reason of reducing the risk of being noticed, discovered and punished. This suggests that price is not always the first indicator signaling the existence of a cartel. Therefore, the optimal decision (i.e., entailing the lowest risk of error) of a competition authority concerning the initiation of an investigation is closely related to the identification of signals of the likelihood of cartels.

There are numerous theoretical and empirical studies conducted in order to find factors and conditions determining cartel success. Basing on market research, Utton (2011), London Economics (2011), Hüschelrath and Weigand (2010), Hüschelrath (2009), Connor (2008), Pepall et al. (2008), Rey (2006), Klimašauskienė (2006), Lipczynski et al. (2006), Veljanovski (2006), Bouwens and Dankers (2005), Levenstein and Suslow (2004), and OECD (2013) identified the key features indicating that some markets are more sensitive to cartelisation than others (see Table 1). The studies have revealed a frequent correlation between these features and demand, supply and other variables. This makes it possible to group them by demand, supply and other factors.

Marshall and Marx (2012) categorized economic factors indicating the likelihood of a cartel to plus factors and super-plus factors. Economic plus factors that deliver a strong inference of collusion are super-plus factors. It is noted that

 Table 1
 Factors indicating higher risks of market exposure to cartelisation as compared to other markets

Factor	Description
High market concentration—a small number of producers/sellers	The smaller is the number of firms in a market, the easier it is for them to agree and the higher are profits gained by each cartel members. The bigger is information asymmetry, the more difficult is cartelisation. Also the bigger is the number of market players, the more difficult it is to identify and punish the cheater. Connot (2008) notes that cartels lose their power to raise prices if non-cartel firms occupy more than 20–30 % of the market, i.e., cartels control about 70 % of the market
High control over supplies	The stronger is firms' control over supplies, the greater is proneness to cartel formation
Technology and cost symmetry	In the case of cost asymmetry amongst firms, it is more difficult for them to agree upon conditions satisfactory to all cartel members. Cartels are easier to form if firms are of similar size and production capacities
Homogeneity of firms	It is easier to agree and coordinate interests for equal firms (in terms of size, capacity, and market share). Or the other hand, a strong market leader can compel smal firms to follow leader's policy
High entry barriers	High barriers to entry encumber or prevent firms from entry. Therefore, the existing market players are protected against competition pressure by new entries. Entry barriers contribute to cartel formation Free entry is an antidote to cartel agreements
Multiple transactions in markets	Multiple meetings of the same firms in the same or different markets facilitate cartel agreements as market participants get to know each other
Product homogeneity	It is easy to set uniform prices for homogeneous products and to control compliance. In case of non-homogeneous products each firm has its own loyal consumers. Accordingly, price reductions would bring substantial profit loss for deviators from the cartel agreement. This eliminates incentives to cheat. Therefore, almost homogeneous products entail more favorable conditions to cartel formation
Small number of substitutes	If there are a few alternative goods or services to substitute cartel products, cartel firms feel more confident being aware of the scarcity of alternatives for buyers. This increases the probability of price elevation on the part of cartel firms
Minor or no technological changes	Minor service innovations or the absence of such innovations make it easier for firms to agree and maintain the cartel agreement
Risk of bankruptcy	Industries with high ongoing costs are more prone to prohibited agreements. The reason lies in that price competition or, in particular, price wars may lead individual firms to bankruptcy. High bankruptcy risks

(continued)

Table 1 (continued)

Factor	Description
	increase firms' incentives to compromise to avoid price competition
High probability of interaction	Trade associations create perfect conditions for firms to communicate and secretly discuss methods and strategies to form and enforce cartels
Similar business culture	The more similar firms are in terms of "business culture", the easier it is to form a cartel
Low buyer concentration	Although there is little empirical research, low buyer concentration is presumed to promote cartel formation. In this case buyers appear to be more loyal to suppliers or producers. Furthermore, low buyer concentration makes it easier to detect cheating and punish the cheaters
Market shocks	Significant changes in supply or demand are likely to destabilize cartels. Steady, predictable demand is likely to increase the risk of collusion. However, economic uncertainties also increase collusive incentives of competitors who seek to set off business loss against potential benefits of conspiracy
Growing demand	Rapidly growing markets favor cartels durability more than declining markets. In growing markets, firms seek to maximize their profits through cartelization, whereas declining markets entail greater incentives to cheat and gain current-period profit Cartels have been observed to be more popular in declining industries with relevant decrease in profits (Bouwens and Dankers 2005). However, deviators are also more visible in such industries as changes in the market share cannot be explained by temporary or cyclical demand fluctuations There is empirical verification of cartels being more likely to occur after a period of intense competition in the sector or a period of weak demand with expected future demand growth. In both cases potential cartel members are likely to have experienced a period of low prices and low profits and, as a result, there may be much to gain by forming a cartel
Market transparency	The risk of cartelization is higher when market operators are able to keep the track of each other's behavior and decisions from information circulating in the market, for example, from product catalogues, price bulletins, marketing campaigns, etc. This makes it easier to detect cheating incentives and to respond as soon as possible
Price elasticity of demand	Cartels are more profitable when demand is relatively inelastic as this enables higher price increases. This could be the reason why cartels are more successful in the short term. Over the long term, prices often become (continued

(continued)

Table 1 (continued)

Factor	Description
	elastic as consumers find substitutes for products sold at higher prices raised by the cartel
Low market power of buyers	Even the most enduring cartel would not be able to substantially raise prices to a very large buyer. This means ineffectiveness and undurability of the cartel
Relevant government actions	For example, at the beginning of the nineties the Danish antitrust authority decided to gather and publish information on ready-mixed concrete prices. As a result, product prices went up by 15–20 % within a year. Such actions of the government institutions increased transparency of the concrete market and created favorable conditions for concrete sellers to agree on price elevation with a perfect opportunity to follow the compliance with the agreement It should be noted that government efforts to regulate prices or overcharges in certain industries may also work in the opposite direction leading to similar effects
History of cartel agreements	Markets with a history of cartels are more exposed to re-cartelization or new cartel episodes

Source: OECD (2013), Utton (2011), London Economics (2011), Hüschelrath and Weigand (2010), Hüschelrath (2009), Connor (2008), Pepall et al. (2008), Rey (2006), Klimašauskienė (2006), Lipczynski et al. (2006), Veljanovski (2006), Bouwens and Dankers (2005) and Levenstein and Suslow (2004)

individual plus factors may not always, per se, be indicative of the existence of cartel. However, a combination of such plus factors, especially in interface with market changes, may straight away become super-plus factors. The authors observe that firms' efforts to blur plus or super-plus characters may lessen profits, undermine cartel stability or even bring out collusive behavior. The main and most common in the scientific literature cited economic factors evidencing cartel existence are presented in Table 2.

Notwithstanding that one or another factor, or a combination of several identified factors, points to the existence of market conditions favoring cartel formation and of above-average cartelisation risk, this by no means prove the fact of cartel existence. Practice has shown that in a number of industries demonstrating the above-identified features cartels are not detected (for example, high market concentration does not always entail cartel formation). Although the fact of cartel non-detection in the markets in which the identified factors are present can be explained both by the absence of cartels and by the outcome of competition authorities performance, the above factors should be viewed as a signal of a greater probability of cartelisation rather than the factual evidence thereof.

Table 2 Economic factors evidencing cartel existence

Group of factors	Factor	Economic evidence
Pricing system	Price raising to buyers above/price reductions to suppliers below what they would have been without the cartel agreement	Rather conclusive if overcharge estimation methods (especially economic methods) justify price raising above the level that would have been without the cartel agreement
	Quantity restrictions by reducing out- put or sales quotas more than they would have been without the cartel agreement	Decreased industry's output/sales quantities as compared to those that would have been without the cartel agreement
	Efforts to minimize buyer resistance to price increases	Collusive price announcements are made relatively more frequently than non-collusive price announcements Collusive price announcements occur at regular intervals and usually reflect the common use by cartels of a regular meeting schedule Collusive price announcements contain gradual price increases in order to reduce buyer resistance and cartel detection risk Collusive price announcements are typically joint announcements, with one firm leading and others following soon thereafter with identical announcements. For example, in the case of the vitamins cartel, the average interval between firms' announcements was 7 days Typically, a market leader is not the first firm to announce about prices. As it is seen in practice, under usual conditions leading firms are the first ones to announce about prices changes, because smaller firms are afraid of large firms' reactions
	Control of within-cartel incentives so as to inhibit interfirm competition and foster higher prices	The incentive "price before volume" or any other incentives related to non-stealing of each other's customers within a cartel cannot work in competitive markets. In markets with homogeneous products a shift from winning the market to price raising is considered to be a super-plus factor
	Price interrelation among different firms	Prices are close related among firms and there is low price variation in the market. In addition, inverse relation- ships between price and export levels may be also indicative of a cartel

(continued)

Table 2 (continued)

Group of factors	Factor	Economic evidence
Allocation system	Allocation of collusive gains among cartel members	In case of collusive agreement of market sharing within a cartel, cartel members preserve stable market shares in the overall cartel market structure irrespective of market-wide changes. For example, the market share of the vitamins cartel started shrinking from 1992 due to the entry of Chinese companies. However, the market shares held by the cartel members remained stable in terms of the percentage. The stability of market shares, geographic and/or customer allocations in interaction with market changes only is attributed to super-plus factors
	Redistribution of gains and losses among cartel members so as to maintain compliance with the agreement	Transfers and arrangements among cartel firms in order to maintain compliance with the agreement. As an example of the case of market allocation agreement, one firm can buy products from another firm at the prices set by the cartel in order to avoid deviations from cartel allocations. Such transfers that have no reasonable economic explanation (for example, firm A has a customer near firm B's location, and in order to avoid costly shipping firm B sell its product to the firm B's customer) or transfers that are observed for several consecutive years are super-plus factors
Enforcement system	Communication within and outside a cartel, monitoring of compliance with the agreement	Cartel members communicate by exchanging confidential information and try to control each other's behavior, as well as compliance with the cartel agreement. Information known by one firm about another one, that is normally inaccessible under competition conditions, is considered a superplus factor. The information that rivals can retrieve from in-depth market analyses is not considered to be a super plus factor. Interfirm information flows do not infer the fault of individual firm, but rather of the communicating firms as a group

(continued)

Table 2	(continued)

Group of		
factors	Factor	Economic evidence
	Enforcement of the agreement and	A cartel has to secure its secrecy and
	punishment in order to combat cheating among cartel members	stability. Where some cartel members are inclined to cheat and deviate from the cartel agreement, the cartel has to respond and punish such member. It can be seen in practice that cartels often establish a kind of guarantee funds
Dominant	Once cartel starts operating success-	Where there is no one dominant firm
firm conduct	fully, there is the incentive to seek	in an industry, the presence of
	additional profits through activities	dominant-firm conduct (exercise of
	such as dominant-firm conduct	dominant-firm's market power) is
		indicative of the presence of cartel
		formation in the industry; although
		none of the firms has a market share
		exceeding 40 % (according to EU's
		legal system, or 50 % in the United
		States), an aggregate market share of all cartel members can exceed the set
		benchmark
		DEHEIHIAIK

Source: Made by the authors on the basis of Marshall and Marx (2012), Stanikūnas (2009) and Harrington (2006)

3 The Characteristic Features of Markets with Increased Cartelization Risks in Lithuania

The practice of cartel discovery in the EU and US shows that most cartels are detected in industries related to manufacturing. Empirical research by Grout and Sonderegger (2005) has revealed the discovery of 38 cartels in 24 industries in the US and 70 cartels in 36 industries in the EU from 1994 to 2004. Table 3 presents the key industries where cartels have been found both in the US and EU.

The research shows that both in the US and EU cartels have been found to be most prevalent in the manufacture of basic chemicals. A relatively big number of cartels have been discovered in the manufacture of pharmaceuticals, medicinal chemicals and botanical products, as well as in manufacture of other non-metallic mineral products. This indicates the presence of favorable conditions for cartel formation. In the US, only one cartel was discovered in sea and coastal water transport, as compared to 10 cartels found in this industry in the EU. In this context we can mention that a cartel active in this market for, even, 13 years has been discovered in Lithuania, too. Table 4 reflects the areas of economic activities where cartels have been found in Lithuania. As it was mentioned in Sect. 1.4, 20 cartel agreements unrelated to public procurement were discovered in Lithuania in the period from 2000 to 2012.

Table 3 Industries where cartels have been discovered in the United States and the European Union

		Cartels	
No.	Industry	US	EU
1	Manufacture of other food products	3	3
2	Manufacture of pulp, paper and paperboard	2	2
3	Manufacture of basic chemicals	14	11
4	Manufacture of paints, varnishes and similar coatings, printing inks and mastics	1	1
5	Manufacture of pharmaceuticals, medicinal chemicals and botanical products	8	4
6	Manufacture of other non-metallic mineral products	8	3
7	Manufacture of basic iron and steel and of ferroalloys	2	1
8	Manufacture of basic precious and other nonferrous metals	2	2
9	Manufacture of electrical equipment not elsewhere classified	6	3
10	Sea and coastal water transport	1	10
11	Miscellaneous business activities not elsewhere classified	1	1
Total:		48	41

Source: Made by the authors on the basis of Grout and Sonderegger (2005)

Table 4 Areas of economic activities where cartels have been discovered in Lithuania

	Number of
Economic activity	cartels
Manufacture-related activities	2
Manufacturing of dairy products	1
Production of orthopedic and other devices	1
Trade-related activities	5
Retail sale of automotive fuel	2
Wholesale of other intermediate products	1
Other retail sale in specialized stores	2
Service-related activities	13
Security and investigation activities	1
Travel agency, tour operator, reservation service and related activities	1
Organization of meetings and events	1
Insurance, reinsurance and pension funding, except compulsory social	2
security	
Driving school activities	1
Accounting, bookkeeping and auditing activities	1
Advertising and market research	1
Photographic activities	1
Publishing activities	1
Waste collection, treatment and disposal activities; materials recovery	1
Other passenger land transport	1
Sea and coastal water transport	1

Research studies suggest that cartel markets in Lithuania are different compared to those in the European Union and other countries. Unlike in more developed countries where cartels are more frequently found in manufacture-related industries, i.e., industrial markets, in Lithuania the largest number of cartels (13) was found in the service sector; the trade sector had 5 cartels and only 2 cartels were found in the manufacture-related area. Perhaps the reason for this can be found in the very specifics of the Lithuanian economy (with prevalence of small and medium-sized businesses mainly engaged in trade and services to end-users sectors) and in the likely absence, or failure to detect, cartels in certain markets.

According to the authors of the article, non-discovery of cartels in one or another economic activity or market does not mean the absence of conditions for cartels to occur. Another possibility is that cartels simply have not been detected yet. Grout and Sonderegger (2005) used econometric methods to provide a ranking of all industries according to the probability that they contain a cartel (see Table 5). The study has been justified in practice—in 2008 the European Commission discovered one of the largest cartels, the car glass cartel in the industry of manufacture of glass and glass products. According to Grout and Sonderegger (2005), the probability for this industry to have a cartel was 0.33.

Table 5 is supplemented with data on Lithuanian cartels, as based on statistics of detected cartels in Lithuania and investigations of prohibited agreements initiated and terminated by the Competition Council. Although in Lithuania no cartels have been officially found in many industries identified by Grout and Sonderegger (2005), the investigations that were terminated due to insufficient evidence lead to the conclusion that the industries or markets where cartels are likely to exist are also similar in Lithuania).

In general, we should say that the Lithuanian Competition Council is functioning only for 13 years. It is a very short period compared to the experience of other countries, and, therefore, the industries where there is the probability of cartels that have not yet been discovered for one or another reason cannot be inferred from the available statistical data. The situation in Lithuania should not be looked at a one-sided viewpoint, stating that prohibited agreements are absent in certain Lithuanian markets or industries, whereas many manufacturing, service, financial intermediation sectors have hundreds of associations, centers and other organizations which members seek representation and protection of their economic interests. In addition, oligopolies are predominant in most of these sectors, but the Competition Council has failed so far to prove an abuse of their oligopolistic position. As an example, in 2007 the Competition Council launched an investigation in the meat processing market. The investigation was terminated in 2008 due to the lack of facts. In 2010, an investigation was initiated concerning undertakings engaged in the production and trade of food products, and the actions of their associations.

Studies have shown that "Lithuanian" cartels have different features than cartels in other countries. Yet, formation of cartels is influenced by the same economic market factors as in other countries. Basing on the conducted theoretical and

Table 5 Industries where there is the probability of cartels that have not yet been discovered

No.	Ranking of industries where no cartels have yet been discovered	Prob.	LTa
1	Telecommunications		P
2	Manufacture of aircraft and spacecraft	0.65	
3	Manufacture of grain mill products, starches and starch products	0.61	P
4	Legal, accounting, bookkeeping and auditing activities; tax consultancy; market research and public opinion polling; business and management	0.55	1
	consultancy		
5	Cargo handling and storage	0.50	
6	Activities of travel agencies and tour operators; tourist assistance activities	0.46	1
7	Publishing	0.44	1
8	Manufacture of railway and tramway locomotives and rolling stock	0.44	
9	Other land transport	0.43	1
10	Recycling of metal waste and scrap	0.40	
11	Manufacture of articles of paper and paperboard	0.40	
12	Manufacture of weapons and ammunition	0.39	
13	Radio and television activities	0.39	
14	Processing and preserving of fruit and vegetables	0.38	
15	Manufacture of motorcycles and bicycles	0.38	
16	Quarrying of sand and clay	0.37	
17	Manufacture of prepared animal feeds	0.35	
18	Non-scheduled air transport	0.34	
19	Manufacture of domestic appliances not elsewhere classified	0.34	
20	Mining and agglomeration of hard coal	0.34	
21	Manufacture of glass and glass products	0.33	
22	Other computer related activities	0.32	
23	Architectural and engineering activities and related technical consultancy	0.30	P
24	Manufacture of cutlery, tools and general hardware	0.29	
25	Other recreational activities	0.28	
26	Manufacture of other chemical products	0.28	
27	Printing and service activities related to printing	0.27	
28	Secondary education	0.27	
29	Manufacture of bricks, tiles and construction products, in baked clay	0.27	
30	Postal and courier activities	0.25	

^a1—number of discovered cartels, P—termination of initiated investigation, thus suggesting cartel probability

Source: Made by the authors on the basis of Grout and Sonderegger (2005), annual reports of the Competition Council of the Republic of Lithuania

empirical research, the authors of the article identify the economic factors (market features) that favor cartel formation in Lithuania in Table 6.

To sum up, the following basic economic factors can be identified as having influenced the formation of "Lithuanian" cartels:

 High market concentration (milk processors cartel, fuel trade cartel, insurance companies cartel, cash handling and collection services cartel);

	Highly	Medium		Not
Factor	inherent	inherent	Inherent	inherent
High market concentration	√			
High supply control	V			
Technology and cost symmetry in the		V		
market				
Homogeneity of firms	√			
High entry barriers				
Multiple transactions in the same and dif-				V
ferent markets				
Product homogeneity		√		
Small number of substitutes				
Minor or no technological changes			1	
Risk of bankruptcy				
High probability of interaction/traditions	√			
Similar business culture of cartel members				
Low buyer concentration				
Market shocks				
Growing demand		V		
Market transparency		V		
Price elasticity of demand	√			
Low market power of buyers	1			
Relevant government actions		V		
History of cartel agreements				√

Table 6 Level of inherence of market factors fostering cartelization in Lithuania

- High supply control (high market concentration usually ensures high control over supplies);
- Homogeneity of firms (fuel market, milk processing market, paper wholesale trade):
- High probability of interactions (most cartel agreements are made through participation in business associations);
- Low price elasticity of demand (fuel market, insurance market, ship agency services, orthopedic devices);
- Low market power of buyers (this factor is especially prevalent in the "business to end-user" market).

Taking into account that the number of discovered cartels is increasing both in the European Union and Lithuania (possibly, due to the growing number of cartels, the scope of their activities or better performance of competition authorities) and notwithstanding the official statistics of cartels in Lithuania, there is a high risk of cartels being present in the same industries in Lithuania and in the European Union, i.e., industrial markets, such as manufacture of chemicals, petroleum products market, manufacture of wood and wood products, manufacture of food products (e.g., meat, bear, milk, bread and bakery products), manufacture and wholesale of

cement, services (e.g., tourism sector, financial, shipping, transportation services), etc. Therefore, these are the industries where cartel detection is probable in the future

4 Conclusion

The specific of cartel markets in the countries of developing culture of competition analyzed in the article reflect an increasingly growing interest of world's theoreticians, practitioners, policymakers, antitrust policy specialists and businessmen in these problems, and justify the relevance and timeliness as well as the scientific novelty of the topic.

Market indications identified in the academic literature evidencing the existence of market conditions favoring cartel formation can be treated only as a signal of a greater probability of cartelization rather than the factual evidence thereof. This justifies the importance of employing different methods in the process of detecting cartel existence on the market. Features indicating that some markets are more sensitive to cartelization than others are usually related to the cartel's external environment: demand, supply, market conditions, government's activities and homogeneity of cartel firms resulting from relevant market conditions. The economic factors indicating the likelihood of a cartel in the market have a close correlation with the components of the cartel's internal organizational structure: the systems of pricing, allocation and enforcement. The market features favoring cartel formation in the countries of developing culture of competition (high market concentration, high supply control, high probability of interaction) are analogous to those described in the academic literature. The main economic factors affecting the "Lithuanian" cartel formation are: the high market concentration; high supply control; homogeneity of firms; high probability of interaction of enterprises; low elasticity of demand; low market power of buyers.

Reactive methods alone are no longer enough to detect modern cartels. Economic screening analyses of markets and the inclusion of proactive methods in the process of cartel analysis improve detection efficiency and contribute to deterring from competition infringement effect.

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Methodological Assumptions for Creating a Model of Business Performance

Tomasz Piotr Czapla and Maciej Jan Malarski

Abstract Each national economy has got its own characteristics and uniqueness which influence the shape and way of operating of businesses. It is of main importance to understand what kind of powers and notions are lying under the running enterprises in specific country. The article contains the assumptions for creating a model of national business performance which consists of four dimensions: culture, structure, strategy and integration. Each dimension is defined and described in the context for further studying of companies in real business world. The model is to be used for establishing the program of research of Polish companies searching the basic traits which are distinguish and exclusive for Polish style of running a successful business. The model can be developed and multiplied in order to conduct comparable research and discover other national styles of business management.

Keywords Business models • Strategy • Culture • Structure • Integration

1 Introduction

The entrepreneurs, running their own businesses and facing different challenges which arise both from internal and external factors, look for a specific way of functioning of their firms. It can be assumed that this search is related to the use of certain patterns of perceiving and thinking which largely guide the decisions of the management and in effect influence the activities of the organization. At the same time, the functioning of the enterprise is associated with certain conditions dictated by the specific environment in which it operates. Both of these facts mean that with

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¹ Styles of perception and thinking are largely the result of social and cultural factors, adopted style of education, including training in business subjects.

²This refers to some general level of environment associated with socioeconomic, legal and cultural characteristic, in which the companies operate.

the adoption of certain characteristics of organization, enterprises are subject to certain characteristic mechanisms of functioning. The purpose of this article is to present the basic assumptions of the business model, which is a starting base to conduct extensive research among companies operating in specific external conditions. The research will seek to identify the characteristics and mechanisms related to the conduct of business by entrepreneurs.

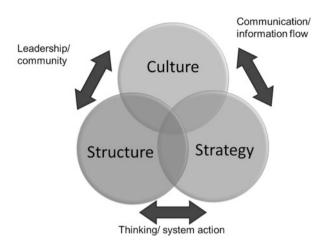
2 The Structure of the Business Model

Assuming that each business model defines the essence of functioning of the enterprise and, even if it is not specified by the intentional actions of the management of the company, it could be assumed that the company is guided by a certain structure of mechanisms, a configuration of dependencies that specify a certain style of functioning. This is reflected in the regulation of internal and external relations, the methods of organizing internal social relations, decision making, planning operations and risk taking, the approach to perform the duties, and the obligations towards the environment.

In the literature, there are many topics relating to the interpretation of the concept of business model. According to Nogalski (2009), a business model can be regarded as a developed form of an organizational model of the management of the enterprise, and presented as a new management tool of conceptual nature, it can be defined as the idea of the desired directions of business development and conditions in which it operates. A business model is a new conceptual tool containing a set of elements and relationships between them that represent the logic of the operation of a company in a specific area. It includes a description of the value offered by the company to a group or groups of customers together with an indication of basic resources, processes (activities), as well as the external relations of that company, aimed at creating value and ensuring the company's competitiveness in the given field as well as enabling increasing its value. The business model is also considered as representative of the base logic of functioning of the enterprise and the strategy of creating value (Shafer et al. 2005). In this perspective, the base logic means that the business model should prominently express the fundamental assumptions concerning the cause and effect relationships in business and making strategic choices. Other definitions of the business model point to the activities of the company related to the operationalization of the concept of visionary entrepreneurs in order to best fit the business to market requirements, obtaining adequate resources, developing good relations with stakeholders, and consequently to making money (Kozminski 2004; Betz 2002; Obloj 2002; Kozielski 2013; Osterwalder and Pigneur 2012).

The model adopted in this paper is focused on mapping the internal characteristics of the functioning of businesses and covers four areas, which also constitute the proposed areas of research: organizational culture, organizational strategy, the structure of the organization, and the integration mechanisms. Organizational

Fig. 1 Business model



culture is a fundamental category from which derives the characteristic modes of action of the company, arising out of approved by management assumptions, values, norms and principles. From the organizational culture stems the basic ideological factor. From the organizational culture stems the basic ideological factor which is "driving" the whole of the organization; it is an element of "spirituality" of the being which constitutes the organization. Culture is therefore a reflection of "soft" elements of the company and expresses the attitude to conducting business, includes beliefs associated with building relationships and shapes the specificity of social behavior. Organizational strategy includes ways to adopt and implement the directions of development of the organization, ways of responding to new situations and threats, estimation and risk reduction, capacity for renewal, reactivation or breakthrough changes. The organizational structure relates to methods of distribution of tasks and responsibilities, the building of organizational relationships, ways to build the information flow and work processes. Another element of the model is the integration mechanisms—connecting, building and maintaining internal balance both in social and managerial dimension. These mechanisms result from the need to merge the individual components of the company by introducing a certain level of dynamic stability. Among these mechanisms the following were determined: leadership/community, the flow of information/communication, system action/thinking. Figure 1 graphically depicts the adopted business model.

3 Organizational Culture

Analyzing the role of organizational culture as an element of shaping the organization's business model it is worth noting that there are many variables used in defining organizational culture, including (Schein 2004):

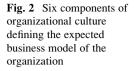
- Observable, repetitive patterns of behavior in interpersonal relations: language used, customs and traditions that develop, and rituals used depending on a wide range of situations (Gofman 1959, 1967; Jones et al. 1988; Trice and Beyer 1993; Saxton et al. 1985; Van Maanen 1979a);
- Group standards: hidden standards and values that develop in working groups, such as for example a specific standard of "good day job for a good living wage," which is a standard developed among employees of Bank Wiring Room in Hawthorne (Homans 1950; Kilmann and Saxton 1998);
- Disclosed values: expressed and publicly announced principles and values that
 the group is trying to achieve, such as "product quality" and "price leadership"
 (Deal and Kennedy 1982, 1999);
- Formal philosophy: a broad policies and ideological principles that guide the group actions aimed at shareholders, employees, customers and other stakeholders of the organization, like renowned "HP Way" Hewlett-Packard (Ouchi 1981; Packard 1995);
- Rules of the game: hidden, unspoken rules of finding oneself in the organization; "Ropes" that a newcomer to the organization must get to know to be accepted; "The way we operate here" (Schein 1968, 1978; Van Maanen 1979a, b; Ritti and Funkhouser 1987);
- Climate: the feeling that is transmitted to the group by the physical layout and the way how members of the organization shape the relationships with each other, with customers or other participants in the organization's environment (Ashkanasy et al. 2000; Schneider 1990; Tagiuri and Litwin 1968);
- Integrated skills: special competences exhibited by members of the group during the execution of specific tasks, the ability to do certain things in a certain way, the method which is passed from generation to generation without having to articulate it in a written form (Argyris and Schon 1978; Cook and Yanow 1993; Henderson and Clark 1990; Peters and Waterman 1982);
- Habits of thinking, mental models and paradigms of language: shared cognitive frameworks that guide perception, thought and language, used by members of the group and instilled in new group members early in the process of socialization (Douglas 1986; Hofstede 2001; Van Maanen 1979b; Senge et al. 1994);
- Joint meanings: emerging understanding created by members of the group in the interactions that occur between them (Geertz 1973; Smircich 1983; Van Maanen and Barley 1984; Weick 1995);
- "Rooted metaphors" or integrating symbols: the ways in which groups grow up to define themselves, which may or may not be conscious but which embody themselves in the architectural forms, layout of the offices and other material creations of the group. This level of culture reflects the emotional and aesthetic reactions of group membership contrast to the cognitive or assessing reaction (Gagliardi 1990; Hatch 1990; Pondy et al. 1983; Schultz 1995);
- Formal rituals and celebrations: roads, ways of celebrating important events that reflect the essential values or important "transitions of" team members, such as promotion, completion of an important project and other similar milestones (Deal and Kennedy 1982, 1999; Trice and Beyer 1993).

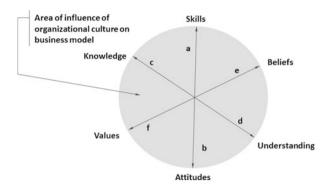
To define the organizational culture one should take into account alongside variables such as norms, values, systems of behavior, rituals and traditions also such elements as: structural stability, depth, width, and social conditions or integration (Schein 2004, pp. 14–15).

- Structural stability—culture assumes a certain level of structural stability in the group. When we say that something is "cultural", we suggest that it is not only common but also stable as an element that defines the group. Once a sense of group identity has been formed, it becomes a major force in stabilizing the group. Culture continues even when the various members of the organization leave it. Culture is not an easy subject to change, as members of the organization appreciate stability in what gives them significance and predictability;
- Depth—culture is the deepest, often unconscious aspect of the group and thus it is also less tangible and less visible than other aspects. From this point of view, most of the terms listed above may be regarded as manifestations of culture, but they do not constitute the essence of what is meant by culture;
- Width—refers to the extent of the impact of culture. Culture is omnipresent; it affects all aspects of the organization and determines how the organization copes with its main tasks, the environment and internal operations;
- Social conditioning or integration—this feature describes the integrative role of
 culture, how rituals, climate, values and behavior combine in a coherent whole;
 in this sense, social conditioning or integration are the essence of what we call
 culture.

The basic cultural values are assimilated by the new members of the organization in the process of observation by them of the ways (patterns) of behavior. However, those values that make up the "heart" of organizational culture are transferred to the new members of the organization in the longer process of their socialization to the group. Deciphering the hidden assumptions—the actual patterns of cultural interaction takes place, therefore, by mutual interactions that occur between new and old members of the organization (Schein 2004). "The most common aspect of the influence of culture concerns the questions of what emotions must be expressed in a given situation and what ways of expressing them are acceptable" (Lewis and Haviland-Jones 2005, p. 589). In this sense, organizational culture is a mechanism of social control, and can be the basis for explicitly manipulating (org. Explicitly Manipulating) members to ensure a certain way of perceiving, thinking and feeling (Schein 2004), which in turn defines the way in which competencies are interpreted and exhibited by the members of the organization.

The above issues shape the system of six components of organizational culture that define the expected functioning of the organization and consequently the specific arrangement of the business model. The components are presented in Fig. 2. Component "a" is the expected skills of employees—with particular emphasis on the expected scope and method of manifesting by employees their initiative. Component "b" is the expected attitude of the employees—with particular emphasis on the expected scope and method of manifesting by employees their





commitment. Component "c" is the expected range of use of rational judgment—use of algorithmic, standardized tools and methodologies. Component "d" is the expected range of use with the use of intuition, creative behavior and heuristics. Component "e" is the expected level of use of the objective, clearly defined code of ethics of the organization in decision-making and resolution of disputes. Component "f" is the expected range of conscious use of the shaped emotional competencies.

Component "a": expected skills of employees—with particular regard to the expected scope and method of manifesting by the staff of their initiative. The examples of the classification of organizational culture relating to this issue may be such dimensions of culture like universalism and particularism, as well as succession and synchronization according to the classification developed by Trompenaars and Hampden-Turner (2002) and Hampden-Turner and Trompenaars (2000, 2004). The first dimension refers to the extent to which we recognize that the organization applies constant (universal) set of rules and principles that defines the only right and applicable procedure in opposition to the assumption that "everything depends" and is subject to interpretation dependent on the situational context of a given action. The second dimension refers to the preferred method of organization of the course of action—either sequential "step by step", or parallel—a lot of the activities carried out synchronously. Another example relating to this issue can be a model developed by Lewis (2006). He based the analysis of organizational culture on two fundamental dimensions—reactive behaviors and active behaviors. Within the category of active behaviors he distinguished two categories—linear activity (linear-active) and parallel activity (multi-active).

Component "b": expected attitudes of employees—with particular regard to the expected scope and manner of manifesting by the employees their commitment. The examples of the classification of the values of organizational culture relating to this issue may be such dimensions of culture like individualism and collectivism as well as equality and hierarchy according to the classification developed by Trompenaars and Hampden-Turner (2002). The first dimension refers to the extent to which we recognize anteriority of the development of the individuals and their welfare over the development of the group and achievement of its collaborative



Fig. 3 Two loops of the wheel of reconciliation of the values. Source: Trompenaars and Hampden-Turner (2002, p. 23)

objectives. Differences in the activities, resulting from the preference for values of individualism or collectivism, are shown in Fig. 3. It presents two loops of the reconciliation of the values that differ in adopted starting point—individualistic (first loop) or collective (second loop).

The second dimension refers to the preference for treating all employees as equals and subject to the general rules, or to the acceptance of assessment and the hierarchy of authority that directs employees in the organization and evaluates their results and work.

Another example of defining the expected attitudes by means of the value of organizational culture may be the concept of cultural dimensions developed by Cameron and Quinn (2003). In their model by crossing two dimensions—the independence of action and the direction of managers' attention—they designated four main types of organizational culture. And so, hierarchy culture—emphasizes the continuity understood as maintaining the smooth functioning of the

organization. In this model of culture the organization adheres to such values as: stability, predictability and efficiency. The rules and principles included in regulations are the guarantee of the organization's consistency. Market culture—is much more focused on the relationship with the environment and shaping its own competitive position. Often, organizations characterized by this type of culture use various kinds of systems of internal billing and budgeting. Core values in the company of market culture are: profitability, the final results (performance), position in the market (competitiveness), the realization of challenging tasks, and building a base of regular customers. Clan culture—puts big emphasis on building cohesion of the organization and a sense of commitment in its members. The key beliefs supporting the culture of the clan type are: belief in the power of teamwork, caring for staff development, treating customers as partners and building a friendly, open working atmosphere, as well as promoting and appreciating the employee loyalty. Adhocracy culture—an essential skill of the organization characterized by the adhocracy culture is innovativeness allowing it to create new solutions both in terms of products and services. The concept of adhocracy strongly emphasizes operating ad hoc—that is, building ad hoc solutions and dynamic structures. The values supported in this culture are: supporting non-standardness, non-stereotypicality, willingness to take risks and anticipating future developments.

Component "c" and "d": the expected range of use of rational judgment—the use of algorithmic, standardized tools and methodologies, as well as the expected range of use and the use of intuition, creative behaviors and heuristics. The examples of the classification of the values of organizational culture relating to this issue can be: analysis and synthesis according to the classification developed by Trompenaars and Hampden-Turner (2002). These dimensions relate to our approach to understanding the reality around us. Do we take apart the phenomena, for example, single facts, objects, phrases, numbers, units, points, or combine them into larger pieces forming of them new patterns, relationships and wider contexts? The shift of the equilibrium toward the analysis can lead to excessive literalism of perception of the surrounding reality, not recognizing alternative possible solutions and to a (potential) tendency to routine. The shift of the equilibrium towards synthesis can lead to over-generalization of the problems, resulting (sometimes) in the blackout, to over-reliance on intuition and underestimation of the role and importance of the stage of diagnosis of problems, and to not recognizing the obvious and simple solutions.

Components "e" and "f": the expected level of use of the clearly defined code of ethics of the organization in decision making and resolving objective disputes, and the expected range of use of the consciously shaped emotional competencies. The examples of the classification of the values of organizational culture relating to this issue may be such dimensions of culture like: inner-direction and outer-direction as well as achieving positions and receiving positions according to the classification developed by Trompenaars and Hampden-Turner (2002). The first dimension refers to the extent to which more important in determining courses of action are our inner beliefs and judgments as compared to the willingness to adapt to the demands and trends of the outside world. The second dimension refers to the conditions defining the position and role of the employee in the organization. Whether it results from

what the employee has achieved and what effort he has put into this, or from other attributes important to the organization, such as age, gender, background or education.

4 Strategy of Organization

The essence of the impact of the organization's strategy on the development of its business model is making choices understood as putting, and then verifying hypotheses about the possible implementation by the organization of strategic options (Fig. 4).

The starting point for that verification of hypotheses is the knowledge owned by the organization. There are three sources of such knowledge. The first source is the results of strategic analysis. The second source is the knowledge of the content of the strategy implemented by other organizations. The third source is the intuition and creativity of the members of the organization, with particular attention to its executives. The space of choice of strategy content, potentially available to the organization, is being gradually narrowed by sequentially responding to increasingly specific questions. These questions act like a system of filters which gradually polarize a previously dispersed beam of possible choices.

The first question "what?"—According to the logic of making strategic choices, first you should answer the most general of questions narrowing down the possible area of choice. It is understood that "regardless of how the problem is approached, there are only three major types of strategy" (de Georges 1993, p. 107). The first basic type of strategy is the strategy of cost leadership. With the desire to achieve a leading position in terms of costs comes the need for "vigorous efforts to reduce costs through gaining experience, strict control of direct and general costs, avoidance of marginal customer and minimizing costs in areas such as R&D, after-sales service, advertising and so on" (Porter 1992, p. 151).

As it can be seen the emphasis is here on achieving low manufacturing cost, but equally important issue is the large market share and therefore a common maneuver used by companies implementing low-cost strategy is to expand the offer by related products, which allows for the acquisition of all major customer groups. Becoming a leader in terms of the cost size gives the company the possibility to achieve above-average profits that can be reinvested in further improvement of machinery and production technology, which in turn should allow it to maintain its position.

Fig. 4 Three levels of an impact of strategy on shaping business model



The second basic type of strategy is the strategy of diversification of products. Diversification strategy involves giving to products (services) of a given company an attribute of being perceived by customers as unique, inimitable on the market. This is done usually through the branding of the product, the use of unique technology, transmitting specific functional characteristics to products, developing after-sales service, etc. Diversification strategy entails in general the need to reduce mass-scale of production and to create the elite (narrow) markets. Thanks to the perception of products (services) of the company as elitist it may reach in the market above-average rate of profit. But it is necessary to remember that this profit is realized at a significant cost to the business areas such as research and development (R&D), design, supreme quality of raw materials and extensive advertising campaigns.

The third basic type of strategy is the strategy of concentration. It involves focusing on the activities of a given company in the segment of the market. This segment can be defined as a selected group of customers, specific range of products, specific geographic market, etc. This strategy compared to the previous two is secondary. It may be either a cost leadership strategy or product diversification strategy, with the difference that it is applied not to the entire market, but only to the selected segment. The benefits achieved from becoming a leader in terms of costs or the variety of products are analogous to those described above, but they are limited by a scale of the selected sector.

The second question "where?"—In the context of this question, there are three basic options—the development trends within the selection of the strategic direction. These are strategies of related development and related and unrelated diversification. Related development strategies are considered from the point of view of relations between the market and the product. Crossing these two dimensions, four such strategies can be distinguished. The first is market penetration. In this strategy the starting point is the markets currently occupied by the organization and its current products. This strategy aims to increase sales of existing products to existing customers and to stimulate new purchases by potential buyers. These objectives can be achieved through in-depth market segmentation, a more precise definition of the interesting segments with a concomitant increase in buyer interest. "The strategy of market penetration is mainly used in conditions of the saturated and relatively stable market" (Grabowski et al. 1992). In general, however, the use of this strategy in the long term is sometimes impossible. Therefore, market development strategy is sometimes a logical extension of the development of the company. Another strategy within the related development is a market development strategy. Under this strategy, the company strives to offer current products in new markets. There are many ways to implement such a strategy, ranging from searching for new ways of using the product to entering the product on completely new markets. It can be added that the often used variation of this strategy is the expansion to foreign markets. With the adoption of the strategic direction, emphasis is placed on gaining knowledge of the preferences and aspirations of new buyers. When the opportunities to sell the product have been exhausted on both existing and new markets, then usually the company decides to implement a strategy of product development.

Another strategy is the strategy of product development. The development is accomplished by offering on the current market new or upgraded products which, however, continue to meet its primary use in a given market. Often, the sufficient measure is making small improvements supplementary to material qualities of the product, for example by increasing the attractiveness of the product, better suitability of packaging, etc (Grabowski et al. 1992). Often, however, the desire to fit into the needs and requirements of the market is associated with having to make deeper changes in the primary and secondary functions of the product.

The fourth strategy in the related development is strategies of related and unrelated diversification. In case of selecting the strategy of related diversification, if the development strategies are based on the current market and the current layout of technical and financial resources, then "generally speaking diversification involves rearrangement of resources of the company onto the activities fundamentally different from those used in the past. The development of the company occurs, therefore, by leaving both the existing technologies of manufacturing the products and the current structure of the market" (Grabowski et al. 1992). One can distinguish basically two types of related diversification: vertical diversification and horizontal diversification. Within the vertical diversification, the activities undertaken by the organization mainly involve including into the production process the phases immediately preceding it and the phases immediately following it. Thus, two subtypes of vertical diversification can be distinguished—forward diversification and backward diversification. This diversification has the undeniable advantage because it allows minimization of the risk of operation by limiting the degree of dependence on suppliers of intermediate levels. It is to be remembered, however, that the far-reaching vertical integration greatly reduces flexibility of functioning and increases the reaction time to changes in the environment. Therefore, deep vertical diversification is effective mainly in technically mature manufacturing industries, which are characterized by relatively low intensity of technological progress. Within the framework of horizontal diversification, the production program is expanding by new products that differ from the currently manufactured but still falling within the technical and production capabilities possibilities of the company and its "know-how". Horizontal integration is usually the result of attempts to meet the new needs of existing customers. It may also be the result of a desire to meet their needs in a more comprehensive manner. Horizontal diversification helps to maintain, and promotes the improvement of the competitive position of the company. This is due to the fact that "functioning in known fields and in the absence of significant changes in the circles of customers allows for considerable reduction of risk and independence from existing competitors" (Grabowski et al. 1992, p. 344).

Unrelated diversification occurs when the company, trying to achieve the effect of synergy,³ undertakes, parallel to the current activities, the production of a

³ The phenomenon of synergy occurs when at least two areas or business processes complement each other giving a combined effect greater than the sum of the effects of each of them individually.

completely and generically different product that is when the company changes its current production structure and market structure. The adoption of such a strategy of development is burdened with significant technological risks associated with the necessity of simultaneous operating in different markets. Thus, the chronology of steps leading to the diversification would be the following: market penetration, market development including international expansion, product development (and only then) entry into new business areas the factors inducing the company to undertake an unrelated diversification should also include a finite market capacity and resulting from this fact investment restrictions. This phenomenon occurs particularly rapidly in oligopolistic markets. In such markets, the frequently used method of finding an outlet for fast-growing profits is the investment in new sectors and new markets.

Although, as it has been noted earlier, diversification is associated with an increased technological risk, it must be said that it allows minimizing investment risk. Normally, "the risk of investing the capital in only one area of production (was) the greater, the greater role in the assets of the company was played by a constant capital, which required a longer payback period respectively. Large companies first felt this threat (...) they also were the first to access the new source of profit, which was engaging the capital in the new branches of production which had the opportunity of rapid development" (Domanska 1986).

The third question "how?"—Is a question about the choice of the strategic method, it is a question of how we want to implement the chosen strategy base in the context of a specific strategic direction. The answer to this question lies in finding a compromise between factors such as the cost of development, 4 its rate and the associated risk of losing control. We are here dealing with two general alternatives. The first "involves sprawling of the company from the inside and is called internal growth. The second one is based on combining the company with other, so far alien, external economic units and therefore is referred to as external growth" (Kortan 1987, p. 3). Within the framework of internal development, in the literature, the concept of growth is distinguished from the concept of development. In general, the growth is understood as the development of the company in the narrow sense. The growth, therefore, covers only quantitative—measurable aspect of the development. Because of this feature it is often called quantitative development. The most common measures of quantitative development include changes in the size of: turnover, added production, fixed assets, equity, the size of the carrying amounts, the amount of profit, etc. Examining the trends which take place in the above-mentioned indicators, three basic trends can be distinguished in the quantitative development: positive growth—when the indicators form a growing trend; the zero growth—when they stay at a certain constant level—we then deal with the stabilization or stagnation—and the negative growth—the indicators form a downward trend. Long-term persistence of this trend promises serious trouble and may

⁴ The cost of development is understood as the cost of the necessary changes in the management of the organization, related to the choice of a particular strategic method.

even lead to bankruptcy of the company. Within the framework of internal development, qualitative development may also occur alongside the quantitative growth. It may be the result of changes in the objectives of the company, its production structure, management system, introduction of new technologies, modernization of the organizational structure, etc. When in the company we deal with both the quantitative growth and qualitative development, then we can talk about development in a broad sense.

Another way to achieve the development of the organization is the external development involving a permanent merger with other companies. If in such a relationship combined with a single leadership the legal independence of participants is preserved, then we can talk about the relationship of a **concern** type. But if the foregoing legal subjectivity of the integrated participants is abolished, then we can talk about the relationship of a **merger** type. Comparing the external development with its alternative, the internal (investment) development, it brings an observation that the same objectives can be achieved under both the former and the latter forms of development.

Selecting one of these forms is therefore dependent on a number of factors. It must be remembered that all the integrating activities are associated with the combining entities being subjected to a uniform coordination and thus with limiting the degree of their independence. Therefore, in case of selecting the merger as a form of relationship there may arise with particular force problems of conflict of interest. And although the investment (internal) development is from the point of view of these contradictions much safer form of development, it carries the threat associated with the generally fairly long period of time that elapses from the beginning to the end of the investment cycle.

Therefore, such an important role is played by the relevant planning of investment activities based on a thorough analysis of the market trends. Merger with another company, its acquisition or lease may be less capital intensive. Making the necessary adaptive changes also takes less time. Another form of external growth next to combining (concern-type relationships) and the acquisition of other companies (merger-type relationships) are the so-called strategic alliances, also referred to as a form of the joint development. Such relationships are based on the common interests of both partners. In the strategic alliances "the participants generally seek to combine financial, marketing, manufacturing or technological resources, finding in such a relationship a shared interest in increasing their market share" (Barrie 1985).

5 Organizational Structure

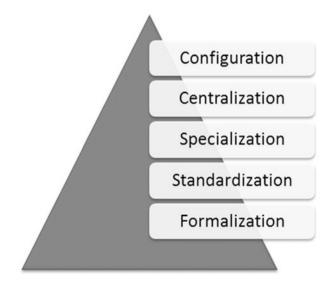
Assuming understanding of the organizational structure, as "the entirety of relations between the elements of some whole, or between elements and the whole, considered for a specific reason" (Zieleniewski 1976, p. 43), then analyzing the impact of this kind of organizational structure on shaping the business model two main

aspects must be taken into account—the configuration that is the structure built understood as a system of components, and organizational bonds, that is the rules for grouping the components of the structure.

From the point of view of connecting the elements of the structure we can distinguish five basic organizational relationships (Sikorski 2009). These include: the official bond, also known as hierarchical bond. It refers to the grouping of jobs (the components of the structure) according to the criterion of business inferiority and superiority. The manifestation of the presence of this bond is the positions of superiors and subordinates. The functional bond refers to the grouping of jobs according to the criterion of community of the functions of the company. The manifestation of the presence of this bond is for example departments of marketing, sales, accounting and administration. The staff bond refers to the grouping of jobs according to the criterion of advising. The manifestation of the presence of this bond is for example departments of Research and Development, controlling or management accounting. The technological bond refers to the grouping of jobs according to either the community of the stage of technological process or of this entire process. The manifestation of the presence of this bond is for example departments (in the clothing company) of cutting, sewing and finishing, or (respectively according to the second criterion) sections of coats for men, women and children. The information bond refers to the grouping of jobs according to the criterion of community of acquisition, processing, use and transferring of data and information.

The bonds present in the organization (in particular, their system) are translated into the basic dimensions of the structures, which in turn has a crucial influence on the final shape of the business model. The layout of dimensions of organizational structures is shown in Fig. 5.

Fig. 5 Dimensions of organizational structure which have an impact on shaping of a business model. *Source*: Based on Bielski (2002) and Sikorski (2009)



The dimension of configuration refers to the number of jobs and organizational units in conjunction with the number of management levels. From this point of view, the most important parameter describing the way of functioning of the organization is here slenderness or flatness of the structure. The dimension of centralization refers to the extent to which the authority in the organization is concentrated on its highest levels. An important aspect of the analysis in this area, apart the level of decentralization, is also philosophy, which is present at this level. Does the shifting of decision-making down the organizational hierarchy take place in the framework of the traditional rules of management—i.e. delegating, or does it result from the logic of empowerment adopted by the organization. The dimension of specialization refers to the degree of diversity/homogeneity of the tasks assigned for execution on the particular position. An important aspect here is the analysis of the expected flexibility in the competence of employees and the scope of the so-called multi-tasking jobs. The dimension of standardization refers to the degree of typicality and repeatability of measures required within the tasks assigned to a given workstation, and the harmonization of rules of conduct in terms of their execution. The dimension of formalization refers to the scope of the standards of conduct and rules of communication in the organization. A particular emphasis is put here to recognize the extent to which the system of regulations obligatory in a given organization is based on formalized procedures and the forms be treated as obligatory.

6 Integration Mechanisms

In any organization there operate internal integration mechanisms that allow the harmonious operation of individual elements of the organization. These mechanisms cause that the organization may be in a state of homeostasis despite the changing conditions in which it functions.⁵ This balance is in turn necessary for the effective and efficient operation and steady and smooth growth of the organization (Bielski 1999).

Integration mechanisms are reflected in the sphere of formal and informal activities of the organization. On the one hand they can be codified and written policies, procedures and instructions; on the other hand they can function in an unwritten form. These mechanisms affect the beliefs of employees, ways of thinking and emotional states and consequently translate into their behavior and work style. Integration mechanisms also have their bearing on the degree of identification of the employees with the organization, which is reflected in the treatment of their

⁵ This is one of the conditions mentioned on the occasion of system look at the functioning of organizations, e.g. (Bielski 1999; Koźmiński and Obłój 1989; Koźmiński and Zawiślak 1982).

workplace with a suitable load of responsibility and loyalty. Identification is the attachment to the workplace expressed by greater mobilization for action, the efforts for the best work performance, and even demonstrating dedication at critical moments for the organization. This model assumes three basic mechanisms of integration namely leadership/community, system action/thinking, and communication/information flow.

7 Leadership

In a typical approach, leadership is often understood as a way of influencing the employee by the person in charge. However, leadership can also be referred to as exerting influence on oneself and may relate not only to influencing subordinates, but to the relationship between equal leaders (Sikorski 1998). In this model, leadership is understood in terms of process and involves the voluntary directing and coordinating the activities of members of an organized group to achieve group aims (Sikorski 1998). Kozminski (2004) emphasizes that the purpose of leadership is to create harmony between the different parts of the organization so as to achieve a certain level of balance between them despite emerging conflicts and contradictions. Understanding of leadership can be extended by certain degrees of its intensity and maturity of the employees (and thus the whole organization) (Blanchard 2007):

- Self-leadership—the most basic level of leadership, and also output to further levels. It means ability to influence oneself, and therefore conscious conduct of own actions, controlling behavior, determining own career goals and striving to achieve them.
- Individual Leadership—the ability to understand others, build relationships with colleagues, build trust with others and influence the behavior of specific people.
- Team leadership—the ability to influence a group of people, understand group dynamics, group behavior, formulating group objectives, seeking compromise and conflict resolution
- Organizational leadership—the ability to influence more than one group at a time, indicating general-purposes, seeking solutions that reconcile different group and individual interests.

Passage of people through each of the stages of leadership becomes the basis for the creation of an organization in which employees become ministering leaders, and the organization becomes a community of people. In the community concept people become equal partners in the implementation of tasks. This mechanism is the main link between culture and structure of the organization.

8 Communication, Information Flow

Internal communication has a dimension of formal and informal exchange of information between the members of the organization. There are three main roles of the communication process (Mai and Akerson 2003; D'Aprix 1996)

- Building community—defining the meanings of language and new concepts regarding functioning of the organization and explaining them to employees, maintaining a common understanding of what creates a specificity of the organization, building an atmosphere of cooperation and mutual trust,
- Navigation—determining a course of action, inspiring and instilling a positive attitude to the future of the organization, identifying and explaining the need for change, highlighting revisions in the functioning of the organization,
- Initiating progress—the creation of new ideas and their distribution, starting and sustaining discussion and exchange of ideas, provoking debates and inducing others to argumentation at times of separate opinions, inducing employees to exchange their knowledge

The flow of information within the organization has a twofold dimension. The first is a form of transfer of all that constitutes the identity of the organization, crystallizing a common understanding of all that is important for the organization. Perechuda (1997) identifies social communication in the organization with confrontation, maintenance and exchange of systems of values, attitudes, motives and organizational behaviors, the values created by individuals and teams of employees. Olsztynska (2002) indicates that communicating is about bringing the specific content to common understanding—as providing opportunities for sharing ideas. Coming to a common understanding assumes the two-sidedness of communication, the need for feedback between the sender and the receiver of the message.

Therefore, communication can be recognized as a dynamic two-way process of transmitting information in symbolic form through the appropriate channels between the sender and the receiver, so they can make contact with each other (Stankiewicz 1999). By conducting debates, conversations, discussions and negotiations a social world is created—there are no real representations of the world, but only more or less legitimized (Bielecka-Prus 2010).

Formulating messages is associated with many activities related to the impact on customers which can be compared to the activity in the context of public relations, or, if we apply them only to a selected group of stakeholders that are employees of the organization, human relations: promoting your own products and activities, the use of opportunities and risks, shaping a favorable opinion of employees, preventing staff problems, changing misperceptions of the organization, and overcoming reluctance, anticipating hostile actions against the organization and educating customers. The second dimension of communication is conscious shaping of appropriate attitudes and behaviors among employees. Internal communication is a kind of bond of individual and collective goals, aspirations, and initiatives undertaken in effective dimension as well as a way to keep the internal balance within the

framework of actions realized in the organization in the efficient dimension. An important prerequisite for effective impact on the perception of the organization by its employees is to provide a consistent and consistently transmitted message to employees of the organization. Consistency means conformity of the formulated content of messages with earlier agreements made within the organization that have legitimizing and ordering character. These arrangements are made on the basis of a certain contract (agreement) between the participants in the organization. These findings, in turn, stem from conditions that constitute organizational identity. Consistency should ensure the strengthening of conviction among the employees of close reflection of the characteristics of organizational identity in the current transmission of messages. Van Riel and Fombrum (2007) emphasize that communication is the foundation of the company's activities and its results. Success of the company, among other things depends on what resources the company uses, how it coordinates them and uses their potential, they argue that the quality of the actions and methods of using resources are strongly correlated with organizational communication—through good communication companies raise resources and reinforce their value by emphasizing their potential for action and development. Communication is this integration mechanism, which in the adopted model combines the culture and strategy.

9 System Thinking, System Action

A system approach means treating the organization as a whole in which the various parts are interrelated and important is the impact of one element on another element (Bielski 1999). Within this mechanism of integration we can determine two categories.

One concerns the practices and methods associated with a system approach to management processes, which should be built to maintain internal cohesion and interrelation and complementarity between the various processes. Assuming that the system approach is associated with the mutual adjustment of individual parts, it can be assumed that each part represents a certain dimension of this system, containing a unique context, type of operation and a set of criteria that define the tasks and measures for their implementation (Rokita 2011). These parts are also acknowledgment of conscious know-how in terms of the approach and methods of implementing the functions of planning, organizing, motivating and control (Barabasz and Belz 2012). The use of the system approach in practical management of organizations is reflected in the use of comprehensive sets of rules, methods and procedures that are designed to cover all areas of the organization and shape the approach to the tasks at various locations within organizations, e.g. system of quality management and system of performance management. This approach can also affect the systematization of the main functions of management, such as budgeting systems, employee assessment systems.

The second category is the perception and interpretation of the surrounding world in a holistic manner, which takes place at the individual and group activities level in the organization. System thinking and action are related to the necessity of continuous considering by employees where they are in relation to the entire organization, at what stage the work is carried out in relation to the whole process/project, what are the cause and effect relationships, what the end result is and what it is affected by. System thinking means taking into account the complexity, entirety, it is organizing the various elements of the organization in a coherent body, understanding by a coherent story that illuminates the causes of problems and explains how they can be corrected in a sustainable way (Senge 1998). This mechanism is the main link between strategy and structure.

10 Conclusions

The designation of a business model that could serve as a starting point for research is a key methodical action. Just like any model, the one presented by the Authors is based on certain assumptions, and those elements are extracted that from the point of view of later studies seem to be significant. This model is designed to capture all the specific features of the operation of enterprises in the research evidence. Those conditions delimit the area of research and intentionally relate to specifics of the company at a specific geographical location, cultural, legal, social and economic environment. Therefore, this model is aimed at chosen and described categories that allow operationalization of the research tools.

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Time Management and Stress Relationship in Terms of Health Sector Employees

Aydan Yuceler, Serife Didem Kaya, and Yusuf Yalcin Ileri

Abstract Nowadays, due to rapid changes and developments, business life becomes increasingly complex which yields many employees do lots of works together in a limited time. As a result, time pressure and job stress negatively affect employee productivity. In the context of our study, we have examined the health sector which is one of today's most complex sectors. The success of health manpower is the most important element for the quality of health services. In this manner, as the working environment is more qualified and less troublesome for health staff, patients receive better and more qualified health services. Health sector is a complex industry not only because of the services provided but also very different characteristics of employees working in this sector. Continuously working under time pressure and concerning of human life expose health sector employee's high stress. Experiencing excessive stress adversely affect the performance and success. So, managements should educate their employees on time management and effort to cause less stress to help them do their jobs more effectively. This study is a theoretical study and domestic and foreign literature on the subject has been studied in detail. In subsequent studies, the literature will be supported with a field work.

Keywords Time management • Stress management • Health • Health sector

1 Introduction

Quite rapid change occurring nowadays confronts organizations and individuals that are building block of these organizations with the problem of compliance. Stress management and time management, the significance of which increase gradually both within the sense of organizational performance and protective mental health, can negatively affect mental health and job satisfaction of modern day employees in which competition is being brutal and only organizations with high performance can survive. Thus, the pressure on employees gradually increases

A. Yuceler (⋈) • S.D. Kaya • Y.Y. Ileri Health Management, Necmettin Erbakan University, Konya, Turkey e-mail: ayuceler@konya.edu.tr; dkaya@konya.edu.tr; yileri@konya.edu.tr and the importance of overcoming the stress and time management is more and more understood. Furthermore, business life that has become more complex depending on changes and developments obligates employees to far more duties and time with limited efficiency (Ozcelik et al. 2012). That is to say that, the obligation to be faster and more excellent cause time pressure on employees. This time pressure affects efficiency and effectiveness of the employees in a negative way and increases performance anxieties (Yilmaz and Aslan 2002).

In the event that the relationship between the capabilities of using time well of administrators or employees and job stresses is proved via measurable parameters, possible positive effect of time management on stress can better be understood. Also, researching whether having training on time and stress management has any contribution on the capability of using time well and on job stress will provide an insight on the virtue of the significance of that will be paid to trainings. In the course of events, the success of organizations is thought to change by overcoming stress and time pressure depending on the efficiency of the administrators in time management (Ozcelik et al. 2012).

1.1 The Concept of Time

Time, literally, is a process in which incidents come down and follow one another towards future and that is out of control of the individuals. However, time is a relative concept. In this direction, it is not possible to make a general and clear description. Time is an eternal abstract period which is created in the minds of the individuals by seeing the sequence of the incidents and considered that incidents will occur in it so on. When assumed for a moment that everything in motion in the universe stops, phenomenon of time cannot be mentioned in such a static case. Time is a significant value that unavoidably flows with a constant speed and which all individuals have equally. The meaning of the time changes as per different environments and different creatures (Akatay 2003).

Time is the greatest problem of us all within lives of modern day passing rapidly. As we cannot make days more than 24 h, there is nothing that we can do other than trying to use flowing time in more organized and efficient way. We continuously mention about the necessity of becoming more organized; but, we cannot perceive how we can achieve this among the intense work pressure and non-stop rushes. In fact, time management has become a necessity for all of us and we need to start using time more orderly any way (Kucuk 2010).

Time is considered as a significant production factor in modern management thinking and as a source and it is accepted that this source has basic share among investments. Time is the least understood and most badly managed source among all production inputs. It is necessary to manage time well to use time efficiently and effectively (Yilmaz and Aslan 2002).

1.2 The Importance of Time

Time is life. It cannot be turned back and nothing can substitute for that. Spending your time is spending your life, but using time well means using your life well and getting best results (Lakein 1997).

The importance of time within the sense of individuals and organizations originate from the features are; (Ozer 2011): Time is personal, cannot be lent or asked for borrow, time is a source that is continuously consumed, it cannot be accumulated, sold, rented or stored to be used in the next day, time is absolutely spent and decreases when spent, time is a source the supply of which does not increase by demand and is not substituted, time is more valuable than other sources and will be so forever, time is a limited source, it is possible to find anything more or less; however, time exists equally for everyone and cannot be increased, it is not possible to stop the day, but possible to lose it.

1.3 Types of Time

The notion of time is possible to be described as; objective time, subjective time, biological time and administrative time (Akatay 2003). Objective time is also called as real time. As for seen and felt objective time, it is time that clock shows. This time can be measured via some observable changes. The resource of real time is the movement of world around the sun. This notion of time actualizes for all individuals as stable and same. One hour can be perceived in different way according to interests and lives of the individuals but, in fact it does not change (Ozdil et al. 2012). Subjective time is also called as psychological time. It is the time that is felt. We feel the period passes during an incident as short or long without paying attention to what clock shows and accordingly decide as long or short. Time of clock is measured via hand and fast units while it is difficult to understand subjective time (Demirel and Ramazanoglu 2005). Biological time is the program of human brain and body is managed by biological clocks. The nature never mistakes the time as in flowers in bloom with the first rays of the sun and closed in the evening, birds migrate in autumn, cactus that flowers only one time every year or snakes going into hibernation. The ordinary functioning of human body is managed with biological clocks. Biological clock is set according to habits and many times we wake up before the clock rings (Ozer 2011). Administrative time is the total for employees and machine time necessary for the activities of planning, organization, executive, coordination, inspection and administrator training conducted to reach this objection with a determination of a qualified objection that may gather several people (Demirel and Ramazanoglu 2005).

1.4 Time Traps

In organizational and administrative life, it is pretty difficult to use time efficiently and effectively. The reason for that is the fact that the time of administrator is not at the mercy of its own, but at the mercy of others. Administrator is required to meet with significant and necessary people all the time. Hence, the administrator does not possess its time and its own mercy. Administrator is the person who lives in time traps and time obstacles in any time and who race against time. Time traps are sometimes internal and sometimes external threats. The most substantial threat is failure (Ozer 2011).

Time traps that are mostly encountered in the organizations can be listed as follows:

Abolishing interruptions: Administrators' works are frequently interrupted for a variety of reasons. The reason for the creation of interruptions in administrator's time is the fact that giving priority to thing or person that interrupts. This is because of the will of moving away from boring work temporarily and delay, politeness or an automatic reaction. Yet, the time of administrator shall not be interrupted (Yilmaz and Aslan 2002).

Planlessness: One of the most important reasons of time losing of administrators is planlessness. Many administrators ignore this substantial activity for the reason that they do not have time. Again, majority of administrators do not lean towards planning in contemplation of the fact that it limits their freedom. Not making a plan means making a failure plan (Akatay 2003).

Indefinite targets and not determining priorities: An administrator who would like to use its time efficiently and effectively should list the activities necessary to be performed and determine the priorities as per urgent issues (Yilmaz and Aslan 2002).

Postponement: Postponement is one of the most considerable sources of time wasting and is a negative habit from the point of using time in efficient way (Turkel and Leblebici 2001). Individuals postpone completion of some works willingly or unwittingly. Some psychological and environmental factors lie behind it. As administrators think that the work to be performed is hard, they delay it to avoid from unwanted works, as they want to understand that works worth spending time and energy etc. (Akatay 2003). Everybody postpones their works. We all have reasons but the most common reason for delay is fear (Allan 1999).

Administrator's learning to say "no": Administrator's learning how to say "no" is one of time saving methods. On the contrary to the practises of many administrators, saying 'no' is easier than saying 'yes'. Saying 'yes' means undertaking an attempt that is to be performed immediately and liability of the future or an obligation to be followed up. Administrators shall bring the consciousness of the fact that saying no in a proper way forward will save time for them for the issues that they do not want or cannot perform. And thus, they should not allow others to spend his/her time (Akatay 2003)

Not transferring the authorities: Transfer of authority, in the simplest expression, is to transfer the liability of a work to another individual. In this way, administrators can save time for more important works by giving certain works to others. In spite of this fact, several individuals try to bear all workloads by themselves (Akatay 2003).

Meetings: Meetings are priceless means of communication. However, it needs to be used suitably and right as in every priceless thing. Otherwise, those become a time trap in which people fall in as a group (Abay 2000).

Telephones and bad communication: Telephone and good communication are time saving tools for administrators when used properly. These tools both ensure that administrator is informed quickly and in a healthy way and transfer of decisions. Speaking is more beneficial than corresponding. However, administrator's having lack of self-control, liking social relationships, not transferring authority, dealing with details and habit of being informed on each issue makes telephone a time trap. Besides, coming up lately, mobile phones allow going beyond secretaries easily. If the telephone is used properly, it saves time. For this reason both making phone calls apart from business issues as a result of habits and accepting each phone call without eliminating them is nothing but waste of time (Ozer 2011).

1.5 Time Management

Time management does not mean working more or stealing from leisure time. It is just using time for ourselves, for developing ourselves and/or gathering with the ones we like by making use of time well. That is to say that, all our purpose is to benefit from the time slots that we spend needlessly in our lives (Ersoy 2000).

Being programless in using time creates time pressure on individuals in the end. We face with time pressure in cases of not completing job on time, trying to prepare for an examination before very short period of time of the exam, trying to carry out works in a fast way when the due time is close. Time pressure drives us to stress, uneasiness, rashness and panic and in the end it will affect our attitude in negative way (Balci 1990).

The important thing in time management is not giving priority to the works of that day but is to include priorities into the daily program. People generally spend majority of their times on some urgent but not actually such important things within the sense of their self-developments. Many trivial things that become urgent as not planned on time cover a great deal of our daily lives. Indeed, the thing to be done is to determine his/her purpose and vision in life and to use time within the direction of performance of this vision as much as possible (Arguden 2004).

1.6 Time Management and Techniques

Various time management techniques are developed to prevent the stress arising from time pressure. Being one of the leaders of time management techniques, Lakein (1997) developed a systematic method on what to do, to perform according to which order of precedence and how to perform the works to be done in shorter time. In this method, basic element is to write the works to be performed. The list extends with the works to be done and on the other hand shortens with the ones done and completed. Lakein (1997) suggested that each items on the list shall be marked with a symbol that refers to significant, mediocre significant and trivial. This kind of time management is generally suggested to high-level employees to decrease stress and can be applied to employees in each level as well. Thus, employees will have the opportunity to spare time for their hobbies when make use of time well (Ozkalp and Kirel 2010).

Basically, time management requires applying to management principles. Planning time, organizing and control are in question. Time management techniques are made use of to meet these requirements especially in the organizations. In this process, especially high level administrators should set up a system to manage the time best way and develop time management technique (Ozer 2011).

Main attitudes and methods that will provide administrators' using their time efficiently, and in other words, enhance the efficiency in time management can be sorted as in the following (Akatay 2003).

- Preparing time report and evening analysis: To use the more efficiently or to
 manage well, it is necessary to prepare a time report in which where and how the
 time will be spend is shown and to make evening analysis. Time report is a list
 that is divided into some certain slots showing how the time is spent.
- Working time analysis and preparing working time profile: Working time analysis is the determination of what are done in an average working day of 8 h, what is the order of precedence and how long is spent for it in the context of self-knowledge (Balci 1990).
- Personal time analysis: Only and efficient first step for better time management is to analysis how you spend your time. You should study where, how and with whom you spend your time. The way to make this personal time analysis in best way is to make a 1-day time schedule.
- Planning: The first activity in planning is to determine the purposes. Having determined the purposes, administrator will maintain its activities within the direction of achieving these and will not spend time for unnecessary works. Moreover, comparing the works done with the purposes of the organization, administrator will be able to determine the activities that do not contribute and thus eliminate these. Even, in some cases, it can be said that the purpose itself can be altered (Yilmaz and Aslan 2002).
- Coping with habits: We are all entities managed by habits. We do not want to break our habits as they provide us easiness and comfort, we know them for sure

and suchlike reasons. However, efficient use of time may require change of some of our habits (Balci 1990).

2 The Concept of Stress

Fast growing technology of modern-day and factors such as communication network, tug of war, economic crisis, increasing unemployment, high inflation, high interests and political instability increase the uncertainty of the futures of employees in business and living conditions. Additionally, some factors as urban pollution that triggers health problems of employees; problem of transportation that causes their physical and mental exhaustion; acceleration in globalization that causes uncertainty and imbalances in living styles by changing social features of countries and accordingly the present work types and working environments also pushes employees into more shyness, uneasiness, anxiety, fear and stress day by day. To be brief, employees live together with stress (Ekinci and Ekinci 2003). When the stress is analyzed literally, involves meanings such as tension, thrill, depression, violence and pressure. When approached conceptually, stress is described as sensual tensions mainly arising from the interaction with the surrounding and that affect physical and health conditions of person. In other words, stress is psychological and/or physical negative results of cases and incidents and effect of any external surrounding reflect on the organism (Ozmutaf 2006).

Stress is a reaction to any physical or psychological pressure on the individual arises from any action or circumstance. Stress is a general reaction of individual against several stressors (Cam 2004).

2.1 Symptoms of Stress

Employees subjected to stress begin to show various signs in time depending on stress. These symptoms are grouped as physical, behavioral and psychological signs and defined in the following (Erdogan et al. 2009):

- Physical Symptoms: Harmful factors cause changes in some systems and functions of the organism. Different phases of these changes result in emergence of diverse symptoms and complaints. It is possible to rank these symptoms as going up of blood pressure, digestive problems, respiratory disorder, head ache, fatigue, allergy and nausea.
- Behavioral Symptoms: Stress has direct and clear effects on behaviors of the
 people. Insomnia, will of sleeping, anorexia, increase in eating, hardness in
 speaking, smoking and alcohol usage can be mentioned within the scope of
 these effects.

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 Psychological Symptoms: Many psychological symptoms arising from stress are encountered in organizations. These symptoms can be expresses as tension, conflict, continuous anxiety, feeling of inadequacy, cry wolf and disappointment.

The symptoms stated above may cause employee's alienation from work, sickness and decrease in efficiency in time.

2.2 Phases of Stress

Stress arises from the reactions of individuals against positive or negative cases encountered. There become some changes in stressed people. These changes comprise of the phases of stress. The emergence of stress is occurred in 3-phases process. When the individual starts to have stress, change is perceived as a threat and causes release stress hormones in the brain. This case which is called as "General adaptation syndrome" comprises of alarm, resistance and exhaustion phases (Guler 2013) (Table 1).

2.3 Sources of Stress

Sources of stress that affect employees in an organization are; surplus workload, limitation of time, low inspection qualities, inadequate authorization in meeting the responsibilities, insecurity of political environment, incoherency among the values of organization and individual, uncertainty of roles, role conflict, anxiety caused by responsibilities, working conditions, human relations and alienation of individual against organization (Davis 1984).

According to another classification, sources of stress are; sources of stress out of organization, organizational sources of stress, personal sources of stress by general structure (Cevik 2011).

Even the sources of stress are load up to the personality of the individual at certain rates, more often it originates from the environment in which the person

Alarm phase	It is period when the reactions such as going up of blood pressure and sweating as a result of releasing of stress hormones when the body is encountered with source of stress
Resistance phase	The body rehabilitates the damages in alarm phase and the reactions of the body disappear when the individual resolves the problem with source of stress
Exhaustion phase	If the incident that causes stress is serious and last for a long time, exhaustion phase occurs. In this period, alarm reactions are re-encountered and tension, asthenia and psychological breakdown are observed in the ongoing process

lives. For example; working place's being far from the residence address, bad relationships with the customers, raw material suppliers or institutions other than the organization by force of the work conducted, negative conclusions of working in shifts that may occur in time, incoherence between the career targets of person in business life and family life conditions, fear of not catching up the fast-changing technological structure or not adapting to it are evaluated as sources that may create stress (Erdogan et al. 2009).

2.4 Methods of Coping with Stress

Methods of coping with stress are given in Table 2 (Okutan and Tengilimoglu 2002).

Strategies of coping with stress originating from business life are administrative regulations carried out to decrease or control stress in organizational level to decrease or to prevent the job stress of employees (Okutan and Tengilimoglu 2002).

General strategies that can be used to decrease organizational stress are explained in four dimensions (Luthans 1989): The first dimension is to create a supportive organization air. In many organizations, there is a firm and non-personal air together with bureaucratic and official structure. This case is a significant source of stress. Setting up less centralist structure that provides participation in decisions and allows upwards communication can be a substantial handling strategy. Theoretically, such kind of structure and process change will provide creation of more supportive organization for employees and decrease of job stress. The second dimension is job enrichment. Job enrichment both includes factors such as responsibility, recognition, possibility of success included in work and development of qualifications in relation with the essence of the work such as different capabilities, identity of the duty, meaningfulness of duty and autonomy. The third dimension is functional arrangements. Functional arrangements meticulously performed are efficient method of coping with job stress. The fourth dimension is determination of organizational roles and decrease of conflicts: Role conflict and uncertainties are

Methods	Descriptions		
Methods of coping with	Relaxation techniques, varied body exercises, dietary patterns are		
body	included in this group		
Methods of mental	Keeping away from the activities that cause disharmony and tension,		
handling	mental arrangement and conversion techniques are included		
Methods of coping with	The most efficient method of coping with stress via behaviors is to		
behaviors	change type 'A' behaviors		
Methods of coping with	Individual tries to handle stress by selecting a life style that s/he		
beliefs	develops him/herself adoptively, brings him/her in internal richness		
	and compatible with ethical and normative principles in compliance		
	with universal norms		

Table 2 Methods of coping with stress

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leading individual sources of stress. Administrators can decrease stress arising from these by eliminating the uncertainties in organizational roles and conflicts.

2.5 Description, Effects, Features and Reasons of Organizational Stress

It is possible to describe organization stress as "an adjustment reaction against external conditions that may result in physical, psychological and behavioral deviations in members of organization". Organizational stress is a case that occurs in working environment and reduces motivation of employees and thus hardens the adjustment to work (Guler 2013).

Organizational stress consists of a set of features. These features are (Guler 2013):

- Organizational stress causes individuals to encounter with some feelings such as anxiety and concerns in working environment.
- It affects the relationships of individual with its surrounding.
- Physical, psychological and behavioral deviations are observed in person in working environment.
- Performance in working environment decreases. Hence, its productivity decreases.
- Individual encounters with cases as not going to work and quitting.
- Have some problems in adaptation to values and norms of working environment.
- Person has stress as s/he cannot meet his/her responsibilities.

2.6 Outcomes of Stress

Besides the results of stress in the health of employee, it has negative effect on organizational productivity and performance. However, it is stated that some level of stress has positive effect on organization. There are two types of effects of stress on organization. One of these is decrease in performance and productivity that are main factors regarding the purpose of organization, and the other one is the feeling of alienation that human factor that have the ability to reveal productivity, efficiency and performance in the organization faces. Extreme stress ruins physical and mental system of employee. Most distinct psychological disorders that are encountered in individuals as a result of stress are anxiety, depression, insomnia and psychological fatigue. Smoking, alcohol, some stimulants, using drugs, extreme eating, sleeping disorder are some of the harmful habits that are mostly applied by individuals to avoid from stress. Looking at individuals' percept, job stress that may cause long and short term diseases can lead to lose individuals' lives. In this sense, it is possible to claim so as a result. Stress is a disease to be struggled and definitely

be coped with both in individual, organizational and social sense (Okutan and Tengilimoglu 2002).

3 The Relationship Between Time Management and Stress Factor from the Point of Employees

Time can be considered as the total of big-small decisions that changes the flow of our lives. Decisions that are not sound cause detentions; reduce self confidence and result in stress. A person who cannot organize the time well is under stress inevitably (Baltas and Baltas 1988).

Some works have certain time limitations. Employees in tax offices, accountants, bankers or teachers face with a work load in certain times of the year to be completed up to a certain deadline. This case causes stress according to the personal characteristics of individuals or levels of perception of responsibility (Pehlivan 1995). Especially, for employees responsible for high level administration and some projects, time pressure is an utmost stress factor. Having to organize their livings with calendar and clock, individuals feel this pressure far too much (Artan 1986).

Nowadays, compared to last century, although people works half time less, spare less time for their relatives and sleeping 1–2 h less, they have problem of "time lag1 that people of last century do not have. There are several reasons of it. Extend of time to reach work, increase in TV and fields of interests are the first ones coming to mind (Baltas and Baltas 1988).

4 Conclusion

As a result, it is concluded that employees can use their time efficiently by paying attention to this four types of dimensions that we can refer as time traps. Considering the fact that time is a limited source; it can be deduced that nothing can be achieved unless directed. Efficient and successful administrators are conscious of how limiter source time is. The scarcest source determines the borders of the productivity and success in each work to be done. Presenting that this source is time, it shall be understood how unique and important time is.

Using or not using the time had in efficient way is generally at the initiative of the people to a great extend. As we do not have the luxury to stop and restart time, the thing that people should do is trying to utilize unstoppable and flowing time in optimum way for their own selves and organizations in which they are active. To achieve this, time traps that are faced shall be determined in the first phase and then these shall be reduced.

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Time's becoming prominent as most valuable source of enterprises and the sensibility of health services on time make the notion of time more important in the field of management of health services. Health institutions are institutions that aim at providing treatments in the shortest time period by diagnosing patients via reliable devices and techniques in optimum conditions. Health administrators are people to whom financial and human resources are given and are responsible for the performance of the purposes of health institutions by carrying out efficient and productive performance. In this scope, efficient usage of time are dealt within the frame of the performance of health administrators and health institutions and evaluated as improvable feature.

Time is also a unique and valuable source that is under the responsibility of hospital administrator as well as other production factors. In this direction, the point becoming forefront in the regulations carried out for hospital administrators is to start using "time" as denominator and basing on assessment of performance of health administrators within the framework of durations and time related to some activities. From the point of these reasons, health administrators shall pay more attention to time planning that broadens the horizon of administrator and having contribution into success in long term by taking into sensibility of health services on time into consideration. One of the skills of administrators required to be developed in the issue of time management is to determine order of urgency and importance of the works and to determine the priorities in accordance with this information. However, to increase the efficiency of administrators in time management; efficient time management attitudes and techniques developed up to present and that will help efficient usage of time shall be adopted and these shall be applied as much as possible. Besides all of these, administrators shall inform employees of organization on time and time management by organizing courses, seminars, conferences and suchlike events.

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Problems and Constraints in the Process Approach Implementation in Organisations

Alicja Gebczynska

Abstract This article addresses an overall body of problems related to implementation of the process approach in organisations with reference to problems and constraints which may occur while the said concept is being implemented. The author has analysed individual stages in which the process approach is to be implemented, with special importance attached to potential obstacles and threats. The purpose of the article is to recommend specific solutions enabling efficient implementation of the process approach, assuming that customers' requirements are satisfied and the organisation's goals are accomplished at the same time. The conclusions drawn in the article should facilitate the process approach implementation in an organisation by applying necessary tools and existing solutions as well as avoiding the most frequent mistakes.

Keywords Process approach • Process management • Problems and constraints

1 Introduction

It may be claimed that the forefather of the process approach was Frederick Winslow Taylor who, already at the beginning of the twentieth century, perceived processes through the perspective of a breakdown of activity into simple actions, while proposing that all unnecessary actions should be eliminated, at the same time. Paradoxically, this concept had led to developing functional specialisation, which is currently being gradually supplanted by the process approach. Unfortunately, the functional division of work proposed by F. Taylor does not fully correspond to the requirements of contemporary organisations, since by adopting such a solution one concentrates employees around performance of individual actions resulting from the functions to which they have been assigned, at the same time neglecting the primary goal, namely satisfying requirements of the final recipient, i.e. the customer.

Another stage in the evolution of the process approach was the value chain concept proposed by M. Porter at the beginning of the 1980s. In accordance with this idea, business activity was divided into basic and auxiliary processes. Following M. Porter's concept, processes representing the area of basic activity are assumed to contribute to the customer value creation, whereas those of the auxiliary activity area support the basic activity.

The next concept referring to processes and their application in organisations was the Business Process Reengineering (BPR) developed by Michael Hammer and James Champy at the beginning of the 1990s. The reengineering concept is based on an assumption that processes implemented in an organisation are to be completely redesigned by abandoning the former ways in which they functioned in favour of new and more efficient solutions. Reengineering is revolutionary in nature, and hence it rarely brings the expected outcomes.

Another initiative proposed by Thomas H. Davenport in 1996 in the scope of the process approach application is process improvement. The assumptions behind this concept are opposite to reengineering as they are based on gradual and ongoing improvement of processes. They are not revolutionary, but evolutionary in nature. The circle of followers of the gradual improvement concept included Geary Rummler and Alan Brache. The approach they had proposed consisted in identification and analysis of processes functioning in an organisation as well as their subsequent optimisation, contrary to reengineering which, in practice, could be brought down to designing of target-oriented business processes without any thorough analysis or an attempt to improve the existing ones (Tartanus 2009).

The third stage of development of the process approach has lasted since the end of the 1990s and is currently in progress, whereas its theoretical premises were provided in a book by Smith and Finger (2003). The main goal of the latest process approach concept does not only boil down to modelling of processes redesigned in the course of reengineering or facilitated through process improvement, but also comprises designing a flexible, coherent and integrated system of processes as well as a mechanism for efficient management of this system, which enables organisations to quickly introduce appropriate modifications and adopt to the changing environment (Rutkowska 2005). The latest concept of the process approach application is referred to as Business Process Management (BPM), and it concentrates on ongoing improvement and optimisation of processes in an organisation using computer systems.

2 Process Approach Concept and Stages

In order to explain the process approach concept, one should start by elaborating upon the notion of a process itself. Following the interpretation provided in the PN-EN ISO 9000:2006 (ISO 2006) standard, this notion may be understood as a set of interrelated or interacting activities transforming inputs into outputs. The purpose of the transformation is to convert the resources at hand into the products delivered to subsequent processes or final customers. A process is a combination of

various activities influencing one another and integrated under the common goal. A process is a key to the process approach, where one assumes that work should be concentrated around processes, and not functions. Adopting such a solution enables planning and supervising the entire course of a product development or a service provision, without losing sight of customers' requirements and needs. Employees should not focus on individual actions, which is the case of a functional system, but rather perceive their tasks from a broader perspective of the external or the internal customer.

In accordance with sub-clause 0.2 of the PN-EN ISO 9001:2009, standard, the process approach is mainly brought down to defining interrelated activities, and then to managing them. "The application of a system of processes within an organisation, together with the identification and interactions of these processes, and their management to produce the desired outcome, can be referred to as the process approach." The foregoing definition of the process approach stresses the aggregation of actions into processes and their suitable management in order to obtain the efficiency envisaged (ISO 2009, p. 13).

For the sake of process orientation, it is recommended that one should think of processes holistically and perceive them as interlinked actions. By identifying them, one can understand the nature of value creation better, whereas their streamlining and ongoing improvement increases the functional efficiency of an organisation as well as the level of satisfaction of both internal and external customers (Nowosielski 2008).

With reference to "ISO 9000 Introduction and Support Package: Guidance on the Concept and Use of the Process Approach for management systems" (ISO 2012), the process approach should be implemented in the following stages, for which recommended actions have been defined:

- 1. Process identification in an organisation
 - 1.1 Define the purpose of the organisation
 - 1.2 Define the policies and objectives of the organisation
 - 1.3 Determine the processes in the organisation
 - 1.4 Determine the sequence of the processes
 - 1.5 Define process ownership
 - 1.6 Define process documentation
- 2. Process planning
 - 2.1 Define the activities within the process
 - 2.2 Define the monitoring and measurement requirements
 - 2.3 Define the resources needed
 - 2.4 Verify the process against its planned objectives
- 3. Process implementation and measurement
 - 3.1 Implement processes and their activities as planned.
- 4. Process analysis
 - 4.1 Assess the process efficiency and effectiveness.
 - 4.2 Where appropriate, use statistical methods.

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- 5. Corrective actions and process improvement
 - 5.1 Undertake corrective actions
 - 5.2 Assess the efficiency of the actions undertaken
 - 5.3 Develop improving actions
 - 5.4 Asses the efficiency of improving actions

3 Potential Obstacles and Threats Occurring While Implementing the Process Approach

Implementation of the process approach should start with defining the organisation's objectives. Enterprises willing to introduce a quality management system, and so to apply the process approach, do not usually encounter problems defining the organisation's objectives and the quality policy. A potential issue may emerge in this sphere in relation to measurability of objectives as well as their decomposition to the process level. The research conducted by a web-based portal, procesowy.pl (Tartanus 2013), the subject of which was an assessment of process-related maturity of Polish organisations, have shown that Polish enterprises face problems while establishing links between the organisation's objectives and personal goals as well as while attempting to apply process measurement solutions (Tartanus 2013). Moreover, results of the studies in question imply that Polish organisations do not manage well trying to logically link strategic objectives, process objectives and specific indicative measures. In practice, establishing a correlation between strategic objectives, process objectives and personal objectives often proves to be the most difficult part of the business process management system implementation. Among the companies and institutions categorised as process managing organisations, 15 % are entities without properly defined process objectives (Tartanus 2013).

The most important process improvements are obtained on the operational level, however, without previously establishing some framework principles of process performance on the strategic level, which would ensure appropriate control through identification of a measurement system for processes, among other solutions, neither managers nor employees will gain sufficient motivation to identify and introduce improvements (Kalinowski 2012). Consequently, the efficiency of the process approach implementation depends to a large extent on the ability to decompose strategic goals to the operational level reflected in the objectives of processes as well as of individual employees. It is the appropriate pursuit of these recommendations that determines involvement of employees in the efforts being undertaken.

Another effort undertaken under the first stage of the process approach implementation is identification of all processes handled within the organisation. What proves particularly useful in the performance of this action is the process classification which makes it easier to seek and group processes. According to the theory,

processes can be divided into primary, auxiliary and managerial ones. Primary processes are related to the product delivery to the customer, whereas auxiliary processes enable and simplify performance of the primary ones. Managerial processes, on the other hand, are directly connected with the organisation management. In the first stage, special importance should be attached to identifying all processes occurring in the organisation and defining correlations between them. A common problem is that attention is only focused on the primary processes, since they are the most obvious ones and depend on the kind of products delivered. Hence the auxiliary or managerial processes are disregarded, as they do not result from the kind of services rendered or goods offered, but rather from the scope of business activity and the manner in which it is managed. The foregoing constraints imply how difficult it is to identify all processes handled within an organisation. Absence of any of the processes causes system incoherence as well as organisational or performance issues which may be experienced by the customer. An organisation should also define key processes of major importance for the company strategy implementation. In Polish enterprises, this element is rather seldom used in practice, since some companies do not have any functional strategy at all or do not identify processes responsible for its implementation. Yet another problem may be that one does not define correlations between processes, which should then be reflected on a map of relations. Consequently, the failure to interlink all processes with one another leads to discontinuity in the actions undertaken. If one identifies a process which does not relate to other processes, it is a signal that it has been inappropriately defined or its inputs or outputs have been incorrectly set.

Another effort which must be made at the first stage of the process approach implementation is defining process owners. As regards the practice of Polish enterprises, the Process-related maturity of Polish organisations report (Tartanus 2013) implies that 48 % of those surveyed, having their processes identified, have appointed process owners, however, this research also proves that no such solutions have unfortunately been introduced in nearly a half of the organisations subject to the study. The results obtained highlight difficulties in performing this action, and furthermore, appointing process owners may lead to another problem pertaining to the scope of their entitlements compared to the entitlements involved in the positions stemming from the organisational structure.

Drawing from the studies conducted by Wolf and Harmon (2012), published at A BPTrends Report entitled "The State of Business Process Management 2012", one may find confirmation of the foregoing observations. The research proves that 32 % of the organizations surveyed features process owners appointed to bear responsibility for core processes in departments. Assuming such a solution often leads to situations where the scope of one's duties resulting from the function performed in the organizational structure coincides with the responsibility stemming from the process owner role. As for interdepartmental processes, deployed across several departments, the problematic matter may be the manner of appointing the process owner. Assigning responsibility for a process is one of key elements of the process approach implementation.

Preparing process documentation is yet another action recommended for those to implement the process approach. This task comprises development of the necessary documentation required for the given process. The documentation should be up-to-date and drawn up in a manner ensuring that it is comprehensible and explicit to employees.

Another stage of the process approach implementation should start with defining actions within a process. Special attention should be paid to indicating all actions constituting the given process as well as appropriate definition of process inputs and outputs. A process course may only be modified while it functions, hence the identification of actions within a process is not a one-time effort, as it may be repeated by adding or removing an action. A problem typical of this stage may be a failure to identify the actual actions occurring in the process by merely describing those that theoretically should be undertaken.

An aspect of major importance for the process approach implementation is determining process monitoring and measuring related requirements. It is related to a choice of measures enabling accomplishment of objectives to be measured as well as of the place and frequency for measuring the outcomes attained. It is, however, a fairly problematic matter, and it requires certain time to devise suitable solutions. This action exerts very significant influence on the process management correctness and is directly connected with the performance of the preceding action, namely defining measures. Making another reference to the results of Polish enterprises as regards the level of their process-related maturity, (Tartanus 2013) one should conclude that absence of process measures is a frequent issue which limits the possibility to supervise the correctness of process implementation to a considerable extent.

Based on the studies undertaken by Harmon and Wolf (2014), published at A BPTrends Report entitled "The State of Business Process Management 2014", one may conclude that problems faced by Polish organizations are no different from standards of other international organizations. Studies conducted in 2013 (published in 2014) emphasize one more significant matter, namely the frequency of measurements performed. Among international organizations managing their processes, downward trends may be observed in terms of measurement frequency. In 2013, the number of organizations which declared not having measured process indices at all or having measured them occasionally increased significantly compared to the year 2011. 55 % of those surveyed claimed to have measured their indices occasionally. At the same time, the number of organizations always measuring processes or measuring them most times decreased. What these trends imply is not only the lack of process measurements in certain organizations, but also a decline in terms of interest in their verification on a regular basis.

Another action performed under the second stage of the process approach implementation is defining the resources necessary to implement the process. It usually involves no difficulties, however, while performing the action one should pay close attention to human, material, information as well as financial resources. And the subsequent effort to be undertaken while implementing the process approach is verifying whether the assumptions adopted with regard to the

possibility of accomplishing the objectives envisaged are correct. Experience proves that this action is not often reflected by the practice of Polish enterprises. Consequently, the assumptions adopted may be contradictory or mutually exclusive, and moreover, a failure to verify the correctness of the assumptions made limits the efficiency in the pursuit of the objectives defined.

The third stage of the process approach implementation consists in undertaking activities following the assumptions previously made. It should be stressed that the implementation is one of the most difficult stages of the process approach which results from the fact that the assumptions adopted must be pursued in practice. While conducting this stage, various unpredictable difficulties and obstacles may occur, ones which have not been taken into account at the planning stage. Making plans is far easier than implementing them when consistency and ability to solve the emerging problems prove to be the key aspects.

The fourth stage of the process approach implementation is an assessment of the outcomes obtained with reference to the assumptions adopted, and it boils down to calculating efficiency and effectiveness of processes as well as identification of potential corrective measures. The information provided above, concerning the limited practical application of process objectives and measures in Polish companies, imply certain difficulties in the performance of this stage, and consequently also the lack of credible information on the correctness of the process handling with reference to what has been assumed. Under this stage, it is worth using specific statistical methods, rather reluctantly applied in practice, especially by service companies, which is probably due to employees' insufficient knowledge concerning the former.

What proves particularly valuable at the stage of analysis is spotting all deviations against the outcomes planned. The outcomes attained in the course of the process analysis depend to a considerable extent on the correctness of implementation of previous stages, i.e. appropriate definition of objectives, process measures as well as the method to verify them. Therefore, it is extremely important to conduct the initial stages of the process approach implementation correctly, since it determines the outcomes obtained at final stages.

Under the fifth and last stage of the process approach implementation, one should pay close attention to elimination of the emerging nonconformities identified at the previous stage, namely the process analysis. For that purpose, it is recommended that appropriate solutions and methods should be developed, assumed to prevent potential issues or limiting their impact, while, at the same time, one is to focus on elimination of reasons leading to mistakes. The observations conducted imply that enterprises following the process approach indeed define and implement corrective measures in order to identify nonconformities, nevertheless, they unfortunately not always assess their efficiency, and this exactly what the ISO guidebook recommends. Lack of systematic assessment of efficiency of the efforts undertaken provides no information on their correctness and applicability in problem solving.

The next action recommended under the fifth stage of the process approach implementation is ongoing improvement of process efficiency. The manner in

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Table 1 Potential obstacles and threats in the process approach implementation and improvements proposed

NI.	Process approach implementation	Tomas	I
No. 1.	Process identification in an organisation	Issues Measurability of the organisation's objectives	Using the SMART principle to define objectives
		Decomposition of the organisation's objectives on lower levels	Using the Strategic Scorecard or Rummler and Brache's methodology
		Concentrating on primary processes exclusively	Making a reference to process classification, which makes it easier to define auxiliary and managerial processes
		Failure to identify all processes	Adopting the process hierarchy method. Repeated verification of processes to test continuity of their courses. Identification of discontinuity. Using computer programs to visualise processes
		Failure to define key processes	Using the Strategic Scorecard or Rummler and Brache's methodology
		Failure to identify mutual impacts between all processes	Preparing a map of relation- ships comprising inputs and outputs of each process
		Appointing process owners	Rejecting functional structure in favour of process-based structure
2.	Process planning	Process describing by means of theoretical actions, and not actual ones	Using a graphical description of each process. Verifying the process course in practice, making up for nonconformities. Using computer programs to visualise the process course
		Lack of measures enabling process measuring	Analysing the process objective in order to choose the parameter assumed to be subject to mea- surement. Defining measures enabling measurement of objectives
		Choice of place and frequency of process measurement	Process observation from the perspective of specific features of its course and necessary data Establishing the process measurement methodology
		Failure to verify correctness of the assumptions made	Checking correctness of the assumptions made by simulating possible outcomes and interpreting the values thus

(continued)

Table 1 (continued)

No.	Process approach implementation stages	Issues	Improvements proposed
			obtained; recommended use of computer programs under the simulation module
3.	Process implementation and measurement	Unexpected issues and obstacles not envisaged in the plan	Implementing the solutions assumed under the chosen process only and observing potential obstacles. Based on the effects obtained, devising preventive measures to be applied while implementing further processes
4.	Process analysis	Difficulties assessing process efficiency and effectiveness	Defining objectives and measures for each of the processes as well as the place and frequency of measurement, followed by regular efficiency and effectiveness assessment for each process. Using computer programs to manage processes
		Limited application of statistical methods	Employee training on the application of statistical methods
5.	Corrective actions and process improvement	Lack of efficiency assessment for the corrective and improving actions undertaken	Verifying the solutions envisaged in the scope of corrective and improving actions with reference to the outcomes attained. In necessary, undertaking further actions to correct the effects attained. Writing down the solutions introduced as well as the effects attained, seeking cause and effect relations

which the improvement is to be handled should be explicitly defined and then implemented, not forgetting to verify its efficiency. In this respect, one may expect problems to arise due to insufficient assessment of efficiency of the improving actions implemented.

Potential obstacles and threats in the process approach implementation and specific improvements proposed have been collated in Table 1.

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4 Solutions Proposed to Facilitate the Process Approach Implementation

Table 1 contains potential issues for which solutions eliminating or limiting the obstacles identified have been defined with reference to each stage of the process approach implementation. Their purpose is to enable efficient implementation of the process approach at any organisation.

As regards the non-measurability of organisation objectives, it is suggested that one should apply the SMART principle, which consists in establishing objectives in a manner ensuring that they are Specific, Measurable, Attainable/Ambitious, Realistic and Timely. Implementing this solution will ensure that the objectives become concrete and based on specific parameters.

In this article, using the Strategic Scorecard (Kaplan and Norton 2001) or Rummler and Brache's methodology has already been proposed twice (Rummler and Brache 2000). The former provides opportunities for strategic organisation management in a breakdown into four perspectives entailing processes, whereas Rummler and Brache's methodology enables organisation efficiency to be increased from a perspective according to which the organisation is handled like a system. Both concepts may be successfully applied to decompose organisation objectives to lower levels or to define key processes. The aforementioned actions are components of both methodologies.

The analysis conducted implies that some problems could be eliminated by deploying computer programs used to manage processes. This suggestion pertains to identification of all processes within an organisation as well as to describing them and assessing process efficiency and effectiveness. Computer programs can also be used to verify correctness of the assumptions adopted by means of a simulation module. Programs such as ADONIS or ARIS provide extensive capabilities in the scope of process modelling, description and simulation, and they are certainly worthwhile using in order to integrate and facilitate process management.

Moreover, for the issues already identified, such standard tools and solutions have been proposed as process classification, map of relations, process structure implementation, selection of measures enabling measurement of objectives or development of a process measurement methodology. As far as the improvements proposed are concerned, they also comprise an option of using pilot solutions which consist in implementing the assumptions adopted within a single chosen process only. Based on the experience acquired in the scope of the emerging obstacles, one can establish specific preventive measures to be undertaken while successive processes are implemented. Such a solution will enable potential issues to be anticipated and solved.

The article also addresses the aspect of employee training which may improve the knowledge concerning application of statistical methods in an organisation.

The latest process approach implementation improvements proposed have involved a need for verification of the solutions adopted in terms of corrective and improving actions with reference to the outcomes attained. It has been recommended that both the solutions envisaged and the effects attained are noted, and—should the outcomes be unsatisfactory—that further more efficient solutions are sought. The improvements proposed are to ensure that the corrective and improving actions undertaken are indeed effective.

Moreover, while implementing the process approach, one must pay close attention to making employees aware of their impact on the processes being deployed and explain the relations functioning within the organisation. Employees should be familiarised with the documentation developed and the nomenclature in use. Misunderstanding or ignorance of certain matters breeds defiance and unwillingness to follow them (Gebczynska 2014). The role played by the managing personnel is of crucial importance in this respect, as the process approach implementation indeed depends on the top management. Being convinced that the concept assumed is correct and being capable of persuading subordinates of the idea is the very prerequisite of success.

5 Conclusions

The process approach implementation stages described in the article have been conceptualised based on a guidebook entitled "ISO 9000 Introduction and Support Package: Guidance on the Concept and Use of the Process Approach for management systems". Possible difficulties and issues which may occur in the course of the process approach implementation have been discussed with reference to results of studies on the process-related maturity of Polish organisations as well as based on the author's own experience in process management, whereas the improvements proposed have been formulated based on a review of publications and having analysed solutions applied in practice by Polish enterprises.

The said improvements proposed in the article, envisaged to simplify the process approach implementation in an organisation, are focused on actions and solutions assumed to streamline process management. The conclusions drawn in the article should facilitate the process approach implementation, making it possible to avoid the most frequent mistakes.

One of the recommendations provided has been a suggestion on using computer programs to manage processes. This solution will simplify process identification and visualisation, contribute to better integration of the processes identified as well as provide an opportunity for seeking mutual relations between them.

The analysis conducted has proved how important the initial stages of the process approach implementation are. Mistakes made in this phase will be replicated in subsequent stages, disturbing correct functioning of the process approach. It is exactly for that reason that one should attach special importance to the stages of process identification and planning, since they are crucial for the effectiveness of the process approach implementation.

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How to Attract Investments to Agricultural Enterprises in Latvia: Manager's Perspective

Andris Sarnovics and Inese Maylutova

Abstract Investments may be considered as one of the most important facilitating factors for the economic development in the country. Management of any enterprise should think about attraction of investments, because they can increase the competitiveness of the enterprise. Since Latvia has joined the EU, Latvian farmers have been receiving various types of support from the EU—both as direct payments and from the Structural Funds after submission of projects. The EU budget for 2014-2020 is not sufficient for Latvia farmers. Therefore the agricultural enterprises have limited opportunities for development, using new investment projects for renovation of the capital assets and modernisation. The aim of the paper is to research the availability of investments for Latvia agricultural enterprises on the basis of scientific approaches to investments, as well as the possibilities to assess accurately the financial attractiveness of investment projects. The authors conclude that the main requirements for correct assessment of a project are the description of the project realization schedule and preparation, substantiation and verification of initial data. More cost-effective investment sources for agricultural enterprises are associated with government subsidies and the EU Structural Funds.

Keywords Investment • Investment project • Attractiveness of investments • Agricultural enterprise • EU Structural Funds

1 Introduction

Agricultural sector is highly significant for Latvia's economy. According to population census results, 734,000 people live in rural areas. After joining the European Union, Latvian farmers have received considerable support for the development of the rural areas in the form of various payments, as well as support for their submitted farm modernisation projects. Direct payments can be considered as the most important type of support from the European Union; they are paid in order to maintain farming lands. According to the statistical data of the Republic of Latvia,

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in 2012, a single average Latvian farm received 2700 EUR per year from the European Union, but over the last years, state support for the farmers in the form of subsidies has reduced and the EU budget for 2014–2020 is not sufficient for Latvian farmers.

Therefore the agricultural enterprises have limited opportunities for development, using new investment projects for renovation of the capital assets and modernisation. Investments mean serious work and considerable expenditure to generate further profit. When making decision about the development of even a very minor investment project, one should have maximum certainty that all the investments would pay off and ensure the profit the owner was hoping for. Besides, such a decision is usually made under the circumstances of uncertainty, considering the project implementation period of many years and some other factors.

The aim of the paper is to research the availability of investments for Latvian agricultural enterprises on the basis of scientific approaches to investments, as well as to find options for managers to evaluate precisely the financial attractiveness of the investment projects. The following research methods were used in the study: analytical, constructive logical, numerical descriptive, statistical, mathematical and comparative analysis.

2 Characteristics and Classification of Investments

Traditionally, the term "investments" comprises realization of long-term economic projects in order to acquire earnings in the future. Such approach to the term "investments" is common both in Latvian and foreign scientific literature. Investments perform several functions. In an enterprise, investments are made in order to expand the business, to modernize the capital assets, to raise the technological level and quality of the production. Investments are also made in order to purchase securities, to invest in assets of other enterprises, to purchase intangible assets, etc. The scientific literature offers several definitions of the term "investments". which were reviewed by the authors in order to describe the essence of the term in their paper. The term "investments" comes from the Latin "invest", which means "to invest" (Grote and Marauhn 2006). Whereas Britannica Academic Edition (2008) provides the following definition: "process of exchanging income during one period of time for an asset that is expected to produce earnings in future periods. Thus, consumption in the current period is foregone in order to obtain a greater return in the future." The second part of the definition includes a concept that the value of assets or deposits will grow from the moment of investment until the moment of expenditure.

Most sources of literature limit the notion of an investment to aspects that increase national production in the future. However, Essinger and Lowe (1997) describe savings and investments in their monograph as similar notions in point of fact, because, in either case, a person or an organization that has assets is sacrificing the opportunity to use them right away in order to use them in the future.

Bodie et al. (2009) consider investments as the application of current financial and other resources in order to gain benefit in the future. For example, a person may buy stocks, foreseeing that future earnings will justify the period, when he has a limited access to money, as well as the investment risk. They underline that types of investments are different, but the main feature is the same—a subject is sacrificing an asset now, waiting for the benefits of such sacrifice later on.

Gitman and Joehnk (2002) definition of investments focuses on reducing the effect of inflation on the value of savings. They define investments as any resource, in which one can invest money, in order to earn profit or in hope that its value will increase or stay the same. Earnings from investments are received in two ways—the current income and increased value.

Investments were also defined by Sachs and Lairran (1993). In economy, capital is saved for a particular period of time in the form of machines, devices, manufacturing building reserves, which are the elements of the state's production capacity. Investment costs—production flow at any point of time, which is aimed towards saving or increasing the core capital.

In macroeconomics, only acquiring new capital is considered an investment, not buying and selling of the existing capital. From the macroeconomics point of view, investments are the application of financial and material funds to create capital for the purpose of the development of national economy. Although, there are various theoretical models and analytical approaches to investment processes, it is possible to offer, in some way, a universal definition of investments. Investments are changes of the acquired capital in a particular period of time (The History of Economic Thought Website 2010) on a macroeconomic level, investments in entrepreneurship facilitate the development of production in the country and the employment rate; they can be defined in several ways. But all investments share the following common traits: financial contribution or investments are made for a certain period of time; creation of incoming future cash flow; compensation of the risks of inflation, losses and the investment itself; creation of the project clean cash flow.

Investment process brings together the fund owners and people who need them. Fund owners and those who seek investments are often brought together through financial institutions or financial market. Financial institutions are organizations, which channel the state, entrepreneurship or personal savings into investments or loans. Financial market is a place, where the fund suppliers and those who need them perform financial operations, usually without intermediaries. Those are securities markets, currency markets and markets for exchange of goods. Investment objects are new or modernized capital assets in all sectors and spheres of national economy. In entrepreneurship, investment operation objects are new or modernized capital assets, securities, target deposits, scientific and technical output and other property objects (Neshitoy 2007) Subjects of investment activities, investors and partners, are local and foreign legal entities and individuals, who participate in the investment process. Investors are subjects of investment activities, who invest their own or borrowed funds or intellectual property during the investment process.

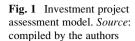
Participants of the investment process can be contracting entities, contractors, banks, consulting companies, insurance companies, designers, intermediaries, etc.

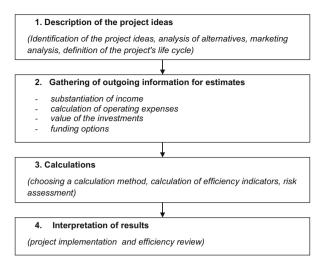
The enterprises also need large amount of money both for long-term and short-term financial needs in order to secure their activities. In long-term, the enterprises seek funds for building factories, purchasing equipment and developing products. The short-term needs include covering the inventory, debts and other expenses. Large enterprises issue a wide range of securities in order to finance the aforementioned financial needs. Investments may be categorized by various features:

- Based on the type of the capital investment object, investments are categorized into three groups: tangible, financial and intangible investments.
 - Financial instruments—investment of funds in long-term securities and contracts, capital share in enterprises, loans, money market instruments, stocks and similar financial instruments.
 - Tangible or real investments are investments of funds in various capital assets.
 - Intangible investments are investments of capital in intangible objects.
- Based on their character, they can be categorized into direct and portfolio investments.
 - Direct investments are contributions to core capital of an economic subject in order to have the rights to participate in the management of the company.
 - Portfolio (indirect) investments are contributions without the rights of management.

According to the form of property, the investments are categorized into private investments and investments of individuals or legal entities; foreign investments, municipal investments and government investments (Neshitoy 2007). Small and medium-size agricultural enterprises are most widely represented in Latvia agriculture. To attract investments they mainly use their own assets, loans, state funding and the EU Structural Funds. During any phase of their life cycle, the enterprises must review various investment ideas—projects that are related to long-term investments. Those investments might involve creation of new objects (enterprises), expanding the production capacity or planning reduction (a new type of production, expanding the distribution network, investments into branding, outsourcing, etc.) The investment project is a plan for investment of assets in order to gain benefits in the future (mainly as profit). Time is the most important factor when reviewing investment projects. Three main project development phases can be pointed out: pre-investment, investment and exploitation phase. The total length of these phases constitute the life cycle of a project.

There are several sub-phases in the pre-investment phase: identification of the investment project (inquiry about options), analysis of alternatives, preparation and analysis of initial data, technical and economic substantiation of the project (business plan), preparation of the assessment conclusion, and advancement of the project. The investment (project management) phase consists of the following





sub-phases: purchase of technologies and unit starting, detailed project development, participation in contests, purchase of land, construction and assembly, equipment installation, securing supplies of raw materials, staffing, delivery and launch. Exploitation phase—phase of production and equipment exploitation. In this phase, the investments start to pay off.

The authors distinguish the following main stages in a project assessment (Fig. 1):

- 1. Description of a general project implementation schedule. Essentially, this phase is about the identification of the project idea—the identification of the source of income, describing how the implementation of the investment idea looks like from the technical and managerial perspective (to define the operating and investment expenses). This stage also comprises the identification of the main participants of the project. This stage is important to define the initial calculation data correctly.
- 2. In order to assess a project, one needs to prepare initial information about the most important four indicators: revenue from implementation, operating (production, exploitation) expenses, investment expenses and sources of funding. Sources of financial literature on the assessment of investment projects, mainly, focus on the methodology of estimates—how to create cash flow and how to estimate indicators. The authors of the article suppose that the main conditions for correct project assessment are the description of the project implementation schedule and the summary, substantiation and verification of initial data.
- 3. Estimate methodology, is, undeniably, also important for project assessment. Scientists point out two directions in the project analysis—investment's efficiency and financial justification of the project (its practicability). The efficiency analysis defines the potential profitability of the project. Financial justification means the investor's potential ability to implement the project. Assessment of

efficiency is based on the analysis of such indicators as PBP, NPV, IRR, PI (see Chap. 3). Financial validity is associated with budget modeling and control over free capital balance in each given phase of the project implementation. There are different approaches to information gathering for the assessment of the project efficiency "in open field" and "in operating enterprise". Project efficiency is determined by additional profit; the company makes as a result of its implementation. It is not correct to base the calculation of additional profit just on the company's general financial plan, taking the project into account. Such approach artificially increases the indicators of the project, by substituting a separate effect of the investment project implementation with the total result of all company's activities.

4. The Final indicator's calculation method is also well-known and accessible, however the interpretation of those results and management's decisions are not always objective. In order to make a decision about the attractiveness of the project, one needs to determine whether the project ensures the desired results within the time limit, the project manager considers reasonable.

The most suitable approach for the assessment of investment projects is the budget approach. Essentially, it means dividing the project review time line into separate planning intervals. Each interval is reviewed from the perspective of incoming and outgoing cash flow. Investment project assessment by its nature, may be considered as a financial planning task.

3 Investment Project Assessment Methods, Their Features

The purpose of investment project assessment is to make a strategic decision about the implementation of the project or declining it. The solution of this task is based on approximate quantitative methods and comprises discrete quantity of prognoses used in the main phases of the project development. In terms of assessing investment projects, money should be invested in such projects, which ensure the highest income, taking into account the discounting (re-calculation of the money value). From the state and entrepreneurs' point of view, capital investments should be made strictly according to economically well-founded projects approved by the relevant authorities. In practice of investment project assessment, all methods are categorized into two groups:

- 1. Methods that are based on accountancy data and do not use discounting procedure.
 - · Payback period (PBP) method.
 - Average rate of return (ARR) method.

- 2. Methods that use cash flow discounting procedure.
 - Internal rate of return (IRR) method.
 - Net present (reduced) value (NPV) method.
 - Profitability index (PI) method.
 - Modified internal rate of return (MIRR) method.

Accountancy rate of return (ARR) from investments is calculated using formula (Kozlovs 2005):

$$ARR = \frac{Average \, annual \, rate \, of \, return}{Initial \, investments} *100\%, \tag{1}$$

where

$$Average annual \ rate \ of \ return = \frac{Total \ rate \ of \ return \ from \ the \ project}{Project \ life \ cycle \ in \ years} \tag{2}$$

Average amount of investments

$$= \frac{Initial\ investment\ expenses + Residue\ value\ of\ investment\ expenses}{2} \tag{3}$$

Estimated ARR criterion compares the predicted rate of return that exists in the sector with that of the particular project. If the ARR is greater than the predicted rate of return, then the company accepts such investment project for realization. Disadvantages of the method:

- 1. ARR does not consider the time value of money. Application of average rates does not solve this problem and does not allow to predict profit dynamics of the project realization and to use it in estimates.
- 2. The method does not have unambiguously certain procedure for practical application.
- ARR is based on the use of bookkeeping of profit rates. Therefore combining it
 with other methods that are based on assessment of net cash flow leads to
 additional difficulties.

Investment payback period (PBP)—period of time required for all accumulated earnings from the realization of the investment project to be even with initial amount of expenses (investments) (Kozlovs 2005). Investment payback period is calculated using the following formula (4):

$$PBP = Y_n + \frac{CIF_0 - CCIF_n}{CIF_{n+1}} \tag{4}$$

where

PBP—payback period,Y—project life cycle in years,

 Y_n —year, when the investments start to pay off,

CIF—net cash flow,

CIF₀—initial amount of investments,

CCIF—cumulative net cash flow.

The project manager fixes a definite term for recouping initial investments. The term is fixed based on the average investment payback period in the sector. If the company must choose from two or more alternative investment projects, then the project with the shortest payback period is chosen (Owen 2012). If the investment payback periods are equal, then particular structural differences of net cash flow allow ranging the projects. Projects with stronger cash flow during the first years are preferred, because these funds may be re-invested in some other project, which might bring additional profit. Disadvantages of the method:

- 1. The method is based on the assumption that dependence of cash flow on the realization time of investment project is not important.
- 2. The method does not consider net cash flow after the payback period.

Investment project's internal rate of return (IRR)—discounting rate that allows to equate (make even) the reduced value of investment project's earnings and initial investment expenses of project realization. With this discounting rate the investment project's NPV is equal to zero. IRR is calculated using the following formula (5):

$$\frac{CIF_1}{(1+r)^1} + \frac{CIF_2}{(1+r)^2} + \dots + \frac{CIF_n}{(1+r)^n} = ICO,$$
 (5)

where

r—discounting rate, equal to IRR, $CIF_1, CIF_2, \dots, CIF_n$ —undiscounted cash flow from the project, ICO—project's initial cash outflow.

IRR is interpreted as maximum profitability of the investment project that allows funding the project without financial losses for capital owners. Therefore, if the investment project's previous internal rate of return is greater than the cost of the company's capital, then such a project should be accepted for implementation. If the project's IRR is lower or equal to the discounting rate, then such a project should be declined (Owen 2012).

Net present value (NPV) is calculated as the difference between the discounted sum of all positive cash flow of the investment project and the sum of all negative cash flow of the same project (of all initial investment expenses) NPV is calculated using the following formula (6):

$$NPV = \frac{CIF_1}{(1+r)^1} + \frac{CIF_2}{(1+r)^2} + \dots + \frac{CIF_n}{(1+r)^n} - ICO,$$
 (6)

where

r—discounting rate CIF_1 , CIF_2 , \cdots , CIF_n —undiscounted cash flow from the project, ICO—project's initial cash outflow.

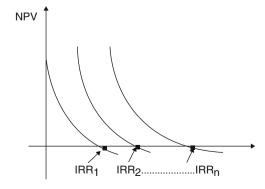
If the investment project's net present value is positive, then such a project is accepted for implementation. Any NPV positive measure is interpreted as a proportional increase in the company's value. If the NPV is negative, then such a project is declined (except for environmental projects) (Brealey 2003).

If two or more mutually exclusive projects are compared, the project with the greatest NPV is preferred. NPV is inversely proportional to discounting rate—if the discounting rate increases, the NPV decreases and vice versa. (See Fig. 2). NPV method has barely any disadvantages characteristic of other methods of investment project analysis; it is practically suitable for analysis of any project with different kinds of cash flow. The only serious limitation of this approach is that it should not be used to compare projects with unequal periods of time. Correct and justified choice of discounting rate has a fundamental importance in the use of the NPV method. Factors affecting discounting rate:

- 1. A correct discounting rate is a profitability rate for resource investment in any other project of the same risk level.
- 2. Funding sources of an investment project and their structure (owned assets, borrowed financial resources, mixed type).

It is recommended to use WACC (weighted average costs of capital), when funding investment projects from sources the enterprise has already created (Brealey 2003). In real life there are situations, when it is not possible to estimate the market value of the components of capital structure. It is recommended to use balance assessments for calculation of WACC in such cases. However there are

Fig. 2 Graph illustrating net present value (NPV). *Source*: Brealey (2003, p. 161)



situations in the practice of economic activity, when the plan is to fund the investment project from new potential financial sources instead of the existing ones. Examples of such funding sources are various loans; EU Structural Funds and other practical funding instruments. The discounting rate of the investment project will be changing under such economic circumstances. Limitations of WACC method:

- 1. The WACC methodology does not take into account the risk of the analysed investment project;
- 2. The WACC methodology can't tell whether there is a risk deviation of the analysed investment project from the total risk of the company.

Financial theory suggests a different approach to overcome these limitations—in order to determine WACC discounting rate, the return (profitability) of the given investment project should be reviewed from the perspective of its components:

- 1. Risk-free return. Examples are securities and bonds issued by the state and/or treasury. Profitability rate of such securities is a bit higher than inflation, although not always.
- 2. Risk premium. Additional income that the company wants to receive as compensation for the risk associated with the investment project. The estimation of risk is a rather complicated process.

In practice, the following types of risks are considered:

- Commercial risk—risk of return. It is focused on loan interest rates, determined by credit institutions and differentiated for various sectors.
- Operational risk—risk of return at a specific level of the company. It is focused
 on loan interest rates, defined by the credit institutions and differentiated for
 various sectors.
- Financial risk—risk of investment decisions, associated with the forms and structure of funding investment projects.

Capital asset pricing model (CAPM) defines the following WACC formula (Investopedia 2010):

$$WACC = g_d * (1 - T) * r_d + g_e * r_e \tag{7}$$

$$R_e = r_f + \beta * (r_m - r_f), \tag{8}$$

where

WACC—weighted average costs of capital,

 g_d —loan fraction of the total capital.

g_e—stockholders' fraction of the total capital,

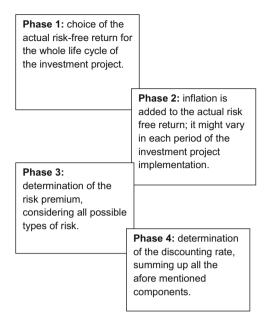
 r_d —lender's desired interest rate,

T—income tax,

 r_e —stockholders' desired earning rate,

 r_f —risk-free return,

Fig. 3 Phases of applying the methodology for determination of the discounting rate. *Source*: compiled by the authors



 r_m —average market rate of return, (r_m-r_f) —market risk premium, β —beta-coefficient.

Phases of applying the methodology for the determination of discounting rate (Fig. 3):

Profitability index (PI) of an investment project is determined by the ratio of future positive cash flow and initial investment expenses according to the formula:

$$PI = \frac{CIF_1 * (1+r)^1}{I} + \frac{CIF_2 * (1+r)^2}{I} + \dots + \frac{CIF_n * (1+r)^n}{I},$$
(9)

where

 CIF_1 , CIF_2 , ..., CIF_n —undiscounted cash flow from the project, I—project's initial cash outflow, r—discounting rate of project's cash flow

An investment project is accepted for implementation under the condition that profitability index PI > 1 and vice versa. The higher the PI is, the more effective is the project (Brealey 2003). Using the PI for assessment of independent investment projects, the results are always the same as in assessments, using NPV and IRR criteria. However, using the PI for the assessment of alternative investment projects might lead to contradictory decisions. Managers of modern enterprises should use the profitability index (PI) as an additional criterion for the assessment of investments due its simplicity and clearness.

Any assessment method provides additional information about an investment project:

- 1. Accountancy rate of return and payback period methods are used in order to:
 - decline projects that are clearly unsuitable,
 - assess small or short-term projects
 - evaluate the level of risk and liquidity, as well as to choose from two projects with equal NPV the one with the shortest payback period.
- 2. NPV method shows the generated value of a project and describes the return from the invested capital. NPV is mainly used to assess long-term investment projects. If the capital is going to be invested in the project in parts over a long period of time, NPV is the most suitable method.
- 3. IRR method provides information about the return provided by each euro invested in a project (Moavenzade 2009).

Sensitivity analysis is testing of the main cash flow variables in order, to determine the sensitivity of a project. It is especially useful to check those parameters that create the greatest risk and might affect the project's cash flow negatively. This analysis is a useful addition to the assessment that allows improving the decision making process and it might reveal the necessity to find additional information about some of the variables. The recommended approach to the sensitivity analysis—change of values (rates, expected demand increase, productivity quotients, resource prices, project delay, weather conditions, etc. (Belli 2001).

Financial and economic analyses are based on calculations, but it is not possible to predict the future. Therefore the assumptions should be clear and realistic. Financial forecast should include several scenarios—the optimistic, average and pessimistic; the sensitivity analysis helps to mark those scenarios (Ministry of Finance of the Czech Republic 2012).

4 Possibilities to Attract Investment to Agricultural Enterprises

The agricultural sector of the European Union takes up a large share in the global agricultural market. The capacity of the EU agricultural sector to produce large amount of production, as well as the variety and quality of this production, allowed the EU to become an important food-stuff exporter. Agriculture is one of the most important sectors of the Latvian national economy; it ensures the development of rural regions. The main occupation of farmers is food-stuff production, which involves the application of time-tested traditions combined with the most recent scientific discoveries and technologies in order to eventually offer food of good quality for acceptable prices. During the research, the authors concluded that one of the main factors hindering the development of agricultural enterprises is the lack of

Table 1 Latvia's government support for farmers in 2014, EUR

Type of support	Amount, EUR
Support for cattle-breeding	4,535,235
Support for selecting and breeding	2,856,536
Support for maintenance of register of animals, herds and housings and supervision of dairy cow and goat breeds	328,683
Support for collection, transportation, processing and elimination of dead animal bodies	546,093
Support for collection, transportation and processing of by-products of animal origin	85,372
Support for partial coverage of veterinary examination	170,745
Support for development of apiculture	547,806
Support for fruit-growing	580,246
Support for studies, international and mutual co-operation	1,063,185
Support for market development	614,681
Support for participation in food quality certification schemes	672,219
Support for coverage of insurance policy expenses	853,723
Support for promotion of co-operation	139,574
Support for implementation of support measures started in 2013	688,491
Total	9,147,352

Source: Ministry of Agriculture of the Republic of Latvia (2014a)

financial resources. Further research by the authors will focus on the tendencies in the agricultural sector in recent years and what financial resources are available for the development of rural areas. In order to foster the development of agriculture and rural areas, as well as to increase the standard of living for rural population, the EU Structural Funds are attracted and the Republic of Latvia is providing support with national subsidies.

In 2010, the total annual financing paid in subsidies was 14.27 million lats, which was the lowest in recent years. According to Rural Support Data, in 2011, the total amount of subsidies was 5.47 million lats; whereas, by 30 June, 2012, it was 4.09 million lats. The rapid decline in the state's support pushes to seek solutions how to acquire resources for further development. (Ministry of Agriculture of the Republic of Latvia 2014a) On 31 December, 2013, Regulation No. 1524 ("On State's Support for Agriculture") issued by the Cabinet of Ministers came into force. They define the order in which the total amount of 2014 subsidies of EUR 9,147,352 will be paid and for which particular purposes. Considering the efficiency of the current supporting measures, the level of state's support and its economic situation, the state's support is important for farmers in those directions that facilitate their viability and competitiveness. In 2014, the funding was allocated to following purposes (see Table 1). Table 1 shows that the majority of funds were allocated to measures associated with the development of cattle-breeding and facilitation of investments, in 2014, state's support for farmers increased in comparison to the previous period of planning. Latvia government has so far supported investments in agriculture with subsidies as defined in the law "On Agriculture and Rural Development" and within the limits of its capabilities. However this support is intended only for the purchase of farming machines and technologies, whereas capital construction and reconstruction projects are not going to be funded with state's money. As additional support for investments in agriculture, there are the EU support programs, however, they also cannot solve the problem of attraction of funding to agriculture.

Therefore the Ministry of Agriculture has prepared the "Lending program for long-term investments in agriculture". The main goal is to support sustainable and competitive farmers and co-operative societies providing agricultural services in capital-intensive sectors of agriculture. Secondary goals of the program:

- 1. To create a long-term funding offers acceptable for farmers and co-operative societies providing agricultural services.
- 2. To facilitate positive structural changes in production and to enhance the attraction of investments for creation of optimal size farms and co-operative societies providing agricultural services.
- 3. To facilitate enhancement of competitiveness of farmers and co-operative societies providing agricultural services.
- 4. To reduce future expenses required for maintenance of farms.
- 5. To create conditions for more comprehensive use of the EU agricultural support programmes after joining the EU.
- 6. To decrease the social stress in rural areas, caused by inability of farmers and agricultural co-operative societies to find financial resources for production development.

The tasks of the program: to ensure support for Latvian farmers, co-operative societies providing agricultural services and enterprises associated with the distribution of biological agricultural products. Prioritized and supportable projects are those that match the following requirements and criteria and create new jobs, as well as promote diversification of agricultural entrepreneurship. Conditions of the program apply only to new projects, which were submitted after the program came into force. Also, the previous loans are not refinanced, nor any funds are allocated to cover the previous expenses before the submission of the project. Requirements for support recipients:

- 1. At least 60 % of borrower's income is from agricultural production;
- 2. The borrower is registered as a tax payer at National Revenue Service;
- 3. At least 51 % of the borrower's core capital belongs to citizens or regular residents of the Republic of Latvia.

The program provides financing to the following types of projects:

- 1. Construction projects for production of agricultural products and hydrotechnical constructions for authorised piscicultural enterprises;
- 2. Reconstruction of buildings for agricultural production;

- 3. Technological installations for the implementation of projects mentioned in point 1 and 2;
- 4. Investments in water and energy supply facilities for the implementation of projects mentioned in point 1 and 2;
- 5. Purchase of farming lands for the implementation of projects mentioned in point 1 and 2:
- 6. Creation of infrastructure (Ministry of Agriculture of the Republic of Latvia 2014a).

Recently the support for investments in agriculture has become a large part of the state's total support; therefore the authors of this study have reviewed the particular activities supported by the state. These activities are categorized into three large blocks explained in detail.

- Support for partial repayment of interest rate for manufacturers of primary agricultural products:
 - associated with purchase of installations and technical equipment (including software) necessary for ensuring the operating activities;
 - associated with investments in construction and reconstruction of buildings for agricultural production;
 - associated with farming lands.
- Support for partial repayment of interest rate for relevant co-operative societies providing agricultural services:
 - associated with purchase of installations and technical equipment (including software) necessary for ensuring the operating activities;
 - associated with investments in construction and reconstruction of buildings for agricultural production.
- Support for partial repayment of interest rate for dairy enterprises:
 - associated with purchase of installations and technical equipment (including software) necessary for ensuring the operating activities;
 - associated with investments in construction and reconstruction of buildings for dairying.

The authors reviewed the implementation options of investment projects for Latvia agricultural enterprises and came to the conclusion that the most beneficial option is the development of an agricultural enterprise using the EU Structural Funds. The elements of the EU multiannual budget, associated with the areas of responsibility of the Ministry of Agriculture, are Common Agricultural Policy (CAP), direct payments, market instruments and rural development policy. They are basically represented and included in the second budget category (natural resource management). The funding approved by the Commission for CAP is 386.9 billion euro, of which 281.8 billion euro are for the Pillar 1 (direct payments and market governance mechanisms) and 89.9 billion euro are for Pillar 2 (rural



Fig. 4 The EU agricultural budget in 2012 (%). Source: compiled by the authors

development). In addition to Pillar 1 and Pillar 2 measures, 15.2 billion euro more are allocated to CAP in other categories of the EU budget:

- research and innovations in the field of food security (4.5 billion euro) within the Common Strategic Framework;
- food innocuousness (2.2. billion euro) in the third budget category (safety and citizenship);
- "indigence program" (food supply program for indigent people in the EU) (2.5 billion euro) in the first budget category (smart and inclusive development);
- new mechanism to deal with crisis situations in the agricultural sector (3.5 billion euro) outside the budget of the EU;

Globalization Adjustment Fund (up to 2.5 billion euro), expanding the scope of the European Globalization Fund (EGF), in order to support farmers affected by globalization, outside the EU budget (Ministry of Agriculture of the Republic of Latvia 2014b). The EU agriculture budget is intended for three types of activities (Fig. 4). Most of the EU agriculture budget is allocated to direct payments for maintenance of land (72 %), which is 44 billion euro in absolute numbers; 14 billion euro (21 %) is allocated to rural development and 7 billion euro is allocated to market support (7 %).

In frames of the EU budget for 2014–2020 only 36.2 % are allocated to Common Agricultural Policy (CAP), including direct payments, total market organization and rural development activities, whereas in 2007–2013 39.4 % of the EU budget was allocated to CAP. According to the EU Common Agricultural Policy (CAP) reform, from 2014 to 2020, direct payments in Latvia will be more than doubled, reaching 196 euro per hectare in 2019. In the situation when the EU budget for agriculture and rural development for 2014–2020 has been cut by 17 %, Latvia has achieved 50 % increase for agriculture and rural development (See Fig. 5).

The new policy of direct payments, rural development and market will be:

- · more targeted;
- more competitive;
- more flexible;
- more production-oriented;
- greener.

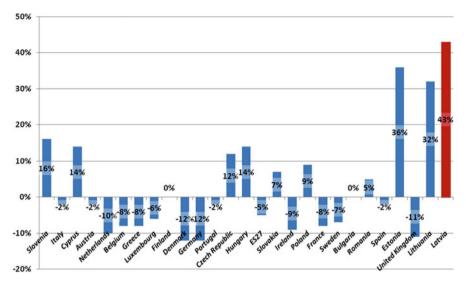


Fig. 5 Comparison of average direct payments and rural development payments per ha (% 2014–2020 vs. 2007–2013). *Source*: Ministry of Agriculture of the Republic of Latvia (2014b)

By initiating changes in CAP, the Commission has tried to come closer to the goals and essence of the strategy "Europe 2020". Also, the goal of the proposal is to make the support system in the sector more honest and balanced and to ensure closer link between agricultural and environment policy at the same time. CAP must stabilize the market and prices, thus focusing on the creation of added value—safe and high quality food in a competitive EU market. The main elements of the Commission's proposal for the EU budget 2014–2020 are:

- 1. Equalization of direct payments. The Commission has offered gradual equalization of direct payments (henceforth—DP); those member countries whose DP are 90 % below the EU average level, will have the difference decreased by 1/3 during the planning period. This difference would be proportionally funded by those EU member countries that receive DP above the EU average level. Also, the Commission has proposed to review the order of granting support for rural development and to use more objective criteria. It has also proposed a more flexible allocation of funding (modulation) between both CAP Pillars (DP and rural development).
- 2. "The Green Component" of the direct payments. In order to facilitate the achievement of environmental and climate goals, is was proposed to link 30 % of the direct support with "the green component" in addition to the existing requirements of mutual compliance. It means that all farmers should ensure activities that are environment friendly.
- 3. Limitations to the amount of support. The Commission has proposed to limit the amount of direct payments to large farms. The Commission suggests allocating

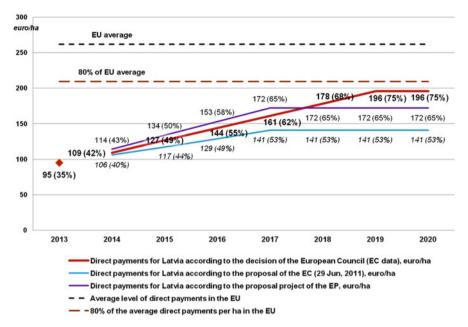


Fig. 6 Direct payments allocated to Latvia by the European Commission 2014-2020, euro/ha. *Source*: Ministry of Agriculture of the Republic of Latvia (2014b)

the resources saved in that way to rural development, keeping these funds within the national envelope of the corresponding country

- 4. Another proposal is to include the EU Agricultural Fund in a unified strategic framework together with the Cohesion Fund, Social Fund, European Regional Development Fund and Fisheries Fund.
- 5. And, finally, to restructure the market mechanisms in order to adapt to new challenges and to ensure the ability of the agricultural sector to react to unforeseen circumstances, which would also result in an effective adaptation to changes in the global market.

Direct payments as part of the CAP are intended only for active farmers, who are occupied with agricultural production and maintenance of land in order and suitable for pasturing and cultivation, as well as for small farmers, who are ensuring viability of rural areas (Fig. 6). Special additional support will be available to start-up farmers, whereas small farmers will acquittal of greening requirements and will have a reduced control burden.

Starting from 2015, dairy produce quota mechanism will cease to exist and it is beneficial for Latvia. Moreover, it was agreed that, in case the quota cancellation after 2015 will cause undesirable market fluctuations, the European Commission will be able to trigger corresponding instruments for managing market crisis as in other sectors. A number of greening requirements should be complied with in order to enable farmers to receive direct payments (it does not apply to support to small

farmers). However Latvia representatives in the Council have achieved considerable flexibility regarding these requirements, that allows to alleviate substantially these greening requirements for farmers, who are operating in the regions with large forest areas. It is important that further on it will be easier for farmers to cultivate land that was not cultivated before. Latvia entrepreneurs will be able to choose to use up to 13 % of the direct payment envelope for production-related support. Both in terms of rural development and market governance, special focus will be on co-operation between farmers and in all the food supply chain in order to facilitate competitiveness and innovations in the food supply chain.

30 % of the Rural Development Program funding will go to activities related to environmental targets, including support in less beneficial regions. Whereas twice the amount (5 %) of the planning period of 2007–2013 will go to LEADER activities in order to facilitate rural development using LEADER approach. In the next period, the main emphasis will be on promoting knowledge and skills, co-operation and innovations among workers of the agricultural and forestry sectors in order to increase the efficiency of production and competitiveness. From now on, Latvia will be able to invest more purposefully in the competitiveness of the agricultural sector, especially by promoting co-operation and ensuring viability of the farms (Ministry of Foreign Affairs of Republic of Latvia 2014). The agricultural support activities funded by the EU funds are:

- · direct payments;
- activities of the Rural Development Program;
- · activities of the European Fisheries Fund;
- export reimbursements;
- · market promotion activities;
- intervention measures:
- other EU measures:
- · loan fund.

Each type of support has its own purpose.

Not only area payments can be considered as a type of the EU support for Latvia farmers. In order to uptake appropriations of the EU funds, Rural Development Program (RDP) that envisages various activities for improvement of life in rural areas of Latvia has been developed. Rural Development Program activities are divided into four axes and each axis has its own activities. The four axes are the following:

Axis 1—increasing the competitiveness of agriculture and forestry;

Axis 2—improvement of environment and rural landscape;

Axis 3—living standards in rural areas and diversification of rural economy;

Axis 4—implementation of the LEADER approach.

Over the last 5 years, there were 15.6 thousand projects approved within RDP with total public funding of 767 million euro, whereas 12.7 thousand projects were financed completely or partially (421 million euro). Most of the farms that had applied for support operate in grain cultivation sector (approximately 46 %) and

dairy cattle-breeding sector (approximately 34 %); far less operate in meat cattle-breeding sector (approximately 9 %), as mixed type farms (agriculture and cattle-breeding—approximately 6 %) and 5 % of the projects refer to vegetable and fruit-growing. It shows that grain cultivation and cattle-breeding dominate in Latvia agriculture.

Substantial regional differences in project character exist. The greatest activity was in Kurzeme regions, as well as in South Latgale and Middle Latvia, then in all Latgale regions (39 % of all submitted projects) and Vidzeme regions (31 % of all submitted projects). It shows that farmers are capable of developing agricultural production in other parts of Latvia, not only in Zemgale and Riga region, which are the most economically active and developed regions. In total, 2083 farms have been supported in 5 years of the RDP (Ministry of Agriculture 2014a, b). The total public funding available for Rural Development Program from 2007–2013 was 738,140,094 LVL (1,050,278,732 EUR). Majority of the projects were submitted for activity "Modernization of Farms" in the Axis 1, "Improvement of Competitiveness of Agriculture and Forestry". Such great activity demonstrates that the farmers are thinking about material and technical basis of their farms, introducing latest technologies that improve production.

However, when building a new production site or technically modernizing the old one, management of the agricultural enterprises rarely turned to the project consultants. There are objective reasons to do it. First, it is costly. Second, the planning process (including all the required harmonization) might take too long. It is complicated to estimate all the expenses associated with the purchase of technical equipment. Only a highly qualified professional can do it. If a new production is purchased, the requested amount of investments usually is equal to its price. However, the supplied installation does not include numerous auxiliaries that increase the total project expenses. Judging by practice, the price of additional equipment varies from 20 to 80 % of the price of the production line itself. Often, transportation expenses, loading and unloading, assemblage, launch and installation of the equipment, customs duties and purchase of additional communications and obtaining the required authorizations, which sometimes might take several months and might require additional resources, are not considered during the preparation of the investment project and added to the list of expenses. It shows that small and medium-sized agricultural enterprises should co-operate more closely with financial advisers during the development of investment projects and attraction of the EU funds.

5 Conclusions

The purpose of an investment project is to acquire information that enables managers to make objective decisions. In case of a positive decision regarding the implementation of the project, it is required that invested resources are fully covered at the end of the project and that the profit is high enough.

Comparing different investment projects, for qualitative assessment of the investment project efficiency and to submit a well-founded proposal concerning the selection of the most successful project the manager has to analyze the projects using several efficiency assessment methods. The authors recommend choosing internal rate of return (IRR) and payback period (PBP) as the measures that most adequately represent the efficiency of agricultural investment projects.

The authors suppose that the main requirements for correct assessment of a project are the description of the project realization schedule and preparation, substantiation and verification of the initial data, because they are the basis for estimates of the project cash flow forecasts and efficiency measures.

The authors conclude that the cash flow forecast, which is the basis of the assessment of the project's efficiency, should include data only about the analyzed project. Efficiency assessment of the manager projects that is based only on the agricultural enterprise's total financial plan, considering the project, is not correct in an operating enterprise. Such approach artificially increases the project indicators.

More cost-effective investment sources for agricultural enterprises are associated with state's subsidies and the EU Structural Funds. Small and medium-sized enterprises should attract business consultants for the preparation of qualitative applications.

In order to adopt successfully the EU funds according to the plan and to have more financially supported qualitative agricultural projects, execution of the Ministry of Agriculture plan should be monitored and its staff should be educated.

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Economic and Social Implications of the Internet of Things in Europe in Relation to Business

Petra Marešová and Jaroslav Kacetl

Abstract The increasing availability of high-quality data collected and transmitted in real-time through cheap, ubiquitous hardware and connections will undoubtedly lead to scientific, technical, and commercial innovation. Opportunities for business are massive in terms of improvements in productivity, and control of supply chains and distributed real-time processing. The paper's objective is to analyze chosen economic and social impacts of the Internet of Things (IoT) in relation to its business potential. The Internet of Things is a scenario in which objects, animals or people are provided with sensors and gain the ability to communicate. The resulting information networks are capable of creating new business models, improving business processes, and reducing costs and risks. Economic impacts treated in this paper include aspects like ICT sector's expenditures, innovation, and investment in the EU, and trends and business potential of the IoT. Social impacts, which might be both positive and negative, will be discussed as well. Among the positive ones belong improved access to information and education, new tools and equipment. On the other hand, the IoT may cause job losses or reduced physical activity and personal interaction.

Keywords Business • Internet of things • Economic and social impact

1 Introduction

The increasing availability of high-quality data lead to scientific, technical, and commercial innovation. Falling technology costs, developments in complementary fields like mobile and cloud, together with support from governments have all contributed to the growing of an Internet of Things (IoT) (BCS 2013).

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It is therefore vital not only to reveal opportunities linked to the IoT and its applications and implications to social sphere, but also to foresee how this technology may transform social life (Shin 2014). Greater public understanding and discussion of the potential benefits as well as threats is vital. Rethinking of practices and policies will be necessary as local, national, regional and global will become close to each other (Erguler 2015). Nevertheless, research on the social impact of the IoT has not fully taken off, yet (Crump and Brown 2013). Of course, most people agree that the IoT provides great opportunities but at the same time there is a pressing need for sound social research into this field on the basis of real evidence and thorough analysis as very little is known about the likely social impacts of the IoT on lives of citizens (González 2011).

The aim of this contribution is to focus on the IoT from both economic and social points of view. Particularly, the objectives are to specify: the economic situation of European countries and of European ICT industry as prerequisites to the development of the IoT, possible utilization of these technologies, expected economic and social benefits and risks to business and to the wider society, strengths and weaknesses, opportunities and threats (SWOT analysis) that the IoT poses to business as well as wider society.

2 Economic Impact of IoT in Europe

2.1 Situation of ICT Industry in Europe

In order to be able to describe the potential impacts of the IoT on business in Europe, it is crucial to know the economic situation of European countries, the level of innovation and technological equipment as well as the state of European ICT sector. The ICT sector's share of GDP in the EU countries has recently fluctuated between 3 and 5 %. In this short period it is impossible to witness either growing or falling trends. Germany, France and England remain long-term leaders in this respect. Research and development expenditures differ a lot in European countries. Figure 1 shows several (in this respect the best and the worst) European countries compared to the USA and China. Expenditures in China are similar to the EU average.

The patenting activity is another indicator of the country's development. In Fig. 2, the patenting activity is evaluated based on the Global Innovation Index (on the scale from 0 to 100). It shows that even the most advanced European countries are ranked below China and the USA. On the other hand, technological infrastructure is very good in Europe. The incidence of internet access and PC ownership in households was in 2012 between 55 and 95 % in individual countries.

In the private sector, the share of European companies with internet access has recently been growing. In 2012 it reached 92 % (Fig. 3).

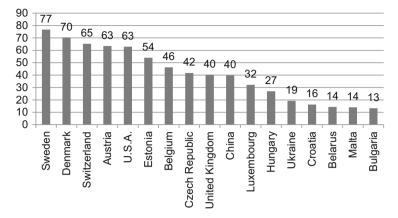


Fig. 1 Gross expenditure on R&D (in %). Source: Global Innovation Index (2014)

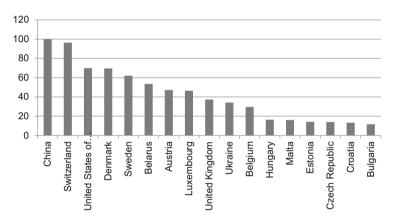


Fig. 2 National office resident patent applications. Source: Global Innovation Index (2014)

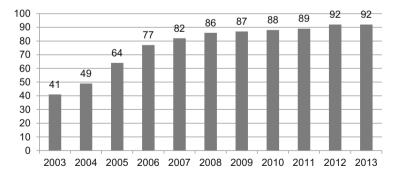


Fig. 3 Companies with high speed internet connection (% of companies with 10-plus employees). *Source*: Eurostat

To sum up, the level of internet access as well as used technologies is high in both European households and companies. Much worse is the situation in the field of innovation support. European countries spend less on research and development and the number of patents is low.

3 Economic Benefits and Risks of IoT in Relation to Business

3.1 Potential IoT Applications

The potential of the IoT has been specified particularly in the field of health (González 2011; Chui et al. 2010; Crump and Brown 2013; Mehta 2014), where it will be instrumental particularly in remote monitoring the patient's medical conditions, e.g. diabetes, Alzheimer's, high blood pressure, heart rate and rhythm, sugar level, as well as the patient's behavior, sleeping pattern, and so forth. If necessary, it will be possible to monitor the patient's heart, intestines or other organs. Consequently, doctors will be get early warning of the patient's condition, and they will be allowed to better diagnose disease and prescribe customized treatment (Chui et al. 2010; Efremov et al. 2015).

Traffic is another promising field of IoT application. The IoT will increase safety on roads (Chui et al. 2010; Mehta 2014). Driving will be much safer as smart cars will reduce the probability of failures, detect imminent collisions and take evasive actions by means of automatic braking systems. Traffic management will become much better as e.g. traffic lights will adjust to real time traffic conditions, road sensors will advise car dashboards about real-time traffic information. Real time information like path optimization, traffic monitoring, etc. will be available. Accident monitoring will help coordinate incident management and emergency response (Mehta 2014).

In the automotive industry (Haller et al. 2009), sensors and embedded systems already play a large role. When detecting hazards or blockings on the road as visualized, these vehicles can generate appropriate messages containing a description, their geographical position and many more application-dependent pieces of information. Messages may be immediately broadcasted to all other cars within communication range, which in turn can store, evaluate and forward them.

Another important asset of the IoT is its potential to greatly increase efficiency and reduce waste, loss and cost. Automated systems may change the use of scarce resources, including water or energy and increase energy efficiency (Chui et al. 2010; Crump and Brown 2013; Glova et al. 2014). Energy supply and consumption will be monitored and adjusted according to the real time needs. It will apply to whole cities (smart cities) as well as individual households (smart homes). Household appliances like thermostats, lights, dishwashers, air

conditioning etc. will adjust themselves to consume less energy by switching off during peak times (Chui et al. 2010).

There is a huge potential of IoT in business in general. According to the Aberdeen Group, 70 % of manufacturing executives are focusing on plant-floor data initiatives to drive operational and business excellence, faster time to market, and immediate access to data from machines on the factory floor. Characteristics of the new intelligent manufacturing environment include (Davenport 2013; Gubbi et al. 2013):

- Smart Assembly. Seeking to reduce disconnects between the manufacturing and
 enterprise networks, manufacturers are adopting converged intelligent networks
 are reducing downtime by allowing remote access to systems and partners and
 delivering precision, resiliency, and reliability from the plant floor to the
 enterprise.
- The Visual Factory. Manufacturers need better visibility into equipment performance, resource needs, and security threats. Emerging networking and connectivity solutions enable a dashboard view of multi-plant environments, enhancing efficiency, safety and return on assets.
- Wide Visibility. Industrial facilities with globally dispersed production sites need better integrated production systems to shorten lead times. Internet Protocol (IP) network technology connects enterprise applications with device-level production data in real time, allowing faster information flows, faster decisions, and greater market responsiveness.

3.2 Benefits of IoT

The IoT may provide ubiquitous services for connected customers and lead to a truly sustainable development as it can help reduce the environmental impact of human activities. At the same time, individuals will be able to play a more active role thanks to their permanent and ubiquitous connectivity. As a consequence of this access to information and communication, large corporations may lose some of their influence to individual entrepreneurs capable of identifying efficient alternatives. Individuals will probably be much more involved in innovation as it should become much more user-led in the future than it is today (Crump and Brown 2013).

Last but not least, current experience with social networks prove that individual effort may become a platform open to millions of people. One of the most promising fields influenced by the popular use of social networks is the optimization of consumption (González 2011).

Today's IoT technologies and services are also employing increasingly sophisticated business intelligence (BI) and analytics to determine when the data generated from remote devices and objects suggests that a potential problem or opportunity is likely. This predictive capability can enable a service provider to replace parts before they fail based on their usage patterns. It can help companies

better anticipate consumer demand based on their current behavior. This capability can also improve operating efficiency and produce greater customer satisfaction.

3.3 Risks of IoT

The IoT is not deemed to be solely positive. There are a lot of risks and concerns attached to it. It is quite difficult to estimate the potential risk of new relationships between people and computers. The most frequently mentioned risks are privacy and data protection. In this respect, public attitudes, opinions and behavior will be critical as far as privacy and data protection are concerned. It will depend on the people how much they will care about giving away information about themselves. People may nonetheless embrace privacy-friendly approaches to data collection and data minimization can become an important data protection concept (Crump and Brown 2013).

ISACA (Angeles 2013), a professional information security, assurance, risk management and governance association, has released 2013 IT Risk/Reward Barometer, a study highlighting consumers' struggle between privacy and convenience in an increasingly interconnected world.

The IoT may cause several problems linked to its social aspects. People may find the IoT intrusive on their private life, it may further reduce personal interaction as more people will work from home. Teleworking may cause psychological problems, such as the feeling of loneliness and unhappiness, to individuals who need social interaction in their daily lives. Another negative aspect of new technologies is reduced physical activity caused by using smart gadgets. It may lead to health problems like obesity, heart disease, diabetes, etc. (Ashton 2009). Nonetheless, the most frequently mentioned problems are privacy, security, and data protection. Data protection will probably not be globally coordinated as there is little chance that European data protection regulations will be adopted in the USA or elsewhere (Crump and Brown 2013). The unprecedented amount of data sharing may have much more dramatic effects than those in the case of ICT. The implications will be both intended and unintended, the latter not only difficult to forecast but also potentially dangerous. The resulting change to society may be huge. The whole society will be much more vulnerable to hacking or major system crashes. Potential inequality in access to valuable data may cause another digital divide between individuals as well as societies. Social consequences may also include job losses as robots and automated systems will replace manual operations, resulting in social problems caused by the fact that the unemployed loss both status and self-esteem. To sum up, the field of social impacts of the IoT needs further research. Experts, politicians as well as public should be involved in the discussion to determine potential advantages and risks linked to the introduction of the IoT.

Economic as well as social impacts of the IoT are summarized as its strengths, weaknesses, opportunities and threats in the following SWOT analysis.

4 SWOT Analysis of Using IoT in Europe

Strengths and weaknesses of the IoT in Europe, which are based on the above mentioned social and economic aspects of the IoT, are summarized in Table 1.

Table 1 suggests that there is good ICT infrastructure in European countries, which is supported by European governments. Small and medium companies as well as ordinary citizens are interested in ICT, too. There have been identified a lot of opportunities. Among others, there is a huge potential of the ICT related to the fact that European population has been ageing. The IoT generates opportunities for solving senior people's health problems. It may also help increase safety and efficiency. Moreover, a growing number of European households have had good

Table 1 SWOT analysis of IoT

Strengths	Weaknesses
Support to the ICT sector by governments in many EU countries Good ICT infrastructure in European countries High level of development in the field of ICT services Creating quality legislative measures Flexible company strategy of ICT sector's SME (small and medium enterprises) Fascination with new things and technologies	Limited financial capital for research and development Limited possibility of returns to scale Insufficient focus on commercial utilization of newly developed products Non-existent legislative environment that would define the IoT It will be difficult to opt out in case one disapproves with the IoT Globally uncoordinated data protection policy Lack of research on the social impacts of the IoT Public lack of awareness about the potential risks
Opportunities	Threats
European ICT sector has been growing Excellent results of European ICT sector Good internet access in many European countries' households, in other countries it has been improving Growth in ICT technology facilities in European households Ongoing discussion on the EU level aimed at defining legislative framework for the IoT Huge potential of the IoT in relation to the ageing population in Europe European companies are aware of the potential and opportunities the IoT offers to business Improved health, safety, efficiency More active role of individuals in business and society through better access to information and social networks Responsible public attitudes, opinions and behaviour towards treating risks related to the IoT	Insufficient legislation in the field of data protection Worries about the potential loss of privacy, Financial crisis Insufficient implementation of ICT, particularly in industrial SME (ECORYS 2009) The elected representatives' lack of expertise

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internet access, which results in more active role of individuals in solving business and social issues.

On the other hand, there are several weaknesses, too. In particular, there is a lack of financial resources for research and development. Newly developed products are insufficiently utilized in commercial sphere and there is little awareness of potential risk linked to the IoT. Last but not least, some worries about the potential loss of privacy, financial crisis, insufficient implementation of ICT in industrial SME and a lack of expertise of the elected representatives who decide on a lot of important things.

5 Conclusion

IOT presents many opportunities for industry verticals and brings about new innovations to businesses. With real-time data and potentially cross-domain data sharing, new business models can be created. In order to achieve economic benefits from the IoT, companies as well as society should invest in high quality technological infrastructure and be able to integrate new technologies with the existing ones. Moreover, it is necessary to develop effective procedures for treating information.

The level of technological infrastructure in the EU is favourable for the development of the IoT. Problem and risk of its fast development lies in the approach of its potential users afraid of the loss of privacy and in the fact that there is no strictly given legislative framework for the IoT. The implications for human society are difficult to forecast. It is however clear that the imminent changes will be profound. The IoT will transform almost everything: the way of doing things, education or environment. Industry, services and production are presently considered to be the fields having the greatest potential to achieve benefits from the IoT. Their success will depend on mostly the chosen strategy, not on their size or financial strength.

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Using Computer Methods to Identify the Factors Affecting the Management of an Urban Parking Lot

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Abstract As the growth of urban areas continues, the area previously used as parking space begins to shrink significantly. For that reason, the only way to increase the parking capacity in cities is to construct more multi-story parking lots. Direct correlation of social, environmental and economic factors sets the way of parking lot planning and design basing on sustainable development principle. The article describes the variables that influence the parking lot management model and presents computer methods that can be used to identify the factors affecting it. The measurements of traffic intensity at the entrance and exit of a shopping centre in Wroclaw are also included. The developmental nature of this project requires that certain problems to be analyzed more closely.

Keywords Parking traffic management • Reverse logistics • Motorization index • Urban parking • Traffic intensity • Driver decision-making • Genetic algorithms • Dempster-Shafer theory • Fuzzy sets

1 Introduction

Reverse logistics, by definition (Korzen 2001), is an integrated system meant to manage the flow of pollution and information about it, as well as to minimize its negative impact on the environment. For that reason, reverse logistics must take into consideration areas such as technological processes, information and

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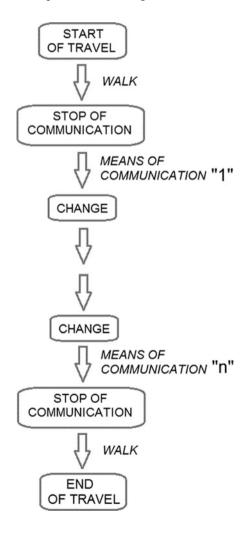
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organization, and economical aspects. As such, one could say that during the exploitation phase, the reverse logistics of a parking lot I characterized by the use of engineering, organizational and informative means to maintain balance between environmental and economic aspects. During the planning stage, it is critical to define and correlate social factors with reverse logistics aspects, as that will allow efficient management during exploitation phase.

2 Transportation in a City

Outlining a transportation diagram requires an assumption, that a journey consists of a walking stage (first and last) and public or private transit (Fig. 1).

Fig. 1 A city journey diagram. *Source*: Szoltysek (2007)



Relation between mass transportation and private transportation, as measured by the International Road Transport Union (based on the research conducted in 100 world cities in the year 2000) is outlined in Table 1.

The increasing interest of private transportation, outlined in Table 1, usual to wealthy societies is an effect of a "car phenomenon" (Szczepaniak 2000). It is mainly characterized by the increase of (registered) passenger cars.

Data provided by GUS (Central Statistical Office) shows that the number of passenger cars registered in 2012 in Poland (as of 31st of December) was 18,744,000, which is 3.4 % more that the year before (Topolski 2008). As such, the national motorization index reached 484 passenger cars per 1000 inhabitants. The changes in motorization index in Poland between 2003 and 2012 are outlined in Fig. 2.

 $\textbf{Table 1} \quad \text{The contribution of the public transportation and private transportation in the city travel operation in the world metropolises}$

	Mass transportation,	Private transportation,	Average distance,
Specification	%	%	km
Northern America-	5	93	11.8
Oceania			
Middle East	14	82	7.3
Western Europe	25	68	7.9
Asia	39	42	7.0
Asian metropolises	42	48	11.0
Africa	42	56	7.5
South America	50	48	10.3
Eastern Europe	60	37	6.6

Source: Szoltysek (2007)

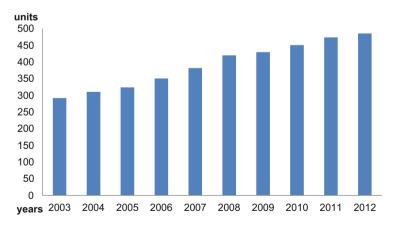


Fig. 2 Passenger cars per 1000 inhabitants. *Source*: Statistical Information and Statistical Information and Elaborations (2013)

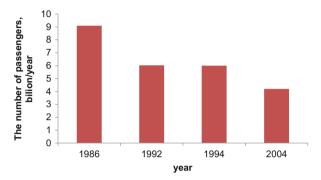
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Table 2 Participation of the municipal transport service passengers in Poland in 1986–2004

Year	Participation in the 1986
1986	100
1992	66.3
1994	65.9
2004	46.2

Source: Korzen (2001)

Fig. 3 The number of the municipal transport service passengers in Poland in 1986–2004. *Source*: Szoltysek (2007)



The result is a decrease in the mass transportation share, relative to private transportation. The number of municipal transport passengers between 1986 and 2004 is outlined in Table 2 and Fig. 3.

3 Urban Parking

Research shows that passenger cars are stationary for 95 % of their use time (Gradkowski 2009). As the popularity of private transportation increases (as outlined in the previous chapter), coupled with limited throughput of urban road system, it is estimated that the ratio may reach even 98 %. A typical passenger car journey starts in a garage, goes on to a stop at a parking lot near the target location and then goes back the garage. This process engages not only the inhabitants of a particular city, but also the inhabitants of satellite towns, coming to the city to school, work, shopping centers, administrative institutions, hospitals, etc. Whatever the point of visit, car passengers want to be able to temporarily leave their car in a dedicated parking spot. Depending on the area of the city, parking space index is estimated. They usually fall around several dozen per 1000 m². As such, in a city centre, area required for parking needs is higher than the area available (Burdzinski 2012) In case of modern shopping centers however, located outside cities themselves, the area is usually available. As the needs grow, parking lots are planned and built in city centers as well, usually near a developed mass transit node.

Because of the limited area available in cities, the only option is to construct multistory parking lots.

4 Research Object Characteristics

The analyzed parking area is located in the city centre, outside a shopping centre with 120 retail units and restaurants. The parking area offers (on three levels) $630 \text{ car spaces at } 90^{\circ}$. The car park entrance is off a quiet enough street.

Opening hours:

• Monday-Friday: 6.00-23.00.

• Saturday: 7.30–21.30.

• Sunday: 7.30–20.30.

The study focused on the users' choice of car spaces in the car park in question every day of the week (Monday–Sunday) over the randomly chosen 7 weeks in 1 year. The selected weeks did not fall on any holiday times (Christmas, Easter, summer break, etc.). The result of the study, which is the number of cars entering the car park on single days of the week is presented in Fig. 4.

The intensity of parking traffic was based on the number of entries and exits. It is described by a percentage share of entries and exits during days in question (Fig. 5).

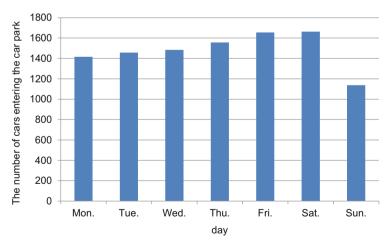


Fig. 4 The number of cars entering the car park on the consecutive days of the randomly chosen week

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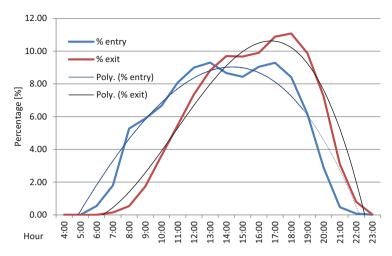


Fig. 5 Average hourly intensity of entries and exits relative to average daily number of entries and exits

5 Optimizing the Light Signaling System Management

The conducted research focused on optimizing a parking management system using an original method derived from genetic algorithms methodology. Two methods of optimal parking management system are presented. One method is based on traditional genetic algorithms, while the second one uses a blend of genetic algorithms and fuzzy sets. The chief job of any parking system is to help finding free parking spots while optimally utilizing the available resources. An intelligent parking management system is an infrastructure that can lead a vehicle in a direction that takes the least time to find an empty spot. Factors that need to be taken into consideration while determining the correct route are: temporary CO concentration in the air, traffic intensity (P) in the vicinity of parking zones (S) and random variables L. These factors constitute the Z_t vector, where I variable is time. In case of a_i cars located on i route (it can also be a traffic intensity coefficient for a given parking sector, assuming it is scaled), the chromosome rating algorithm is as follows:

$$E(C) = \frac{\sum_{k=1}^{n} \min(Z_t \cdot R_{k,o}) - 0, 1^* |R_{k,o}|}{\sum_{k=1}^{d} t_{k,o}}$$
(1)

and

$$R_{k,o} = P_{k,o} \cdot Z_t \cdot V \cdot t_{k,o} - \sum_{i \in G_{k,o}} a_{k,i,o}$$
 (2)

where

V—vehicle speed coefficient

 P_k —cardinality of set Gk (quantity of elements in a given group that follows the same direction)

 t_k —time needed to ascertain the ride direction for a given k group of cars

n—quantity of groups

d—quantity of all parking variants

 a_i —occurrence coefficient for a given vehicle group

$$a_i = \begin{cases} 1 & \text{for } G_k > 0 \\ 0 & \text{for } G_k = 0 \end{cases}$$
 (3)

Assuming a model analyzing traffic on several stories of a parking lot, allowing for interaction between W number of stories, then an optimal route is described by a chromosome rating genetic algorithm. Multi-parking analysis is described by the following equation:

$$\forall WE_W(C) = \sum_{o=1}^{W} \frac{\sum_{k=1}^{n} \min(Z_t \cdot R_{k,o}) - 0, 1^* |R_{k,o}|}{\sum_{k=1}^{d} t_{k,o}},$$
(4)

As a result of all analyses, a parking variant that maximizes the chromosome rating values is chosen, according to the equation:

$$E(C) = \max \left\{ \int_{t} \sum_{o=1}^{W} \frac{\sum_{k=1}^{n} \min(Z_{t} \cdot R_{k,o}) - 0, 1*|R_{k,o}|}{\sum_{k=1}^{d} t_{k,o}} dt \right\}$$
 (5)

In case of the Eq. (5) the chromosome rating is done by a modified likelihood function and a center of gravity function, derived from fuzzy logic theory. Using this method, the best solution for parking route can be obtained. It should be noted, that in case of linking dependent parking lots, a sequential system is created. It can be successfully described by a model that links fuzzy logic with Dempster-Shafer evidence theory (Topolski 2008).

Here is a different parking algorithm method using fuzzy logic. Fuzzy sets (Topolski 2008) can be applied to obtain a fuzzy chromosome rating.

$$E_k(C) = \sup_{R_{k,o}} \{ \mu(Z_t \cdot R_{k,o}) \} \cdot \max_{1 < k < M} \mu(Z_t \cdot R_{k,o})$$
 (6)

Eventually the cycle that maximizes the chromosome rating value using combination rule from Dempster-Shafer Theory (Topolski 2008) is chosen. The result is:

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$$E(C) = \max[E_1(C) \oplus E_2(C) \oplus \ldots \oplus E_k(C)]. \tag{7}$$

Implementation of chromosome rating genetic algorithm given by Eq. (6) depends on a parking type. There are no definite premises that would allow a logical choice. Implementing two methods or a simulation testing of solutions is preferable when trying to choose a superior one.

6 Parking Traffic Management

As mentioned in the earlier parts of the article, the parking traffic management is based on the analysis of social, economical and environmental factors and efficient organization of tools allowing control over it. A critical social factor is ensuring comfort and safety. Parking space planning is determined by Polish laws, such as Dz. U Nr 75, poz. 690 (Rozporządzenie Ministra Infrastruktury 2002) that defines the minimal dimensions of parking spaces depending on their type (parallel, perpendicular and angle) and the width and type of the approach. Depending on the target group, the type of parking is defined, so that it would allow the comfort of conducting the parking maneuver, while taking the turn radius and the width of the approach into consideration. The comfort and safety factor is also dependent on a number and quality of decisions made, both by the drivers and pedestrians present at the parking lot.

Proper parking traffic management is also based on an environmental factor, which is:

- limiting the intensity of traffic in the parking area
- maintaining the flow and linearity of movement
- ensuring, that the parking maneuver can be done easily

The parking traffic management system is based on providing its user with needed information and directing them, taking the aforementioned factors into consideration. The system should also be able to adapt to current conditions, react to those changes quickly and have a high refresh rate. Expansion of multiparameter systems of parking traffic management is inherently linked to economical factors, which is why an optimal system should be skillfully balanced and adjusted to project needs.

In parking traffic management, the social aspect of informing and directing the user should be accented. Research has concluded that searching for more than one property (such as both shape and color) causes a relative drop in search efficiency, in terms of response time, accuracy and signal detection (Menneer et al. 2010). As such, an effective information system should be constructed around the perceptual predispositions of the target user group, taking into account their neurological and psychological traits, impulse control, reflexes- anything that could influence the

decision-making process (Appelt et al. 2011; Charlan 2012; Jaracz and Borkowska 2010).

Basing on research described in literature and the one conducted by the authors of the article, an efficient parking traffic management system should minimize the number of decisions made by drivers. Their parameterization should also be limited to two alternatives. Directional signaling should also be flexible, as mentioned before. Also, due to unequal distribution of traffic, which is particularly visible at 7 p.m. in the direction of the exit. The system should be able to modify its parameters to maintain flow and adjust it to aforementioned properties.

7 Conclusion

Urban areas transform natural environments and create artificial ones. The increasing motorization index creates new challenger for the urban infrastructure in terms of parking planning and organization. Computer methods enhancing the management are based on genetic algorithms and fuzzy sets. They have a practical application in intelligent control over complex parking systems. The advantage of fuzzy sets in such systems is that they can work with imprecise and uncertain data.

Parking traffic management is based on analysis of social, environmental and economical parameters. A set of tools that allows control and directing is a significant help in management process. IT systems allow accurate description of traffic and an effective management system should adjust itself to changing conditions.

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Part II Marketing

Creating a Conceptual Framework for Corporate Brand Positioning

Tiina-Kaisa Kuuru and Pekka Tuominen

Abstract Achieving a strong position with a sustainable competitive advantage is vital for any company; therefore, it is surprising that so little research has been conducted on corporate brand positioning. Addressing this evident gap in the literature of industrial marketing, our study creates a conceptual framework for the corporate brand positioning of industrial brands. We define the term 'corporate brand positioning' as the process of developing a new brand driver to elevate the brand in the industrial market, thus achieving a sustainable competitive advantage. The corporate brand positioning process in industrial markets follows the same phases as it does in consumer markets; these phases consist of several sub-processes, including analysing the brand and its competitors, customers and market; determining the target brand positioning options; and achieving the desired brand position. These phases can be intertwined or overlapped. The conceptual framework is constructed from common features of brand positioning identified in the current literature, but the special characteristics of corporate brands shape the conceptual framework to fit the industrial market. The result is our conceptual framework for corporate brand positioning.

Keywords Corporate brands • Positioning • Competitive advantage

1 Introduction

1.1 The Nature of Brand Positioning in Industrial Business

It has only recently been recognized that branding and a superior position can also deliver added value and a competitive advantage in industrial markets. Previously, branding had not been considered as relevant in the B2B (business-to-business) sector as was in the B2C (business-to-consumer) sector (Kotler and Pfoertsch 2007), and professionalism in B2B brand building is still relatively low (Baumghart 2010). One major reason for the increasing focus on branding is that companies are

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facing increasing competition. Customers have an ever-increasing number of suppliers to choose from and there is often a bewildering array of alternatives. In addition, the attitudes of buyers are changing; the low price or efficiency of the product is no longer the first priority—buyers are more concerned with the emotional and social aspects of brands (de Chernatony et al. 2011).

Building a strong brand provides numerous benefits, including reduced vulnerability to competitive marketing actions, larger margins, a stronger image and greater customer loyalty (Delgado-Ballester and Munuera-Aleman 2005). Brand positioning is an essential part of strong brand building; its purpose is to highlight one's brand in the relation to one's competitors and occupy a distinctive, valuable and meaningful place in the minds of stakeholders (Aaker 1992). Increasingly, the value of large corporations is based on this immaterial capital. For example, the value of Coca Cola, Apple and Nokia is not based on their factories and production but on the image created in the minds of customers (de Chernatony et al. 2011). A strong brand is always built upon the associations the customer makes with the brand (Keller 2012).

Brands serve a similar general function in B2B markets as they do in consumer markets: they facilitate the identification of products, services and businesses, and differentiate them from their competitors (Anderson et al. 2009). They are an effective and compelling means of communicating the benefits and value of a product. Brands can provide a guarantee of quality, origin and performance, thereby increasing the perceived value to the customer and reducing the risk and complexity involved in the buying decision (de Chernatony et al. 2011; Kotler et al. 2012).

According to Webster and Keller (2004) industrial brands can differentiate themselves on the basis of a number of attributes and benefits that range in their tangibility and their relationship to the product. Some associations can be linked to functional attributes, such as promised benefits, whereas others can be linked to more abstract considerations, such as ethics, reliability or sustainability. The brand can also be seen as an emotional element: it captures the hearts and minds of its customers, connecting the customer and the company. Due to the ubiquity of technology decreasing the potential for a sustained competitive advantage in the industrial market, managers are focusing more on differentiating their brands on the basis of unique emotional—rather than functional—characteristics (de Chernatony et al. 2011). The best brands survive emerging trends and attacks by competitors because they have a deep and strong connection with their customers (Kotler and Pfoertsch 2007; Kay 2009).

In consumer markets, brands are important: they have a remarkable meaning for the customer. In industrial markets, on the other hand, a company must communicate its brand and focus on all its stakeholder groups—from customers and suppliers to political decision-makers and municipalities. Different stakeholders have different kinds of needs and expectations. It is therefore a real challenge to be able to respond to all requirements and wishes (Davies et al. 2003).

Industrial branding should be rooted in the marketing strategy, the well-known fundamentals of which involve market segmentation, targeting, and positioning (Webster and Keller 2004). Strategies to build brand image and company reputation

Characteristics	Corporate brand	
Target	Company or organization	
Management	Top-level management	
Responsible for brand building	Every level of the company	
Time orientation	Long-term, lifecycle	
Stakeholders	Complex set of various actors, from customers and municipalities to political decision-makers and investors	
Level	Strategic	
Traditional brand attributes	Tangible and concrete, e.g., product features, capacity and quality	
Emerging brand attributes	Intangible and abstract, e.g., reliability, sustainability and safety	

Table 1 Special characteristics of industrial branding

can enhance business customers' perceptions of product and service quality and value, thereby increasing loyalty (Cretu and Brodie 2007). Brand communications are conducted on all levels and in all the company's actions, not just by the marketing department (Hatch and Schultz 2003).

Brands are increasingly viewed as offering a crucial point of differentiation and a sustainable form of competitive advantage for B2B marketers (Beverland et al. 2005; Low and Blois 2002; Mudambi 2002). Indeed, brands play an important role in the decision-making processes of business customers (Bendixen et al. 2004; Mitchell 2004). Important considerations in purchase decisions often involve the manufacturer's reputation, combined with the buyer's own level of awareness and degree of loyalty (Cretu and Brodie 2007; Mudambi 2002). The special characteristics of industrial branding are illustrated in Table 1 (Hatch and Schultz 2003; Balmer and Gray 2003).

Kotler and Pfoertsch (2007) argue that branding and brand management would become crucially important in industrial business. 'The future of brands is the future of business' they argued.

2 Corporate Brand Positioning and the Positioning Process

2.1 The Corporate Brand

In the B2B market, the corporate brand often represents the core of the corporative brand strategy, and it is controlled by higher-level management (Hatch and Schultz 2003). A brand can be considered a 'corporate brand' when the corporate name is the same as the brand name and the corporate brand represents both the company and its products (Aaker 2004). The company's culture and structure are the major part of the brand essence (Merrilees and Miller 2008). Corporate branding requires a holistic approach to brand management, with all members of the organization

acting in accordance with the desired brand identity. The corporate brand can be regarded as an intangible asset of a company (Aaker 2004).

Hatch and Schultz (2001) have defined three factors, called strategic stars, that create a strong corporate brand. These stars are 'vision', 'culture' and 'image'. Vision includes the long-term principle of concentrating on the corporate brand, which is led by top-level management. Culture refers to the idea that all the company's staff—from the bottom to the top—needs to understand, believe in and share the idea of the corporate brand. This culture concerns values, behaviour and attitudes. It has been argued that the role of employees is also changing. No longer can workers be subsumed into the category the 'firm'; they need to be recognized as a brand ambassadors who live the brand in their everyday work (Merrilees and Miller 2008; Schultz 2005; Harris and de Chernatony 2001).

Hatch and Schultz (2001) also identify three gaps between these strategic stars. The gaps represent the misalignments between vision, culture and image. The first is the vision-culture gap, indicating how the managers' vision can fail to align with the employees' thoughts and ideas. The second is the culture-image gap, which represents the possible differences between employee and stakeholder perceptions. If there is a misalignment between stakeholder perceptions and those of the company itself about what the company stands for, confusion is bound to arise. The last gap is between vision and image, which encapsulates the dilemma of whether the stakeholders support the direction the management is taking the company. These three stars and gaps construct the corporate brand identity, telling us how the brand is understood and defined within the company.

According to Aaker (2004), a corporate brand can be defined by organizational associations. He defines the corporate brand as the amalgamation of the company's rich heritage, its assets, capabilities, people, values and priorities, and its local or global frame of reference, citizenship programmes and performance record. The corporate brand is a set of attributes that is built from the ground upwards—that is, from the company's origins—through the company's competences and the constant maintenance of the customer at the core of the business. The importance of employees should also not be underestimated: they are a crucial element of the corporate brand, as attitudes and culture guide the image and thoughts of the brand among the stakeholders (Merrilees and Miller 2008). As corporate brands tend to have strong associations both in the mind of employees and with external stakeholders, changing a corporate brand is like changing the direction of a large ocean liner—it will turn slowly and require a lot of energy to do so (Aaker 2004).

2.2 Corporate Brand Positioning

Already over 30 years ago, Ries and Trout (1982) defined positioning as 'not what is done to the product or service, but rather what is done to the mind of the prospect.' Positioning thus involves achieving the desired place in the mind of the stakeholders. Likewise, Kotler et al. (2012) describe positioning as 'the act of

designing the company's offering and image to occupy a distinctive place in the minds of the target market'. Thus, the goal of positioning is to identify and achieve a strong position that gives the company a genuine advantage (Kapferer 2012). Corporate brand positioning includes the positioning of the whole organization, including its products, processes and practices. Even though positioning is a traditional phenomenon in marketing, it has not lost its meaning. Every organization should observe the market environment and continuously seek a sustainable, superior position.

When the brand positioning process takes place in an organization that has decided to change both its position in the market and how it is perceived by stakeholders, the process can be defined as repositioning. The most common reasons for corporate rebranding are mergers and acquisitions, spin-offs, a need for a change of brand image, or a refocusing of the company (Juntunen 2011). Repositioning can be seen as a part of rebranding. In addition, it concerns whether the positioning of the brand changes or stays the same. According to Muzellec and Lambkin (2006) a possible characterization of rebranding is the 'creation of a new name, term, symbol, design or a combination of them for an established brand with the intention of developing a differentiated (new) position in the mind of stakeholders and competitors'. Repositioning has the same characteristics and phases as positioning.

Organizations should in turn look to the reality of the customer, and try to achieve a favourable place in customers' minds. The customer's perception of the product may result in any observation or experience. It should also always be kept in mind that customers' choices are made on the basis of comparison (Kapferer 2012). Aaker (1992) defines brand positioning as a part of a business's identity and value proposition that is actively communicated to the target market. As already stated, a strong brand is always built upon customer associations with the brand. Porter (1980) also established a marketing framework where two types of positioning were introduced: low-cost and differentiation. In low-cost positioning, the goal is simply to minimize costs and then pass on the savings through lower prices. In differentiation, companies offer something unique to stand out from competitors so that customers are willing to pay a price premium (Zahay and Griffin 2010).

As the theory of positioning shows, it involves making choices (Zahay and Griffin 2010; Kapferer 2012). A company cannot change everything at the same time, nor does it need to: the functional elements of a brand can remain unchanged while the emotional elements can be significantly repositioned in the eyes of consumers (Simms and Trott 2007). In order to create and maintain the sustainable competitive advantage offered by the brand, companies must concentrate their resources, structure and financial accountability on this most important asset (Aaker 2004). Businesses with a strong brand positioning benefit from the clarity of focus that provides them with more effectiveness, efficiency, and competitive advantage through all operations (Clifton and Simmons 2003). Building, championing, supporting and protecting a strong brand is every employee's job, starting with the CEO (Bedbury 2002). Like corporate rebranding, corporate brand positioning also involves organizational change (Juntunen 2011). Brand positioning

is based on the commitment of the whole organization and the integration of all marketing tools and effective marketing communications because of their importance in creating customers' perceptions of the brand (Hartmann et al. 2005). Even the definition and phenomenon of positioning has its roots decades ago; it can be argued that its importance and relevance is increasing all the time since the market environment is changing faster and competition is tougher than ever before (de Chernatony et al. 2011).

2.3 The Elements of Corporate Brand Positioning and the Positioning Process

Sagar et al. (2006) have identified five brand positioning elements (Fig. 1): brand awareness, brand image, brand identity, brand personality and brand communication. The latter three can be controlled by the company (Sagar et al. 2011). These elements define the brand.

The brand identity marks the first element of brand positioning. It is the central concept to building a strong brand; it provides direction and meaning for the brand, so it is vital to the brand's strategic vision. Brand identity expresses the brand's tangible and intangible characteristics; it draws upon the roots and heritage of the brand. (Kapferer 2012) Brand identity also covers the company's internal view of what the brand is like, what it represents, who it is targeted at, and what kind of actions are used to deliver the brand's message.

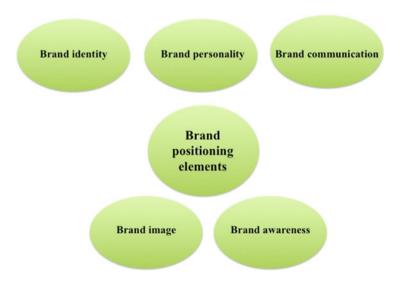


Fig. 1 The elements of brand positioning

It is through the brand image that the company's stakeholders perceive the company's values, mission and product aspects (Keller 2012). Brand image can be a differential advantage for a company because it comprises all the attributes and benefits of the brand (Davis et al. 2008). Brand image is a set of beliefs, expectations and attitudes about a particular brand that is formed by different kinds of signals from the target company and other sources (Kapferer 2012). Every point of contact between the company and the customer becomes an input to brand image (Webster and Keller 2004). The company should understand how they are seen in the eyes of stakeholders and to align brand identity with the brand image.

Aaker (2002) describes brand personality as the personification of brand identity. The emotional characteristics of the brand are represented by the metaphor of personality, which, among other sources, evolves from the core values of the brand (Harris and de Chernatony 2001). The personification of this identity requires the blending of human psychological attributes into brand-related attributes. The outcome is a form of symbol, metaphor or sound which 'connects and develops' the relationship with customers. The personification of identity requires the identification of persons, animals, visual images, and colours that resonate with the company's identity.

Brand awareness refers to the strength of brand's presence in consumers' minds (Aaker 2002). Rossiter and Percy (1992) describe brand awareness as the measure of the effectiveness of brand communication. There are three factors determining overall awareness of a brand: brand recognition, brand recall, and top-of-the-mind awareness (Keller 2012). Brand recognition refers to the ability of the consumer to correctly differentiate the brand they previously have been exposed to. Brand recall is the customer's ability to list the brands in a particular product category. Top-of-the-mind awareness means that the brand has a more prominent position in the consumer's mind than its competitors.

Brand communication is the process by which a company communicates not only product features and attributes but also the emotional aspects of the product or service to the consumer. It includes all means of media and communication (advertising, sponsorships, campaigns, direct marketing, trade fairs, word-of-mouth campaigns, radio advertisements, print media, online presence) (Lynch and de Chernatony 2004). The aim of brand communications is again to build a strong corporate brand in the minds of stakeholders (Juntunen 2011). The effectiveness of brand communication is based on the identification of the right communication mix, media planning, and the right impact on the customer. It starts from product packaging and ends at the point of purchase at the retail counter. Brand personality and brand identity are thus communicated to customers through brand communication (Sagar et al. 2011).

Little research has been conducted on corporate brand positioning processes, so it is justified to draw on frameworks from literature concerning the rebranding process. Ahonen (2008) suggests that corporate rebranding has four main phases: analysis, planning, implementation and evaluation. Juntunen et al. (2009) have expanded the process to include seven phases: triggering, analysis and decision-making, planning, preparation, implementation, evaluation, and continuation.

Similar phases have been identified in the strategic positioning process: analysis of the current status, determination of the target position, actions for achieving the target position, and the monitoring of the results. Each phase of the different models consists of several sub-processes that may be intertwined or overlapped, and should not be considered as static (Ahonen 2008). Indeed, the phases do not necessarily even follow each other in order. Merrilees and Miller (2008) define the corporate rebranding process as a change between an initially formulated corpora brand and a new formulation. They find three key themes that are especially important: revision of the corporate brand vision, internal branding and ensuring commitment, and implementation.

The same process is also found in the previous literature. Analysis of the current position is often divided into the identification of competitors and the analysis of customers (Engel et al. 1994; Aaker and Myers 2009). The positioning perspective in these sub-processes is often customer-based and informed by the positioning of the product brand, but the same process cycle is also suitable for the B2B context. Several researchers (Einwiller and Will 2002; Van Riel and Van Bruggen 2002; Rode and Vallaster 2005) define corporate branding—and brand positioning—as being the process of creating and maintaining a favourable image and reputation for the company.

According to Kapferer (2012), positioning is a two-phase process: the first phase involves identifying the 'competitive set'—the brand's standing and what it should be associated and compared with. The second phase concentrates on the brand's essential difference.

It can be argued that the corporate brand positioning process follows the same phases as the rebranding process and the product brand positioning process. Naturally, the special features of a corporate brand should be taken into account. In this research, the phases of the corporate brand positioning process are formed from rebranding and positioning literature (Juntunen et al. 2009; Ahonen 2008; Merrilees and Miller 2008; Muzellec and Lambkin 2006). The phases represent a suitable process flow in the context of this research. As the scope of this research is limited, the phases of evaluation and continuation have been omitted.

3 The Corporate Brand Positioning Process

3.1 Analysing the Current Situation

The first phase of the positioning process involves analysing the current situation. Information is required about the company, but also about its competitors, customers and possibly other stakeholders' situations as well. Strategic brand analysis can be done in a number of ways, but from the analysis models in the literature, a few main characteristics can be distinguished: analysis of one's own brand and the analysis of one's competitors, customers, and market (Aaker and McLoughlin

2008; Aaker 2002). Some authors also add analysis of the environment and distributors (de Chernatony et al. 2011), but in this research analysis of the market environment is combined with customer analysis.

The aim of this phase is to be clear where the brand currently stands—that is, the view inside the company and how it differs from the views of stakeholders. In addition, the brand messages of main competitors are also analysed, and customers' perceptions, needs and wants are specified.

3.1.1 Analysing Own Brand

Analysing one's own brand requires a lot of information on topics such as brand image, the strengths and weaknesses of the company, brand heritage, relations to other brands and the company's objectives (Aaker and McLoughlin 2008). The research should be made at different levels of the organization to get reliable and comprehensive results. This will also indicate whether the brand is seen uniformly throughout the company or if different departments or employees have different ideas.

The core competences of the brand should be clear (de Chernatony 2010). Are the competences with which the company has built its current position still relevant and useful? Are they still bringing a competitive advantage to the company? A company can achieve a sustainable competitive advantage by managing value-creating resources more effectively than its competitors. Brands are viewed as key value-creating resources and valuable sources for competitive advantage because they are specific, protected by law, and difficult for competitors to copy (Ponsonby-McCabe and Boyle 2006).

According to traditional SWOT-analysis (analysis of strengths, weaknesses, opportunities and threats of the company), the strengths and the weaknesses of the brand should be distinguished (Helms and Nixon 2010). Strengths and weaknesses are usually found in the company, its products, and its processes. When identified, crucial elements of positioning should be considered.

Mudambi et al. (1997) divide brand values into the tangible and the intangible, and stress the importance of intangible attributes. A strong organizational culture helps in building stronger and more sustainable emotional competitive advantage. Coherent personnel share the same attitudes, ideas and values about the brand, are motivated, and share the brand message in their everyday work. Creating a sense of community and a strong organizational culture starts with the mindset of top-level management; without the commitment and drive of this group, it is impossible to build a reliable and strong shared brand image and coherent vision, processes and communications. Consistency increases stakeholders' trust in a brand (de Chernatony 2010).

Besides the attitudes and actions of employees and the commitment of top-level management, communication plays a major role in the positioning process. When analysing one's own brand, many answers can be found in the company's communications. All types of communication should be investigated to find not only

strengths but also contradictions and inequalities. If the company is not communicating the brand's position in the same way the brand is seen inside the company, one can be sure that the desired message will not reach the stakeholders.

The company should also identify its stakeholder groups and understand their importance to further research. It should be investigated whether the goals of the company and the different groups are the same, and it should be a priority to understand the importance of the different groups. The balance of the power between the company and stakeholder groups should also be estimated: for example, who holds the power in negotiations? This research, however, does not focus on all stakeholders—its focus is limited to the employees of the company, its customers, and its competitors.

3.1.2 Analysing Customers and Market

To discover which attributes and elements customers value, some analysis of the customers is necessary. This involves determining customer trends and the needs and wants, motivation, and the drivers of the purchasing decision (Aaker and McLoughlin 2008). Knowledge of the customers' preferences can provide some insight into the development of the market and customers' preferences. On the other hand, potential new customers and changes in the customer base can also be researched (Hooley and Saunders 1993) to discover which benefits and attributes are important, and, especially, which ones drive customers towards brand loyalty. If it is possible, the research should learn of hidden and as yet unfulfilled preferences, and use this information in the positioning process.

It is also important to distinguish different customer segments (Aaker and McLoughlin 2008) and to determine their preferences, needs and wants, and attitudes towards the brand and its marketing communications. Positioning should be modified on the basis of the differences and information found and targeted at different segments. de Chernatony (2010) also recommends investigating markets in a wider context. The situation, threats and possibilities of the company related to political, economic, social and environmental issues should also be taken into consideration.

3.1.3 Analysing Competition

The first step of competitor analysis is to identify the competitors (Aaker and McLoughlin 2008; de Chernatony 2010) and divide them according to whether they are in direct or indirect competition. It is also important to separate the most important and strongest competitors from the rest. After identifying the main competitors, the focus shifts to attempting to understand them (Aaker and McLoughlin 2008).

When conducting the competitor analysis, the number of researched companies should be limited to the most important ones to keep the research compact (Hooley and Saunders 1993). The strengths, weaknesses and driving factors of the brand should be analysed. The position of competitors' brands should also be clear. de Chernatony et al. (2011) argue that the success factors of brands can be identified by analysing their strengths and weaknesses. This allows the company to find out how the brand differentiates itself from its competitors, and to identify weak points that can be turned into strengths (Aaker 1992). Gaps in the competitors' position are also investigated. Usually, there are a limited number of positioning strategies used in any specific field of business, so finding a gap can deliver a competitive advantage. According to competitor analysis, the company can decide whether it should strengthen existing attributes or create something new.

An effective tool for outlining the position of competitors is a brand map. The position of the brand is drawn and the position can be demonstrated. The use of a mapping technique can help to identify the similarities, differences and gaps between one's own brand and those of one's competitors. A brand map can also show how far or close a brand is from achieving its goals.

Word pairs that describe the brands of the specific field are written at the ends of each of the axes. The word pairs should be carefully considered to ensure the best possible result for the map; these words can be attributes or express personalities. It is possible to add more axes to the map if other dimensions of the brand are taken into consideration. Some issues are more complex than a two-dimensional map allows, so it is also possible to create maps with many more dimensions, as Fig. 2 illustrates (Davies et al. 2003).

Brand maps are useful tools for outlining the market situation and the company's position in relation to its competitors. Different techniques create opportunities to

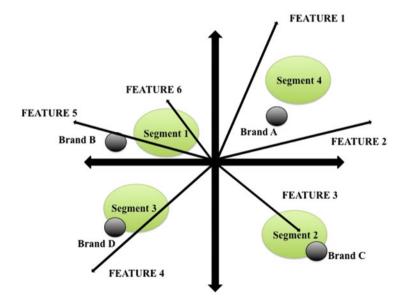


Fig. 2 A multi-dimensional brand map

add more and more dimensions. The careful planning of the structure of the brand map is required to achieve the best possible results. Too simple a brand map may not offer any significant answers, but on the other hand, an excessively complicated brand map can be too complicated and it can be difficult to form any clear findings.

3.2 Determining the Target Position

Determining the target position is based on careful analysis of the current situation (Kapferer 2012), and it consists of three steps: the creation of options, comparison and testing, and the evaluation of the position. When choosing the target position, the company should carefully identify what it wants to achieve, how it wants its customers to see the company, and what it can promise. It should also be taken into account whether the target position is based on the interests and strengths of the company or the customer's point of view. Another important issue to consider is whether the driver of positioning is based on rational (costs), functional (attributes of the product) or emotional (images) factors (Low and Lamp 2000; Fuchs and Diamantopoulos 2010).

The target position is formed on the basis of the analysis of the current situation. According to Kapferer (2012) it is important to create a number of positioning options. The process of choosing the correct and most favourable position is a process of trying, adding and deleting. A company can identify itself through almost an infinite number of associations. Several positioning bases are discussed in the literature, ranging from the tangible to the intangible. Tangible attributes, like shape, have traditionally been used as drivers, but recently more intangible attributes—such as sustainability, responsibility and eco-friendliness—have become more popular. Today's companies rely on their brands to create different kinds of images—there is no single, superior positioning strategy. Every company must understand its own circumstances and environment and make its own context-based decisions. Business environments are continuously changing, which means that the company must be aware of its circumstances and constantly question its competence and drivers.

Many positioning strategies can be found from the literature. These strategies can be used to assist in creating positioning options. The strategies vary by writer: two quite comprehensive strategies are the lists made by Temporal (2006) and Fuchs and Diamantopoulos (2010), which we outline below.

One of the most traditional bases for positioning is a feature or characteristic that represents the company and its products in the best possible way. The company highlights the concrete attributes of the brand in order to create a differential advantage. Concrete attributes are characteristics of the brand advantage; they are objectively measurable, mostly tangible and typically 'search features'; they are also specific to the product category (Fuchs and Diamantopoulos 2010). Selected features should be those that make the brand better than or different from its competitors. This strategy is clear and logical (Temporal 2006). The feature does

not need to be a concrete product feature but it can also be something abstract like safety, eco-friendliness or reliability. One remarkable weakness of this strategy is that competitors can easily copy it, and features that are really different are hard to find and maintain. For example, sustainability is a feature with many definitions, so it is hard to offer one's own; in addition, some people regard claims of sustainability as greenwashing, which can be negatively associated and thus exclude some part of the target group (Kotler et al. 2012).

When changing the strategy to become more customer-oriented, one basis of the strategy can be to examine the benefit the customer gets from the brand. This strategy helps the company to understand customers' preferences, needs and wants better and to target its messages to the customer more accurately. Understanding the benefits that customers are seeking is not enough, as the benefits should be unique and different from those offered by one's competitors (Kotler et al. 2012). The benefits can be direct or indirect (Fuchs and Diamantopoulos 2010). Direct benefits communicate advantages of (i.e., the usage of) a brand. Direct benefits that are not directly observable are always experienced and perceived by the customers, and different customers can value and find different benefits from the same brand. Direct benefits are based on the personal values that consumers assign to the product or service features, and they are related to the question of whether the brand works as intended. The other types of benefits are indirect benefits, which satisfy hedonistic and experiential needs. Indirect benefits give customers an indirect advantage from the consumption of the product, for example, status or self-confidence. Indirect benefits play a crucial role in brands whose products have a hedonistic, expressive or symbolic function.

Good product features are no longer enough to deliver great value for the customer; the focus should be shifted to providing solutions to customers' problems. The ability to solve problems is also a commonly used strategy in industrial markets. The company must be reliable, able, and committed to solving its customers' problems. If this can be realized, this strategy is very effective. The problem is that there can only be one problem-solver in the market. The company must ensure that no competitor can offer the same solutions; innovation is therefore required. For example, it can be difficult to differentiate between companies in the technology market in terms of problem-solving because the solutions offered to customers can be quite similar (Upshaw 1995).

Another potential problem is that there can only be one market leader. Positioning as a leader is effective, but it is obviously hard to achieve. Being the market leader on paper is not enough; the company must also be the market leader in the minds of customers. Leadership can be based on expertise, behaviour or authority, and the market leadership position is usually communicated by superlatives: most innovative, most reliable, safest, etc. (Upshaw 1995).

Another strategy is to position oneself against one's competitors to highlight their weaknesses, thus positioning one's brand in an advantageous way through the communications 'we are more...', 'we are better...', etc. The competition-driven strategy can be considered aggressive, and it requires attitude, courage and skill. There must also be an attitude of respect and fair play, as this strategy can make a

company look rude and arrogant in the eyes of stakeholders. There are quite tight restrictions in many countries' legislation limiting a company's opportunities to compare itself to its competitors.

Many companies also position themselves under the corporate brand. This strategy can be cost-effective, but the company must be careful to bring the product's brands into the corporate brand line, otherwise the whole package can become very confusing.

Positioning can also be based on the type of use. The brand can be differentiated by stressing the situations, time or methods of using the brand. This emphasis should not be too strong, however, because there is a risk of tying the customer's associations with the brand to just one type of situation or way to use.

More abstract bases for the positioning strategy include, for example, positioning through aspirations—that is, what people would like to be or where they would like to go, what are they dream about, or the positioning of their convictions. For example, Benetton has communicated more about human rights and equality than about its concrete products (Temporal 2006).

Values and images can also be an effective basis for brand positioning. The company can position its brand, for example, through a perceived price-quality ratio, or more abstract values like emotional or ethical perspectives. A positioning strategy that focuses on values can be strong and have a great impact to the individual customer's choices and thoughts. On the other hand, a company can try to create consumer associations about external aspects of the brand that communicate their values and visions. These can be, for example, sustainability (green values), effectiveness (efficiency) or economy (best value for the money). Value-based positioning has been more popular with consumer goods (Upshaw 1995), but lately it has gained more attention in B2B sector as well, since competition is getting tighter and traditional attribute- or benefit-based strategies are no longer strong enough.

Positioning can also be determined through brand personality (Temporal 2006). First, the brand personality is defined, and then it is communicated to gain a specific image in the minds of customers. The brand personality is often described using different kinds of adjectives. The brand can, for example, be green, innovative, adventurous or traditional. If the company succeeds in creating a unique personality, it is difficult for competitors to copy. In this positioning strategy, it is not enough to just find out how the personality is defined within the company; it must also be clear how stakeholders see and experience the brand.

In many cases, the selected brand positioning strategy can be a combination of many strategies. This is illustrated in Fig. 3 (Temporal 2006). The organization must be able to distinguish the best suitable and effective strategies for its specific situation. Strategies offer different kinds of possibilities to build brand positions. The strategy should be suitable for the business field, and creativity is recommended: few brands can succeed with the same strategy and brand driver in the same industry.

Once the different positioning strategies have been identified, compared and tested, the 'best' one is selected. The positioning strategy should be selected carefully; it will be the foundation for the whole positioning process—from communications to the day-to-day running of the company.

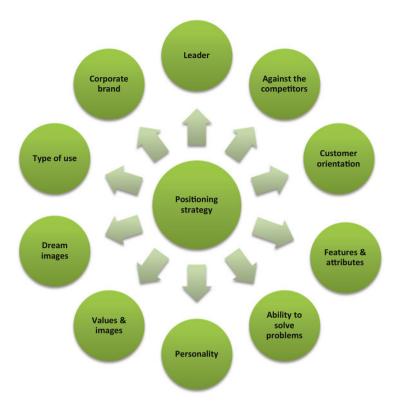


Fig. 3 The elements of brand positioning strategies

3.3 Achieving the Target Position

After completing the process of analysing the current situation of one's brand, competitors, customers and markets, it is time to define the elements of positioning, and to create, compare and choose the target position.

Before any external communications regarding the subject, the brand should be positioned and the new position made clear throughout the organization. Managers throughout the organization play a crucial role in implementing the desired brand identity. They are responsible for coherently and continuously defining and driving the identity of the corporate brand. In addition, leaders mediate between organizational structures and individuals. Employees also play a crucial role in reducing the gap between the desired corporate brand identity and the one perceived by the company's stakeholders. Besides being seen as messengers, employees should also be regarded as co-creators of the brand. If the position of the brand is not understood and embraced inside the organization, it is impossible to try to gain the desired position externally.

4 Synthesis of the Conceptual Framework

Figure 4 illustrates the flow of the corporate brand positioning process. The synthesis of the conceptual framework is a combination of several crucial theories found in the literature review (Sagar et al. 2006; Ahonen 2008; Juntunen et al. 2009). The elements of brand positioning (Sagar et al. 2006) are included in the framework because they are crucial when the brand position is analysed, determined, chosen and achieved.

In the literature, a fourth phase is also introduced—monitoring or evaluating of the results (Ahonen 2008; Juntunen et al. 2009)—but it has been omitted due to the scope of the research. This research aims to analyse and evaluate the brand positioning process from the beginning until the point when the desired brand position is chosen. Further analytical processes are therefore not included in this research to ensure that it remains compact: insightful results and conclusions are more likely to be achieved when the focus of the research is clearly defined.

Figure 4 brings the corporate brand positioning process together. The first phase is the analysis of the current situation, which includes three sub-phases: the analysis of one's own brand, one's competitors, and one's customers and market. The focus

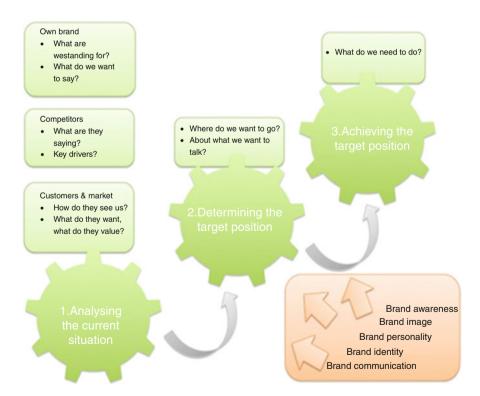


Fig. 4 Synthesis of the conceptual framework for corporate brand positioning

is on the current circumstances and the phase presents an overview of the general situation. The second phase, determining the target position, shifts the focus more towards the future. It challenges the company to consider what it wants to achieve and how it wants to be seen by its customers. This is the point where the desired brand identity and image appears. Several options for a favourable position are created and it is the duty of the company to compare, evaluate and finally choose the position it wants to achieve. The final phase of the process is achieving this target position. This phase introduces the actions required to achieve the target brand position. Brand positioning elements (lower right corner) guide and influence to every phase of the process. The company should create a realistic and reliable brand identity and personality that coincides with the brand image created by the customers. The crucial role in delivering the brand message is achieved through strong brand communications. When successful, the result is a brand image and brand awareness, both of which can create a sustainable competitive advantage for the company. Brand awareness then measures the impact of the brand's communications.

5 Summary

There has been surprisingly little research on corporate brand positioning. This study addressed this evident gap in the literature of industrial marketing. The purpose of this study was to create a conceptual framework for corporate brand positioning. Corporate brand positioning is defined as a process of searching for and finding a new driver for a brand to highlight itself in the industrial market in order to achieve a sustainable competitive advantage. The corporate brand positioning process consists of several phases. These include analysis of one's own brand, one's competitors, customers and market, determining the target brand positioning options, and achieving the desired brand position. These phases consist of several sub-processes that can be intertwined or overlapped.

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Why It Is Worth and What Is the Key to Support a Desired Corporate Reputation: A Review

Migle Matuleviciene and Jurgita Stravinskiene

Abstract The aim of this paper is to analyze and systematize different approaches to corporate reputation and its support, highlighting the value of corporate reputation, assessing the problem of stakeholder heterogeneous perception of corporate reputation and identifying key dimensions of supporting a high corporate reputation. In this paper we have revealed that there is worth to support a high reputation because of the economic value, the relationship value and the value related to competitive advantage. To support a high reputation, an organization must define this construct and understand how it can be perceived by various stakeholders. We propose a definition which compounds the support of high corporate reputation. Nevertheless, this paper reviews that reputation can be supported with regard to key dimensions of corporate reputation, treating them as basic tools and considering communication as the most important one. The paper proposes an integrated view to corporate reputation and highlights new insights to communication while supporting a high corporate reputation.

Keywords Corporate reputation • Corporate reputation support • Stakeholders • Communication

1 Introduction

Theoreticians and practicians of communication, marketing and management literature have analyzed and are still analyzing corporate reputation construct. A special contribution to interpretation of corporate reputation is made by Fombrun (1996), Fombrun and Van Riel (1997), Gotsi and Wilson (2001), Dowling (2004) and many researchers. These researchers provided a detailed analysis of corporate reputation, but analyzing the latter-day literature it is noticeable that there is still a lack of collective approach to corporate reputation construct. The dimensions of a high corporate reputation, submitted by scientists, are stereotyped, do not contain

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specific recommendations for how to support a high corporate reputation and what is the value of a high corporate reputation for an organization recently.

The analysis of reputational value is quite abstract in a literature. Researchers often distinguish tangible and intangible values of corporate reputation, however the interpretation of fundamental and detail aspects of these kind of value is poor. These days, scientists (Podnar et al. 2012; Mustak et al. 2013; Olmedo-Cifuentes et al. 2014) have been trying to propose different interpretations of value and its expressions, looking at the tangible and intangible values in prospect of these days. Particular these new approaches to value expression impel to go deep into the concept of corporate reputation, seeking to find a new approach to supporting a high corporate reputation.

The main problem of analyzing the support of high corporate reputation is a heterogeneity of corporate reputation (Varey 2002; Helm 2007; Fiedler and Kirchgeorg 2007; Walker 2010; Feldman et al. 2014). The heterogeneity of the perception of corporate reputation between different stakeholders can be considered as the main reason why it is difficult not only to interpret but also to support corporate reputation. The main aim for organizations is to support a high corporate reputation. However, it is difficult to do this, because it is not known how to bring all heterogeneous stakeholder interests together. Scientists propose similar tools to secure a high reputation, but there are no specific recommendations how to do this. Both previous and latter-day scientists (Fombrun 1996; Schwaiger 2004; Hillenbrand and Money 2009; Omar et al. 2009; Podnar et al. 2012; Maden et al. 2012; Mazzola et al. 2006; Petrokaite and Stravinskiene 2013) agree that organization can support a high corporate reputation invoking basic dimensions of corporate reputation, but it should be mentioned that what their role is in supporting a high corporate reputation, remains unclear.

Previous insights, despite being fairly detailed, do not answer a question of what particular tools organization could support a high corporate reputation. Many of latter-day scientists have been trying to put a new face on the support of corporate reputation. Based on the newest insights, we argue that the best tool to support a high corporate reputation is communication. Therefore, evaluating the gaps, problems and the lack of systematic approach in the literature, this paper is intent on providing both previous and latter-day approach to corporate reputation value, reputation construct and support of corporate reputation carrying out a systematic, concentrated analysis and interpretation of aforementioned aspects. In a result, this paper reveals what helps to support a high corporate reputation.

2 The Concept of Corporate Reputation

Scientists became interested in corporate reputation in the year 1950–1970 and to this day they are speaking in a high key about what the corporate reputation is (Dolphin 2004; Maden et al. 2012). Almost two decades ago, Fombrun and Van Riel (1997) stated that the analysis of corporate reputation is chaotic and valueless,

but Barnett et al. (2006), Maden et al. (2012) believe that such an approach is developed for the fact that the scientists, who have analyzed corporate reputation, did not try to find a single definition of corporate reputation—reputation has been treated in accordance with the views of individual scientists, whereas to search for a unanimous construct they began much later. However, it can be argued that the construct of corporate reputation has been explored enough—the relevance of corporate reputation has especially increased during the last decade—it allowed to analyze this construct and to state that the value of corporate reputation to an organization is obvious (Barnett et al. 2006). Nevertheless, one of the most disputable objects to this day is heterogeneity of corporate reputation. Scientists disagree with a homogeneous understanding of corporate reputation among different stakeholders.

2.1 Reputation Heterogeneity

In the literature the question is whether different stakeholders realize corporate reputation under the equal dimensions (Varey 2002; Helm 2007; Fiedler and Kirchgeorg 2007; Walker 2010; Feldman et al. 2014). Helm (2007) analyses the question "Do firms have one reputation or many?" (p. 239). Varey (2002) argues that the corporate reputation is perceived differently. Helm (2007) interprets that each stakeholder perceives an organization and its actions differently, so the corporate reputation is different from each stakeholder's perspective.

Helm (2007) analyzes corporate reputation through three perspectives of scientists. Looking from the first perspective, the reputation is interpreted "as an attitudinal construct that only exists in the minds of individuals" (p. 239), and any stakeholder perceives corporate reputation in different ways. Different types of qualitative research methods allow committing the heterogeneity of views on corporate reputation. The second perspective suggests that the perception of corporate reputation can be different between different stakeholders. From Bromley (2002) point of view, organizations may have in so far different reputations as they have stakeholders, interested in an organization. It is argued that reputation is perceived differently among different stakeholders, but equally-within stakeholders. While summarizing these two perspectives, it can be assumed that an organization does not have a single reputation but the third perspective suggests conversely. In this case, corporate reputation is perceived as an intergroup convergence by all stakeholders, forming the general corporate reputation or a collective approach to an organization by different stakeholders (Helm 2007; Fombrun et al. 2000). Helm (2007) claims that the latter approach specifies the concept of corporate reputation accurately.

Helm (2007) proposes a scheme that combines these three perspectives and reflects what criteria constitute the general corporate reputation as well as corporate reputation is perceived by different stakeholders (see Fig. 1).

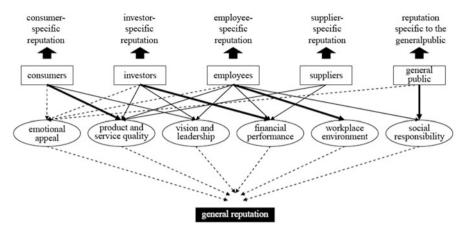


Fig. 1 General and stakeholder group-specific concepts of corporate reputation. *Source*: Helm (2007, p. 241)

Walker (2010), contrary to Helm (2007), is at a variance with a number of scientists' opinion that an organization may not have a single reputation. Walker (2010) argues that corporate reputation is based on what is apparently known or seen, therefore corporate reputation should be perceived equally by different stakeholders—only positively or only negatively. He provides an example of an organization, which behaves environmentally responsibly, so this organization could not be perceived as damaging the environment, therefore its reputation should be only positive to all stakeholders.

However, Helm (2007) argues that the assumption of heterogeneity of corporate reputation between different stakeholders reduces the possibility of misconceptions, defining corporate reputation. Whereas Varey (2002) explains that corporate reputation consists of many aspects—what employees feel about their employer, customers—about goods supplier, investors—its shares and the like. So the management of corporate reputation is different between different stakeholders—for each of them a different model of reputation management must be chosen. These approaches presuppose that organization may have a different reputation by different stakeholders. De Castro et al. (2006) suggests dividing corporate reputation to business reputation, related with the most interacting stakeholders, and social reputation, involving corporate relationships with investors and the public—the less interacting stakeholders. Guru et al. (2013) states that reputation itself is made up of three elements-brand reputation (consumer perception of the brand), corporate reputation (consumer perception of the organization) and stakeholder reputation (brand or an organization with which stakeholders interact, reputation). This multidimensional approach to corporate reputation additionally strengthens the arguments of scientists over corporate reputation heterogeneity.

To supplement insights of Helm (2007), it can be used three schools of thought, using to perceive corporate reputation—an evaluative school, an impressional school and a relational school (Chun 2005). The first two schools of thought say

that each stakeholder perceives corporate reputation differently. Meanwhile, stakeholders of a third school of thought are divided into internal and external, contrasting their views to each other. Chun (2005) does not mention it, but it can be supposed that the internal and external stakeholders within two groups perceive corporate reputation in the same key. Talking of characteristics of aforementioned schools of thought, it should be noted that stakeholders of evaluative school of thought assess organization's financial performance and the evaluators are investors or managers. Stakeholders of impressional school of thought are customers, employees or the media—each of them perceives corporate reputation according to their impressions of organization. Stakeholders of relational school of thought may be various—both internal and external stakeholders, while their perception of corporate reputation is unrelated.

Summarizing the approaches to heterogeneity of understanding corporate reputation, it can be concluded that corporate reputation could not be perceived unambiguously. However, it is suggested to invoke the perception of Helm (2007), who proposes that despite different stakeholder perception of corporate reputation, it still forms a general corporate reputation (see Fig. 1). The perception heterogeneity of corporate reputation should be perceived seriously, that is stakeholder concept is defined differently due to unequal perceptions of corporate reputation by several stakeholders.

2.2 Defining Corporate Reputation

Omar et al. (2009) suggest dividing corporate reputation concepts into four groups:

- 1. By stakeholder perception—recognizing the organization as good or bad.
- 2. By stakeholder emotional reactions—based on a general assessment of the different parts of an organization.
- 3. By an organization's past actions—when corporate reputation is defined as a result of an organization history, economic and non-economic actions.
- 4. By information during the time of direct or indirect stakeholder experience with an organization.

The definitions of corporate reputation, found in literature, are represented in Table 1.

From definitions of corporate reputation it is seen that there are many different but similar meanings of corporate reputation. An overview of different sources suggests that corporate reputation is described best of Gotsi and Wilson (2001), who argue that corporate reputation is "stakeholder's overall evaluation of a company over time, based on the stakeholder's direct experiences with the company, any other form of communication and symbolism that provides information about the firm's actions and/or a comparison with the actions of other leading rivals" (pp. 29) (see Fig. 2). There it is appropriate to emphasize that this definition is easily the best because it is based on stakeholder emotional reactions, which may

 Table 1 Corporate reputation concept interpretations

Definition	Source
By Stakeholder Perception	
Organization strategic behavior in the marketplace	Fombrun and Van Riel (1997)
Corporate associations that individuals establish with the company name	Fombrun et al. (2000)
"A general organizational attribute that reflects the extent to which external stakeholders see the firm as good and not bad"	Roberts and Dowling (2002)
A valuable strategic resource that contributes to a firm's sustainable competitive advantage An overall evaluation of the extent to which a firm is substantially good or bad	Keh and Xie (2009)
Collective agreement about what the relevant public knows about an actor	Shamma and Hassan (2009)
A rare and valuable intangible asset that competitors find difficult to imitate, substitute or replicate (because of its social complexity)	Siano et al. (2010)
By Stakeholder Emotional Reactions	
 Organization's ability to meet the expectation of all its stakeholders Reputations are overall assessments of organizations by their stakeholders. They are aggregate perceptions by stakeholders of an organization's ability to fulfill their expectations, whether these stakeholders are interested in buying the company's products, working for the company, or investing in the company's shares 	Fombrun (1996)
Rooted in the aggregated perceptions of the firm's stakeholders	Fombrun et al. (2000)
Stakeholder's overall evaluation of a company over time. This evaluation is based on the stakeholder's direct experiences with the company, any other form of communication and symbolism that provides information about the firm's actions and/or a comparison with the actions of other leading rivals	Gotsi and Wilson (2001)
Force that can attract customers	Davies et al. (2003)
Force that influences the selling-buying processes	Lin et al. (2003)
Can be described by attributes such as admiration, respect, trust and confidence in the company	Dowling (2004)
A social construct that tends to rest on individuals' beliefs and perceptions	Gaultier-Gaillard and Louisot (2006)
Force that encourages stakeholder loyalty	Bontis et al. (2007)
A collective impression about a firm	Shamma and Hassan (2009)
A result of a shared judgment socially expressed (degree of respect and credibility) by stakeholders, which is based on the actions of the firm and on its ability to satisfy expectations and create value for stakeholders	Siano et al. (2010)
Consists of several different facets, each of which plays different roles for different stakeholders in different situations	Peloza et al. (2012)
	(continue)

(continued)

Table 1 (continued)

Definition	Source
By Organization's Past Actions	
The estimation of the consistency over time of an attribute of an entity	Herbig and Milewicz (1995)
A perceptual representation of a company's past actions and future prospects that describe the firm's overall appeal to all its key constituents when compared to other leading rivals	Fombrun (1996)
Reputation is determined by the value (quality) of the actor's previous efforts	Podolny and Phillips (1996)
The cumulative value judgments by the public over time provides the company with significant competitive advantages	Fombrun and Van Riel (1997)
Predicted by organization previous financial performance	Roberts and Dowling (2002)
A reflection of a firm's past actions which provide signals to stake- holders about its probable future actions	Davies et al. (2003)
The strongest determinant of any organization's Sustainability	Firestein (2006)
A unique, hard to imitate intangible asset	Smaiziene and Jucevicius (2009)
By Information During the Time of Direct or Indirect Stakehold Organization	er Experience with
A result of the interactions between a company and its stakeholders	Deephouse (2000)
Reduces the uncertainty for stakeholders by signaling positive attributes of the companies such as product quality	Rindova et al. (2005)

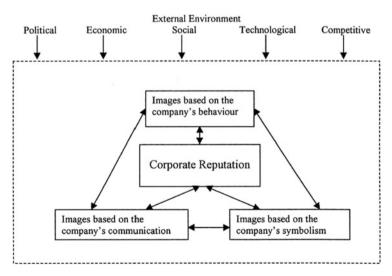


Fig. 2 Defining corporate reputation. Source: Gotsi and Wilson (2001, p. 29)

be different for different stakeholders, considering to the assumption of corporate reputation perception heterogeneity.

2.3 The Link Between Corporate Reputation, Image and Identity

A review of corporate reputation, as a whole of certain features, revealed another important concept in reputational context—image. For a long time scientists have disagreed or image may be considered to be a part of corporate reputation. Barnett et al. (2006), who has analyzed a number of definitions, concluded that scientists have different approaches to corporate reputation, so it is useful to bring more clarity to this definition, purposefully highlighting the differences between four basic concepts in the context of corporate reputation: identity, image and reputational capital. However, as the main reason of the absence of a general definition, Barnett et al. (2006) names the confusion between three key concepts—identity, image and reputation. In the literature, corporate reputation has long been synonymous with aforementioned two concepts—image and identity, despite the fact that these concepts are similar to each other, but in fact—very different (Barnett et al. 2006; Omar et al. 2009; Walker 2010; Feldman et al. 2014). Nowadays, scientists seek to deny the identicalness of corporate reputation with identity and image. Further there will be viewed the fundamental differences of interpretations between corporate reputation, image and identity, discussed by Gotsi and Wilson (2001), Varey (2002), Chun (2005), Walker (2010), Siano et al. (2007, 2010), Olegario and McKenna (2013), Feldman et al. (2014).

2.3.1 Identity

Corporate identity is interpreted as the sameness of an organization, which shows how an organization imagines itself, with whom identify themselves employees of an organization, what position they take up in the context of an organization. The identity is focused on internal stakeholders, because they would be the ones to see themselves as part of an organization (Walker 2010; Feldman et al. 2014). Feldman et al. (2014) states that identity is based on an organization's culture and consists of current activities, history, values and behavior. Chun (2005) and Walker (2010) note that corporate identity can be desired and actual. Desired identity is based on what the organization wants stakeholder to know about it—this identity can be created, managed and controlled, while the actual identity is difficult to manage, because it is based on what stakeholders actually know or think about an organization. It is likely that an organization wants to create only positive identity, but the actual identity, which is much more complicated and less controlled, can be both positive and negative.

2.3.2 Image

Corporate image, in contrast to identity, is expressed by ambitions of an organization—how stakeholders should image organization. The image is focused on external stakeholders. The image, like identity, is divided into desired and actual, also can be positive or negative, despite an organization's efforts to have only a positive image (Walker 2010). The image is based on stakeholder temporary impressions, arising from direct or indirect experience with an organization, in other words, it is the perception of corporate identity in a current time-period (Siano et al. 2007; Feldman et al. 2014).

2.3.3 Differences Between Corporate Identity, Image and Reputation

Have been analyzing corporate reputation and corporate image for many years, Gotsi and Wilson (2001) argue that these two concepts can be combined into two dominant schools of thought. The first school of thought states that the concepts of corporate reputation and corporate image are identical, and the second—that concepts are different. Kennedy (1977) was one of the first, who tried to substantiate that the creation of image, like reputation, takes a long time, so the identicalness of these two concepts should not be a problem for the researchers (cited in Gotsi and Wilson 2001). Gotsi and Wilson (2001), who have been analyzing the definitions of these two concepts state that identification of image with reputation dominated from 1960 to 1970, because at that time studies of corporate image were very popular, therefore corporate image was equated to corporate reputation for a long time. Rindova (1997) argues that the aforementioned schools of thought have been based on public relations, and thus the greater attention was paid to corporate image as opposed to reputation (cited in Gotsi and Wilson 2001), Caruana (1997) states that identifying corporate reputation with the image raises a number of uncertainties while analyzing corporate reputation (cited in Gotsi and Wilson 2001), therefore, the representatives of a second school of thought have criticized this approach, in order to draw a clear boundary between concepts of corporate image and reputation. Representatives of a second school of thought propose three approaches to the relationship between corporate reputation and corporate image. According to the first viewpoint—corporate reputation radically differs from corporate image. From the second viewpoint, corporate reputation is considering as a part of corporate image. The third viewpoint reveals that corporate reputation is influenced by a number of different images, which is based on stakeholder view to an organization (Gotsi and Wilson 2001; Siano et al. 2007; Olegario and McKenna 2013). In this case, it is important to highlight the first viewpoint, which does not propose to compare the two aforementioned concepts. Many of 1980s scientists said that corporate image could not be identified with corporate reputation, because the image can be created artificially. Rindova (1997) quite accurately defined the differences between corporate image and corporate reputation, stating that corporate image makes certain of a better picture of an organization, while corporate reputation is considered as the real, responsible action making, in order to gain public respect (cited in Gotsi and Wilson 2001). Semons (1998) agrees, arguing that experts in public relations also adopt this approach (cited in Gotsi and Wilson 2001). Most other scientists treat these two concepts as different. Analyzing the differences between image and reputation, Walker (2010) points out the time factor—one of the most important comparing indicators of these two aforementioned concepts. Comparing to corporate image, reputation is stable, permanent, purified from different images over a period of time (Gotsi and Wilson 2001; Siano et al. 2007, 2010; Walker 2010; Olegario and McKenna 2013; Feldman et al. 2014). Walker (2010) states that corporate image can be created relatively quickly, while a high reputation can be formed over a long time-period, but is more stable, therefore Feldman et al. (2014) interprets corporate reputation as a historical component for its stability and durability. Varey (2002) argue that corporate reputation is much more significant and powerful to an organization when seeking to gain an advantage and success in the market, compared with identity and image (cited in Varey 2002). From the viewpoint of Varey (2002), corporate image and corporate identity are components of corporate reputation—tools, which help to manage corporate reputation. There are many different approaches to the relationship between corporate identity, corporate image and corporate reputation in literature, however it is obvious that nowadays it is not significant to identify these three concepts, because differences between these concepts are widely analyzed. Therefore, corporate reputation can be treated as related, dependent, but not identical with corporate identity and corporate image.

3 A Value of Corporate Reputation

Corporate reputation in literature is interpreted differently. In contrast to latter—day scientists, previous scientists emphasized a tangible value of corporate reputation. Fearnley (1993) argues that in order to secure corporate reputation, an organization must focus on quality, delivery and price, while factors such as sociability, environmental protection and good working conditions should be demoted. At that date, all efforts to improve corporate reputation were concentrated on satisfying customer needs, without mentioning any other stakeholders. Over the time, the relevance of corporate reputation has grown, showing that the high corporate reputation gives value not only from transactions between an organization and customers, but also from transactions between an organization and other stakeholders. This promoted to rise of a new object of analysis—an intangible value of corporate reputation. Since there is no unambiguous approach to the value of corporate reputation in communication, marketing and management literature, it is purposeful to systematize the different views and to provide the interpretation.

The value of corporate reputation is expressed in many different components, indicated in communication, marketing and management literature. Varey (2002)

provides a concentrated, at the same time detailed analysis of the value of corporate reputation. He emphasizes that corporate reputation is primarily designed to highlight the values, beliefs and to show the ways in which the organization is trying to accomplish its objectives. Varey (2002) also states that reputation serves as an advertisement, forms a supportive stakeholder behavior in relation to organization, affects the sales volumes, differentiates the products, attracts shareholders and employees, helps to maintain good relationships with community and government, forms stakeholder view to an organization, promotes acceptance, reflects a true face of an organization, helps to achieve organizational goals, to make management decisions, acts as a competitive tool and influences stakeholder provisions. Cravens et al. (2003) argue that organizations with a high reputation have more loyal and productive employees, whereas high corporate reputation keeps the suppliers to reduce the prices of raw materials, reduces the threat of a crisis or a financial loss when the crisis strikes. Omar et al. (2009) adds that a high corporate reputation leads customers to the perception that the organization proposes a greater quality, allows to increase the price, to attract a larger investors, to improve the access to major markets, to ensure the positive spread of "word of mouth" information and to reduce the opportunity to imitate the actions of organization. Benthaus et al. (2013) consider that the high corporate reputation provides to take the new opportunities of opening up the prospects, secures a higher market position, increasing the market entry barriers for competitors, increases the attractiveness of organization to potential employees and investors.

It could be stated that there are two basic approaches to the value of corporate reputation in literature. Some scientists argue that the main task of corporate reputation is to maintain the financial success for an organization, treating it as a tangible value. Podolny and Phillips (1996), Fombrun (1996), Roberts and Dowling (2002), Varey (2002), Keh and Xie (2009), Omar et al. (2009), Siano et al. (2007, 2010), Abratt and Kleyn (2012), Goergen (2013), Przepiorka (2013), Park et al. (2014) agree with this approach. By the second approach scientists recognize that corporate reputation generates an intangible value to an organization (Roberts and Dowling 2002; Varey 2002; Dowling 2006b; Puncheva 2008; Siano et al. 2007, 2010).

3.1 Tangible Value

Omar et al. (2009), in accordance with Fombrun (1996) argue that it is worth to develop and support corporate reputation because of an economic return. Roberts and Dowling (2002) and Dowling (2006b) also emphasize a tangible corporate reputation value. Dowling (2006b), Abratt and Kleyn (2012) notice that scientists do not arrive at the opinion if a high corporate reputation has an influence on organization financial success or vice versa. Nevertheless, they state that the efforts to improve corporate reputation lead to increasing reputational value, while financial return on investment, business growth and successful risk management are

comprehended as the expression of the value. Whereas Siano et al. (2010) argues that reputation "allows the company to achieve and maintain sustained superior financial performance and contributes significantly to performance differences among organizations" (pp. 69). It was observed that a quality of product or service is often considered for their high price and high corporate reputation. As a result, organizations with a high reputation are able to set a higher price—even in cases when the product is similar to or worse than concurrent products (Varey 2002; Siano et al. 2007). This have been proven by Keh and Xie (2009) and Przepiorka (2013). They investigated that the trust—based corporate reputation has a positive impact not only on consumer buying behavior, but also enables an organization to increase the trade mark—ups. Siano et al. (2007) states that a high reputation reduces the advertising costs due to a lower investment in communication. With reference to these statements, we conclude that reputation generates not only the respect, but also good returns for an organization.

3.2 Intangible Value

Scientists also single out an intangible value of corporate reputation. An intangible value comes along with tangible value and is considered on the ground of competitive advantage and relationship with stakeholders. Roberts and Dowling (2002) and Dowling (2006b) argue that the competitive advantage is a rare and valuable intangible asset, providing an opportunity to earn a maximum profit in comparison with other organizations. According to Varey (2002), when one organization acquires and reinforces a high reputation, the other organization loses it. This can be treated as movement of stakeholders from one organization to another for some reasons. Consequently, having a high reputation, it is much easier for an organization to compete with other similar organizations. Puncheva (2008) penetrates the intangible value in the context of the relationship between an organization and stakeholders. She observes that corporate reputation can influence the relationship between an organization and stakeholders whereas corporate reputation is reflected by many actions, which may affect the maintenance or dissolution of the relationship. Omar et al. (2009) agrees that organizations with a high reputation support more successful relationships with stakeholders. A corporate reputation value of the long-term relationships between an organization and stakeholders is illustrated in Fig. 3:

When a corporate reputation is considered positively, stakeholders get involved in the relationships with an organization. But the involvement does not mean that an organization will certain a long-term relationship with stakeholders due to the fact that stakeholders value the organization according to its actions at the any stage of organization proceedings. Nonetheless important for stakeholders is the change of corporate proceeding and the benefit of these changes. There a long-term relationship begins between an organization and stakeholders, based on stakeholder satisfaction. When stakeholders are not satisfied, they terminate the relationship with an

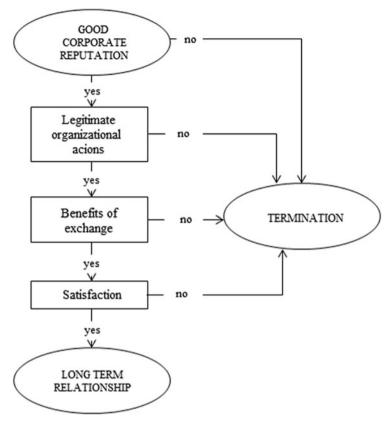


Fig. 3 A corporate reputation value of the long-term relationships between organization and stakeholders. *Source*: adapted by Puncheva (2008, p. 274)

organization whereas the organization loses the ability to support a high reputation. In addition, Puncheva (2008) notes that this process can be influenced by other criteria, such as different stakeholder interests and expectations.

Generally speaking, stakeholders appreciate the relationship with high reputation organizations, since corporate reputation is considered to be a guarantor of quality (Roberts and Dowling 2002). Consumers are willing to pay a higher price, employees willingly work in organizations with a high reputation and providers feel less risk in cooperation with such organizations. A high corporate reputation increases the influence of advertising to consumers, maintains and increases the sales efficiency and helps to raise up when crisis hits. Fombrun (1996) argue that it also encourages stakeholder loyalty, trust and cooperation, Roberts and Dowling (2002), Fombrun and Van Riel (2004) add that a high corporate reputation allows the organization to acquire the necessary resources for a more favorable way and reduces the sense of a risk to stakeholders (Siano et al. 2007, 2010). Omar et al.

The nature of the value	Expression of the value		
Economic value	Income growth		
	The increase of sales volumes		
	Realizing the economic goals		
	The reduction of competitiveness		
Relationship value between organiza-	Notability of organization		
tion and stakeholders	Attractiveness of organization		
	Acceptance of stakeholders		
	Involvement of stakeholders		
	Positive behavior of stakeholders		
Value, associated with a competitive	Innovation-based organization development		
advantage	New opportunities and prospects		
	Involvement in the major markets or increasing		
	position in an existing market		
	Differentiation		

Table 2 Interpretation of a corporate reputation value to organization

Source: Podnar et al. (2012), Mustak et al. (2013) and Olmedo-Cifuentes et al. (2014)

(2009) notices that consumers avoid purchasing from a newly build organizations for their unformed reputation.

In summary, it can be argued that the insights of scientists in the literature are quite wide, so it is useful to systematize them by combining different interpretations to certain groups by the nature and expression of the value. It is observed that scientists mostly emphasize the economic value of corporate reputation, relationship value and the value associated with a competitive advantage (see Table 2).

A high corporate reputation creates economic value for an organization. While the economic value is usually associated with profit and increasing sales volumes, but it can be seen that a high reputation helps realizing the other, none less important economic targets and reduce competitiveness. A high reputation creates the value from the relationship between an organization and stakeholders—increases the visibility and attractiveness of an organization, which promotes the acceptance, involvement and positive behavior of stakeholders in regard to an organization. Also there can be identified the value, related with competitive advantage. This value can be related with innovation-based development of an organization, involvement in the major markets or increasing position in an existing market and differentiation.

To sum up the analysis of a corporate reputation value, it can be concluded that the value is classified into material and immaterial. A detailed review of literature revealed that a high corporate reputation may be perceived as having the potential to create an economic, relationship and competitive advantage values. Although scientists present various approaches to the value of corporate reputation, but it can be stated that the value is obvious, so it is appropriate to continue to go deeper into the reputation analysis and to provide a concentrated and comprehensive study of the support of corporate reputation.

4 Supporting a High Corporate Reputation

Scientists agree that each organization has a reputation, independent of whether it is supported or not. Corporate reputation varies, even if an organization remains the same over the years, so it is important for an organization to find the tools by which an organization is able to support a desirable reputation. During the analysis of the literature, it is noted that in some cases corporate reputation can be identified with reputation management. In this paper, when talking about support of corporate reputation, we will identify reputation with reputation management, but treat it in part as self-contained, not targeted process.

4.1 The Diversity of Approaches to Corporate Reputation Support

Varey (2002) argues that reputation is easiest to support in those markets, which are characterized by rapid spread of information "word of mouth"—in retail markets, restaurants, cinemas'. And it can be rapidly achieved by innovation. Omar et al. (2009), according to Fombrun (1996) argues that the high corporate reputation can be supported by forming a unique corporate identity, creating a harmonious and consistent image, offering a range of unique products, ensuring the quality of product and services, informing employees about the positive effect of reputation, maintaining socially responsible activities, ensuring communication in media, including community members in the activities of an organization. Omar et al. (2009) argues that maintaining these integrated actions by way of supporting corporate reputation ensures high corporate reputation in various contexts—different countries, different markets and different strategic situations. Puncheva-Mitchelotti and Mitchelotti (2010) express a similar view, stating that an organization should support reputation in ways that contribute to the growth of consumers, employees, investors and community support. In contrast to Omar et al. (2009), Varey (2002) argues that in order to support the high corporate reputation, it is necessary to pay attention not only to image formation, but also the technical, functional performance and the quality of other parameters. Not mixing all these areas, the supporting of corporate reputation will be based only on expectations, none the concrete results. Markwick and Fill (1997), Regester and Larkin (2005), Coombs and Holladay (2006) emphasize that the main goal of supporting corporate reputation is to tackle the crisis (cited in Siano et al. 2010). Siano et al. (2010), Gaultier-Gaillard and Louisot (2006) argue that this can be achieved by increasing reputational capital, because only reputational capital can protect an organization from crises. Whereas to support corporate reputation, and particularly a brand reputation is difficult and can be expensive, costs of support can be divided, creating alliances with other organizations or their brands. Copartnership in creating co-brands is not less important than managing the individual brand, because it promotes the brand development, facilitates diversification into other related or unrelated areas. Siano et al. (2010) who has analyzed the approaches of many scientists, notes that partnership with other organizations or brands are useful, but one of the most important principles in supporting corporate reputation is managing and reducing the reputational risk. The last-mentioned argument is further enhanced by Siano et al. (2010) insights that corporate reputation is associated with more risk than other areas of an organization. The limited support of corporate reputation decreases stakeholders' loyalty and trust, which could lead to the recession of an organization.

4.2 Dimensions of a High Corporate Reputation

There are no specific recommendations how to support corporate reputation in the literature, but it can be seen that corporate reputation can be supported with regard to key dimensions of corporate reputation, treating them as tools, which can be used when supporting a high corporate reputation. Fombrun and Van Riel (2004) conducted a survey in ten countries around the world and systematized the dimensions of corporate reputation, used till then, to six key dimensions, involving:

- 1. Emotional appeal (positive thinking, admire and respect, trust).
- 2. Products and services (position, inovativeness, high quality, relation between quality and price).
- 3. Financial performance (profitability, low risk of investment, strong prospects for future growth, out-performing the competitors).
- 4. Vision and leadership (leadership, clear vision for future, recognizing and taking the advantage of market opportunities).
- 5. Workplace environment (good working conditions, good employees, fair compensation system for employees).
- 6. Social responsibility (supporting good causes, responsiveness against environment and society).

Despite these six systematic dimensions, scientists still follow more than six dimensions in order to look widely at corporate reputation and its support. The review of literature allowed to distinguish basic dimensions of corporate reputation, mostly found in literature (see Table 3):

These or similar dimensions are found in a number of literature (Fombrun 1996; Schwaiger 2004; Hillenbrand and Money 2009; Omar et al. 2009; Podnar et al. 2012; Maden et al. 2012; Mazzola et al. 2006; Petrokaite and Stravinskiene 2013), but close by aforementioned dimensions Mazzola et al. (2006) further distinguish the strategic planning, control systems, Omar et al. (2009), Podnar et al. (2012), Petrokaite and Stravinskiene (2013)—stakeholders' trust and communication.

All these dimensions have been widely discussed in works of many scientists, however it is worth to pay attention to the dimension of communication, treated as

Table 3 Dimensions of corporate reputation

High corporate reputation	
Dimensions	Indicators
Good financial results	High business performance, effective management, benefit for organization, vision, profitability, solvency, competitiveness, growth, bankruptcy, inexhaustible, the absence of government takeover, success in different markets
Management quality	The ability to develop, manage and control the resources, competence
Business strategy	Resource and process optimization, organization's past and future actions, a clear vision, cooperation, clear short-term and long-term business strategies
Organization structure	Inside—a management strategy and quality of management—the ability to adapt to changes, risk management, co-ordination. In relations with the outside world—design, flexibility and communication
Organization culture	Teamwork and openness to change, business projects, environment credibility, observance of propagating organizational culture
Leadership	Reliability, the approach to organization of external stakeholders, leadership in the market, recognition, development, sensitivity to internal and external changes, admiration and respect
Organisation products	High quality of goods and services, installation of quality management systems, innovation, value creation, customer orientation, care for customers and retention, reduction of complaints
Brand image	Perceived brand value, customer satisfaction, organizations visibility in the media, advertising, visibility and credibility
Innovation and value	Implementation of development programs, investments in research and development, new and unusual distribution channels
Organization global activities	Number of countries where organization operates, and the revenue from external countries
Human resources	The ability to attract and retain talented employees, they take care and nurture them; good working conditions—physical environment, wages, supplying the necessary work tools; employee satisfaction and motivation—promotion opportunities, assessment, awards, safe working environment and equal opportunities, the absence of redundancies, the threat of exploitation
Customer orientation	Attention to customer, recognition, effective advertising, listening to suggestions
Social and environmental responsibility	Social responsibility, caring for environment, pollution reduction, support and charity, commitment to the local community
Emotional appeal	Tradition, reliability and trust
Honest, ethical activity	Avoiding scams, corruption and fraud; fairness, transparency, responsible consumption, promoting ethical behavior of employees
Positive image in the media	-

Source: adapted by Podnar et al. (2012) and Olmedo-Cifuentes et al. (2014)

particularly important component of corporate reputation (Fombrun and Van Riel 2004; Chun 2005; Forman and Argenti 2005; Dowling 2006a; Omar et al. 2009; Podnar et al. 2012; Petrokaite and Stravinskiene 2013; Guru et al. 2013; Benthaus et al. 2013). Nowadays, communication is considered to be one of the most important objects of corporate reputation analysis. Omar et al. (2009) substantiated that communication and trust are the two main factors affecting corporate reputation in the context of contemporary globalization, developing a global organizational culture, creating the added value, demoting other dimensions, such as transparency, responsibility and quality to the second position.

According to Fombrun and Van Riel (2004), the support of corporate reputation is centered on the distinctive internal and external communication with stakeholders. Having analyzed five international organizations, recognized as superior in their industry, Forman and Argenti (2005) concluded that the main factor for success, talking of supporting corporate reputation, is communication. Despite supporting corporate reputation, communication also performs such functions as explanation of organizational behavior (Dowling 2006a), communication of corporate identity and image, transparency and acceptance of business and organization, creates reputational advantage and reduces transaction costs (Forman and Argenti 2005). Forman and Argenti (2005) raised and tested the assumption whether the effectiveness of communication impacts on corporate reputation or not. They have come to a conclusion that corporate reputation arises primarily from the way the organization represents itself. Stakeholders assess an organization according to communicated identity—name, signs, symbols, self-presentation. This assessment, which is formed separately inside each stakeholder, is equal to general corporate reputation (see Fig. 4).

Forman and Argenti (2005) argue that in order to properly support corporate reputation by communication, organization should focus on communicating

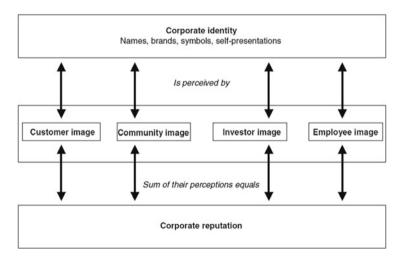


Fig. 4 Reputation framework. *Source*: Forman and Argenti (2005, p. 249)

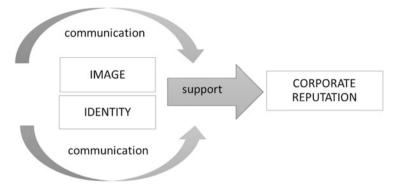


Fig. 5 A theoretical model of corporate reputation support

corporate image, whereas Siano et al. (2007) proposes to communicate corporate identity. Despite the fact that the most recent literature does not offer to associate corporate reputation with corporate identity and image, but there is often found the link between communicating corporate identity and image and the support of corporate reputation. As previously discussed, the desired identity, which Balmer and Greyser (2006), Siano et al. (2007) name as visual, is based on what the organization wants stakeholder to know about it—this identity can be created, managed and controlled. Therefore communication can be treated as a tool of supporting both corporate identity and image as well as corporate reputation, subject to which approach to commonality between corporate identity and corporate image we refer to. Therefore, according to one of the approaches, identity and image communication can be treated as reputation support.

According to these insights it was proposed a theoretical model of corporate reputation support (see Fig. 5) with reference to studies of Siano et al. (2007), Omar et al. (2009), Abratt and Kleyn (2012), Guru et al. (2013) in the area of brand communication, studies of Gotsi and Wilson (2001), Varey (2002), Chun (2005), Walker (2010), Siano et al. (2007, 2010), Olegario and McKenna (2013), Feldman et al. (2014) in the area of corporate identity and image, insights of Fombrun and Van Riel (2004), Chun (2005), Forman and Argenti (2005), Dowling (2006a), Omar et al. (2009), Podnar et al. (2012), Petrokaite and Stravinskiene (2013), Guru et al. (2013), Benthaus et al. (2013), stating that the communication should be treated as particularly important component of corporate reputation. The model graphically represents a relationship between corporate identity and image communication and corporate reputation support.

4.3 Corporate Reputation Support in the Context of Brand Communication

In the literature brand communication is often comprehended as possible contributor to support corporate reputation. This is confirmed by the interface of visual identity and the brand, while Siano et al. (2007) identifies the brand as a key element of the visual identity, whereas Abratt and Kleyn (2012) name the brand as the expression of identity, As Fombrun (1996), Schwaiger (2004), Hillenbrand and Money (2009), Siano et al. (2010), Omar et al. (2009), Podnar et al. (2012), Maden et al. (2012), Mazzola et al. (2006), Petrokaite and Stravinskiene (2013), Guru et al. (2013) and many other scientists consider the brand image as one of dimensions of corporate reputation (see Table 3), it could be stated that communicating the visual identity can be comprehensible as an integral part of supporting corporate reputation. Varey (2002) also notes that an organization usually performs communication, related with image. Whereas Guru et al. (2013) states that communication, as a tool of brand management, improves organization's image and reputation in the society. By reason of these approaches it could be stated that the communication of the brand, as the expression of identity and the reflection of corporate image, in turn, may be associated with corporate reputation support (see Fig. 6).

There was found that communication is a tool to support a high corporate reputation. To support corporate reputation, it is recommended to communicate corporate identity and image—they are recognized to be the components of corporate reputation. Scientists often analyze brand communication, as one of the ways to support corporate reputation. To substantiate this proposal, we refer to the estimations that brand is a key element or the expression of visual identity. Also the brand image should be considered to reflect the image of organization and is one of

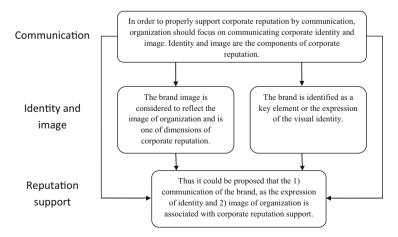


Fig. 6 Supporting corporate reputation through brand communication

dimensions of corporate reputation. This leads to a conclusion that communication of the brand, as the expression of identity or the image of organization could be associated with corporate reputation support.

To summarize, a variety of approaches and investigations, discussed in this paper, supposes a conclusion that an organization, in order to reach a high reputation, must find the tools helping to support reputation. There are no specific recommendations how to support a high reputation, therefore it is thought that corporate reputation support is a complicated process. Nevertheless, in order to support a high corporate reputation, it is proposed to consider the key dimensions of corporate reputation, particularly communication—comprehensible as the tool of effective communication of corporate identity and image.

5 Conclusion

The default of the general definition has highlighted the key problematic aspect of interpretation corporate reputation—corporate reputation is perceived heterogeneous among different stakeholders. According to this, it is proposed to follow the definition of Gotsi and Wilson (2001), which states that corporate reputation is "Stakeholder's overall evaluation of a company over time. This evaluation is based on the stakeholder's direct experiences with the company, any other form of communication and symbolism that provides information about the firm's actions and/or a comparison with the actions of other leading rivals"(pp. 29). The insights of many scientists has revealed that corporate reputation is considered to be consistent of corporate image and corporate identity—tools, which help to manage corporate reputation.

The value of corporate reputation is interpreted differently and is expressed by many different components, found in communication, marketing and management literature. To dissociate from distributing the value of corporate reputation to tangible and intangible value, it is suggested to divide value into three types: economic value, relationship value and the value, related to competitive advantage:

- Associating the economic value with the volume of sales and the profit growth, realization of other economic goals and the reduction of competitiveness.
- Associating the relationship value with stakeholder perception, increasing attractiveness, which promotes the acceptance, involvement and positive behavior of stakeholders.
- Associating the competitive advantage value with innovation-based organization development, opening new opportunities and prospects of joining the major markets or growing position in the existing market and also differentiation.

Different approaches to supporting corporate reputation suggest that there is no single construct, which can be followed in order to support a high corporate reputation. Nevertheless, it is suggested to follow the basic dimensions of corporate reputation, treating them as a means of supporting a high corporate reputation. The

review of the recent literature has revealed that it is purposeful to consider communication as a basic tool of a high corporate reputation because communication, in addition to a wide variety of functions, performs the essential—the identity and image communication function, associated with support of a high corporate reputation. According to these insights it was proposed a theoretical model of corporate reputation support, which graphically represents a relationship between corporate identity and image communication and corporate reputation support.

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E-Shop Offer as a Tool Creating Value for Customer

Marcin Lewicki

Abstract E-commerce, due to changes in new technologies and e-customer behavior is one of the most rapidly changing fields of science, therefore at the same time it is one of the most interesting ones. Value for customer is concept long present in the literature; nevertheless, a research gap has been identified when it comes to creating value for customer in e-commerce. There are a lot of different tools that can be used by companies in order to provide value for customer and one of the most direct and important one is company offer. The main purpose of this article is to present e-shop offer as tool creating value for customer. Moreover, elements of e-shop offer are presented and evaluated based on own research of the author. Finally I discuss trends in e-shop offer in general.

Keywords E-commerce • Value for customer • Value creation • E-shop

1 Introduction

Electronic commerce from the beginning of its existence is associated with the ongoing changes (especially if we look back to the 1990s and birth of such companies like Amazon, eBay and Dell). These changes apply to almost every aspect of doing business online, ranging from the business model used, going through the products available on the Internet, ending with the possibilities of matching the offer to the individual needs of each buyer and using new mobile technologies to reach to customer. Therefore, the problem of creating value for customer in e-commerce continues to be valid and important to any entity seeking to succeed in online sales. Creating value for customer, in general, is one of the most complex and difficult to explore areas of marketing, one of the main reasons for this lies in the very concept of value for customer. If we simply define value for customer as the subjectively perceived difference between the benefits and costs of obtaining them (Szymura-Tyc 2005), we can assume that for each client, both, the benefits and the costs perceived, may differ, despite the fact the offer proposed to

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them, from viewpoint of company, is exactly the same. Nevertheless, in spite of the above and based on the different methods of research, it is possible to identify tools, that for a potential customer could have a greater importance than others when it comes to providing value and as a result—stimulating the purchase decision.

The main objective of the article is to present e-shop offer as tool creating value for customer in e-commerce and to provide answers to What elements does e-shop offer consist of as a tool creating value for customer?, Which elements of e-shop offer are of the great importance for potential customer?, and What are the trends in e-shop offer as tool creating value for customer?

The main research methods used in order to fulfill the article objective are studies of present academic literature and knowledge concerning value creation for customer and own research conducted by the author with the use of online questionnaire.

2 Value for Customer in E-Commerce: General Concept

Value for customer is a term introduced first in 1954 by Drucker (2005), 60 years of its existence within different fields of science resulted in a variety of definitions, to name just few, for example:

- perceived value is the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given (Zeithaml 1988)
- value for the customer represents the ratio between quality and perceived benefits of the product and the perceived sacrifice in the form of the price paid (Monroe 1990)
- value delivered to the customer is the difference between the total value of the product for the customer and the cost that must be incurred in connection with its acquisition. The total value of the product to the customer is the sum of what he expects from the product or service (Kotler 1994)
- customer value is equal to preferences perceived by the customer, which are the basis for assessing the product attributes, attributes of its functioning and the consequences of its use, which facilitate (or hinder) the client to achieve its goals and objectives in the process of use (Woodruff 1997)
- value for the customer is subjectively perceived by the customer surplus of the benefits over the subjectively perceived costs associated with the acquisition and use of the product (Szymura-Tyc 2005)

Defining the value for the customer in e-commerce, almost every definition that is present in marketing literature (including these presented above) would be appropriate, the way we define this term is not dependent on a particular industry. However, the situation is changing as it comes to showing the tools and mechanism of its creation which could vary to a greater or lesser extent. Constructing conceptual framework for creating value for the customer in e-commerce, the author suggests using marketing-mix (4P) concept as a starting point—taking into account the impact of the Internet environment (Table 1).

Tool	Internet environment impact
Product	E-shop web site can be seen as expanded product Product is characterized by the immateriality and various potential of digitization Enterprise range of products, in terms of the number of entries, can be almost unlimited (especially digital products) The ability to offer a wide customization Product information are common and readily available to potential customers
Price	 Price comparison websites allow customers to compare different offers instantly Price competition is dominating the use of high-price strategy is difficult
Place	 • Internet environment stimulates the construction of a zero-grade (direct) channels • There is a clear shortening of information and promotion streams within channels • The global scale of operation is facilitated • Overall, a significant increase in the flexibility of almost all activities in the distribution system
Promotion	Direct contact with the customer through a number of electronic tools Significantly reduced cost and time of the message arrival to the wide range of customers Multitude of ad display formats available The opportunity to build a community around e-business

Table 1 Marketing-mix (4P) concept and the impact of the Internet environment

Based on the insights included in the table above and the fact that customer value in the retail sector (which e-commerce is part of) can be carried out by such factors like: customer expectations for shop assortment, the level of customer service, loyalty programs, price of the products etc. (Kucharska 2011), in the subject of value creation in e-commerce, e-shop offer should be determined as one of the most important tool to create value for customer.

3 Creating Value for Customer with E-Shop Offer

E-shop offer as tool creating value for customer in electronic commerce includes within its scope of meaning the broadest spectrum of different elements, it is also a direct way in which customer value can be expressed. Within e-shop offer, key decisions are made, both, from the company and its client's point of view. These decisions include for example: the selection and shaping of assortment, choosing the ways to stimulate sales, choosing forms of payment and delivery etc. Moreover, e-shop offer determines its branch and as a derivative of the all four tools of the marketing-mix concept (i.e. product, price, place and promotion) include: hassle-free return/exchange of goods, the presence of branded products, wide range of products available, opportunities to participate in the loyalty program/partner store, opportunities to take advantage of special offers/promotions/discounts, extended warranty, range of after-sales technical support provided by e-shop, available forms of delivery of goods and the time/cost of delivery, available forms of payment, the

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Table 2	The most co	ommon forms	of payment ar	nd deliver/c	ollection in	n polish e-shops
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Forms of payment	Forms of delivery and collection
Payment on delivery	• Postal
Payment on the spot	• Courier
Bank transfer	• E-shop self consignment
 Fast Internet transfer 	• Personal collection through special services like
 Credit card, 	pack stations
 Installments 	• Personal collection at one of the fixed points of
 Micropayments SMS 	sale
 Payment through the special services 	
like PayPal	

availability of lending and/or leasing, suggestions for future purchases provided by the e-store to the customer, competitive price level, brick and click channel of sales, range of possible offer adjustment to an individual store user, the possibility of buying in a store through the auction platform.

Despite the fact that using e-shop offer as tool creating value for customer, as shown above may include 15 different elements, one of the most developed are forms of delivery/collection and payment. Over 20 years of e-commerce evolution did result in plenty of different forms used by e-shops and available for the customer, among which, the most common in Poland were presented in Table 2.

Further analysis of different e-shop sites in Poland shows that building hybrid distribution channels, so called brick and click channel, seem to be another relatively common way of creating additional value for the customers. It should not be surprise if we take into account that mixed channel provides customer such benefits like: additional possibility of receiving the goods, the possibility to see/touch/feel the product before making final decision to purchase, the possibility to have "face to face" contact with the seller, hassle-free return/exchange of goods—no need to send bought goods back to seller.

Another relatively more important and worth mentioning element of e-shop offer as tool creating value for customer, is price level decision—ability to offer customer a competitive price. Almost every e-shop tend to clearly show customer that its product price is the lowest on the market, again, it should not be surprise taking into account the fact that whole e-commerce is dominated by low-price strategies. From customer perspective it is very easy to check and compare price on particular product within different e-shops within just two mouse clicks (often with the help with the price comparison services like Ceneo.pl), therefore it's relatively hard for e-shops to justify much higher price on products. E-shops are somehow forced to shape price on the levels that will not disqualify their offer on stage of searching for information by customers.

4 E-Shop Offer as Tool Creating Value for Customer in Research

4.1 Research Methodology

An attempt to identify the importance of e-shop offer has been taken based upon the author's own research using online questionnaire which was characterized by:

- quantitative form
- time scope: from 01.02.2012 to 30.06.2012
- · subject scope: e-customers in Poland
- 23 questions mostly based on 5-step Likert scale
- sample form of a question: "Please evaluate the impact of various elements associated with e-shop offer on Your purchase decision"
- population size—336 respondents (202 females, 134 males)
- · random sampling

The form of questions did not refer directly to the category of customer value, and was based on the assumption that: If an element is relevant for the customer in the context of the purchase decision, it is also seen by him as valuable (in other words, creates value for customer). This way of formulating questions was dictated largely due to the results of qualitative research and pilot quantitative research which have been both held prior to main quantitative research (respondents when asked directly about the value for the customer had difficulty understanding questions).

The overall assessment of e-shop offer as tool crating value for the customer consisted of the partial evaluation made within each of the 15 e-shop offer elements identified at earlier stages of research (these included, inter alia, literature studies, observation method, case studies and FGI) are hassle-free return/exchange of goods, the presence of branded products, wide range of products available, opportunities to participate in the loyalty program/partner store, opportunities to take advantage of special offers/promotions/discounts, extended warranty, range of after-sales technical support provided by e-shop, available forms of delivery of goods and the time/cost of delivery, available forms of payment, the availability of lending and/or leasing, suggestions for future purchases provided by the e-store to the customer, lower product prices compared to other stores, brick and click channel of sales, range of possible offer adjustment to an individual store user, and the possibility of buying in a store through the auction platform.

All highlighted relationships between variables which are presented in this paper was statistically valid.

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4.2 The Importance of E-Shop Offer as Tool Creating Value for Customer

According to the average importance (where scope of the evaluation: 1 to 5; and average value of: $\varepsilon < 1, 1.5 = >$ irrelevant element, $\varepsilon < 2; 2.5 = >$ element of minor importance, $\varepsilon < 2.5, 3.5 = >$ element of moderate importance, $\varepsilon < 3.5, 4.5 = >$ element of great importance, $\varepsilon < 4.5; 5 > = >$ element of very great importance) respondents scored the highest: the hassle-free return/exchange of goods, competitive price level and available forms of delivery of goods and the time/cost of delivery. On the other hand, the lowest score was related to the availability of lending and or leasing, suggestions for future purchases and opportunities to participate in the loyalty program/partner store. What is worth noticing, based on the results received, there was no element rated by respondents as irrelevant (Fig. 1).

If we take into consideration gender of the respondents, statistically valid—their opinions did differ in evaluation of few elements i.e.: opportunities to participate in the loyalty program/partner store (Fig. 2), opportunities to take advantage of special

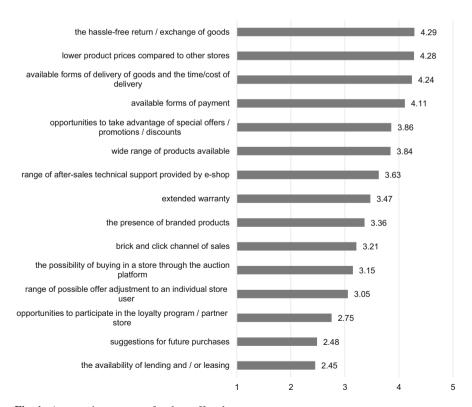


Fig. 1 Average importance of e-shop offer elements

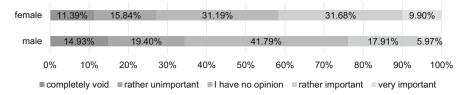


Fig. 2 Importance of opportunities to participate in the loyalty program/partner store depending on the gender of the respondents

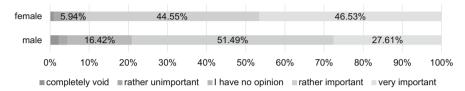


Fig. 3 Importance of opportunities to take advantage of special offers/promotions/ discounts depending on the gender of the respondents

offers/promotions/discounts (Fig. 3), extended warranty (Fig. 4), lower product prices compared to other stores (Fig. 5).

Importance in customer purchase decision of the above elements was rated significantly higher by women than men. One of the possible reasons may be the simple fact that female respondents were in majority within research conducted. The other reasons may include: the difference in frequency of purchases, where female respondents were more frequent than male and the fact that female respondents did significantly more purchases than male in branches like "Clothing and footwear" (female—62.38 %; male—33.58 %) or "Health and Beauty" (female—40.10 %, male—17.91 %), where all these elements could be evaluated as more important for potential buyer.

As it comes to payment methods used by the respondents, it was not surprising that the most common was payment by cash on delivery and regular bank transfer while the least used was credit card. If we look through many publically available e-commerce reports in Poland (like for example e-Handel 2012 or eCommerce Poland 2013) the picture in this area is exactly the same. The reason for this is the fact that experience of polish e-customer is relatively low in comparison to the residents of the West Europe, therefore they simply prefer to use more secure methods of payment for goods bought in Internet (Fig. 6).

Further analysis of the data, provided information that respondents evaluated higher than the average the importance of such e-shop offer elements like: wide range of products available, opportunities to participate in the loyalty program/partner store, opportunities to take advantage of special offers/promotions/discounts, extended warranty, hassle-free return/exchange of bought goods, the possibility of buying in a store through the auction platform, in "Clothing and footwear" branch of electronic commerce. Based on this information it could be

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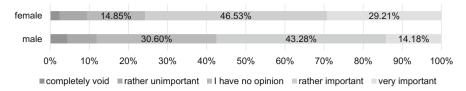


Fig. 4 Importance of extended warranty depending on the gender of the respondents

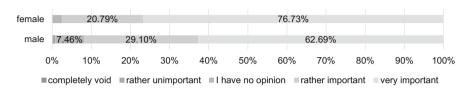


Fig. 5 Importance of lower product prices compared to other stores depending on the gender of the respondents

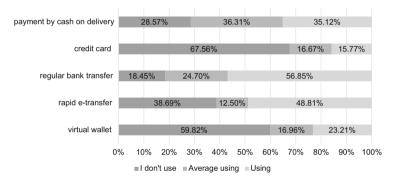


Fig. 6 Payment methods usage in the opinion of the respondents

concluded there should be relation between how customer evaluate different elements of e-shop offer in regard to e-shop branch. Nevertheless, statistically valid relation has been found only in "Clothing and footwear branch". In spite of the fact that the author realizes the reason for the lack of statistically valid relations in other branches is mostly due to the character of research conducted (most of all, its population size and structure), the relation found in "Clothing and footwear" branch could be a good starting point for further, more detailed research within specified branches.

5 E-Shop Offer Trends

General observation of polish e-shops helps to define main trends in e-shop offer. Undoubtedly one of them is the fact that more and more e-shops invest in richer assortment. The biggest companies in e-commerce (like Amazon.com worldwide or Empik.com in Poland) with each successive year try to expand their assortment, to provide more choice for customers. Taking into account the long tail phenomenon (Anderson 2009), which especially in Internet sale has almost limitless potential, where adding even niche products to e-shop assortment is significantly cheaper in comparison to stationary shops, this trend is not the one that could not be expected.

Another quite common trend is the sale expansion of stationary shops into Internet (for example Tesco.pl) and conversely, e-shops operating previously exclusively in Internet tend to open stationary shops to support their online sale (for example Merlin.pl). This trend shows that hybrid channel of online sale seems to be most effective in terms of creating value for customer (despite the fact that in own research of the author, brick and click channel of distribution, was evaluated as factor of moderate importance for respondents).

If we look at e-customers and change in their behavior, key word is "mobile". According to Deloitte report (Deloitte 2013)—"Mobile access to the internet is shifting how customers shop—and retailers have the chance to change mobile from a threat to an advantage." One of most common trend in e-customers behavior is so called "showrooming"—customers before buying goods online tend to try/check them at stationary shop which often belongs to other retailer than e-shop they finally but this product in. One of good examples of handling this problem is BestBuy in USA, who for example have special mobile offers for the customers that buy through mobile phones.

Finally, quite visible trend is constant emphasis in e-shop offer on price and promotions, which often is perfectly integrated within whole e-business model. One of best examples of such integration are stores like HumbleWeeklyBundle.com and iBOOD.com.

6 Conclusion

There is no doubt e-commerce evolution is not over (especially in Poland). Year after year, reports from e-commerce show how rapid and dynamic are all changes within this sphere of economy. These changes include both sides of market i.e. companies introducing new business models and mobile technologies so as theirs customers, who do shop in Internet and use these mobile technologies more often with each another year. It would not be exaggeration to say e-commerce was never that close to its customer. One of the most important aspects of e-commerce companies should be to create the offer that will meet customer requirements on the highest level and based on value creation. Therefore, based upon research

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conducted by the author of this paper, it should be point out that in regard to e-shop offer: The respondents did appreciate:

- (a) the hassle-free return/exchange of goods, competitive price level and available forms of delivery of goods and the time/cost of delivery
- (b) the range of options available when choosing the method of delivery and payment
- (c) the range of special offers available

the respondents did not appreciate:

- (a) availability of lending and or leasing,
- (b) suggestions for future purchases
- (c) opportunities to participate in the loyalty program/partner store

To summarize, the author suggest to take all the above elements of e-shop offer into consideration when creating value for customers with the help of this tool. Moreover all discussed in this paper trends do point in one direction i.e. brick and click channel of distribution as possibly best solution in terms of creating value for customer with e-shop offer, therefore, if it is possible (based on company funds) to create such channel, it is highly recommended as well.

Finally it is worth mentioning, that general observation of e-shops shows that most of them seems to follow the appropriate path to create value for potential customers.

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Relations Between Consumer Ethnocentrism, Cosmopolitanism and Materialism: Lithuanian Consumer Profile

Žaneta Piligrimienė and Gintarė Kazakauskienė

Abstract As the world becomes smaller and the boundaries between countries erase, consumer behaviour is also changing. The prevalent opinion exists that globalization accelerates the rise of a global consumption culture and most of consumers tend to be cosmopolitan. Still others argue that globalization has reverse impact on consumer behaviour, that it motivates people to resist global forces. The interesting aspect of analysis involve exploration of relations among consumer ethnocentrism (CET), cosmopolitanism (COS) and materialism (MAT), taking the latter one as standing for the view that global culture dismisses the importance of CET as well as COS, and local/global brands consumption is dependent more on the level of materialism. Analysis of existing theoretical and empirical evidences allows distinguishing three areas in determining the relations between CET, COS and MAT. Some authors suggest that all three constructs are interrelated, cosmopolitanism and materialism being antecedents to consumer ethnocentrism. Others claim that cosmopolitanism is an antecedent to ethnocentrism, but the materialism is not related with neither of them. Still others argue that all those constructs should be analysed independently. Therefore, the aim of this article is to investigate the relations between consumer ethnocentrism, cosmopolitanism and materialism, while defining the Lithuanian consumer profile.

Keywords Consumer ethnocentrism • Cosmopolitanism • Materialism • Consumer profile

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1 Introduction

Nowadays the world faces the challenges of globalisation that influences consumer behaviour and marketing decisions of companies. Despite the effect of globalisation, consumers in different countries tend to behave differently and it is necessary to find out how to position the product among all the other similar products in a particular country.

When entering the foreign market it's important to understand consumer's attitude toward foreign products. That's why researchers often use such psychographic criteria as consumer ethnocentrism, cosmopolitanism and sometimes materialism for market segmentation. It is known that ethnocentric consumers tend to buy local products and gratuitously devalue imported products. Meanwhile cosmopolitan consumers like variety and are interested in foreign cultures, which make them potential buyers of foreign products. Materialistic consumers usually care about utilitarian and hedonistic value as well as social status, and that makes them look for globally known brands.

In spite of the agreement that consumer ethnocentrism, cosmopolitanism and materialism are good criteria for market segmentation, academic publications provide some different opinions about how these constructs are related. Some authors suggest that all these three constructs are interrelated, stating that cosmopolitanism and materialism could be treated like antecedents of consumer ethnocentrism (Shankarmahesh 2006). Others argue that only cosmopolitanism is an antecedent of ethnocentrism, meanwhile materialism is a completely independent construct (Cleveland et al. 2009; Cannon and Yaprak 2002; Sharma et al. 1995; Parts and Vida 2011; etc.). There is also a suggestion that all these three constructs are not related (Vida et al. 2008). It's important to mention that research on consumer ethnocentrism, cosmopolitanism and materialism usually involve demographic variables as well (Shankarmahesh 2006; Chryssochoidis et al. 2007; Riefler and Diamantopoulos 2009), and the relations between demographic variables and three psychographic constructs have also been judged controversial.

Therefore, the *research problem* can be formulated as the following research questions: How are consumer ethnocentrism, cosmopolitanism and materialism related? What is the relation between those three constructs and demographic characteristics? How could the Lithuanian consumers be defined considering CET, COS and MAT?

Keeping that in mind, the main *purpose of this paper* is to investigate possible relations between consumer ethnocentrism, cosmopolitanism and materialism, and to test the relations with demographic variables, while defining the Lithuanian consumer profile.

2 Theoretical Background

Shimp and Sharma (1987) were the first who began to analyse the impact of consumer ethnocentrism on consumer behaviour. Consumer ethnocentrism can be understood as support for domestic products, patriotic feelings, leading to animosity toward imported products, belief that buying foreign products can harm domestic economy. There are plenty of research focused on consumer ethnocentrism and consumer decision making model, involving antecedents and consequences of ethnocentrism. Some research was done on relations between CET, COS and MAT, stating that cosmopolitanism and materialism are antecedents to consumer ethnocentrism (Shankarmahesh 2006) and the relation between CET and those two constructs is negative (Sharma et al. 1995; Cannon and Yaprak 2002; Cleveland and Laroche 2007; Cleveland et al. 2009; etc.).

Studies on consumer ethnocentrism often involve demographic variables—gender, age, education, income—as well. There are empirical evidences that women are more ethnocentric than men (Shankarmahesh 2006; Nadiri and Tümer 2010; Smyczek and Glowik 2011), that age is positively related with ethnocentrism (Shimp and Sharma 1987; Chryssochoidis et al. 2007; Cleveland et al. 2009; Nadiri and Tümer 2010; Smyczek and Glowik 2011; etc.), meanwhile income and education is negatively related with consumer ethnocentrism (Cleveland et al. 2009; Nadiri and Tümer 2010; Smyczek and Glowik 2011).

Cosmopolitanism can be defined as consumer orientation that crosses boundaries of countries and cultures. Cosmopolitans are viewed as "world citizens" that have positive view to the variety of cultures. They travel a lot and are open for new trends, brands and experiences. Thus cosmopolitanism is treated as an opposite to consumer ethnocentrism. There are number of empirical evidences proving the negative relation between those two constructs (Sharma et al. 1995; Cannon and Yaprak 2002; Riefler and Diamantopoulos 2009; Cleveland et al. 2009; etc.). Meanwhile the relation between cosmopolitanism and materialism is not quite clear. Some state that cosmopolitanism and materialism is not related (Cleveland et al. 2009) still there is an attempt to suggest the positive relation among those two constructs.

Speaking about relation with demographics, there are evidences that women are more cosmopolitan than men (Woodward et al. 2008; Cleveland et al. 2009), and that younger people with higher income and higher education level tend to be more cosmopolitan, indicating negative relation between age and COS (Riefler and Diamantopoulos 2009; Cleveland et al. 2009) and positive relation between income, education and COS (Cleveland et al. 2009).

Materialism has been defined as "the importance ascribed to the ownership and acquisition of material goods in achieving major life goals or desired states" (Richins 2004). Thus, materialism is often seen as long lasting belief about attractiveness of acquisition and having things, seeking to have more than others. Ownership of things makes materialists feel happy. Materialism as belief is composed from three elements: (a) importance of acquisition, (b) acquisition as seeking

for happiness, and (c) success as an outcome of acquisition. There is a support in the scientific literature for studying materialism as a relevant issue in understanding consumer responses to globalization. On the other hand, the materialistic consumer culture is spreading globally and it's important to understand how, when and where disposition of MAT influence consumer behaviour.

Relations between materialism, consumer ethnocentrism and cosmopolitanism are not clear and stable. Some authors suggest that materialism should be associated with increasing cultural homogeneity, while consumer ethnocentrism reflects cultural heterogeneity (Cleveland and Laroche 2007), thus indicating negative relation between MAT and CET. Still others argue that materialism is positively related with ethnocentrism (Clarke et al. 2000). The research of Cleveland et al. (2009) suggests that materialism and consumer ethnocentrism is not related, neither is MAT and COS.

Materialism by now is the least analysed construct and there are only few studies that involve some demographics and MAT. Few empirical evidences show that age is negatively related with MAT and indicate men as being more materialistic than women (Larsen et al. 1999; Cleveland et al. 2009). There are no proves in scientific literature about the relation between MAT and income or education.

It should be noted that research involving all three constructs are rare. Usually existing studies involve analysis of two of these constructs or each of them is being analysed separately. One of the examples, where all three previously mentioned constructs are analysed together, is an eight-country study by Cleveland et al. (2009). Authors emphasize an importance of research on cosmopolitanism, consumer ethnocentrism and materialism in analysing consumer behaviour in the context of globalisation. They base their choice of these constructs on the premise that two of them (cosmopolitanism and materialism) reflect the perspective of the global consumer, and one (ethnocentrism) is associated with the perspective of local consumer (Cleveland et al. 2009). The study covers three constructs, demographic variables and their impact on consumer behaviour on the international aspect. The findings showed that an impact of demographic variables on consumer ethnocentrism, cosmopolitanism and materialism differed across countries. The impact of three constructs on consumer behaviour was also different depending on country.

Analysis of scientific publications demonstrates the continuous interest in exploration of such consumer attitudinal dispositions as ethnocentrism, cosmopolitanism, materialism and others, recognizing their importance in revealing the similarities and differences in consumer behaviour in the increasingly globalising markets. Together with more common demographic segmentation, psychographic segmentation allows classifying the consumers across countries as well as within a particular country. Still the relations between the constructs are not stable and differ across different research context.

3 Research Methodology

The main aim of the research was to investigate the relations between consumer ethnocentrism (CET), cosmopolitanism (COS) and materialism (MAT) along with consumer demographics (age, gender, income and education), and to define the consumer profile in Lithuania.

The research model, indicating the relationships among the constructs, is shown in Fig. 1.

Based on the previously reported research results, the following hypotheses were developed:

H₁: Consumer ethnocentrism (CET) and cosmopolitanism (COS) are negatively related.

H₂: Consumer ethnocentrism (CET) and materialism (MAT) are negatively related.

H₃: Cosmopolitanism (COS) and materialism (MAT) are not related.

H₄: There is a relation between consumer ethnocentrism and demographic characteristics: (a) CET is positively related to age, (b) CET is negatively related to income, (c) CET is negatively related to education, and (d) women have higher mean CET scores than men.

H₅: There is a relation between cosmopolitanism and demographic characteristics:

- (a) COS is negatively related to age, (b) COS is positively related to income,
- (c) COS is positively related to education, and (d) women have higher mean COS scores than men.

H₆: There is a relation between materialism and demographic characteristics:

- (a) MAT is negatively related to age, (b) MAT is positively related to income,
- (c) MAT is positively related to education, and (d) men have higher mean MAT scores than women.

The quantitative online survey research method was chosen for this particular research, with the sample size of 207 respondents. The research instrument consisted of four main parts, representing consumer ethnocentrism (CET), cosmopolitanism (COS), materialism (MAT) and demographics. The constructs, their origins and number of items, corresponding to each of the constructs, are shown

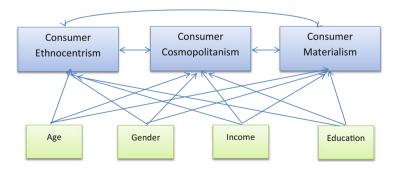


Fig. 1 Research model

Construct	Measurement scale	Authors
Consumer ethnocentrism	10 items CETSCALE +2 additional items	Shimp and Sharma (1987) Developed by authors, according to Nadiri and Tümer (2010)
Cosmopolitanism	11 items COS scale +2 additional items	Cleveland and Laroche (2007) Developed by authors, according to Cannon and Yaprak (2002)
Materialism	9 items scale	Richins (2004)
Demographics	4 items	Gender, age, income and education

Table 1 Research instrument

in Table 1. Respondents were asked to indicate their agreement or disagreement with each statement on a 7-point Likert scale, from 1 (completely disagree) to 7 (completely agree).

Data analysis methods included Descriptive statistics, Exploratory Factor Analysis, Correlation analysis, Kruskal-Wallis and Man-Whitney nonparametric statistical tests, and Two-Step Cluster analysis. The reliability of the scales was statistically verified using Cronbach's alpha coefficient, with the indexes higher than $\alpha = 0.9$.

4 Research Results

Respondent's Characteristics The respondents from different age groups were reached during this research. Nevertheless, the majority of respondents were at the age from 18 to 25 years old (42.5 %) and from 26 to 35 years old (28.0 %). Gender distribution showed that women took more active participation in the survey (67.6 %) than men did (32.4 %). Almost half of the respondents (49.7 %) had a high (university) education. Respondents with various income levels were reached (see Table 2).

Reliability of Measures The construct validity was determined using Exploratory Factor Analysis (EFA) (principal component analysis with Varimax rotation method). The sample adequacy for extraction of the factors was confirmed through Kaiser-Meyer-Olkin (KMO) test and Bartlett's test of sphericity. The Bartlett's test result was significant (p < 0.001), and the KMO value (0.924) showed that using exploratory EFA was suitable. By EFA, three factors were extracted, remaining their initial item structure and explaining 63 % of the total variance. All factor loadings, except for two items, were higher than 0.4, indicating that they were higher than the recommended level. Items that had factor loadings lower than 0.4 (one developed by authors for COS scale, and the other one for MAT scale, adapted from Richins 2004), were removed from further analysis. In order to evaluate the

Table 2	Respondent's
character	ristics

Variables	Attributes	%
Gender	Male	32.4
	Female	67.6
Age	Under 25 years	49.3
_	26–45 years	35.7
	More than 45 years	15.0
Income	Low (under 1000 Lt ^a /month)	37.2
	Moderate (1001–2500 Lt/month)	43.0
	Higher (more than 2500 Lt/month)	19.8
Education	Secondary	27.1
	Higher education	23.2
	High education	49.7

^aAt the time of research 1000 Lt ("Litas"—national currency of Lithuania) was approximately equal to 290 EUR—the minimal monthly wage

Table 3 Final structure and reliability of scales

Factor	No. of items	Cronbach α
Consumer Ethnocentrism	12	0.949
Cosmopolitanism	12	0.938
Materialism	8	0.903

Table 4 Correlations between CET, COS and MAT

		CET	COS	MAT
Spearman's rho	CET	_	-0.403^{a}	-0.185^{a}
	COS	-0.403 ^a	_	0.259 ^a
	MAT	-0.185^{a}	0.259 ^a	_

^aCorrelation is significant at the 0.01 level (2-tailed)

reliability of the three constructs, the internal consistency analysis was performed. The Cronbach alpha coefficient at all three cases was higher than 0.9, showing that the instrument is highly reliable (see Table 3).

Relations Between Consumer Ethnocentrism, Cosmopolitanism and Materialism In order to test hypotheses about the relations between CET, COS and MAT, correlation analysis was performed (see Table 4). Spearman's rho correlation coefficient was calculated, because the results of Kolmogorov-Smirnov test showed that data were not distributed normally.

Correlation analysis showed the statistically significant negative moderate (rho = -0.403) relation between consumer ethnocentrism and cosmopolitanism, thus *confirming* the hypothesis **H1**, and corresponding to the previous research results (Riefler and Diamantopoulos 2009; Cleveland et al. 2009; Cannon and Yaprak 2002; Sharma et al. 1995). Correlation results also allowed to *confirm* the hypothesis **H2**, showing statistically significant negative although very weak (rho = -0.185) relation between consumer ethnocentrism and materialism. These results correspond to the suggestion that materialism is linked with increasing

		CET	COS	MAT
Spearman's rho	Age	0.237 ^a	-0.185 ^a	-0.292^{a}
	Education	-0.224^{a}	0.168 ^b	-0.033
	Income	-0.247^{a}	-0.004	-0.102

Table 5 Correlations between CET, COS, MAT and demographic variables

Table 6 Means of CET, COS and MAT according to gender

	Mean	
	Male	Female
Consumer ethnocentrism	3.24	3.23
Cosmopolitanism	5.38	5.5
Materialism	4.4	4.2

cultural homogeneity meanwhile consumer ethnocentrism represents the ideas of cultural heterogeneity (Cleveland and Laroche 2007). Hypothesis ${\bf H3}$ was not confirmed as correlation analysis showed significant positive relation between cosmopolitanism and materialism (rho = 0.259). These findings bring some new insights into the relations between COS and MAT, because usually the scientific publications do not indicate any significant relation among these two constructs.

Relations Between CET, COS, MAT and Demographics Correlation analysis was performed in order to test the hypotheses about relationships between three attitudinal constructs and demographic variables. The results are provided in Tables 5 and 6.

Analysis of correlation results allowed *confirming* hypothesis **H4a**: consumer ethnocentrism is positively related to age; **H4b**: CET is negatively related to income, and H4c: CET is negatively related to education. However, means comparison showed, that there is no difference in CET based on gender, thus the hypothesis **H4d** was not confirmed. The results support existing findings in scientific publications, that older people tend to be more ethnocentric because of lower technological sophistication and stronger nationalistic views (Shankarmahesh 2006; Chryssochoidis et al. 2007; Cleveland et al. 2009; Nadiri and Tümer 2010; Smyczek and Glowik 2011). Positive relation between ethnocentrism and income, as well as between CET and education also has support in many sources, stating that people with lower income and less educated do not travel a lot and are not familiar with different foreign cultures, at the same time they tend to appreciate only national culture (Watson and Wright 2000; Cleveland et al. 2009; Nadiri and Tümer 2010; Smyczek and Glowik 2011). The finding that consumer ethnocentrism is not related to gender also has support in existing literature (Caruana and Magri 1996).

The results allowed *confirming* hypotheses **H5a** and **H6a**, as they showed significant negative relations between age and both COS and MAT. According to

^aCorrelation is significant at the 0.01 level (2-tailed)

^bCorrelation is significant at the 0.05 level (2-tailed)

Riefler and Diamantopoulos (2009), younger people tend to be cosmopolitans, because they use modern technologies more often, are stronger influenced by advertisement and travel a lot. At the same time younger people tend to become more materialistic under the influence of various psychological and social reasons, like social influence, advertisement, need to belong to the group, etc. (Richins and Dawson 1992). Hypotheses **H5b** and **H6b** were *not confirmed*, because correlation coefficients were not significant, and even so, they were negative, showing that cosmopolitanism and materialism are not positively related with income, at least in the context of this research. The same could be said about hypothesized relationship between MAT and education (H6c), which is not significant and negative in this case. However, the results allow *confirming* positive relation between cosmopolitanism and education (H5c), although the relation is weak (rho = 0.168). Further analysis with Kruskal-Wallis test showed that respondents with high education tend to be more cosmopolitan than respondents with higher or secondary education, but there is a strong tendency among respondents who did not finished the school yet, to have cosmopolitan view. So, the results reflect ambiguous findings among researchers advocating positive relation between COS and education (Cleveland et al. 2009) or suggesting negative relation (Woodward et al. 2008). Finally, comparison of means showed no difference both for COS and MAT according to gender. As such, it is possible to conclude that gender has no relation with consumer ethnocentrism, cosmopolitanism and materialism, at least in the context of the current research in Lithuania.

Lithuanian Consumer Profile In order to define the consumer profile, Two-Step Cluster analysis was performed, based on consumer ethnocentrism, cosmopolitanism and materialism, together with demographics, such as age, income and education (the variable gender was eliminated from further analysis, as the results showed no relation between gender and other constructs). Schwarz's Bayesian Criterion (BIC) and Akaike Information Criterion (AIC) for clustering provided similar results, indicating that the overall model quality is "fair" (silhouette measure of cohesion and separation being 0.4).

Results of cluster analysis (see Table 7) allowed distinguishing three clusters that could be relatively named as "Solid cosmopolitans", "Young materialists" and "Senior ethnocentrists". The biggest cluster—cosmopolitans—can be described as consisting of people with high education, average and higher income, between the age of 26–45 years that keep cosmopolitan view with low ethnocentrism and average level of materialism. The second cluster—materialists—is defined as young people just graduated or still at secondary school, with low income, but high level of materialism and cosmopolitanism. And the smallest cluster—ethnocentrists—can be described as people over 45 years old with higher education and strong ethnocentric view, whose level of materialism and cosmopolitanism is low.

In general the research results allow suggesting that consumers in Lithuania are not ethnocentric despite the fact of ageing society. Young and educated population that lives, works and travels through different countries, recognizes different

Cluster	2	1	3
Label	Solid cosmopolitans	Young materialists	Senior ethnocentrists
Size	53.1 % (110)	34.8 % (72)	12.1 % (25)
Inputs	Education High (93.6 %)	Education Secondary (61.1 %)	CET (5.59)
	Income Average (50.0 %)	Age Under 25 years (93.1 %)	Age Over 45 years (56.0 %)
	COS (5.97)	Income Low (75.0 %)	Education Higher (68.0 %)
	Age 26–45 years (52.7 %)	MAT (4.77)	MAT (2.52)
	CET (2.81)	COS (5.93)	COS (3.52)
	MAT (4.32)	CET (3.06)	Income Average (64.0 %)

Table 7 Results of cluster analysis

cultures and keeps cosmopolitan view to world. Keeping in mind the moderate tendency to materialism, this kind of population is very attractive to well-known global and other international brands.

5 Conclusions

In summary, the research has its value as it provides some insights into the Lithuanian consumer profile based on ethnocentrism, cosmopolitanism and materialism. The findings about the relations between consumer ethnocentrism, cosmopolitanism and materialism are not identical to existing findings in other countries, so they bring some input into understanding of the phenomenon.

Research results into the relationship between CET, COS and MAT showed support for existing evidences about negative relation between consumer ethnocentrism and cosmopolitanism as well as between CET and materialism, corresponding to the idea that materialism is linked more with increasing cultural homogeneity meanwhile consumer ethnocentrism represents the ideas of cultural heterogeneity.

As opposite to existing findings our research showed positive relation between materialism and cosmopolitanism. It brings some new insights into the relations between COS and MAT, because usually the scientific publications do not indicate any significant relation among those two constructs.

Considering the relations between CET, COS, MAT and demographic characteristics, the research showed that gender is not the variable for defining consumer profile, but age, education and income are. As was expected, age is positively related with CET, meanwhile income and education have negative relation. Age is also a good predictor speaking about cosmopolitanism, younger people showing

stronger cosmopolitan attitude. The results confirm positive (although week) relation with education, but do not indicate significant relation with income level. Such results are not very surprising, as nowadays even children travel a lot and Internet opens the countless opportunities to experience different cultures. The research supported negative relation between materialism and age. However, relations with other demographic variables were not established, leaving this field of study open for further exploration.

Managerial Implications From the practical point of view, knowing the consumer is essential to every marketing specialist, working in national, international or global markets. Marketers might develop marketing strategies according to the main features of the target customers.

If the consumers are ethnocentric, it's important to invoke patriotism, collectivism and emphasize an importance of national heritage, use national symbolism, labels and slogans "Made in Lithuania", and stress the responsibility of each individual for supporting national economics.

If the consumers are cosmopolitan, it's important to put emphasis on product innovativeness, technological decisions, product communication should highlight country of origin, global guarantee of quality, feelings of being a member of global society, etc.

If the consumers are materialistic, the brand should communicate the extra class, emphasizing exclusive features of the product or the benefits it provides; it's important to communicate price that highlights product exclusiveness, create consumption habits and trends.

Limitations and Further Research The research provided in this article is limited in the aspect that the majority of the respondents were relatively young and as such, the extent to which the results can be generalized is limited. Further studies should be conducted, involving bigger sample from different age groups, particularly elder population.

Further research on consumer ethnocentrism, cosmopolitanism and materialism may involve different product categories as well as investigation of the relations with other consumer characteristics, not only demographics (such like life style, personal values, etc.). It would also be useful to make more thorough analysis of the positioning and communication decisions, adapted for ethnocentric, cosmopolitan or materialistic consumers.

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Understanding Economics and Marketing of Ecomuseums: An Exploration of a USA Sample

Angela Besana and Annamaria Esposito

Abstract The term 'ecomuseum' reflects the connection between the museum and its social surroundings and environment. First of all, the paper investigates the definition. This paper looks into the Ecomuseum definition, to point out different contexts and institutions which generate Ecomuseum. Secondly, the paper investigates Economics and Marketing Behaviors of Ecomuseums in support of the competitive advantage, and analyzes the way of creating territorial brand values able to engage communities in the ongoing creation of an Ecomuseum, looking for an interpretative model. A particular focus is on fundraising and online communication in order to have evidence of the wide range of stakeholders this entrepreneur can target. To reach its goal, this paper presents a Cluster Analysis to gain an understanding of Economics of Ecomuseums, and case studies to offer an insight of their Marketing Strategies. The cluster analysis will profile a USA sample according to their marketing and fundraising performances and emphasize the connections with audiences and targets both within and without the communities, town or regions where they are. The sample will allow to focus on vanishing boundaries of the definition and to separate strategies and performances of two main profiles: the Fundraiser with Gain or Loss and the Marketing Expert.

Keywords Ecomuseum • Economics • Marketing • USA • Cluster

1 Introduction

Museums can be businesses of the cultural and creative industry. The museum collects, investigates, shows the original content of visual and applied arts: paintings, sculptures, design and the folklore at the latest times. The term 'ecomuseum' reflects the connection between the museum and its social surroundings and environment. The ecomuseum is a place of relationships, collaboration between citizens

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and institutions, conservation and enhancement of cultural heritage both tangible and intangible. First of all, the folklore is here exhibited.

The paper investigates this definition. The concept takes on a different meaning depending on the context within it is inserted. This paper looks into the Ecomuseum definition, to point out different contexts and institutions which generate Ecomuseum. Taking into account vanishing boundaries of the core business, from exposition to environmental beautification; from education to the promotion of folklore and tradition, this not-for-profit entrepreneur is not only a museum.

The paper investigates Economics and Marketing Behaviors of Ecomuseums in support of the competitive advantage, and analyzes the way of creating territorial brand values able to engage communities in the ongoing creation of an Ecomuseum, looking for an interpretative model. A particular focus is on fundraising and online communication in order to have evidence of the wide range of stakeholders this entrepreneur can target.

To reach its goal, the paper presents a Cluster Analysis to gain an understanding of Economics of Ecomuseums, and case studies to offer an insight of their Marketing Strategies. The cluster analysis will profile a USA sample according to their marketing and fundraising performances and emphasize the connections with audiences and targets both within and without the communities, town or regions where they are.

The sample will allow to focus on vanishing boundaries of the definition and to separate strategies and performances of two main profiles: the Fundraiser with Gain or Loss and the Marketing Expert. This research aims to draw an interpretative model and strategies for competitive advantage of the Ecomuseum which takes into account the territorial brand values, and it may be considered a starting point to further possibly investigations on this topic.

2 Boundaries of the Concept Ecomuseum

An ecomuseum is an opportunity to run with new ideas, it is foremost a community and an objective: the development of that community (De Varine 1978). An ecomuseum is a territory encompassing both tangible and intangible heritage, including the memories of the people who live there (Rivard 1984, 1988), based on a community agreement. An ecomuseum is 'primarily a way of thinking, a holistic open system view of the world' (Heron 1991). Ecomuseums represent a heritage of identities and cultures, the genius loci, the 'sense of place', (Davis 1999). They are instruments for promoting and preserving local identity, as well as developing forms of alternative and sustainable tourism.

In fact, the concept 'ecomuseum' is the most challenging for contemporary museology: both a collection inside of a building and an open-air museum; both tangible and intangible heritage; both museum and non-museum where folklore and traditions are promoted thanks to events that are not simply exhibitions. Corsane et al. (2007) have highlighted 21 features, which characterize ecomuseums. They

may occur both simultaneously or not. Furthermore connections with the community, where the ecomuseum is located, are unavoidable with a particular focus on cultural ethnic awareness.

Maggi (2002) describes a community 'taking care of a place': mountain, valley, park, forest, lake, sea, etc. so that the landscape is an essential dimension of the ecomuseum. Environmental protection, education and beautification are, as a consequence, essential activities in an ecomuseum. Davis and Corsane (2014), provide a concise definition of the ecomuseum as 'a community driven heritage project that aids sustainable development'.

The engagement of the community is a binding commitment between the population and administrations. The engagement can consist of voluntarism, fundraising and any other activity in order to support the governance of the ecomuseum. The governance can be the community itself who shares responsibilities, in order to grant the sustainable development of the environment and the landscape, where the ecomuseum is located. Communities collect ethnographic and material culture in ecomuseums. Ecomuseums are memories that cannot be destroyed and next generations must be committed to them. Ecomuseums are agents 'for managing change that links education, culture, and power. It extends the mission of a museum to include responsibility for human dignity' (Fuller 1992).

As a matter of fact, the 'ecomuseum definition' has vanishing boundaries. The intangible features deny traditional rooms, visual arts and they integrate open-air, landscape, folklore, traditions, mature engagement and awareness. The tangible features refer to memories of manufacturing and industrial supply-chains, agriculture and connections to the environment of the past that must be preserved. Are there boundaries? It is hard to limit 'cultural roots': they can be in the environmental specifics of a valley, a lake, a sea, a season; they can be in traditions that refer to material culture, creative skills, sports and any entertaining activity, history and melting of populations who were from different countries.

Taking into consideration vanishing boundaries of the 'name' and approaching the USA ecomuseum, where do USA communities collect and show their dispersed relics and assets? In unconventional museums? Core business of USA 'ecomuseums' can be appreciated in associations, societies, foundations, trusts, conservancies, parks, councils, centers and museums. USA not-for-profit organizations can be an efficient medium among memory, environment and communities, when cultural policies and philanthropy legitimate their financial sustainability, artistic vitality and recognized public value (Bakke 2014; Wyszomirski 2013). Their mission can be the enhancement of memories, traditions, legacies next to the conservation and beautification of landscapes that were domesticated by pilgrims and founding fathers. Stakeholders of these not-for-profit organizations can include artists, (non-arts) businesses, local city governments, non-profits, neighborhood associations, preservationists, and more. At some point, a community can protect and cultivate the shared value in local cultural production and culture does not only include traditional arts. Successful organizations exhibit robust coalitions that span traditional boundaries, as governments, non-profits, community foundations, trusts, councils and communities collaborate in its operation (Noonan 2013).

3 Marketing of the Ecomuseum: The Importance of the Website

A heritage 'marketing & communication' approach is important for the maintenance and the sustainable development of the ecomuseum and its community. First of all marketing & communication strategies can help to empower community, and to make residents aware of their heritage. This is why marketing & communication strategies have to ensure that the concerned community is properly involved in the definition, marketing and operation of the ecomuseum and its objectives. In fact, it is important that the concept of ecomuseums is not distorted and emptied of its meaning, and that communities directly benefit from the marketing of their heritage.

Marketing ecomuseums could support the creation and the spread of a territorial brand rich of values able to engage different publics. A territorial brand is the sum of values which lies in a positive, powerful and solid reputation, which characterizes certain territories, creating and rebounding income (Nogué and de San Eugenio Vela 2011). The competitiveness of a territory seems to be increased by the presence of distinctive products and manufacturing that express the specificity of its values. These products help to building the territorial brand (Vescovi and Gazzola 2007) and contribute to enrich it with iconic symbols, meanings and values that go beyond the simple geographical link between community products and territory.

An ecomuseum, which contributes to spread the territorial brand, affirms the identity and the authenticity of the place: culture, knowledge, tradition, creativity, distinctive products and manufacturing and genius loci, become institutions for the community (Kapferer 2002). Among the most important ecomuseums marketing & communication goals there are attracting and building 'deeper relationships with more diverse audience' (Spitz and Thorn 2003) rationalize the total process of developing resources, going through the definition of the visitor experience in order to allow them to enjoy the ecomuseum visit (Screven 1986; Shackley 1999; Goulding 2000), intensifying efforts to raise funds from individuals and companies as well as the launching of subscription programs (Chhabra 2009). Furthermore marketing & communication strategies are useful to establish educational programs for different, previously identified publics, i.e. school visits, training, courses; to managing change that links education, culture, and power; to plan membership and fund-raising programs for private organizations; to communicate every initiative to the proper public. As aforementioned, Marketing & communication efforts need a proper planning to be linked up with each other coherently. Generally this point is a weakness in many profit and not-for-profit organization (Gregory 2009).

A powerful tool of marketing & communication is the ecomuseum website. Considering the websites of ecomuseums in our cluster, the most important emerging value is authenticity, which connotes culture, origins, and the sense of genuine (Chhabra et al. 2003). The analysis of websites shows some common objectives, which are related to education and teaching people, particularly the younger people,

about the value of the culture, nature and the sense of the place. Then ecomuseums are seen as being a repository for cultural materials and memories, and eventually an instrument to enhance tourism and sustainable economic development.

Social media allow institutions to be directly connected with audience. Users can share and generate content. To reach these virtual spaces in a simple and fast way social buttons are provided. These tools allow the user to connect to web pages, share information and material through one or a few clicks. In fact, through their use, ecomuseums can signal their presence on other websites, and create audience awareness about the different channels to interact. Ecomuseums, as many organizations, employ Facebook, Twitter, Youtube, and Pinterest.

Fundraising, above all, occupies a significant position in the websites of the USA ecomuseums due to the weight of financial constraints following a reduction in state funding that requires the ecomuseum to generate supplementary funds and to establish the means for better communications directed towards various target groups. 'Donation'/Support Us'/Donate' are the voices of the main navigation menu. Furthermore the website provides, for each page of the site, a button that enables users to quickly connect with the section dedicated to online transactions. On the donation page, in addition to on-line mode, there is information about traditional methods to financially support the ecomuseum.

From the website analysis it emerges that ecomuseums in USA receive funds from gift shop sales, admissions, and federal grants. Furthermore, other funds derive from individuals Membership Dues, gaming, facilities, rental, special events, and food service. Considering this wide concept of 'ecomuseum', main strategies of marketing, fundraising and the website communication, the next paragraph is the cluster analysis of economic performances of a sample of 100 USA organizations according to IRS (Internal Revenue Service) keywords and codes that refer to ecomuseum, tradition, folklore, environmental protection, education and beautification, cultural ethnic awareness. For this sample counting the highest 2012's revenues, rows of 2012's revenues, expenses, gain or loss, assets and net assets were investigated, so that these organizations were *profiled* according to their main economic performances and their prevailing revenues thanks to either marketing or fundraising.

This is a first attempt to collect different case histories of a *flexible concept* and estimate economics and marketing of contemporary USA 'ecomuseums' according to revenues and expenses that are related to marketing and fundraising towards several and different stakeholders. This research can, therefore, be a benchmark of communities' engagement in the preservation, interpretation and management of their inheritance for the sustainable development.

4 The Investigation of a USA Sample: The Profiling According to 2012's Performances

The U.S.A. Congress declared the meaningfulness of folklore, community cultures and traditions in 1976. Communities were considered essential for the American Identity. Neither a museum nor an ecomuseum was supposed to be the exclusive location of this 'cultural richness'.

- Congress declared
- (1) That the diversity inherent in American folklife has contributed greatly to the cultural richness of the Nation and has fostered a sense of individuality and identity among the American people;
- (2) that the history of the United States effectively demonstrates that building a strong nation does not require the sacrifice of cultural differences;
- (3) that American folklife has a fundamental influence on the desire, beliefs, values, and character of the American people;
- (4) that it is appropriate and necessary for the Federal Government to support research and scholarship in American folklife in order to contribute to an understanding of the complex problems of the basic desires, beliefs, and values of the American people in both rural and urban areas;
- (5) that the encouragement and support of American folklife, while primarily a matter for private and local initiative, is also an appropriate matter of concern to the Federal Government; and
- (6) that it is in the interest of the general welfare of the Nation to preserve, support, revitalize, and disseminate American folklife traditions and arts...

Taking into account a flexible concept of 'ecomuseum', from January till March 2014, 990 Forms of 100 organizations with the highest 2012's revenues were investigated in www.guidestar.org, according to keywords ecomuseum, folklore, tradition and according to IRS (Internal Revenue Service) codes environmental protection and education, environmental beautification, cultural and ethnic awareness.

Guidestar is a database that collects Statements of Revenues and Expenses and Financial Statements of USA not-for-profit organizations. These organizations can be listed according to keywords or Census Codes like A23 Cultural/Ethnic Awareness, C50 Environmental Beautification, C60 Environmental Education. These codes were here particularly investigated.

Here follow some mission statements in order to have evidence of the goal of these organizations:

- To promote, advance, stimulate and encourage interest and research in and to serve as a bond among those interested in the study of folklore ... American Folklore Society, Columbus. Ohio
- Americas Society is an educational forum which presents programs in its public policy and cultural affairs departments . . . Americas Society Inc, New York
- To improve the quality of life in urban areas through environmental education, community greening and gardening, job training and advocacy for environmental justice . . . Greater Newark Conservancy, Newark

All Accounting data of these organizations can be read in the Form 990. The Form 990 (IRS Revenue Service) is the best accounting tool for our empirical purpose as it classifies revenue categories in ten accounting lines: (a) Contributions, gifts, grants and similar; (b) Program Service Revenues; (c) Membership; (d) Interests and Dividends; (e) Dividends and interests from securities; (f) Rents or other investment income; (g) Sales of assets; (h) Special fundraising events revenues; (i) Sales of inventory; (j) Other Revenues. (a), (c) and (h) refer to the fundraising effort. (b) refers to marketing. The other revenue rows refer to the investment income and any other earned income, (j).

Accounting lines separate the Fundraising Expense from other expenses, too. Marketing is included in the Program Service Expense. 'Management and general' includes miscellaneous costs that are neither fundraising nor marketing. In order to split the sample in significant groups with average and separating performances, all revenue categories and expenditure ones were, here, indexed to total revenues and total expenditures. The Gain or Loss was divided by total revenues and Net Assets were divided by Total Assets, in order to estimate the sustainability of the organization. Using indexed data (ratios), we clustered (k-means) performances with the aim to profile different types of USA 'ecomuseums' according to prevailing revenue sources and the composition of their expenses (Table 1).

Table 1 Final cluster centers of a sample of USA 'ecomuseums'. Average 2012's performances of 100 organizations

	Cluster, number of organizations, profile				
	1, 7, fundraiser with loss	2, 27, marketing expert	3, 7, indebted fundraiser	4, 1	5, 58, fundraiser with gain
Contributions/total revenues	0.74	0.27	0.70	-24.05	0.82
Program service revenues/total revenues	0.14	0.70	0.25	-6.78	0.09
Investment income/total revenues	0.05	0.00	0.00	32.52	0.04
Other revenues/total revenues	0.07	0.02	0.05	-0.70	0.05
Program service expense/ total expenses	0.81	0.83	0.83	0.76	0.77
Management and general expense/total expenses	0.14	0.15	0.13	0.21	0.15
Fundraising expense/total expenses	0.05	0.02	0.04	0.03	0.09
Gain or loss/total revenues	-0.58	0.00	0.08	63.34	0.18
Net assets/total assets	0.87	0.71	-0.40	0.92	0.87

Source: Elaboration with SPSS software

Strong of their connections with communities, the prevailing profile of the USA sample is the *Fundraiser*, Cluster 5 (Table 1). With only one organization, Cluster 4 is extra-ordinary and it is not significant for this profiling. The Analysis of Variance (ANOVA) shows that Program Service Expenses and Management ones are not significant (Table 2). Nevertheless the cluster analysis gives evidence of profiles with a different revenue and expense composition.

Cluster 5 (58 organization) is the most crowded profile, the *Fundraiser*. 82 % of revenues are contributions, the fundraising expense is the highest of the sample (9 %) and the gain is the highest of the sample (18 % of total revenues). USA 'ecomuseums' target at the best their communities, philanthropists, fund-givers, administrations so that they can collect enough resources for their financial sustainability, Net Assets being 87 % of Total Assets.

The opposite profile is the Cluster 2 with 27 organizations. This is the *Marketing Expert*. On average, program service revenues are the highest ones of the sample, 70 %. Program service expense is the highest too (83 %), though this marketing expertise does not profit these organizations by neither gain nor loss. For this profile, the fundraising expense is the lowest one (2 %). The financial stability means Net Assets for 71 %.

If the fundraiser of Cluster 5 is the most successful profile, two small clusters, 1 and 3, shows that fundraising can be inefficient. With seven organizations, Cluster 1 suffers of the highest loss of the sample, on average -58% of total revenues. With seven organizations, Cluster 3 has negative Net Assets. This means that these

Table 2	Analysis	of variance	$\Delta NOV \Delta$
Table 2	AHAIVSIS	or variance	ANUVA

	Cluster		Error			
	Mean square	df	Mean square	df	F test	Significance test
Contributions/total revenues	152.541	4	0.039	95	3891.649	0.000
Program service revenues /total revenues	14.067	4	0.026	95	545.537	0.000
Investment income/total revenues	261.367	4	0.007	95	35643.908	0.000
Other revenues/total revenues	0.142	4	0.014	95	10.441	0.000
Program service expense /total expenses	0.022	4	0.012	95	1.815	0.132
Management and general expense/total expenses	0.002	4	0.009	95	0.191	0.942
Fundraising expense /total expenses	0.020	4	0.004	95	5.421	0.001
Gain or loss/total revenues	991.591	4	0.059	95	16874.402	0.000
Net assets/total assets	2.542	4	0.055	95	45.811	0.000

For the composition of clusters, see Appendix

organizations are, on average, highly indebted. Today, the USA ecomuseum is a miscellaneous universe of organizations with strong commitment and engagement with communities and this research shows that these organizations are mature fundraisers in order to support memories, traditions and environments. Marketing is not excluded but it is not the most gainful strategy.

5 Conclusion

In 2012, for the here investigated sample, contributions were more than 1.1 billion US dollars and 69.84 % of total revenues. Program service revenues were more than 330 million US dollars and 20.89 % of total revenues. The investment income was more than 115 million US dollars and 7.23 % of total revenues. The other revenue was modest in this sample. The program service expense was more than 997 million US dollars and 76.21 % of total expenses. The management and general expense was more than 189 million of US dollars and 14.48 % of total expenses. The fundraising expense was more than 120 million of US dollars and 9.31 % of total expenses. The net gain of the whole sample was more than 284 million US dollars and 17.88 % of total revenues.

The sample is, therefore, evidence of a miscellaneous USA strategic phenomenon. Marketing and fundraising are prevailing strategies next to investing and collecting of other revenues. The cluster analysis confirms trends that are not excluded for the contemporary USA performing, visual arts and the whole creative economy (Harris et al. 2013). Program service expenses and revenues are significant but the fundraising effort is the most successful, if it is considered that the Fundraiser profile is the most gainful and the most solvent.

Apart of separating features of the most meaningful clusters 5 *The Fundraiser* and 2 *The Marketing Expert*, the promotion effort of the sample is confirmed both in the offline and online marketing and fundraising. In regards to marketing & communication, ecomuseums in our cluster show a cultural heritage approach, able to promote values of the territorial brand as culture, knowledge, tradition, creativity, distinctive manufacturing and genius loci. In a nutshell, ecomuseums contribute to building territorial reputation.

Marketing and communication activities, as well as supporting reputation, are aimed to attracting different audiences, defining visitor experience, intensifying efforts to raise funds and volunteering. One of the limitations of this research is in the selection of the sample according to a core-business whose boundaries are vanishing. Ecomuseums are an *evolving species* whose features are continually changing and adapting. US 'ecomuseums' cannot be limited to one definition.

Appendix: Composition of Clusters

USA 'Ecomuseums'	Cluster		
Springs Preserve Foundation-Las Vegas	1		
Mann Agricultural Land Trust-Point Reyes Station	1		
Texas Folklife Resources-Austin			
Philadelphia Folklore Project-Philadelphia	1		
Folklore Village Farm-Dodgeville	1		
Japan Society-New York	1		
National Museum of American Jewish History-Philadelphia	1		
Star Sports Theatre Arts&Recreation-Culver City	2		
Lifeschool-Bodega	2		
Marine Discovery Center-New Smyrna Beach	2		
Blue Hill Observatory Science Center-Readville	2		
Center for Energy and Environment-Minneapolis	2		
National Outdoor Leadership School-Lander	2		
Green Mountain College-Poultney	2		
34th Street Partnership-New York	2		
Capital Crossroads Special Improvement-Columbus	2		
Sacramento Tree Foundation-Sacramento	2		
Our City Forest-San Jose	2		
Great River Greening-Saint Paul	2		
San Francisco Clean City Coalition-San Francisco	2		
Delaware Center for Horticulture-Wilmington	2		
PA Cleanways-Greensburg	2		
California Stormwater Quality ASS-Menlo Park	2		
Center for Southern Folklore-Memphis	2		
Folklore Society of Greater Washington-Frederick	2		
Living Traditions-New York	2		
Louisiana Folk Roots-Lafayette	2		
Lower East Tenement Museum-New York	2		
National Baseball Hall of Fame and Museum-Cooperstown	2		
Gospel Music Workshop of America-Detroit	2		
We Tell Stories-Santa Monica	2		
Council for Native Hawaiian Advancement-Kapolei	2		
High Desert Museum-Bend	2		
California Rodeo-Salinas	2		
National Wildlife Federation-Reston	3		
Railroad Park Foundation-Birmingham	3		
Webb County Heritage Foundation-Laredo	3		
New York Folklore Society-Schenectady	3		
Crocker Art Museum-Sacramento	3		
National Black Arts Festival-Atlanta	3		
The Epoch Times Association-South Plainfield	3		

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Outward Bound-Fishkill	4			
Whalehead Preservation Trust&Currituck Wildlife Museum-Corolla	5			
Connecticut Audubon Society-Fairfield	5			
Naples Botanical Garden-Naples	5			
O'neill Sea Odissey-San Jose	5			
Friends of The Virgin Islands National Park- St. John	5			
Governor Island Corporation-New York	5			
National Arbor Day Foundation-Lincoln	5			
Los Angeles Conservation Corps-Los Angeles	5			
Brooklyin Botanic Garden-Brooklyn	5			
Nature Conservancy-Arlington	5			
Chesapeake Bay Foundation-Annapolis	5			
San Francisco Parks Alliance-San Francisco	5			
Forest Park Forever-St Louis	5			
New York Restoration Project-New York	5			
Keep America Beautiful-Stamford	5			
Pittsburgh Parks Conservancy-Pittsburgh	5			
Keep Indianapolis Beautiful-Indianapolis	5			
Parkpride Atlanta-Atlanta	5			
Allegheny County Parks Foundation-Pittsburgh	5			
Hermann Park Conservancy-Houston				
Friends of Trees-Portland				
Heartlands Conservancy-Mascoutah	5			
Riverlife-Pittsburgh	5			
Friends of The Blue Ridge-Roanoke	5			
Friends of Westchester County Parks-Ardsley	5			
Taltree Arboretum And Gardens Found-Valparaiso	5			
Florida West Coast Resource Cons-Parrish	5			
Colorado Youth Corps Association-Denver	5			
Friends of The Mississippi River-St Paul	5			
Tree for Houston-Houston	5			
Greater Newark Conservancy-Newark	5			
Railtrails Council-Union Dale	5			
Riverside Park Conservancy-New York	5			
Andover Village Improvement Society-Andover	5			
Capital District Community Gardens-Troy	5			
Memorial Park Conservancy-Houston	5			
Keep Texas Beautiful-Austin	5			
Friends of Hudson River Park-New York	5			
American Folklore Society-Columbus				
Heritage Works-Detroit				
Arts Midwest-Minneapolis	5			
Montaclair Art Museum-Montclair	5			
North Carolina Folklife Institute-Durham	5			
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Mississippi Industrial Heritage Museum-Meridian				
National Czech&Slovak Museum&Library-Cedar Rapids				
Americas Society-New York				
National Italian America Foundation-Washington	5			
Alaska Native Heritage Center-Anchorage	5			
National Museum of Mexican Art-Chicago	5			
August Wilson Center for African American Culture-Pittsburgh				
Crow Canyon Archaeological Center-Cortez				
Santa Fe International Folk Art Market-Santa Fe				
Sealaska Heritage Institute-Juneau	5			
Mid Americas Arts Alliance-Kansas City				
Hispanic Society of America-New York				
Museum of The New South-Charlotte				
Nordic Heritage Museum Foundation-Seattle				
Asian Arts Initiative-Philadelphia	5			

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CLV Model Selection for Segmentation Perspective

Mohamed Ben Mzoughia and Mohamed Limam

Abstract The customer lifetime value (CLV) metric aims to predict the importance level of each customer, offering to companies the ability to group them into homogenous segments, to propose appropriate marketing actions and to optimize resource allocation. CLV is widely suggested as a new base to segment customers. The Pareto/NBD and the BG/NBD are the most relevant CLV models, assuming that the number of transactions performed by customers follows a Poisson distribution. The BG/GCP has the particularity to model the number of transactions using the Conway-Maxwell-Poisson (CMP) distribution which is a generalization of the Poisson distribution providing additional flexibility when modeling discrete data. In this paper we propose to compare segmentation performance of the BG/GCP compared to the Pareto/NBD and the BG/NBD models, and to select the most efficient one. This performance is evaluated using three different clustering methods namely K-means, Fuzzy C-means and EM Clustering. Using two simulated datasets, presenting respectively an over and an under dispersion from Poisson distribution, the empirical analysis shows that the BG/GCP model based on CMP flexibility offers the best segmentation performance.

Keywords Customer segmentation • Customer lifetime value • Conway–Maxwell–Poisson distribution

1 Introduction

Customer segmentation is a key approach providing managers the opportunity to better fit customer requirements and to optimize the company's marketing resources (Venkatesan and Kumar 2004; Kumar et al. 2006). Many researchers consider the CLV metricas an interesting approach to segment customers. The concept of CLV proposes to anticipate the future profitability of customer during each time period of his lifetime with the firm. For a successful CLV based

M.B. Mzoughia (⋈) • M. Limam LARODEC Laboratory, ISG, University of Tunis, Tunis, Tunisia e-mail: Mohamed.mzoughia@gmail.com; mohamed.limam@isg.rnu.tn segmentation, the major challenge is how to choose the adequate CLV model providing an adequate expectation of the customer behavior.

In the non-contractual context, in which customer defections are observed, the main challenge associated with the CLV measurement is the expectation of the customer number of transactions and lifetime. In this context, the most recognized models are the Pareto-NBD, (Schmittlein et al. 1987) and the BG/NBG (Fader et al. 2005) which assume that the number of transactions follows a Poisson distribution with heterogeneity in transaction rates across customers following a gamma distribution, giving us a Negative binomial distribution (NBD).

The use of Poisson distribution for modelling the number of transactions is the common assumption retained by several extensions or alternatives to the Pareto-NBD and the BG/NBG models. However, many real data violate the assumption related to the use of the Poisson distribution. To overcome this shortcoming, Mzoughia and Limam (2014) proposed an improvement to the BG-NBD model, named BG/GCP, by assuming that the number of transactions follows a Conway–Maxwell–Poisson (CMP) distribution, a generalized form of the Poisson distribution, offering additional flexibility when modelling a variety of over and underdispersions.

In this paper, we propose to evaluate the ability of the BG/GCP model to offer an enhanced segmentation performance compared to the Pareto/NBD and the BG/NBD models in the cases of over and under-dispersion using simulated data. Beyond the dispersion of data, the segmentation performance of the three models is conducted using three different clustering methods which are K-means, Fuzzy C-means and EM clustering algorithm.

The paper is organized as follows. In Sect. 2 we present an overview of CLV models. Section 3 deals with the research approach adopted to evaluate the segmentation performance of each model. An empirical analysis compares CLV models. Finally, we conclude with research perspectives in Sect. 5.

2 CLV Models

2.1 The Pareto/NBD and the BG/NBD Models

The Pareto/NBD and the BG/NBD models use three past measures to predict customer future activity which are the "cohort" T, the "frequency" x and the "recency" t_x .

The Pareto/NBD model is based on six assumptions:

- 1. Customers bring in two states: they are "alive" for some time and then become definitively inactive;
- 2. The number of transactions performed by customer follows a Poisson distribution with transaction rate λ ;

- 3. Heterogeneity in transaction rates across customers follows a gamma distribution with parameters r and α;
- 4. The customer lifetime τ is exponentially distributed with dropout rate μ ;
- 5. Heterogeneity in dropout rates across customers follows a gamma distribution with parameters s and β;
- 6. The parameters λ and μ are independent.

Assumptions 2 and 3 give the Pareto Distribution and assumptions 4 and 5 give the NBD model.

Model parameters are estimated by maximizing the likelihood function:

$$L = \frac{\Gamma(r+x)}{\Gamma(r)} \left\{ \frac{1}{(\alpha+T)^{r+x}(\beta+T)^s} + \left(\frac{s}{r+s+x}\right) A_0 \right\}$$
 (1)

where $A_0 = \frac{F(a,b,c,z(t_x))}{(\alpha+t)^{r+s+x}} - \frac{F(a,b,c,z(T))}{(\alpha+T)^{r+s+x}}$; a = r+x+s; b = s+1; c = r+x+s+1; $z(y) = \frac{\alpha-\beta}{\alpha+y}$ and F is the Gaussian hypergeometric function which is a power series of the form:

$$F(a,b,c,z) = \sum_{j=0}^{\infty} \frac{(a)_{j}(b)_{j}}{(c)_{j}} \frac{z^{j}}{j!}$$
 (2)

We estimate the conditional expectation of the number of transactions which will be made by a customer until the end of time period T + k as:

$$\hat{x}_{T+k} = x + \frac{\Gamma(\hat{r} + x)\hat{\alpha}^{\hat{r}}\hat{\beta}^{\hat{s}}}{\Gamma(\hat{r})(\hat{\alpha} + T)^{\hat{r} + x}(\hat{\beta} + T)^{\hat{s}}\hat{L}}$$

$$\times \frac{(\hat{r} + x)(\hat{\beta} + T)}{(\hat{\alpha} + T)(\hat{s} - 1)} \left[1 - \left(\frac{\hat{\beta} + T}{\hat{\beta} + T + k}\right)^{\hat{s} + 1} \right]$$
(3)

The Pareto/NBD is a very popular model, however, it present significant difficulties at its implementation associated to computational challenges related to parameters estimation. In this context, Fader et al. (2005) proposed an alternative of the Pareto/NBD model called BG/NBD (Fader et al. 2005). This model is based on the same assumptions as the Pareto/NBD model while modeling the number of transactions; even so, the BG/NBD model considers that the customer lifetime follows a Beta-Geometric distribution.

Model parameters are estimated by maximizing the likelihood function:

$$L(\lambda, p|t_1, t_2 \dots t_r, T) = p(1-p)^{x-1} \lambda^x e^{-\lambda T} + \delta_{r>0} p(1-p)^{x-1} \lambda^x e^{-\lambda t_r}$$
(4)

where $\delta_{x>0} = 1$ if x > 0 and 0 otherwise.

The expectation number of transactions is:

$$\hat{x}_{T+k} = \frac{a+b+x-1}{(a-1)\left(1+\delta_{x>0}\frac{a}{b+x-1}\left(\frac{\alpha+T}{\alpha+t_x}\right)^{r+x}\right)} \times \left[1-\left(\frac{a+T}{\alpha+T+k}\right)^{r+x} {}_{2}F_{1}\left(r+x,b+x;a+b+x-1;\frac{k}{\alpha+T+k}\right)\right].$$
 (5)

As the two models provide very similar outcomes in a wide variety of business (Jerath et al. 2011), the BG/NBD can be viewed as an attractive alternative to the Pareto/NBD.

2.2 The BG/GCP Model

The Pareto/NBD, BG/NBD and related models have in common the use of Poisson distribution to model number of transactions. However, this assumption is violated in many real data. The BG/GCP model, proposed by Mzoughia and Limam (2014), retains the same BG/NBD assumptions while modeling customer lifetime. However, it considers that the number of transactions follows a Conway–Maxwell–Poisson distribution, a generalized form of the Poisson distribution, offering additional flexibility when modellingdiscrete data.

Given by the probability mass function of the CMP distribution is:

$$P(X = x) = \frac{\lambda^x}{(x!)^v} \frac{1}{Z(\lambda, v)}, \text{ with } Z(\lambda, v) = \sum_{i=0}^{\infty} \frac{\lambda^i}{(j!)^v}$$
 (6)

As presented in Table 1, the BG/GCP model is an improved form of BG/NBD by modeling the number of transactions using Conway–Maxwell–Poisson distribution with heterogeneity in transaction rates across customers following a gamma distribution.

The likelihood function is represented as:

$$L(v,\alpha,r,a,b|T,t_x,x,\pi_x) = \int_0^\infty \int_0^1 \frac{\alpha^r}{\pi^v Z(\lambda,v)^T B(a,b) \Gamma(r)}$$
$$\left[\lambda^{x+r-1} e^{-\lambda \alpha} p^{a-1} (1-p)^{t_x+b-2} (Z(\lambda,v)+1-p)^{T-t_x}\right] dp d\lambda \tag{7}$$

Table 1 Models comparison

Model	Number of transaction	Lifetime
Pareto-NBD	NBD (Poisson-Gamma)	Pareto
BG-NBD	NBD (Poisson-Gamma)	Beta geometric
BG/GCP	CMP gamma	Beta geometric

Model parameters can be calculated using the maximum likelihood. The predicted number of purchases in the period (T, T+t] can be presented as:

$$E(X(t)|v,\alpha,r,a,b,x,T,t_{x},\pi_{x}) = \int_{0}^{\infty} \int_{0}^{1} \sum_{k=1}^{t} \overline{x}t(1-p)^{t} \frac{\lambda^{x}}{\pi_{x}^{v}Z(\lambda,\alpha)} (1-p)^{T-1}$$

$$\frac{p^{a-1}(1-p)^{b-1}}{B(a,b)} \frac{\alpha^{r}\lambda^{r-1}e^{-\lambda\alpha}}{\Gamma(r)} dp d\lambda$$
 (8)

Where
$$\overline{x} = \sum_{j=0}^{\infty} \frac{j\lambda^j}{(j!)^v Z(\lambda, v)}$$

Using estimated parameters and customer past purchase measures x, t_x , π_x and T, the individual number of purchases can be predicted for any future time period (T, T+t].

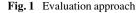
The BG/GCP model presents a high degree of accuracy compared to the Pareto/NBD and the BG/NBD models while predicting individual purchasing behavior (Mzoughia and Limam 2014). However, we propose in this work to evaluate the segmentation performance of the BG/GCP model compared to the Pareto/NBD, the BG/NBD models.

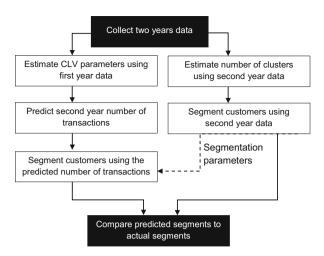
3 Evaluation Approach

In this section, we present the methodology used to compare CLV models for segmentation perspective. To do this, we propose to use two simulated datasets covering the cases where customer's number of transactions presents over-dispersion or under-dispersion of data to Poisson distribution.

As shown in Fig. 1, each dataset is divided into two periods (2 years in our case); the first time period is used both to estimate model parameters and to predict individual number of transactions corresponding to the next time period. The second time period is used to segment customers; we propose to choose the number of clusters by optimizing the Bayesian information criterion (BIC). This method has been applied successfully to the problem of determining the number of components in a model (Dasgupta and Raftery 1998) and for deciding which among two or more partitions most closely matches the data.

To show the independence of our analysis with respect to the segmentation method, we choose three segmentation techniques to create customer segments, which are K-means, Fuzzy C-means and Expectation maximization algorithm (EM Clustering). K-means clustering and Fuzzy-C Means Clustering are two partition-based methods and are very similar in approaches. The main difference is that, in Fuzzy-C Means clustering, each point has a probability of belonging to





each cluster, rather than completely belonging to just one cluster as it is the case in the traditional K-means. The third method is the EM clustering which is a probabilistic model-based. EM finds clusters by determining a mixture of Gaussians that fit a given data set. Each Gaussian has an associated mean and covariance matrix.

The second time period data is used for each clustering technique to identify segmentation parameters to be utilized to compare customers segments using predicted data to segments made within actual data.

Finally we compare the three predicted segments using the BG/GCP, the Pareto/NBD and the BG/NBD models to actual segments. The comparison is done using sensitivity, Precision, Recall and F-Measure statistics.

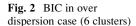
4 Empirical Analysis

We apply the BG/GCP, the Pareto/NBD and the BG/NBD models to predict the individual future number of transactions in two sets of simulated data. Each dataset is considered of 2000 customers making transactions during an observed time of 104 weeks. The first 52 weeks are used to estimate parameters and the next 52 weeks are used to evaluate segmentation performance of the three models.

The simulated data is generated as follows:

- The customer lifetime follows a Pareto distribution
- The weekly number of transactions follows a CMP distribution with parameters
 v and λ
- The CMP parameter λ follows a Gamma Distribution

The first simulated data set consider a v > 1 corresponding to an under dispersion of number of transactions from the Poisson distribution (scenario 1). The second



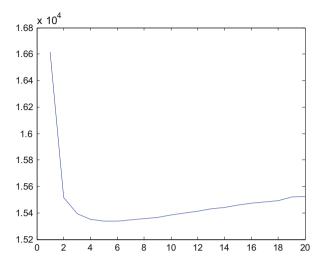
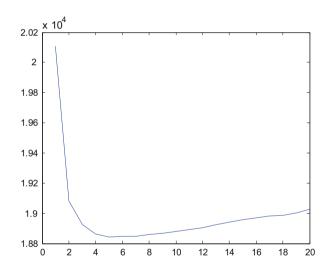


Fig. 3 BIC in over dispersion case (6 clusters)



simulated data set (scenario 2) presents an over dispersion from the Poisson distribution with v < 1.

Using the second year data, we measure the Bayesian information criterion to identify the optimal number of clusters. Figures 2 and 3 show the optimal number of clusters for each simulated datasets.

K-means, Fuzzy C-means and EM Clustering techniques are applied to the two datasets using second year real data. Resulted classes are defined on the basis of number of transactions performed in the second year. The same customers are also classed on the basis of the number of transactions predicted using the BG/GCP, the Pareto/NBD and the BG/NBD models. These classes are compared to actual classes using sensitivity, precision, recall and F-Measure statistics. The sensitivity metric

Style	Statistic	Measure	Pareto-NBD	BG-NBD
K-means	Sensitivity	0.45	0.52	0.94
	Precision	0.68	0.67	0.79
	Recall	0.45	0.52	0.94
	F-measure	0.54	0.59	0.86
Fuzzy C-means	Sensitivity	0.45	0.52	0.93
	Precision	0.67	0.67	0.80
	Recall	0.45	0.52	0.93
	F-measure	0.53	0.59	0.86
EM clustering	Sensitivity	0.43	0.49	0.96
	Precision	0.61	0.62	0.80
	Recall	0.43	0.49	0.96
	F-measure	0.51	0.55	0.87

Table 2 Segmentation performance of the three models (v < 1)

measures the proportions of customers which real segment are correctly identified using forecasted number of transactions. Table 2 show that in the case of over dispersion (v < 1), the BG/GCP model allows to identify correctly more than 93 % of customer's segments using the three clustering methods K-means, Fuzzy C-means and EM algorithm. The Pareto/NBD and the BG/NBD presents a sensitivity value smaller than 52 %. The BG/GCP model gives also a good precision and recall levels, about 80 % and 95 % respectively.

The precision statistic stand for the fraction of retrieved instances that are relevant, however the recall statistic is the fraction of retrieved instances that are retrieved. The challenged models give a precision and recall levels smaller than 70 % and 52 % respectively. F-measure statistic is the harmonic mean of precision and recall which "measures the effectiveness of retrieval with respect to a user who attaches times as much importance to recall as precision" (Van Rijsbergen 1979, p. 7). Always in the case of over dispersion (v < 1), the BG/GCP model gives towering value of F-measure greater than 0.86 compared to the Pareto/NBD and the BG/NBD models giving an F-measure less than 0.6.

Table 3 compare models in the case of under dispersion (v > 1). The BG/GCP and the BG/NBD models gives a high segmentation performance with an F-measure greater than 0.82. The Pareto/NBD model gives an F-measure lower than 0.7 within the three clustering techniques. This analysis shows the high segmentation performance of the BG/GCP model compared to competing models, particularly when the assumption of equidispersion that underlies the Poisson distribution is violated and data are over or under-dispersed.

Given the objectives of this research, this analysis confirms the ability of the BG/GCP model to provide enhanced segmentation performance, compared to the Pareto/NBD and BG/NBD regardless the segmentation method.

Style	Statistic	Measure	Pareto-NBD	BG-NBD
K-means	Sensitivity	0.65	0.91	0.91
	Precision	0.70	0.82	0.78
	Recall	0.65	0.91	0.91
	F-Measure	0.68	0.86	0.84
Fuzzy C-means	Sensitivity	0.64	0.91	0.91
	Precision	0.70	0.82	0.78
	Recall	0.64	0.91	0.91
	F-measure	0.67	0.86	0.84
EM clustering	Sensitivity	0.44	0.94	0.93
	Precision	0.58	0.82	0.73
	Recall	0.44	0.94	0.93
	F-measure	0.50	0.88	0.82

Table 3 Segmentation performance of the three models—(v > 1)

5 Conclusion

The customer lifetime value metric is a powerful segmentation feature offering to companies the ability to group customers corresponding to the future importance level and to optimize marketing efforts. The success of this segmentation is based on the choice of the appropriate model that predicts with accuracy the future number of transactions for each customer. Pareto/NBD and BG/NBD are the most prevalent CLV models which are based on the assumption that the number of transactions follows a Poisson distribution. However, this assumption presents some limits while modeling real discrete data. The BG/GCP is an improved CLV model based Conway–Maxwell–Poisson distribution providing more flexibility to forecast future customer transactions.

To evaluate the segmentation performance of the BG/GCP model, we compared customer segments generated using real data to those generated using predicted data through the Pareto/NBD, the BG/NBD and the BG/GCP models. The comparison is done using sensitivity, precision, recall and F-measure metrics. Three segmentation methods are used in the evaluations which are K-means, Fuzzy C-means and EM Clustering. To cover different cases, we used two simulated data sets presenting an over dispersion and under dispersion of number of transactions from the Poisson distribution.

The empirical analysis confirms the ability of the BG/GCP model to provide an enhanced segmentation performance using simulated data both on over or under-dispersion of data from Poisson distribution. This performance is verified using different clustering method such K-means, Fuzzy C-means and EM Clustering. Further investigation is needed to evaluate the performance of the BG/GCP model using other types of clustering algorithms as hierarchical method and spectral method.

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Sentiment Classification in Multiple Languages: Fifty Shades of Customer Opinions

Tomáš Kincl, Michal Novák, and Jiří Přibil

Abstract Sentiment analysis is a natural language processing task where the goal is to classify the sentiment polarity of the expressed opinions, although the aim to achieve the highest accuracy in sentiment classification for one particular language, does not truly reflect the needs of business. Sentiment analysis is often used by multinational companies operating on multiple markets. Such companies are interested in consumer opinions about their products and services in different countries (thus in different languages). However, most of the research in multi-language sentiment classification simply utilizes automated translation from minor languages to English (and then conducting sentiment analysis for English). This paper aims to contribute to the multi-language sentiment classification problem and proposes a language independent approach which could provide a good level of classification accuracy in multiple languages without using automated translations or language-dependent components (i.e. lexicons). The results indicate that the proposed approach could provide a high level of sentiment classification accuracy, even for multiple languages and without the language dependent components.

Keywords Sentiment analysis • Language-independent • Customer reviews • Opinion mining • Marketing

1 Introduction

Sentiment analysis or opinion mining seems to be a hot and recent topic related to the emergence of digital media and communication technologies although people have always listened to their relatives and people they respect (Anderson 1998; Goldenberg et al. 2001). Monitoring what customers think about companies and their products is a key marketing research task. Opinion surveys, measuring

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customers' preferences or media monitoring have become an integral part of corporate activities (Comcowich 2010).

However, media monitoring has changed rapidly with the emergence of new technologies. The content is digitalized and available online; linguistic and geographic barriers no longer exist. Moreover, the online environment is highly fragmented and new information resources are continuously emerging and vanishing. Almost anyone can become an influencer or opinion leader—many of today's most influential blogs (i.e. The Huffington Post, Techcrunch, Engadget, Mashable) began a few years ago as a personal website, quickly growing into widely recognized and respected media (Aldred et al. 2008). More than 80 % of US internet users have previously conducted online research about a product. More than 75 % of online-hooked customers admit that reviews significantly influence their purchase intentions and that they are willing to pay more for a product with better customer reviews (Horrigan 2008).

Recognizing sentiment and determining people's attitudes becomes a challenge in such a highly fragmented and chaotic environment. Nevertheless, computer-based processing and modelling allows for automated sentiment analysis (Liu 2012). The goal of sentiment analysis is to (automatically) identify and extract subjective information, generally to classify the polarity (usually positive or negative) of expressed opinion (Pang and Lee 2008). The analysis can be made of the document, sentence, or feature/aspect level and there are two major approaches to sentiment analysis (Zhang et al. 2011). The lexicon-based approaches usually utilize prepared dictionaries of sentiment words and phrases with associated orientations and strength (Taboada et al. 2011). The second group is based on (supervised) machine learning. Such methods usually require labeled training set to build the classifier (Pak and Paroubek 2010). However most experiments focus on major languages (English, but also Asian languages) while minor or morphologically rich languages are rarely addressed (Tsarfaty et al. 2010).

Only a few studies have addressed cross-domain or cross-language (sub)tasks, where the data comes from multiple thematic domains or various languages (Liu 2012). We believe that domain or language dependent models do not truly reflect the business needs. The companies will seldom use a specific tool or model for each market or country they operate in. The aim of this paper is to contribute to this field and develop a language-independent model for sentiment classification, which would provide a good performance (classifier accuracy) among multiple languages. Such a task might be approached as a domain adaptation problem (Cambria et al. 2013). Even though it is widely accepted that a classifier trained on the set from one domain often performs poorly on data from another domain (Liu 2012), there are studies suggesting that a simple "all-in-one" classifier outperforms models utilizing training sets solely from a single domain (Mansour et al. 2013). Our suggested approach analyzes a model trained on a multiple-language set.

2 Methodology

The dataset contains reader reviews retrieved from Amazon websites in July 2014. All reviews related to the 2012 bestselling book, Fifty Shades of Grey by E.L. James (all versions—hardcover, paperback, kindle edition or audio version—included) were downloaded. The dataset contains readers' comments in three languages—English (amazon.co.uk; 7255 reviews at the time of data retrieval), German (amazon.de; 4154 reviews at the time of data retrieval) and French (amazon.fr; 1258 reviews at the time of data retrieval). Each review has been saved as a single text file. An example of such reader review is on the Fig. 1.

The number of stars assigned by the reader has also been saved to provide training data for the model. The 1- and 2-star reviews were considered as negative; the 4- and 5-star reviews as positive. The 3-star reviews were regarded as neutral and thus omitted from the training set. The length of reviews obtained varies from several words (~3) up to highly comprehensive and detailed reviews (almost 1500 words).

RapidMiner software (http://rapid-i.com/) was used for the analysis and the preprocessing procedure included case transformation (all lowercase), tokenization (splitting the document into a sequence of tokens—words) and generating character n-grams. The difference between word and character n-grams is depicted by the following example (for n = 3). The sequence "to be or not to be" is represented as the following word 3-g: to be or, be or not, or not to, not to be. Similarly for character 3-g: to_, o_b, _be, be_, e_o, _or, or_, r_n, _no, not, ot_, t_t, _to, to_, o_b, _be (spaces are visualized as underlines). Such representation offers several advantages over the word based n-grams.

3 of 3 people found the following review helpful

★★★☆ A pleasant surprise...not the best writing around but interesting characters and a good story

Even if you've not yet read Fifty Shades of Grey, I'd guess that you already know a few things about it. You might know that it's the fastest selling paperback, ever. You probably know that it has spectacularly divided opinion (the Amazon reviews are fairly evenly split between one-star and five-star, with very little in between). And you almost certainly know that it...

Read the full review >

Published 11 months ago by StephanielsReading

> See more 5 star, 4 star reviews

6,259 of 6,524 people found the following review helpful

☆☆☆☆ Oh My! What a pile of discarded panties

Oh My, I mean really, Oh my, oh my, oh my.....No readers, I have not just been whipped (pardon the pun) into a bosom heaving wreck by the size of my partner's "impressive length". I have in fact, just dragged myself through to the final page of this ludicrous nonsense and found myself almost speechless. Almost...

The main character, Christian Grey, is quite... Read the full review >

Published on 24 Jun 2012 by Lazycatfish

> See more 3 star, 2 star, 1 star reviews

Fig. 1 An example of positive and negative reader review at Amazon.co.uk. *Source*: http://www.amazon.co.uk/product-reviews/B007L3BMGA/

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Social network posts and comments often contain informal expressions, typos, errors, emoticons or other unknown or hardly recognizable terms (Ptaszynski et al. 2011). Existing Natural Language Processing (NLP) frameworks often struggle to address such phenomena, which is a problem for lexicon-based sentiment analysis approaches (Ritter et al. 2011). As a result, the model employs generating character n-grams which has previously been proven to be effective for various NLP tasks, i.e. spam filtering (Kanaris et al. 2007) or authorship attribution (Escalante et al. 2011) The word-based models in sentiment analysis often suffer from disadvantages such as word identification (especially for Asian languages) or require specific and language-dependent knowledge. However, there is only limited evidence regarding the use of character n-grams even though some research has suggested that character n-grams could reach state of the art or even better performance (Peng et al. 2003) and could be easier to implement (Blamey et al. 2012). This has also been confirmed for some sentiment analysis experiments (Rybina 2012; Raaijmakers and Kraaij 2008) although other results offer more mixed findings (Ye et al. 2009). Since the sentiment analysis in multiple languages can't rely on language-dependent components, our model suggests character n-grams for feature selection. The features weighting scheme utilizes tf-idf weighting, which can provide a significant increase in classification accuracy (Maas et al. 2011).

The model utilizes the Support Vector Machines (SVM) classifier (Cortes and Vapnik 1995) which is (along with Naïve Bayes and Maximum Entropy) the most frequently used within supervised learning models for sentiment analysis (Liu 2012). An SVM classifier constructs a hyperplane (or a set of hyperplanes), which separates examples (represented as points in a space) of different categories by a maximized gap (Chang and Lin 2011). Moreover, the character n-gram feature selection together with SVM has previously provided good results (Aisopos et al. 2012). To evaluate the model performance, the 10-fold cross-validation has been applied. First, the model was built for each language separately. Then a multiple-languages model was created with the subsequent comparison of the performance of the models (Fig. 2).

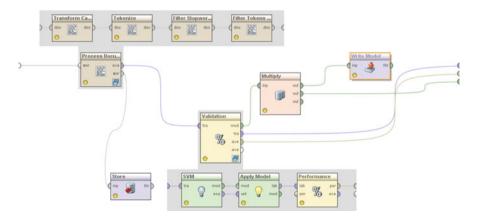


Fig. 2 A classification model in rapidminer software

The multi-lingual sentiment analysis task can be approached as a domain adaptation problem (Cambria et al. 2013). Aue and Gamon (2005) suggest four different approaches to overcome a domain-specificity problem. The suggested model in this paper utilizes training on a mixture of labeled data from all domains (languages) since such data was available.

3 Results

From each language, 200 positive (100 4-star and 100 5-star) and 200 negative (100 1-star and 100 2-star) reviews were randomly selected as a training set. It was first though that the number of downloaded reviews could be selected as further examples for a training set, however the number of 1- and 2- star French reviews were slightly over 100. The size of the training sets was therefore limited to allow a comparison of the model performance for different languages.

For the English language, the model reached an accuracy of 83.50 %, precision: 84.17 % and recall 84.00 %. Some studies have shown better performance previously for English language (Liu 2012), however they often utilized a language-dependent component (i.e. sentiment lexicons) and used a much larger training set, which also influences the performance (Brooke et al. 2009). The performance of the model for the English language is depicted in Table 1.

For the German language, the model performed very similarly. The accuracy was 83.50 %, precision 85.26 % and recall 82.50 %. The performance of the model is summarized in Table 2.

For the French language the model reached an accuracy of 84.75 %, precision 84.36 % and recall 86.00 %. The performance of the model is depicted in Table 3.

Table 1 Performance of the classifier for the English language (10-fold cross-validation)

	True neg	True pos	Class precision (%)
Pred. neg	166	32	83.84
Pred. pos	34	168	83.17
Class recall	83.00 %	84.00 %	

Table 2 Performance of the classifier for the German language (10-fold cross-validation)

	True neg	True pos	Class precision (%)
Pred. neg	169	35	82.84
Pred. pos	31	165	84.18
Class recall	84.50 %	82.50 %	

Table 3 Performance of the classifier for the French language (10-fold cross-validation)

	True neg	True pos	Class precision (%)
Pred. neg	167	28	85.64
Pred. pos	33	172	83.90
Class recall	83.50 %	86.00 %	

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Table 4 Performance of the classifier for multiple languages (10-fold cross-validation)

	True neg	True pos	Class precision (%)
Pred. neg	515	91	84.98
Pred. pos	85	509	85.69
Class recall	85.83 %	84.83 %	

3.1 Results for All-in-One Multilingual Model

For the multilingual model, the same randomly selected comments from each language have been used as a training set. Therefore, the training set consists of 600 positive (100 4- and 100 5-star reviews from each of the three languages) and 600 negative (100 1- and 100 2-star comments from each of the three languages) reviews. The classifier accuracy reached 85.33 %, precision 86.01 % and recall 84.83 %. The performance of the model is summarized in Table 4.

Even though the classifier was trained on mixed data, the performance has slightly improved (by 1.83% in case of English and German data and by 0.58% for French language). This supports the theory that multilingual feature spaces could be outperforming models trained solely on individual languages (Banea et al. 2010).

4 Conclusion and Discussion

The results indicate that there might be an alternative to common approaches addressing the cross-language sentiment classification issue. Such common approaches often utilize language-dependent components (Liu 2012), i.e. sentiment lexicons or automated translators and thus are dependent on the quality of such resources. This provides a good level of classifier performance for major languages (i.e. Spanish, French or German), however not many studies have addressed sentiment analysis for morphologically rich or minor languages i.e. Arabian, Hebrew or Czech (Tsarfaty et al. 2010; Habernal et al. 2013).

The suggested model based on multilingual labeled data from three Amazon local websites (UK—English, German and French) outperforms the models that utilize the training set only from a single language. Such a conclusion is supported by previous experiments in related fields—i.e. Mansour et al. (2013) addresses a domain adaptation issue and suggests a simple "all-in-one" classifier (utilizing all available training data) that outperforms traditional approaches.

The classifier performance improved for English and German by 1.83 % and for the French language by 0.58 %. The model benefits from the fact that many languages share a significant amount of similar (or identical) words with the same (or close) meaning. A comprehensive list of such words can be found in Anon (n.d. a) for English and German languages or in Anon (n.d.b) for English and French languages. There are even more words from various languages where the spelling is only partially identical—this is where the character n-grams come into play. An

identical character n-gram from a similar word (but from different languages) with the same sentiment polarity improves the classifiers performance, since the model has more supportive data to distinguish between cases. Moreover, Anglicisms have intensively proliferated into a wide variety of languages with the extensive use of digital media and social networks in recent years (Berns et al. 2007).

Even though the results are promising, they must be considered carefully. Further studies including more languages and more domains should be conducted. Regardless of this, the authors have conducted several experiments using a similar model addressing the cross-domain sentiment classification task with similarly promising results.

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Formal Marketing Planning and Performance: The Case of Transitional Economy

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Abstract This analysis aims to identify the weaknesses in the marketing planning process in companies in a transitional economy and, confirm the connection between continuous formal marketing planning and business performance (profitability and market orientation). Data was obtained with primary and secondary research. The research explored the food, i.e. confectionery industry (38 % of the registered companies), with the techniques of survey and interview. The descriptive statistics shows that the companies have multiple weaknesses in the marketing planning process: continuous formal marketing planning occurs rarely, there is lack of knowledge about the systematic planning process and a tendency of misuse of analytical tools. The deductive statistics demonstrates a direct connection and dependence of profitability and market orientation degree on implementation of continuous formal marketing planning. Limitations arise from the sample size and the (one) chosen industry sector. Nonetheless, there are some practical and social implications: correction of current practices and change in the views about the effects of the marketing planning process. The value on a national level derives from the fact that it is one of few papers that analyzes this subject through primary data. The results can also be consulted by researchers and practitioners from other transitional economies.

Keywords Marketing planning • Business performance • Transitional economy

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1 Introduction

Marketing planning as well as marketing in general, means different things to different companies. Overall, strategic planning is actually a "managerial process of developing and maintaining a strategic relationship between the company and the changing market opportunities" (Paley 2007, p. 17). Elevated on the level of corporate planning, marketing planning can be defined as "the process of formulating long-term plans for effective management of opportunities and constraints of the environment, in light of the strengths and weaknesses of the business enterprise" (Kuratko and Hodgetts 2001, p. 468). Formal marketing planning is "a written statement of marketing objectives of the company, including statements about the products, expected sales, profits and markets, promotional and advertising strategies, pricing policy, distribution channels etc. with precise specification of timelines, and individual responsibilities" (South West Arts Marketing 2002, p. 7). The marketing plan is conceptually very simple and involves a series of logical sequential steps: situational analysis, setting basic assumptions, defining objectives and ways to achieve goals, estimating costs and scheduling for implementation of activities (McDonald 1992).

Regardless of the accepted definition, the planning process should create a clear picture of the business and its opportunities and should be a primary feature of a company that expects success on the market (Hulbert et al. 1980). The marketing plan, even if it is not perfect, helps in creation of corporate culture based on marketing and market orientation, by encouraging cooperation, and commitment to objectives (Blythe and Megicks 2010).

Research about the effectiveness of formal marketing planning within the enterprise, systematize its importance in several key effects (McDonald and Wilson 2011, p. 33): Systematic identification of opportunities and threats; willingness to intercept the changes; specification of sustainable competitive advantage; improved communication and reduction of conflict; involvement of all levels of Management in the planning process; more appropriate allocation of limited resources; consistency of approach to the work throughout the enterprise; higher degree of market orientation of the company. In general it can be said that the planning process should provide description of the intention, core values and standards of behavior, identification of market opportunities, evaluation of alternative strategic directions, selection of target markets, and development of the marketing mix model that significantly differs from competitors' model.

Research shows that as a result of the changes, transition economies (halfway between centrally planned and market economy) are characterized by low economic development, low income, first—generation managers, companies challenged to develop strategies for the first time etc. In fact, companies often start with small capital and scarce financial resources, with little or no managerial experience, oriented toward short-term financial results, with limited number of business operations, and a tendency for small investments (Zurawicki and Becker 1994).

Some of the most common problems faced by Macedonian companies are (Agency for Promotion of Entrepreneurship of the Republic of Macedonia 2005): low quality of products versus consumer demands, lack of certification for international quality standards and standardization of production processes, lack of information about business possibilities on the markets. Most of these factors are actually typical marketing activities, such as market research, market positioning, introduction of new products, competition, etc., which are also a part of the marketing planning process. Few additional facts about the economy of the Republic of Macedonia undeniably prove the need for further development and improvement in the competitiveness of the business sector (Ministry of Economy of the Republic of Macedonia 2009): the industry is positioned mainly towards traditional markets through export of metals, food and beverages; the price is the primary driver of competitiveness; the change from competition based on price to competition based on quality is very slow. The general picture of the business sector in this transitional economy shows a tenuous situation of companies that are subservient to foreign competition, with undeveloped business and marketing strategies, struggling to survive.

2 Literature Review

Numerous studies analyze the need and impact of formal marketing planning. Namely, studies show that it is very difficult for managers to maintain a high level of knowledge about the industry and business conditions and to implement control in case of implementation of informal marketing planning (McDonald 1982; Farhangmehr 2004). Significant relationship between formal planning and business success and survival of the companies has been found (Kraus and Kauranen 2009). Also, studies show that a formal written plan significantly contributes to higher gross profit and sales growth (Mazzarol 2001). The commercial success of the company/product is also influenced by the application of formal marketing planning (McDonald 2006).

In fact, there is extensive literature on the positive relationship between management, marketing planning and environment, on the one hand, and marketing planning, business performance and competitiveness on the other (Buckley et al. 1988). Marketing planning is recognized as one of the crucial activities that create a strong base for growth, development and survival of the companies. However, many researchers have identified a gap in the application of formal marketing planning in practice, and have concluded that its use in reality is relatively low. Some authors suggest that the likelihood to use formal planning increases with the size of the company and the turbulence of the business environment, as well as with the complexity of production, financial and marketing processes (Falshaw et al. 2006). In the context of entrepreneurial business, it is shown that the personality characteristics of the manager/owner have a major impact on the degree of marketing planning formalization and product innovation

(Olson and Bokor 1995; Gelderen et al. 2000). Studies have found that the use of marketing planning is in fact very limited (70 % of the entrepreneurial companies do not implement formal marketing planning) (Farhangmehr 2004). Moreover, studies reveal that even in organizations that claim to apply strategic or marketing planning, the actual implementation of the process is on a low level (Smith 2003, p. 292): there is limited use of formal methods of planning, portfolio and life cycle analysis and perceptual mapping are rarely used, SWOT analysis in the only frequently used tool. These findings of limited implementation of marketing planning are confirmed by other studies, which have also analyzed some of the causes of this situation. Namely, it was established that the absence of long-term planning is due to (Orpen 1985): poorly defined goals, lack of time, inexperienced managers, inability to coordinate the planning, lack of participation of subordinates, inability to provide accurate data, etc.

Transition to a market economy increases the pressure on companies in terms of how to respond to the challenges that arise from the process: high degree of rivalry among competitors, numerous opportunities for substitution, more sophisticated and informed consumers who have raised their expectations in terms of higher quality and lower prices. Some research on marketing in transition economies have pointed to the lack of developed institutions, skills and knowledge as factors that obstruct the process of development of effective business operations (Ferguson 1992). In transition economies, some of the key marketing challenges are identified as following (Zurawicki and Becker 1994): low public confidence in the integrity and efficiency of managers; lack of databases and representative research; gaps in the basic knowledge of management and marketing; inability to develop long-term strategies; absence of specific strategies for domestic markets; low entrepreneurial activities.

Overall, studies show relatively low levels of use of marketing planning, as a result of numerous factors of a different nature. However, most of the research related to marketing and marketing planning are devoted to analysis of the practices of companies in developed economies, which creates the need for more research on this subject in transitional economies.

3 Hypotheses

This study intends to extend the literature on the marketing activities in companies in a transitional economy by analyzing the current practices and opinions in regards with marketing, especially the marketing planning process. This perspective could further be of use in explaining the reasons of failure that are not an effect of the external factors of influence. It is hoped that such an angle could have an impact in changing the viewpoint of the managers in the companies that operate in a transitional economy. Therefore, the paper presents several hypotheses to frame the empirical research:

- The owners/managers of the companies in transitional economies have little know-how in marketing even after more than 20 years of the beginning of privatization.
- Business performance of the companies poor and keeps them in a continuous stage of survival.
- Companies do not invest in people with satisfactory marketing management knowledge.
- Due to the weaknesses in the managerial know-how, the marketing planning process in the companies is inadequate and unsystematic.
- Companies by size differ in the implementation of various marketing activities, where large and medium—sized companies are in a better position than small companies.
- Formal marketing planning is rarely implemented in continuity over a longer period of time.
- Continuous implementation of formal marketing planning (written plan) affects and determinates the outcome of business performance, i.e. the gather the continuity in implementation of a written plan, the better the profitability and higher the market orientation level.

4 Methodology

The methodology involved both quantitative and qualitative research methods. Secondary data derived from books, journals and academic articles. Primary data was collected with the techniques of structured questionnaires about managers' attitudes and current practices of marketing planning and a follow-up, semi-structured interview with the managers. The analysis is based on parametric statistics and responses were measured on a nominal and interval scale. The statistical sample included 38 % (19) of the registered companies in the confectionery industry in Macedonia. Data was analyzed with IBM SPSS19. The conclusions are given on the base of descriptive and deductive statistics.

Business performance, i.e. profitability and market orientation degree were measured on a subjective scale. The subjective scales are taken as a measure due to: (1) managers' avoidance to provide accurate data that reflect their business performance, and (2) high level of convergence between subjective and objective scales for measuring business performance as reported by Dawes (1999). The profitability of the companies was measured on 11—point subjective scale (from 0—extremely poor, to 10—absolutely outstanding). The market orientation/MO degree of the companies was measured on 5—point Likert scale on four key elements used by Narver and Slater (1990) and Kohli et al. (1993): consumer orientation (consumer analysis/CA and response to consumer needs/RCN), competitor orientation/CO and internal information sharing/IIS. The values are calculated as an average for every MO activity.

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The focus of the analysis is the confectionery industry for several reasons (Economic Chamber of Macedonia 2013): it is an important part of the food industry with positive impact on the external trading balance of the country; the value of exports of finished confectionery products is almost 10 % the value of total exports of food products; it employs a significant part of the workforce in the state and, is a major consumer of the domestic packaging industry and transportation services.

Furthermore, this industry it is a part of a fragmented market for consumer goods, with high rivalry among competitors influenced by the high possibility of new entrants, large number of substitute products, high bargaining power on the side of suppliers and consumers. Lieders on the market are foreign companies with strong brands and higher prices of products as compared to the domestic companies and their followers and imitators strategic positions and low—priced, low quality products. This is a market where the possibility to create a sustainable competitive advantage and better competitive positioning is directly influenced by a proactive approach to strategic planning in general and, marketing—management activities in particular (Jovanov Marjanova 2012).

Based on the literature review and, in order to provide sufficient knowledge about current marketing practices in companies in a transitional economy, this paper examines the marketing planning process and the benefits of its use on business performance in entrepreneurial companies form the confectionery industry in Republic of Macedonia. The main goal is to alter the state of mind of the owners and managers of the companies in a way that will lead to better understanding of the marketing concept and thus, increase the implementation of marketing activities and consequently improve business performance.

5 Findings and Discussion

5.1 Current Marketing Planning Practices in Macedonian Companies

The study included companies of different sizes in the sample influenced by the fact that marketing planning should not be conditioned primarily by the size of the company, but the industry and the environment in which it works. Size is defined primarily by number of employees (1–9 micro, 10–49—small, 50–250 medium, above 250—large) according to the definition provided by the Ministry of Justice of Republic of Macedonia (2004, article 470). Descriptive statistics shows that the statistical sample consist of nearly equal representation of small (31.6 %), medium (36.8 %) and large (31.6 %) companies (Table 1).

Form Table 2 it can be seen that the financial situation (profitability) of companies is rather poor, with most of the companies reporting profits that are poor to

Size		Frequency	Percentage
Valid	Small	6	31.6
	Medium	7	36.8
	Large	6	31.6
	Total	19	100.0

Table 1 Companies by size

Table 2 Descriptive statistics of companies' profitability

Profitabilit	у _.	Frequency	Percentage	Cumulative percentage
Valid	Poor	3	15.8	15.8
	Moderately poor	5	26.3	42.1
	Moderately good	6	31.6	73.7
	Very good	3	15.8	89.5
	Extremely good	2	10.5	100.0
	Total	19	100.0	

moderately poor (42.1 % cumulatively), which is currently sufficient for survival, but not for significant necessary reinvestment for further growth and development.

As shown in Table 3, the research has revealed that companies have on average medium level of market orientation (3.8), mostly due to the higher levels shown by large companies (average of 4.2). Small companies have reported on average lower level of market orientation (2.6).

The study also analyses the type of marketing planning that is commonly used in the strategic planning in the companies. As shown in Table 4, the findings emphasize that:

- Informal marketing planning is often used by 31.6 % of the companies, by 15.8 % use it always, sometimes or rarely, and 21 % never perform informal marketing planning;
- In terms of behavioral marketing planning, 26.3 % of the companies use it sometimes, 47.4 %—often, 15.8 %—always, and by 10.5 %—rarely or never;
- A formal marketing plan is never, i.e. rarely executed by 47.4 % of the companies, only 26.3 % use it sometimes, 21.1 % of the surveyed companies implement it frequently, and only 5.3 % use formal marketing planning always.

In regards to how often do companies maintain continuity on a year to year basis in the process of planning, the research indicates that 26% of the interviewed managers occasionally and 26% of them rarely maintain continuity in the preparation of a written marketing plan, while 15.8 % never preserve this continuity in the process (Table 5.)

Some of the main reasons for absence of implementation of formal marketing planning are found to be: lack of time (half of the managers/owners who rarely or never use formal planning completely agree and 30 % of them agree); lack of qualified staff (50 % of them agree and 30 % totally agree); the belief that planning is possible without a written plan (50 % agree and 10 % totally agree); doubt in the

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Table 3 Market orientation degree of SME's

Companies size	Degree of market orientation activities (min– max)	Degree of market orientation activities (average values in absolute numbers)	Market orientation degree—MO (min-max)	Market orientation degree—MO (average value in absolute number)
Micro and small (cumulative)	2.17 \leq consumer analysis (CA) \geq 3 2.5 \leq reaction to consumer needs (RCN) \geq 3.75 2.5 \leq competitor orientation (CO) \geq 3.75 2.33 \leq internal information sharing (IIS) \geq 5	CA—2.7 RCN—3 CO—3.04 IIS—3.39	2.5 ≤ MO ≥ 2.77	MO—3
Medium	$ \begin{vmatrix} 3 \le CA \ge 5 \\ 3.25 \le RCN \ge 4.25 \\ 2.75 \le CO \ge 5 \\ 3 \le IIS \ge 5 \end{vmatrix} $	CA—4.07 RCN—4.25 CO—4.28 IIS—4.24	3.21 ≤ MO ≥ 5	MO—4.2
Large	$ \begin{array}{ c c } \hline 2.17 \le CA \ge 5 \\ 3.25 \le RCN \ge 5 \\ 2.25 \le CO \ge 5 \\ 2.33 \le IIS \ge 5 \\ \hline \end{array} $	CA—4 RCN—4.38 CO—4.29 IIS—4.28	2.50 ≤ MO ≥ 5	MO—4.2

Note: Values are calculated as an average for every MO activity, by number of companies. Example: $CA_{micro\ and\ small}$ 2.7 = (2.17 + 2.33 + 2.33 + 2.5 + 3 + 4)/6; CA_{medium} 4.07 = (3 + 3*3.83 + 4 + 2*5)/7 etc

Table 4 Types of marketing planning

Informal marketing planning		Behavioristic mark	eting planning	Formal marketing planning	
Percentage		Percentage		Percentage	
Never	21.1	Never	5.3	Never	21.1
Rarely	15.8	Rarely	5.3	Rarely	26.3
Sometimes	15.8	Sometimes	26.3	Sometimes	26.3
Often	31.6	Often	47.4	Often	21.1
Always	15.8	Always	15.8	Always	5.3
Total	100.0	Total	100.0	Total	100.0

effects of marketing planning on business performance (70 % are not certain if they trust in its results, and 10 % do not believe in the positive effects).

From Table 6, it can be seen that in terms of the elements that companies include in the preparation of the plan, corporate philosophy statement and values statements are rarely, i.e. never included in the plan (73.7 % never include philosophy statement and 68.4 % never include values statement). In addition, corporate vision and mission statements are rarely defined (only by 26.4 % create it often or always,

	Continuo	us preparation of	of a written marketin	g plan	
	Never	Rarely	Occasionally	Frequently	Always
	1	0	0	0	0
	1	0	0	0	0
	1	5	4	0	0
	0	0	1	4	2
Total	3	5	5	4	2
Percentage	15.8	26.3	26.3	21.1	10.5

Table 5 Frequency in the continuous preparation of a written marketing plan

and 15.8 %—sometimes); less than half of the companies (47.4 %) perform situational analysis often, but not always; only 5.3 % always define the target segment of consumers, and merely 36.8 % of them perform this action often. Also, marketing strategy is created by 31.6 %—often and only by 10.5 %—always; marketing tactic are created by 26.3 %—often and only by 5.3 %—always; marketing control is included only by 10.5 % often and/or always.

Apropos the situational analysis and, the elements that should be involved in a situational analysis, the study suggest that in general, the companies in the process of strategy creation, do not analyze most of the elements always, but rather often or sometimes. That is (Jovanov Marjanova et al. 2014): analysis of market trends is sometimes done by 21.1 % of the companies, often by 42.1 %, and always only by 10.5 % of the companies; analysis of consumers is rarely performed by 26.3 % of the respondents, by 15.8 %—sometimes and by 31.6 %—often; analysis of competition is sometimes and often executed by 21.1 % of the companies, and by solely 36.8 %—always; analysis of macro—environment is rarely conducted by 42.1 % of the companies, by 26.3 %—sometimes and, by 10.5 %—often; analysis of internal factors is rarely performed by 15.8 %, sometimes by 31.6 % and, only 15.8 % often analyze the internal factors of influence.

In addition, in relation to the models of a situational analysis, the obtained data reveal that SWOT is the most common analytical tool (it is practiced sometimes by 31.6 %, often and always by 15.8 %), while other available tools are rarely used or generally unknown (5M analysis is never used by 31.6 % and, sometimes by 15.8 % of the companies, PEST analysis is often and sometimes used by 5.3 %, rarely by 31.6 % and, never use it more than half of the surveyed companies—57.9 %, Porter's five forces model is rarely used by 26.3 %, and 73.7 % of the respondents never use it as an analytical tool).

Moreover, most of the analyzed companies (50 % of large, 57 % of medium and 33.3 % of the small companies) include marketing control as an element of the written plan only occasionally. The absence of systematic control mechanism points toward a possible risk of inability to take corrective measures in the process of execution of the plan.

The study tends to point out to existing differences in the marketing activities in companies by size. Beginning with profitability and market orientation level, ending with the continuity and implementation of the marketing planning process,

Table 6 Usage of elements in the process of formal marketing planning

)	•)					
			Vision and mission	Situational	Goals and		Marketing	Marketing	
Percentage	Philosophy	Values		analysis	objectives	Segmentation			Control
No answer	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8
Never	73.7	68.4	26.3	10.5	5.3	10.5	15.8		5.3
Rarely	10.5	15.8	15.8	0	0	5.3	0		10.5
Sometimes	0	0	15.8	26.3	0	26.3	26.3		47.4
Often	0	0	21.1	42.1	36.8	36.8	31.6		10.5
Always	0	0	5.3	5.3	42.1	5.3	10.5		10.5
Total	100	100	100	100	100	100	100	100	100

Correlation		Owner	Marketing department employees
Continuous preparation of a written marketing plan	Pearson correlation	-0.513*	0.834**
	Significance (1-tailed)	0.025	0.000
	N	19	19

Table 7 Correlation: People involved and continuity of the planning process

Source: Jovanov Marjanova et al. (2014)

large companies show better results and know-how, followed by medium—sized companies. The small companies are the ones that show most weaknesses in the planning process. Some of the reasons of the differences between companies by size can be explained in terms of people involved in the process of marketing planning (Jovanov Marjanova et al. 2014). Namely, in all of the analyzed small companies the owner is always included in the process and, in 50 % of them, sometimes, the process involves a team of employees. On the other hand, in medium-sized companies the planning is performed within the marketing department or by team of employees who are assigned for the task (by 43 %). In most of the large companies (67 %) the marketing planning process is implemented within the marketing department. Correspondingly, the analysis indicated that the involvement of the owner in the planning process is in a significant negative relationship with the continuity of the preparation of a written plan and, when the process is conducted by employees of the marketing department, there is a significant positive correlation with the continuity in the preparation of a written marketing plan (Table 7).

Further research may be needed to explain these differences in the process in companies by size in a more detailed way, so other factors of influence can be identified and taken into account in the strategy creation process.

5.2 Connection and Impact of Continuous Formal Marketing Planning on Business Performance

Deductive statistics was implemented to test the relationship between profitability and market orientation as business performance measures (dependent variables) and, continuous formal marketing planning i.e. actual preparation of a written marketing plan (independent variable).

The reliability of the scale is confirmed by the high level of the coefficient Cronbach Alpha— $\alpha = 0.902$ (Table 8) for all of the variables used to define the marketing planning process, which enables repeated future testing (George and Mallery 2003; Gliem and Gliem 2003).

^{*}Correlation is significant on 0.05 level (1-tailed)

^{**}Correlation is significant on 0.01 level (1-tailed)

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Table 8 Testing the scale reliability

Reliability/variables in the questionnaire explaining	the marketing planning process
Cronbach's alpha	Number of variables
0.902	52

Table 9 Correlations: Business performance and continuous preparation of a written marketing plan

Correlations		
		Continuous preparation of a written marketing plan
Profitability	Pearson Correlation	0.649**
	Sig. (1-tailed)	0.001
	N	19
Market orientation	Pearson Correlation	0.645***
	Sig. (1-tailed)	0.001
	N	19

^{*}Correlation is significant at the 0.05 level (1-tailed)

Table 10 Impact of continuous preparation of a written marketing plan on profitability (regression estimates)

	Unstand Coeffici	lardized ents	Standardized Coefficients			95.0 % Confider Interval	
		Std.				Lower	Upper
	В	Error	Beta	t	Sig.	bound	bound
(Constant)	2.653	0.923		2.876	0.010	0.707	4.600
Continuous preparation of a written mar-	1.048	0.298	0.649*	3.516	0.003	0.419	1.677
keting plan							

Notes: R^2 : 0.421, Adjusted R^2 : 0.387, F = 12.359, Sig. F = 0.003, N = 19

The correlation analysis shows a direct positive relationship between the continuous preparation of a written marketing plan and business performance, specifically profitability and market orientation level (Table 9).

Following the proven connection of the phenomena, the dependence of business performance measures (dependent variables) of the continuous preparation of a written marketing plan (independent variable) was tested. Thereby, as shown in Table 10, according to the decision-making rule: $t > t_{df:\alpha}$ (Newbold et al. 2007), the simple linear regression analysis confirmed the linear dependence of profitability of the continuous preparation of a written marketing plan (Sig. = α = 0.003; coefficient of determination R^2 = 0.421; t- test statistics t = 3.516; degrees of freedom df = 17; critical value of the test $t_{df:\alpha}$ = 2.898).

^{**}Correlation is significant at the 0.01 level (1-tailed)

^{*}Significant at 5 %, *dependent variable: profitability

	Unstand	lardized ents	Standardized coefficients			95.0 % confiden interval	
	В	Std. Error	Beta	t	Sig.	Lower bound	Upper bound
(Constant)	2.532	0.412		6.140	0.000	1.662	3.401
Continuous preparation of a written marketing plan	0.464	0.133	0.645*	3.481	0.003	0.183	0.745

 Table 11 Impact of continuous preparation of a written marketing plan on market orientation (regression estimates)

Notes: R^2 : 0.416, Adjusted R^2 : 0.382, F = 12.117, Sig. F = 0.003, N = 19

Moreover, using the F-test (Table 10), the relationship between profitability and continuous preparation of a written marketing plan is proven to be statistically significant (F = 12.359; degrees of freedom $df_1 = 1$ $df_2 = 17$ and critical value of the test $F_{1:17} = 8.40$).

Likewise, using the simple linear regression analysis and the F-test, the analysis also confirmed the linear dependence of market orientation level of the continued preparation of a written marketing plan (Table 11).

The analysis shows that in the case of an industry which produces consumer goods and is characterized by fragmented market, with high rivalry among competitors and well informed and demanding consumers, formal marketing planning and continuous preparation of a written plan, directly affects the positive outcome of different measures of business performance of companies. The literature provides sufficient information that supports this statement in developed economies, but this research demonstrates that this hypothesis is also true for developing, i.e. transitional economies, as in the case of Republic of Macedonia.

6 Summary and Conclusions

From the analysis of the process of marketing planning it can be stated that the current practices of the companies that operate in a transitional economy (Republic of Macedonia) reveal numerous weaknesses:

- The companies more often remain in the phase of behavioral or informal marketing plan, and rarely practice formal marketing planning.
- There are evident differences in the process of planning between large, medium—sized and small companies.
- Continuity in the preparation of a written marketing plan is more often found in medium-sized and large companies, while small companies have demonstrated low level of continuity in the formal planning process.

^{*}Significant at 5 %, *dependent variable: market orientation

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• The lack of time and qualified staff, as well as the low confidence in the process of marketing planning are the key factors of influence in the situation.

- The written marketing plan is relatively poorly executed, because it lacks a
 number of key elements such as: a statement of corporate philosophy and values,
 mission/vision statement, customer analysis and analysis of the macro—environment, measures and techniques of control.
- One of the most used tools is the SWOT analysis, while the other models of analysis are rarely used, which can lead to the risk of insufficient information from immediate and wider environment.
- In view of the people involved in the planning process, small companies are in a weaker position compared to medium-sized and large companies, since the involvement of the owner in the marketing planning process, as is the case in small companies, results in negative correlation with the continuous preparation of the written plan, which consequently affects the outcome of the business performance in a negative way.
- Managers and owners of these companies do not fully understand the marketing concept and the need of high level of market orientation.

This evidence creates an image of a challenging business situation, especially in terms of implementation of marketing activities, i.e. marketing planning practices. According to the previously proven relationship between business performance and continuous preparation of a written marketing plan, companies need to make changes on their path of development. The recommended key steps to overcome the identified weaknesses are as follows:

- Employment of knowledgeable workforce with marketing skills.
- Identification of corporate culture based on the marketing concept principles.
- Acquisition of information by the process of marketing research or situational analysis.
- Placing marketing tools as an outgoing element on the beginning of operations.
- Determination of the general direction through the strategic plan.
- Implementation of a short-term written plan built on the basis of predetermined content (by the book), but flexible enough to fit the specific requirements of the company.

The creation of a written plan provides systematic approach to planning, as it offers an insight into all the key elements, the level of consistency between different business units, and a review of the work as a whole. The proven connection with business performance only reinforces the fact that there is a need for continuous, formal marketing planning, even in the case of companies in transition economies, especially if the company wants to ensure the survival and success in the long run.

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Cross-Cultural Issues in Social Networking Sites: Review of Research

Elena Vitkauskaite

Abstract People worldwide increasingly use social networking sites. There are vast cultural differences between users from different countries not to speak about different regions. These differences affect the way people use social networking sites and purposes they use it for in different countries. Therefore, the research question addressed in this paper is: what are trends of research performed to date regarding cross-cultural issues in social networking sites? The paper also aims to identify gaps in the said research and to define areas and directions for future research in this area. A systematic and critical literature review is undertaken into research carried out in the area of cross-cultural issues in social networking sites. Most of the studies analyze only a few social networking sites and/ or in respect of few countries. Cultural differences in motivation to use social networking sites, issues of privacy and security, social capital and self-expression of users are the most widely researched aspects. Larger scale research is needed to reach significant results in the area of evaluating cross-cultural issues in social networking sites across the world.

Keywords Cultural differences • Social media • Social networking sites

1 Introduction

Social networking sites such as Facebook, Twitter, Google+and others are used daily by millions of people worldwide. eMarketer (2013) estimated that the number of users of these sites will rise to 2.55 billion in 2017 from current number of 1.73 billion. Largest and fastest growing regions in terms of numbers of social networking sites users are Middle East and Africa, Asia, and Latin America. There are vast cultural differences between users from different countries not to speak about different regions. These differences affect the way people use social networking sites and purposes they use it for in different countries.

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Body of research addressing cross-cultural issues in social networking sites is growing, though they are researched for less than a decade (first known publication available online is dated 2006). Research question addressed in this paper is: what are trends of research performed to date regarding cross-cultural issues in social networking sites? The paper also aims to identify gaps in the said research and to define areas and directions for future research in this area. A systematic and critical literature review is undertaken into research carried out in the area of cross-cultural issues in social networking sites.

2 Definition and Development of Social Networking Sites

Ryan (2008) claims that the concept of "the virtual community" had been introduced in Howard Rheingold's (1993) novel by the same name, though later suggested the more appropriate term "online social network". Researchers use quite a number of terms, which are related to social networking sites (see Table 1).

Definition proposed by Richter et al. (2009) subsumes all activities by Internet users with regard to extending or maintaining their social network. Kim et al. (2010) researched social networking sites and social media sites as two different types of social websites, although they acknowledge that the difference between the two types of sites is diminishing. Their definition of social websites though excludes certain types of web sites and parts of websites that allow people to post and share user-generated content. Definition suggested by Boyd and Ellison (2008) is currently still the most popular definition in the academic literature. On

Table 1 Terms related to social networki	ing sites
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Term	Definition	Author
Internet social networking	It can be understood as the "phenomenon of Social Networking on the Internet"	Richter et al. (2009)
Social web sites	"Web sites that make it possible for people to form online communities, and share user-created contents"	Kim et al. (2010)
Social net- working services	"Online communities that focus on bringing together people with similar interests or who are interested in exploring the interests and activities of others"	Marcus and Krishnamurthi (2009)
Social network sites	"Web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system. The nature and nomenclature of these connections may vary from site to site"	Boyd and Ellison (2008)

the other hand, Beer (2008) criticized this definition by pointing out that it is too wide and includes all sites that feature social network of any kind (and not just as core features). He also disagreed that social networking sites are only for making new relations. Richter et al. (2011) proposed that social network sites can be understood as services that facilitate internet social networking phenomenon and they are also one type of social services.

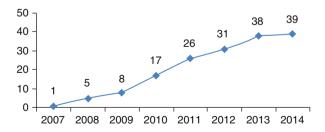
3 Methods

Search for articles related to cross-cultural issues in social networking sites was carried out in April of 2014 by entering queries in databases of Scholar Google, Emerald, Elsevier, Sage, Taylor & Francis and Springer. Because of different but often overlapping terms used by scientists to call social networking sites (as described above), search queries used were "social network* sites", "online social network*", "social network* service", "internet social network*" in combination with "cross-cultural" or "cultural differences".

Peer-reviewed articles from journals and conference proceedings as well as book chapters that were available in full text were then selected based on following main criteria: empirical research carried out in two or more countries or involving representatives of two or more cultures, comparing results from different cultures and related to social networking sites. Initial selection was done by reading the abstract of the paper. Total 54 articles were found to be relevant. During analysis 15 articles were removed from this shortlist as research described in it did not actually involve representatives of at least two different cultures or results from research in two different countries were not compared in any way, or articles just offered conceptual research framework.

Publications fitting the criteria were published between year 2007 and January 2014 (see Fig. 1). Highest numbers of articles were published in 2010 and 2011.

Fig. 1 Cumulative number of published research on cross-cultural issues in social networking sites



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4 Results

4.1 Choice of National Cultures and Their Number

Cross-cultural research on social networking sites tends to follow the trend of comparing two national cultures as 26 articles (66.67 %) of 39 deal with only two national cultures, followed by researchers attempting to compare three national cultures (6 articles or 15.38 %). Worth mentioning are studies included in the shortlist which deal with one country only (Leeming and Danino 2012; Choi et al. 2013), as they involved international respondents, therefore representing cultures not only of country research was carried out in. Article by Herring et al. (2007) was also included in shortlist though authors do not deal with any specific country or culture, because they analyzed social networking site content generated by users in four languages, which are presumably native for at least part of those users and therefore meaning that there is more than one culture investigated (see Table 2).

Observed trend matches with cross-cultural research practice in area of marketing as well: Engelen and Brettel (2011) found that 65 % of cross-cultural studies in marketing were investigating two national cultures and 15 % of studies were investigating three national cultures.

Cadogan (2010) criticizes practice of scientists to test cross-cultural/cross-national research theories using samples from two or three countries. He claims that the use of small numbers of countries does preclude generalizations, and so theory testing is not appropriate. Though, he agrees there are situations where it is entirely appropriate for a research study to begin by specifying that it will focus on just two countries, but that is seen as appropriate for exploratory studies. Exploratory studies are not suited for all research questions though. In order to draw meaningful, generalizable, conclusions a sample that is big enough is often needed. Franke and Richey (2010, p. 16) propose: "some confidence can be placed in results that indicate strong relationships between variables based on seven to ten or more countries. Samples of 20 countries may be sufficient for reliable detection of above-average effects, and 50 or more may be needed for safe generalizations about the moderate effects that appear to be typical of relationships between national-level variables". Only study carried out by Krishnan et al. (2013) describes results from a sample of more than seven countries and, therefore, fits the recommendation.

Difference from the practice in cross-cultural marketing research can be observed in terms of choice of specific countries: Engelen and Brettel (2011) observed that US is part of 66 % of all cross-cultural studies, followed by China with 30 % of all studies. According to them, a large portion of the studies has focused on US-China comparisons. In cross-cultural research related to social networking sites, US is a part of nearly 4/5 of studies, followed by Korea and China being part of 28.21 % of studies each. Large portion (51.28 %) of cross-cultural research related to social networking sites is focused on USA and one or few Asian countries (China, Korea, India, and Japan more often than other

 Table 2
 Summary of choice of countries researched

Number of countries per study	26 Studies (66.67 %) analyzes results from
	2 national cultures
	6 Studies (15.38 %)—3 countries
	3 Studies (7.69 %)—1 country
	2 Studies (5.13 %)—4 countries
	1 Study (2.56 %)—5 countries and
	1 Study (2.56 %)—91 countries
Number of studies analyzing results from	31 Studies (79.49 % of articles) analyzing results
a specific country	from USA
•	12 Studies (28.21 %)—China
	11 Studies (28.21 %)—Korea
	6 Studies (15.38 %)—Germany and United King-
	dom each
	5 Studies (12.82 %)—India and France each
	4 Studies (10.26 %)—Japan
	2 Studies (5.13 %)—Greece, Hong Kong, Italy,
	Russia, Morocco and Taiwan each
	1 Study (2.56 %)—Albania, Angola, Argentina,
	Australia, Austria, Bangladesh, Belgium, Brazil,
	Bulgaria, Burkina Faso, Canada, Cape Verde,
	Chile, Colombia, Costa Rica, Croatia, Czech
	Republic, Denmark, Dominican Republic, Ecua-
	dor, Egypt, El Salvador, Estonia, Ethiopia, Finland
	Ghana, Guatemala, Honduras, Hungary, Iceland,
	Indonesia, Iran, Ireland, Israel, Jamaica, Jordan,
	Kenya, Kuwait, Lebanon, Luxembourg, Malawi,
	Malaysia, Malta, Mexico, Namibia, Nepal, Neth-
	erlands, New Zealand, Nigeria, Norway, Pakistan,
	Panama, Peru, Philippines, Poland, Portugal,
	Romania, Saudi Arabia, Senegal, Serbia, Singa-
	pore, Slovakia, Slovenia, South Africa, Spain, Sri
	Lanka, Sweden, Switzerland, Syria, Tanzania,
	Thailand, Trinidad, Turkey, Ukraine, United Arab
	Emirates, Uruguay, Venezuela, Vietnam, Zambia
	3 Studies did not specify countries but rather
	regions (i.e. Latin America, South America, East
	Asia)
Number of studies analyzing results from	31 Studies (79.49 % of articles) carried out in North
countries of the region of the world	America
	28 Studies (71.79 %)—in Asia
	15 Studies (38.46 %)—in Europe
	3 Studies (7.69 %)—in South America
	2 Studies (5.13 %)—in Africa
	1 Study (2.56)—in Australia and Oceania

countries). European countries are analyzed in 38.46 % of studies. They are more often analyzed along with USA (6 studies, 15.38 % of all studies), followed by comparison with one of Asian countries (3 studies, 7.69 %) or to other European country (3 studies, 7.69 %). Two studies involved countries or cultures from three regions (North America, Asia, and Europe). Out of three studies related to countries

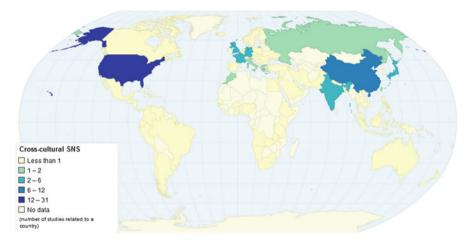


Fig. 2 Countries researched in articles related to cross-cultural issues in social networking sites

of cultures of South America, one compared them to countries or cultures of North America (namely USA) and another one to Asia (specified only to East Asia). Out of two studies related to countries of Africa, one is comparing it to North America (namely USA). Study carried out by Krishnan et al. (2013) is the only one covering most countries and regions of the world, being the only study researching in Australia and Oceania region.

Figure 2 visualizes data provided in the second row of Table 2, providing a map of specific countries cross-cultural research related to social networking sites deals with.

The map also clearly depicts how under-researched the cultures in South America, Africa as well as Australia and Oceania are. It also represents that a small number of countries or cultures are usually chosen from different regions.

Another important issue related to the choice of countries or cultures is the motivation to choose specific countries. Most of the researchers used national culture as the basis for their research. Only two studies from the sample had clearly explained the reasoning for making a conscious choice to research specific countries though, namely Herring et al. (2007) and Krasnova et al. (2012). All other researchers did not ground their decision to research specific countries or cultures in any way.

4.2 Choice of Social Networking Sites

Significant part of studies (41.03 %) did not choose to research any specific social networking site, but rather seeks to learn about (motivation to) use of social networking sites or attitudes towards them in general. Remaining studies deal

Number of social networking sites per study	11 Studies (28.21 %) deal with 1 social networking site 8 Studies (20.51 %)—with 2 social networking sites 3 Studies (7.69 %)—with 3 social networking sites 1 Study (2.56 %)—with 39 social networking sites 16 Studies (41.03 %) did not seek to get results about any of social networking sites, in particular
Number of studies carried out in specific social networking sites	17 Studies (73.91 % of articles researching specific social networking sites) deal with Facebook 3 Studies (13.04 %)—with MySpace, Cyworld and Renren each 2 Studies (8.70 %)—with Mixi and Kaixin001 each 1 Study (4.35 %)—with LiveJournal, Wretch, Beehive, Vkontakte, Study VZ, and Twitter each

Table 3 Summary of choice of social networking sites researched

with small number of social networking sites (1–3 sites) with an exception of study carried out by Marcus and Krishnamurthi (2009), who analyzed 39 social networking sites (see Table 3).

Unlike the choice of countries or cultures to be compared, choice of social networking sites is most often explained by researchers even if only by popularity of certain social networking site in given country or worldwide (i.e. Facebook).

Facebook is the most researched of social networking sites with 73.91 % of studies which chose to research specific sites, having Facebook as their site of choice. A bulk of these studies research only Facebook (8 out 11 studies analyzing 1 social networking site) by comparing results of two or more countries (6 or 8 cases) or cultures by not focusing on specific countries (i.e. Leeming and Danino (2012) observed how Facebook is used by mixed nationality group from a variety of countries who engaged in a business language course in the UK).

All studies drawing results from two social networking sites take American website (Facebook in six cases and MySpace in two cases) and most often compare results to the ones of chosen Asian social networking sites (Mixi, Cyworld, Renren, or Wretch), with one study comparing it with opinions of Vkontakte users (Krasnova et al. 2011).

4.3 Choice of Framework for Assessing National Culture

Significant portion (14 or 35.90 %) of studies did not relate their research to any specific framework for assessing national culture (see Table 4). Out of the remaining studies, only two were not related to cultural dimensions proposed by Hofstede (2001), Chu and Choi (2011) related their research to the horizontal and vertical individualism and collectivism proposed by Triandis (1995), and Chang (2010)—to the dimension of high/low context cultures suggested by Hall (1976).

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Cultural dimensions	Studies	
Hofstede (2001) ^a	23	58.97 %
Individualism/collectivism	23	58.97 %
Power distance	10	25.64 %
Masculinity/femininity	10	25.64 %
Uncertainty avoidance	14	35.90 %
Long-term orientation	5	12.82 %
Hall (1976)	4	10.26 %
High/low context cultures		
Triandis (1995)	1	2.56 %
Horizontal and vertical individualism and collectivism		
None specific	14	35.90 %

Table 4 Summary of choice of framework for assessing national culture

58.97 % of studies assessing national cultures based on Hofstede (2001) cultural dimensions, matches the trend observed by Engelen and Brettel (2011) in cross-cultural marketing research—they found 60 % of studies apply at least one of Hofstede's cultural dimensions. They also found out that the second most frequent cultural dimensions are those of Hall (1989), following with 14 %. Similar situation is observed in this sample of studies, with studies relating to Hall's dimension of high/low context cultures. It is important to note though, that only one dimension of Hall's framework is related to and in three studies of four relating to it, it is done in addition to Hofstede's framework of cultural dimensions.

Worth mentioning is the fact, individualism/collectivism dimension is the most often referred to from the five dimensions proposed by Hofstede (2001): six studies (15.38 %) base their assessment of the national cultures on this dimension alone; four studies (10.26 %) base their assessment of the national cultures on uncertainty avoidance dimension in addition; and three studies (7.69 %) base their assessment of the national cultures on other contributions related to this dimension in addition.

Significant importance of individualism/collectivism dimension in a context of Web 2.0 is mostly grounded in theoretical assumptions (i.e. Chau 2008). Importance of other dimensions is not yet denied by empirical evidence. Therefore, more research attempting to find out role of other cultural dimensions in social networking sites is needed.

Following Engelen and Brettel (2011), researchers should extend the set of cultural dimensions beyond those of Hofstede (2001). Cultural dimensions suggested by Schwartz (1994) and GLOBE study (House et al. 2001) are broader than in the Hofstede's framework and they build upon more recent survey data than do the classifications from Hofstede (2001). Therefore, these frameworks should be integrated in future research.

^aStudies that integrate at least one cultural dimension from this framework

 Table 5
 Research directions and method employed in studies

Author	Main research object	Method and sample
Herring et al. (2007)	Use of language	Observation/content analysis of 5025 pages
Chapman and Lahav (2008)	User goals and behavior	Observation/content analysis of pro- files, and interview of 36 students
Fogg and Iizawa (2008)	Persuasion in SNS	Observation/content analysis and small scale survey (64 users)
Lewis and George (2008)	Deceptive behavior on SNS	Online survey
Marshall et al. (2008)	Students' attitudes toward and usage of SNS (focus on online privacy and communication issues)	Online survey of 486 students
Guo and Yu (2009)	Cross nation study of SNS development	Secondary data analysis
Marcus and Krishnamurthi (2009)	Appeal of SNS	Observation/content analysis of a site
Veltri and Elgarah (2009)	Adoption of social network sites	Survey (random sampling, 45 users)
Chang (2010)	Patterns of friendship connections among SNS participants	Content analysis of 3003 profiles (snowball sampling starting with a random sample of 6 users till second level connections)
Ji et al. (2010)	Use of SNS and formation of social capital	Online survey of 489 users (random sampling)
Karl et al. (2010)	Posting Faux Pas	Online survey of 636 students
Krasnova and Veltri (2010)	Self-disclosure	Online survey of 331 users (random sampling)
Posey et al. (2010)	Self-disclosure	Online survey of 529 users (random sampling)
Rosen et al. (2010)	Culturally specific behavior and satisfaction	Online survey of 452 students
Shin (2010)	Motivation to use SNS	Survey of 351 students
Thom-Santelli et al. (2010)	Cultural differences in status messaging	Content analysis of 184,439 messages
Vasalou et al. (2010)	Motivation to use SNS	Online survey of 423 users (random sampling, snowball method)
Barker and Ota (2011)	Use of SNS and motivation to use SNS	Online survey of 282 students
Choi et al. (2011)	Nature of personal networks and social relationships college students hold in the online social space	Online survey of 589 students
Chu and Choi (2011)	Social relationship variables	Online survey of 663 students
Yang et al. (2011)	Q&A Behavior	Online survey of 933 users (random sampling)

(continued)

Table 5 (continued)

Author	Main research object	Method and sample
Kim	Motivation to use SNS	Survey of 331 students
et al. (2011)		
Krasnova et al. (2011)	Privacy and trust on SNS	Online survey of 350 users (random sampling)
Tsoi and Chen (2011)	Use of SNS and trust	Online survey of 116 users (random sampling)
Wang et al. (2011)	Privacy concerns	Online survey of 924 users (random sampling, snowball method)
Zhao and Jiang (2011)	Self-presentation	Content analysis of 114 students' profile pictures
Cho and Park (2012)	Self-disclosure and social relationships	Interview of 30 students
Harlow and Harp (2012)	How activists perceive and use SNS, and how SNS serve to create an alternative public sphere that facilitates an online 'imagined community' and encourages activists participating online to also participate offline	Online survey of 261 activists
Krasnova et al. (2012)	Self-disclosure and privacy	Online survey of 331 users (random sampling)
Leeming and Danino (2012)	Intercultural communication on Facebook in context of higher education	Observation of activity of international students on Facebook page
Tsoi and Chen (2011)	Cultural differences reflected on corporate pages	Observation/content analysis of 83 pages on social networking sites
Choi et al. (2013)	Factors affecting SNSs switching	Online survey of 162 users (random sampling, snowball method)
Jackson and Wang (2013)	Use of SNS	Online survey of 892 students
Jiang and de Bruijn (2013)	Cross-cultural social networking and social capital	Online survey of 200 students
Krishnan et al. (2013)	Use of SNS and human development	Secondary data analysis
Ku et al. (2013)	Motivation to use SNS	Online survey and interview of 225 students
Ng (2013)	Intentions to purchase	Online survey of 284 users (random sampling)
Wu and Lu (2013)	Self-disclosure	Observation/content analysis of 1180 user profiles
Pentina et al. (Forthcoming)	Motivation to use SNS	Online survey and interview of 202 users (random sampling, snowball method)

4.4 Research Objects and Methods Employed

Cross-cultural differences in motivation to use or uses of social networking sites are researched most in studies about cross-cultural issues in social networking sites. These research objects are followed by attempts to find cross-cultural differences in self-disclosure and self-presentation. While privacy and trust issues in cross-cultural context are gaining researchers attention too, there are studies analyzing cross-cultural differences in deceptive behavior (Fogg and Iizawa 2008) and posting Faux Pas (Karl et al. 2010) as well. Few more directly application oriented studies attempt to find out cross-cultural differences in intentions to purchase on social networking sites (Ng 2013) and on corporate pages on social networking sites (Tsai and Men 2012) (Table 5).

Most of the studies (26 or 66.67 %) employed (online or offline) survey as a method for primary data collection. Ten studies (25.64 %) used observation/content analysis of social networking sites, messages, pictures, communication, profiles of users or corporate pages on the social networking sites. Four studies (10.26 %) used interview for collecting primary data, though three of them did interviews in addition to other methods.

Significant number of studies (15 or 38.46 %) collected primary data from students. Though it is generally assumed that student samples are similar along a number of characteristics, especially demographics, there is a potential danger to miss cultural differences that would have otherwise been observed if nonstudent samples had been used (Schaffer and Riordan 2003). On the other hand, there are many other non-cultural factors resulting in significant differences between student samples, and these differences can contribute to variations in outcome measures (Matsumoto and Yoo 2006). Though researchers mention laminations to the generalizability of research results to the general populations of countries their student samples are from, there is little evidence of questioning sample equivalence (or sample differences).

5 Conclusion

Africa, Asia, and South America are largest and fastest growing regions in terms of numbers of social networking sites users, but only Asian national cultures of those three regions of the world are researched by scientists researching social networking sites in cross-cultural contexts. African and Latin American cultures are underresearched so far as most researchers deal with two cultures, one of which is USA most often, which is then most often compared to one of the Asian cultures. Consequently, little number of researchers is dealing with national cultures from more than two regions. Therefore, cross cultural research of social networking sites covering more cultures (including ones from South America and Africa) is needed in the future.

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Few studies ground their choice of national cultures. They are providing grounding for all other aspects of the research, such as theoretical assumptions, choice of social networking sites, choice of methods to collect data, sampling, and other relevant details. Sound grounding of choice of countries is needed as well in future studies.

Most of the studies analyze only a few social networking sites. If specific social networking sites are chosen it is usually Facebook and local social networking site in Asian country (e.g. Renren, Cyworld, Mixi). More social networking sites are taken into consideration in future studies. Their list should not be limited to only most popular ones but could also include few more of less popular ones per country.

Majority of research related to cross-cultural issues in social networking sites is based on G. Hofstede's (2001) culture dimensions (power distance, individualism/collectivism, masculinity/femininity and uncertainty avoidance), as well as E. T. Hall's (1989) dimension of high/low context. Significant number of studies only relate to the dimension of individualism/collectivism. More research attempting to find out role of other cultural dimensions in social networking sites is needed. Researchers should extend the set of cultural dimensions beyond those of Hofstede's, by employing more recent frameworks for assessing national culture.

Cultural differences in motivation to use social networking sites, issues of privacy and security, social capital and self-expression of users are most widely researched aspects so far. However, it is still a pretty limited research scope. Although studies covered in this article bring a number of interesting and significant insights, many of them still have to be validated. There is still a lot social and economic aspects to be researched in cross-cultural research of social networking sites as well as cultural differences of social networking sites' impact on societies and organizations to be found.

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Integrated Systems of Marketing Information as the Element of Modern Organization's Management

Dmitry Bogdanov

Abstract The article is devoted to studying peculiarities and prospects of using integrated systems of marketing information as the element of modern organization's management. The author considers genesis of systems of marketing information, defines essential characteristics and content of integrated system of marketing information, detects functional trends of using integrated system of marketing information 'MONOLIT: CRM', and analyses its functional opportunities and restrictions.

Keywords Integrated system of marketing information • Management • Contemporary organization • Marketing informational technologies

1 Introduction

Development of systems of marketing information occurred first of all in connection with the change of marketing role in organization's activity and appearance of new informational technologies. If in the early stages of developing marketing informational systems disembodied bodies of data, coming from the external environment on the irregular basis were processed, during the evolutional process the process of collecting and treatment of marketing information had been systematized, and information had been integrated, what leaded to simplification of analysis and using intraorganizational information, increase of quality of information coming into the system.

Besides this, development of marketing informational systems provided increase of the volume of coming information and provided the opportunity to use it while making administrative and strategic decisions. The process of integration affected not only marketing informational systems, but other intraorganisational informational systems, which served as incentive to formation of new stage of working with information—creating global informational system.

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2 Essential Characteristics of Contents of Integrated System of Marketing Information

The incentive for developing contemporary systems of marketing information was improvement of informational technologies in 1990th, in particular, working out and massive use of system, allowing to minimize costs on keeping units of information; providing acceleration of the received information processing and analyzing; getting further development by telecommunications and electronic means of broadcasting information; enhancing capacities of working with global informational space of Internet network.

As the result of development of the marketing information systems and increase of opportunities of processing and analyzing information, enhancing of the role of marketing informational systems in informational provision of decision making on the highest level of management occurred. If earlier decisions of the top-managers were based mostly on intuition, then on practical data received, and the users of the informational systems were managers of lower link, nowadays using of the systems of marketing information on the medium and top levels is increasing.

It is possible to mark out the next modern trends in work with marketing information systems in developed countries: creation and application of innovational methods of collecting and analyzing of data, formation of progressive innovational approaches to analysis of the market with the help of micro-marketing and marketing of data bases, using innovational approaches to organization of marketing information, which was reflected in conception of knowledge management.

Recently, new approaches to data collection become wide-spread: CATI (device for computerized phone surveys), CAPI (device for computerized personal interviews), scanners, peoplemeters (devices for evaluating popularity of different television programs), EPOS (electronic point of sale)—devices, based on the technology of scanning bar-codes, which allow to get full information about sales and prices in every sales outlet, and other electronic devices. Introduction of these innovations affected increase of efficiency of marketing information systems, provided raise of rate of response to environmental changes. Moreover, using of such instruments allowed to increase objectivity of marketing information significantly.

Innovational instruments of getting information, and its interpretation, analysis and evaluation were being worked out. Due to innovational technologies of working with data bases, it became possible to cut costs of keeping information, and to raise significantly its volume rate of processing, which created necessary conditions for using the advantages of mentioned innovational methods of collecting information.

Among the number of innovational methods of working with information, becoming more widespread, there is database marketing, which became especially popular under the conditions of forming individual approach to clients, while conducting marketing researches. Markets of developed countries, over time,

were segmented up to minimally possible level, and further segmentation with the use of traditional marketing instruments was almost impossible.

High market saturation and cut-throat competition lead to situation, when separate customers, not groups of customers, were marked out as objects of marketing of organizations, dealing with producing retail consumer commodities. In order to keep market positions, organizations started to use integrated means of communications, telecommunications and data bases, which perform top-priority function of settling feedback with the market, to work with the customers.

The basis of data bases marketing is constituted by formation and development of data bases, which contain detailed information about all clients. Nowadays data bases contain not only list of customers, which was typically for previous stages of work with marketing information, but of full information about customers behavior and their preferences, which organization possess. Information about customers is carefully collected and structured during the whole period of organization existing. Data about purchased products, their combinations, prices on them, shops, where they were bought by the particular customer, and promoting events, he had taken part in, etc. are collected.

Interactive marketing allows an organization to collect information about its products purchasing by individual buyers and to provide the correspondence of different market measures and the whole marketing complex with this information, to conduct analysis of particular customers' reaction on current measures in regard of their social-demographic characteristics, which improves efficiency of marketing measures, allows to satisfy relevant market needs more fully. Employment of the method described unifies communications and promotion of organization into single data flow (Popkova 2014).

Data bases allow to support the dialog with customers by using different ways. Address data bases are formed from post addresses, phone numbers, and different coupons for purchasing goods. Using patron cards is a popular method, which is actively used by KLM airline and many other organizations (Popkova et al. 2014).

An important modern trend related with working with information for most of organizations in developed countries is constituted in uniting present sources of information and switching from a system, composed of a set of disembodied data, to marketing knowledge system. Marketing knowledge are cumulative intellectual organization's capital, which contains information and ideas, necessary for taking right administrative decisions, which serve the interests of customers and the organization (Kelly and McGuinness 2013). Using of the newest informational technologies led to increase of information volumes, coming into informational system, due to which the present systems of marketing information became disable to treat all existing information, to choose the most important and to hand over necessary data to administration on time. This became possible due to formation of marketing knowledge system of organization. We can consider that structure of marketing informational system is represented by internal information, marketing intelligence, marketing research and analytic marketing system (Fig. 1).

Let us consider the systems listed above in more details. The basis of the system of internal information is constituted by internal sources of information (accounting

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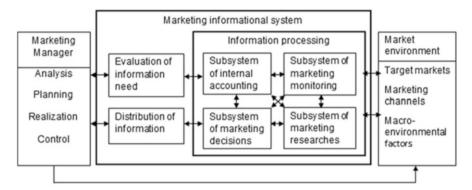


Fig. 1 Composition of informational marketing system

in organization). Each department of organization is involved in the process of collecting and registration of information about clients, costs and current receipts of cash resources (Popkova 2014). Provision of information about environmental dynamic occurs in system of marketing intelligence. Data, daily arriving in this system, allow the marketing manager to monitor state of marketing continuously (Clasen and Goerne 2011). System of marketing intelligence deals with fixing first of all those events, which perform an important role in long-term prospects and those events, which pose a potential threat to organization. The sources of information for systems of marketing intelligence are workers of organization, clients, competitors, suppliers and middle-men, inventors and rationalizers, and different printed issues and advertisement.

3 Functional Trends of Using of Integrated System of Marketing Information 'Monolit: CRM'

In organizations, dealing with production and distribution of mass consumption goods (FMCG), it is rational to use system 'Monolit: CRM'®, which is designed for organizing and managing processes of mobile sales using pre-selling and van-selling, merchandizing, accounting and equipment service. Such system provides supporting users with stationary and mobile (installing on PPC) working places, includes means of web-access, servers of synchronization, web-services of data access, allows to differentiate access to information and to audit actions of users. Due to integration with IT-systems of partners (distributors, retail nets) the system provides active interchange of information about clients, prices, goods and stocks, and orders, made by mobile workers of sales service.

System Monolit: CRM allows organizations in country scale to build effective CRM-configurations. The largest realized project is joining up within the frameworks of given system 4500 trade representatives, which use PPC and 1500 'back office' users, and almost 750 gateways in 76 offices of the company and

340 distributions. Introduction of this system as independent decisions is possible; also possible is its integration with ERP-systems of side manufacturers. The program can be also provided together with program complex ERP Monolit®.

During the process of transformation of world economy as affected by globalization process, formation of large market segment—FMCG (Fast Moving Consumer Goods) or mass demand goods (mass consumption), which in one of the economy's engines—occurred. Segment of mass demand goods is the most competitive and dynamic due to short cycle of sales. Business-processes, taking place in it, are measured in days and hours, fast capital turnover and investment payback are achieved. That is why organizations, manufacturing goods of mass demand, pay special attention to marketing, effective organization of sales and quality of service (Cichon 2013).

Short sales cycle stipulated necessity of keeping big number of workers, which most of the time work outside the office, 'in the field'. Mainly, we are discussing trade representatives and merchandizers. The specific of such structure is reflected by a capacious term—mobile trade (Fig. 2).

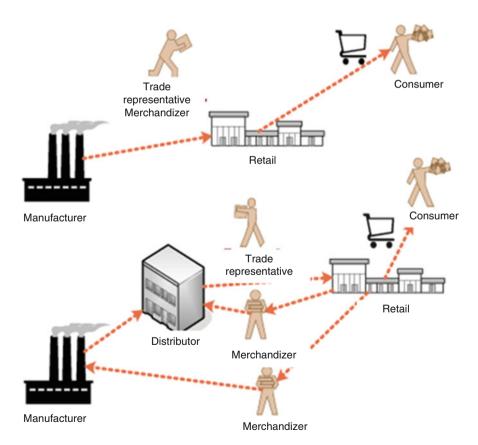


Fig. 2 Decision, suggested by 'Monolit-Info'

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Decision by 'Monolit-Info' is the system 'Monolit: CRM', which is designed for organizing and managing processes of mobile trade according to the schemes of pre-selling and van-selling, merchandizing, accounting and equipment service in organization, handling with manufacturing and distributing mass demand goods. Organization of work within the system occurs due to creating unified informational environment of workers, which act as trade representatives, merchandizers, service-men, supervisors, sales department managers and distributor's sales department workers (Popkova 2013) (Fig. 3).

The system provides two types of work places. Mobile work place—client program software, installed on PPC of a worker, which allows to interchange data between PPC and central data base according to user's command via global net Internet over the HTTP/HTTPS protocol. Stationary work place—client software, installed on user's work station and interacting with server of central data base directly within the framework of local network, or by module of web-access (interchange occurs over the HTTP or HTTPS protocol) (Fig. 4).

There are the next principles, which given system is working according to (Aja et al. 2013):

- Keeping all information in the central data base;
- Using PPC by mobile workers for daily work—to accept orders, to collect marketing information;



Fig. 3 Architecture of the system

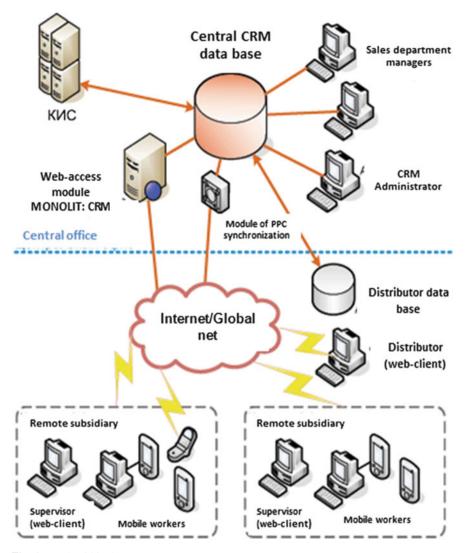


Fig. 4 Work within the system

- Data interchange between PPC and central data base within the framework of synchronization session via global network Internet;
- Giving to managers and analytics active access to information, collected by executors and kept on the central DB, on stationary work places (additionally mobile version on work place is acceptable for managers).

An important peculiarity of this system is the possibility of its functioning both within the frameworks of ERP Monolit complex and ERP-systems of side manufacturers. Such integration becomes possible due to data interchange module, which allows interchanging in XML format.

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4 Functional Opportunities and Restrictions of 'Monolit: CRM' System

Typical configuration of 'Monolit: CRM' is performed in Fig. 5. The system allows to operate sales of organization of regional or national scale. The represented configuration is centralized, constant connection with the head office is necessary for its successful work. Remote work of managers of regional sales departments and attraction of distributors to direct work within the system are possible with the use of web-access module and client software, installed on stationary work place.

Functional opportunities of 'Monolit: CRM' system are presented on Fig. 5.

The 'Monolit-Info' system for managing mutual relations with clients includes block of territory management, loyalty programs, block of sales management, block of SFA decisions for mobile workers, block of client work efficiency management, block of working time recording and calculating mobile workers' bonuses, block of audit and training management, block of service management, block of partners' relationship management.

Operating of client software, installed on stationary work place, is possible within the framework of local net of organization or by using web-access module. Interaction of client software and web-access module occurs over HTTP/HTTPS protocol in the global net Internet. Due to this it is possible to install and manage work places, to organize access of workers of remote departments and distributors to the system with minimal costs. Synchronization of data base of a system, working under control of Microsoft SQL Server data base managing system and keeping all information of mobile work places, is performed with the central data base. Owing to this the risk of PPC information loss is minimized. The next modes of synchronization of the system with PPC are possible (Popkova et al. 2013a):

- Mode of fast synchronization: transfer of modified data just from PPC to CRM Data Base (DB);
- Mode of full synchronization: bothway transfer of modified data between PPC and CRM DB:
- Installation mode: cleaning up all data on PPC and full loading of them from CRM DB;



Fig. 5 Functional opportunities of 'Monolit: CRM' system

- Backup mode: transfer of data to backup PC;
- Unloading mode: unloading data from backup PC.

Access to data by the users of client software is operating on the basis of Windows user profile. At that gaining access to system objects of the data base (tables, procedures) using other programs is impossible. It is possible to delimit functionally access to the system or to delimit data retrieving opportunities (Hamilton and Darity 2010).

- Functional delimitation assumes work place adjustment: each work place is granted just those functions, which are needed.
- Delimitation of access to data of the system is performed by creating roles, which are assigned to users, and distributing this roles within the organization hierarchy. For example, a user, performing a role of a supervisor in this territory, possesses access to all sales outlet, routes and documents, related to this territory, and rights for administrating agents, subjected to him.

Delimitation of access to work with system on PPC can be performed by using standard system software, and by using password inquiry while system activation. Installation of special protection for some devices can be provided—embedding of hardware to delimit access, for example, fingerprint scanners (Casey 2014). Module of synchronization is the only means of getting access to data base from PPC. Synchronization process management is performed by it, which doesn't allow a client to interfere the process of transferring data. System allows managers to audit the organization in whole and activity of individual staff members due to registration of all sessions with PPC in a special log, which allows to control performance of the fixed regulation procedures by staff. In order to use software remote users should enter credentials of account (user name and password) while launching program. Delimitation of levels of access to system information of organization's staff is performed according to the same technology, as while delimitating rights of clients (Darity and Hamilton 2012.).

5 Conclusion

'Monolit: CRM' system has a range of advantages. Advantages for clients are the following:

Possibility of efficient order processing and sales processing, minimization of mistakes while registration and handling orders, payrolls, optimization of orders and, as a consequence, reduction of costs, related to re-grading or deficit of goods, and reduction of storage expenditures. Advantages for mobile workers: Getting actual access to information about goods, prices, stocks; history of relationship with client, their orders, debts; trade equipment; No need to carry a big amount of paper documents with; Minimal cost of using PPC in compare with bulky and heavy laptops, simplicity and comfort in compare with paper

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technology; Opportunity to get and transfer information outside organization's office.

- Advantages for managers: no necessity to organize and monitor double input of information to the system (agent makes a paper record, which later is input by operator or the agent themselves); opportunity to plan activity of trade representatives; rise of transparency of staff activity and realization of actual monitoring work of them; opportunity to form standard analytic reports and to create own ones.
- Advantages for the whole company: providing interactions between key departments; reduction of operating costs; rise of speed and quality of client servicing; improvement of labor conditions for staff; efficient organization of sales department work; providing integration with corporate informational system.
- Advantages for distributors: opportunity of integration between own corporate system and manufacturer's system (business-to-business, B2B); opportunity of actual receiving of orders, registered by mobile workers of manufacturer transferable orders; opportunity to interchange information about clients, prices, goods, stocks (Popkova et al. 2013b). 'Monolit: CRM' grants wide opportunities of scaling to users, providing decisions making for organization of a national scale. The largest realized decision involved 4500 trade representatives, which use PPC, and 1500 'back office' users, and almost 750 gateways in 76 offices of the company and 340 distributions.

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Formation of Marketing Mobility of Russian Institutions of Higher Education in the Market of Additional Educational Services

Olga Konina

Abstract The article is devoted to grounding the necessity of formation of marketing mobility of Russian institutions of higher education in the market of additional educational services. The author determines the role of marketing mobility in development of higher education establishments, reveals the main parameters of marketing mobility of institutions of higher education, and defines the opportunities and prospects of increasing marketing mobility of higher education establishments through the system of additional professional education.

Keywords Marketing mobility • Institution of higher education • The market of educational services • System of additional professional education

1 Introduction

The contemporary situation on the labor market in Russia and other countries of the world stimulates demand on the services of institutions of higher education. At that the world economic crisis became a catalyst of interest in the system of higher education from those people, who already have specialization in curtain field. Current conditions, related to excess of specialists on the labor market in combination with deficit of present workplaces, stimulate employers to increase their requirements to jobseekers significantly.

Exactly educational sector is one of the potential factors of way out of the contemporary world economic crisis. The situation of the labor-market demonstrates disproportion between demand and supply of labor resources. An important role in smoothing these disproportions is played by different levels of educational market. At the same time, it is necessary to understand that fast way out of the crisis

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can be encouraged by more operative reaction of the educational market on market demand.

2 Role of Marketing Mobility in Development of Institutions of Higher Education

Development of educational sector of Russian economy is closely related to growth of educational mobility. In the wide sense marketing mobility links up together all participants of the market of educational services, including higher education establishments themselves. Marketing mobility of institution of higher education is the capability of the institution to use marketing complex for forming strong market position of own educational services, brand and goodwill of the institution, increasing volumes of consumed educational services, and improving quality of these services.

This is providing educational services, corresponding to market requirements by the fastest and most effective way. The key word in this definition is 'promptly'. Since mobility means fast reaction to changing external conditions, market demand, specific requirements of consumers, qualitative and quantitative changes of complex of resources, which higher education establishment can use (Popkova et al. 2014).

Marketing mobility represents factor of modernization and transformation of educational market by spreading experience of institution of higher education, at the same time it is not just interchange of educational experience, educational programs, but interchange of present innovations within approaches to education, and to marketing of educational products. At that integration of marketing mobility is a component of success for different educational programs, interaction of higher education establishments of different levels.

Essential feature of growth of marketing activity of institutions of higher education constitutes in that fact that it assume establishment of maximally close connections between educational market and business-structure, which both dictate trends of developing innovational activity of institutions of higher educations and determine needs of the labor-market in qualified staff, which shows direct impact at demand and supply on the market of educational services. In addition, spread of marketing mobility encourages integration of global informational and educational space, stimulates increase of human capital mobility.

Conception of marketing mobility can also serve as instrument of achieving of the main targets of integration of Russian market of educational services into the international market. So, the Conception of export of educational services of Russian Federation in 2011–2020 has the following goals (Popkova et al. 2013b): increasing quality, attractiveness and competitiveness of Russian system of education in the world and regional educational space; providing effective participating of Russia in global and important regional processes of education development;

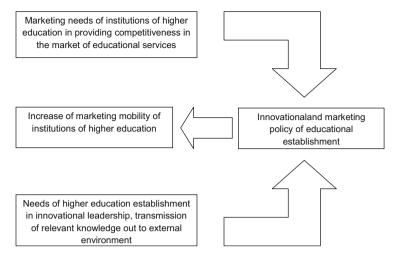


Fig. 1 Sources of marketing mobility of institution of higher education. *Source*: Klimasauskiene (2003)

increasing share of export of educational services in Russian GDP. Marketing mobility is formed on the edge of marketing activity of institution of higher education and its innovational activity (Fig. 1).

It is necessary to explain why marketing mobility is so important for all groups of consumers of educational services. The point is that it assumes introduction of innovational educational programs, which is aimed at deeper and more qualitative introduction of innovational projects, faster spreading of innovational development works. At the same time, it includes innovational activity of higher education establishment itself, which should be spread wider not only in educational environment, but to go into other sectors of economy. Interconnection of target auditions of managing marketing mobility of higher education establishment with their main partners/interaction subjects in the market of educational services is shown at Fig. 2.

The generalized view of the role of marketing mobility in increasing of effective operating of institutions of higher education is presented in Fig. 3.

Thereby, role of marketing mobility in development of institution of higher education is constituted in that fact that it allows institution of higher education to become more competitive, more responsible to market needs (Popkova 2013). Exactly in this, in accordance to market requirements, marketing component of marketing mobility is constituted. Marketing mobility assumes that institution of higher education is flexible enough to correspond dynamically changing market needs.

Our time can be characterized as a specific period of intense competition, accelerate innovation, reduce the total length of innovation cycles and with the use of intensive development of various kinds of innovations in various spheres of

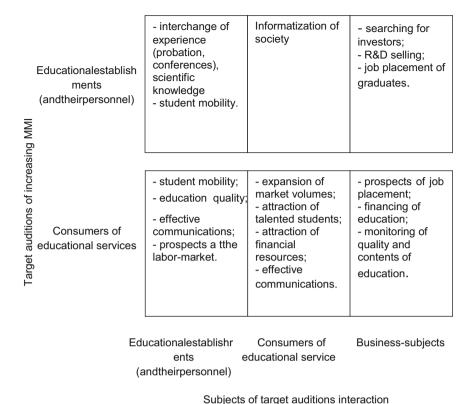


Fig. 2 Directions of interaction of target auditions of increasing marketing mobility of institutions of higher education

activity. The above phenomena are valid for large enterprises, small and medium businesses, as well as for institutions of higher education. Overall condition of the environment puts pressure on modern universities. By the above conditions of worth to add a demographic slump of recent decades, there is triggering a wave of significant shortage of students in the first year in 2009–2010. Unfortunately, this trend will continue for several more years. However, fertility rates of recent years since 2005 suggest a positive turn in this situation (Cichon 2013).

In 2010, the increase in the number of people in Russia is observed for the first time since 1994, despite the fact that in 2008 the population decreased by 104.9 thousand on 0.07 % This growth was formed as a substantially reduced due to natural attrition, and as a result of increased migration growth (Darity and Hamilton 2012). In addition, state universities, not previously think about promoting their own educational services in the market, are increasingly aware of the need for such a view of the competition announced by the private for-profit institutions of higher education. The modern university is forced to give high mobility marketing to maintain their status, the influx of students, and at the same time try to create a level

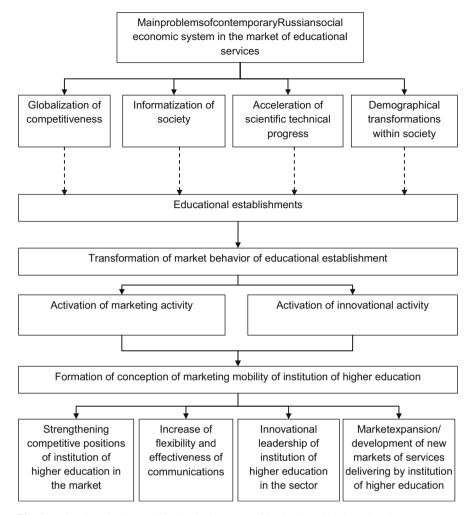


Fig. 3 Role of marketing mobility in development of institution of higher education

of prestige to form in the walls of the best staff and student body (Popkova et al. 2014).

Along with training in all major universities in our country is carried out research activities. Guided by the general trend of development of our economy, announced by the Government, as well as the need and the needs of the market, research at the university is becoming more innovative, and most topics of innovation, in the broad sense of the word, has received increased attention. Numerous articles on the theory and practice of innovation, management innovation, their nature, characteristics and methods of intensification, applied research, the creation of new models, working models, technologies, development of innovative systems management

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and organization form a common area of innovation and development of high school life, causing occurrence of his so-called innovative mobility.

However, by 2011 the need for its positioning in the market and the importance of conducting innovative developments make us understand almost all universities in Russia. What should be the policy of the modern university now to bring it to the forefront? It was in response to this question pops up the first time the concept of innovation and marketing mobility university (Popkova et al. 2013a).

Marketing mobility of high school—it university promptly apply the marketing mix to form a strong mar-term positions own educational mustache-meadow, building brand and the positive reputation of the re-establishment, increase consumption, pull a population of educational services, as well as being to improve the quality the service itself. These pre-delivering educational services are adequate to the demands of the market, the fastest-effectiveness. The key word in this definition of "quickly" because of mobility, imply a rapid response to changing due to external conditions, market demand for specific requirements require the middle, on the qualitative and quantitative changes of the complex resources available to the university.

Innovative mobility institution of higher education should be considered as his way-ness to the operational design, development, implementation, borrowing, commercialization of innovations in various fields within this institution. Innovation and marketing mobility - a combination of innovation and marketing of high school mobility, their methods, parameters, and their cross-reactivity, it is the application of innovative methods and tools in the marketing of high-quality educational services and marketing innovation. In addition, innovation and marketing of high school mobility—is to create a unified vision of the university at which he is a completely new institution with an opportunity to find the application field of activity intellectual capital in the form of teaching staff and research; Institute, which will be attractive to students as their training takes a high level of practical quality education, and the development of a set of measures for the implementation of this policy (Popkova 2014).

3 Parameters of Marketing Mobility of Institutions of Higher Education

However, in order to control any process, not enough to know the general vector of its development. We must take into account the parameters of its course. Innovation and marketing mobility university (IMMV)—is both a phenomenon and process. Accordingly, as the God-Liu phenomenon or process, it must have certain parameters. Until now, these parameters have never been described and classical. This is explained by the relative novelty of the concept of innovation-Marketing mobility and insufficient volume while research in this area.

The system of evaluation parameters of innovation and marketing mobility consists of subsystems parameters marketing and innovation of mobility of the university, as well as special parameters of the IMMV. IMMV parameters can be classified as follows: to enable accurate evaluation: quantitative (strictly measurable) and qualitative (relative measurable); the possible effects: mutable and immutable; the place of formation: internal and external. Qualitative parameters of innovative mobility university include: latitude MI high school; depth of innovative research; the degree of completion of the innovation process; intensity MI high school.

Under the breadth of innovative mobility university meant not only the number of direction of innovative research, but also, these areas are. For example, the breadth of IMV will be different at the two universities, if one innovative research conducted in the field of alternative energy, and the other—in the production of new cars for ink pens (black and nothing else). Understood, but that the university researchers that swept-asserted a strong range of interrelated or separately-standing problems, has a higher mobility innovation.

Depth of innovative research-RAWA available for Basic Research in the subject area, developed according to the university, application and systemic. Unfortunately, the in Russian universities is that the investigators, there tend to be called innovative interpretation of previously base. For example, is it possible to speak of a second-innovative research on economic faculty, if the result of scientific-term work is not innovative methods of production or the creation qualitatively new management tools of the organization and the only other previously known determination or of existing materials into a single schedule?

The degree of completion of the innovation process is a reflection of the maximum stage of the innovation process implemented in this school: theoretical innovation, manufacturing specific operating models and test samples, preparation and testing of a massive launch, commercialization and full implementation of innovations on the market. Intensity MI high school—is the total time of one particular implementation of an innovative project, as well as the frequency of appearance of new innovative projects. Quantitative parameters of innovative university-term mobility are annual number of registered patents for new technologies and inventions, percentage of faculty members engaged in innovative research, the overall percentage of students involved in innovative research, the amount of annual allocations for innovational research from the budget of the university, the volume of attracted investments from the university on research development, and income derived from the sale of the university and the commercialization of university innovation projects. Quantitative parameters of marketing and howling mobility university should include: the total amount of annual contributions to marketing; the amount of cash receipts from the sale of CPD programs within the university; the number of employees at the university teaching and research centers; The volume supplied to the market to university-added services (not education); The percentage of high school on the market for basic educationenforcement services. Qualitative parameters marketing mobility of the university are: The level of use of marketing in high school; brand awareness and reputation of 328 O. Konina

the university in the city, region, country; compliance with the basic and additional educational services of high school current market requirements; updatable educational programs.

The level of marketing at the university is a quality parameter, which has three main dimensions: low, intermediate, advanced. To the low level of use of marketing is a situation where marketing at the university has only a monitoring function achieve certain pre-defined parameters, such as profit or total return of educational programs. The average level of use of marketing determines the position at which marketing investments are minimal, not made evaluation of marketing activities and marketing activities are fragmented non-system character.

Advanced level marketing involves the use of an adequate and rapid assessment of marketing activities and marketing activity itself is complex, near the university has a specific marketing strategy for the implementation of the provisions of which apply a wide range of marketing tools. Marketing activities are carried out in several directions: promotion of educational programs, building brand university, attracting quality faculty and students. Specific parameters estimation IMMV are the result of the synergistic effect of the cross-coupling and integrated use of tools and methods of management and marketing of innovative mobility university.

These parameters are: application and development of innovative methods and tools of marketing within a particular institution of higher education; use the full marketing mix to market university innovation (industrial, educational, administrative). All of the above parameters relate to a large group of internal parameters. Anyway, they all depend on the state of development and marketing of innovative research in the walls of the university and are considered relatively variable because the university management has the ability to affect change through their specific marketing and innovation policy.

IMMV are state of the market environment in which the function has university. Therefore, the external parameters, as a rule, are immutable, because it does not depend on the internal workings of the institution, and accepted them as objective reality. These parameters include: the level of competition in the market for basic educational services; the level of competition in the market of additional professional education (counted as part of the university there and implementing programs DPO); the number of students (total fertility rate statistics as a factor of market capacity and demand for the primary and secondary educational services); the investment attractiveness of the university. The last parameter can be added parameters IMMV only conditionally and indirectly, but it is very important for the development of a common understanding of the painting.

4 Conclusion

If the investment attractiveness of the region is high in this region are concentrated the necessary financial resources, part of which is mobile and only risk capital required for the implementation of innovation, pays the demand for innovation. In the investment-attractive region lively market, market conditions are favorable, the production develops at a rapid pace, to some extent improved the standard of living and purchasing power of the population and, as a consequence, high demand for educational services. IMMV in regions is such potentially higher than in regions with a backward, underdeveloped economies.

However, the question cannot be considered on the parameters of innovation and marketing mobility closed since the concept is rather complicated and, as any hard-structural phenomenon that is not easy to analyze and assess. With the emergence of new views on this concept further study the possibility of new parameters IMMV more fully reveal its essence and to effectively manage it.

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Institutional Approach to Territory Marketing

Yulia Dubova

Abstract The article is devoted to development of institutional approach to territory marketing. The authors consider territory marketing as a reflection of institutional changes in contemporary economy; detect institutional tool-set for raising marketing attractiveness of territory; work out an institutional model of economic system; compile a model of a good in regional marketing and mark out distributing policy of a region as institutional instrument of territory marketing.

Keywords Institutional Approach • Territory Marketing • Economic System • Distributing Policy • Institutional Changes

1 Introduction

During the whole history of economic system, the change of economic mentality of society was reflected by contrast institutional changes. At the modern stage the attitude towards territory marketing in particular, and toward promotion of regions in whole is an indicator of development of serious institutional changes. In modern economic theory, within the conception of territory marketing: there is a prevailing opinion that wealth of a region van be achieved just with a help of state regulating, and the actions of government usually substitute or deform market mechanism, pursued foreign policy of a region, covered by a slogan of self-reliance in hypertrophied sizes, encourages isolation of given territory, in political sphere of a region demographical institutions are influenced by constantly changing authority groups. The key moment constitutes in the fact that with the other conditions being equal such economy is unproductive. That is why development and use of institutional approach to territory marketing is needed.

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2 Territory Marketing as a Reflection of Institutional Changes in Contemporary Economy

Transition to market way of management is usually related to development not so much of markets themselves, as with transactional sector of economy. Presence of real prices and markets allows to accumulate private property by individuals, which have opportunity and entrepreneurial abilities to use it effectively in order to gain maximal benefit. Otherwise, the chosen path of handing around state property in the course of privatization, is ineffective alternative, losing to efficiency of market mechanism in long-term prospect, which is proved by the practice of functioning of reformed Russian economy. In the end of institutional economic reforms, the state, instead of creating new institutions and mechanisms of economic coordination—markets and their institutions, substituted them by state distribution of resources according to preferences of political elite.

Eroding of property rights was encouraged by the legal uncertainty of ways of operating some types of property, e.g. land. Such state of affairs not only reduces the cost of resources, but opens the additional opportunities of monitoring their employment by officials (Popkova et al. 2014).

For effective activity under the conditions of market economy liberation of contracts signing is essential. Diversion of the principles of freedom to choose counteragents for signing contracts to compulsory principle is the reason for complication of contraction institute, which decrease the efficiency of the institution themselves and interchange. Nowadays in Russia in economical practice precisely the second principle is observed. This is confirmed by numerous bans of regional authorities on export and sales of agricultural and other production out of the regions. Requirements of territorial marketing, in this case, clearly show institutional changes in regional economy. Institutional model of economic system is represented on Fig. 1.

In order to realize territorial marketing it is important to be able to control and use resources, available in the region. At the same time, modern territory marketing indicates that the process of such use should necessarily fit the existing model of institutional system in the region.

The assumed model allows to produce composition of periodical system of flows and stocks to general model of economic rotation in the system. Within the framework of given model the flows of expenditures of institutional sectors rush to the market, where purchase of manufacturing factors, final consuming goods is realized. At the time at the same time the TK sector produces services (output) for other sectors for purchase (distribution and promotion of goods for consumers, conclusion contracts, storing, etc.), what gets transactional expenses of costs (Popkova 2013).

Output flows of institutional represent return from final production realized, manufacturing factors and are directed to institutional sectors. At that TK produces services for other sectors doe sales (distribution and promotion of goods for consumers, conclusion contracts, storing, etc.), what gets transactional expenses

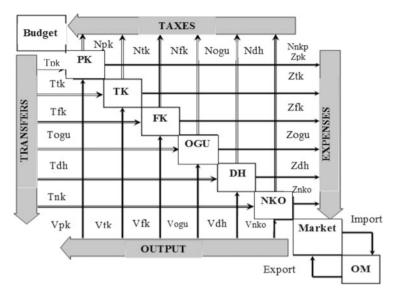


Fig. 1 Institutional model of economic system

of output. Tax flows of institutional sectors are formed of taxing expenses and output. At that OGU sector forms the revenue part of budget and receives assets for operating its system functions, form fund of emergency situations.

Flows of transfers to institutional sectors are formed of the expenses part of budget. At that OGU forms the revenue part of budget, maintain state institutions, carries out inter-budgetary transfers, and pays for damage, caused by emergency situations.

Flows of transfers to institutional are formed of the expenses part of budget. At that the OGU sector form the expenses part of budget, maintain state institutions, carries out inter-budgetary transfers, and pays for damage, caused by emergency situations. The principle of periodical system of flows and stocks of economic system, unification of its main elements, assumes a new understanding of categories of costs and output. So for institutional DH sector, the costs are consuming expenses for own consumption, and output is labour in its actualized form—salary. At the same time non-corporative activity of DH assumes costs of purchasing raw materials and materials, which non-corporative output to sell in the market is produced of (Popkova 2014).

For institutional OGU sector while servicing budget, transfers transferable to other institutional sectors are the costs, collected taxes for budget are the output. At the same time the state produce public services, which it spends money on maintaining state institutions for.

Institutional NKO sector has in payments of participators of public organizations as the expenses. Social services of public organizations are the output of the sector. Economic system of a system is connected with economic systems of other

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countries through external flows of import and export, which are equal to internal flows of costs and output.

The model doesn't show stocks of institutional sectors but they are meant and can be calculated. At that, based on conservation law, the sum of all flows in the system would not be equal to zero, but would constitute the value of growth and decrease of stocks by sectors.

It is necessary to mention that exactly the periodicity property of flows and stocks gave an opportunity to form economic system of country, region. This system admits decomposition (fragmentary to constituents), which keeps the periodicity properties.

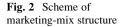
Using of institutional structuring of economic system dramatically changes the approach to targets and aims of state regulation. So, for example, the economic growth can be achieved by development NFK and FK sectors, but at the same time, revenues of DH sector would decrease, which would influence the social development of country, region. This should not be admitted. Excessive development of FK output, agency due to reduction of NFK output can worsen the economic growth, which is not available. However, the combined impact on concrete institutional sectors allows to perform balanced regulation in economic system. Consequently, the model allows to form rational proportions of developing institutional structures and provides effective regulating impact for its realization.

For defining adequacy of suggested model to actual state of economic system it is necessary to describe institutional sectors in structural features and to determine character and function of influence of structure on corresponding parameters, sector flows. On the given step of analysis comparison of structures of active economic system is conducted, which is important for detecting character of interaction of institutional sectors. This gives an opportunity of early diagnostics of the system. As the result, the targets of structuring are determined by development strategies and the general direction of the project.

3 Institutional Instruments of Increasing Marketing Attractiveness of Territory

One of the variant of this complex is the 4P model, which in spite of its boundedness, can be used while planning marketing campaigns for transition step of forming market institutions and relations. The most wide-spread form of marketing-mix consists of four submixes of marketing: product marketing, distributional marketing, contract marketing, and communicative marketing. Each of them includes separate complex of measures, conducting of which encourages formation of corresponding policy within the sphere of region marketing (Keynes 1975) (Fig. 2).

After completion of the segmentation process and determining on its basis specifics of region positioning, marketeers should effectively report the results of





positioning to possible consumers with the help of corresponding complex of territory marketing. From the regional positions marketing complex represents as a kit of verifiable variative factors of marketing, complex of which a territory can use if they wish to get a particular response of their subjects-consumers.

Developing of a system of regional marketing demands formation of marketing efforts of territory in the chosen target markets. They are set by strategic decisions on preserving and supporting active position or its improvement (repositioning). At that effective performance of positioning strategy is possible just while active use of territory marketing instruments as a part of corresponding complex program of regional marketing (Popkova et al. 2013b).

Municipal marketing means general resource potential of a territory by a good. These are opportunities, which a region can use, opportunities, which are the object of regional marketing. The model, reflecting the concept of a good in territory marketing, is performed for ex. here Fig. 3.

Let us consider how traditional model of good changes in such interpretation of this category. The starting point of the model is a core product. Its basis is constituted of leading value and main function, that is those key benefits and advantages of region, which potential consumer of external and internal markets of territory can achieve. Performing as an object, territory suggest external interested subjects (investors) all its total resource potential aiming to advantageously sell image of the region and to activate economic development in this territory.

The next element of the model is the actual product. The region suggest themselves to the role of supplier of goods and values for consumers, and its total resource potential and unique territorial features: convenient geographical location and rich natural resources, up-to-date transporting infrastructure, attractive internal market, high-qualified scientific and manufacturing labor force, presence of exclusive know-how and innovational technologies, cultural historic heritage, good will (Popkova et al. 2013a).

The third element of the model is the augmented or assumed product. It represents a set of expected conditions, which consumer usually plans to get and which he agrees to while purchasing this product. Among the similar characteristics of augmented product ought to be the following: investing attractiveness and presence of favorable conjuncture for stable economic growth of this region, which encourages formation of favorable social economic situation for activity of all levels of society of territory and potential directions for developing innovations, etc.

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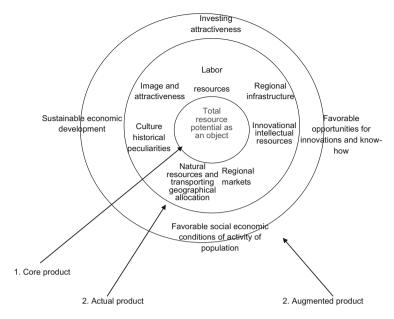


Fig. 3 Model of a good in regional marketing

The region as a subject can take a position not only of a consumer, but to give other subjects, external and internal towards the territory, everything, which can have any investing attractiveness and significance for potential internal investors, entrepreneurs and consumers (Schmid 2004.).

The result of activity of sector of territory marketing is performed by services, which quite often remain 'invisible' for ordinary inhabitants of the region, though they use them in ordinary life, the value of which can be understood just after purchasing them. Under 'service' in regional marketing an agreed process of interaction of two or some market subjects is understood, when one side influence another in order to form, increase and multiply the opportunities of the last ones in purchasing fundamental goods. Besides that due to the work of Armstrong et al. (2004) the model of service marketing in compare with '4P' model is added by three more 'P': process, physical evidence and people.

4 Distributional Policy of Region as Institutional Instrument of Territory Marketing

Distributional policy is conducted aiming on delivery of product on time from the place of its production to receiver. It is performed due to the next measures: analyzing and grounding distributing channels, trade policy, marketing logistics, policy of distributing means, policy of allocation of manufacturing forces, policy of

allocation of consumers and markets, policy of delivery, store policy towards finished products, etc.

In order to develop measures on distribution of complex of territory marketing one should conduct careful segmentation and choose the most interesting from the point of view of future profits target segment, then to consider specifics of distribution from the positions of two moments of regional characteristics: as subject and as object of marketing program of territory development.

Region, functioning as subject at market, provides consumers with services for satisfying individual and collective needs of different social groups, living in the region. Considering the main characteristics of service as a good (intangibility, inseparability, inconstancy and impossibility of keeping), specifics of planning service distribution between final consumers. The choice of principle of distributing services among population is one of the most issues: who should get, what and how many. Besides, there are general rules of distribution of regional services between population:

- the principle of equal distribution in the presence of standard minimum for all social groups can be the basis, deviation from which is admissible just at obvious profit;
- for groups with high revenues the emphasis is on distribution in accordance with revenues received or taxes paid;
- for groups with low revenues and specific needs (invalids, pensioners, families with children, etc.) it is assumed to receive additional resources. While distributing municipal collective services the distributing channel can participate in provision of any elements of service (for example, formation of order package on repair of household appliances for pensioners) or the whole complex of services.

For planning distribution the following indicators can be used: indicator of admissible accordance between the level of rendering services and expenses on maintaining this level (enterprises often decrease the level of service in order to reduce expenses), indicator of probability of visiting establishment of rendering this services depending on any peculiarities, indicator of number of visits per day, week, etc., depending on the number of services.

Thereby, it is possible to make a rating of attractiveness of different regions, rendering similar services, and to detect the advantages and disadvantages of choosing distribution channels.

It is possible to say this variant of system of territory marketing coincides with standard interpretation of marketing conception. But at that the informative base of structure of territory marketing is distinguished by the next elements: checked and argued local economic policy, importance and rationality of which is stipulated by growing competence between regions, this policy is oriented at maximal satisfaction of needs of development of regional economy, social sphere of this territory, interests of entrepreneurs, the whole complex of territory marketing instruments is used in order to increase the quality of all social layers of population and any citizen of this region (Fig. 4).

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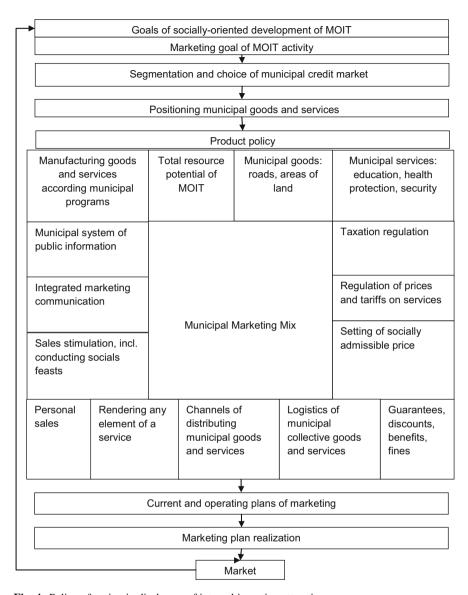


Fig. 4 Policy of region in disclosure of internal investing attractiveness

For dynamical productive stable complex development of territory it is necessary to use all instruments of regional marketing in complex and unite system, excluding contradictions between them and using possible synergy effect from realization of some simultaneous measures in interfacing spheres of economic life of region at once. Just in this case measures on regional development would be performed not pointwise and chaotically, causing separate outburst of interest to

investing into region, but planning and continuously providing economic growth both in entrepreneurial; sphere and social life of inhabitants.

5 Conclusion

Thus, territory marketing can serve as a reflection of institutional changes, which occur in the economy of a region, if to consider the range of restrictions, imposed by the government on territorial marketing in this region within the sphere of promotion of goods and services. With the help of modern marketing instruments territory marketing gives an opportunity to evaluate the character of market competition on the territory, the level of support and preferences of particular manufacturers and to find the reasons of its unfair or unprejudiced character. Territory marketing allows to evaluate operation of all institutions, functioning in this region, fully and in dynamics. Thereby, carefully considering the issue of forming program of region development, foreseeing possible ways of its realization, it is possible to understand which institutional changes occur in the region in the moment.

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Part III SMEs and Human Resources

University Students' Perceptions and Attitudes About Entrepreneurship and Their Intentions to Startup Businesses: Literature Review

Adil Hassan Bakheet Khalid

Abstract The aim of this paper is to review the available literature on university students' perception towards entrepreneurial activity. This will help develop a framework for a project seeking to recommend solid entrepreneurial policies towards youth. The paper specifically aims to find out what are the variables influencing the students' perception and how to measure their perceptions towards entrepreneurship and what will be the effect of perceptions on attitudes and intentions to start their own businesses. There is a growing body of literature arguing that perception plays a very relevant role in the decision to start a new business. The importance of personal traits in understanding this personal decision has been highlighted by many researchers. There are many theories attempt to explain the origin of entrepreneurship and its contributions over time. They attempt to answer the question of why some people or even some communities more entrepreneurial than others. This review will highlight major variables and theories considered in the available literature. As a result perception of the available opportunities; barriers; motives, entrepreneurial exposure, family support and culture were identified and formulate the conceptual framework for the potential project.

Keywords Entrepreneur • Entrepreneurship • Entrepreneurial intention • Perceptions • Attitudes • Startup

1 Introduction

An important question is why some university students decide to pursue entrepreneurial activities while others search for employment. Research has investigated the possible reasons behind this behavior from the perspective of the individuals as well as economic and other factors in their environment (Audretsch and Keilbach 2004;

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Hofstede 2001). Competition for employment in the public or private sectors is the cause of graduates' failure to choose a career in entrepreneurship, which they view as a second or final choice (Norasmah and Salmah 2009). What is not clear; however is how the students themselves perceive entrepreneurship and how these perceptions influence their attitudes and intentions to start their business?

Many researches have investigated the reasons for the creation of new enterprises and the entrepreneurial characteristics of those individuals responsible for establishing a new enterprise. This is why this paper intends to investigate the available literature on the reasons why university students are different in term of the way they think about their career and what factors influence their attitudes and intentions to start their own businesses. This will make it clear for any policies targeting this specific group to encourage the establishment of small and medium size enterprises (SMEs).

Economies differ in terms of how they offer encouragement to entrepreneurs. Private property rights and a competitive market system are good incentives for enterprise. Uncertainties about the economy, corporate downsizing, etc., are result in declining number of corporate recruiters and job vacancies. As a result, the rate of unemployment is increased. Furthermore, the unemployment of graduates has become a national issue in many countries, especially in Oman as the government is not able to provide jobs for all nationals. The available ways for the government currently are either to replace the expatriates with unskilled nationals (Omanization), support the private sector to create more jobs or to enterprise national youth. This will help the government to meet the job demand of the increasing number of graduates from public and private higher educational institutions that join the job market each year.

Enterprising of Students and graduates would help them to develop their own career and support the government to reduce the current level of unemployment (Norasmah and Salmah 2009). In Oman the time between graduation and getting a job is long, which can be used to start-up. Students now realizing this problem and they will be more sensitive than before to find alternative ways to increase their opportunities to avoid unemployment. This can be achieved by equip themselves with necessary entrepreneurial knowledge and skills to succeed in running businesses or to be creative and innovative to transfer a business idea into a new venture (Brown 1990; Henry 2004). Oman has its own norms and values and it defines distinct outlooks toward the real life of its people. The Omanis have a large range of expectations, demands, and outlooks for diverse and complex values in many areas. They put a huge pressure on the government to support them. Their cultural values seem to be a significant issue in students' enterprising, as they have a deep history in business and international trade.

While entrepreneurship is a young area of research, youth entrepreneurship is still younger and a good deal of the research literature is of high-income or middle-income countries. There is thus a lack of empirical evidence from developing economies, which is largely due to unavailable data. Entrepreneurship literature relevant to university students is therefore even scarcer mainly about developing countries. However; few studies available as (Llisterri et al. 2006) studied the extent of youth entrepreneurship and how young entrepreneurs who chose to become

entrepreneurs create dynamic and high growth enterprises that create employment for others (World Bank 2010), argued that young entrepreneurship is an important part of the national economy which can create and increase employment opportunities and enhancing economic growth, as these enterprises need employees to grow and to compete.

Given the importance of entrepreneurship and young entrepreneurs to every economy, the aim of this paper is to frame a conceptual model for a project intends to investigate the perception of Omani university students towards entrepreneurial activity, with the view to extend entrepreneurial policies towards this group, which represents the Omani youth. The literature review will help developing clear guidelines on what are the factors behind the positive attitudes and how these attitudes influence the intention to start up. In addition; the literature review will also help identify how to measure the perceptions of young people towards entrepreneurship through assessing their views about a number of variables. As the project will focus on university students in Oman, the sample study will be conducted among the university students in Oman. The government now is investing and focusing on this area of entrepreneurship as a mean to overcome the limitations of providing jobs to the increasing numbers of graduates and other who constitute the supply side of the labor market.

2 Entrepreneurship Literature: An Overview

The entrepreneurship literature can be divided into two broad areas focusing on individual entrepreneurs and the structure of entrepreneurship (Martinelli 1994; Thornton 1999). The individual entrepreneurship literature seeks to explain the prevalence of entrepreneurs in terms of distinctive psychological traits or how special characteristics are formed in certain social groups. There is a growing body of literature arguing that perception plays a very relevant role in the decision to start a new business. The importance of personal traits in understanding this personal decision has been highlighted by many researchers. In their view, perception provides additional insights into the complex process of entrepreneurship.

Structural entrepreneurship highlights how social and cultural structures call forth entrepreneurs by providing opportunities for entrepreneurship. McClelland (1961), claimed that some societies have cultural attitudes that engender entrepreneurial individuals. The cultural and institutional support factors can be divided into institutions and policies, knowledge of how to start ventures, how to obtain financial support and perception of entrepreneurship as a career. These factors are used to explain the types and levels of entrepreneurship in a country context (Busenitz et al. 2000). These studies do not seek to explain entrepreneurial action on the micro level, but rather the amount of entrepreneurial activity in a certain place or time (Reynolds 1991).

3 Theories of Entrepreneurship

Entrepreneurship theories are theories that attempt to explain the origin of entrepreneurship and its contributions over time. They attempt to answer the question of why some people or even some communities more entrepreneurial than others. The theories revolve around the roles of instinctive personal traits and the environmental factors in providing answers to the question. A set of theories are identified while dealing with entrepreneurship. First set of theories emerged from the questions focused on the entrepreneur, while the other set of theories emerged based on the questions raised about the entrepreneurial process (Bygrave and Hofer 1991). These two sets were identified the traits theories which, talk about the entrepreneurs and the entrepreneurial events theories which focused on the process of perceiving opportunities, establishing businesses, and successfully run them. These two sets of theories are linked together as the essence of the entrepreneurship is the entrepreneur (Mitton 1989).

The entrepreneurial recent and existed approaches and theories are originally come from this broad perspective. The entrepreneurial behaviourial approach explains what entrepreneurs do, in what order, to what extent, and how these actions help create, discover and develop new organizations (Van de Ven 1980; Gartner 1988). This approach also justifies the actions of the entrepreneurs in developing new economic activity or venture (Shane and Venkataraman 2000; Davidsson 2003). Accordingly, entrepreneurship is considered as an explanation about what potential entrepreneurs do rather than who they are. Definitely what the change they will add when they start business is also reflected as a result of their actions. According to Drucker (1985), entrepreneurship can and should be exercised systematically. From the previous discussion of the behavioral approaches, it is clear now they put actual observable behaviors as the main focus of investigation to explain the entrepreneurs' behaviour. Therefore; it is very important to identify new start-ups and then track their development by measuring entrepreneurs' attitudes, intentions, actions and strategic decisions for business development (Van de Ven et al. 1999; Reynolds 2000). To do so researchers used many measures to allow for more qualitative and qualitative interpretations of the starting-up and entrepreneurial process (Van de Ven 1992).

Some researchers seek to uncover the specific ways in which entrepreneurs process information and store knowledge as means to understand entrepreneurial action, this can be classified as perceptual or cognitive approach (Mitchell et al. 2002). This approach is divided into two broad sections. One typically review existing psychological research and identify cognitive biases such as evaluating risky opportunities. The other gives more direct examination of how entrepreneurs think. Other approach is the intention-based approach, which seeks to explain specific entrepreneurial events or actions such as searching for opportunities, deciding to start or exit a venture, or pushing for continued growth (Bird 1989). Under this approach, researchers typically trace entrepreneurial intentions to three general factors, which represent the main variables of the planned behaviour theory:

the individual's attitude toward behaviour, perceived social norms and perceived behavioral control (Krueger 2000). Beliefs in own ability to start a business and achieves own goals is the major factor influencing the intention to start-up as there will be a high level of confidence toward success. Krueger (2003), found a significant relationship between self-efficacy and the entrepreneurial behaviour. The intention therefore is dependent on the self-efficacy but it doesn't mean that there will be an entrepreneurial actions. This why in the behaviourial model it was considered as an independent variable leads to entrepreneurial action (behaviour) i.e. what the entrepreneurs do. This implies that many contributions can be identified and facilitated by different concerned stakeholders to encourage the entrepreneurial action. This leaves the door open to recommends a lot of provisions to university students and graduates to support their intentions to start-up, and to transfer their intentions to action.

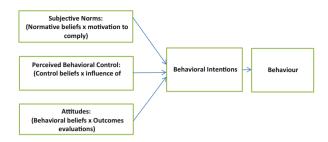
4 The Theory of Planned Behaviour as a Focus

According to Veciana et al. (2005), first; the attitude toward the act refers to the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question. Second; the subjective norms, of the Theory of Planned Behaviour (TPB); refer to the perceived social pressure to perform or not to perform the behavior. Therefore; for them the theory of planned behavior, in its intent to explain human behavior deals also with the antecedents of attitudes toward the behavior and subjective norms. Furthermore; the theory of planned behavior proposed by (Ajzen 1991), postulates that behavior is a function of beliefs (self-efficacy). The beliefs then considered being the prevailing determinants of a person's attitudes, intentions and behavior. Behavioral beliefs beside the other factors are assumed to influence attitudes toward the behavior (action). According to the figure below; normative beliefs constitute the underlying determinants for subjective norms (Fig. 1).

Third; the perceived behavioral control plays an important part in the (TPB). According to this theory, the resources and opportunities available to a person must to some extent dictate the likelihood of behavioral achievement (Veciana et al. 2005). However, of greater psychological interest than the actual control is the perception of behavioral control and its impact on intentions and actions. Perceived behavioral control is defined in the as the people's perception of the ease or difficulty of performing the behavior of interest (Veciana et al. 2005). The antecedents of perceived behavioral control are the control beliefs. These control beliefs may be based in part on past experience with the behavior, but they will usually also be influenced by the experiences of acquaintances and friends, and by other factors that increase or reduce the perceived difficulty of performing the behavior in question (Veciana et al. 2005). Shapero (1984) emphasized the perception of the potential entrepreneurs about the availability of financial support beside

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Fig. 1 The theory of planned behaviour. *Source*: Ajzen (1991)



other factors as availability of advice, consultation and relevant technical education that will facilitate the start-ups.

The impact of the three components of the TPB on predicting the entrepreneurial intention is expected to vary across behaviors and situations (Ajzen 1991). Similarly; there are many factors influencing the creation process of new start-up (Shapero 1984). In the other hand; other factors like perceived credibility, perceived desirability and inclination to act represents the major factors that affecting the potential entrepreneurs' intentions toward entrepreneurship. In the same direction; Krueger and Brazeal (1994); concluded that the perceived feasibility of the start-up; is a major factor contributing to the entrepreneurial intention.

The behavioral consequences influence the intention of the individuals as many researchers concluded this impact. Beside the behavior influences, personal traits of potential entrepreneur motivate them to start-up. Therefore; risk takers have positive attitudes toward income and independence and more likely to be engaged in an entrepreneurial behavior. These factors for (Douglas and Shepherd 2002); found to be influential in formulating the positive attitudes towards entrepreneurship and create the intention to start-up to be self-employed. They argued that individuals with higher expected utility from factors as behavior influences and personal traits; would be more likely to have greater entrepreneurial intentions.

The factors that influence entrepreneurial intention were also the focus of many studies in the past few decades (Hills and Barnaby 1977; Sexton and Bowman 1985; Hills and Welsch 1986; Hutt and Van Hook 1986; Hatten and Ruhland 1995; Ede et al. 1998). In Scotland for example; Henderson and Robertson (2000); have collected data from young people who were studying entrepreneurship in business schools and those who are newly hired at a major financial institutions. They found that the majority of those studying entrepreneurship expressed a desire for self-employment, compared to very few percentage of those who newly hired in financial institutions. In (Sagie and Elizur) study which published in 1999, they have reviewed the available entrepreneurship literature; and concluded that almost all published studies have focused on identifying students' characteristics who were interested in entrepreneurship. They have listed these characteristics as students' desire for self-employment, their prior family business experience, and their demographic differences.

5 Other Related Recent Studies

Venesaar et al. (2006) have identified the factors influencing the university students' attitudes and intentions to start up. These factors include students' personality traits and contextual factors of business environment. They argued that the university has a vital role in supporting students' entrepreneurial attitudes and intentions. One of their most important results is that despite the considerable share of respondents thinking about starting a business, most of them do not have the intention to undertake entrepreneurial activity immediately after graduation. To assess the attitudes of students toward entrepreneurship; they analyzed their motivations to start their businesses. They argued that ambition for freedom ranked top for students, followed by intention for self-realization and the strongest pushing factor is connected with searching for opportunity to earn better income. They found that respondents' attitudes towards entrepreneurship were highly correlated with their intentions to start-ups whether in near or late future. The interesting result here is the attachment of higher importance to motivation factors and the intention to start-up in the near future.

Narendra (2006) investigated about what a group of university students in India intended to do upon completion of their college education, are they going to become entrepreneurs or work for someone else? According to results of factor analysis, six variables (to lead other people, to be my own boss, to put my innovative ideas into practice, determination, personal challenge non-business education) were found to relate to the start-ups. In a recent study; the entrepreneurship education, entrepreneurship intensions among students, the entrepreneurial self-efficacy of the students and the perception of entrepreneurship among the students within an Indian setting were investigated (Mohammed and Aparna 2011). This study has provided some useful insights about the entrepreneurial intention among students. For example; it concluded that most entrepreneurial self-efficacy or self-confidence lies with the students' perceived ability to manage money or be a leader. Other study highlighted that self-confident increases interest in entrepreneurship majors and electives (Bernstein 2011).

Roozikhah (2010) found that students interested in learning more about markets, corporations, industries, and business regulations, seem more motivated than others within the entrepreneurial climate. While Norasmah and Salmah (2009) show that an attitude based on an internal locus of control, monetary value, and autonomy had a significant impact on choosing entrepreneurship as a career choice. They also found that attitude can predict career choice in this field through aspiration level among graduates. It is clear that attitude plays an important role in motivating an individual's career choice behavior in entrepreneurship. Students' interest in entrepreneurship and their interest on its relevant courses; were studied by many researchers to identify the major characteristics of potential entrepreneurs from them.

Khan and Almoharby (2007) highlighted the importance of entrepreneurial activity for the future growth and development of the economies of oil-producing

countries of the GCC. While Panikar and Washington (2011) argued that many Omani students possess entrepreneurial skills and characteristics. They also found that the attitude and level of interest toward entrepreneurship is high. If we consider the argument of Bernstein (2011); which states that regardless of their levels of self-confident, students perceived both the entrepreneurship major and elective as increasing their likelihood of success as entrepreneurs, we will understand now why the Ministry of Higher Education in Oman enforced all Higher Education Institutions (HEIs) to introduce an entrepreneurship course; as a compulsory course; for all students.

6 Research Model and Theoretical Framework

As a summary of both entrepreneurship theories and literature review; the researcher can now draw the framework of this study. The framework expected to include both personal traits and environmental influences. Therefore, the framework as shown in Fig. 2 includes specific set of independent variables (perception of business opportunities, perception of barriers, perception of motives, personal entrepreneurial exposure, expected family support, and culture), which influence the attitudes of students towards entrepreneurship, which in return influences their intentions to start their own businesses.

This model will help develop the following:

- Research objectives as the study will look forward to measure these relationships.
- Research questions as the study will try to answer to what extent these factors influence the attitudes and intentions.

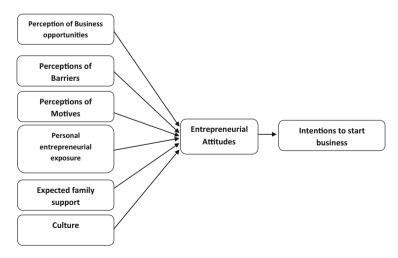


Fig. 2 Proposed conceptual framework

 Research hypotheses as the focus will be on testing these relationships between variables.

Therefore; and as it is clear from the research model, the students' attitudes will be a dependent variable for the sets of both personal and environmental factors and independent variable for the students' intention to start-ups.

7 How to Measure the Study Variables

As indicated earlier; the second aim of this paper, besides reviewing the current literature on entrepreneurship behavior and intentions among university students, is to find out how to measure the study variables. There are a lot of hints from statistics and previous studies on how to measure these variables. The variables in the (TPB) model are psychological constructs in nature. Therefore; each predictor variable may be measured directly by asking students about specific behavioral beliefs and outcome evaluations. The common method of measuring behavioral intentions is by investigating the behaviour where multiple options are possible. To measuring attitudes direct measurement is common which involves the use of bipolar adjectives (very good–very poor). Ideally we can use Likert's scale which identifies items for each behaviourial construct under investigation. It is important that the attitude items have high internal consistency, i.e. scores on these items correlate highly with each other. At the end we can calculate the mean of the item scores to give an overall attitude score.

8 Conclusion

This study examines the available literature about the entrepreneurship theories and influential variables among university students. The aim is to draw a conceptual framework that will help in implementing a research project funded by the Research Council of Oman. It was found that the theory of planned behavior (TPB) proposed by Ajzen (1991), is the most appropriate model for this study; as it tries to study the attitudes towards entrepreneurship among university students in Oman. The study reviewed many relevant studies and clearly identified the following variables as the influential factors that formulate the students' attitudes towards entrepreneurship. The attitudes then considered impacting the intention of students to start-up. As it was also highlighted, the intention alone doesn't lead to action unless there are many factors pushing in that direction.

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Online Video Clips in Foreign Language Teaching

Jaroslav Kacetl and Madgalena Fiserova

Abstract Information and communication technologies are an inseparable part of any human activity, including university education. The authors will discuss ways of exploiting videos in foreign language classes. A number of experts have been looking into this problem and come up with various suggestions. This contribution discusses the development of video clip utilization in language classes for students of Management of Travel and Tourism at the Faculty of Informatics and Management, University of Hradec Kralove, Czech Republic. The authors have been using videos for 4 years. All the time, they have been trying to further develop both materials and procedure employed in the classroom. A questionnaire survey and a literature review have been conducted in order to determine the best possible practice of video utilization. The outcomes are presented below.

Keywords Audio-Visual • ICT • Video • Websites • Worksheet

1 Introduction

At present information and communication technologies (ICT) are an inseparable part of any human activity, including university education. Canning-Wilson (2000) provides a definition of video as "the selection and sequence of messages in an audio-visual context". Video is commonly used to enhance foreign language lessons. Nowadays there are a lot of freely available online video clips that can be employed for foreign language teaching. Information and communication technologies (ICT) at schools and universities enable teachers to use these authentic materials. We believe that the most efficient and beneficial type of video used in the classroom is an authentic video providing students with an authentic model of speech. However, a question remains: How to efficiently exploit videos in English lessons?

A lot of authors have been looking into this problem. The above mentioned Canning-Wilson (2000) states advantages of using video. For instance, it provides

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visual stimuli and contextual clues, generates prediction, helps learners to predict information and infer ideas, allows the learner to see authentic body rhythm and speech rhythm in second language discourse. Canning-Wilson (2000) reveals that her large-scale survey suggests that the students like learning language through the use of videos. On the other hand, she warns educators that they must not lose sight of the educational purpose video has in the language classroom.

Nowadays it is easy to find suitable video clips on the Internet and foreign language teachers frequently use them. Some useful websites are YouTube, Yahoo! Video, TeacherTube, Hulu (not available in the Czech Republic), Netflix (not available in the Czech Republic), OneWorldTV, Google Video, MSN Soapbox, NextVista, Discovery Education, and Deutsche Welle.

For instance, Mullen and Wedwick (2008) discuss integration of technology into teaching and find YouTube useful for its quick access to a large database of videos. They believe that video clips have the potential to enhance almost any classroom lesson. Apart from YouTube they list other video sharing websites such as TeacherTube, SchoolTube, United Streaming, OneWorldTV, Yahoo! Video, Google Video, and MSN Soapbox. Bell and Bull (2010), while maintaining that the ubiquitous presence of digital video is permeating every aspect of life in the twentyfirst century, broaden the list of useful websites with subscription services like Discovery Education (http://streaming.discoveryeducation.com/) offering thousands of educational titles, or another free site NextVista. They add that video clips can be used in teaching a number of subjects, including foreign language lessons, where students can watch video clips of everyday conversations in films or television broadcasts or listen to music (song lyrics), interact through live video conferencing, create their own conversation videos, and much more. Similarly to Canning-Wilson (2000), they emphasize that in order to support the best use of emergent technologies, careful thought about effective applications in each discipline is needed, though. Video content should always match an instructional goal. Therefore, students need prior instruction about what to look for in a video clip. For instance, the teacher can help them by pausing video at strategic points, replaying key segments, or by assessing their understanding. In order to support the best use of these emergent technologies, careful thought about effective applications in each discipline are needed.

Trier (2007) talks about what he calls the new and rapidly expanding trend of vidcasting. He can see the powerful pedagogical potential of YouTube, which is only one of vidcast websites but currently the most popular one. On the other hand, McKinnon (n.d.) states that even though video is a valuable classroom tool, it is still possibly underused and adds that the setting, action, emotions, or gestures students can observe in a video clip, provide an important visual stimulus for language production and practice. He suggests and explains a wide variety of activities including pre-viewing, while-viewing and post-viewing tasks teacher and students can do with video clips. McKinnon (n.d.) also works for onestopenglish, a resource site for English Language teachers, and prepares sample lessons using activities he calls split viewing, vision on/sound off, observe and write, video dictogloss, watch and observe, video as a listening tool—pronunciation, and video as a listening

tool—elementary video class. Cakir (2006) also lists several practical techniques for using video clips in language lessons. Namely, active viewing, freeze framing and prediction, silent viewing, sound on and vision off activity, repetition and role-play, reproduction activity, dubbing activity, and follow-up activity.

Of course, the above mentioned list of useful websites is by no means full. Another site offering free online video clips designed for ESL (English as a Second Language) classrooms is called Real English (www.real-english.com). It is free and there are original videos as well as interactive lessons. The language is authentic and real. Students can listen to a wide variety of accents, used structures range from the simplest to more advanced ones. Using subtitles is optional. Of course, freely available video clips are not necessarily in Standard English, British or American, only. There are also Australian English, Indian English, South African English and many more Englishes. Nevertheless, as Crystal (2005) emphasizes, English has become a pluricentric language, that is one whose norms and functions vary globally. It is therefore beneficial for students to be aware of this phenomenon.

Using subtitles is another interesting problem linked to employing video clips at all levels of foreign language teaching. In this respect, Hayati and Mohmedi (2011) have offered interesting findings. The participants at their research were randomly assigned to three groups, watching a video clip with L2 (English), L1 (mother tongue), and no subtitles, respectively. Hayati and Mohmedi (2011) maintain that students benefit most from bimodal L2 input, i.e. from watching foreign language video clips with subtitles in the same language. Then, they compared results of a follow-up listening test. The students who watched the video clip with English subtitles performed at a considerably higher level than those who watched the same clip with L1 subtitles. This second group, in turn, scored much higher than those who watched without any subtitles. It follows that subtitles improve the student's ability to identify key words and that bimodal L2 input is better than L1 subtitles as students do not need to do the additional activity of translating. Moreover, Hayati's and Mohmedi (2011) showed that students with good vocabulary and listening skills needed to glance at subtitles only occasionally.

The authors teach languages (English and German, respectively) at the Faculty of Informatics and Management (FIM), University of Hradec Kralove (UHK), the Czech Republic. There are currently under way two projects that are particularly important for foreign language teaching at FIM. One of them aims at creating a new system of domestic as well as foreign internships for full-time Management of Travel and Tourism students. Since 2012 there have been placements in Geoparks in Portugal and the United Kingdom and the number of foreign host institutions is expected to rise. The other project aims at exploiting ICT in all subjects, including teaching English and German. It is therefore a reasonable plan to employ ICT in foreign language teaching.

The paper's objective is to describe the ways ICT started to be employed in foreign language teaching at FIM UHK.

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2 Materials and Methods

First, interviews with a number of FIM teachers were conducted to determine how ICT could be exploited in foreign language classes. The interviews resulted in an idea to use video clips focusing on travel and tourism so that MCR students could improve in particular their listening skills and widen their specialist vocabulary.

Then, search for suitable video clips on freely available websites started. At this stage, Deutsche Welle (DW) was selected as the primary source of video clips. DW website was chosen because there are hundreds of 4-min long video clips on various topics, including those suitable for MCR students—particularly Euromaxx City series introducing tourist attractions and culture of significant European cities, and other six-part euromaxx series on various topics like Great Gardens, Regional Success Stories, Market Tales, or Holiday Challenge. Moreover, most of them are in both English and German and their length seems to be suitable as students manage to pay attention all the time. DW video clip topics are a treasure of information about culture, history, politics, institutions and other facets of life not only in German speaking countries, but also in other—especially European—countries and can therefore be used to support a lecture or to demonstrate a problem.

The choice of DW as a suitable website was followed by literature review aimed at finding out ways how video clips are used in language classrooms at all levels, in particular B2 to C1 levels according to the Common European Framework of Reference for Languages. The resulting worksheet (for the latest version see below in 4 Sample Worksheet for MCR Students) is divided into several parts. In brief, the format usually contains the title and website, a short introduction to the topic, explanation of key vocabulary, questions (T/F, open questions, cloze tests). The student version of electronic worksheet can be made available to FIM students at any time through the university intranet, usually without key. The students' worksheet is always on one page to make it printer-friendly. Teachers, nonetheless, may use a longer version with key and notes.

First video clips and corresponding worksheets were used in foreign language classes for other FIM teachers who provided feedback. The authors both teach and attend respective English and German lessons for teachers. Then, first video clips were used in regular classes for Management of Travel and Tourism students and a similar format of video clips and corresponding worksheets started to be used in English lessons for students of other specializations, too. At the moment, the authors have prepared about 100 worksheets to video clips in English and about 70 to those in German.

Having used these video clips for more than 3 years, the authors have had representative feedback from their students'. A questionnaire survey is carried out at the end of every academic year among second-year MCR students to find out their views on using video clips in the classroom. At that time, all of them should have seen about 40 video clips, either in English or in German. All second-year MCR students are at more or less B2 level in either English or German. They

have English or German classes in both winter and summer semester, which adds up to 26 lessons during their second-year. In about 20 language lessons they watch a video clip. Moreover, it is recommended that they should do self-study outside classes, based on using textbooks English Listening Exercises (Kacetl 2011), containing 20 worksheets for MCR students and another 20 for students of other specializations, and Hörübungen (Fiserova 2011), containing 30 worksheets for MCR students, respectively (for sample worksheets see Appendix II).

So far, the authors have collected more than 100 respondents (117), most of them students of MCR (105). Nonetheless, the non-MCR students (12) attended all the classes where video clips were used with MCR students. The language used in the questionnaire is Czech as some of the students study German, whereas others English. The authors' hypotheses were as follows:

- H1—Students prefer audio-visual materials to audio-only materials.
- H2—Students can help us enhance the format of worksheets.
- H3—Students are capable of coming up with interesting video clip topics.

3 Results and Discussion

H1 was proved. Questionnaire results (see Table 4) confirm it as almost all MCR students prefer audio-visual materials to audio-only ones (for questionnaire questions see Appendix I).

H2 was disproved as most students would not change the format at all. Nevertheless, some of them suggested several improvements to the worksheet format. For example, the authors started to paste below the title photographs related to the topic. A few students would welcome Czech equivalents to the explanation of key vocabulary, further information to the topic, or additional pre-listening activities.

H3 was proved. Students would welcome topics related to sports, business, topical events and news, environmental and global problems, intercultural relations, religion, nature, news, fauna and flora. Students would also like to learn more about non-European countries most video clips focus on European countries. The authors have already had a few worksheets for non-European destinations, e.g. Melbourne, Toronto, Miami, and others. Nevertheless, these are based on video clips from other sources than DW and therefore their screenplay differs from the DW format, which the authors consider to be the best one.

Management of Travel and Tourism is a study programme supposed for those students whose aim is both to be able to communicate in English easily and to become experts in the field of geography and tourism. Therefore, they also suggest watching video reports on travel trends, gastronomic tourism, cultural tourism as well as alternative cultural tourism, garden tourism and religious tourism. Such video clips often feature specific phenomena like intercultural relations, the concept of European Capitals of Culture and much more. These video clips and worksheets provide students with a lot of useful information and interesting facts. Students may

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Table 1 Questionnaire results

Question no.	Audio-visual/yes	Audio-only/no
Q1	114	3
Q3	116	1
Q5	112	5

Source: the authors

even plan their holidays or get advice for travellers where to go and what to see. Moreover, these video clips may also serve as a great source of information for final exams.

Among the benefits of using video clips is therefore widening the vocabulary, including the following examples: tourist draw, a frequent visitor to a major landmark, a medieval city, fortified walls, a place to savour, UNESCO World Heritage Site, twin town, or culinary. Moreover, student may learn a lot about various things, including architecture (e.g. about the Gherkin Tower in London, which was designed by Sir Norman Foster) literature (James Joyce's Ulysses set in Dublin and linked to Bloomsday, the annual celebration of this work), tailoring (making gowns and shoes in for Oxford University students, Scottish suits made in Edinburgh) gardening (Sissinghurst), cuisine and cooking (Lea and Perrins' Worcester Sauce) history (Saint Patrick's Cathedral in Dublin).

All video clips contain a lot of interesting things that can be elaborated on during the classes. Students can not only answer the questions but also search on their own for further information about cities and places presented in video clips. In this way, they can collect information about Bloomsday in Dublin, Fringe theatre festival in Edinburgh, Spanish tapas in Seville, or even Michelangelo and his David in Florence.

It is the authors' goal to make sure that their students learn both English and get skill and knowledge useful for their future profession. While doing these listening exercises, students should concentrate not only on improving their listening skills, but also on widening their vocabulary and on learning facts about different places. It is therefore advisable to do all worksheets repeatedly. The recommended procedure is as follows: brainstorm what you know about the topic; read carefully the introduction, vocabulary and questions; make sure you understand all parts of the worksheet; watch the video recording without looking into the worksheet; try to answer questions; watch and listen for the second time to answer the remaining questions; find out more about the topic—use various sources; summarise main ideas in writing; try to summarise main ideas orally.

The authors have not enquired into whether or not their approach contributes to improving their students' performance, yet. Nonetheless, e.g. Skvorova and Skvor (2003) maintain that a healthy person remembers 20 % of what they hear and 50 % of what they simultaneously hear and watch. The difference is significant and it should not be ignored in language teaching. In their further survey the authors would like to enquire about the most successful video clips and they plan to focus in particular on determining whether and how much their approach using video clips contributes to increasing their students' performance.

4 Conclusion

As far as the H2 is concerned, the authors have devised how students can help enhance the format of worksheets. Students are asked to make worksheets to corresponding video clips themselves as an alternative for missing classes. Resulting worksheets are usually different from the authors' versions and by comparing them the authors expect to find ways how to improve the current version of worksheets.

Consequently, also H3 is expected to be confirmed by assigning students with individual work on worksheets rather than by getting answers from a questionnaire survey. Students themselves look for suitable video clips on the Internet and send a list of possible video clips to the teacher, who has the last word.

The authors future work will focus on making students more involved in preparing listening tasks based on audio-visual method. The teacher's task should be not only to prepare new video clips for foreign language classes, but also to assist and supervise students in their own activity aimed at improving their knowledge and skills with the help of audio-visual materials.

Presently, the authors and their students have been collecting the transcripts of DW video clips about tourism. The aim is to collect transcripts containing together about 60,000 words. With an average DW video clip of some 500 words it means to make an electronic version of at least 120 transcripts. These transcripts will be used as the material for further study. The authors plan to use the software programme called Sketch Engine, which will generate a list of the most frequently used expressions and collocations. The resulting list will then be used in order to make a dictionary of the most frequently used vocabulary in Travel and Tourism. It will be used in classes and may even be published.

To sum up, the authors are sure there is not only the dictionary but also much more to be done as the follow-up to the research described in this paper.

Appendix I Survey Questions

- Q1. What method of practising listening skills do you prefer?
 - Audio-visual Audio-only
- Q2. Make a pro-con list of using the audio-visual method.
- Q3. Does the format of worksheets suit you?
 - Yes No
- Q4. How would you improve or change the format?
- Q5. Does the choice of video clip topics meet your expectations with respect to your field of study?
 - Yes No
- Q6. What other topics would you be interested in?

Appendix II Sample Worksheets for MCR Students

Florence—Italy (Pictures of the given city are usually just below the title.) http://www.youtube.com/watch?v=shRdDIxpuTg. The central Italian city of Florence draws millions of visitors every year, who come to marvel at Renaissance art and architecture. The treasures are the legacy of the wealthy Medici family which rose to power in the 15th century. Florence remains popular with modern-day art students as well as gourmets who come to sample delicacies from the surrounding Tuscany region (The caption is usually copied and pasted from Deutsche Welle or YouTube websites.).

Vocabulary

treasure trove/'trez.a, travv//-a, trovv/noun [C or U] > a large amount of money or a large number of valuable metals, stones or other objects found hidden somewhere and seeming to belong to no one

a treasure trove of sth > a place that is full of something good; a treasure trove of information; Though small, this museum is a veritable treasure trove of history.

dunk/daŋk/verb [T] INTO LIQUID > to put a biscuit, piece of bread, etc. into a liquid such as tea or soup for a short time before eating it; She dunked a biscuit *in* her tea.

Answer These Questions

- 1. What is mentioned as one of *Florence's* major landmarks?
- 2. What does the building's facade boast?

making world famous porcelain items since ___

- 3. Around the corner, spanning the river *Arno*, is the *Ponte Vecchio*, the city's oldest bridge. The structure is still the original one. Who was it used by?
- 4. The Medici family, the wealthy dynasty and patrons of the arts, collected hundreds of works. Where can they be seen today?
- 5. What day does the Uffizi director Antonio Natali like most to be in the gallery and why?

6.	Florence is a treasure trove of Renaissance architecture. The many
	built on the Piazza della Signoria have turned the square into an
	Students of the city's prestigious University of the Arts go
	there frequently to study their perfect
7.	Since 2001 Florence has held an important event. What is its name and purpose?
8.	In the showrooms of Richard Ginori you can see a vase featuring two peacocks.
	It costs € The Richard Ginori Porcelain Manufacture has been

9.	The main market Mercato Centrale sells edible delights like Pecorino
	, fresh pasta and baked goods. A popular item is Cantucci, a crunchy
	almond
10.	Marisa Taddeo, a market vendor, says: "Cantucci are a typical Tuscan speci-
	ality. The are very so we like dunking them in liqueur.
	We dunk them and them."
11.	Florence is bursting at the seams with of all kinds, with photo
	as far as the eye can see. The city is a for any culture-
	loving tourist.

Subsequently, students may look for further information about the topic on the Internet. In case of Florence, further information may include sights like Santa Maria del Fiore Cathedral, Piazza della Signoria (Signoria Square) with Palazzo Vecchio, or Mercato Centrale. Another option are famous personalities linked to the Renaissance heyday of Florence, for instance Michelangelo, Leonardo, Botticelli, Brunelleschi. Last but not least, typical food and drink, including pecorino, cantucci and vin santo, may be discussed as well.

Worcester Sauce (Regional Success Stories 06—Worcester) http://www.youtube.com/watch?v=WGdRajhTEXE&feature=relmfu. What makes Worcester sauce so popular and what does it have to do with the English town of the same name in the West Midlands?

Vocabulary

crucial adjective/'kru:.ʃəl/ adj > **extremely important or necessary;** a crucial decision/question; Her work has been crucial to the project's success. [+ that] It is crucial that the problem is tackled immediately.

glove noun/gl $_{\Lambda}$ v/n [C] > a piece of clothing which is worn on the hand and wrist for warmth or protection, with separate parts for each finger; leather/woollen/rubber gloves; a pair of gloves

Answer these questions and decide whether the statements are true or false (tick T for True or F for False):

- 1. Apart from its crucial ingredient—Worcester sauce, what does the drink called Bloody Mary comprise?
- 2. Worcester sauce gets its name from the town of Worcester, its birthplace. What is the other name under which it is known in many countries?
- 3. The famous cathedral that towers over the rooftops is a testament to Worcester's importance in the ______, as illustrated in Tudor House, which documents local _____.
- 4. According to Roy Fidoe, what has Worcester been known over the years for?
- 5. When did two chemists John Wheeley Lea and William Henry Perrins originally invent the sauce?

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6. T/F The sauce rapidly became a best-seller. The factory set up by Lea and Perrins is not in use today.

- 7. T/F The process of making the sauce has always been a closely guarded secret.
- 8. T/F According to Paul Hartley, it was back in the 1830s the only real good cooking sauce.
- 9. Some prefer just a dash (of the sauce) for some extra zest while others _____ the sauce on liberally. Worcester sauce is one of England's best known _____ exports, a regional success story, indeed.

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Financial Literacy Enhancement as a Task of Financial Education for Latvian Population

Andris Sarnovics, Inese Mavlutova, Liga Peiseniece, and Santa Berzina

Abstract Living in a rapidly changing environment, financial literacy is an important set of skills, which allows to effectively manage resources and to use all available opportunities to improve one's quality of life. Actions of different national and international organizations in Europe suggest that financial literacy has become an important topic. The objective of research is to investigate financial literacy and financial education from its theoretical perspective, as well as to evaluate the level of financial literacy in Latvia by carrying out a survey among secondary school students in order to identify the main directions for the promotion of financial literacy in Latvia as part of the European environment. The research results confirmed the common trends that have been observed in the area, moreover. it lead to a deeper understanding of the level of the knowledge secondary school students and the gaps in the area of financial literacy. Furthermore, it allowed to identify the topics that the students are interested in. It also described the need for adequate teaching methods. The current study has identified the stakeholders and their involvement in assisting to raise the level of financial literacy of population. The research focused on co-operation opportunities among stakeholders in order to improve financial literacy among young generation. We can draw some conclusions concerning the current research. One of the most important issue is to promote the cooperation between secondary school teachers and the experts in the field of finance.

Keywords Financial literacy • Financial education • Financial knowledge • Financial behaviour • Well-being • Personal financial planning

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1 Introduction

Personal financial planning, correct evaluation of one's needs for a loan and the ability to repay it, the accumulation and diversification of savings are those abilities that define the quality of future life. Besides, there is a need for skills to attract private capital in order to initiate diverse business. Living in a rapidly changing environment requires fast decision making, so financial literacy is an important set of skills which allows to manage effectively resources, and to see various opportunities to improve the quality of life.

Financial literacy has been a topic of importance since childhood. Thus, the role of various stakeholders in social, financial and educational areas is of great significance. It is also vital for executives, including designers of educational content, financial institutions and, above all, school teachers and parents. Actions of different national and international organizations in Europe suggest that financial literacy has become an important topic also in the agenda of political actions showing the attitude for the promotion of financial literacy not only among young people, but also among other interested individuals on a long-term bases to generate positive result on regional and national scale and leading to financial prosperity in future.

The current research is to investigate financial education including literacy from its theoretical perspective, as well as to evaluate the level of financial literacy in Latvia by carrying out a survey among secondary school students in order to identify the main directions for the promotion of financial literacy in Latvia as part of the European environment.

The subject of research is financial education and the analysis of the importance of its place in creating a wealthy sociality. While carrying out the research diverse methods have been used: qualitative methods including the comparative analysis of financial literacy, gap analysis of economic situation and the role of policy of financial literacy in Latvia. In order to gain results, a survey of financial knowledge of secondary school students in Latvia has been done. Besides, personal observations have been included which demonstrate financial literacy of secondary school leavers studying at higher education institution. As to quantitative research method statistical data analysis was applied.

The research results confirmed that there are common trends of financial literacy, as well as it lead to a deeper understanding of the level of the knowledge among secondary school students and the gaps in the area of their financial literacy. Furthermore, it allowed to identify the topics that the students are interested in. It also described the need for adequate teaching methods.

The current research identified all stakeholders and determined their role in raising the level of financial literacy among young generation. It provided co-operation opportunities and demonstrated how to improve financial literacy among the youth. This paper summarizes the focus of the research and its results. It also includes conclusions and suggestions as well as the Memorandum on how to raze the level of financial literacy in Latvia.

On the basis of the research, several recommendations have been suggested for secondary school teachers and the experts in order to achieve financial literacy of secondary school students. The authors suggest the development of education materials and their integration in school curriculum. It also offers adapted and integrated practical tasks to be included in the curriculum for financial education.

As it is known, poor savings and investment decisions have led to financial crisis lasting for a long period, thus deteriorating financial security of society. The change of Pension system and uncertainty of Social security policy caused Latvian people to secure their own future life by applying for insurance policies and ensuring sound financial planning for their future retirement age.

2 The Essence and Direction of Financial Literacy as a Task of Financial Education

The essence of financial literacy is ability to make informed and substantiated decisions regarding personal finances. They are often related to such questions as money spending for personal use, savings and deposits, investments. Several researchers and different finance institutions have put forward various definitions related to financial literacy. Unfortunately there is no clear definition of financial literacy so far. Despite the variety of definitions, most scientists and specialists agree that financial literacy is one of the elements of education on economics.

American Council for Economic Education has emphasized that financial literacy is understood as one of the basic principles of economy, the knowledge about economical maters and the understanding of main terms of economic. Financial literacy could be defined as management of knowledge and abilities related to financial matters in order to take effective actions and make decisions with confidence in order to achieve person's individual, family and social goals. It includes the ability to understand financial options and future plans as well as spending carefully and management of problem cases that are caused by unemployment. It relates also to saving for old age or children's education. Financial literacy means the development of skills and knowledge acquisitions concerting financial matters to make effective decisions and implement activities that meet individual's personal, family and global community needs (National Council for Economic Education 2005). Summing up various interpretations of the financial literacy provided in different sources, it is worth mentioning that it is the ability:

- to make informative judgements and take effective actions regarding use and management of currency (Schagen 1997);
- to make simple decisions regarding liability agreements, especially in terms of basic knowledge about interest rates within the context of everyday financial choices by Lusardi and Tufano (2008).

Lusardi and Mitchell (2008) point out that financial literacy is the most important concept in economic which requires knowledge for making savings and decisions regarding investments. Financial literacy is individual's competence and ability to demonstrate the acquired financial knowledge in practice. Unfortunately, financial literacy cannot be measured directly. It is possible to educate oneself in financial matters by using practical experience and integrating actively that what has been learned underlines (Moore 2003).

The President's Advisory Council on Financial Literacy (PACFL 2008), convened to "improve financial literacy among all Americans," defines financial literacy and financial education in the following way:

- Financial literacy: the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being;
- Financial education: the process by which people improve their understanding of financial products, services and concepts, so they are empowered to make informed choices, avoid pitfalls, know where to go for help and take other actions to improve their present and long-term financial well-being.

In addition, different international financial organisations in their definitions of the term emphasize the aspect of financial literacy, for example, OECD (Organisation for Economic Co-operation and Development) defines financial literacy as knowledge and understanding of financial risks, as a skill, motivation and certitude that this knowledge and understanding will be used in such a way that allows to make beneficial decisions in relation to financial matters, thus improving well-being both individually and collectively and leading to valid participation in economic activities (OECD 2013). OECD (2005) also defines financial education as the process by which financial consumers/investors improve their understanding of financial products and concepts and, through information, instruction and/or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being.

The above mentioned refers to the financial behaviour of individuals. It is the application of financial skills and the feedback of acquired financial knowledge. The improvement of financial behaviour depends on available of financial resources, financial services and as well as personal attitude (Fig. 1). Individuals need financial literacy in order to cope with the increased complexity of their needs and financial products.

Survey of financial literacy schemes in the EU 27 (Habschick et al. 2007) presents two categories of reasons for financial literacy: the complexity of individual's needs and the complexity of financial products in a structure as it is presented in Fig. 2.

Financial literacy relates to important questions: firstly, knowledge about finances, secondly, the reasons of the needs of financial literacy. The rationale of financial literacy is the necessity to make financial decisions everyday life in order a quality of life in modern society. The term "financial literacy" includes knowledge, understanding and ability to make directly reasoned and correct decisions regarding

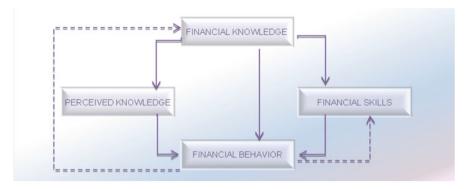


Fig. 1 Conceptual model of financial literacy [Source: Hung et al. (2009)]



Fig. 2 Main drivers for financial literacy [Source: Habschick et al. (2007, p. 5)]

financial matters. Figure 3 demonstrates that financial literacy includes knowledge, understanding and the ability to manage personal finance.

The term financial literacy also means the processes of solving financial matters which include identification of different concepts, their analysis and the ability to identify their causes, as well as the ability to evaluate them and suggest appropriate solutions. OECD has divided the processes related to financial literacy into four sequential blocks (Fig. 4).

Having analysed various opinions related to financial literacy we could summarised that financial literacy is a competence, ability and understanding, which ensures critical approach to evaluation of financial matters and thus, making the right decisions. As to knowledge requirements, similarly to OECD views, the definitions focus on financial instruments, savings, investments, liability agreements, knowledge of main economic terms and budget matters. Appropriate financial education has an important role in building up financial literacy. German researchers Friebel and Kaminski (2012) have successfully defined the financial education topics and structured them into four areas (see Fig. 5).

As pointed out by Friebel and Kaminski (2012), the most relevant areas consist of: money management, handling of life risks, asset and retirement arrangements



Fig. 3 Main topics of financial literacy



Fig. 4 The processes related to financial literacy



Fig. 5 Focus of financial education at secondary schools [Source: Friebel and Kaminski (2012)]

and loan applications, which could be part of content included in curriculum by teachers when clarifying financial matters in secondary schools.

3 Relevance of Financial Education and Its Activities in Latvia

In 2011 economy in Latvia was the 91st biggest economies in the world, since 2000 it has been characterized by a rapid increase of Gross Domestic Product (GDP) (2011–27, 407 billion USD). However, at the end of 2008 and at the beginning of 2009 due to financial crisis that set in, the level of consumption fell rapidly. In 2008 the GDP of Latvia per capita in accordance to purchasing parity constituted only 56 % from the average level of all 27 European Union (EU) states being the third lowest indicator among the EU states. The rapid GDP increase was largely affected by the domestic consumption. After joining the EU Latvia has access to previously unprecedented financial resources. Various EU funds flew into national economy including households and businesses that provided greater opportunities to receive consumer loans and mortgages. The above mentioned is also proved by the statistical data between 2003 and 2008. The total volume of loans increased by 80 % in Latvia. Due to the fact that households faced huge debts, national economy set in recession. Since the world financial crisis in 2007, and the GDP declined by 18 % in 2009. It was one of the biggest falls in the whole world. In 2010 the government of Latvia faced with budget deficit that constituted 45 % of GDP including 75 % of foreign debt (Synthesis Report 2013).

Since 2004 the commercial banking sector has developed rapidly. However it was set back by the global financial crisis of 2008 because of free capital flow. The population was dragged into huge credits exceeding their credit worthiness. The granting of credits was not regulated sufficiently neither due to banking regulations nor due to the lack of financial knowledge of population. The country did not have clear forecasts concerning economical development, besides potential private risks were not assessed. The creditworthiness of customers was not analysed. Latvia experienced the most rapid decline in economy among in the EU countries in 2009 and 2010. The commercial banking sector suffered great losses. In 2011, the proportion of the proportional acid loans of Latvian households reached 19.6 %.

After the rapid decline and the following implementation of strict fiscal consolidation, Latvia experienced strong economic growth again. Already at the end of 2012, several years before the final term, Latvia even repaid the whole loan amount to the International Monetary Fund. Currently, in 2014, the situation is changing—the consumers have understood and are assessing more carefully the necessity of deposits and usefulness of insurance services during periods of economic decline and crisis in cases, when the financial structure of households is more fragile and substantially more vulnerable to several negative factors. The crisis experience demonstrates that the clients of the financial sector should be unambiguously competent at least regarding the most simple popular financial services—use of accounts, payments, internet bank, loans, insurance services and deposits. Each user of services should have basic knowledge. They should understand financial planning, should be competent in range of offered services and should understand their potential level of risk and security aspects, as well as to be able to compare different

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services in order to identify the most suitable for their personal needs. The users should be competent in financial service and consumer rights as well as in state system of sovereign guarantees, also in individual responsibility and potential consequences in case of default.

According to the Central Statistics Bureau (CSB), there is a tendency of slight household consumption increase in last 3 years, however the household expenditure level is still lower than in 2008. In 2013, the average household consumption expenditure was 301 euros per household member, which is 19 euros more than in 2012. In 2013, consumption expenditure reached 91 % of 2008 level in terms of nominal prices, but only 83 % in terms of relative prices. At the same time, in 2013, the gross domestic product per capita reached the pre-crisis level for the first time. Such delay of the final household consumption from the economic growth is associated with the employment rate, which is still lower than before the crisis, as well as with household precaution to incur new indebtedness, which were the main drivers of the consumption until 2008 (Delfi Bizness 2014).

Also the commercial banking sector is experiencing a rise. Following 3 years of losses, 2013 was the second year in a row when the banking sector in total earned profit, the amount of which reached 173 million lats or 246.2 million euros (profit was 122.3 million lats in 2012). Profitability increased during 2013 and return on investment (ROI) of the banking sector reached 8.65 % at the end of December (5.56 %—at the end of 2012). The income and expenses structure has not changed substantially. As commented by the Association of the Commercial Banks, the year 2013 for Latvian banking sector can be described shortly and imaginatively as 3 E-s: euro, efficiency and export. No need to comment the introduction of the euro; with timely investment of work and resources, the bank clients were ensured with comfortable, simple and understandable change of the national currency. The increase of efficiency and the change of business model is at the focus of banks not only in Latvia, but also in Europe and worldwide. The most visible part of this process for clients in Latvia is the development of electronic services and informing clients about them, as well as the decrease of the number of market participants. Whereas the export of financial services is expanding and provides the largest return on investment or profitability.

The introduction of the euro has facilitated a rapid increase of residents' deposits—848 million lats (1.2 billion euros) or 13.3 %, whereas non-residents' deposits increased by 384 million lats (546 million euros) or by 6.3 %. Thus, the total amount of deposits reached 13.7 billion lats (19.5 billion euros). At the beginning of 2013, residents' households restarted to deposit slightly more, but in the last quarter before the introduction of the euro, both household and business deposits increased rapidly—by 390 million lats (556 million euros) and 332 million lats (472 million euros) respectively in 2013 altogether. Credit portfolio decreased by 6.5 % in 2013. Apart from the effect of credit write-off, which rather is an end stage of striking the bank balances of crisis years than a representation of the current situation, the credit portfolio decreased by 3.1 % (including that of residents' non-financial companies and residents' households—by 1.8 % and 4.5 % respectively). The new loans issued by the banks to residents' non-financial companies

and households in 2013 reached 1.6 billion lats (2.3 billion euros), which is 5 % more than in the year before. There was an increase in real estate, construction, sales and transportation sectors. The households were granted with loans for purchase, reconstruction and/or repair of home, which comprise more than 191 million lats (270 million euros)—21.8 % more than in the year before. Proportion of loan payments delayed for more than 90 days in the total credit portfolio of banking sector continued to decrease and reached 8.3 % at the end of December (11.2 %—at the end of 2012). The total proportion of delayed loan payments in the credit portfolio of banking sector dropped from 17.4 to 14.6 % during the year. The balance saved by the banks for unsafe loans decreased to 674 million lats (958 million euros) or 6.1 % of the total bank credit portfolio at the end of 2013 (8 % at the end of 2012), but the ratio of savings and the amount of loan payments delayed for more than 90 days remained high—73.6 %.

The President of the Association of the Commercial Banks of Latvia, Bicevskis (2014) concludes that switch to euro has had a positive influence on the population's habits of using financial services. Despite previous concerns, most of the population and entrepreneurs listened to the practical suggestions on how to be well-prepared for the introduction of euro and to pass safely the period of concomitant circulation of lats and euro. Already starting with timely pay-in of cash into accounts at the end of 2013 and payments using payment cards, as well as with the use of distant services at the beginning of 2014, the clients ensured that the lines in bank branches and outlets were much shorter than expected. Therefore switch to euro has proved that modern culture of usage of financial services is possible in Latvia. A relevant question is whether it will be a long-term tendency. The authors of the current paper have raised the importance of promotion of financial literacy of the society.

Considering the lessons from the economic crisis, it is topical to take preventive measures, including the educating the society about financial literacy matters. When, after the crisis, the national economic indicators start to rise again and the standard of living improves, the financial instruments and services are becoming more relevant to the society. However, the society's knowledge and the level of education on financial matters is not sufficient. In order to achieve long-term improvement of the society's financial literacy, long-term measures are necessary rather than separate actions. An important and unsolved problem is adjustment of education programmes to the new tendencies, because the studies show that the level of financial literacy is low among the secondary school students, which is associated with insufficient examination of the topical financial and economic matters in the education programmes approved by the state, as well as due to the lack of opportunities for teachers who teach economics in secondary schools and the need to improve their knowledge.

General secondary education offers the opportunity to learn the basic economics, however it is an optional subject, therefore less than a half (44 %) of the Latvian students use this opportunity (National Strategy for Financial Literacy in Latvia 2014–2020 2014). Several Latvian experts believe that the quality of financial education is Latvia is under threat in recent years, because, by creating a single elementary school subject—social science, which offers only a fragmented scope of

economics and which mostly is not taught by specialists in economics, as well as by revoking mandatory status of economics in secondary school. The emphasis focuses on financial and economic knowledge is not sufficient for requirements of the modern social and economic life and in order to ensure the understanding of economic regularities and the ability to manage personal financial assets among the graduates of educational establishments (Delfi 2012). The study done by the research centre SKDS shows that the proportion of social science in Latvia is smaller than in other 31 countries compared in the research. Absolute majority of Latvia's population (73 %) considers that the school does not provide sufficient knowledge about personal finance (SKDS 2011).

As the survey of the National Centre for Education (NCE) data indicates, the overall knowledge of pupils about economics and finance matters is average or good. It showed that pupils are able to differentiate the personal income and expenses; less than a half of pupils know, for example, what can serve as collateral and pledge for a loan. The rights of a borrower and their responsibilities and the possible consequences in situations, when there are problems to meet their commitments, are the issues that need more attention. Pupils have not sufficiently developed a skill to obtain information from various sources and the number of mistakes in practical tasks demonstrates poor mathematical skills and very poor understanding of macroeconomics matters is evident. (National Strategy for Financial Literacy in Latvia 2014–2020 2014).

Survey results of teachers in schools in Latvia show that 67 % consider that the education programme provides insufficient knowledge about personal finance matters, also 47 % of young people believe that there are not enough such topics in the content of the programme, as financial planning etc. Besides 80 % of respondents among Latvia's population admit that everyone should know the basics of economics, and therefore economics should be taught in schools as a mandatory subject (TNS 2013). This leads to the conclusion that the overall situation in schools in Latvia have not properly developed school programme in economics and the Latvian teachers' level of knowledge is not sufficient. After graduation, the graduates' knowledge about financial matters is not sufficient. According to the survey results, 80 % of the respondents admit that economics should be a mandatory subject.

In September 2012 Financial and Capital Market Commission (FCMC) held the discussion "Directions for public finance education" about the key questions of financial education. During the discussion Bank of Latvia president Rimshevics confirmed that there was a low level of financial education in the society. Rimshevics emphasized that teaching of the questions of economics including financial education are of major importance. Nevertheless, since 2008 the basics of economics is an optional subject at higher secondary schools in Latvia, and many students do not choose it.

Ministry of Education and Science (MES) has to carry out coordination work to improve education content in order to provide better understanding of the level of finances. As to the state level it should be achieved that economics is introduced as a compulsory subject studied by every school student in Latvia. MES determines

education implementation policy, education content and also implements the EU common position in education questions on the national level. MES is also responsible for the national level legislation, including the normative acts of school accreditation and programme licensing.

The National Centre for Education (NCE) is responsible for the management of general education content. NCE provides the development of general education study content and supervises its implementation, coordinates the development of study literature adequate to general education standards, coordinates the activity of interest education and holds support events for the development and talent improvement of students. In order to develop general education content including the questions of finance education and broaden student knowledge and understanding about it, NCE cooperates actively with professional associations and specialists of the field.

Currently in Latvia different activities are being carried out, which envisage work on various informative materials related to the questions of financial education for pupils:

- The Bank of Latvia—has made available a visitors centre called "Money World" where people can find deep and interesting information about the history of money, EU, stock exchange, and other important things using interactive and modern methods. They also have produced special materials about inflation, monetary policy and European money. People have the possibility to learn about the Bank of Latvia and "Money School". "Money tree" provides information on financial issues. There are also games on inflation, economy and monetary policy.
- Financial and Capital Market Commission as a governmental institution (supervisory agency of the financial sector in Latvia) launched website "Client School", where current and potential financial and capital market clients can obtain more detailed information and description of the financial services. Before deciding to use any service in Latvia, FCMC encourage everyone to visit new site for instructional materials. The site provides basic information on new financial services to all the clients allowing them to assess potential future risks that may arise and to evaluate their readiness to assume the risks.
- The Association of Commercial Banks of Latvia (ACBL), as a public organization uniting on voluntary principle the banks registered in Latvia and branches of foreign banks, implement the activities strengthening corporate governance and responsibility, safeguarding consumer rights, providing training and improving expertise, compiling statistics and preparing analytical materials. The ACBL also pays great attention to the education of society on money safety: Since 2012 the Association of Commercial Banks of Latvia has started implementing financial education project to improve the level of youth financial literacy in general and vocational education. The Association has conducted research "Study on Situation of Financial Literacy in the General Education among Target Groups of Teachers and Students". The aim of the research is to obtain information for creating the support system for teachers of social studies and

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economics on teaching financial literacy in general education. ACBL has developed digital resources for teachers of economics: educational film about student loans, as well as interactive quiz sets for interactive "Active Expression" voting handsets.

- The main projects of Junior Achievement Latvia include Student Companies, the Business Plan Contest, Business Fairytales and Job Shadow Day. They provide one of the most active everyday programs to create financially educated youth, but becoming a partner school requires participation fee therefore these projects are reachable only for a fraction of young people.
- Commercial banks are another group of institutions that diversifies financial education. They offer lectures about bank products, loans, payment cards and other financial services. Usually these lectures are free of charge because they include bank advertisements, for example:
 - Swedbank has done a survey about spending habits, it also holds contests for secondary school students, for example, "A new finance expert", besides it also refers to the tax calculator and the budget calculator;
 - Danske Bank Group offers games about money;
 - SEB Bank has established a school for new financier to educate children on financial issues:
 - Nordea Bank offers the financial guide and the financial standards;
 - DNB Bank has made young people handbook "TRY".

In 2013, the Financial and Capital Market Commission conducted a research about the society groups, which were targeted by various financial education activities by different institutions in 2012 (see Fig. 6).

Figure 6 shows that the vast majority of activities done by different institutions were focused on promoting the level of financial literacy among students and teachers. One of the conclusion that may be made is that the activities for promotion of financial literacy do not reach a large proportion of the society. The FCMC also analysed the most common topics of financial education (see Fig. 7).

Fig. 6 Financial education activities broken down in topics [Source: National Strategy for Financial Literacy in Latvia 2014–2020 (2014, p. 37)]

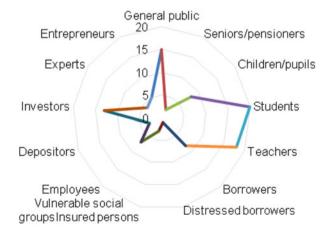


Fig. 7 Financial education activities broken down in topics [Source: National Strategy for Financial Literacy in Latvia 2014–2020 (2014, p. 37)]



Figure 7 shows that financial education activities focused sufficiently mostly on such topics as the planning of personal finance and investments. Another conclusion is that financial education activities were not sufficient in Latvia in 2012. There is a need for the development of a new unified, complex and systematic approach to the promotion of financial literacy in Latvia's society.

With reference to global experience and local situation, raising the level of financial literacy in Latvia has become a public objective. In 2013, several institutions—the Ministry of Education and Science, National Centre for Education, Consumer Rights Protection Centre, the Association of Commercial Banks of Latvia, Latvian Insurers Association and BA School of Business and Finance under the guidance of the Financial and Capital Market Commission developed the National Strategy for Financial Literacy in Latvia 2014–2020. On 24 February, 2014, the Financial and Capital Market Commission, the Ministry of Education and Science, National Centre for Education, Consumer Rights Protection Centre, the Association of Commercial Banks of Latvia, Latvian Insurers Association and BA School of Business and Finance has signed the memorandum on the implementation of the National Strategy for Financial Literacy in Latvia 2014–2020, in which the strategic partners have agreed on strategic objectives in the field of financial literacy. The strategy describes the directions of actions needed to implement each goal. Besides, these directions define the necessary tasks and activities of each institution involved (Zakulis 2014).

In order to develop the common understanding of the notion of financial literacy, the Latvian financial and economic education promotion partners have come up with a strategic vision for the desirable development of Latvian society in the field of financial literacy. It includes the following:

- Everyone knows the basics of financial planning and is able to make a balanced personal/household budget;
- The majority of population deliberately accumulates savings and ensures against potential future risks;
- The majority of population is financially independent and does not depend on public support, because they plan their well-being in old age mainly rely on their own earnings and savings;
- The majority of population is able to create a financially sustainable personal financial concept with their financial objectives and options in mind;

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• Everyone understands and considers the opportunities and risks of financial sector and free-market economy and is able to use advantages for their own well-being;

- A large part of the population is economically active and with innovative approach, therefore they are competitive in the regional and global labour market;
- A large part of population can give advice and consult on the matters of private finance, as well as to follow the economic processes and encourage others to improve their well-being (National Strategy for Financial Literacy in Latvia 2014–2020 2014).

The National Development Plan 2014–2020 is the main national document on medium-term planning that stipulates a financially sound, sustainable and educated society as a key resource for the economic growth in Latvia. Therefore, objectives of the National Strategy for Financial Literacy are in line with the vision of the National Development Plan: "Economic Breakthrough—for the Greater Well-Being of Latvia" (National Strategy for Financial Literacy in Latvia 2014–2020 2014).

The partners that promote financial literacy in Latvia have agreed on three strategic objectives in the area of financial literacy. A set of activities are specified under each objective and the tasks have been formulated. The partners plan their own or joint financial and economic education activities for further periods.

The first objective is to create the tradition of planning finance and creating savings to enhance Latvian household stability, welfare and financial sustainability throughout the life cycles, a long-term financial planning tradition should be built starting from the payment discipline to the personal savings and investments. To achieve this objective the main directions of the actions include:

- 1. Enhancement of curricula to provide the development of financial literacy at every stage of general public education;
- 2. Development of lifelong education resources encouraging self-study options to raise financial literacy among different segments of society (including persons with disabilities);
- 3. Implementation and maintenance of advisory and consultancy services network.

The second objective is to work out the environmental integrity of financial services to ensure the provision of fair financial services that is adequate to the needs of consumers and encourages consumers to make proper choices based on risk-awareness and responsibility. To achieve this objective the main directions of the actions include:

- 1. The improvement of public awareness of financial services, their fundamental nature and risks associated;
- 2. The provision of fair and responsible services adequate to the needs of end-users.

The third objective is the development and sustainability of public finance to increase the public knowledge about the fundamentals of the market economy, as

well as to raise their ability to evaluate national economic processes, including various scenarios for economic development, to improve public financial independence and growth opportunities. The main directions of the actions include:

- 1. The improvement of public knowledge and their analytical skills regarding the market economy and the operation of financial system;
- 2. The promotion of public financial and economic activity.

Each of the parties that signed the Memorandum envisages steps to achieve the goals defined by the Strategy according to their branch of activity and competence.

4 A Study on Financial Literacy Among Secondary School Students in Latvia

In order to assess the current level of financial literacy in secondary schools and to create topical subjects and methods for teaching financial matters that would be possible to integrate in existing financial subjects in schools, the study was conducted within the framework of the international research project of life-long education "Financial Education—Levering The Implementation Efficiency in Schools". Project participants include four higher education institutions and four gymnasiums from four countries: Austria, Germany, Belgium and Latvia.

The choice of research methods is defined by the strategy of the study (quantitative and/or qualitative), its design, aim, question and hypothesis. Various methods may be used in the studies of different type, besides, mixed method approach is applied, however one needs to be aware that each method has its own traditions of advantages and disadvantages. The same method may be used both with quantitative and qualitative strategy, depending on the method type and data acquired and the approach used for data analysis. The authors of the current research used survey method for data acquisition. The authors created a survey for Latvia's secondary school students from form 10 to 12. In order to conduct the study, a population sample was chosen from five gymnasiums and schools in Riga and Riga region. There were almost 500 students studying between the grade 10 and 12 at the moment of the survey. From this general population a sample was created—at least 40 % of secondary school students, who became the participants. The Survey of students was conducted from January to June, 2014. 199 respondents, aged 16–20, participated in the survey (Table 1).

As the table shows, the majority of respondents are from Agenskalns State Gymnasium—67 or 33.7 % of respondents. Grade 10 is most widely represented—86 of 43.2 % or respondents are in grade 10. More than a half of respondents are female—58.3 %, males are minority—40.7 %. According to the data aggregated by the Ministry of Education and Science of the Republic of Latvia, in 2014, there were, in total, 40,059 10th–12th grade students in comprehensive

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	Number of respondents							
Schools	Form 10		Form 11		Form 12		Number of respondents	
Schools	rollii 10		I OII	1111	1.011	11 12	respon	idents
Adazi Free Waldorf School	7	3.5 %	6	3 %	15	7.5 %	28	14.1 %
Agenskalns State Gymnasium	56	28.1 %	2	1 %	9	4.5 %	67	33.7 %
Riga State Gymnasium No. 2	0	0 %	13	6.5 %	0	0 %	13	6.5 %
Riga State Gymnasium No. 3	23	11.6 %	28	14.1 %	12	6.1 %	63	31.6 %
Riga Jugla Secondary School	0	0 %	0	0 %	28	14.1 %	28	14.1 %
Total:	86	43.2 %	49	24.6 %	64	32.2 %	199	100 %
Demographic characteristics	tics Number of respondents							
Male 81					40.7 %			

Table 1 Main characteristics of the sample

Source: Mavlutova et al. (2014, p. 7)

Female

Gender unspecified

schools in Latvia. 37 % of all Latvia's secondary school students are study in comprehensive schools of Riga.

58.3 %

1 %

116

2

The aim of the survey is to establish the level of financial literacy among students and to determine the most important directions for the improvement of financial education of secondary school students. Several methods are used in data processing—the quantitative method, qualitative method and statistical method. Since the cluster of respondents is not a general cluster, the methods were adapted to the types of sample processing. Questionnaire was based on the questionnaire created and approbated by the project partners in Germany. In total there were 20 questions on six topics (General financial matters, Bank services and crediting, Insurance, Taxes, Investments, Financial terminology).

In general financial matters, the first set of questions refers to those financial issues that students face directly in their everyday life, including shopping, mobile communication services etc. Figure 8 summarizes the topic of the question and students' level of knowledge.

The answers to the questions were numbered in an ascending order:

- 1. Most of the respondents know the difference between the pocket money and the money the parents provide for a specific purpose. They also understand that there is no legal age restriction regarding the money the parents give to their children. The respondents were asked a question: "I may spend money the parents gave me as I want." 78.2 % of the respondents answered positively to this question.
- 2. With the growing popularity of on-line shopping, the students were asked to choose one correct ending (out of three listed) to a following sentence: "While surfing the internet and ordering goods and services in on-line stores, persons under 18 years of age should remember that". 44.4 % answered correctly. Poor knowledge on this matter is observed in all groups. It might be due to the fact

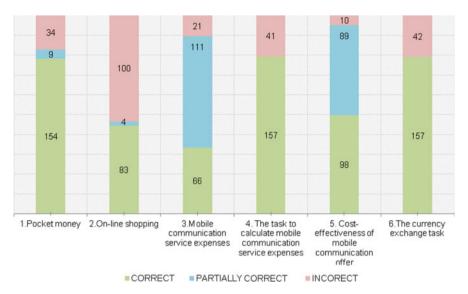


Fig. 8 Secondary school students' survey answers related to general financial matters

that on-line shops do not mention anything about the age restrictions for clients and it is not being checked.

- 3. In order to find out whether the students know that they should focus when choosing mobile communication rates in order to avoid extra costs, the following question was asked: "If you have a unified mobile communication rate, you may make calls without additional fee. What should you take into account in order to avoid extra costs?" After processing of answers, it was concluded that the majority of respondents chose only one out of two correct answers. Only 33.3 % of all respondents answered correctly the question.
- 4. The respondents were asked the question requiring calculation: "What are the annual costs of text messages, if three text messages are sent per day and the fee for one text message is 0.07 euro?" The Majority of respondents (79.3 %) gave a correct answer, which was expected as the question is simple in terms of calculation.
- 5. Most of the students demonstrated the ability to choose the less expensive option depending on the frequency of cell phone usage. The respondents were asked the following question: "What is a less expensive option—a pay-as-yougo refill card or a rate plan?" Only 49.7 % of the respondents answered absolutely correctly.
- 6. Since the euro was introduced in Latvia, the respondents were asked the question that could show whether they can exchange lats to the euro according to currency exchange rate. The following question was asked: "You have 170 lats. How much is it in the euro?" 78.9 % of the respondents gave correct answers. Since the survey was conducted after Latvia had joined the Eurozone,

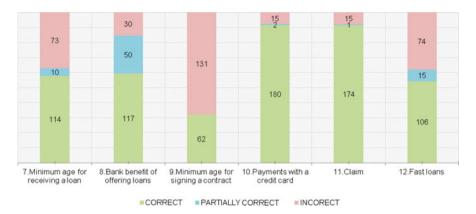


Fig. 9 Secondary school students' answers related to the questions on bank services and crediting

the percentage of the respondents that could not correctly exchange lats to the euro is considered to be too high.

It was expected that the secondary school students will demonstrate better knowledge about general financial matters because they are associated with their everyday life. The conclusion could be that young people do not pay sufficient attention to detailed inquiry about these matters. They often perform financial operations without considering the legal aspects, thus putting themselves under the risk of potential consequences.

Under bank services and crediting, six questions related to banking services, including crediting were included in the survey. It is important to find out the level of understanding of secondary school students' about bank operations, their rights and responsibilities (Fig. 9).

- 7. The majority of the students are aware of their right to apply for a loan at the age of 18. The respondents were asked the following question: "Can you receive a loan at the age of 18?". Most of the respondents (57.9 %) answered the question correctly;
- 8. The students are aware of the fact that the banks earn from any operation they offer their clients. In order to determine students' understanding of bank activities and granting of loans, they were asked the following: "Why do the banks offer loans?" Most of the respondents (59.4 %) gave the correct answer—banks earn from granting of loans.
- 9. The students demonstrated the lack of knowledge about their right to sign contracts. They were asked the following question: "What is the minimum age for signing contracts?" 66.8 % failed to give a correct reply.
- 10. The students are well aware of how and where it is possible to pay with a credit card. Vast majority of the students (91.4 %) gave a correct answer to the question: "Is it possible to pay with a credit card anytime and anywhere?".
- 11. In one of the questions, the students were able to choose the correct statement from the options provided: (a) "Savings and loan associations are for people who do not have money"; (b) "The Bank of Latvia accepts money only from

wealthy people", (c) "Anyone can choose between bank services and services of a savings and loan association". Majority of respondents (91.6 %) were able to provide correct answer to the question, too.

12. In order to determine students' understanding on fast loans they were asked the following question: "You want to take a fast SMS loan. What should you know when making a decision about loaning?" 54.4 % gave a correct answer, which is not a good indicator. The fast loan topic should be included in the school programme, because it is not possible to find complete information about this service on websites of fast loan companies.

After aggregation of answers related to bank services and crediting, the authors concluded that the students' knowledge is good, especially, in cases related to payments with credit cards and loan issues. However, the knowledge on signing a contract and fast crediting is rather poor.

The survey included two questions related to insurance. The aim was to understand the level of students' knowledge on this topic (Fig. 10).

- 13. In order to determine students' understanding on health insurance, the term "Life insurance policy" was provided. The students had to choose a correct match from three provided options. The majority of the respondents (61 %) failed.
- 14. The respondents were asked the following question: "What does the health insurance policy cover?" The question was too difficult for the majority of the respondents, 48.5 % failed.

The topic of insurance is not relevant among secondary school students because they are too young. The students lack the knowledge on financial issues. Having analysed the answers provided by the respondents, the general conclusion is that the level of knowledge of secondary school students' is very low. Due to this, insurance is a topic that requires more focus within the framework of the education programme.

The survey also included questions related to the taxation in Latvia (Fig. 11).

15. Value-added tax is a tax on consumption, which is included in the price of a good or a service and is paid by the end-consumer. The students also pay value-

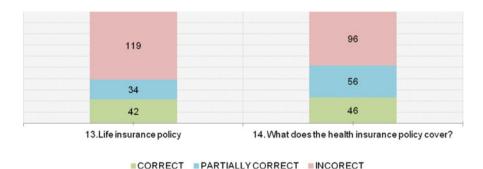


Fig. 10 Secondary school students' answers related to the questions on insurance (Source: Compiled by the authors)

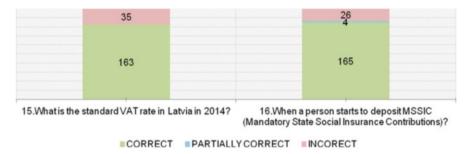


Fig. 11 Secondary school students' answers related to the questions on taxation (*Source*: Compiled by the authors)

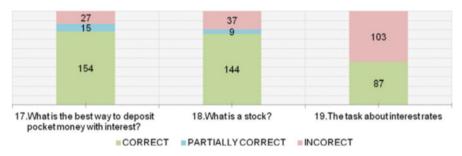


Fig. 12 Secondary school students' answers related to the questions on investments. *Source*: Compiled by the authors

added tax when purchasing goods or services. They were asked the following question: "What is the standard VAT rate in Latvia in 2014?" 82.3 % of the respondents gave correct answers.

16. The survey also included the question on State social insurance: "When a person starts to deposit MSSIC (Mandatory State Social Insurance Contributions)?" 84.6 % of the respondents answered correctly. The answers show that the majority of the students know that deposition of MSSIC starts when a person becomes employed.

The level of students' knowledge on taxation is considered to be good. There is a plenty of information available to public on taxation.

The students were asked three questions related to investment of money (Fig. 12).

- 17. The respondents were asked the following question: "What is the best way to deposit pocket money to earn?" The aim of the question was to understand whether the students know how to make deposits and invest their money in order to earn. Having processed the data it was concluded that most of the respondents were able to choose the most profitable option. 78.6 % of the respondents answered correctly.
- 18. 75.8 % of all respondents answered correctly the question: "What is a stock?".

19. In order to find out the students' abilities to make a decision on investments, the students were asked to do a calculation. The following task was given: "You have saved 900 EUR. After two years you will need 1000 euro for buying a car. What should be the interest rate to receive 1000 EUR for a two years deposit?". The question demonstrates the students' inability to calculate interest rate correctly. This also demonstrates low level of practical skills. 45.8 % gave correct answers. Unfortunately, it demonstrates that majority of the students are not able to forecast their profit from an investment and they do not know how to calculate the interest rates. Initially, it was expected that the grade 12 students would succeed with the task. The results showed that the grade 10 succeeded and most of them provided correct answers. There is no evidence to explain good knowledge of grade 10 students. It could be that their knowledge in economics and mathematics is much better than those who are older.

The survey results demonstrate that the students' knowledge on investments is good, however they have difficulties to make practical calculations. The programmes of mathematics and economics should focus more on practical tasks.

During the survey the respondents were offered 20 financial terms for the explanation. The term loan is familiar to the students in most cases. It could be also explained that companies advertise fast loans thus the term becomes more familiar. As to the terms credits and loans the students are also familiar with them. Whereas the term trust services is not recognised by students, 40.7 % of the respondents have not heard of it. This term is common to the professionals working in the sector, therefore, the students haven't heard of it. Only 4 % of the respondents were able to explain the term, although it was not the most difficult one to explain. Only 2.5 % of the respondents were able to explain European Financial Stabilisation Mechanism. 61.3 % has heard of it. This is due to the fact that it belongs to specialise terminology of the sector. The students indicated that they have heard about pawnshop services and leasing. The respondents were also able to explain these terms. 79.9 % of students can explain what the term pawnshop services are. 71.9 % knew the term leasing. The number of pawnshops in Latvia is high, thus most of the students have heard about them. Similarly due to advertising the term leasing services is also widely known. Students and their parents use online shops in the same way the terms discount, the Bank of Latvia and savings account seem to be familiar, only less than 2 % failed. The terms FCMC, overdraft interest rate, discount rate and overdraft where not known to students. The research shows that students could identify the terms but they were not able to explain them. The results show that more than 50 % of respondents could not explain 13 terms. It is the result of advertising and mass media influence. The terms were familiar to students but they were not able to explain them. To carry out the research the survey result were analysed by using several factors: school, grade and gender. Several mutually related statistical variables were calculated, as well as financial literacy (FL) index, that is the ratio of correct answers (see Table 2).

Table 2 Summary of the correct answers in the students' survey

		Maximum number of	Minimum number of	Average number of			F	Number of
		correct answers	correct answers	correct answers	Mode	Mode Median	index	surveys
Form	Form 10	16	5	11.08	11	11	0.5839	98
distribution Form 11	Form 11	16	3	11.96	13	12	0.6294	49
	Form 12	16	5	11.45	12	12	0.6028	49
School distribution	School Agenskalns State distribution Gymnasium	16	9	11.85	11	12	0.6247	<i>L</i> 9
	Riga State Gymnasium Number 3	16	3	11.08	10	111	0.5865	63
	Riga State Gymnasium Number 2	14	10	12.23	13	12	0.6437	13
	Jugla Secondary School	15	8	11.50	12	11.5	0.6053	28
	Adazi Free Waldorf School	15	5	10.54	13	11	0.5853	28
Gender	Female	16	5	11.72	11	12	0.6166	116
distribution Male	Male	15	3	10.94	12	11	0.5761	81
	Gender unspecified	16	11	13.50	1	13.5	0.6757	2
In total		16	3	11.42	11	12	0.6012	199

Table 2 shows that the students provided about 16 correct answers from all needed, one student answered only 3 correct questions. On average there were 11.42 correct answers out of 19.

The students of Riga State Gymnasium Number 2 succeeded in most cases. On average they gave 12.23 correct answers. Thus, they achieved the highest index among schools—0.6437. The students of Adazi Free Waldorf School on average gave 10.54 correct answers that is the lowest FL index of 0.5853. Taking into account the factor of grade, grade 11 students succeeded in most cases. It could be the result of the study program in economics that they do in grade 11. As to gender distribution, the knowledge of females is better than that of males. The average number of correct answers is 11.72 and 10.94 respectively, whereas financial literacy index is 0.6166 and 0.5761. In general, the level of financial literacy of students is average. The research shows that there is the need to develop practical skills of students in financial calculations, as well as to provide knowledge on it.

The studies conducted in Germany and Belgium demonstrate that 14 % of secondary school students have financial literacy. 31 % of students think that their financial knowledge is poor (Federal Association of German Banks 2012). The survey carried out in Belgium demonstrate that only 44.5 % of young people aged 18–24 can complete financial literacy tests with relatively good results (Synthesis Report 2013).

5 Conclusion

The lessons learned from the economic crisis show that preventive measures should be taken. One of them is to educate the society on financial literacy matters. After the crisis the indicators show that the standard of life improves, thus people have the opportunity more financial instruments and services. The society needs enough knowledge on financial matters.

In order to achieve a long-term improvement of the society's financial literacy, long-term measures should be taken. The role of educational establishment's becomes more important in the formation of financial literacy of the society. Educational programs should be adapted to new trends. It is important to improve the quality of programs in order to facilitate financial literacy grows among secondary school students. The system of exams needs to be improved, the survey showed in sufficient results on financial and economic matters. There is a need for the state to pay more attention to these questions. Another important factor is the improvement of secondary school teachers whose subject is economics.

The conducted study shows that students have general knowledge on financial matters, however they face difficulties to do practical tasks such as calculations and resource planning. The students lack the understanding of the needs to know financial operations. Finally, the study results demonstrate that the students are familiar with many financial terms and services, however they are not able to explain them.

It is obvious that further education including lifelong education is required in order to develop financial literacy of teachers in all subjects related to finance, they need training on methodology and material development which could enhance the development of skills needed for financial knowledge. Measures should be taken in relation to interdisciplinary teaching. It is advisable to test the students' knowledge before they enter the studies on economics. Similarly, the students should be tested after the acquisition of knowledge and skills in various subjects that consider financial issues.

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The Mediating Role of Cynicism on Authentic Leadership and Organizational Identification Relationship

Ilge Kurt

Abstract Positive organizational behavior is a contemporary field in organizational behavior and authentic leadership can be considered as a leadership style, emerged from positive organizational behavior. Authentic leaders can be described as genuine leaders who are transparent, have integrity, high ethical standards and who create trust. As authentic leaders are motivated by the well-being of their subordinates and organization, they help employees find meaning and connection at work through greater self-awareness and internalization of values. Hence, the follower's organizational identification is expected to be higher. Authentic leadership is also found to have a negative effect on cynicism, whereas in some studies, organizational cynicism is found to have a negative and significant effect on organizational identification. The purpose of this study is to explore the mediating role of cynicism on the relationship between authentic leadership and organizational identification. In the context of the study, a survey using questionnaires is conducted. The data were gathered conveniently from 122 white collar employees who work in companies of different sectors and departments. The results reveal that the relationship between authentic leadership and organizational identification is mediated by cynicism.

Keywords Organizational identification • Cynicism • Authentic leadership • Organizational behavior

1 Introduction

In a work context where new challenges, technologies, market demands, and competition constantly emerge, the need for positive leaders who lead with purpose, values, and integrity has arisen (Avolio and Gardner 2005). That precipitated focus on the concept of authentic leaders as genuine leaders who are transparent,

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have integrity with high ethical standards and who create trust (Gardner et al. 2005). Positive organizational behavior is a contemporary field in organizational behavior and authentic leadership can be considered as a leadership style, emerged from positive organizational behavior.

While globalization, rough competition, technological developments and innovation have impact on organizations; the influence of mergers and acquisitions, restructuring and downsizing of organizations on employees can't be disregarded. Under these circumstances, researchers have also started to explore a newly emerging attitude in corporate environments called cynicism. Although studies in the 1990s have pointed out the presence of cynicism in the workplace, employees seem to be increasingly cynical in the new millennium, especially in corporate environments (Twenge et al. 2004). Organizational cynicism can be defined as a negative attitude which is composed of belief, affect and behavior, towards one's employing organization. Organizational cynicism has been theorized to be associated with negative consequences for organizations including reduced levels of performance, job satisfaction, and organizational commitment, and increased levels of intention to quit (Dean et al. 1998). Therefore, studies exploring the role of cynicism, regarding various antecedents and outcomes may provide an insight to fill the gap in literature for a comprehensive understanding of cynicism.

Organizations continue to realize that analysis of the bond between employees and the organizations have become even more important, owing to the dynamic work environment characterized by globalization, mergers and acquisitions, and the emergence of virtual organizations (Rousseau 1998). As implied by Kreiner and Ashforth (2004), identification within the organizational context has grown considerably over the last decade, depending on the fact that it has emerged as an important variable in organizational behavior research.

The purpose of this study is to first explore the relationship between authentic leadership and organizational identification and secondly, to investigate the mediating role of cynicism on the relationship between authentic leadership and organizational identification. The authentic leadership may predict less cynicism, which in turn may increase organizational identification. It intends to provide further contribution to the business literature by pointing out managerial implications of the research concepts, and the relationships among them.

2 Literature Review

2.1 Organizational Identification

In recent years, scholars have examined the ways people define themselves in terms of their relationships to organizations, by applying the concept of social identifications to the organizational settings (Ashforth and Mael 1989). Ashforth et al. (2008) indicated that the organizational identification owes its foundation in social identity

and social categorization theories. Social identity theory defined identification as being one (Ashforth and Mael 1989).

Organizational identification can be conceptualized as a specific form of social identification in which the employees identify with the organization, by assuming the perceived prototypical characteristics of the organization as part of their own self-concept (Mael and Ashforth 1992). Organizational identification refers to the individuals' feeling of being a part of the organization, internalizing the organizational values, feeling pride in the membership and an overlap between the employees' image of the organization and the self (Riketta and Van Dick 2005). It can be defined as a specific form of social identification where the individual defines him or herself in terms of the membership in a particular organization and the perceived oneness with an organization together with the experience of the organization's successes and failures as one's own (Mael and Ashforth 1992). Organizational members tend to identify with the organization when they define themselves at least partly in terms of what the organization is thought to represent (Kreiner and Ashforth 2004).

2.2 Organizational Cynicism

Studies of organizational cynicism began to show improvement by the late 1980s and early 1990s (James 2005). Cynicism can be defined as general or specific attitudes symbolized by the disappointment, insecurity, hopelessness, anger and mistrust of institutions or person, group, ideology and social skills (Andersson 1996). Andersson (1996) defined it as "an attitude of contempt, frustration and distrust toward an object or multiple objects, susceptible to change by exposure to factors in the environment". Wilkerson (2002) indicated that it is a negative attitude toward one's employing organization in general, and toward its procedures, processes, and management, that is based on a conviction that these elements generally work against the employee's best interests.

In the organizational context, Dean et al. (1998) conceptualized cynicism as a multidimensional construct with three components [beliefs (cognitive), affect, and behavioral tendencies] and defined cynicism as "a negative attitude towards one's employing organization comprising three dimensions: (1) a belief that the organization lacks integrity; (2) negative affect toward the organization; and (3) tendencies to disparaging and critical behaviors toward the organization that are consistent with these beliefs and affect." According to the first dimension employees believe that the practices of their organizations betray a lack of principles such as fairness, honesty, and sincerity. The affect dimension comprises several emotions such as anger, distress, disgust, scorn, shame. Finally, the most obvious behavioral tendency for those with cynical attitudes is the expression of strong criticisms of the organization, pessimistic predictions, and ironic humor (Dean et al. 1998).

2.3 Authentic Leadership

Authenticity has its roots in Greek philosophy meaning, to thine own self to be true (being true to oneself) (Gardner et al. 2005). According to Avolio et al. (2004) authentic leaders are the leaders who are deeply aware of how they think and behave and are perceived by others as being aware of their own and others' values/moral perspective, knowledge, and strengths, and who are confident, hopeful, optimistic, resilient, and high on moral character. Walumbwa et al. (2008) defined authentic leadership as a pattern of leader behavior that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, internalized moral perspective, balanced processing of information, and relational transparency.

The authentic leadership construct comprises four dimensions (Gardner et al. 2005). The first dimension is self awareness and it refers to showing an understanding of one's own talents, strengths, weaknesses, and sense of purpose, core values, beliefs and desires. The second dimension, relational transparency, involves making personal disclosures, such as openly sharing information and expressing true thoughts and feelings, indicating that the leader has trust, openness and self-disclosure in relationships. The third dimension, balanced processing, involves objectively analyzing all relevant information before making a decision. Leaders solicit views from others that challenge their existing positions and they are able to consider multiple sides of an issue and multiple perspectives. The final dimension is internalized moral perspective and it refers to an internalized and integrated form of self-regulation, guided by internal moral standards and values.

3 Research Model and Hypothesis

Despite the existence of some studies exploring the relationship between leadership styles and organizational identification (Iyer et al. 1997; Cicero and Pierro 2007), the studies exploring the relationship between authentic leadership and organizational identification are very limited. Booms (2010) in her empirical study with employees working at companies with corporate governance rules found that trust plays a mediating role between authentic leadership and organizational identification. Avolio and Gardner (2005) suggested that authentic leaders help followers find meaning at their work through greater self-awareness and internalization of values, therefore the follower's identification with the organization can be expected to be higher with authentic leaders. On the contrary, if the employees believe that the leader is not honest and lacks integrity, in other words, not authentic; this might affect organizational identification level negatively. Within the framework of literature review, it is possible to propose the following hypothesis.

 $\mathbf{H_{1}}$: There is a positive and significant relationship between authentic leadership and organizational identification.

Researches about cynicism and organizational identification have revealed that both concepts are associated with employee attitudes and behavior. However, the empirical studies exploring the relationship between cynicism and organizational identification are also limited. Kreiner and Ashforth (2004) explored and found that identification was inversely related with societal cynicism towards institutions, whereas cynicism was positively associated with disidentification. For the work context, Bedeian's (2007) study on academic staff showed that a higher level of organizational identification was negatively related to the strength of cynicism. In a study conducted in Turkey by Polat et al. (2010), it was found that cynicism had a negative effect on organizational identification. A higher level of cynicism closely related with experience that casts doubt on the motives, actions, and values of one's employing organization may be related with employees' unwillingness to define themselves in terms of organizational membership and therefore lower levels of organizational identification can be expected. Furthermore, individuals who are cynical may be more likely to disidentify because they tend to see the organization in a negative or pessimistic perspective. Furthermore, organizational identification is found to be positively related with procedural and distributive justice (Olkkonen and Lipponen 2006) and cynicism is found to be negatively associated with justice (Kutanis and Cetinel 2010). Taking into account the framework of the relationship between cynicism and organizational identification, it can also be expected that lower levels of cynicism can predict higher levels of organizational identification.

Authentic leadership with relational transparency and internalized moral perspective dimension can be expected to promote justice and organizational identification. Some studies (Laschinger et al. 2012) demonstrated the importance of authentic leadership's role in preventing negative work behaviors such as workplace bullying. Laschinger et al. (2013) in his study revealed that the authentic behavior of nursing leaders contributed to lower levels of cynicism.

Therefore, within the framework of literature review, authentic leadership can be expected to predict less cynicism, which in turn could predict increased organizational identification. It is possible to propose the following hypothesis.

H₂: Cynicism mediates the relationship between authentic leadership and organizational identification.

4 Methodology

The data were gathered conveniently from 122 white collar employees who work in companies of different sectors and departments, both as traditional paper and pen form of survey and as soft copy form survey. 220 questionnaire forms were distributed and 122 were returned with % 55.45 response rate.

For measuring organizational identification, Mael and Ashforth's (1992) scale is used. The five point Likert type scale comprises 6 items. As stated by Riketta and Van Dick (2005), Mael and Ashforth's scale was considered the most representative organizational identification measure with regard to its empirical outcomes and

with regard to the fact that it provided the least variation on correlations. Organizational cynicism is measured by five point Likert type scale consisting of 13 items which was developed by Brandes et al. (1999). It comprises three dimensions, which are cognitive, affective and behavioral. For measuring authentic leadership, Gardner et al.'s (2005) 16 item five point Likert type authentic leadership scale is used. The scale comprises four components, which are self-awareness, relational transparency, balanced processing and ethical/moral. Self-awareness and ethical/moral dimensions have 4 items each, whereas transparency has 5 and balanced processing has 3 items.

5 Research Findings

Results of this study were evaluated using the SPSS 16.0. A brief look at the demographic figures of the participants reveals that 58 % of the respondents were male. It was observed that 63 % of them had graduate degrees and 40 % of them were specialists. The majority of the respondents (35 %) were between the ages of 30–40 years. Nearly half of the respondents had work tenure of more than 5 years.

Factor analysis was conducted for the variables. For organizational identification, it was seen that KMO value was 0.912 and Bartlett's Test of Sphericity was significant (p = 0.000 < 0.001); which indicated that the data was adequate and appropriate to conduct factor analysis. One factor was acquired, parallel with the literature review. It explained 74.789 % of the variance. Cronbach's alpha for the factor was 0.93. For cynicism, it was seen that KMO value was 0.897 and Bartlett's Test of Sphericity was significant (p = 0.000 < 0.001). Two factors were acquired: Behavior and cognitive components of cynicism comprised one factor, whereas affect component comprised the second factor. Explained variance by behavior and cognitive components was 38.924 %, whereas it was 31.241 % variance of the scale for affect. In total, they explained 70.165 % of the variance. Cronbach's alpha for the factors were 0.897 and 0.908 respectively. For authentic leadership, KMO value was 0.888 and Bartlett's Test of Sphericity was significant (p = 0.000 < 0.001). Three factors were acquired and it explained 65.867 % of the variance. Relational transparency and balanced processing components comprised the first factor and internalized moral perspective component comprised the second factor, whereas self awareness component formed the third factor. Cronbach's alpha for the factors were found as 0.885, 0.851 and 0.866 respectively. As can be observed from Table 1, correlation analysis was conducted to explore the relationships between the research concepts. There is found to be a positive and significant relationship (r: 0.251) between authentic leadership and organizational identification, thus H1 is supported.

As can be seen on Table 2, cynicism was regressed on authentic leadership and authentic leadership was observed to have a significant effect on cynicism. Secondly, organizational identification was regressed on authentic leadership and the results indicated that authentic leadership had a significant effect on organizational

Table 1 Correlation analysis

		Cynicism (Total)	Cynicism (Behavior and cognitive) (Factor 1)	Cynicism (Affect) (Factor 2)	Organizational identification
Organizational	r	-0.648**	-0.660**	-0.415**	1
dentification	p	0.000	0.000	0.000	
Authentic leadership (Total)	r	-0.431**	-0.401**	-0.385**	0.251**
	p	0.000	0.000	0.000	0.005
Authentic leadership (Rela-	r	-0.293**	-0.246**	-0.331**	0.142
onal transparency and bal- nced processing, Factor 1)	p	0.000	0.000	0.000	0.12
Authentic leadership (Inter-	r	-0.476**	-0.450**	-0.409**	0.245**
nalized moral perspective, Factor 2)	p	0.000	0.000	0.000	0.007
Authentic leadership (Self	r	-0.358**	-0.366**	-0.233**	0.281**
awareness, Factor 3)	p	0.000	0.000	0.000	0.002

^{**}p < 0.01

Table 2 Hierarchical regression analysis examining the mediating role of cynicism on authentic leadership and organizational identification relationship

	R ²	R ² change	F	F Sig.	β	t	p	
Step 1								
Authentic leadership	0.185	0.185	27.317	0.000	-0.431	-5.227	0.000*	
Dependent variable: C	ynicism							
Step 2								
Authentic leadership	0.251	0.063	8.056	0.000	0.251	2.838	0.005*	
Dependent variable: Organizational identification								
Step 3								
Authentic leadership	0.421	0.358	43.296	0.000	-0.035	-0.450	0.654	
Cynicism	1				-0.663	-8.582	0.000*	
Dependent variable: Organizational identification								

Dependent variable: Organizational identification

identification as well. Thirdly, organizational identification was regressed on authentic leadership and cynicism. Cynicism had a significant effect on organizational identification. Moreover, with the inclusion of cynicism the significance value of the authentic leadership dropped to insignificance, and there was full support for mediation (Baron and Kenny 1986). Thus, Hypothesis 2 is supported. The results were also cross-checked by conducting Sobel test (Sobel 1982). A calculation of Sobel test showed significant result (z: 4.456, p: 0.00), suggesting that cynicism mediated the effect of authentic leadership on organizational identification.

^{*}p < 0.01

Regarding demographics, there were not any significant differences found in terms of gender, age, education, work-position, organizational tenure, and work tenure.

6 Conclusion

The results support the literature review, which contend that there is positive and significant relationship between authentic leadership and organizational identification (Booms 2010; Avolio and Gardner 2005). The follower's identification with the organization can be expected to be higher with authentic leaders. Through honesty and integrity, they may internalize values and develop greater bond with the organization. Authentic leadership behaviors, especially displaying an internalized and integrated form of self-regulation, guided by internal moral standards and values, may be expected to contribute to higher levels of organizational identification.

If the employees feel that they are the part of the organization by internalizing the organizational values, feeling pride in the membership and perceiving an overlap between the image of the organization and themselves (Riketta and Van Dick 2005) through authentic leadership; they would tend to exhibit less negative attitude toward their employing organization in terms of beliefs, affect and behavior (Dean et al. 1998). There is found to be a moderately strong negative relationship between authentic leadership and cynicism. Among the dimensions of authentic leadership; internalized moral perspective is observed to have the strongest negative correlation with the organizational cynicism. That is, if the employees perceive their leaders to exhibit an internalized and integrated form of self-regulation, guided by internal moral standards and values; they would tend to show less cynicism.

In regard to the mediating role of cynicism on the relationship between authentic leadership and organizational identification, cynicism was found to have mediator role. Parallel with the literature review, perceptions of authentic leadership were found to have positive association with organizational identification and negative association with cynicism (Laschinger et al. 2013; Booms 2010). When dimensions of cynicism is taken into account, organizational identification is especially negatively associated with the belief that the organization lacks integrity and with the behavioral tendencies to disparaging and critical behaviors toward the organization that are consistent with these beliefs. The hierarchical regression analysis showed that lower cynicism has a mediating role on the positive relationship between authentic leadership and organizational identification.

The results of organizational cynicism may be destructive for both employees and organizations, therefore it is vitally important to explore the antecedents of cynicism. The results of the study also draw attention to the importance of personorganization fit and value congruence in organizations. Studies about authentic leadership are still at their infancy in Turkey. Therefore, the results about its

association with organizational identification and cynicism can also be expected to contribute to the literature.

The findings of the study serve some suggestions for managerial implications as well. Keeping a low amount cynicism through authentic leadership style may enable employees to perceive the organizational identity positively, providing strong organizational justice perceptions, providing a respectable vision and mission for the organization together with career plans for employees. Furthermore, building trust relationships and open communication channels may stimulate higher levels of organizational identification and lower levels of cynicism.

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Prospects of Risk Management on Small Trade Enterprises

Elena Lopatina

Abstract The article investigates the prospects for the application of risk management on small trade enterprises. The authors define the relevance of the application of risk management on small trade enterprises, evaluate the possibility of the risk assessment on small trade enterprises, consider the prospects for the application of risk management to small trade enterprises, as well as studying the international experience of risk management on small trade enterprises.

Keywords Risk management • Small trade enterprise • Risk-radar • Dichotomous portfoliation • Credit cycle

1 Introduction

In the process of globalization, more and more companies are working with innovative and sophisticated technologies front the international markets. In this regard, there are new and enhanced existing business risks. If a few decades ago risk management was an additional tool of enterprise management, now it has become a mandatory component of enhancing its competitiveness. Strengthening closeness of the connection enterprises from different industries and countries in the process of cooperation and internationalization combined with acceleration and expansion of contagion in the global economy leads to the need for risk assessment and risk management.

The basic idea of risk management can be summarized as follows: "It is impossible to control, the existence of which we do not know". Therefore, in order to manage risk, it is necessary to identify them. Therefore, the first step in risk management is to identify risks. For this determined value of each type of business activity are identified, ordered and documented the potential benefits and threats of all factors associated with these activities.

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Our next step is determined by risk analysis and probability of their occurrence and the possible consequences for the enterprise. After that, the response to the risks—possible measures are taken to prevent risks. At the last stage, the verification risk, i.e. evaluation of the effectiveness of risk management at the enterprise. The priorities include the development of a modern enterprise integrated and dynamic risk management system.

2 Relevance of the Application of Risk Management on Small Trade Enterprises

Risk management is a procedure designed to ensure that minimize the adverse effects of financial losses by: identify potential sources of loss; measurements financial consequences of losses; use of controls to minimize actual losses or their financial implications. Risk management in the enterprise is a cyclical process (Fig. 1).

For the effective functioning of this system, it should focus not only on the entity's objectives, but also on its strategy and culture. Integrated risk management requires a comprehensive and systematic risk management at the enterprise at all levels (Table 1).

To achieve the maximum effect from the introduction of a risk management system must use the correct tools of the system for the final and effective decision-making in the event of risk. Schematic representation of the methods of functioning of the risk management system in enterprises is shown in Fig. 2.

The algorithm of functioning of the risk management system has significant prospects for small trade enterprise at the moment, which may be reflected in the following results of the implementation of risk management system (Popkova et al. 2013a): Preservation of sustainable management system business activities of the organization; Compensation for overload (full or partial) of risk management in business organizations; Determination of economic responsibility for government failures in the process of risk management with a view to ensuring their interest in the outcomes the risk management system of enterprise organization.

Fig. 1 The process of risk management on the enterprise

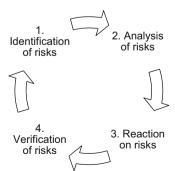


Table 1 Integrated risk management

Level 1. Strategic framework for risk management

- Compliance risk management system strategy, vision and mission of the enterprise;
- Profiling risks: Possible types of risks, the estimated time of risk events, the probability of risk events;
- Analysis of the possible consequences of the risk events for the enterprise;
- Adaptation of the enterprise in relation to the selected risk profile;
- Risky strategic audit;
- Reporting to stakeholders.

Level 2. Organizational foundations of risk management

- Formation of the organizational structure of the company in accordance with the risk profile of the undertaking;
- Identify the resources needed for risk management at the enterprise;
- Definition of responsibilities for risk management among decision makers in the enterprise.

Level 3. Internal Control System

- Control of risks in the enterprise;
- The introduction of rules and regulations in accordance with the risk profile of the undertaking;
- Reporting on risks and internal communications.

Level 4. Internal audit of risk management at the enterprise

Formation mechanism of enterprise risk management structure retailing, its functional and instrumental development will lead to the following results (Popkova et al. 2013b):

- Remain robust risk management system of enterprise structure as a whole;
- Compensation for overload (full or partial) of risk management in the business structure;
- Determination of economic responsibility for government failures in the process of risk management with a view to ensuring their interest in the outcomes the risk management system of enterprise structure.

Thus, for small trade enterprise Retailing problem of organization and development of the risk management system at the moment is one of the priorities.

3 Opportunities for Risk Assessment on Small Trade Enterprises

Measuring risks can be quantitative, qualitative or mixed. Quantitative approach to risk analysis is based on information obtained in the course of qualitative analysis. The most common scoring methods are statistical methods, the method of analogy, logical- probabilistic method, a group of analytical methods.

Are the most common statistical methods, among which are the tabular, graphical, method of grouping, the method of averages, the index method, for the

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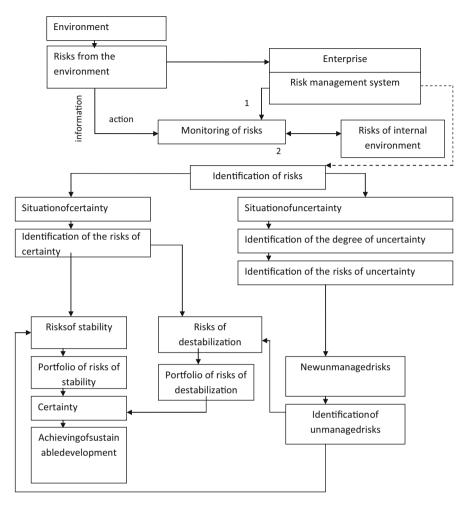


Fig. 2 Model of effective functioning of the risk management system on small trade enterprise

oscillation analysis, regression analysis and others (Popkova et al. 2013c). Their main task is to determine the probability of occurrence of a particular adverse event based on a statistical study of the available data on the activities of a particular organization in the past. In the simplest case quantitatively private operational risks are assessed using measures of dispersion, standard deviation, coefficient of variation, and the results of their influence—based on the average expected values of the studied parameters (Popkova and Tinyakova 2013a). The main advantage of statistical methods is a simple mathematical calculations, but their use requires a large number of observations, since this depends directly on the accuracy of risk assessment.

At the moment, unfortunately, there is no method of quantifying the generalized indicator of risk that would be suitable for a variety of theoretical and practical

cases, and the risk, if it is considered only as a local characteristic of the individual areas of the enterprise. Because of this risk management is episodic and fragmented.

The most common type of risk assessment is quality. Qualitative evaluation uses definitions that are not directly related to financial performance (e.g., high probability of risk). It is used to quickly determine the risk is not significant for the company in order to further exclude it from a detailed review process, if the risk is low. Methods of qualitative approach to risk assessment include: brainstorming, evaluation, using interdisciplinary teams, specialized and expert assessments, structured interviews and/or questionnaires, etc.

Feature of the method of expert estimates is to use the experience of experts in the analysis and assessment of the impact of various qualitative factors, which developed a list of evaluation criteria in the form of questionnaires, each criterion corresponds to a certain weight, which is not reported to the experts. After that, the expert analyzes the submitted questions and marks the selected answer (Popkova and Tinyakova 2013b). It should be noted that the experts to answer questions should have complete information about the object being evaluated, otherwise the experts' responses will be biased. After completion of the survey, completed expert sheets are processed and displayed the result of examination (Popkova and Tinyakova 2013c). This is a relatively simple method, but the quality of risk assessment depends on the quality of selection experts.

According to the qualitative assessment methodology, the risk can be assessed three-dimensionally when compared probability of its occurrence, impact and implications. Each level of probability makes an impact and consequences on assigned value (Table 2).

Under conditions of complete uncertainty can be used expert risk assessment methods are inherently subjective, but provide useful information to reduce uncertainty and help to make an informed decision risky. Since the high degree of uncertainty in the activities of small enterprises, qualitative risk assessment is the most common. In practice to assess the "stability" of the provisions necessary to use simplified methods for determining the coefficient of risk, for example, by a factor of risk K_p :

$$K_{\rm p} = \frac{\rm Y}{\rm C},\tag{1}$$

Where Y—maximum possible loss from ongoing operations in the course of business or exchange activities; C—amount of own funds, rubles. Scale assess the stability of the company, which is based on values of the K_p , has four levels: from minimal to unacceptable (Table 3).

According to this principle of gradation and dichotomous portfoliation, the risks are in the portfolio with intent to eliminate or control them.

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Table 2 Three-dimensional risk assessment

Risk assessment PROBABILITY * IMPACT * INVESTIGATION	
PROBABILITY "L"	Value
Could have been expected (happens often)	10.0
Possible	6.0
Unusual, but possible	3.0
Only remotely possible (there somewhere)	1.0
Conceivable, but very unlikely (not yet happened)	0.5
Impossible in practice (one in a million times)	0.2
Unable hypothetically	0.1
IMPACT "E"	Value
permanent	10.0
Frequent (daily)	6.0
Sometimes (once a week)	3.0
Infrequent (once per month)	2.0
Rare (once a year)	1.0
Very rare (once a year)	0.5
No effect	0.0
INVESTIGATION "C"	
Catastrophic (many fatal or destruction in the amount of R10 million)	
Natural disasters (a few fatalities or damage in the amount of R1 million)	
Very serious (one fatality or damage more than R100,000)	
Serious (serious injury or damage in excess of R10,000)	
Important (temporary disability or damage in excess of R 1000)	
Noticeable (minor damage in the amount of R 100)	

Table 3 Scale assessment of stability of the company

Evaluation of risk	Value of K _p	Identification of the company's position
Minimal risk	0-0.1	Stability
Acceptable risk	0.1-0.3	
High risk	0.3-0.6	Destabilization
Unacceptable risk	more than 0.6	

4 International Experience of Risk Management on Small Trade Enterprises

Issues of risk management in small trade enterprises in the United States addressed at the state level. In 2007, the Association of Small Business Development in conjunction with the Ministry of National Security has developed a risk management advice to small trade enterprises, based on based on the idea that small business has an impact on national security.

In the U.S., the practice of risk management is widespread including in small business enterprises and considered vital to the success of any program or project. Event risk management are conducted regularly and systematically. The most popular method of risk management in the U.S. is a risk radar. This technique was developed in 1996 based on 15 years of experience in providing risk

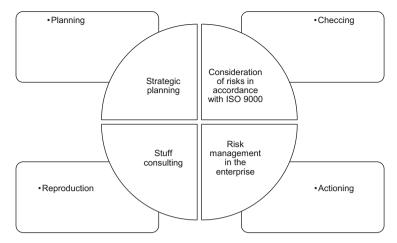


Fig. 3 Risk-radar for small trade enterprise

management services to the U.S. government, the Ministry of Defense and commercial customers (Fig. 3).

As can be seen from Fig. 2 Risk Radar provides strategic risk management of small trade enterprise, allowing to take into account the influence of time and future events for the purposes of the enterprise. Universities are also involved in the development of recommendations on the application of risk management to small trade enterprises. So Corporation Strategic analysis systems (SAS), created in 1976 at North Carolina State University (the North Carolina State University) has been developing software for risk management in small trade enterprises based on four key areas:

- Banking and financial services. Cost-benefit analysis, the need for credit resources and creditworthiness.
- Energy. Management of commodity energy portfolios to find comprehensive solutions for risk management.
- Government. Risk-based approach to prevent the development of shady business.
- Insurance. Profit analysis, risk insurance increase ROE.

This technique is used in more than 65,000 small trade enterprises in 135 countries around the world. In England, on the risk management of small business enterprises is also highlighted. According to the Department of Business Innovation in the UK, in 2011, there were 4.81 million small trading company in 2008, which in 2012 increased by 104.0003 (2.2 %). In these enterprises employ about 23,100,000 people, their annual turnover is 3000 billion pounds. They account for 75.9 % of all enterprises, 59.4 % of jobs in the country and produce almost 50 % of GDP (Steven 2013).

A study conducted by the Institute of Accounting in England and Wales (ICAEW) in 2012 showed that small and medium-sized businesses annually is

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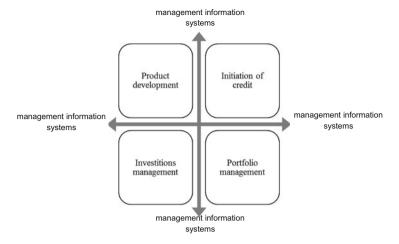


Fig. 4 Model of the credit cycle of risk management for small trade enterprises

spent on risk management around 5 billion pounds, which allows them to systematically assess and manage risks effectively use financial and human resources to achieve its goals (Candice 2013). Developing countries are also making efforts to implement a risk management system for small trade enterprises. For example, the Central Bank of Nigeria (CBN) has developed a model of the business cycle, which provides risk management, as a platform for business development. In this model, priority is given to credit risk management. The model takes into account all aspects of lending to small business enterprises and creates the preconditions for credit risk management on the basis of management information systems (Fig. 4).

This model is flexible and adaptive, it can be applied in any field of activity and tailored business. Recognition of the need for a risk management system in enterprises is reflected in the creation of international legal platform comprising ISO 31000, The Sarbanes-Oxley Act, Code of Corporate Governance, COSO and COSO II. Consider the data in more detail the legal documents. Since late 2008, there is really a global standard for managing business risks: international norm ISO DIN 31000.

It secured the three fundamental principles of risk management in the enterprise. First, risk management should perform an executive function in the workplace and made systematically and cyclically. Secondly, the risk assessment should be performed top-down with decreasing values and likelihood of risk events. Thirdly, this document sets out the basic concepts and types of business risks. In ISO 31000 provides general recommendations for the management of business risks: risk management in the enterprise management system, methods of risk assessment, risk management in emergency crisis management and business continuity risk management.

Sarbanes-Oxley Act was passed by Congress in 2002 as a response to various financial scandals. It serves primarily to restore investor confidence in the capital

market and contains the rules and standards that can increase the level of transparency of financial reporting. Sarbanes-Oxley Act contains several areas of risk management companies, which describe specific requirements for financial statements. Each title consists of several sections, namely: responsibility of each employee of the enterprise; studies and reports; disclosure of the financial condition of the company; preparation of tax returns; conflict of interests of stakeholders; resource management; malfeasance; corporate fraud.

Corporate Governance Code contains the rules of business management and control of business risks. The main idea of this paper is the need for orientation of management decisions in the field of risk management for the long period of time. COSO model was developed in 1992 and focuses on the work of accountants within the internal control system in the enterprise. The main areas of risk management in this system are recognized optimization of internal costs and quality of financial statements. Model COSO II—an enhanced version of COSO, founded in 2004. The basic assumption of risk management at the enterprise in accordance with this document is that each company creates value for specific stakeholders and should ensure the necessary level of security. COSO II describes eight related but different components of risk management at the enterprise: internal environment, goal setting, forecasting the future of enterprise development, risk assessment, control activities, information management, monitoring and risk management. Thus, we can conclude that risk management applicable to small trade enterprises around the world and recognized as an effective and indispensable tool of business.

5 Conclusion

Current stage of development of economic relations in society is determined by the high level of volatility of environmental factors, uncertain prospects of development, as well as a serious lag in the level of development of small business enterprises in comparison with large companies—that determines the appearance of a significant number of risks that affect the activity of small traders in particular spheres trade. Identified patterns are the direct cause of the increased attention to the issue of risk management among small trade enterprises.

The practical significance of the present study is that the results will contribute to solving urgent problems—increase the competitiveness of small business enterprises through the implementation of a risk management system that will maintain the level of income of small enterprises, improve the sustainability of their activities, contributing to the transformation of the economic system in the new state where small business plays a more significant role.

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Strategy Implementation Versus the Concept of Strategy

Letycja Sołoducho-Pelc

Abstract The purpose of this paper is to examine the relationship between the form of the strategy, its time horizon, the update frequency and the degree of the strategy implementation. The studies concerning the strategic management process, i.e. the process of continuous development and implementation of the strategy, pay special attention to the importance of preparing a formalized strategy known to the company's management and employees, extending the time horizon for planning, and performing frequent updates in response to the speed and intensity of changes occurring in the environment. The paper presents the results of the studies concerning the problems associated with the strategy implementation, which were conducted on a sample of 200 Polish companies. The Paper and Pencil Interview research method was used for the needs of the study. The results can be interpreted as an indication that success in the strategy implementation does not depend on the degree of the strategy formalization or the frequency of changes in the strategic plan. It seems that the successful companies participating in the survey implement the strategy to a considerable degree, despite the fact that they represent different approaches to the form, time horizon and frequency of updates of the strategy.

Keywords Strategy • Strategy implementation • Concept of strategy • Time horizon • Update of the strategy • Degree of the strategy implementation

1 Introduction

In the literature on strategic management a significant emphasis is put on the need to develop a strategy. A number of theoretical studies and research relating to company practices that concern the form of the strategy, its time horizon and the need of updating it have been developed thus far. Much less attention is paid to the implementation of the strategic management process, while theoretical considerations are not often taken. As compared with other studies related to the area of strategic management, the studies on the practice of the strategy implementation

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process are very rare. The fact that companies make many mistakes when trying to implement the strategy in practice is of key importance from the viewpoint of the significance of this problem. Therefore, the strand of research concerning the relationship between the form of the strategy itself and key elements associated with its implementation, i.e. the time horizon, modifications and the degree of the strategy implementation, seems to be interesting.

2 Literature Review

2.1 Form of the Strategy and Its Communication

The strategy, especially in the aspect of its practical use, raises many doubts despite the fact that there has been a fascination in it for a few millennia due to the importance of the strategy in winning military or competitive struggle (Tzu 2006). However the multitude of the existing theories does not translate into successes of companies or the ease in the practical implementation of strategic management guidelines. Doubts arise from the very beginning, when the concept of the strategy should be particularized. The vast number of definitions of the term "strategy" is a serious obstacle for theorists and practitioners of strategic management already at the start (Bourgeois 1980; Boar 1984; Mintzberg 1987a, b, 1988; Andrews 1980).

Selection of an adequate strategy from the viewpoint of the specific nature of a given company should be preceded by arrangements concerning its form. This is associated with the course of the process of developing and implementing the strategy. If this course is of a purposeful, systematic and analytical character, it is natural to use solutions that allow formalising the form of the strategy (Abell 1980; Mason and Mitroff 1981; Leemhuis 1985; Greenley 1986; Hax and Majluf 1991; Miller and Cardinal 1994; Hansen et al. 1999; Johnson and Scholes 2002).

Companies make their choices using a wide range of possibilities: from informal strategies derived from thoughts and opinions of the managing staff, which constitute an unstable and thus problematic point of reference, to strategies formalized in the form of a detailed document that is a durable determinant for future actions and decisions (Mintzberg 1994a, b). Each level of formalization has its advantages and disadvantage (Armstrong 1982). A lack or a slight degree of the strategy formalization seems to be more appropriate due to the variability of the environment. However, the choice of such a form of the strategy cannot guarantee the company a stable and sustainable development over a long time horizon. In addition, such a form of the strategy is associated with serious communication problems that may translate into difficulties in its implementation. In turn, an excessive formalization of the strategy may interfere with the dynamics of changes occurring both in the environment and inside the organization (Brock and Barry 2003). Therefore, the possibility of combining two extreme versions of plans (variable and formalized

plans) should be considered. This imposes the need to create a flexible, however not entirely durable plan of formalized character (Bechtold 1997).

The consequences of the implementation of the strategy planning and formalization are confirmed by results of the research (Pearce et al. 1987). The advantages can be seen at different stages of the strategic management process. The organizations that attach a significant importance to the strategic analysis when planning their actions focus in particular on developing various scenarios of the future, taking into account potential changes. This in turn translates into the rate of growth of the organization. A lack of planning and preparation of a formalized strategy causes that many companies focus on acting based on the intuition and the existing knowledge. Their behavior can be characterized as a strategy of "response" to changes occurring in the environment and inside the company.

The issue of a considerable importance of understanding and accepting the strategy by the employees responsible for its implementation does not raise any doubts among theorists and practitioners of strategic management. It seems obvious that the implementation of the strategy requires the preparation of the process in terms of planning, coordinating and monitoring the actions taken by employees. In addition, this requires that the company management should be able to solve quickly emerging problems and to make necessary changes in the strategy, which translates also into professional obligations of the employees (Mezger and Violani 2012). As a part of the individual approach, it is necessary to assign each employee the scope of duties and responsibilities associated with the implementation of the strategy developed. The clarification of the issues relating to the activity of specific employees seems to be equally important to the preparation of a good plan, i.e. an effective long-term plan that supports the implementation of strategic objectives (Kaplan and Norton 2001).

The problems of communicating the strategy are associated with the dilemmas concerning the form of the strategy, which in turn translates into the course of the strategy implementation process (Klein 1996). The communication affects the possibility of implementing the strategy and becomes one of the main limitations—the studies indicate that only 5 % of employees understand the strategy (Kenny 2006). In this case the formalization is important insofar that it can be a significant barrier to effective communication of the strategy. This problem is of particular importance in organizations that do not involve their employees in the strategy preparation process. The form of the strategy adequate to a given company and adjusted to its size can contribute to a more effective course of the strategy implementation process (Steyn 2004; Nakatani 2005).

2.2 Time Horizon and Modifications of the Strategy

In the science of strategic management, there predominates the belief that plans should be made for a long time horizon, as in defiance of the speed and dynamics of changes occurring in the environment (Box 2011). In a long time horizon it is

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possible to anticipate changes that generate opportunities and threats for the development of the company, risk management and building a competitive advantage, which translates into maximized profits (Jones 1993; Keil et al. 2001). However, when making a decision to plan actions in a long time horizon, it is necessary to respond faster and faster, i.e. to monitor the changes occurring in the environment, collect information and take decisions (Box 2011). As an alternative it is possible to perform short-term actions that can ensure only temporary successes (Jauch et al. 1980). The need to formulate the strategy in a long time horizon was confirmed by results of the studies on company achievements treated as a measure of the success (Brennan et al. 1997).

However, when analyzing the length of the time horizon, there is a need to take account of a stable and durable strategy implementation, which includes the necessity to correct and even doubt the existing arrangements (Ansoff 1980). However such actions require time, so companies often treat the existing assumptions concerning the strategy as binding and neither verify them nor make necessary modifications (Magretta 2012).

2.3 Implementation of the Strategy

Since the preparation of the strategy is associated with significant organizational and intellectual efforts, it is hard to understand why so many strategies are not implemented. The results of the studies regarding the level of the strategy implementation are really surprising and prove enormous difficulties associated with this process. Bearing in mind the fact that only 10–30 % of strategies (or in other terms from 1 to 3 strategies out of 10 developed ones) are implemented, it can be concluded the strategy implementation process is much more difficult than strategic planning (Raps 2005). In any case it is a mistake to separate these two processes as only the combination of the conception stage and the implementation stage may lead to the success. It is assumed that planning involves the issues associated with the preparation and implementation of the strategy as well as translating it into the plans and activities of tactical, operational and strategic nature.

The fact of having a strategy itself is very important, but it creates a false impression that the strategy, even without implementation, will ensure planned growth and success of the company (Magretta 2012). It is equally important to ask oneself difficult questions concerning, inter alia, issues associated with setting a strategic objective in the process of developing the strategy and to particularize the issues associated with the manner of realization of the objective (Drucker 1954; Steyn 2004).

Therefore, it seem to be a key issue to consider the interdependencies in this process, which link the form of the strategy with its communication, i.e. the elements associated with the initial stage of the strategic management process with an accepted time horizon as well as elements associated with the introduction

of updates to the strategy. It appears that these elements have a significant impact on the degree of the implementation of the development concept worked out.

3 Research Methodology

These results constitute an integral part of the detailed studies on the implementation of the strategy in companies. The research sample included 200 Polish companies. A vast majority (86.5 %) of the companies, when describing their ownership structure, indicated that were wholly privately owned. These entities have been honored for their successes in two rankings: "Diamenty Forbesa 2013" and the ranking of the "Polityka" weekly. The companies included in the Forbes list have received a positive rating of credibility, which means that their profitability was positively assessed (based on EBIT and ROA) as well as that they had a high level of current liquidity and were not in arrears with payments. Companies that met all these conditions also had to demonstrate a positive financial result and the value of the equity. In turn, companies that were included in the "Polityka" list are the biggest Polish companies, classified according to their sales revenues. The subject of the studies required the companies analyzed.

In order to select the research sample and ensure the highest representativeness in the survey, the stratified random sampling method was used. Thanks to adopting this method, the sample is more representative in terms of a larger number of variables as compared with a simple random sample. A method based on collecting data in an open and standardized manner was used in addition. The paper and pencil interview (PAPI) was used as a research technique, due to a high degree of complexity of the research tool and the multi-faceted problems associated with the quantitative study. The respondents referred to the statements contained in individual questions by selecting answers in the Likert scale. The questionnaire used in the interview contained 58 questions: 12 questions in the demographic part and 46 questions in the main part of the survey. Interviews with the respondents were conducted by a research agency.

Three statistical analysis methods were used in the survey, while only two of them were used for the needs of this paper: Cramer's V coefficient and Kendall's tau-b correlation coefficient. The Cramer's V coefficient was determined in order to examine the strength of the relationship between nominal variables. In turn, the correlations between ordinal variables were determined based on the Kendall's tau-b correlation coefficient. Kendall's tau-b is a non-parametric measure of correlation for ordinal variables. The questions in the main part of the questionnaire are on an ordinal scale and therefore the use of this correlation can be considered to be justified. The sign of the coefficient used in this measure indicates the direction of the relationship, while its absolute value represents the strength of the relationship. Larger absolute values suggest stronger dependencies. The coefficient takes values from the range of -1 to +1. In the case of this correlation, it does not matter whether the variables being analyzed have distributions similar to the normal distribution.

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That is why the Kendall's tau-b correlation is treated as a non-parametric correlation.

4 Results of the Research and Discussions

The research results presented here concern the form of the strategy, including the time horizon, updates, communication to employees and implementation of the strategy.

In order to verify the relationship between the final arrangements concerning the strategy and its implementation, four hypotheses were formulated and presented below.

- **H**₁: An increase in the frequency of updating the strategy increases the effectiveness of its implementation.
- **H**₂: Extending the time horizon of the strategy affects the effectiveness of its implementation.
- **H**₃: Along with extending the time horizon of the strategy, the frequency of updating it increases.
- **H**₄: There is a relationship between the form of the strategy and the communication of guidelines concerning the strategy to employees.

In order to test the hypotheses 1–3, the correlations were calculated using the Kendall's tau-b correlation coefficient. This coefficient is a non-parametric measure of correlation for ordinal variables. As the questions included in the questionnaire had an ordinal scale (it is possible to put them in order by size, but quantitative differences between responses cannot be indicated), the use of this correlation is justified. The correlations calculated using the Kendall's tau-b method are shown in Table 1.

In the case of nominal variables, the hypotheses were tested using the Cramer's V coefficient. It is used to measure the strength of relationships between nominal variables. The results are presented in Table 2.

Table 1 Kendall's tau-b correlation

Hypothesis	Kendall's tau-b correlation coefficient
H1	0.051
H2	0.168*
Н3	0.287*

^{*}Significant correlation at the level of 0.01 (two-sided)

Table 2 Cramer's V correlation

Hypothesis	Cramer's V correlation coefficient
H4	0.524

Among the four hypotheses, H1 is not statistically significant. On the basis of the result obtained it is not possible to draw generalized conclusions concerning the assumptions made for the entire population. Thus, no relationship between the effectiveness of the strategy implementation and the frequency of updating it was found.

Hypothesis H2 concerned the relationship between the time horizon and the implementation of the strategy. The result obtained (0.168**) indicates the existence of a weak positive relationship. Thus, the dependence between a longer time horizon and an increased level of the effectiveness in the strategy implementation was verified positively. It can be considered that contrary to the scope and speed of changes occurring in the environment and inside the organization, it is appropriate to extend the time horizon of the strategy, because it translates directly into the ease and effectiveness of the strategy implementation. This is not surprising, since when planning in a longer time horizon, it is easier to prepare the organization for the implementation of the strategy, also in terms of the necessary changes.

The hypothesis 3 indicated a relationship between updating the company's strategy and the time horizon. The result indicating a positive correlation (0.287**), which can be assessed as an average, allows accepting this hypothesis. This means that along with extending the time horizon, the frequency of updates to the strategy increases. So it appears that an extension of the time horizon does not necessarily have to cause that the strategy becomes outdated. Bearing in mind the above it can be presumed that companies may ensure the success in the strategy implementation over a long time horizon by making necessary adjustments and modifications to the development concept adopted.

When interpreting the result obtained for the hypothesis 4, the existence of a strong relationship between the form of the strategy and the communication of the assumptions of the strategy to employees can be indicated.

It is not surprising that in the group of 36 companies surveyed, which selected the strategy existing only in the "boss's head", employees of 30 companies indicated that the strategy was communicated verbally at meetings with the management. A similar situation occurs in the companies whose strategy consists in verbal arrangements known only to the top management. In this case, employees of 28 companies were informed about the strategy verbally during meetings with managers. In the group of entities that formulated the strategy in the form of verbal arrangements known to every employee, the verbal communication of the strategy at meetings with the management took place in 18 companies, while in 14 companies each employee was provided with the strategy in writing.

In turn, the companies, which developed a formalized strategy in the form of a document known only to the company management, indicated the verbal communication of the strategy at meetings (23 entities) and providing every employee with the strategy in writing (32 entities). Verbal communication of the strategy was chosen by 19 companies with a strategy formalized in the form of a document known to every employee of the company. Communication in writing to each employee was selected by 8 entities.

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It can therefore be presumed that a low degree of the strategy formalization in the form of verbal arrangements translates into the choice of a verbal form of the strategy communication. In turn, a high degree of the formalization of a documented strategy entails informing the employees about the strategy in writing.

The studies allowed identifying the relationship between: the length of the time horizon of the strategy and the update frequency, as well as between the length of the time horizon and the degree of the implementation of the strategy. In relation to the existing theoretical considerations and research results, there are no proofs confirming the existence of the relationship between updating the strategy and the degree of its implementation as well as between the form of the strategy and the degree of the strategy implementation.

5 Conclusion

When summarizing the research results presented in this paper, it is worth to emphasize the importance of the form and communication of the strategy for its implementation. Preparation of a long-term development plan is necessary as we cannot predict the future, but businesses can choose the degree of formalization for the form of the strategy. Referring to the research results, it can be indicated that one of important aspects of formal planning is the time horizon, which is of particular importance for the strategy implementation (Fig. 1).

The time horizon not only defines the long-term aspirations, but primarily it prepares for changes. The relationship between the time horizon and the effectiveness in the strategy implementation seems obvious from the viewpoint of the theory of strategic management, but it is difficult to implement in practice due to the variability of the environment. Other elements, such as the form of the strategy, the communication of the strategy to employees and the strategic plan updates, are less important, because their impact on the effective implementation is indirect.

The relationship that can be seen between the time horizon and updates of the strategy seems to be indisputable. It is necessary that the strategy takes into account the need to adapt to changes, which causes that enterprises have to update the strategy with a frequency depending on the length of the time horizon. It is not



Fig. 1 The impact on the effective implementation strategy

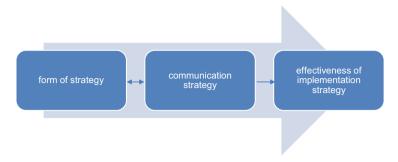


Fig. 2 The relationship between the form of the strategy and the form of communication

possible to plan in a long time horizon without considering the necessary adjustments of the strategy, due to the influence of many factors that are dependent and independent of the company. There is another regularity that proves the relationship between the form of the strategy and the form of communicating the strategy to employees (Fig. 2).

The results are not controversial also in this case and they are consistent with the theoretical knowledge. The form of the strategy with a low level of complexity affects the choice of the form of communication, which is usually neither complex nor formalized. Conversely, the selection of a formalized strategy determines the form of communication, which is often formal and documented.

The results of the studies can be interpreted as a confirmation of the relationship between the conceptual stage aimed at developing the strategy and the strategy implementation stage. At the same time it should be emphasized that the most important elements from the viewpoint of the effective implementation of the strategy include the consideration of the long-term future of the company, frequent verification of the strategic plan and the correct choice of the form of the strategy due to the necessity to communicate it to employees responsible for the implementation, whose actions result just from the strategy.

The results can be interpreted as an indication that success in the strategy implementation does not depend on the degree of the strategy formalization or the frequency of changes in the strategic plan. It seems that the successful companies participating in the survey implement the strategy to a considerable degree, despite the fact that they represent different approaches to the form, time horizon and frequency of updates of the strategy. It can be assumed that an effective implementation of the strategy is supported not only by the issues associated with the form of the strategy, but also by tools aiding in the implementation.

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Profiling and Strategies of the Contemporary Creativity: Cluster Analysis of a USA Sample

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Abstract Creativity is today defining boundaries of cultural industries in Europe and out of Europe. Creativity does not include only performing and visual arts but also material culture, tangible and intangible heritages, education, television, knowledge intensive industries, advertising, etc. The creativity can be both for-profit and not-for-profit, too. Taking into account multiple features and strategies of creative entrepreneurs, the debate among lecturers, policy-makers and researchers is never ending. While the boundaries of the concept 'culture' are vanishing into 'creativity', main strategies of cultural and creative entrepreneurs are evolving, too. Above all, revenue maximization and diversification are leading the not-for-profit creativity out of the contemporary crisis of resources and funds. Thanks to a k-means clustering we investigated 2012s costs and revenues of a sample of the USA creativity: museums, symphony orchestras, theatres, universities and public televisions. Four main profiles emerged according to performances of marketing, fundraising, investing and other financing. Bigger clusters are the marketing expert and the revenue diversifier with loss. The revenue diversifier of a less crowded cluster is the most profitable and the most solvent, instead. The fundraiser is not the most crowded cluster but he profits by the second highest gain of the sample.

Keywords Creativity • Profiling • Marketing • Fundraising • Cluster

1 Introduction

Creativity is the contemporary boundary of cultural industries. Creativity is a much more comprehensive content than Culture, as Creativity does not only include performing and visual arts but also tangible and intangible heritage, media and entertainment, knowledge intensive industries, corporate communication, advertising, design, fashion, material culture and any other industry whose product and service is original and artistic.

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At the same time creative firms can be both for-profit and not-for-profit, too. As an example, media are traditionally for-profit industries, museums and the conservation of heritages are usually not-for-profit. Taking into account multiple and flexible contents, features and managerial trends of creative industries, the debate among lecturers, policy-makers and researchers is never ending.

While the boundaries of the concept 'culture' are vanishing into 'creativity', main strategies of cultural and creative entrepreneurs are evolving, too. Above all, revenue maximization and diversification are leading the not-for-profit creativity out of the contemporary crisis of resources and funds. The revenue maximization can refer to the marketing effort or the fundraising effort, so that different profiles of creative firms can emerge according to prevailing strategies and economic performances. There are sometimes no prevailing strategies, as revenue diversification implies that contributions or program service revenues can be less than fifty percent of total revenues. In this case, gains of investments and other revenues can be added to program service revenues and contribution.

Thanks to a k-means clustering we investigated 2012s costs and revenues of a sample of 100 USA not-for-profit creative firms: museums, symphony orchestras, theatres, universities and public televisions. Four main profiles emerged according to performances of marketing, fundraising, investing and other financing. Bigger clusters are marketing experts and the most crowded revenue diversifier is suffering of a loss. The revenue diversifier of a less crowded cluster is the most profitable and the most solvent, instead. The fundraiser is not the most crowded cluster but he profits by the second highest gain of the sample.

2 The Creativity Comprehensive Concept: The USA Creativity

One of the main topics that have been discussed by the literature of economics of culture for two decades, refers to core businesses and boundaries of cultural industries. Cultural industries refer to core businesses like performing and visual arts. As a consequence, theatres and museums are a focus of this literature. The debate is lately focused on a new category classification that was firstly emphasized in the political discourse of Blair's UK Governments (Flew and Cunningham 2010). The Creative Industry Task Force should have investigated a much more comprehensive industry than the cultural one, the Creative Industry, which was supposed to include cultural and creative industries. The debate about creative industries has evolved and matured for two decades and next to policy-makers, lecturers, researchers and observatories have written pages of reports, case studies (creative cities, above all), district or cluster analysis, industrial applications of creative original ideas and, very often, doubts and skepticism about a definition that is not universally accepted (O'Connor 2009; Roodhouse 2008). This definition includes auction houses next to universities, museums next to fashion corporations. The

structure, management and performances of this multiple universe can be very different.

If the debate among social scientists is never ending, the 2000s have seen increasing consensus among policymakers about working definitions of the creative industries and what sectors should or should not be included, albeit with some debates about what should be considered to be "core" creative or cultural industries: performing and visual arts, media and entertainment, information and communication technologies, knowledge intensive services, business services like advertising and communication. The works undertaken for UNESCO in developing its revised Framework for Cultural Statistics compared the cultural statistics frameworks of fourteen constituencies (ten countries, one region, one city, the European Union, and the World Intellectual Property Organization) and found that a consensus exists around the inclusion of definite sectors in cultural statistics modeling, though the latest agenda seems to need a more critical engagement (De Beukelaer 2014). According to the latest 2013s United Nations/UNDP/UNESCO Creative Economy Report, short-term visions and framing of policy issues are a limitation to the sustainability of these industries. At the same time, the two poles of developed and developing countries are increasing their gap both as for strategies and as for performances. In addition, creative people are not so mobile, as it was first foreseen and the agenda on the development of their managerial skills should become a binding commitment.

For applied scientists of industrial organization, structures of these industries continually evolve both on the demand side and on the supply sides. On the demand side, consumers who are not supporting fashions are next to consumers who look for a personalization of consumption and distinction thanks to labels and brands. At the same time, some consumers are not focused on aesthetics but on the gain of investments: for the investor, the *cultivation of taste* becomes a second target while a profitable investment perspective drives the creative consumption. Most creative consumers are community minded: community is in cyberspace and not only cyberspace. Communities are leading consumption, ranking of creative firms, innovative fundraising (from viral marketing to crowd-funding). Creative consumers usually buy bundles: art is bundled with tourist services and other attractions. This feature suggests promotion strategies like city cards or minisubscriptions for weekends or specific holidays.

On the supply side, advertising has been internalized for a decade: once delegating advertising campaigns to public relation and advertising agencies, creative firms are now maturing inner profiles with teams of Marketing and ICT—Information and Communication Technology—Experts. Active quality monitoring becomes a priority, too. The implementation of managerial best practices is another priority, in order to enterprise the cultural organization. Community networking and the customer's engagement, they are both essential in order to gain competitive advantages in (virtual) contemporary markets and to gain the favor of consumers for innovative supplies. This may increase reputation (and intangibles) of creative firms in the community, both offline and online.

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Not-for-profits are one significant side of the *Creative Universe*. Profits not being the main goal, Not-for-profit entrepreneurs supply arts, culture and creativity with the revenue-maximization thanks to marketing, fundraising and other strategies that grant the revenue diversification.

In USA the creative economy constantly counts for more than 11 % of GDP. The cultural employment counts for more than 5 % of total employment. For such an economy, the comparative weakness of national cultural policies is compensated by a patchwork of subnational strategies, where state and local governments undertake diverse initiatives to support the creative economy, often with the purpose of reshaping cities, regions, counties, district or clusters as a hub of creativity (Wyszominski 2008).

Above all, in 2010 Not-for-profit USA Cultural Entrepreneurs generated \$135.2 billion of economic activity: \$61.1 billion by not-for-profit arts and culture organizations and the added value of \$74.1 billion in event-related expenditures by their audiences. This economic activity supports 4.1 million full-time jobs. This industry also generates 22.3 billion in revenue to local, state, and federal governments every year (Americans for the Arts 2013).

The latest and most significant evidence is that the cultural and creative economy is adding values for local industries that are not only 'applications of creative contents'. *Arts & Economic Prosperity IV* shows that arts and culture organizations leverage additional event-related spending by their audiences that pumps revenue into the local economy (Americans for the Arts 2013). When patrons attend an arts event, they may pay for parking, have lunch and dinner at a restaurant, shop in local retail stores, and have any other fun on the way home. Based on the 151,802 audience surveys conducted by *Americans for the Arts*, the typical arts attendee spends \$24.60 per person, per event, beyond the cost of admission.

Territories that are attractions of cultural tourists experience an additional boost of economic activity. Creative industries multiply added values of parallel industries like tourism. As a matter of fact, the tourism industry research has repeatedly demonstrated that arts tourists stay longer and spend more than the average traveler. Arts & Economic Prosperity IV reflects those findings: 32 % of attendees live outside the county in which the arts event took place, and their event-related spending is more than twice that of their local counterparts (nonlocal: \$39.96 vs. local: \$17.42). The multiplier is 2.29.

Nowadays, not-for-profit cultural and creative entrepreneurs are getting on with managerial and marketing approaches for the purpose of revenue maximization. The not-for-profit organization is then confronted with different marketing tools with the aim both to increase customers, visitors and audiences, their segmentation and their purchasing-power exploitation (Choi 2009; Delaney and O'Toole 2007) and to gain the propensity and trustworthiness of donors, who are public and private fund-givers. The literature counts several contributions about the implementation of different tools of marketing, fundraising and other resource-collecting in cultural firms (Colbert et al. 2004; Colbert and Damperal 2007; Colbert 2008; Thornton 2006).

At the same time, if the cultural entrepreneur concentrates resources particularly on one category of expenses for specific activities, other activities may remain regardless or deferred. The trade-off between the marketing or the fundraising effort and the cultural supply should be mediated for the most efficient allocation of resources, above all, when resources become particularly scarce (Rushton 2008; Schuster 1998).

For the revenue diversification (Carroll and Stater 2009), both marketing and fundraising are useful and the proportion between expenditures for fundraising and for marketing affects the success or failure in revenue diversification and maximization, the financial stability and the competitive advantage.

Focus of this research is the revenue diversification and the composition of marketing, fundraising and other administrative expenses of the USA not-for-profit creativity that is listed according to the IRS (Internal Revenue Service) standards at www.guidestar.org, the richest database of USA Not-for-profits' Statements of Revenues and Expenses and Financial Statements. We concentrate on a sample of 100 USA Creative Not-for-profits with the highest 2012 revenues: from theatre to television, from museums to universities and symphony orchestras. We explore accounting data of 20 firms for each of the above-mentioned not-for-profit creative industry; theatre, public television, museum, university and symphony orchestra.

The cluster analysis will profile USA creative Not-for-profits according to revenues from marketing, fundraising or other strategies, according to the range of expenses, their gain or loss and their solvency (Net Assets/Total Assets). The analysis will give evidence of revenue diversification in the 2012s USA Not-for-profit Creativity and it will be useful in order focus on who is supporting and paying for the creative economy.

3 Cluster Analysis of a Sample of USA Creativity According to 2012s Performances

We selected a sample of 100 USA not-for-profit creative firms whose 2012s statements of revenues and expenses and financial statements can be found in www.guidestar.org. The selection includes five categories of creative core businesses: theatre, museum, symphony orchestra, public television and university. All of them generate a creative and original content that is useful for entertainment or day-by-day utility if university research can be considered as for widespread opportunities (medical, cultural, social research, etc.)

This database collects Forms 990 (IRS Internal Revenue Service) where revenue categories are ranked in ten accounting lines so that performances of different financing strategies can be easily perceived. In Table 1 (a) (c) and (h) refer to the fundraising effort. (b) refers to marketing. The other revenue rows refer to the investment income and any other earned income.

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Table 1 Revenue categories of 990 Forms

(a) Contributions, gifts, grants and similar
(b) Program service revenues
(c) Membership
(d) Interests and dividends
(e) Dividends and interests from securities
(f) Rents or other investment income
(g) Sales of assets
(h) Special fundraising events revenues
(i) Sales of inventory
(j) Other revenues

In 990 Forms the Fundraising Expense is separated from other expenses. The tax-exempt organization is obliged to report the exact cost of fundraising and to fill in Form 990 lines, where Program Service Expense is separated from Management and general Expense, too. Marketing is included in the Program Service Expense. 'Management and general' includes miscellaneous costs that are not fundraising or marketing, instead.

All revenue categories and expense ones were, here, indexed to total revenues and total expenditures. The 'Program service' expense, 'Management and general' and 'Fundraising' ones were divided by total expenditures. Revenues main lines (Contributions, Program Service Revenues, Investment Income and Other Revenue) were divided by Total Revenues. Gain or loss was divided by Total Revenues, too.

In order to examine the solvency of the creative entrepreneur, we listed Net Assets and Total Assets from Financial Statements and we calculated Net Assets/Total Assets, too. The k-means cluster analysis of revenue, expense, gain (or loss) and net assets ratios, profiled different types of 'creative entrepreneurs' according to prevailing revenues and expenses (Table 2). According to the Analysis of Variance, all ratios are significant apart of Other Revenues/Total Revenues (Table 3).

In Table 2 average performances (final cluster centers) of clusters show four prevailing profiles. Four very small Clusters show extra-ordinary performances (outliers) and they are excluded from the Table and the analysis. In the Appendix of the paper members of every clusters can be identified for the five creative industries (theatre, museum, symphony orchestra, public television and university) that are here sampled according to the highest 2012s revenues and for the creative not-for-profits that are listed in www.guidestar.org.

The most crowded clusters are The Marketing Expert and the Revenue Diversifier, with 28 firms. These clusters are different for composition and for economic performances, too. Theatres and universities are prevailing in the cluster 'Marketing Expert', whose main revenue is the Program Service Revenue, 75 % and whose main expense is the Program Service Expense (inclusive of Marketing) for 88 %. The gain is 3 % of total revenues and the solvency is 57 %. The cluster 'Revenue Diversifier' is mainly crowded of symphony orchestras and theatres. Neither

Number of Items, <i>Profiles</i> , cluster number according to the Appendix	28, The Marketing Expert— THEATRE & UNIVERSITY, cluster 2 in the Appendix	11, The Revenue Diversifier with Gain— MUSEUM & UNIVERSITY, cluster 5	28, The Revenue Diversifier with Los— SYMPHONY & THEATRE, cluster 6	23, The Fundraiser— MUSEUM & TV, cluster 7
Contributions/ total revenues	0.21	0.30	0.49	0.82
Program ser- vice revenues/ total revenues	0.75	0.27	0.38	0.09
Investment revenues/total revenues	0.03	0.39	0.05	0.05
Other revenues/ total revenues	0.01	0.04	0.08	0.03
Gain or loss (-)/total revenues	0.03	0.14	-0.08	0.09
Program ser- vice expense/ total expenses	0.88	0.82	0.77	0.75
Management and general expense/total expenses	0.09	0.14	0.17	0.11
Fundraising expense/total expenses	0.03	0.08	0.06	0.14
Net assets/total assets	0.57	0.80	0.64	0.77

Table 2 Final cluster centers according to 2012s revenues and expenses

Contributions (49 %) nor Program Service Revenues (38 %) are the prevailing revenues. Next to them, this is the cluster with the highest Other Revenue (8 %). This is the profile of the Revenue Diversifier with a loss of -8 %. Nevertheless, the solvency is 64 %.

Next to this Revenue Diversifier with loss, there is another Revenue Diversifier with Gain, too. With the highest Investment Income (39 %), this profile has neither Contributions nor Program Service Revenues prevailing, but he profits by the highest gain (14 %) and the highest solvency (80 %). With 11 cases, this cluster contains, mostly, museums and universities.

The Fundraiser is the cluster with 23 firms. This cluster shows 88 % contributions and the highest Fundraising Expense of the sample, 14 %. The gain is the second highest of the sample, 9 %. The solvency is 77 %. Museums and public televisions are mostly crowding this cluster. The highest solvency and gain ratio, they are for the Revenue Diversifier with Gain and the Fundraiser. Nevertheless, the prevailing profile is the Revenue Diversifier with 39 firms out of 100.

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Table 3	ANOVA—	analysis	of	variance
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	Cluster		Error			
	Mean		Mean		1	Sig.
	square	df	square	df	F	test
Contributions/total revenues	6.799	7	0.012	92	570.515	0.000
Program service revenues/total	0.926	7	0.012	92	74.629	0.000
revenues						
Investment revenues/total revenues	0.179	7	0.006	92	30.448	0.000
Other revenues/total revenues	0.010	7	0.005	92	2.130	0.048
Gain or loss (–)/total revenues	0.353	7	0.024	92	14.447	0.000
Program service expense/total	0.048	7	0.007	92	6.488	0.000
expenses						
Management and general expense/	0.019	7	0.005	92	3.795	0.001
total expense						
Fundraising expense/total expenses	0.024	7	0.004	92	5.982	0.000
Net assets/total assets	3.909	7	0.045	92	87.790	0.000

4 Conclusion

Focused on revenue maximization and diversification, the USA not-for-profit creative economy is surviving thanks to an efficient resource allocation in marketing, fundraising and other financing strategies. The research gives evidence that a multimode financing is not always profitable. Multiplying audiences and strategies, they do not always generate gains and competitive advantages. The Revenue Diversifier can be with profit or loss.

Next to the Fundraiser, there is a Revenue Diversifier who profits by the highest gain and the highest solvency of the sample. This result means that, apart of marketing, the USA Not-for-profit Creativity is getting on with revenue diversification, in order to survive and gain the competitive advantage at crisis times. Marketing, fundraising, investing and other revenue-collecting are a fortifying strategy in a turbulent scenario, though we have limited the analysis to 1 year, 2012. The profiling could be further investigated, contradicted or confirmed with the analysis of time series, from 2008 to 2013 in order to focus on crisis years and the exit of the crisis and to explore if profiles are changing, from the Fundraiser to the Marketing Expert or Revenue Diversifier and vice-versa.

Appendix: Composition of Clusters (Alphabetical Order)

	_
MAINE PUBLIC BROADCASTING-LEWISTON	1
	-
GEORGE WASHINGTON UNIVERSITY-ASHBURN	2
	+-
ROCHESTER UNIVERSITY-ROCHESTER	2
A MANUAL DIN MEDICATIVA CODE AL CADA DO	<u> </u>
MIAMI UNIVERSITY-CORAL GABLES	2

(continued)

CORNELL UNIVERSITY-ITHACA	2
UNIVERSITY OF SOUTHERN CALIFORNIA-LOS ANGELES	2
VANDERBILT UNIVERSITY-NASHVILLE	2
NEW YORK UNIVERSITY-NEW YORK	2
JOHNS HOPKINS UNIVERSITY-BALTIMORE	2
GEORGETOWN UNIVERSITY-WASHINGTON	2
TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA-PHILADELPHIA	2
TEMPLE UNIVERSITY-PHILADELPHIA	2
LOS ANGELES PHILHARMONIC ASSOCIATION	2
TRUSTEES OF BOSTON UNIVERSITY-BOSTON	2
ROUNDABOUT THEATRE COMPANY-NEW YORK	2
CENTER THEATRE GROUP-LOS ANGELES	2
MANHATTAN THEATRE CLUB-NEW YORK	2
HENNEPIN THEATRE TRUST-MINNEAPOLIS	2
CALIFORNIA MUSICAL THEATRE-SACRAMENTO	2
CALIFORNIA INSTITUTE OF TECHNOLOGY-PASADENA	2
WALNUT STREET THEATRE-PHILADELPHIA	2
THEATRE UNDER THE STARS-HOUSTON	2
PAPER MILL PLAYHOUSE-MILLBURN	2
STARLIGHT THEATRE ASSOCIATION-KANSAS CITY	2
AMERICAN REPERTORY THEATRE-CAMBRIDGE	2
AUDITORIUM THEATRE OF ROOSEVELT UNIVERSITY-CHICAGO	2
WASHINGTON UNIVERSITY-SAINT LOUIS	2
COMMUNITY TV FOUNDATION SOUTH FLORIDA-MIAMI	2
EASTERN EDUCATIONAL TV NETWORK-BOSTON	2
SEATTLE SYMPHONY ORCHESTRA INC-SEATTLE	3
BALTIMORE SYMPHONY ORCHESTRA INC-BALTIMORE	3
INDIANA SYMPHONY SOCIETY-INDIANAPOLIS	4
HOUSTON SYMPHONY SOCIETY-HOUSTON	4
YALE UNIVERSITY-NEW HAVEN	5
STANFORD UNIVERSITY BOARD OF TRUSTEES-PALO ALTO	5
MOMA-NEW YORK	5
MUSEUM OF FINE ARTS-BOSTON	5
MUSEUM OF FINE ARTS-HOUSTON	5
CLEVELAND MUSEUM OF ART-CLEVELAND	5
STERLING AND FRANCINE CLARK ART INSTITUTE-WILLIAMSTOWN	5
CORCORAN GALLERY-WASHINGTON	5
UNIVERSITY OF NOTRE DAME DU LAC-NOTRE DAME	5
BOSTON SYMPHONY ORCHESTRA INC-BOSTON	5
TRUSTEES OF PRINCETON UNIVERSITY-PRINCETON	5
MASSACHUSETTS INSTITUTE OF TECHNOLOGY-CAMBRIDGE	6
MUSEUM ASSOCIATES-LOS ANGELES	6
ASIAN ART MUSEUM FOUNDATION-SAN FRANCISCO	6
CORPORATION OF FINE ARTS MUSEUM-SAN FRANCISCO	6

(continued)

SAN FRANCISCO SYMPHONY-SAN FRANCISCO	6
CHICAGO SYMPHONY ORCHESTRA-CHICAGO	6
MUSICAL ARTS ASSOCIATION-CLEVELAND	6
PHILADELPHIA ORCHESTRA ASSOCIATION-PHILADELPHIA	6
SAINT LOUIS SYMPHONY ORCHESTRA-ST LOUIS	6
DALLAS SYMPHONY ASSOCIATION-DALLAS	6
DETROIT SYMPHONY ORCHESTRA INC-DETROIT	6
SAN DIEGO SYMPHONY ORCHESTRA ASSOCIATION-SAN DIEGO	6
NASHVILLE SYMPHONY ASSOCIATION-NASHVILLE	6
KANSAS CITY SYMPHONY-KANSAS CITY	6
OREGON SHAKESPEARE FESTIVAL ASSOCIATION-ASHLAND	6
CHICAGO THEATRE GROUP-CHICAGO	6
AMERICAN CONSERVATORY THEATRE FOUNDATION-SAN FRANCISCO	6
SHAKESPEARE THEATRE-WASHINGTON	6
GUTHRIE THEATRE FOUNDATION-MINNEAPOLIS	6
ALLEY THEATRE-HOUSTON	6
FORD'S THEATRE SOCIETY-WASHINGTON	6
CINCINNATI PLAYHOUSE IN THE PARK-CINCINNATI	6
THEATER & ARTS FOUNDATION OF SAN DIEGO-LA JOLLA	6
DUKE UNIVERSITY-DURHAM	6
PUBLIC BROADCASTING SERVICE-ARLINGTON	6
SESAME WORKSHOP-NEW YORK	6
WNET-NEW YORK	6
PUBLIC TV 19-KANSAS CITY	6
HAWAII PUBLIC TV FOUNDATION-HONOLULU	7
PHILADELPHIA MUSEUM OF ART-PHILADELPHIA	7
WHITNEY MUSEUM OF AMERICAN ART-NEW YORK	7
BROOKLYN INSTITUTE OF ARTS AND SCIENCES-BROOKLYN	7
DETROIT INSTITUTE OF ARTS-DETROIT	7
MINNEAPOLIS SOCIETY OF FINE ARTS-MINNEAPOLIS	7
ISABELLA STEWART GARDNER MUSEUM-BOSTON	7
CINCINNATI SYMPHONY-CINCINNATI	7
MINNESOTA ORCHESTRAL ASSOCIATION-MINNEAPOLIS	7
MILWAUKEE SYMPHONY ORCHESTRA-MILWAUKEE	7
NEW WORLD SYMPHONY-MIAMI BEACH	7
THIRTEEN-NEW YORK	7
GREATER WASHINGTON EDUCATIONAL TELECOMMUNICATIONS ASSOCIA-	7
TION-ARLINGTON	
WINDOW TO THE WORLD COMMUNICATIONS-CHICAGO	7
TWIN CITIES PUBLIC TV-SAINT PAUL	7
WHYY-PHILADELPHIA	7
COMMUNITY TV OF SOUTHERN CALIFORNIA-BURBANK	7
NORTH TEXAS PUBLIC BROADCASTING-DALLAS	7
KCTS TELEVISION-SEATTLE	7
KOCE-TV FOUNDATION-COSTA MESA	7

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ROCKY MOUNTAIN PUBLIC BROADCASTING-DENVER	7
KVIE-SACRAMENTO	7
SAINT LOUIS REGIONAL PUBLIC MEDIA	7
VIRGINIA MUSEUM OF FINE ARTS FOUNDATION-RICHMOND	8
MIAMI ART MUSEUM OF DADE-MIAMI	8
DENVER ART MUSEUM-DENVER	8
HONOLULU ACADEMY OF ARTS-HONOLULU	8
MENIL FOUNDATION-HOUSTON	8

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National Currency Changeover to Euro: Case of Micro Enterprises of Trading Sector

Madara Payare and Ilmars Kreituss

Abstract The research investigates the changeover process of national currency to Euro, the theoretical aspects of proper project planning and practical implications for micro enterprises of trading sector. Joining Euro zone is a major project for private business sector as it may imply both extra costs and benefits. The research analyses to what extent Euro changeover planning phase was in accordance with project's actual implementation phase and how presence of project plan affected the realization of the project. The paper assesses National Euro Changeover project and Euro introduction in micro trading enterprises in Latvia. Primary data were collected before and after Euro implementation through quantitative surveys of micro entrepreneurs involved in trading. The research results are justified with experts' opinions directly involved in changeover project. An average Euro changeover project costs in micro trading enterprises have obtained and found that project costs are independent of presence of project plan while project time is dependent on project plan. Recommendations and a model Euro changeover plan for micro trading businesses has developed which can be used for Euro changeover in other upcoming Euro zone countries.

Keywords Project management • Euro changeover • Micro trading enterprises

1 Introduction

Latvia joined Eurozone at 1st January 2014. Euro changeover is not only an important step for national economy of each country implementing Euro, but also a major comprehensive project affecting all sectors of national economy including private business sector. The aim of the research is to examine how presence of Euro changeover plan influences project costs and time realization in micro enterprises of trading sector in Latvia.

The micro trading companies have been chosen as the object of the research because micro-enterprises play the main role in all national economies and in EU as

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a whole. And according to Latvia's business registry trading is the most popular business activity among micro and small enterprises.

According to the project management theory *costs, time and quality* are three major project criteria, which have to be taken into consideration when preparing for a project (Mihailidis et al. 2013). The main research problem was to investigate to what extent Euro changeover realization phase met the objectives set in project planning phase and how presence of changeover plan influenced Euro project realization. Practical relevance to microtraders is to clarify to what extent presence of changeover plan influences actual project implementation costs and project duration and how presence of project implementation plan affects the overall assessment of the project. This research paper aims to analyze Euro implementation process in order to produce recommendations for next Eurozone countries.

2 Research Methodology and Design

The research paradigm assumes that social reality is singular and objective and is not affected by the act of investigating it (Collis and Hussey 2009). The research performs both qualitative and quantitative analysis with minimal researcher interference done in non-contrived study setting that does not interrupt the natural environment of the research object. The investigation of the issue was carried out as a longitudinal research in November 2013 and in March 2014 in order to analyze and illustrate how project planning was realized during Euro implementation process. Regarding the data collection techniques both primary and secondary data are used. In order to reduce bias in data sources, methods and investigations the principle of triangulation was used (Jick 1979). Secondary data was obtained through literature review, statistics and public databases, national media and news sites. Furthermore, the primary data were collected through quantitative surveys with micro entrepreneurs involved in trading before and after implementation of Euro. Chi-Square method (Salkind 2013) was used in order to verify statistical proofing of the results. Quantitative data was enriched by semi structured face to face in-depth interviews with industry experts Henriks Danusevics—president of Latvia's Traders Association and the main Euro Project Coordinator in Latvia Dace Kalsone.

3 Project Management Triangle

As the researcher is interested in determining the process of Euro implementation project in micro trading companies it is vital to state the notion of the project. Maylor (2003) states that the project is a "unique set of coordinated activities, with definite starting and finishing points, undertaken by an individual or organization to meet specific performance and objectives within defined schedule with specific cost

and performance parameters." Furthermore, project management theory states that project management is the science on application of knowledge, skills and techniques to execute project efficiently and effectively. All projects are influenced by project criteria or constraints by time, resources, quality, legislation, ethics and environment.

As described before all projects have a starting and ending point which puts the project in a particular time frame. All resources—financial and non-financial—such as personnel and materials have to be taken in consideration. The extent of the project and the quality of project deliverables are important characteristics. Every project has to comply with legal standards, laws and regulations of particular environment. Ethics in project management relates to ethical management, moral believes, values and rules when implementing the project. And the project should not harm the nature or environment but instead should promote sustainability and environmental protection.

Time, resources, quality and scope are internal criteria, but legislation, ethics and environment are external criteria and cannot be influenced by the project manager. Nicholas (2001) reveals that universally the main criteria of project management are: *time and costs*, which directly affects the realization of the project.

Furthermore, each project consists of several phases consisting of a set of activities that need to be performed. The project life cycle consists of sequential phases – initiating, planning, executing and closure that can be extended into several minor subcategories depending on the complexity of the project. Every phase is integral to the whole project process and all phases together create a chain of activities, thus making project as a system (Wideman 2004).

In order to better-organized project's activities they have to be planned and grouped. Work breakdown structure is technique for dividing project into smaller, manageable components, phases and tasks needed to complete during the project (Kapur 2005). Thus, the project can be more effective and efficient both in terms of time and costs.

The project management triangle is a model that shows the main trade-offs present in any project. It illustrates that the accuracy of the project is highly dependent on the management of time, cost and scope which all affect the quality of project deliverable. This is delineated with a use of triangle were if one side is changed then two other sides change accordingly. Traditionally main criteria are time, cost and scope or quality depending on the author and project.

Nicholas (2001) believes that project time estimation is the most crucial part in project planning phase as it later serves as basis for allocating financial and non-financial resources, helps to estimate costs and tracks project performance. Besides, project schedule links the milestones and tasks created in work breakdown structure (WBS) with calendar time. The precise time estimation is crucial for accurate project realization because time schedules set deadlines and outlines the project's structure through all project life cycle. Moreover, all projects have their start and end points whereas exceeding the time limit means increased costs and decrease satisfaction of the project outcome. Project Management Institute (2000)

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states that one of the most popular tool for project time scheduling is Critical Path Method. CPM is a mathematical technique which indicates all project tasks and a time needed to complete representing the longest project path. Furthermore, Maylor (2003) and Nicholas (2001) add that a Gantt chart is the most common and easiest technique for smaller scale projects how to estimate and manage project time schedules.

Cost management is the next logical step after the project time frame with all required activities has been developed. WBS and budget are interrelated as expenditures for each necessary activities have to be estimated, thus WBS will be present in each phase of cost management. Project management costs are all expenses associated with a project including labor costs, administrative costs, technology costs, material costs, supplies and other direct and indirect costs that may appear during the project. The project cost management faces many challenges in creating greater awareness of the value that they provide for projects (Smith 2014). Maylor (2003) and Project Management Institute (2000) agrees that the most suitable technique for business with limited resources and time is WBS technique where costs are linked to particular activities and time frame.

4 Latvia's National Euro Changeover Plan

Euro implementation project in EU level is coordinated and supported by EU Commission, which issues rules and regulations for Latvia's government, which forwards those to steering committee. Thus, this is the point where National Euro Changeover Plan starts with the decision of Cabinet of Ministers (CM Nr. 308) were a steering committee for Euro implementation project is created. There exists a reversible communication between Steering Committee and EU Commission as Steering Committee is obligated to report to EU Commission about the project progress twice a year (Ministry of Finance 2013).

Figure 1 outlines the Euro introduction structure by levels in Latvia. Five work groups have been created each with a specific aim. Figure 1 exhibits how Euro bureau together with work groups communicate the information and guidelines to social partners, governmental and non-governmental organizations such as Latvia's Traders Association, Chamber of Industry and Commerce of Latvia and others who are then responsible for organizing informative campaigns, seminars and distributing news in order to spread information to public. In communication process communication department of Ministry of Finance and PR department of Bank of Latvia contributes, thus assisting Euro bureau in communication related issues (Ministry of Finance 2013).

Work groups have prepared recommendations for small and medium enterprises with list of activities and timelines that should be met in order to implement Euro successfully. The Ministry of Finance emphasizes that detailed Euro implementation plan should be developed and executed in all businesses in Latvia not underestimating the importance of it in SME trading companies (Ministry of

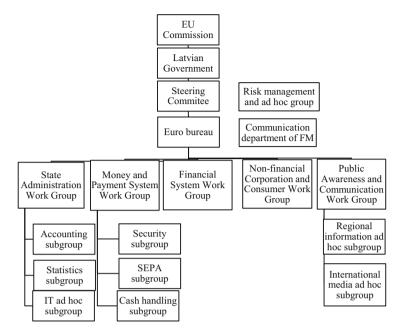


Fig. 1 Euro implementation organizational structure in Latvia

Finance 2013). EU Commission (2008) notes that every enterprise should develop a Euro introduction plan with exact activities and timelines were all responsibilities are assigned to particular persons and clear task description is made in order to avoid biases. Latvian Cabinet of Ministers approved Latvia's National Euro Implementation Law in the final version on 4 of April 2013 with order Nr. 136 issued. The law indicates principles and activities that have to be performed in business level in order to prepare for Cash and non-cash Euro changeover is introduced via 2 week dual circulation period (1–14 January 2014), during this period consumers may pay in national currency Lats (LVL) but it is mandatory for businesses to give change in Euro, thus facilitating the exchange process. Furthermore, all electronic payment systems have to issue Euros and Euro is indicated as main currency from 1 January 2014 while Lats are displayed only for informative purposes. Cash will be delivered starting from the 10 December 2013 at the earliest.

Fair price display in both currencies—dual reflection period of both currencies—starts 3 months before changeover takes place on 1 October 2013 and lasts 6 months till 1 June 2014. The prices have to be displayed according to the official exchange rate 1 LVL = 0.702804 EUR. Dual reflection of prices have to appear on invoices, delivery notes, payment documents and POS receipts that are issued to customers according to article 13 in The Euro Changeover Law in Latvia (EIKL).

On Euro introduction day all accounting registers, record balances and each accounting unit have to be recalculated to Euros. Furthermore after 1 January 2014 all taxes, insurances and other obligations are expressed and paid in Euros.

Moreover, capital has to be expressed in whole Euros but shares can be expressed in Euros and cents (Likumi 2013).

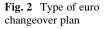
All information technology systems that operate with cash or non-cash have to be adjusted to Euro. This includes adjustment of invoice generating systems, payroll systems, administrative information systems, labelling systems, purchase and stock software, electronic funds transfer terminals, cash registers and point of sales systems (EU Commission 2008). However, there is exception for those cash registers which architecture by default does not allow reprogramming them for dual currency display. Furthermore, professionals from Swedbank (2013) and EU Commission (2008) suggest that Euro project should be planned at least 1 year before introduction takes place.

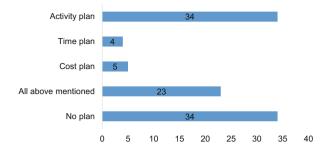
5 Analysis of Euro Implementation in Micro Trading Enterprises

According to the General Classification of Economic Activities trading is sales without transformation of new and used goods mainly to the general public for personal or household consumption (CSB 2013). Referring to European Commission regulation Nr. 800/2008 annex 1, article 2—micro company is the one which yearly turnover is smaller or equal to two million euros. Small Business Act (SBA) developed by European Commission in 2013 states that small and medium enterprises employ 79 % of all economically active people in private sector and generate approximately 69 % of value added in Latvia. Both indicators are above the EU level by 12 %. Latvia's market is dominated by micro enterprises (87 % or 61,788 companies), followed by small enterprises only 9.8 % or 6900 companies and medium sized enterprises that makes only 2.1 % of all businesses with 1485 companies.

6 Survey Analysis

The preliminary survey revealed that only 46 businesses out of 100 had developed a Euro changeover plan in November 2013, majority—54 companies had not made Euro introduction project. However, after implementation of Euro, in March 2014 the results were slightly different, indicating that the number of companies who had not made a Euro introduction plan have decreased by 8 % showing that 34 companies out of 100 have not made a Euro introduction plan and 66 companies had changeover plan, see Fig. 2. Thus, it is evident that small proportion (8 %) of businesses made Euro introduction plan only in the end of the year 2013. The second survey showed that majority of companies (34 %), had developed an activity based plan also known as WBS. Relatively small proportion four traders





had developed only time plan for Euro changeover. While only five traders had developed only cost plan. However, the results show that in total 23 trading companies (23 %) had developed a detailed Euro changeover plan including all activities, time frames and costs associated with each activity.

In-depth interviews with Henriks Danusevics—the president of Latvia's Traders Association (LTA) and Dace Kalsone—the main Euro Project Coordinator in Latvia—showed that they believe that even without a plan microtraders have managed to introduce the project quite well.

6.1 Costs

The biggest estimated costs regarding Euro introduction (Fig. 3) were associated with the adjustment or change of IT systems 39 % (cash registers, electronic payment terminals, money handling equipment, back offices, software, etc.). Twenty nine (29 %) micro traders saw cash delivery and other bank related services as second most costly activity. Still, accounting systems and process adjustment were associated with major costs by 25 %. Only five companies answered that all three above mentioned activities would result in big expenses.

Estimations have been more or less precise as after the changeover still adjustment of IT systems was rated as the most costly activity but cash delivery from second most expensive activity has shifted to the third place. When Euro introduction time came, 66 traders had changeover plan and 34 still did not have a plan. If compare the traders' expectations and real project costs we can see that after introducing Euro 23 traders (34 %) who had a plan spent up to 700 euros and the number of those who spent the same amount but did not have plan decreased by 14 respondents or 42 %, see Fig. 4. However, the number of those who had a plan and planned to spend from 2800 to 14,000 euros increased by three respondents but the number of those who did not have a plan decreased by five respondents. In overall, 43 respondents or 65 % of those who had a plan spent up to 2800 euros and 25 respondents or 73 % of those who did not have a plan. In total 71 % of all traders spent up to 2800 euros in average for Euro changeover project.

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Fig. 3 The biggest estimated costs assigned to particular activities

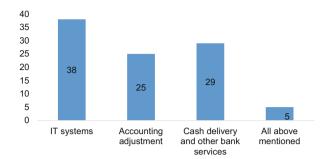
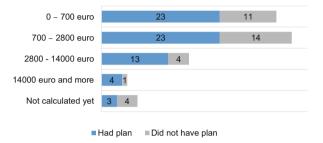


Fig. 4 Real euro project costs



H. Danusevics, the president of Latvia's Traders Association, explained that already before Euro changeover, basing on Estonia's experience, it was calculated that Euro project costs will be from 0.5 to 4 % of company's turnover. He admitted that taking this into consideration the real introduction costs up to 2800 euros in 71 % of micro trading businesses seems to be an adequate sum. Thus, judging from numbers it seems that micro traders have spent approximately 1 % of their turnover for Euro changeover.

However, to make justified conclusions a statistical analysis was used to understand if presence of project plan had any influence over project costs. Thus Chi-Square test, that is the most appropriate to verify phenomena, has been used (Salkind 2013) (Table 1).

If the rate of the error is 0.05, thus Chi-Square results reveals that the significance $p\!=\!0.40\!>\!0.05$, meaning that presence of project plan does not influence actual project costs and those traders without plan have managed project costs similarly to those who had the plan.

6.2 Time

The survey showed that majority of micro trading businesses (95 %) started to work on time as planned (see Fig. 5). However, 11 % of traders who did not have Euro changeover plan did not start work on time. From those who had plan only 3 % did not start to work on time. Furthermore, one respondent answered that business was

	Costs were in	line with expectations	3
Presence of project plan	Yes	No	Total
Yes	55	11	66
No	26	8	34
Total	81	19	100

Table 1 Relationships between project plan and costs

Fig. 5 Number of business opened on time

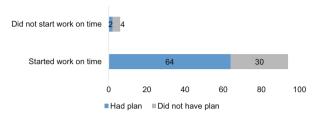


Table 2 Relationships between project plan and project duration

	Started	to work on t	ime
Presence of project plan	Yes	No	Total
Yes	64	2	66
No	30	4	34
Total	94	6	100

closed deliberately for 14 days in order to avoid dual currency circulation period. Another traders report that the opening was delayed for few days as for Euro changeover project business bought new IT systems that were not properly adjusted for Euro yet. Those traders (two respondents) who had project plan but still did not open as planned explained that opening was delayed for few hours due to problems with cash registers. Thus, it seems that traders who had developed a project plan have managed time better than those who did not have the plan.

However, both experts H. Danusevics and D. Kalsone explained in interviews that even without accurate plan all necessary activities in trading enterprises were performed in planned time and even if there were few cases when traders failed to start their business on time, those mainly were exceptional cases. Even though it seems that project duration is dependent of presence of project plan, the authors decided to apply the same Chi-Square method, in order to get statistical proofing of the results (Table 2).

97 % of those who had project plan started to work on time as it was initially planned, however, from those who did not have plan only 88 % of respondents started to work on time. With the error 0.05 Chi-Square results reveals that the significance p=0.08>0.05, meaning that presence of project plan does influence the actual project duration and those traders without project plan have not managed to fit in project's time frame that was dictated by the government.

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Fig. 6 Evaluation of euro changeover project

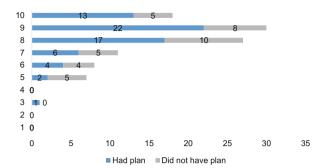


Table 3 Two-sample T-test assuming equal variances

	Variable 1 (Traders with	Variable 2 (Traders without
	plan)	plan)
Mean	8.38	7.97
Variance	1.93	2.03
Observations	66.00	34.00
Pooled variance	1.96	
Hypothesized mean	0.00	
difference		
Df	98.00	
t Stat	1.38	
$P(T \le t)$ one-tail	0.09	
t Critical one-tail	1.66	
$P(T \le t)$ two-tail	0.17	
t Critical two-tail	1.98	

6.3 Project Assessment

Respondents were asked to rate the Euro changeover project in a scale from 1 to 10. Figure 6 exhibits the rating made by both traders who had changeover plan and those who did not have plan.

Majority of traders (75 %) rate the project positively with grade from 8 to 10. From those 78 % are traders who had changeover plan and 69 % are traders without project plan. H. Danusevics admits that such grade from traders' side is very adequate. He as well would assess the project in trading sector with 9, as he believes traders managed to introduce Euro very successfully. The other expert D. Kalsone rate the project in trading sector to be very positive. Student t-test method was used to verify whether exists statistically significant difference between opinions of both groups.

Table 3 outlines that in average traders with plan rate the project with grade 8.38 but traders without implementation plan rate the project with slightly smaller grade 7.97. Also, the variance of both groups shows that answers of those traders who did not have a plan are more dispersed and are more sensitive. The authors assume that with the rate of the error 0.05, Student t-test results reveals that the significance

p = 0.17 > 0.05, therefore statistical difference is not significant meaning that presence of project plan does not influence project's assessment.

7 Euro Implementation Model Plan for Micro Traders of New Coming Euro Zone Countries

As one of the research objectives was to produce recommendations for micro trading businesses in other new coming Euro zone countries, particularly for Lithuania, the authors have developed a changeover plan for Lithuania's micro trading businesses. Lithuania is planning to acquire Euro in 1 January 2015. In order to produce viable implementation plan the authors have studied guidelines and recommendations presented in Lithuania's National Changeover Plan. The model plan is based on the project management principles and Latvia's micro traders' experience and opinions of industry experts (see Table 4).

Table 4 Implementation plan for Lithuania's micro trading businesses

	Start date	Duration (days)	End date
Initiating			
Goal definition	1 July 2014	2	2 July 2014
Strategy selection	1 July 2014	2	2 July 2014
Scope definition	1 July 2014	2	2 July 2014
Identify project members	3 July 2014	3	6 July 2014
Appoint project manager	3 July 2014	2	5 July 2014
Planning			
Assign responsibilities	7 July 2014	5	11 July 2014
Develop activity plan	14 July 2014	90	14 October 2014
Time planning	15 July 2014	90	14 October 2014
Cost planning	16 July 2014	90	15 October 2014
Communication	17 July 2014	90	16 October 2014
Execution			
Price recalculation and change	1 August 2014	545	1 October 2014
Dual price display	1 October 2014	90	1 January 2016
Systems testing	1 September 2014	90	1 November 2014
Employee training	1 November 2014	60	31 January 2014
Cash delivery contracts	1 July 2014	120	1 October 2014
Cash delivery starts	1 December 2014	31	31 December 2014
Execution			
Dual circulation	1 January 2015	14	14 January 2015
Monitoring	1 July 2014	198	14 January 2015
Closure			-
Annual report	1 January 2015	120	30 April 2015
Review and evaluation	14 January 2015	30	14 February 2015

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This Euro implementation plan could be used and redesigned in Lithuania's micro trading businesses with the aim to better prepare for Euro changeover. Success of such projects depends on the transformation of the strategic planning phase to the realization phase. The Benefits Realisation Mechanism (BRM) is a set of processes to close the gap between strategy planning and execution by ensuring the implementation of the most valuable initiatives (Serra and Kunc 2015). The same principles could be used to develop Euro changeover plans of other new coming Euro zone countries. However, national specifics have to be taken in consideration (Spalek 2014).

8 Conclusion

The analysis of planning and realization process of Euro changeover project in micro enterprises of trading sector in Latvia showed to what extent Euro change-over planning phase was in accordance with project's actual implementation phase and how presence of project plan affected the realization of the project. The research showed that presence of project plan does influence the actual project duration and traders without project plan have not managed to fit in project's time frame. Despite the statistically proved result that the presence of project plan did not influence actual project costs, authors strongly recommend to microenterprises to develop Euro implementation time, cost and activity plans. Majority (97 %) of traders who had Euro changeover plan have realized all planned activities.

71 % of traders have spent up to 2800 euros (or approximately 1 % of their turnover) for Euro changeover. The actual biggest costs were faced in adjustment of IT systems, thus the estimations of most costly changeover activities have been quite precise. The cash delivery and other bank related services as well as accounting adjustment are the next most costly activities. Majority (79 %) of traders have realized the project budget with no or minor changes in the planned budget.

The adjustment of IT and accounting systems were the most time consuming processes, where the biggest time logs have been experienced. This may be due to too late communication with external partners. Majority (94 %) trading businesses opened on time as planned, those who did not experienced—a minor delay of few hours or a day. Majority of traders (75 %) and also industry experts rate the project in micro trading sector in Latvia to be very successful (grades 8–10). There is no statistically significant difference in project assessment between micro traders who had a plan and those who did not have a plan.

The authors recommend using the model currency changeover plan developed in this research for Lithuania's micro trading businesses and apply the same principles for other new coming Euro zone countries taking in consideration and making readjustments according to the national specificities.

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Practical Use of the Financial Management of Small and Medium-Sized Enterprises in the Czech Republic Conditions

Eva Hamplova and Katerina Provaznikova

Abstract Using tools and techniques of the financial management in conditions of small and medium-sized businesses is an essential part of successful entrepreneurship. The main objective of the paper is to find out how businessmen deal with the main economic issues connected with the assessment of their company performance and the related liquidity. The aim of the research is to analyze systematically the set of data and information obtained through direct questioning of respondents—entrepreneurs who run their business and have their own subjective style of financial management. The initial hypothesis of the research plan is to confirm that even though the tools of financial management represent a very important business area, the skills and knowledge of entrepreneurs in small and medium-sized businesses are insufficient. There are no doubts about the fact that the financial management on the level of big businesses is the matter of their existence. The importance that the entrepreneurs of small and medium-sized businesses attribute to the criteria measuring and evaluating the company performance, liquidity and the profit distribution is already the subject of the research through the questionnaire survey.

Keywords Business • Business environment • Financial management • SME

1 Introduction

Applying tools of company financial management does not only refer to large firms that achieve a high turnover, use large assets, employ a big number of workers and do their business on a global level. Financial management is the knowledge which

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even on a very low level gives entrepreneurs the possibility to grasp their own business, make decisions about it and thus prepare the business for successful operation and ensure its livelihood security (Atherton 2003). Without this type of management, as well as without other components of company management, the enterprise would gradually merge with the market, in other words it would cease to exist (Marek 2009; Maresova 2010).

Doing business on a small and medium-sized enterprise level is not easy and unimportant. On the contrary, the role an entrepreneur often as a self-employed person is very complicated. They usually cannot afford to employ top scientists, managers, dealers, experts in general. Apart from performance, which is the subject of business, entrepreneurs often perform all management functions, such as planning, organizing, controlling, human resources management and leadership, in one person. It is a question whether they are aware of this fact when founding an enterprise, they definitely realize this fact in further stages of the existence of their business (Quereshi and Velde 2008).

Knowledge in general is an integral part of an entrepreneur—manager's competencies, in our paper the focus is mainly on the knowledge and skills from the field of financial management, where money is the lifeblood of the business (Pike and Neale 2006). In small and medium-sized business this is doubly true (Medarova et al. 2012). Entrepreneurship is a global phenomenon. At the beginning of the new millennium more business activity can be seen than it was customary in the history because there are fewer barriers preventing entry into business (Lukes and Jakl 2012), yet successful business is not very common and visible activity in the national economy.

2 Methodology and Data

The survey was carried out by 3rd year students of the professional subject of financial management of the Firm in January–June 2014. A unified questionnaire was filled in by the students themselves together with entrepreneurs. The students were instructed by the authors of the questionnaire in the content of individual questions, which was supposed to guarantee not only their high rate of return but also the completeness of the answered questions. The choice of respondents was determined by the students themselves who either approached the entrepreneurs from their surroundings or entirely unknown businessmen with the intention to identify the firm, the entrepreneur and his/her motivation as well as the determination to start a business.

The assessment and comparison of answers from two questionnaires enabled them to understand the decision of the businessman and the meaning of his/her choice between earning income from doing a job based on employment relations—employment contract or running their own business.

The questionnaires were collected from 206 respondents in total. They do business mainly in the form of an individual enterprise, i.e. Self-Employed Person, with a different time length (duration) of doing business and a different branch

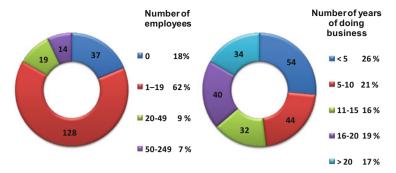


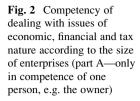
Fig. 1 Overview of respondents of the questionnaire survey by the size of enterprise and the duration of conducting business

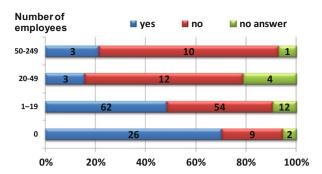
specialization. In particular there were 100 Self-Employed person respondents, 78 respondents doing business in the form of Limited Liability Company, 1 -Co-operative, 10 Joint Stock Companies and 2 Public-benefit Corporation. As far as the duration of conducting business (Fig. 1) is concerned 54 respondents have been doing business for less than 5 years, 44 respondents 5–10 years, 32 respondents belong to the category of 11-15 years of doing business, 40 respondents to the category of 16–20 years, 34 respondents have been doing business for 21–24 years, i.e. they started doing business between years 1990 and 1992. Only two respondents did not fill in this category. As for the size of enterprises (Fig. 1) 37 respondents did not report even one employee, 128 respondents are in the category of 1-19 employees, 19 respondents have 20-49 employees, 14 respondents have 50-249 employees, 4 respondents have more than 520 employees and 4 questionnaires had to be excluded. Our questionnaire survey covered mainly small enterprises, i.e. 96 % of respondents expressed their view on the use of tools and techniques of financial management in firms with up to 50 employees. Due to the way of distribution of the questionnaires almost 80 % of respondents are from one region. It is Hradec Králové region with the population of 0.5 million that holds the 10th position among 14 regions in the Czech Republic. 5 % of the total CR population live in Hradec Králové region. The authors assume that this fact does not have a significant impact on the findings of their survey.

3 Results and Discussion

3.1 Competency of Handling Issues of Economic, Financial and Tax Nature

We came to an interesting conclusion when identifying a person that in a business entity of our questionnaire survey deals with economic, financial and tax issues.





The majority of entrepreneurs-respondents without employees (70 %, Fig. 2—part A), who represent nearly 1/5 in our survey, handle the economic, financial and tax issues themselves. It means that they deal themselves with the specific tasks connected with e.g. bookkeeping, preparing tax returns, calculation and administration of social and health insurance, planning and realization of payments, considerations of investment effectiveness, pricing and other matters. 24 % (Fig. 2—part A) of respondents to our survey do not handle economic, financial and tax issues themselves any more. With the increasing size of the enterprise decision-making competencies are transferred to the other internal staff or external experts.

In our survey the most represented size group is that including firms with 1–19 employees and it is just this group where 48 % (Fig. 2—part A) of respondents still deal with economic, financial and tax issues themselves. Deciding about these issues is partly transferred by entrepreneurs into the authority of internal persons (38 % Fig. 3—part B) and 23 % (Fig. 4—part C) of businessmen in this size group transfer these competencies to external persons and consultants.

It follows from the above that dealing with the issues of economic, financial and tax nature in small enterprises still remains largely the responsibility of one person, alternatively more people within one firm. This means that knowledge and skills in this field are more than important because incompetent decision-making in the economic sphere may be associated with low business efficiency and thus low competitiveness and low livelihood security. Incompetent decision-making in the sphere of finance may lead in the short term to insolvency and its impact is fast and uncompromising. Finally, the issues of tax nature cannot be underestimated. The calculation and optimization of tax base requires the knowledge of tax law with all of its changes and regulations. Unqualified tax return carries the risk of tax office prosecution, which in turn is reflected in business efficiency and additional financial needs.

Fig. 3 Competency of dealing with issues of economic, financial and tax nature according to the size of enterprises (part B—in competence of several internal persons, e.g. the owner, accountant, sales manager, etc.)

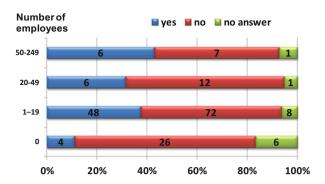
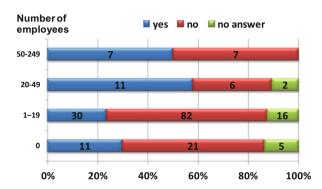


Fig. 4 Competency of dealing with issues of economic, financial and tax nature according to the size of enterprises (part C—in competence of several internal but also external persons, e.g. tax adviser, company accountant, auditor, etc.)



3.2 Criteria for Company Performance Evaluation

Five-grade scale was used to analyze the importance that businessmen assign to the performance of their firm. Grade 1 means no importance and grade 5—high importance. The entrepreneurs were evaluating individual financial criteria connected with the company performance and were matching their priorities with them. Considering the criterion marked as the highest importance by the entrepreneurs in our survey—it is net profit. For the entrepreneurs in the firms of size 0, 1–19, 20–49 of our survey the category of net profit (Fig. 5) is the most important criterion of the company performance evaluation. It is followed by the growth of sales and the sufficient amount of cash for the survival of the firm. Only the entrepreneurs of firms sized 50–249 perceive the growth of sales as the most important criterion which is followed by sufficient cash and then net profit. Only 7 % of entrepreneurs' rating from the firms of this size is represented in our questionnaire survey, it is not therefore possible to assert this fact and distinguish it from the opinions of entrepreneurs of smaller firms.

It is essential that entrepreneurs perceive the concept of net profit and earnings before tax. The conclusions certainly cannot be generalized but the criterion of net profit for entrepreneurs in terms of their performance is more important than the criterion of earnings before tax. Though in the economic, financial and tax decision-

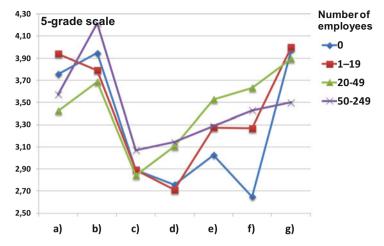


Fig. 5 Criteria for company performance evaluation according to the size of enterprises. (a) sufficient amount of cash (cash flow) for survival of the enterprise; (b) growth of sales; (c) high margin; (d) market share; (e) earnings before taxes; (f) financial strength (value of equity); (g) net profit

making there is a significant difference between the two concepts. Rating in gross general form (EBT—Earnings before Taxes) through gross profit reflects the performance of a business regardless of revenue taxation and thus it is possible in terms of financial management to compare values without affecting the tax optimization. Tax optimization is also in the conditions of small and medium-sized entrepreneurship a significant phenomenon and the conclusions resulting from the optimal and minimum tax base are distorted by tax conditions set in the country in a given tax period.

Significant positive finding is that entrepreneurs regardless of the size of the business perceive as an important criterion of company performance the growth of sales and the sufficient amount of cash needed for the survival of their firm (Fig. 5). The growth of sales expresses growing volume of business performance, in the context with the profit category in any form it is an expression that evaluates the effectiveness of the given performances and for small and medium-sized enterprises these criteria are absolutely vital determining their healthy functioning, growth and existential security.

If we evaluate the criteria that are perceived as less important for the entrepreneurs in our questionnaire survey (Figs. 5 and 6), then it is a perception of the market share of the enterprise, the criterion of high margin and a financial strength in other words the value of equity in the business. Small and medium-sized businesses are involved in peripheral areas of the market which are not interesting for large companies and are not connected with the high profit margin therefore these criteria have lower rating as for the importance.

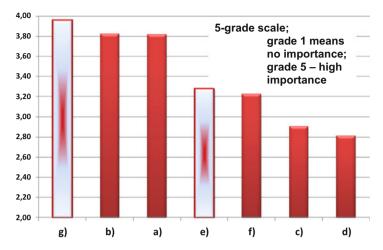


Fig. 6 Criteria for company performance evaluation. (g) net profit; (b) growth of sales; (a) sufficient amount of cash (cash flow) for survival of the enterprise; (e) earnings before taxes; (f) financial strength (value of equity); (c) high margin; (d) market share

4 Conclusion

Financial management of a firm as a purposeful activity of most entrepreneurs is one of the basic factors of success in business. Knowledge, skills and the actual application of sound financial management is very closely related to understanding of the activities associated with financial processes which take place in a firm regardless of its size (Zahra and Dess 2001). The aim of this paper was through a conducted survey among entrepreneurs to make a judgment about how entrepreneurs carry out these purposeful knowledge and skill techniques and what importance they attribute to selected monetary criteria in the evaluation of the success rate or the performance of their business.

The analysis of the questionnaire survey, which was attended by 206 respondents, and of which 15 respondents had to be excluded due to the incompleteness of data, shows quite a clear conclusion. In small and medium-sized enterprises the competencies related to the decision-making in the economic, financial and tax sphere are concentrated in the hands of individuals and also internal persons. Up to 70 % of entrepreneurs who do not have any employees manage the firm in the economic, financial and tax sphere themselves. Only 30 % of respondents assign these issues to external "experts". In the size category of 1–19 employees 50 % of entrepreneurs make decisions about economic, financial and tax issues themselves, 30 % of them assign these competencies to other internal workers and 20 % of entrepreneurs in our survey deal with the financial management of their business together with external "experts".

With the size of the firm the competencies of financial management are transferred more towards the cooperation with external experts. As the sample of firms

with 20–49 and 50–249 employees is not sufficiently represented in our survey, a deeper analysis has no significance.

Entrepreneurs find the net profit, the growth of sales and enough cash the most important criteria for the company performance evaluation. As less important criteria they perceive earnings before tax, the value of their own capital, a high profit margin and a market share. Due to the fact that the most criteria rated by the entrepreneurs in our survey do not achieve on average values characterizing high importance (in our survey it is value 5 in 5-grade scale) the following conclusion can be made. Measuring company performance combined with knowledge of financial management is not the highest priority for entrepreneurs of small and medium-sized businesses. These are not the categories which they perceive as a highly important tool and a financial goal of their business. This confirms the initial hypothesis that even though the tools of financial management represent a very important business area, the skills and knowledge of entrepreneurs in small and medium-sized businesses are insufficient.

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Savings of Households Run by Self-Employed Persons in Rural Areas in Poland

Krupa Dorota and Walczak Damian

Abstract The research objective of the article is to characterize the level, form and structure of savings of non-agricultural households of self-employed persons (private entrepreneurs) from rural areas in Poland, including the goals of maintaining different types of savings. Also, other characteristics of this group compared with households of private entrepreneurs from non-agricultural areas will be presented. For the purposes of the work, a group of households of private entrepreneurs who are residing in rural areas, regardless of the place where the business activity is run, was distinguished. The work was based on statistical data and a representative and nationwide study—'Social Diagnosis' (the number of respondents in 2013 amounted to 12.3 thousand). Comparisons were made for the time period covering the years 2005–2013. The studies conducted indicated, however, that there are significant differences between the place of residence of entrepreneurs and possessing savings, their amount, or the goals of maintaining different types of savings.

Keywords Households • Savings • Entrepreneurs • SME • Rural areas

1 Introduction

For many years the issues of saving and savings have been one of the most frequently discussed in the context of micro-economics, macro-economics or sociology.

Various aspects of savings have become an important area of research during the last century. Keynes (1978) assumed that savings motives change very slowly and their influence on the propensity to consume is stable over long periods of time. In his opinion, people are focused on current income. In the permanent income theory Friedman assumed that people are concerned about long-term consumption. Ando and Modigliani focused on the life-cycle hypothesis of savings (Devaney et al. 2007).

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In more recent publications we can find a hierarchy of saving motives and factors that influence the movement to higher levels of the hierarchy (Devaney et al. 2007). Household savings are often presented in terms of dynamics, where different generations and their characteristics are taken into account. Musial (2014) shows that attitudes to personal finance management have changed across the following five generations: traditionalists, baby boomers, generation X, Y and Z.

Gentry and Hubbard (2004) examined the importance of saving by entrepreneurial households and the possible interdependence between entrepreneurs' investment and saving decisions. Mishra et al. (2013) find that self-employed US farm households accumulate more wealth.

The outcome of the research considering household savings in Poland was presented by Czapinski and Panek (2006). An important discussion starting point about savings of Polish society was presented by Dziawgo (2010).

The authors also dealt with the analysis of preferences regarding the forms of the allocation of household savings in Poland (Krupa et al. 2012) and the decisions concerning savings of households of the self-employed (Walczak and Krupa 2013).

On the one hand, we can notice that the context of entrepreneurship may be an important factor in the accumulation of savings and, on the other hand, we can suppose that there exists a difference between urban and rural saving decisions.

Non-agricultural economic activities conducted in rural areas can generate additional income for rural residents and constitute one of the ways of raising the standard of living of the population (Stanko 2009).

Therefore, in this context it seems vital to take a closer look at rural savings accumulated by non-agricultural households whose main source of income is an economic activity.

According to the data of the Central Statistical Office in Poland (GUS), in 2013 there were 13.57 million households:

- 9.15 million (67.4 %) in urban areas,
- 4.42 million (32.6 %) in rural areas.

Out of approximately 31.2 million adult individuals, 1.67 million (5.3 %) conducted an economic activity. Also, it should be noted that the SME sector in Poland generates almost 47.3 % of GDP. For example, in 2012 micro, small and medium-sized businesses generated 29.4 %, 7.8 %, and 10.1 % respectively (for comparison, in that year large companies generated 24.5 % of GDP, other entities 16.1 %, duties and taxes 12.2 %) (PARP 2013).

2 Objectives and Terms

The research objective of the article is to characterize the level, form and structure of savings of non-agricultural households of self-employed persons (private entrepreneurs) from rural areas in Poland, including the goals of maintaining different

types of savings. Also, other characteristics of this group compared with households of private entrepreneurs from non-agricultural areas will be presented.

The study 'Social Diagnosis (2013)', on which the present work is based, provided a definition of a household of the self-employed. According to the definition, this is a household whose primary source of income comes from self-employment outside agriculture or performance of professional services.

For the purposes of the work, a group of households of private entrepreneurs who are residing in rural areas, regardless of the place where the business activity is run, was distinguished. Researching savings of entrepreneurs from rural areas can enhance the hitherto conclusions on the amount, methods and goals of saving. It will also allow more attention to be paid to the often overlooked investment needs of rural residents who are not farmers, but for whom special investment offers can and should be developed. Preferences in the scope of the forms of savings allocation of entrepreneurs representing the SME sector may give rise to the creation and separation of investment products that meet the needs of this group. What may be interesting from the point of view of the conclusions drawn from the work are the additional characteristics of households of entrepreneurs from rural areas compared to other farms in Poland (debt, earned income, number of household residents, changes in the income situation).

3 Data and Methods

The work was based on statistical data and a representative nationwide study—'Social Diagnosis' (the number of respondents in 2013 amounted to 12.3 thousand). Comparisons were made for the time period covering the years 2005–2013. The representative study 'Social Diagnosis' contained 41.8 % (5150) rural households, while the remaining 58.2 % were urban households (7161). Private entrepreneurs accounted for 3.3 % of all respondents (35,509). 31.4 % of such households were residing in rural areas.

In the article the dependence of the characteristics was determined with the use of the chi-square test of independence (χ^2 test). In each of such tests individual indications of respondents were compared with potential characteristics that determine their decisions (the relevant calculations were made with the use of SPSS Statistics 20).

For each pair of characteristics a zero hypothesis H_0 was set and it assumed that the compared characteristics are independent, and the hypothesis H_1 assumed that these characteristics are dependent. If the calculated χ^2 is greater than the critical value $\chi^2_{\mathrm{df},\alpha}$ (for degrees of freedom df: (r-1) (s-1) and a presupposed level of significance $\alpha=0.05$), then H_0 should be rejected, otherwise there is no reason to reject the null hypothesis (Domanski 1979). That means that $\chi^2 \geq \chi^2_{df,\alpha}$ and we reject H_0 at the significance level α , and we may suppose that the characteristics are

dependent, $\chi^2 < \chi^2_{df,\alpha}$, there is no reason to reject H_0 assuming the independence of characteristics.

4 Results

As a result of the research, general characteristics of private entrepreneurs representing rural areas and of households conducted by the self-employed in rural areas will be presented. For comparison purposes, the data concerning the whole Poland will also be shown. Then, the tested characteristics of certain groups of households will be provided.

The characteristics of private entrepreneurs from rural areas were compared to all private entrepreneurs (Table 1).

According to Table 1, in 2013 in Poland 38.4 % of private entrepreneurs lived in rural areas. The majority of private entrepreneurs in rural areas are men (70.8 %) and a similar share of male private entrepreneurs can be noted in the whole of Poland (68.3 %). According to Table 2, 73.8 % of private entrepreneurs from rural areas live in households with more than four residents (59.9 % of all private entrepreneurs). Most (41.1 %) private entrepreneurs in rural areas have vocational education, 35.3 %, have secondary education, and only 16.6 % higher.

The structure is significantly different, if compared with the education structure of private entrepreneurs reflecting the whole of Poland, where 37.7 % have secondary education, 28 % higher, and 26.9 % vocational. Private entrepreneurs from rural areas change their banks less frequently. As much as 56.9 % of them have never changed their bank in comparison with 45.4 % of private entrepreneurs in the whole of Poland. They also show considerably less confidence in commercial banks, 42.9 % of private entrepreneurs in rural areas have confidence in commercial banks, compared to the 51.4 % of private entrepreneurs from the whole country.

Significant differences can also be found in the individual characteristics of households conducted by the self-employed in rural areas, if compared with the data on the self-employed in Poland (Table 2).

Households of self-employed persons in rural areas more often have the means to repay borrowings (46.1 %), compared to households run by the self-employed throughout the country. At the same time it is far more difficult for such a household to make ends meet with the income currently earned. 59.1 % of households of the self-employed in rural areas pointed to such difficulties, as compared with 56.6 % of such households from across Poland. We can notice that a monthly income per person in 38.6 % of household of self-employed persons is in the range from 501 to 1000 PLN, 27.9 % in the range from 1001 to 1500 PLN and only 17.3 % have more than 1500 PLN per person. The situation for self-employed persons' households throughout the country looks much better. 31.6 % of them have a monthly income per capita in the range from 501 to 1000 PLN, 29.2 % in the range from 1001 to 1500 PLN and 30.1 % have more than 1500 PLN per person. Households of people

Table 1 Characteristics of private entrepreneurs in Poland, in %

Characteristics	Details of each characteristic	Private entrepreneurs in rural areas in Poland	All private entrepreneurs in Poland
Location	Residents of the countryside	100	38.4
	Residents of the city	0	61.6
Sex	Man	70.8	68.3
	Woman	29.2	31.7
The size of the household in which they reside	1-Person household	0.9	2.4
	2/3-Person household	25.3	38.7
	4/5-Person household	49.0	44.3
	Larger	24.8	15.6
Education	Higher	16.6	28.0
	Post-secondary	3.7	4.5
	Secondary	35.3	37.7
	Vocational	41.1	26.9
	Other	3.3	2.9
Marital status	Bachelor/ spinster	15.9	16.2
	Married	80.7	78.2
	Divorced	1.8	3.3
	In separation	0.7	0.4
	Widower/ widow	0.9	1.9
Driving licence	Yes	93.6	92.2
	No	6.4	7.8
Number of banks changed	None	56.9	45.4
during the entire life	1	28.5	28.3
	2	9.1	16.2
	3	2.9	6.8
	4+	2.6	3.3
Confidence in commercial	Yes	42.9	51.4
banks	No	29.5	26.8
	No opinion	27.6	21.8

Source: Compiled by the authors based on the data from Social Diagnosis (2013)

from rural areas are not in arrears with payments for their rent, while for the self-employed in Poland the figure is 7.4 %, and they are rarely in arrears with utilities (in rural areas it is 2.6 %, for the whole of Poland 4.3 %). Significantly fewer households of the self-employed in rural areas, when compared with the whole Poland, make payments using on-line banking (46.4 % versus 59 %).

account via the Internet

		Househ self-em persons	ployed
Characteristics	Details of each characteristic	Rural areas	All
Does the farm have the means to repay the loan?	Yes	46.1	45.5
	No	53.9	54.5
The share of households in which the financial situation has improved in the last 2 years		12.4	12.0
Does the currently earned income of the household is	Sufficient	40.9	43.4
sufficient to make ends meet?	Hardly sufficient	59.1	56.6
Monthly income in households run by self-employed	0-500 PLN	16.2	9.1
persons	501-1000 PLN	38.6	31.6
	1001-1500 PLN	27.9	29.2
	1500-	17.3	30.1
Is the household in arrears with its rent?	Yes	0	7.4
	No	100	92.6
Is the household in arrears with its utilities (gas,	Yes	2.6	4.3
electricity)?	No	97.4	95.7
The share of households that make payments from a bank		46.4	59.0

Table 2 Characteristics of households run by self-employed persons in rural areas vs. all areas in Poland. in $\%^a$

Source: Compiled by the authors based on the data from Social Diagnosis (2013)

As a result of testing the dependence between place of residence and the main source of income and specified independent variables (possessing savings and the amount of savings), the null hypotheses were rejected—what indicates the relationship between place of residence and source of income and possessing savings and their amount (Table 3).

The chi-square test was applied to check the characteristics of households presented as a percentage for the following groups:

- households within Poland's rural areas, for which self-employment is the main source of earning income,
- households of Polish cities, for which self-employment is the main source of income,
- the remaining households in Poland's rural areas, with major income other than that achieved from self-employment,
- households of Polish cities, with major income other than that achieved from self-employment.

The following tables (Tables 4, 5, 6 and 7) present the tested characteristics as divided into groups. The last column of each table indicates also data for all households in Poland in which self-employment is the main source of income.

^a1 PLN (złoty) = 0.23 Euro according to Table A of NBP http://www.nbp.pl/homen.aspx?f=/kursy/ratesa.html

Table 3 Results of testing the dependence between place of residence and the main source of income and specified independent variables^a

Independent variable	χ^2	Degrees of freedom (df)	$\chi^2_{\mathrm{df},\alpha}$	Value-p	Decision
Possessing savings	185.3	3	7.81	0.000	Rejection H ₀
Savings amount	88.9	12	21.02	0.000	Rejection H ₀

Source: Compiled by the authors based on the research conducted

^aIn order to ensure transparency of presented data, the data were shown excluding the cases with 'no response'. Exclusion of 'no-response' resulted also from the need to ensure the minimum number of 'individual fields of the table', which are necessary when applying the chi-square test of independence

Table 4 Possession of savings, in %

Location of the					
household	Rural area	Urban area	Rural area	Urban area	Poland
The main source			Other than	Other than	
of household	Self-	Self-	self-	self-	Self-
income	employment	employment	employment	employment	employment
Yes	53.0	53.8	31.8	42.2	38.6
No	47.0	46.2	68.2	57.8	61.4
Total	100.0	100.0	100.0	100.0	100.0

Source: Compiled by the authors based on the data from Social Diagnosis (2013)

Table 5 Place of residence of entrepreneurs and the amount of savings, in %

Location of the household	Rural area	Urban area	Rural area	Urban area	Poland
The main source	0.16	C 16	Other than	Other than	0.10
of household income	Self- employment	Self- employment	self- employment	self- employment	Self- employment
Up to the amount of monthly income	23.3	20.9	32.5	24.7	27.2
Up to 3 month-income	28.2	24.4	33.5	31.3	31.7
Up to the semi- annual income	26.2	26.2	20.6	22.0	21.8
Up to the annual income	19.4	15.7	9.6	14.0	12.7
More than the annual income	2.9	12.8	3.8	7.9	6.6
	100.0	100.0	100.0	100.0	100.0

Source: Compiled by the authors based on the data from Social Diagnosis (2013)

Generally, as shown in Table 4, more than a half of the households whose main source of income is self-employment, both in rural and urban areas, possess some savings.

Table 5 shows the amount of household savings depending on the place of residence. Households representing both rural and urban areas in which

5.3

Other forms

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Location of the household	Daniel and	I Iulaan anaa	Daniel and	I lub on onco	Daland
nousenoid	Rural area	Urban area	Rural area	Urban area	Poland
			Other than	Other than	
The main source of	Self-	Self-	self-	self-	Self-
household income	employment	employment	employment	employment	employment
In cash	52.5	36.8	57.4	42.7	47.6
In banks, in PLN	70.8	72.3	58.8	68.3	65.4
In banks, in foreign currencies	3.3	7.7	2.4	3.6	3.3
In bonds	0.0	3.1	0.9	2.9	2.0
In investment funds	5.0	10.8	2.5	6.8	5.5
Individual retire- ment account	6.7	4.1	2.5	4.7	4.0
Securities listed on the stock exchange	0.8	4.2	0.5	2.4	1.8
Shares and stocks in private joint stock companies	1.7	1.0	0.6	1.5	1.2
Investments in real estate	4.2	8.8	1.6	2.9	2.7
Investments in other goods	4.2	5.2	1.5	1.9	2.0
Insurance policy	11.8	12.4	4.4	9.6	8.0
Long-term savings plans	3.4	6.2	2.8	4.4	3.9

Table 6 Methods of savings (among persons who possess some savings), in %, multiple choice

8.8 Source: Compiled by the authors based on the data from Social Diagnosis (2013)

6.7

self-employment is the main source of income have savings which are higher multiples of monthly income compared with households where the main source of income is other than self-employment. In addition, the amount of savings in 28.2 % of households of private entrepreneurs in rural areas is higher than 3-month income, 26.2 % higher than the semi-annual income.

4.8

Only 2.9 % of households of private entrepreneurs who were residing in rural area the amount of savings exceeded annual income. In the case of households of private entrepreneurs from non-agricultural area the percentage was 12.8 %

Table 6 contains the methods of household savings among those who possess some savings. All groups of households indicated their bank deposits in PLN and cash as the most frequent methods of savings. In the case of cash, pointed to as a method of saving, the majority of indications came from households located in rural areas. Other methods of saving are much less popular.

Table 7 presents the most frequently indicated goals of savings of households that possess some savings.

Location of the					
household	Rural area	Urban area	Rural area	Urban area	Poland
The main source			Other than	Other than	
of household	Self-	Self-	self-	self-	Self-
income	employment	employment	employment	employment	employment
Current expenses	30.5	30.4	36.1	30.8	32.5
Fixed fees	11.8	10.3	12.1	13.3	12.8
Durables	28.8	23.8	21.1	20.9	21.3
Buy a house/ apartment	5.9	12.9	3.2	6.3	5.6
Renovation of house/apartment	25.2	24.3	27.3	25.9	26.3
Treatment	21.1	20.6	27.7	31.8	29.6
Rehabilitation	8.5	7.3	7.9	13.7	11.3
Recreation	19.7	35.6	16	28.8	25.0
For a rainy day	59.3	63.4	62.9	68.2	66.0
Children's future	29.7	34.9	22.8	22.2	23.1
Old age	27.1	38.6	31.5	38.5	35.9
Development of economic activities	28.8	22.7	7.2	3.2	6.0
Other objectives	9.3	17.5	10.3	11.9	11.6
Without a goal	12.7	14.1	8.5	9.9	9.7

Table 7 Goals of savings (among households which possess some savings), in %, multiple choice

Source: Compiled by the authors based on the data from Social Diagnosis (2013)

All households are saving for a rainy day. But households of self-employed persons are saving for children's future and development of economic activities. Households of private entrepreneurs from rural areas indicated current expenditure as one of the most important goals of saving, while households of entrepreneurs representing urban areas save mainly for old age.

5 Conclusions

The studies conducted indicated, however, that there are significant differences between the place of residence of entrepreneurs and possessing savings, their amount, or the goals of maintaining different methods of savings.

More entrepreneurs' households in rural areas possess a bigger amount of savings than other rural households, however, if compared with households of entrepreneurs in the city, they save less.

Similarly, in terms of their size, entrepreneurs residing in rural areas more frequently have savings exceeding their semi-annual income than other rural residents, but less than entrepreneurs living in non-rural areas.

The conclusions presented as well as the characteristics of households in rural areas of self-employed persons (excluding farmers) compared with entrepreneurs from other areas can become an inspiration for financial institutions to create special investment offers for the researched group.

Financial institutions developing offers for households of entrepreneurs from rural areas should take into account the fact that in spite of lower savings, they care more about the repayment of their financial obligations, compared with other groups and are less frequently in arrears with their payments. In addition, more attention should be paid to educating private entrepreneurs from rural areas in the scope of the possible ways of investing their savings and investment offers should be constructed with the consideration of the specific needs and investment objectives of this group of entrepreneurs.

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A Research to Determine the Relationship Between Emotional Labor and Burnout

Derya Ozilhan Ozbey and Emel Gelmez

Abstract In this study, the relationship between burnout and emotional labor which is defined as effort, planning and control that is required to demonstrate the desired behavior to be performed organizationally in interpersonal affairs (Academy of Management Review 21(4):986–1010, 1996) was examined. In this context, the main purpose of this study is to determine the relationship between emotional labor and burnout. In the study, survey method was used and the study was carried on hotel business operating in the tourism industry in the province of Antalya. As a result of the study, positive and statistically significant relationship was found between emotional labor and burnout.

Keywords Emotional Labor • Burnout

1 Introduction

In the recent times, also in the competition in service sector and the service approach this condition presented, the important developments stand out. In this scope, one of the important factors to provide to do the best service, increasing service quality and satisfaction, is to give place the emotions in service as well. In other words, while service workers are carrying out their tasks, there is a necessity that they show emotional labor. In the framework of this thought, emotional labor, one of relatively new variables of the area of organizational behavior foresees to be interested in the emotions of those receiving service and to empathize with them (James 1989 cited in Begenirbas and Basim 2013). In today's business enterprises, where human capital is an important component, the employees play key role in providing the organizational successes.

In the recent years, along with the rapidly growth of service sector, "Emotional Labor" attracts attention as an indispensable and common component of many service areas and profession (Basim and Begenirbas 2012). In this context, in this study, determining the behaviors of emotional labor and burnout levels of the

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employees in a hotel business in the province Antalya, the relationship between these concepts will be scrutinized.

2 Theoretical Framework

2.1 Emotional Labor

Individuals, in their daily lives, frequently, instead of reflecting their real emotions as it is, prefer to give reactions compatible with the social norms. In view of this, individuals keep their emotions under control. When they should use their emotional reactions as a part of their jobs, they become done the emotional control in exchange of a certain wage. Their emotions, from now on, become a part of their jobs and their successes in workplace is closely related to how they use their emotions (Oral and Kose 2011). Emotional labor can be defined as the effort, planning, and control necessary for showing the behaviors that are desired to be realizing organizationally (Morris and Feldman 1996). In addition, it can be expressed as the state of showing the emotional show the enterprise wants by employees in such a way that the employees will satisfy the customers or, using the different strategies, reflect this emotional case (Goodwin et al. 2011). Ashforth and Humphrey (1993) expressed the emotional labor as the action to exhibit; Ashforth and Humphrey (1993) expressed the emotional labor as the action to exhibit the suitable emotion.

According to Hochschild (2003, cited in Basbug et al. 2010), the jobs, in which the emotional labor is exhibited, have a certain features. Emotional labor is presented especially in the jobs requiring direct contact in humans; the jobs and organization requiring the employee to use their emotions for creating an emotional state on the other individual, and the jobs enabling to control on the emotions of employees.

When literature is examined, it is seen that the dimensions of emotional labor are in certain ways. Hochschild (1979, 1983 cited in Basim and Begenirbas 2012) considered the behaviors related to the emotions of employees in two dimensions; superficial playing act and deeply playing act. In superficial playing act, the employee, in the framework of institutional and professional show rules, making fake their emotions, reflects them to the customer or receiver. In deeply playing act, the employee, focusing on the internal emotions, makes an effort to play the role demanded as an actor. As a result of this effort, he/she tries to transfer his/her emotions to the opposite side (Hochschild 1983; Brotheridge and Grandey 2002 cited in Basim and Begenirbas 2012). In a study carried out by Ashforth and Humphrey (1993), in the same way, emotional labor was examined in three sub-dimensions; (superficial behaviors, deep behaviors, and sincere behaviors (Ashforth and Humphrey 1993). In the studies related to emotional labor in

literature, it is seen that authors considered the dimensions of emotional labor in different ways.

2.2 Burnout

The term burnout took place in literature as a concept first discussed in the clinic studies of Freudenberger (1974 cited in Budak and Surgevil 2005) who defines the burnout, as a result of becoming unsuccessful, wearing, energy and power loss, and desires not to be satisfied, as exhaustion state in the internal resources of individual (Silig 2003 cited in Budak and Surgevil 2005). Burnout as a syndrome occurring in the way of emotional exhaustion and getting into the negative thoughts, seen on the people working in the jobs requiring to work together with people (Maslach and Jackson 1981). In the work environment, burnout behavior emerges in three forms as emotional burnout, depersonalization, and decrease in the sense of personal success (Maslach and Jackson 1981; Maslach and Goldberg 1998). Emotional burnout is defined as the main dimension of burnout. It represents the personal stress dimension of burnout. When individuals define himself/herself or the others as exhausted, they generally mean emotional burnout (Maslach et al. 2001). Emotional burnout emerges in case that individual feels himself/herself in the state of exhaustion, hopelessness, and being caught in a trap (Weisberg and Saige 1999). Depersonalization is a dimension of burnout emerging as exhibiting the negative emotions, sarcastic attitudes and behaviors against customers (Maslach and Jackson 1981). Depersonalization is defined as the state that individual feels the deficiency of feeling against humans (Bruce 2009), his/her negative and rough attitudes to the individuals he/she serves, his/her becoming unreactive to job (Budak and Surgevil 2005), behaving to people as an object, saying humiliating words, and exhibiting careless and sarcastic attitude (Yildirim and Icerli 2010). Decrease in the sense of personal success is the state that the employee evaluates himself/herself negatively associated with job, especially while working with customers. The employees themselves feel unhappy and are not satisfied with their successes (Maslach and Jackson 1981). In other words, this is related to the state that they come into the tendency to negatively feel themselves and that they are not satisfied with their jobs (Lingard 2003) It means a decrease at the level of the adequacy and effectiveness of individual in his/her work (Maslach and Goldberg 1998).

3 Methodology of Study

In this section of the study, the information will be given about the aim, hypothesis, method and findings of the study realized by using survey method. In addition, the results obtained in the study will be assessed from the statistical point of view and the hypothesis of study will be tested.

3.1 Scope of the Study

The study was realized on the employees of a hotel business being in active in the province Antalya. In this scope, it was attempted to determine the emotional labor and burnout levels of the employees and to be identified the relationships between these. In this context, the hypothesis of the study was stated below.

Hypothesis: "Between emotional labor and burnout, there is a statistically significant and positive relationship".

3.2 Aim of Study

The aim of this study is to scrutinize the behavior of emotional labor and burnout. In this direction, in an hotel business being in active the province Antalya, the study was carried out especially on the employees being face to face communication with customers.

3.3 Method and Sample of Study

In the formation of dataset of this study, the method of survey was utilized and the study was carried out especially on the employees being face to face communication with customers in an hotel business being in active in the Antalya. The data in the study were collected by means of face to face interviews with the respondents through a standard questionnaire prepared taken into consideration Likert Scale. The items in the scale were put in order as "1 = I definitely disagree with it" and "5 = I definitely agree with it".

In determining the employees to be included in the sample, convenience sam pling method (Cui et al. 2003; Zhou 2004) used in several studies, was preferred convenience sampling, since it enables to reach a number of data quickly, is a method preferred (Nakip 2003). The universe of this study consists of the employees of a hotel business being in active in the province Antalya. The study was realized on the employees of a hotel being in active in the province Antalya and it was limited with 210 employees. According to the number of employees assessed, considering that the employees, participated in the study and especially made face to face interaction with customers, were selected, a return rate of 45.71 % was obtained when considering that on the samples selected from the main mass, the return rate generally ranged between 20 and 40 %, the return rate in the study can be evaluated as an acceptable rate. In the stage of assessment of questionnaire, "SPSS 20.0 for Windows" Program was used. Before analyzing the data, the reliability of scales was measured by using Cronbach Alfa Test. α value of scales was $\alpha = 0.819$ for emotional labor behavior and $\alpha = 0.792$ for burnout, while the

reliability of scales regarding to the sub-dimensions of emotional labor and burnout was $\alpha=0.727$ for superficial role playing, 0.755 for deeply role playing, $\alpha=0.775$ for natural emotions, $\alpha=0.806$ for emotional burnout, 0.818 for depersonalization, and $\alpha=0.806$ for decrease of personal success sense. α ranges between 0 and 1 and it is desired that an acceptable value is minimum 0.70 (Altunisik et al. 2010). It was observed that that the scales had high degree reliability.

In the study, in order to determine the emotional labor behavior, "Emotional labor Scale", which was formed (Diefendorff et al. 2005; Grandey 2003; Kruml and Geddes 2000 cited in Basim and Begenirbas 2012) by developing some item, adapted citing some items of emotional labor scales by Grandey (2003) and Kruml and Geddes (2000) both cited in Basim and Begenirbas 2012, and translated to Turkish by Basim and Begenirbas (2012) was used by Diefendorff et al. (2005 cited in Basim and Begenirbas 2012). In order to determine the burnout level of employees, "Burnout Scale", developed by and adapted to Turkish by Ergin (1992), was used.

4 Findings of Study

4.1 Sample Specifications

In this part of the study, the demographic specifications of employees taking in the scope of study will be evaluated by means of Table 1. 54.2 % of the employees in the scope of study consist of males, 45.8 % of females. 68.8 of participants were married and 31.2 % single. The educational levels of participants were: 35.4 % high school, 27.1 % secondary school, 22.9 % primary school, and 14.6 % university. It is seen that 64.6 % the employees have a monthly income level of between TL 500–999, 22.9 % TL 1000–1499, and 12.5 % 0–499.

4.2 Determination of the Relationship Between Emotional Labor and Burnout

In order to identify the assessments regarding to the emotional labor behaviors of those participating in the study about, the items in Table 2 was asked in the form of 5 point Likert Scale.

When the emotional labor behaviors of the employees are examined, "I try to feel the emotions that I must show to customers." receives the highest value (2.98). This is equally followed by the expressions of "Emotions that I display for customers exist spontaneously.", "Emotions that I display for customers are sincere.", and, "Emotions that I display for customers are same as those I feel at that moment." (2.92). The answers given to the expressions of "I express different

Table 1 Demographic specifications of sample

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Specifications	Definition	Frequency	Percent	Specifications	Definition	Frequency	Percent
Gender	Male	52	54.2	Marital status	Married	99	8.89
	Female	44	45.8		Single	30	31.2
Educational level	Primary School	22	22.9	Income level (TL)	0-499	12	12.5
	Secondary School	26	27.1		500–999	62	64.6
	High School	34	35.4		1000–1499	22	22.9
	University	14	14.6	Note: (i) $n = 96$			

Emotional labor		S.D.
I pretend to feel good when dealing with customers.		1.34
I wear a mask to display the emotions I have to show as a part of my job.		1.30
I make an extra effort as if I was performing when dealing with customers.		1.18
I act in order to deal with customers properly.		1.26
I pretend to actually feel the emotions that I don't really have.		1.20
I express different emotions from those I feel to customers.		1.20
I make an effort to actually feel the emotions that I have to display.		1.13
I try to actually live the emotions that I have to display for customers.		1.15
Emotions that I display for customers exist spontaneously.		1.04
Emotions that I display for customers are sincere.		1.02
Emotions that I display for customers are same as those I feel at that moment.		1.06
I make a great effort to actually feel the emotions that I have to show for		1.07
customers.		
I try to feel the emotions that I must show to customers.	2.98	1.15
Total	36 17	12.61

Table 2 The cases of emotional labor of the participants of study

Notes: (i) n = 96; (ii) In the scale 1 is in the meaning of "1 definitely disagree with it", 5 "I definitely agree with it"; (iii) According to Friedman two ways Anova test, the results that $(\chi 2 = 66.004 \text{ and p} < 0.001)$ are statistically significant

emotions from those I feel to customers." and "I make a great effort to actually feel the emotions that I have to show for customers." (2.90), with an average close to the other items, show the emotional labor level. In general meaning, when Table 2 is examined, that the emotional labor behaviors of employees are below averaged value attracts attention. The assessments of those participating in the study regarding to the burnout levels are like as seen in Table 3.

When the burnout levels of employees are examined, the expressions of "I feel emotionally exhausted after work.", "In the mornings I feel that I can't endure my work one more day.", and "I easily understand the feelings of people that I interact due to my work." (4.44) have a participation level in equal degree. These expressions are respectively followed by the expressions of "I feel that I contribute to life other people thanks to my work." (4.42), "I feel that I start to dislike my job." (4.40), "I feel that people I interact due to my work act as if they were not humans." (4.38), and "I approach to emotional problems cooly. (4.37)". When Table 3 is generally examined, it is seen that the burnout level of the employees is above the mean value.

In order to identify the relationship between the emotional labor behavior and burnout that the main aim of this study, correlation analysis was conducted. Below, in Table 4, emotional labor-burnout correlation matrix is given.

When correlation matrix in Table 4 is examined, between emotional labor behavior and burnout, it I seen that there is a statically significant (p < 0.001) relationship. In this context, the hypothesis of study put forward in the form of "Between emotional labor behavior and burnout, there is a statically significant and positive" was accepted.

Burnout	Mean	S.D.
I feel that I start to dislike my job.		0.49
I feel emotionally exhausted after work.		0.50
In the mornings I feel that I can't endure my work one more day.		0.50
I easily understand the feelings of people that I interact due to my work.		0.50
I feel that people I interact due to my work act as if they were not humans.		0.49
I find it really weary to deal with problematic people.		0.44
I find best solutions to the problems of people that I interact due to my work.		0.39
I feel that I am sick of my work.		0.47
I feel that I contribute to life other people thanks to my work.		0.50
I have been rude to people since I started to work in this job.		0.42
I'm afraid that this work will make me more insensitive.		0.46
I have the strength to achieve a lot.		0.42
I think my work restrict me.		0.41
I think I work too much.		0.46
I don't care what happens to the people that I interact due to my work.		0.46
It makes me very stressful to directly interact with people.		0.47
I create a comfortable atmosphere between me and the people that I interact due to my work.		0.44
I feel energized after an intimate work with people.	4.29	0.46
I have gained noticable achievements in this work.		0.45
I feel that I came to an end.		0.44
I approach to emotional problems cooly.		0.49
I feel that people that I interact due to my work act as if I created their problems.		0.46
Total	94.85	4.00

Table 3 The burnout levels of those participating in the study

Notes: (i) n = 96; (ii) In the scale, 1 is in the meaning of "1 definitely disagree with it", 5 "I definitely agree with it"; (iii) According to Friedman two ways Anova test the results that $(\chi 2 = 64.943)$ and p < 0.001 are statistically significant

Table 4 Correlation matrix

	Emotional labor	Burnout
Emotional labor	1	
Burnout	0.405**	1

p < 0.001

5 Conclusion and Discussion

In this study, between the emotional labor behaviors working in a hotel business being in active in the province Antalya and their burnout levels, it was identified that there was a statistically significant positive relationship. These results are in coordination with the studies in literature (Kaya and Ozhan 2012; Yildirim and Erul 2013). According to the result of correlation analysis conducted, the hypothesis of study put forward was accepted.

Since the sample of this study consists of the employees being in active in Tourism Sector in the Province Antalya, the power to generalize remains weak. From the point of works to be done in the future, it is again suggested that the study was carried out with larger samples. It is necessary to take into consideration that the study is evaluated through the data belonging to only a certain slice of time. Since this study was only carried out in the province Antalya, it is useful to conduct this kind of studies in the different sectors. In addition, since this study, was conducted in a certain time limitations, when considering the questions, whose answers are sought and hypotheses put forward, as a method of data collecting, it can be said that realizing a periodic study is a more appropriate approach.

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