Pui-Sze Chow Chun-Hung Chiu Amy C. Y. Yip Ailie K. Y. Tang *Editors*

Contemporary Case Studies on Fashion Production, Marketing and Operations



Springer Series in Fashion Business

Series editor

Tsan-Ming Choi, The Hong Kong Polytechnic University, Hung Hom, Hong Kong

More information about this series at http://www.springer.com/series/15202

Pui-Sze Chow · Chun-Hung Chiu Amy C. Y. Yip · Ailie K. Y. Tang Editors

Contemporary Case Studies on Fashion Production, Marketing and Operations



Editors
Pui-Sze Chow
Centennial College
Pokfulam
Hong Kong

Chun-Hung Chiu Business School Sun Yat-sen University Guangzhou China Amy C. Y. Yip City University of Hong Kong Kowloon Hong Kong

Ailie K. Y. Tang Centennial College Pokfulam Hong Kong

ISSN 2366-8776 ISSN 2366-8784 (electronic) Springer Series in Fashion Business ISBN 978-981-10-7006-8 ISBN 978-981-10-7007-5 (eBook) https://doi.org/10.1007/978-981-10-7007-5

Library of Congress Control Number: 2017955659

© Springer Nature Singapore Pte Ltd. 2018

This work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, express or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Printed on acid-free paper

This Springer imprint is published by Springer Nature

The registered company is Springer Nature Singapore Pte Ltd.

The registered company address is: 152 Beach Road, #21-01/04 Gateway East, Singapore 189721, Singapore

Preface

The fashion industry is amongst the largest industries in the world. The global fashion market contributes a huge amount of GDP and employs a majority of people in many countries; thus it has pivotal impacts on the global economy. Apart from the volatile demand and fast-moving fashion trends, the dynamics of the industry is constantly affected by the advancement in technology and the ever-changing concerns from the consumers such as sustainability. Whereas continuous investigation and theory development advances the knowledge to tackle the up and coming issues in such a dynamic business environment, the study and reporting of real-world cases help illustrate the application aspect of those theories and generate further insights. A number of real cases in the fashion industry, such as the business model of the fast fashion brand Zara, and the innovative social media marketing approach of the traditional luxury brand Burberry, have even become benchmark textbook examples in the respective disciplines.

In the existing pool of literature, case studies in fashion business are usually documented according to some specific topics. Apparently, there is a lack of a comprehensive collection of examples that relates to the various contemporary issues encountered by the fashion industry. In light of this, we have edited this volume which features a number of case studies to illustrate the different challenges pertinent to the sector nowadays and to showcase the respective state-of-the-art solutions.

This edited volume includes thirteen chapters with diversified topics and geographical contexts (Table 1). According to the nature of the topics, they are organized in four parts, namely: (I) Fashion Production, (II) Fashion Branding and Marketing, (III) Fashion Operations, and (IV) Sustainability and the Fashion Industry. We briefly describe individual chapters as follows:

vi Preface

Table 1 List of chapters and details

Chapter	Topic	Segment	Case(s)	
			Geographical context	Name(s)
Part I: Co	ase Studies on Fashion	Production		
1	Domestic manufacturing	Apparel manufacturing firms	US	Tydale, 3fe Apparel, Lela Rose, Trina Turk, and Green 3 Apparel
2	Product development	Apparel trading and manufacturing	Hong Kong	An anonymous international luxury brand
3	Laser application	General	_	Miscellaneous
Part II: C	Case Studies on Fashion	Branding and Ma	rketing	
4	Brand positioning	Vintage retail brands	UK	Minted, City Retro, and an anonymous vintage retail brand
5	Internationalization	Family-owned luxury brands	Italy	Missoni
6	Rebranding and digitalization	Luxury brands	China	Three anonymous European luxury brands
7	Practices and considerations for email customer survey	-	Hong Kong	Local company of an international fashion accessories brand
Part III:	Case Studies on Fashio	n Operations		
8	Role of retail stores	Fast fashion	Global	H&M
9	Click-and-collect process in omnichannel fashion retailing	_	Germany	Decathlon, Galeria Kaufhof, Hunkemoller, and Massimo Dutti
10	Supply chain strategy	Fashion renting companies	US and China	Rent-the-Runway, and Meilizu
Part IV:	Case Studies on Sustain			
11	Sustainable innovation	Apparel supply chains	Hong Kong	TAL
12	Social responsibility programs	Fashion retailers	Brazil	An anonymous Brazilian fashion retailer
13	Used apparel collection programs	_	Global	Eileen Fisher, H&M, Patagonia, and Uniqlo

Part I: Case Studies on Fashion Production

Fashion production has always been facing different challenges owing to the very nature of the fashion products. Quick response is critical to the ever-changing preferences of the end-consumer market. Stringent cost control is necessary for profitability. Use of technology for product innovation and process efficiency offers competitive advantages.

Over the decades, it has been a common practice for fashion brands to outsource the manufacturing process to overseas suppliers (e.g. those in China, Bangladesh, and Mexico) for cheaper production of garments in large volume. Recently, there has been advocates for domestic production in light of the demand for quicker response and sustainability concern. In Chap. 1, Harris presents a study on domestic manufacturing and sourcing in the US apparel industry. Based on the findings of five case studies, the author discusses the niche of domestic apparel manufacturing. A "domestic and balanced sourcing model" is proposed that summarizes the various factors of competitiveness for domestic apparel production.

In Chap. 2, Fung and Choi examine the product development process in the fashion industry with reference to a case study of an international luxury fashion brand. Comparing its approach to product development with that commonly adopted by fashion trading companies in Hong Kong, the authors discuss the implications and provide suggestions to improve the practices of the latter.

In Chap. 3, Yuan, Chen and Luzzi presents a comprehensive review of the use of laser in different areas throughout the apparel production process, from fabric cutting, engraving, to fault detection and inventory management. Illustrated with examples the authors discuss the merits of the application of laser and highlight its potential to enhance environmental sustainability and innovations in apparel production.

Part II: Case Studies on Fashion Branding and Marketing

Branding and marketing play a paramount role to the success of a fashion brand. Proper branding and marketing strategies help a brand to stand out from the competitors and reach the target end-consumers. In Chap. 4, McColl, Canning, Shearer, and McBride explores the branding issue of vintage fashion retail brands. Based on the case studies of three vintage retailers in Glasgow, UK, the authors discuss the various elements that help enhance the positioning and operations of vintage fashion retail brands, including brand story creation, online communications with customers, and personalized customer services.

In Chap. 5, Runfola, Ranfagni and Guercini examine internationalization of Italian family-owned luxury brands. Through the case study on Missoni, one of the internationally reputed luxury brands, the authors discuss the challenges faced by the Italian small-medium-sized family-owned luxury fashion companies nowadays.

viii Preface

They conclude four key assets in managing the internationalization process of this type of luxury family business.

With the booming economy and improved living standard of the people, China has emerged as a very promising market for many western luxury brands. Yet socio-cultural factors may significantly affect the successful entrance of these brands in China. In Chap. 6, Rovai investigates the different branding and digitalization strategies adopted by three European luxury brands to enter into the Chinese market. Observed from these cases, the author emphasizes appropriate "luxury digitalization" strategy as the key to successful market positioning in China.

Working in a market-driven industry, it is crucial for fashion companies to keep updated with the consumers' needs and preferences. With the ease of access to mobile technology, email survey has become a convenient way to collect consumers' opinions. In Chap. 7, Wu and Tso presents an email survey project by a mass market fashion retailer to solicit consumers' perception towards the brand. The authors identify several good practices and discuss various considerations in conducting email survey for fashion retailers.

Part III: Case Studies on Fashion Operations

Fast fashion comprises a considerable segment in the fashion sector. In Chap. 8, Arrigo scrutinizes the roles of directly operated stores in the fast fashion business model. With reference to the case of H&M, one of the largest fast fashion retailers, the author asserts the significance of directly controlled retail network on the fast fashion business model. In particular, the ability to capture timely and extensive market information is paramount to the success of fast fashion business.

With the advance in and the tremendous use of mobile technology, the distribution channels are no longer confined to the traditional brick-and-mortar shops. In fact, an increasing number of fashion companies have been using different online portals to reach their customers. In Chap. 9, Bug, Gordon, and Staudenmaier study the click and collect service, one of the emerging omnichannel retailing services. By comparing the different aspects of the click and collect services offered by four German fashion retailers, the authors assess the current development in omnichannel retailing in Germany and provide recommendations to achieve seamless omnichannel customer experience.

Apart from omnichannel retailing, the concept of sharing economy has started drawing attention in the fashion business domain. With the increasing concern of sustainability, a new business model of fashion renting has emerged recently. In Chap. 10, Lai, Song, Xu and Chiu investigate the supply chain strategies adopted by two fashion-renting companies, namely: Rent-the-Runway in the US and Meilizu in China. Focusing on the delivery and laundry services, the authors compare the outsourcing strategies of the two companies and demonstrate the importance of the fit in the supply chain strategy with the business environment.

Part IV: Case Studies on Sustainability and Fashion Industry

Fashion industry has always been blamed as one of the industries that are most hazardous to the environment. Pollution during the production process and the landfill problem owing to the huge amount of used/unwanted clothing are few examples of the environmental issues rooted from the industry. Apart from the environmental concern, employee welfare and the relationship with other stakeholders lie on the core of corporate social responsibility (CSR) that had drawn attention for business nowadays. With the increased awareness and concern for environmental and social sustainability amongst consumers, fashion companies have been imposing stringent measures in their supply chains to minimize their impact on the environment and enhance social sustainability. Such measures include adoption of sustainability programs to evaluate and monitor supply chain activities, as well as the launching of used apparel collection initiatives to manage post-consumer wastes. The three chapters in this section look into the different sustainability approaches adopted by the industry.

In Chap. 11, Kim and Zorola report the case of TAL, an established apparel manufacturer for numerous famous global brands, with respect to their proactive approaches to sustainability. Based on the findings, the authors propose a "sustainable supply network innovation" model that emphasizes on network of support and co-creation within the apparel supply chain.

In Chap. 12, Moro, Mendes and Amato Neto explore the corporate social responsibility (CSR) program employed by a Brazilian fashion retailer, with a focus on the supplier selection process. With reference to Zadek's five stages of organizational learning (2004), the authors evaluate the merits and drawbacks, and afterwards suggest improvements for implementation of CSR programs.

In Chap. 13, Chow and Li study the used apparel collection (UAC) programs implemented by four fashion retailers. The authors discuss and compare the different features of these UAC programs, and suggest that the type of UAC programs a fashion retailer adopt should fit with its business model.

We are delighted that this book depicts many interesting case studies that complement theories and provide concrete illustrations of the real-world practices in the fashion business sector. We believe readers from both the academia and the private sector will find this edited volume a useful reference that could help them tackle the rising challenges in the fashion industry.

Last but not least, we would like to take this opportunity to sincerely thank Prof. Tsan-Ming Choi for his support and advice for this book project. Special thanks are also due to William Achauer, Vishal Daryanomel, Ravi Krishnan and Jebin Asir Jose for their kind assistance in preparing and completing the book. We are grateful to all authors who have contributed their interesting cases to the book. We are also indebted to the reviewers who devoted their precious time to review and provide us with valuable comments on the submitted chapters.

x Preface

This book is partially supported by the funding of the Research Grant Council of Hong Kong under grant number UGC/IDS12/14, and the National Natural Science Foundation of China with the Grant No. of 71371197.

Centennial College Sun Yat-sen University City University of Hong Kong Centennial College Pui-Sze Chow Chun-Hung Chiu Amy C. Y. Yip Ailie K. Y. Tang

Contents

Part	t I Cases on Fashion Production	
1	USA Apparel Manufacturing and Domestic Sourcing	3
2	Product Development Process of an International Luxury Fashion Brand: Implications to Hong Kong Fashion Trading and Manufacturing Companies Yi-Ning Fung and Tsan-Ming Choi	27
3	Application of Laser Technology in Fashion Industry Guoxiang Yuan, Zhuoming Chen and Domenico Luzzi	43
Part	t II Cases on Fashion Branding and Marketing	
4	Vintage Fashion Retailing: Building the Store Brand Julie McColl, Catherine Canning, Linda Shearer and Louise McBride	59
5	The Internationalization of Italian Luxury Brands. The Missoni Case	73
6	Luxury Branding and Digitalisation: The Case of European Brands in China	89
7	Good Practices and Considerations in Conducting Email Survey for Fashion Retail Industry	105
Part	t III Cases on Fashion Retailing and Operations	
8	The Key Role of Retail Stores in Fast Fashion Companies: The H&M Case Study	121

xii Contents

9	Fashion Business Case Study on the German Click & Collect Situation	139
10	Supply Chain Strategic Fit: Two Fashion-Renting Cases Xiangyu Lai, Shiting Song, Yaqing Xu and Chun-Hung Chiu	165
Part	t IV Cases on Sustainability and Fashion Industry	
11	Sustainable Innovation in the Apparel Supply Chain: Case Study on TAL Apparel Limited	183
12	Sustainable Development in the Supplier Chain: Analysis of a Brazilian Fashion Retailer's Social Responsibility Program	199
13	Towards Closed-Loop Fashion Supply Chains—Reflections from Retailer-Facilitated Used Apparel Collection Programs Pui-Sze Chow and Cinty K. Y. Li	219
Inde	ex	241

Contributors

João Amato Neto Production Engineering, Polytechnic School, University of São Paulo, São Paulo, Brazil

Elisa Arrigo University of Milano-Bicocca, Milan, Italy

Peter Bug Reutlingen University, Reutlingen, Germany

Catherine Canning Department of Business Management, Glasgow Caledonian University, Glasgow, Scotland, UK

Zhuoming Chen School of Fashion Technology, Shanghai University of Engineering Science, Shanghai, China

Chun-Hung Chiu Business School, Sun Yat-sen University, Guangzhou, China

Tsan-Ming Choi Institute of Textiles and Clothing, The Hong Kong Polytechnic University, Kowloon, Hong Kong

Pui-Sze Chow Centennial College, Pokfulam, Hong Kong

Yi-Ning Fung Institute of Textiles and Clothing, The Hong Kong Polytechnic University, Kowloon, Hong Kong

Natalie Gordon Reutlingen University, Reutlingen, Germany

Simone Guercini Department of Economics and Business, University of Florence, Florence, Italy

Carol Elizabeth Harris Hartlepool, UK

Jiyoung Kim Department of Merchandising and Digital Retailing, University of North Texas, Denton, TX, USA

Xiangyu Lai Business School, Sun Yat-sen University, Guangzhou, China

Cinty K. Y. Li Centennial College, Pokfulam, Hong Kong

xiv Contents

Domenico Luzzi SEI Laser Italy (Hangzhou Branch), Hangzhou, China

Louise McBride Department of Business Management, Glasgow Caledonian University, Glasgow, Scotland, UK

Julie McColl Department of Business Management, Glasgow Caledonian University, Glasgow, Scotland, UK

Francisca Dantas Mendes Textile and Fashion, School of Arts, Sciences and Humanities, University of São Paulo, São Paulo, Brazil

Rita de Cássia Lopes Moro Textile and Fashion, School of Arts, Sciences and Humanities, University of São Paulo, São Paulo, Brazil

Silvia Ranfagni Department of Economics and Business, University of Florence, Florence, Italy

Serena Rovai La Rochelle Business School, La Rochelle Cedex, France

Andrea Runfola Department of Economics, University of Perugia, Perugia, Italy

Linda Shearer Department of Business Management, Glasgow Caledonian University, Glasgow, Scotland, UK

Shiting Song Business School, Sun Yat-sen University, Guangzhou, China

Ann-Sophie Staudenmaier Reutlingen University, Reutlingen, Germany

Kwok Fai Geoffrey Tso Department of Management Sciences, City University of Hong Kong, Kowloon, Hong Kong

Chi Wai Wu Tourism College, Institute for Tourism Studies, Macau

Yaqing Xu Business School, Sun Yat-sen University, Guangzhou, China

Guoxiang Yuan College of Fashion and Design, Donghua University, Shanghai, China; Key Laboratory of Clothing Design and Technology, Donghua University, Ministry of Education, Shanghai, China

Marissa Zorola Department of Merchandising and Digital Retailing, University of North Texas, Denton, TX, USA

Part I Cases on Fashion Production

Chapter 1 USA Apparel Manufacturing and Domestic Sourcing

Carol Elizabeth Harris

Abstract This chapter presents a study on domestic manufacturing and how domestic manufacturers are surviving in the global marketplace. The study identified garment categories using OTEXA (Office of Textile and Apparel) information that had low percentage change in imports. Five case studies highlighted that the uses of balanced manufacturing and niche market were some of the main reasons why the companies were able to produce garments domestically. The models used as a framework for the analysis did not explain fully why some companies were able to remain competitive and use domestic production. A new model, the 'Domestic and Balanced Sourcing Model' was created to help explain the reasons why some garments are maintaining a domestic presence more than others and how certain companies are able to remain competitive in today's global marketplace.

Keywords Domestic sourcing • Niche products • Business models

1.1 Introduction

Over the past 25 years, the USA apparel manufacturing industry has undergone changes that have resulted in the country being affected by the global shift of the industry.

Increased global production has put the assembly sector of the USA garment industry under a great deal of pressure. Due to the availability of cheaper production costs overseas, manufacturers have found it difficult to retain domestic sewing operations and remain competitive. The result in the shift of manufacturing to overseas locations has been large-scale job losses. US studies on the impact of the Quota phase have shown massive employment disruption as increased global competition leads to even greater pressure on wages (Foo and Bas 2003). In the USA, wage and salary employment in the apparel industry declined 16% between

C. E. Harris (⊠) Hartlepool, UK

e-mail: ceharris_31410@yahoo.com

the years 2004 and 2014 compared with an increase of 16% for all other industries combined (United States Trade and International Commission, USITC 2014). The decline translates into 153,000 lost jobs over the period, greater than the decrease in almost any other industry (US Department of Labor 2016). Declining employment has been caused by growing imports, fierce cost cutting, pressure imposed by retailers and international competition. A change in trade regulations has almost certainly been the single most important factor influencing future employment (USITC 2014). Many manufacturing companies are establishing overseas units where the workforce is cheaper (Deutsche and Kern 2007). This then leads to the closing of their domestic factories and moving their production overseas. These moves give them the option of reducing prices to remain competitive or increasing their profit margin.

Since the mid-1980s there has been an increase in apparel production worldwide but a decline in domestic production in developed countries (Oh and Moon 2003). This is partly due to '....result of adverse economic circumstances, shifting patterns of demand, structural changes in distribution, developments in new technology and above all: a sharp escalation in international competition' (Kilduff 2005, p. 182). High-wage apparel manufacturers need to embrace new technologies to enable them to enhance their quick response capabilities which will give them a 'legitimate cost effective role' (Warburton 2004). Kilduff (2005) also points out that in order for USA apparel manufactures to be 'successful', they need to 'invest in new technologies...production and logistics'. More and more companies are sourcing manufacturing offshore but upgraded domestic production in the USA will continue to help 'produce leading edge products' (Kilduff 2005).

1.2 Literature Review

1.2.1 Smaller Firms: Niche Markets

Small firms play a limited role in mass production by providing reserve capacity during peak periods of demand (Scott 2002). They do, however, play a central role for the fashion industry with its highly uncertain markets and to niche market producers when order sizes are too small to outsource offshore. It was suggested by Dana and Hamilton (2007, p. 63) that '...the speed and flexibility of smaller suppliers could have been an asset in helping larger manufacturers to compete against imports'. Italy, however, made different choices to most other developed countries. Small manufacturing firms still continue to maintain a strong domestic foothold in their apparel manufacturing sector (Pellicelli 2006). They specialize in fashionable products which rely on flexibility, specialization and quality. Bailey-Todd (2008) suggested that large firms producing domestically using subcontractors that they have a long working relationship with help maintain domestic production. Bailey-Todd (2008) also states that Benetton, for example, performs the major part

of its production in Italy, where it has a wide network of domestic subcontractors that ensure high productivity and flexibility (Bailey-Todd 2008).

The USA has two main areas of apparel manufacturing remaining, Los Angeles County, California and New York City, Apparel manufacturers have an advantage if they are located where there are related industries or clusters. These firms can produce faster due to the close proximity of the fabric and trim suppliers than a company that is located with low subcontractor clusters (Winger 1999). Los Angeles ranks first and NYC second in terms of clothing manufacturing facilities. With the largest number of manufacturing establishments left, LA can boast a strong infrastructure with the appropriate labour and capital for onshore apparel manufacturers to succeed (Bailey-Todd 2008). The area focuses on high value-added activities such as design and marketing. Due to this specialization, high-end fashion producers in LA may gain a competitive advantage (Scott 2002). High fashion that is often produced in LA can be produced with short lead times, quick turnaround and small order quantities (Bonacich 1998). Many firms in LA are, however, small- to medium-sized businesses that supply the niche market and often the firms can consist of less than nine workers (Scott 2002). Bailey-Todd (2008) suggests that historically the workforce in LA has been made up of immigrant workers. It has now transitioned from focusing on mass market to becoming a fashion centre for design-intensive apparel companies, where production and marketing allow the industry to survive (Bailey-Todd 2008). The LA market demands quick turnaround giving local producers an advantage over offshore producers. The ability to have control over quality and make last-minute adjustments based on specific market demands makes domestic production advantageous (Winger 1999). Many companies have invested in new equipment and technology to help stave off competition (Scott 2002). USA companies, especially in NYC and LA, continue to produce niche market apparel that have '...little labor content but commands high prices' (Bailey-Todd 2008, p. 262). New York City is the only other state in the USA that has a significant domestic apparel presence. It is also the major USA fashion centre that houses the design and buying offices of many of the large manufacturers and retailers in the USA (Dana and Hamilton 2007). The bulk of the industry that is left in NYC comprises small manufacturers and contractors that supply clothing to a fragmented set of niche markets (Bailey-Todd 2008). NYC's existing clusters of small manufacturers and contractors can provide quick turnaround times and manufacture products faster than their global counterparts (Crean 2002). Although foreign competition is causing many of these niche markets to decline, many are too small or orders are time-sensitive to be outsourced offshore (Doeringer and Carson 2006). The quick style changes and need for quick responses to new seasons trends require a direct collaboration between producers and designers, which would only be possible where there is a concentration of small and medium producers in close proximity to fashion markets (Kumar and Arbi 2008). NYC is also a centre for training new designers who often aspire to careers as independent designers. Young designers use the apparel producers in the city due to the size of their orders and their inability to meet minimum order quantities for global contractors. However, even these small orders can often be too small to be

produced by small contractors (Crean 2002). If, however, there is any prospect for the USA apparel industry to carve out durable market niches for which it has a competitive advantage, it is likely to be in high value-added fashion producers where design, quality and speed matter and where orders are too small to tempt offshore competitors (Doeringer and Carson 2006).

1.2.2 Porter's Five Forces Model

The first concept of competitive advantage strategy was developed by Porter (1998) and is described as taking aggressive action to create a defendable position in the industry. These actions it is suggested will enable a firm to successfully manage competitive forces and create a higher level of economic return (Porter 1998). Porter's Five Forces Model illustrates the competitive strategies that have been implemented by many industries to help them maintain a competitive advantage. The clothing industry is a very competitive marketplace where the main goal is to entice the customer to buy their product. The retailer is constantly thinking of new ways to maintain and increase their customer base through advertising and product type. Independent designer labels also have their own advertisements in magazines and storefronts. The price point is a very important factor for the consumer and, in today's fast-changing marketplace, it is increasingly important. Customers are constantly looking for the best value for money even when buying designer labels. The price point is something that all companies consider no matter what size they are. The apparel industry, due to its low barriers to entry, is one of the most highly competitive manufacturing sectors in the world (Standard and Poor's 2004). As obstacles to trade among nations have declined due to improvements in transportation systems, technology transfer and government cooperation, the industry has seen a rapid increase in globalization. Porter (1998) indicates that potential new entrants pose a threat due to the increased level of capacity they afford. Such additional supply could drive down prices and cut into the profits of current producers. Potential entrants into the clothing industry are very high as the start-up cost is relatively low. Grunsven and Smakman (2001) suggests that due to the low capital investment and low technology needs it is very easy for apparel manufacturers to establish new businesses and low barriers to entry help facilitate competition within the industry. Not only the initial setup is low cost but also the wages are usually significantly lower in the offshore locations adding to their appeal by developed countries. Jones (2006) also pointed out that the apparel industry is not a knowledge-based industry and therefore research and development is not an area that is heavily invested in. Textile development, however, is a constantly evolving area with new fabric developments emerging on a regular basis.

There is not a great amount of research into smaller niche market companies. Jones (2006) pointed out that the UK concentrated on long production runs, whereas Italy adopted management strategies that incorporated niche-marketing policies, which appear to have achieved success. Smaller niche market companies

could remain competitive through their product type and being smaller gives the companies greater control of their product and gives them flexibility when reacting quickly to changes in trends and demands. The threat of competition from substitute products occurs if multiple products are found to perform the same function (Porter 1998). Porter (1998) asks whether large companies are more profitable than smaller firms. He suggested that larger firms are more 'protected by mobility barriers than smaller firms' (Porter 1998, p. 145) and that they are more insulated from rivalry than smaller companies, and due to this the larger firms will be more profitable than smaller ones. However, smaller firms are able to follow specific strategies, and therefore are able to achieve higher product differentiation or a superior service as in niche market products. Porter (1998) acknowledges that in these instances smaller privately owned companies may be more profitable than larger ones.

1.2.3 Diamond Model

Porter's five-force model was not really designed with a global marketplace in mind, so he developed the Diamond—Comparative Advantage of Nations model or The Determinants of National Advantage model as it is also known. It was developed for companies that were competing in a global marketplace. Porter included factor conditions, such as skilled labour, as necessary factors for industries to remain competitive in the global market. As mentioned earlier, the USA and many other developed countries are losing their skill base and this is a major concern for companies that still wish to manufacture within the USA. Companies that outsource do so because of attractive low labour costs, but as Warburton and Stratton (2004) stated this does not always produce high-quality work. However, this does not mean that low-cost producers never produce good quality work. Jones (2006, p. 157) suggested that Porter's diamond framework highlighted the reasons for the use of offshore manufacturing to 'offset the disadvantages which are predominantly high wages'. Most companies outsource because of the attractive low-cost labour, but this does not always produce high-quality goods. A constantly monitored production process will produce better quality as problems are highlighted through the process rather than at the end. The fashion industry relies upon supporting industries. The textile industry supplies the fabric for the garments and the sewing machine industry provides the equipment to make the product. There is very little fabric manufacturing left within the USA. For the USA, many companies source fabrics from Europe, which are subject to tariffs that were originally put in place to protect the domestic industry, which no longer exists. Also, high exchange rates can affect companies sourcing fabric from outside of the USA. The conflict between the costs of domestic manufacturing and offshore manufacturing is always being debated (Lowson 2003). While domestic manufacturing is more expensive, there can be many hidden costs when using offshore producers. Fogarty (2006) suggests that the hidden costs include export taxes, additional warehousing, transportation and insurance charges. Transportation is one of the greatest costs, but

Porter suggests that transportation improvements have lowered the cost of exchanging goods around the world. This of course does depend on how the product is going to be transported. Porter believes that industries today 'do not resemble those that the theory of comparative advantage was built on' (Porter 1998, p. 13). Technology has become an important factor in industry today. As long as the skills to produce the product efficiently and effectively are available alongside the technology, then companies are able to establish new businesses easily (Porter 1998).

1.2.4 Lean and Agile Manufacturing Concepts

According to Halevi, the industrial era that has been dominated by mass production is drawing to a close (Halevi 1999). Halevi postulates that the concept of Agile manufacturing will dominate the manufacturing industry. Agile manufacturing would be suitable for the fashion industry as it often has short product life cycles and high variety (Stratton 2004). Halevi stated that with agile manufacturing 'competitive advantage will be determined by the new criteria of quality and customer satisfaction' (Halevi 1999, p. 46). Halevi (1999) suggests that only highly competitive companies will use this approach due to the fact that the products are usually custom designed. This approach would lend itself to niche market products, as they are perceived as being exclusively designed. Although niche market products could fit into this approach, he also stated that the companies that embrace this idea would also consider environmental issues, which at this time many companies within the apparel industry do not. Suri (1998) suggests that Agile manufacturing is an evolving approach, but the core principles of how to implement it are still being evolved. He suggests that agility may take companies beyond Quick Response Manufacturing but QRM can also be applied to custom one of kind products and short production runs. The effect of this strategy is to reduce lead times and costs and thereby improving competitiveness and performance (Jones 2006). Porter (1998) suggests that long lead times require firms to base their decisions on projections rather than demands. Warburton and Stratton (2004) pointed out that it is not unusual for both retailers and manufacturers to make a 25% error in sales forecasting of a significant percentage of styles, but for fashion items this forecasting can be much worse. Porter (1998) pointed out that firms are often left behind even though the decision-making process or placing orders is in itself risky. The Just-in-Time approach is best applied to high-volume products that are repetitive and of a stable demand which for the most part is synonymous with most mass production processes. This is also the idea behind the principle of Lean Manufacturing when the product type is usually commodities with low product variety and long production cycle (Stratton 2004). This approach can be adopted by companies that have little style change and long production runs but is the opposite approach and contradicts the thought process of Agile manufacturing. It was also suggested by Stratton (2004) that Lean and Agile supply approaches could be used together as they enable companies to remain competitive as fashion goods usually have a short production life due to the ever-changing fashion trends. They can also be delivered at speed due to the fact that many niche market products are produced domestically.

1.3 Case Studies

The five companies selected for the case studies were based on the following criteria that each of the companies produces at least one of the garments that have been identified as having a low percentage change in imports from OTEXA website. The low percentage change in imports suggests that the products may be being produced domestically. The garment categories identified were as follows:

- Women's dresses MMF (Man-made Fibres)/Cotton/Wool,
- Men's and boys Wool suits,
- Men's and boys MMF/Cotton shirts not knit,
- Women's MMF shirts not knit.
- Men's and boys Cotton knit shirts,
- Men's and boys Cotton pants and shorts, and
- Women's Foundation Garments.

Two out of the five companies use both domestic and offshore productions, while the other three produce solely in the USA. All of the information was obtained directly from the owners of the companies.

1.3.1 Case Study 1: Tyndale

Tyndale is a privately owned company-based out of Pipersville PA. The owner Robert Whittenberg has been in business for over 20 years offering a varied product line.

Their product base varies from Flame-Resistant (FR) workwear to men's and women's casual wear. Their core business is supply managed apparel services to investor-owned utilities in the USA, but they also produce jeans and knit shirts for independent stores and through their website and catalogue. Whittenberg stated that 'Our made in the USA line is the broadest and deepest available in the market place'. They distribute to all major manufacturers, which enables them to provide virtually any product that their customer base wants. Their main customer is the utility industries which purchases FR garments. The labour union supports 'Made in America' products and is therefore prepared to pay higher prices for their products. In addition, they have a 'Made in the USA' catalogue that they distribute to customers who may be willing to pay a premium for 'Made in the USA'

garments. They also sell through independent stores and through their website. One of their customers is a Japanese company that wants 'Made in America' jeans. As a manufacturer, Tyndale competes with divisions of VF Corporation (a fictitious name to reflect the more diverse product line.), Dickies, Carhartt and Riverside manufacturing. As service providers, they compete with Cintas and Wearguard who are manufacturers of workwear products. Cintas has a higher design aspect to their work wear collection. Robert Whittenberg, owner, mentioned that 'we have noticed that many of our competitors have switched from substantially manufacturing in the USA to substantially all imported'. Generally, Tyndale's pricing is higher than other manufacturers that are selling directly to the end user, but they offset this by providing a 'better service, broader product choice and "Made in the USA", Whittenberg said. Their strength lies in the fact that they can provide garments quickly and cost-effectively with minimum wastage. They can keep products in stock, which enables them to provide their customers with what they wish to buy. Their customers want 'Made in the USA' products, whether they are American customers or Japanese customers that want 'Made in the USA' jeans. Their ability to be flexible is important but creativity is not. Due to their main business type, their product changes slightly from year to year. Advances in fabric are often the biggest changes that are made to their product. This therefore restricts any creativity that is often associated with the garment industry. They manufacture relatively close in American standards to their main office, which enables them to keep transportation costs down. The IT system that they have allows the customer service team to manage large complicated orders, while still having a personal touch in knowing their customers and their needs. Increased technology has allowed the company to use the most up-to-date computer software to provide the best service to their customers. They are leaders in the Flame-Resistant (FR) area of the industry, Whittenberg commented, which is the feedback he receives from competitors and vendors. They are respected in the industry as an honest and trustworthy organization.

1.3.1.1 Domestic Versus Offshore Production

Tyndale manufactures 100% of its products in the USA mainly in North Carolina and in Pittsburg, which are close to their distribution centre in Pipersville. The 'Made in America' label is their business and is a major selling point. Owning their own factories means that Tyndale has no need to subcontract any of their manufacturing, and, are therefore able to have hands-on approach with their production and the quality of the finished product. They have never used offshore manufacturers because of their products quality and their position in the marketplace. There will always be a need for clothing, Whittenberg commented, and the lowest cost producer for the most part is going to be sought. This will almost always be where textiles are also being produced. As a company, Tyndale does not want to use the lowest cost producer as they feel that they will not get the quality of work that they are looking for and therefore cannot match their current workmanship. In addition,

their garments are made from domestic textiles, which have economic benefits because of lower transportation costs than international shipping. Whittenberg also believes that it is environmentally friendly to produce domestically as he is not shipping garments around the world. 'Our customers want products that are made in the USA', Whittenberg said. 'Because our fabrics are expensive compared to our labor costs, it is somewhat cost efficient to do so'. He expressed that US manufacturers are increasingly capable of doing small runs with quick turnarounds. which international manufacturers cannot do because of lead times. Manufacturing in the USA gives the supplier the ability to restock an item when it becomes out of stock. Ninety percent of their business is restocking. Whittenberg commented that you cannot simply stop selling an item just because it is out of stock; you need to get back into a stocking position to give the customer what they need. They manage all of their design and product development in house but send their pattern making and grading to a freelance pattern maker in Pittsburg. They develop two-six new products per year, but also make incremental improvements to their established products throughout the year. They also make order for their larger companies continually. When looking at the market level, Whittenberg commented that quality was a major consideration. 'I have been able to produce superior products in the USA compared to internationally because there seems to be a general preference towards quality over cost cutting which is difficult to identify internationally'. Tyndale differentiates 'Made in the USA' garments from international ones. They include the location of manufacturing on each of their products. They have an IT system that allows them to manage extremely complex service requests for large customers in an efficient manner. The sales department is extremely experienced which enables them to offer their customers the best product for its end use. Over the past 20 years, there has been a huge increase in companies' abilities to produce overseas. They no longer have to employ people in the same state or even in the same country. Technology for Tyndale has helped with placement of orders rather than outsourcing. They employ around 100 machinists of which many have been with the company since its beginning 20 years ago. Because of this, they have a strong skill base, which is something that many other companies feel that they do not have because of the movement of labour to offshore locations. Whittenberg commented that he thinks that there is not only a lack of skilled labour but also a lack of low-cost labour. Although a lack of skilled labour does not affect Tyndale at the moment, they know that in the future with the prospect of employees retiring they will need to replace and retrain new employees. Whittenberg commented that he terminated two machinists employment with him in the past year because of their inability to produce the standard of work that he is looking for. Over the past 10 years, it has been difficult to source employees in rural areas even though there are not many other jobs. Now urban areas employ mainly Latin and Asian workforces not Americans. Twenty years ago, after high school a girl would go to a sewing factory to find work. Today, they are now moving to the cities to find work in high-tech positions. Whittenberg said that 'We seek to continue to improve all areas of our business, but we will continue to focus on a narrow segment of the overall FR market place'.

1.3.2 Case Study 2: 3fe Apparel

Angela and Joseph Farrell established 3fe Apparel in 2006. Their goal is to offer traditional products with unique aspects of detail, focusing on providing customers with the finest quality products. As a company that uses domestic production, 3fe offers quality and originality in their designs Farrell commented. Their price point is high because of their product; quality seems to be the most notable cause of the difference in relation to where garments are produced. They offer a range of women's contemporary dresses and tops as well as accessories such as their Pidge scarf that launched their business venture. Their target customer is a 20-50-year-old woman who is looking for good design. Because of their design's individuality, the company has developed a customer following and brand loyalty that has developed over the past few years. Farrell believes that this is due to the quality and originality in their designs, which have uniqueness to them. Small additions make a difference, Farrell pointed out. Just by adding nice buttons instead of plastic ones makes a product more appealing but can add a disproportionate value. 'The luxury apparel market has become a niche market for America', owner Angela Farrell said. Many designers are taking the high-end 'Made in America' approach, attaching their names to quality and quality products, Farrell commented. Their ability to produce something quickly that is unique reduces the amount of competitors that they have in their market area. A number of luxury manufacturers are beginning to return to the USA for quality control, having had difficulty with quick changes and monitoring their production in overseas factories, which could increase 3fe's competitors. The company's greatest strengths are its control over production quality, customer service, packaging and delivery. 3fe Apparel manages all aspects of the company in-house, with dedication and precision that cannot be attained throughout-sourced services. Their greatest weaknesses and threats are that of monetary concern. By producing in the United States, they pay an extraordinary amount on labour, insurance and rent. But, to stay competitive, they must keep prices low by reducing the profit margin. This leaves little room for going over budget, expanding through advertising, or further product production. Although they have many new product ideas that could be realized, the required funds to expand are greater and more difficult to secure without a large increase in sales. As a company, they have put in a great deal of effort to hire only USA-based suppliers. Farrell commented that there is a lack of skilled tangible physical labour. 'Americans no longer want to work in manufacturing; it seems to be only low income families that want to do this. American's have lost their pride in their work', Farrell said. As the economy changes, almost two-third of the suppliers have gone out of business, leaving them with the difficult task of continually finding new USA-based suppliers. Farrell commented that they are constantly struggling with USA suppliers to get their products made at a reasonable price. They will try to maintain domestic production but are unsure if they can do this due to an ever decreasing manufacturing base and cost increases. As a company, they are trying to maintain domestic production but are finding it increasingly difficult because of the reasons mentioned above.

1.3.2.1 Domestic Versus Offshore Production

The domestic wage and salary structure have hurt local manufacturers' ability to compete against international competition, Farrell commented. In the state of Connecticut where 3fe is located, the minimum wage is \$7.65 per hour, but to gain competent employees a company must pay at least \$9 an hour for even menial tasks (making boxes, counting buttons and sticking labels) was another comment. On the other hand, overseas \$9 would be for a full day if not a week. 'My labor costs are 70% of my total costs', Farrell said, 'but if I manufactured overseas the labor would be 10–15%'. Below is an example of her cost for the knitted Pidge scarf. This is one of the reasons why Farrell is constantly struggling to keep her products made in the USA. 'We are hoping that our items from next season can also be locally made with reasonable costs, but if they cannot, we will produce overseas instead of pushing and fighting to make our products domestically, as we pushed and fought for our current line'. With the ever-rising fuel costs, it is also getting more and more expensive to ship products even within the USA. Some luxury manufactured goods are still being produced in the USA for quality control, because many companies have had difficulty with quick changes and the monitoring of production in overseas factories, Farrell commented. Although the order quantities are at present too small to produce offshore, lead times and quality control are the main reasons why they use domestic production at this time. If they want to change something, they can re-sample or re-make in 4-5 h, which would be impossible if they used overseas manufacturers. Outsourcing leads to a loss in quality, Farrell commented, especially when the product is being produced thousands of miles away in another country. The ability to have hands-on approach enables domestic producers to oversee the production and quality. Farrell works closely with the factories that produce their product. This helps ensure that products are produced in a cost-efficient manner as the factories have product development engineers that work with her to ensure the best product for the price. Farrell often finds it difficult to source good quality workmanship as many of the companies that were able to supply her are now going out of business and machinists and such like are moving into other positions. As a relative newcomer to the industry, 3fe is finding it difficult to compete on price. They currently use domestic production but are finding it more and more difficult to do so due to cost. The another problem that they are facing is being able to find manufacturers to produce their products. Factories are continually closing and that in itself is a problem. Producing goods domestically allows for hands-on approach and the ability to ensure that the goods are produced to the highest quality. Neither of these would be easy to access if using offshore suppliers. There is a lack of skilled labour available and any that are available will be expensive and therefore increasing the cost of the end product. Being at the end of the market that is perceived as luxury, the 3fe label is significant to their customers. Their customers

know that when they buy this named brand they are going to get quality and a product that is supporting the local economy.

1.3.3 Case Study 3: Lela Rose

Lela Rose is a privately owned company based in New York City and was founded in 1996 by Lela Rose. Lela Rose's vision was and is to create women's clothes that were unique in their design. She pairs unconventional fabrics and techniques, which have become trademarks of her designs. 'My philosophy of design is about creating beautiful, hand finished clothes that exude a casual luxury and refinement', Lela Rose. The collection is strategically targeted at the opening price point of designer collections. The company has been positioned to offer accessibility, without sacrificing the quality and design standard of the designer market. Occupying this niche has been crucial in helping to broaden the Lela Rose customer base and brand awareness. Their target customer is a 30-65-year-old woman who is looking for good design. As a brand, they have intentionally positioned themselves to fit the niche for customers that shop for other feminine collections like Thakoon and Chloe while admiring the detailed craftsmanship of Oscar De La Renta. Because of their design excellence, the company has developed a strong customer following and brand loyalty. The Lela Rose collection is merchandised on the designer collection floor in major upscale department stores like Neiman Marcus and Bloomingdales alongside designers such as Zac Posen, Thakoon, Chloe, Peter Som and Derek Lam. The company's major strength rests on the ever-evolving design of the collection. In recent seasons, they have expanded their collection by launching a new division in sportswear, which maintains the well-known attention to rich detail and offers their customers a new direction. The brand has developed committed customers and retailers who know that each collection will be both unique and consistent and who continue to support the brand season after season. Beyond design, the company has strengths in sales and production that are due in large part to the cohesiveness of the working environment. The Lela Rose Company is growing but is still small, and they are using that size to their benefit. The studio environment resembles the workings of a family unit and boasts an extremely dedicated staff. Everyone has independent responsibilities and tasks but is still involved in all aspects of the company business. This cohesiveness works to their advantage in many ways. They are able to give and receive immediate feedback; the sales and production teams collaborate to analyse past performance at a retail level and provide a roadmap for the next season. This information enables them to accurately revisit silhouettes, fit, fabric weights as well as help to insure an overall well merchandised collection. The flipside of the benefits of operating a relatively small yet growing company is that physical space is limiting and has begun to show as a weakness. As the company continues to expand and hire new employees, available space for desks and computers and other work-related products has shrunk. The size of the studio's showroom has also presented a challenge. Each season the number of pieces in the collection grows and available merchandising space becomes limited. More retail accounts are coming into view the collection each season and seating can be hard to accommodate when more than one account is in the showroom. Additionally, only one sample of each piece from the collections is made and must be shared among trunk shows, editors and stylists. Only one piece from each collection is made for cost purposes. This at times leads to a frustrating inability to fill a request for a sample and thus has hampered orders and sales on a garment.

1.3.3.1 Domestic Versus Offshore Production

Lela Rose does not own their own manufacturing facility and therefore all but one of their products is manufactured in New York City. They work closely with their manufacturers as they also produce the initial sample garment. The close proximity of the factory allows Rose to be involved in all aspects of the garment construction. She is able to work with the sample machinists to ensure the garments ease of transition from the sample stage to the production. The factory advises Rose on product development to ensure that the appropriate equipment and techniques are used. The only product that is not produced in the US is their knitwear which is one hundred percent produced overseas. The cost of producing knitwear in the USA would not be cost-effective, but having said that Rose still needs to consider the cost and how many pieces she can import from the production location and what the current exchange rates are at that time. The hourly rates for workers (seamstresses, cutters and machinists) are far higher in the USA and NYC especially than those in low-wage countries. This does of course make a difference when costing a garment. 'Fortunately, economics are not the only consideration used when costing our garments', Rose said. Cost is the main reason that goods are produced overseas, she commented, but quality and the ability to control her products is why she produces her products in the USA and control over timely delivery of goods. Rose believes that the first garments into the stores are the first things out of the stores. Many NYC manufacturing companies can no longer compete with overseas manufacturers and it is only companies like Lela Rose that keep the industry alive there. Many still produce samples for NYC designers but they know that the product is never going to be put into production because it is too expensive. Their sample is shown to overseas producers and made for a fraction of the cost. Rose feels lucky to be situated in NYC, but she feels that many manufacturers in the USA are losing their knowledge and skill base from an industry that provided jobs for many years. 'I personally feel sadness over the loss of knowledge, but understand the economics of it', Rose said. She also commented on the loss of skills that have been passed down through generations, such as tailoring in Italy and laces and embroideries from Europe, which could all be lost for good. Lela Rose produces all but one of their products in the USA. They produce their high-end luxury women's wear domestically so that there is control over timely deliveries and their ability to work directly with the manufacturers of their products to ensure that the quality is what is

expected. Their customer knows that the Lela Rose brand stands for quality and uniqueness, which allows it to stand alongside other major designer brands on the sales floor. The loss of skill in the USA is very apparent in NYC, which is where Rose is located. Along with the closing of factories is the loss of the fabric and trim stores that used to supply them. This makes it difficult for companies like Lela Rose to find the components they need to produce their products and in turn is sending them further afield to source them.

1.3.4 Case Study 4: Trina Turk

Trina Turk is a privately owned company based in Los Angeles, California and was founded in 1995 by Trina Turk. They are a California inspired lifestyle brand with a west coast point of view. 'Our customer loves fashion', Turk said, 'but is not a fashion victim'. Their product is vintage inspired with a basis in classic American sportswear. As a brand, they have become associated with a 'Palm Springs/Resort lifestyle'. Bold graphic prints and colour are an integral part of their brand identity and they are also known for making great fitting pants. Trina Turk produces women's contemporary sportswear and women's swimwear, which is licensed by Apparel Ventures. They have an amount of men's wear that they sell through their own retail stores but do not keep it as stocked as the women's wear. Turk currently has three retail store locations with plans for an additional two stores in the near future. Their lifestyle products include signature scented candles, pillows and vintage furniture upholstered in their signature prints. New product lines upcoming are a licensed gift collection that will include needlepoint and embroidered pillows, rugs, coasters, guest towels, a licensed guest designer programme with the hosiery company HUE and a licensed indoor/outdoor upholstery fabric collection with Schumacher which will be to the trade only and sold thru Schumacher showrooms. Their target customers are 25–50-year-old women with 30–45 year olds being their core customer. Turk believes that her customer is more about attitude than an age. The price point that Turk sells at is lower than many other designer labels and is therefore more affordable. They also have customer brand loyalty, which they have worked at through an excellent product and good customer service. Turk launched her website in 2003 which is operated by OneStop.com. They receive between 160 and 250 orders per week at present and the average order is \$238 and contains an average of 1.5 units. Their website gets an average 12,000 visitors per week and volume is fairly steady throughout the year as they are not a highly seasonal design product. Increased technology has improved Turks sales because of the Internet and has increased their customer base. They have been able to reach customers in all areas of the USA that would not normally have had access to Trina Turk's clothes.

Her collections are merchandised on the designer collection floor in major upscale department stores like Nordstrom, Neiman Marcus and Bloomingdales as well as in selected locations of Lord and Taylor, Saks and Macy's. Turks main competitors are Theory, Diane Von Furstenberg, Nanette Lepore, Rebecca Taylor,

Milly, Vince, Catherine Malandrino, Alice and Olivia, Tory Burch and BCBG. Store buyers will buy from established brands and Turk's 13-year record portrays her as a proven entity especially in this current economic climate. Companies know that she will ship on time that the quality is going to be good. The price point that Turk sells at is lower than many other designer labels and is therefore a more affordable product. They also have customer loyalty, which they have worked at through an excellent product and good customer service. The biggest percentage of their profit is lost in department store arrangements. With more of their own retail stores, they have more control over their own destiny. Although the setup of retail stores is costly, Turk is using both the stores and the Internet to attract more customers. When department stores are struggling and their sales are bad, it affects Trina Turk as they are just one of the long lists of brands that the store represents. In house, Turk feels that they give a real customer experience and they are able to sell their brand more efficiently. The margin agreement that Turk has to take out with the department stores also works to her disadvantage. If the garments do not sell through at a certain rate, then Trina Turk either needs to take it back or make a loss on a newly agreed price.

1.3.4.1 Domestic Versus Offshore Production

Turk uses domestic production for control and the ability to oversee the production process. She sees this as an advantage over many of her competitors as her ability to re-cut or re-sample a garment at short notice is a distinct advantage. Lead times for her production orders that are placed overseas always causes Turk concern, especially in today's economic climate. She feels that she cannot change her orders if things are not going well and that things are out of her control until the garments arrive at her warehouse. Thirty-thirty-five percent of their production is made in China and sixty-five to seventy percent is made in California. More complicated and detailed designs as well as sweaters are made in China as the labour content is high and would be cost prohibitive to produce in the USA. Turk commented that the market is working—only high-price point garments will continue to be produced domestically or low-work content, compounding skill loss. The fabric that Trina Turk uses comes from all over the world from China and Korea to Turkey and Italy. Turk pointed out that because of the exchange rates with European companies, this often affects her ability to buy fabric and get them imported. The tariff on imported woollen fabrics, which is thirty-two percent, Turk said, 'is out of date'. It was initially put into place to protect the domestic industry but there is very little if any left. All of the USA production is done in California allowing for a hands-on approach with the production. Their samples are made in-house but Turk works closely with the manufacturers on product development to smooth out any potential production issues. This is not possible with the offshore manufacturers that Turk uses without continual visits to the factory location, which would be both costly and time-consuming. Turk mentioned that the ability to find factories that make the quality of work that she is looking for is difficult. Only a handful of companies

produce good quality work in L.A.'s San Gabriel area. She commented that contractors could be trained to produce good quality work. Contrary to other comments made, she feels that quality is reduced because of domestic production. Turk sees her main advantage over her competitors is the fact that she produces domestically. Her ability to make changes last minute whether it be to the design or the fabric or to cut extra of a garment that is selling well is something that she would not be able to do if dealing with offshore producers. Lead times are another reason for domestic production. Orders have to be placed up to 6 months in advance, but this does not necessarily mean that the order will be delivered on time. The lack of skilled labour reflects the quality of some of the manufacturing units based in the Los Angeles area. Only a handful of manufacturers can produce the quality of work that Turk requires and suggested that contractors could be trained to produce better quality goods. Turks customers know that when they purchase a garment that carries the 'Trina Turk' brand label that they are going to get a good quality product at a price that is slightly more affordable than other designer labels.

1.3.5 Case Study 5: Green 3 Apparel

Green 3 is a design, marketing and distribution company which contract sources environmentally friendly apparel, made in the USA. The founding partners of Green 3 have a combined 40 plus years of apparel experience with multi-billion dollar global brands such as Osh Kosh B'gosh. Having worked for companies that constantly outsourced, Jim Martin and his partners wanted to manufacture in the USA. They target upper-end stores and produce moderate to higher price points. Their core products are an assortment of woman's knit shirts with original prints. Green 3 also do all of their own artwork in-house and have highly skilled artists. Their shirts retail in most locations from \$32 to \$48 dollars. Green 3's customer base is better-end specialty store, and moderate to better catalogues.

Their product is 100% 'green' from fibre, through dye, screen, wash and finish. They also use domestic production so their 'Made in the USA' label is also a strong selling point. They therefore target themselves in a patriotic and Eco-friendly way. Their primary business is wholesale, although they do sell some of their items directly to the consumer via their website. Green 3 competitors are actually very limited, owner Martin commented. It is currently very difficult to market any company as completely 'green' unless they use eco-friendly fabrics, dyes and finishes, as does Green 3. The larger a company gets, the more difficult it is to achieve. Their niche is that they are able to service the catalogue industry as a 'full package contract product development' house. Meaning that they can be 'your' one stop for developing, executing and delivering product with very minimal input from the customer. They are finding very few competitors that can do this.

They knew at the outset that they were going to be costlier than products that were imported but they hoped that people would be patriotic like themselves and buy 'Made in the USA' products that are eco-friendly. The sales volume has grown

approximately 12-fold in 3 years, which is better than they could ever have expected in the current climate. Green 3 is both parties first experience of entrepreneurship, with a network of approximately 300 specialty stores coast to coast, and a rapidly expanding base of catalogue customers. They market their company through international trade shows in various locations across the USA.

The combined experience of the partners allows the company to have executive-level experience in a small company, but who understand big business. Their ability to produce garments quickly and have short lead times gives Green 3 an advantage over any of their potential competitors. The prints that are used on their garments are done in-house which is also a distinct advantage.

1.3.5.1 Domestic Versus Offshore Production

Producing domestically greatly reduces delivery problems and allows for a more hands-on approach with the quality of the product). Although fuel costs make it costly to transport products around the world and within the USA, Martin thinks that there are several factors that will affect where companies source their manufacturing. The things that he thinks will come into play are as follows:

- i. Continued depression of product prices with consumers driving down prices by going to lower cost stores;
- ii. Retailers are lowering the bar to remain competitive. Wal-Mart and Kohl's are passing savings on to the consumer less and less. The only way to remain competitive is to make garments of lesser quality. Also, third world countries producing lower quality products and lowering garment pricing;
- iii. Retail price point and the weakening dollar.

'Niche market products will continue to be produced domestically because of small runs that make it cost effective', Martin said. Like other companies that have been questioned, owner Jim Martin commented that it is difficult to find people that want to work in the manufacturing industry. He feels that there is a lack of skilled labour but there are different factors that he attributes to this such as their location in North Carolina, the pay that machinists make, although it is not substandard, and the ability to develop a skilled labour force. The ability to hold on to machinists is a problem that Martin thinks contributes to quality issues. As employees are always looking for a better job, manufacturers have a high turnover of employees and the ability to develop a skilled labour force is difficult.

Green 3 is an eco-friendly domestic manufacturer. Their major selling point is that they use eco-friendly cotton to make their shirts as well as eco-friendly dyes and finishes on their garments, which is something that their customers are looking for. The company produces domestically not only to support the local economy but also to protect the environment. The ability to produce good quality products and not have to deal with lead times is the main reason for the owners to produce domestically as well as not flying garments halfway around the world.

1.4 Analysis of Case Studies

The five companies used for the case studies all use domestic production although not all exclusively. They each produce garments that have a low percentage change in imports. Each of the companies conveyed that some of their main reasons for using domestic production are as follows:

- i. Made in the USA.
- ii. Short lead times,
- iii. Achievement of quality standards,
- iv. Brand loyalty,
- v. Small order quantities,
- vi. Loss of skill base and
- vii. Quick response.

The companies did express a concern about their ability to compete with offshore producers, but because of their customer loyalty to their brand they were for the most part able to sustain their price points. Several of the companies expressed concerns about the cost of transportation when deciding on where to get their products produced. At the time of this research, gas prices in the USA had reached an all-time high and all forms of transportation costs had increased. The ability to oversee their production and have an amount of control over their products quality was high on their list of priorities when considering where to get their garments produced. Only Trina Turk expressed a concern that manufacturers in the USA did not necessarily produce good quality products. She is, however, located on the West Coast and the other four companies are based in the North Eastern part of the USA, which historically was a major location for the clothing industry. Both Trina Turk and Lela Rose produce their knitted sweaters offshore due to the fact that it would be cost prohibitive to produce domestically. All of the companies expressed a concern over the lack of skilled labour, and with the constant closing of garment production facilities, skilled workers are now moving to other jobs and industries which is leaving a shortfall in quality skilled labour that is available. The ability to find skilled labour is something that affects each of the companies. As manufacturers are constantly closing and production is moving offshore, machinists and other skilled workers are finding employment in other areas, which often pays more. This has a knock-on effect when companies are looking for skilled machinists as they have to offer a higher wage to make the job attractive. This then of course has an effect on the cost of the garment. The company then has to decide to either reduce their profit margin in order to compete with their competitors or to promote the product as a more exclusive and better quality piece. Only Tyndale owns their own factories and has a product development team to work on the production of new and established designs. The other four companies work with local manufacturers for their production. They work closely with the product development teams which advise on machinery and cost-efficient production techniques where needed to ensure a smooth production process. Each of the companies questioned has an exclusive edge to their product type. Whether it is designer branding, eco-friendly or purely good product reputation, they are each known for something that is not available from every other garment manufacturer. Because of their exclusivity this, in turn, does lead to smaller order quantities, which can impact where their garments are produced. This affects two of the companies in particular: Green 3 Apparel and 3fe, their quantities being too small to place orders overseas. Also, Green 3 produces in the USA because of the effect that transporting garments around the world has upon the environment. The other three have the ability to produce either domestically or offshore through their order size but choose not to for patriotic reasons and for some, moral standing. They all produce in the USA due mainly to the design elements in their pieces and the ability to monitor their products by working closely with the factories that produce them. Increased technology has improved each of the five companies' ability to provide better customer service when customers are placing orders or their ability to sell their products to customers in areas that they would not usually be able.

1.5 Theory Building for a Domestic and Balanced Sourcing Model

From the research, it became apparent that small privately owned companies were the major users of domestic manufacturing. They are able to remain competitive through their product type and the size of their company. With fewer people in control, they are able to make decisions easier as they do not have to keep multiple shareholders happy. Using domestic production they are able to make quick changes, control the quality of their product and have a quick turnaround. The research showed that for the most part companies that still source domestically and work with garments that have a low percentage change in imports are niche market producers. Porter suggests that a threat of substitute products could be a problem for the survival of companies, but an ability to have a unique product keeps the threats lower (Porter 1998). Niche market products appear to be able to withstand the high-cost price tag. Consumers are looking for something different and are often willing to pay a premium for it. The companies contacted for the case studies have uniqueness to their product. Whether it is an environmentally friendly fabric or exclusive design, they appear to be able to compete in the marketplace without their customers looking for cheaper substitutes. The companies are constantly able to quickly adapt to changes in the market and are producing products that at the moment no one else is fulfilling in this niche product area. As they are established companies, they have brand recognition and have a significant amount of customer loyalty. Rivalry within the fashion industry is prevalent. The companies that did respond were able to remain competitive due either to the uniqueness of their products or because of designer branding. They did not compete on price as each of them falls into slightly different categories to their closest competitor.

The companies are focused on their product type and customer and offer product differentiation. Differentiation provides insulation against competitive rivalry because of brand loyalty by the company's customers, therefore resulting in lower sensitivity to price (Porter 1998). In Porter's five-force model, suppliers have power over the companies that they produce for. The garment industry is classified as fragmented according to Porter, as it is an industry where there is no advantage of size in dealing with suppliers or buyers (Porter 1998). The companies contacted produce small order quantities and the supplier could therefore have a great deal of control, as the smaller orders can get pushed back when a larger order is placed. Fortunately for the companies used in this research, they have established a very good working relationship with their suppliers.

1.6 Domestic and Balanced Sourcing Model

When all of the theories and management strategies that were considered for this research had been reviewed, it highlighted a need for a new model that supported and enhanced Porter's Five Forces Model (1998). The research highlighted that previous strategies and theories have been and are being geared towards larger companies, and although it could be argued that management strategies should be able to be implemented in any size company, they did not help explain why some garment categories were resisting imports more than others and how domestic producers were remaining competitive in today's global marketplace. From the research conducted, a 'Domestic and Balanced Sourcing Model' evolved. The model presents the factors that were highlighted from the research and help to explain why smaller privately owned niche market companies are remaining competitive today and why some garments are resisting imports more than others.

The points highlighted from the research are as follows:

1. Privately owned companies.

All of the companies used for the interviews and case studies are privately owned. Being smaller and privately owned allows for greater control in the decision-making process. Time can be saved by not having to get the approval of a board of directors as the owners are the ones that make the decisions about the design and the production process. They do not have to consider a large board of shareholders and are therefore able to make decisions quickly that will suit the needs and requirements of their business.

2. Exclusive design/branding.

The companies contacted produce exclusive designs and pride themselves on good customer service, which helps give them brand identity. They also produce garments that are of very good quality and fabrics that are often perceived as luxurious. Niche market products help with designer branding as often customers are willing to pay more for something that is perceived as individual and exclusive. This was

highlighted in Porter's three generic strategies and the companies do fit into Porter's theory in relation to differentiation and focus. But it does not consider point three, which are minimum order quantities.

3. Minimum order quantities.

Due to the exclusive nature of the product, mass production is not really an option. Although two of the companies do have large enough order quantities to produce offshore, they use both domestic and offshore productions. This in turn highlighted balanced sourcing which is not considered by any of the models or concepts. Minimum orders were considered by the agile manufacturing concept but this was only for domestic production.

4. Product Control.

The ability to have a hands-on approach with the production process was of great importance to most of the companies contacted for this research. As mentioned earlier, companies expressed a concern that neither domestic nor offshore production always produced the required quality. A way to monitor this was to use domestic production facilities that were easy to reach and this allowed for quality standards to be reached and maintained.

5. Quick Response and Short Lead Times.

The companies contacted expressed that one of their main advantages over their competitors when using domestic production was their ability to monitor deliveries to ensure that their garments are delivered on time. Using domestic production allowed them to change styles quickly if something was not selling well or to re-cut a style if it was selling out.

From the Domestic and Balanced Sourcing Model (Fig. 1.1), it can be seen how the size of the company is an important aspect in a company's ability to remain competitive in a domestic Market.

Smaller privately owned companies can make decisions quicker and not have to consider anyone other than themselves as they are both the owners and the Board of Directors. It allows them to be more competitive as they are able to make decisions quicker, which in turn can often mean that they have their product in stores ahead of their competition. The exclusive designs or branding gives them a unique selling point as they acquire customer loyalty due to the quality and designs of their garments. The quality of the product also gives them an exclusive edge as customers that are willing to pay more for their clothes expect them to be well made. Their ability to source either totally domestically or use balanced sourcing allowed them the opportunity to offset more expensive production costs in the USA against cheaper labour offshore. Working closely with the factories on preproduction and quality issues gives them the quality product that they are looking for. Smaller order quantities could be seen as a disadvantage, but from the research this was not the case. The smaller order quantities allowed product differentiation, which would not

24 C. E. Harris

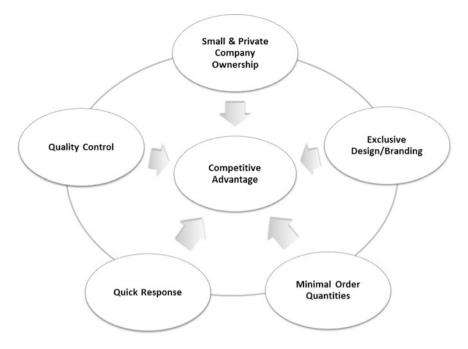


Fig. 1.1 Domestic and Balanced Sourcing Model

be achievable through mass production. Also, smaller orders allowed for a quick turnaround on a product.

Although quick response does not just mean how quickly a product can be pushed through production, the companies were able to attain a relatively quick production process of 1–2 weeks with domestic producers and 3–4 weeks with offshore. Their ability to air freight the garments, although more expensive, ensured quicker delivery times. This is really only possible due to the price point at which they sell their garments. All of the points highlighted from the research and the new model show a new way of thinking as to the reasons why some companies are able to remain competitive and produce domestically in today's market, and help explain why some garments are resisting imports more than others.

1.7 Conclusion and Further Research

A major issue that is facing companies that still wish to produce domestically is that they are running out of options to get good quality work produced. For the most part, these companies are privately owned and produce niche market products which are often more expensive. Changes in the economy could affect this sector of the industry, but due to their small size orders and their ability to make changes to

orders, they are, for the most part, in a better position than companies that place large orders months in advance. Most of the companies do not wish to use offshore production. One of their main selling points is a 'Made in the USA' label. Further investigation should be made into quick response strategies and the reduction of lead times. An in-depth look should be taken at lead times to assess if they can be reduced so that companies do not have to place orders so far in advance. The availability of production space and the time taken to ship products to and from offshore locations are often the main reasons behind lengthy lead times. Several years ago, many industries embraced Quick Response Strategies (QRS), but with the movement to offshore producers, this appears to no longer be a favoured option. There may come a time in the future when the reintroduction of QRS would help alleviate the current lengthy lead times and the problems associated with them. Companies may choose to place their orders domestically to be able to have a quick turnaround without long lead times. From the research, several points were highlighted as key factors affecting competitiveness. These points could be used for future research, as they are important to the survival of the company's studied. The points were as follows:

- Small order quantities,
- Branding,
- · Quick Response,
- Short Lead Times,
- · Loss of skill base and
- Protectionism during the global economic slowdown.

Further research should be carried out through a 5- year longitudinal study to assess if the companies contacted for this research are still sourcing domestically and if not is it due to the fact that

- 1. They are no longer able to compete on price;
- 2. There is no longer a skilled workforce available.

References

Bailey-Todd A (2008) Evolution of the Los Angeles county apparel industry. J Fashion Mark Manag 12(2):260–276

Bonacich E (1998) Organizing immigrant workers in Los Angeles apparel industry. J World Syst Res 4:10-19

Crean S (2002) Baked in New York, mimeo. Industrial Retention Network, New York

Dana LP, Hamilton RT (2007) Evaluating offshore and domestic production in the apparel industry. J Int Entrepreneurship 5:47–63

Deutsche K, Kern S (2007) Free Trade to Deep Integration. Available at: http://www.dbresearch.com/PROD/DBR_INTERNET_EN-PROD/PROD000000000210017.pdf. Accessed 27 June 2007

Doeringer P, Carson S (2006) Can fast fashion save the US apparel industry? Soc Econ Rev 4 (3):353–377

26 C. E. Harris

Fogarty A (2006) Domestic vs. offshore manufacturing. Fact or fiction that offshore equals cheaper?, Editorial, J Fashion Mark Manag 10(2)

- Foo LJ, Bas NF (2003) Free trade's looming threat to the worlds garment workers. Available at: http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1000. Accessed 23 July 2005
- Grunsven L, Smakman R (2001) Competitive adjustment and advancement in global commodity chain: 1, firm's strategies and trajectories in the East Asian apparel industry. Singap J Trop Geogr 22(2):173–188
- Halevi G (1999) Restructuring the Manufacturing Process. Applying the Matrix Method. New York, St. Lucie Press
- Jones RM (2006) The apparel industry, 2nd edn. Blackwell Science, Oxford
- Kilduff P (2005) Patterns of strategic adjustment in the US textile and apparel industries since 1979. J Fashion Mark Manag 9(2):180–194
- Kumar S, Arbi AS (2008) Outsourcing strategies for apparel manufacture: a case study. J Manuf Tech Manag 19(1):73–91
- Lowson RH (2003) The nature of an operation strategy: combining strategic decisions from the resource-based and market-driven viewpoint. Manag Decis 41(6):538–549
- Oh H, Moon WS (2003) What is happening to the US textile industry? Reflections on NAFTA and US corporate strategies. J Fashion Mark Manag 7(2):119–137
- Pellicelli M (2006) The new economics of outsourcing: empirical evidence from Italian textile, apparel industry. Serv Ind J 25(5):689-708
- Porter ME (1998) Competitive strategies: techniques for analyzing industries and competitors. Free Press, New York
- Scott A (2002) Competitive dynamics of Los Angeles county's clothing industry: the widening global connection and its local ramifications. Urban Stud 39(8):1287–1306
- Standard and Poor's (2004) Textiles industry survey. Monthly Review, January
- Stratton R (2004) Integrating lean and agile thinking: concepts in support of practice. National Textile Center, Research Briefs, June, 2002
- Suri R (1998) Quick response manufacturing. Productivity Press, Oregon, Portland
- US Department of Labor (2016) Quarterly Census of employment and wages. Bureau of Labor Statistics. Available at: www.bls.gov/cew/home.htm. Accessed 15th June 2016
- USITC (2014) US International Trade Commission, Assessment of the Economic Effects on the United States of China's Accession to the WTO
- Warburton, RDH (2004) Domestic manufacturing, When is it competitive? Available at: http://www.juststyle.com/articleprint.aspx?ID=92827. Accessed 22nd June 2004
- Warburton RDH, Stratton R (2004) Questioning the relentless shift to offshore manufacturing. Supply Chain Management An International Journal 7(2):101–108
- Winger RM (1999) Apparel and show biz share centre stage in Los Angeles County. Apparel Industry 60(3):18–23

Chapter 2 Product Development Process of an International Luxury Fashion Brand: Implications to Hong Kong Fashion Trading and Manufacturing Companies

Yi-Ning Fung and Tsan-Ming Choi

Abstract In fashion supply chains, product development is a crucial and sophisticated process. This is especially true for the luxury fashion brands as they aim to achieve the best quality, in both choices of materials and management of the production process. In this paper, we report a case study on the product development process of a luxury fashion brand (Brand A). Based on the real case's scenario, we explore the whole product development process, from material sourcing, sample development, to materials inspection, and management. We compare Brand A's product development process with the commonly seen product development process in fashion trading companies in Hong Kong. Implications on how Hong Kong fashion trading and manufacturing companies can enhance their operations are also discussed.

Keywords Product development • Fashion industry • Supply chain management

2.1 Introduction

In the fashion industry, the product development process is a highly complex and sophisticated one. On one hand, driven by the fast fashion business trend (Choi 2013), business efficiency is always an important dimension of product development. On the other hand, product and design qualities are both regarded as critical

Y. -N. Fung (⋈) · T. -M. Choi

Institute of Textiles and Clothing, The Hong Kong Polytechnic University,

Hung Hom, Kowloon, Hong Kong e-mail: yiningfung@hotmail.com

T.-M. Choi

e-mail: jason.choi@polyu.edu.hk

[©] Springer Nature Singapore Pte Ltd. 2018

elements in fashion product development. As such, a proper product development process for fashion requires a balance between cost saving and quality.

Traditionally, the fashion industry in Asia, like Mainland China and Hong Kong (MCHK), is famous for cost efficiency. However, with the development of Hong Kong and Mainland China, operations costs (including the labor cost, land cost, energy cost, etc.) are getting higher and higher. Product development costs of fashion companies in MCHK are high and hence the cost advantage no longer exists. As a result, fashion manufacturers and traders in Hong Kong should consider new measures to develop their operations and sustain their competitive advantage.

In this paper, by reporting a real case study on the product development process in an international luxury fashion brand (Brand A¹), we try to shed some light on how Hong Kong fashion manufacturers and traders may develop their operations with reference to the high- quality product model implemented in Brand A. In addition, this paper provides empirical details regarding the product development process of a well-established luxury brand. In particular, it serves as an important reference to researchers who are interested in conducting further research on product development.

This paper is organized as follows. Section 2.1 introduces the topic. Section 2.2 reviews the literature. Section 2.3 presents the product development process in Brand A. Section 2.4 introduces the common features of the product development process in Hong Kong. Section 2.5 presents a comparison between the product development processes in Hong Kong and in Brand A. Section 2.6 discusses the implications. Section 2.7 concludes this paper with a discussion on future research.

2.2 Literature Review

Product development process is an important topic in fashion business. In the following, we concisely review some related studies.

For fashion product development, several studies are devoted to making improvement in the respective process. For example, Lau et al. (2006) develop a novel fuzzy expert system for fabric specimen forecasting. Their proposed system can facilitate the fashion product development process with the incorporation of sensory judgments during fabric selection. The authors report that the forecasting accuracy of the expert system is over 80%. Thus, the proposed expert system can effectively help fashion manufacturers and traders to identify the most appropriate fabric for product development. Goworek (2010) studies the contemporary practice in fashion product development in UK fashion retailers. The author reveals via case studies that communication skills are crucial in the product development process. In particular, the author argues that effective collaboration among various participants is important during fashion product development. This is especially true if the

¹Brand A is an artificial name for a real brand.

fashion product development process has to include the latest information on fashion trends and fashion market conditions. Caniato et al. (2014) study the integration of new product development process and international fashion retailing. The authors argue that international fashion retailing can help collect data regarding foreign countries' requirements on new product development. Via conducting real case studies with 13 Italian fashion companies, the authors successfully construct the framework and identify the respective variables.

As the fashion product development process also involves the use of energies and creates pollutants, recent studies have addressed these issues from the sustainability perspective. For example, Moon et al. (2013) report a case study on the product design scenarios which can effectively save energy consumption. Dissanayake and Sinha (2015) reexamine the product development process in fashion remanufacturing and propose measures which can enhance the level of sustainability.

Similar to Goworek (2010) and Caniato et al. (2014), this paper aims to examine the product development process in fashion, based on real case scenarios. However, this paper is different from all the reviewed papers in its major objective and the perspective. To be specific, this paper is similar to Campaniaris et al. (2015)² in which it relates to the topic of fashion industry's development. In particular, this paper proposes the probable direction of further development of the product development process in fashion companies in HK.

2.3 Case Study: The Product Development Process of Brand A

Brand A is a famous top luxury fashion brand with its origin in Europe. It is ranked by many popular portals as one of the top 100 brands in the world. In the following, we report the product development process of Brand A. Notice that the details of the case are learned from the senior management members of Brand A, including its executive vice president, managing director of women division, and director of women's ready to wear.

Similar to most fashion product development process in well-established brands, the process of design and product development in Brand A is very complex and sophisticated. It consists of a number of stages, which are substantially influenced by various factors. To be specific, the first stage relates to innovation with which new design ideas and fashion concepts are generated which involve the consideration of the market as well as materials sourcing (with inputs from marketing research). The new design ideas are then developed by the production team to

²Campaniaris et al. (2015) examine the industrial development of the fashion sector in Canada. The authors examine the ways for the Canadian fashion companies to evolve and keep its competitiveness by providing value adding services.

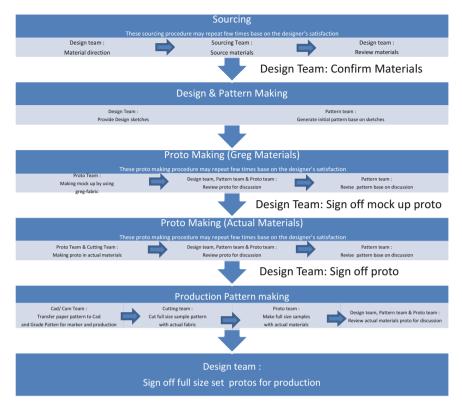


Fig. 2.1 The product development process of Brand A. Source Based on the discussion with the senior staff members of Brand A

create the respective prototype patterns and proceed to make the samples. In the following, we report the details of different stages in Brand A. Figure 2.1 shows the product development process of Brand A.

2.3.1 Materials Sourcing

At the very beginning of each season, in Brand A, the (fashion) design team will communicate with the materials sourcing team upon the fabric they look for. Then, the sourcing team will source materials from manufacturers and suppliers to provide swatches for the design team to choose from. The design team will then decide which particular fabric they are going to use in the season. Afterwards, proto yardage order will be placed and the team will prepare materials for the later stages. As a remark, in this stage, the team must make sure the materials and manufacturing processes are able to satisfy the design requirements (Carr and Pmeroy 1992).

With the support of the material team, pattern makers and proto developers will have a clear picture of what fabrics they will use. They will have a fine adjustment on the pattern and constructions according to the fabric characteristics. This step can help to make sure that the materials are in their best use and the prototypes can fully meet the design concept and requirements.

Brand A pays very high attention to the material sourcing and quality control. In particular, Brand A uses three main types of materials, namely leathers, fabrics, and silks, and they have a very tight standard of control on their usage. For other trimmings such as buckles, buttons, and tapes, they are sourced and controlled by other different departments.

As leather goods are the signature items for Brand A, the leather sourcing requirements are very demanding and the standard is very high. Not limited in the large varieties of leather: goatskin, lambskin, alligator skin, ostrich skin, Stingray skin, etc., Brand A materials sourcing team will need to source the best quality ones all round the world, for example, Bleu de France, Mississippiensis, Sikkim, Mysore, Swift, Epsom, Barenia, and Togo.

Nevertheless, based on the designer's seasonal directions, they need to communicate with nominated leather suppliers and tailor-make the desire leather finishing and effects. For instance, the muted matt finishing, holographic foil, dimpled and textured surface. This sourcing structure also applies to other materials sourcing.

2.3.2 Sample Making

Brand A has its own in-house sample making workshop which is divided into three parts, namely the pattern making area, proto making area, and the CAD/CAM cutting area. The role of each member in each area is very specific and focused. This helps make the product more sophisticated and up to the brand's world-class standards.

2.3.2.1 Pattern Making

In fashion product development, it is known that pattern makers help to take in the fashion designer's idea and creates patterns needed for producing the actual garment (Vogt 2007). According to the woven workshop manager in Brand A, the main processes in pattern making are draping, pattern making, and fitting. After receiving the sketches from designers, pattern makers will use greg-fabric to drape on the dummy and make a mock-up of the garment for the first outlook reference. Different pattern makers are specialized in particular products. For example, a pattern maker is specialized in jackets, another one for novelty tops, etc. Moreover,

each pattern maker's assistant helps him/her to chase and cut the pattern during the draping and pattern drawing process. Pattern makers need to work closely with fashion designers or the entire design department upon the style details and construction; as a result, they sometimes contribute apparel design ideas especially when one those related to technical details. This can help to facilitate the design and production process, as the final pattern will be used to manufacture the garment.

The pattern makers must be extremely experienced and precise because a small mistake can ruin the design and jeopardize the whole product development process. Furthermore, it will cost the manufacturer significant amount of money in waste materials and production time.

2.3.2.2 **Cutting**

The Brand A' pattern makers will initially create the first pattern for a particular garment idea which is used to create an initial sample of the garment. Later in the process, the pattern maker will develop a more technically accurate pattern which is closer to the production pattern. They will make a garment using the actually selected fabric. To cut the adopted fabric, special arrangement is made. There are members who are specialized in cutting fabrics (i.e., their sole job is on cutting fabrics). They will cut hand by hand and piece by piece. For the fabrics which need special care, the worker will place pieces of silk paper on top and bottom and stitch it on the fabric being cut. This can help to stabilize and minimize the reaction of the fabric and to protect it from damage and distortion.

2.3.2.3 Proto Making

In Brand A, the requirements of hiring a Sewing Machine Operator are different from the normal office staff. They pay attention to their sample making history and experience, instead of qualifications. All of them are highly skilled and have an excellent experience to work with the products and materials. In the development process, they need to work closely with designers and pattern makers, so they can interpret the pattern correctly and fulfill the design. Thus the "mock up" and prototypes are created in good craftsmanship. Sample room sewing workers in Brand A are highly respected and are working in a good environment. So, once they are hired, they stabilize and work for a long time. Thus, they are well adapted to the culture and products of Brand A.

2.3.2.4 CAD/CAM Sizing and Marker Making

In Brand A, the Pattern Graders and Marker Makers are "in-house" and work closely with the Pattern Makers. The Grading and Marker making processes are

Areas	Features	Pros	Cons
Materials sourcing	In-house support, specialized functions, top quality	Good communication, high-quality materials	High cost
Sample making	In-house functions. Specialized functions in pattern making, cutting, and proto making, etc.	The best craftsmanship is achieved	Expensive
Materials and product inspection	100% inspection of fabric	Highest quality	Percentage of usage is low (potential wastage is high), and product cost is high

Table 2.1 Features of Brand A's product development process

computerized by using the Lectra system (which is a cutting-edge technology for enhancing cutting room operations³). When the "perfect" production pattern with all the pattern pieces are completed (pattern for each part of the garment which will be used to manufacture the garment in mass production), Pattern Graders take the pattern and reduce and enlarge it into different sizes. This provides the Marker Makers with graded patterns they can use for producing the items in a range of sizes (Granger 2007).

2.3.3 Materials and Product Inspection

According to the Raw Material Manager of Brand A, each and every yard of fabric will be 100% inspected. Once a defect is found, they will place a mark as a reminder. For fabrics with more defects, they will use them in small garment parts, vice versa. In the case of print silk, they will check if all the panels can be matched. Any color dot on the print is not accepted, for example, if it is used in the front panel of the garment, it will not be used. "Our products are not expensive, they are costly!" (said by Brand A's Executive Vice President). As a reference figure, among 14,000 pieces of silk print fabric only 7500 pieces are approved. In addition, to avoid the defect on the fabric being on large panels, the usable width or percentage is far less than many other factories. These show the level of quality requirements and high materials cost in Brand A. Table 2.1 summarizes the features of Brand A's product development process, and Fig. 2.1 shows the whole product development process of Brand A.

³See: https://www.lectra.com/en/.

2.4 The Product Development Process in HK Trading and Manufacturing Companies

In Hong Kong, most of the trading companies deal with many different brands and manufacturers. They usually act as the middlemen between brands and manufacturers. For example, the Hong Kong design and product development team work closely with Mainland China manufacturers to develop prototypes, while the merchandising team negotiate on costing. After receiving all the samples and costing information, the overseas sales team will then organize buying meetings and show the prototypes to customers for selection and place orders. ⁴

2.4.1 Materials Sourcing

Hong Kong trading companies are famous in having an established sourcing network and being price cautious, the sourcing teams usually have a pool of suppliers which can supply different materials. Sourcing teams work closely with designers and merchandisers, based on the customers' target price range, they will source available materials which are similar to designer's request and at the same time being favorable to costing and productions. Sometimes, to cope with the low price point, designers are not shown with materials they desire, instead, they need to compromise in the design and styles.

Moreover, some trading companies will rely on the manufacturers to source materials for them and pass to designers. Manufacturers can source materials from suppliers with good relations, e.g., those who have arranged bulk production before. This helps to facilitate the production efficiency and receive a good bargain. However, the suppliers may be located far away and the choice of suppliers is also limited.

2.4.2 Sample Making

Unlike Brand A, Hong Kong trading companies usually do not have in-house workshops/sample rooms. They rely on manufacturers to make prototypes. Designers/product developers will allocate styles to different factories based on their strengths and locations.

⁴The scenario reported in Sect. 2.4 is based on the first author's substantial working experience in the related companies.

2.4.2.1 Pattern Making and Cutting

Pattern technicians from manufacturers are not specified in particular products. They are required to make patterns on all products which include pants, tops, jackets, etc. As they are located in the factories, they do not have much chance to work directly with the designers. They need to interpret the style based on the design sketches and specification and communicate with product developers via e-mails and phone calls. In addition, they will have less contribution in design details and construction.

This kind of remote communication involves loads of back and forward e-mails which create undesirable misinterpretation. As a result, the derived samples may not match the designer's request and there is a need to remake few protos before it can show to customers. This will elongate the development process and increase the development cost.

In MCHK, pattern technicians usually work alone. They need to cut the fabric and pattern by themselves. Mostly they will not be specialized in only one product or one job. It is because if doing so, companies need to hire more pattern technicians, which will bring up the operations cost. Besides, apart from proto patterns, they also need to work on production patterns. Owing to this reason, the pattern makers may be overloaded and may not take careful considerations upon the materials characteristics. They may sometimes damage or distort the fabrics during cutting and thus affect the final "output". When the pattern graders have finished the sizing, they will proceed to prepare the full-size shipment samples. Designers will have adjustments about the size specification after reviewing all the shipment samples and remake all the garments. This will also slow down the whole process and may delay the delivery schedule and on-shelf date.

2.4.2.2 Proto Making

Compared with Brand A, status of Sewing Machine Operators in MCHK manufacturers are much lower. In some small factories, they will hire Sewing Machine Operators who do not have much experience in sewing operations. Moreover, the sewing technicians mainly come from production. They used to deal with bulk production which is more routine. They make the same product over and over again and do not have much experience or understanding of the whole product development process.

Besides, workers in China usually work far away from home and they can only back home in Chinese New Year period. Usually, they will stay at home for a month and may even go to find a job in different geographical areas or industries. They do not tend to stick to the same company or industry, and their consideration focuses mainly on salary and living environments. If the working environment is not in a good condition and they can find a company with a higher pay, many workers will switch to another or even change his job nature totally, e.g., some

Areas	Features	Pros	Cons
Materials sourcing	Rely on factories to help with sourcing. Designers may not see the materials when they design the products	Good networks based on relationship. Highly competitive sourcing bargain (low cost)	Relationship goes first which may limit the supplier choices. Designers have to compromise in their design and styles under the constraint of materials
Sample making	No in-house functions; Nonspecialized functions in pattern making, cutting, and proto making, etc.	Low staffing cost	Lack of communication among teams. Technicians are not specialized
Materials and product inspection	Staff members may not be well trained. Statistical sampling and inspection of fabric	Low operations cost of sampling and inspection. Low product cost. Percentage of usage is high	Quality problems may arise

Table 2.2 Features of product development process with Hong Kong fashion trading and manufacturing firms

workers will switch from garment manufacturing to electronic manufacturing. In this case, Sewing Machine Operators usually have little commitment to the company. They are not well trained and hence they do not well adapt to the company's product development requirements. This makes the standard of product quality varies from time to time, and it is sometimes hard to produce samples up to the designers' satisfaction. This leads to a serious quality problem. Table 2.2 shows a summary of the common features found in most Hong Kong fashion trading and manufacturing companies.

2.5 Comparison and Discussions

From the above discussion, we can see that Brand A not only focuses on the creativity and design, but it also pays high attention and spends heavily on product development. There is no doubt that they think product development is a very important process which brings the design concept to real product and is a key to make sure the product meets the design concept and also the brand's standard and requirements.

Compared to the scenario of Brand A, just on the contrary, not many Hong Kong manufacturing and trading companies are willing to invest heavily in product development. After the designers/product developers have finished the sketches and technical pack, merchandisers will directly pass the information to factories and let the factories do the proto work without getting much involvement of designers/

	Brand A	Hong Kong fashion trading and manufacturing firms		
Process management and leader	Brand managed and initiated	Trader managed		
Investment	Heavy	Limited		
Cost	Less tight budget	Very tight budget		
Procedures	Highly specialized and precise	Less specialized and precise		
Design	Designers well participate in the process	Designers may not be involved and may not get what they want		

Table 2.3 Comparisons between Product Development Processes in Brand A and the Ones Managed by Hong Kong Fashion Trading and Manufacturing Firms

developers. So, sometimes the designers may not get what they want even until the very end of development stage.

The main reason that brings to this difference upon the product development role, is the business nature. Often, the high-end luxury brands' garments focus on the high price, and fashion-forward consumer goods in high quality with a recognized brand name (i.e., brand managed and initiated). The high price consumer goods generate a high revenue. To stimulate the brand image and reinforce positioning of high fashion, luxury brands are willing to place high investment on product development, just like Brand A. However, for fashion companies in HK, the companies are traders and they usually neither own the brands nor the factories; they act as the middlemen between brands and manufacturers (i.e. trader managed). Thus, brand designers need to work with the trading companies in Hong Kong, meanwhile, the merchandisers in Hong Kong communicate with factories in China for the protos and production. Based on this kind of business nature, product development is arranged by different parties and in different nations without specification. Thus, style and quality are not to the same standard as Brand A.

In addition, trading in Hong Kong mainly focuses on the private labels which are sold in department stores and discount stores overseas. Design teams working in these department stores and discount stores such as J.C. Penny and Macy's are responsible for creating their store's own private label/brands. Due to the relatively low-profit margin of the consumer goods in department stores and discount stores, to make profit, the order quantity is huge. In addition, control of product target price and operations cost is very critical. For the design teams, the styles and product quality are highly constrained by the low target price. Besides, to control the operations cost, the department stores and discount stores usually do not have their own product development teams and the product development process is usually shared by the Hong Kong merchandising and trading firms, and the production team in factories in places like the mainland China. To summarize, a table of comparison is added as follows (Table 2.3).

2.6 Implications

From the previous sections, we have already discussed the product development process in Brand A and also the commonly seen situation in the Hong Kong fashion traders and manufacturers. In the following, we first summarize some key challenges faced by the Hong Kong traders and manufacturers. Then, we explore how the findings from the case study on Brand A as well as the literature can help.

2.6.1 Challenges

From our previous analysis, it is found that in the product development process, in many cases, relationship goes first in materials sourcing which directly leads to a limitation of supplier choices. As a result, designers have to compromise in their design and styles under the tight constraints of materials. In addition, for sampling making, two major problems appear which include the lack of communication among teams, and the lack of specialization of technicians. In materials and product inspection, we see that quality problems usually arise. To overcome these challenges commonly seen in the product development process in Hong Kong trading and manufacturing firms, some new measures have to be taken.

2.6.2 Proposed Measures

Pinpointing the challenges faced by the Hong Kong trading companies, we propose the measures to cope with them by making reference to Brand A's case, as well as others.

2.6.2.1 From Brand A's Case

1. Quality evolution: As the requirement of quality fashion goods from consumers are getting higher from time to time, there is a quality uplifting evolution even for the non-luxury sectors. In fact, the retail buying positions in today's marketplace are changing, so that the quality of product is important. Every fashion company handles product development differently, but many fashion brands/ retailers expect product developers to have good knowledge of the product development process and be able to work with designers and manufacturers to produce private-label goods for their retail brand/stores (Guthrie and Regni 2006). Nowadays, fashion merchandising companies in the mainland China have taken up the job of Hong Kong merchandising companies in arranging the production and bulk shipment. Factories' production team can somehow take

- over the merchandising function of Hong Kong trading firms. To deal with this challenge and stay competitive, Hong Kong trading companies cannot only act as a middleman and focus in offering merchandising services. They need to enhance the creative and product development service provide to customers. Following the approach of Brand A, Hong Kong fashion trading companies should treasure more on quality. They can make use of Hong Kong designers' global fashion exposure and high fashion sense, and invest more in product development process. This would provide a higher quality service to customers.
- 2. In-House Facilities: Brand A is successful partially because of its fully vertically integrated process, with all in-house supports, for product development. Following its model, Hong Kong trading companies can consider set up an in-house sample room in Hong Kong. Instead of having manufacturers to make the protos, Hong Kong companies can do the same. Similar to the Brand A, Hong Kong trading companies can develop a team of talented and well-experienced pattern technicians and sewing operators for product development. With Hong Kong's well-developed market, education system and city's environment, good working condition is easily achievable and the inflow of well-trained skillful works is also present. It is possible that Hong Kong trading and manufacturing companies can support these critical and value-adding services for their clients. This, together with Hong Kong's locational advantage, can further enhance the niche of Hong Kong fashion trading and manufacturing companies.

2.6.2.2 Other Measures

- 1. Value-adding services: As Hong Kong is one of the world-class international metropolitans, Hong Kong designers/product developers' "fashion knowledge and abilities" are strong. Even though it is a fact that world-class fashion designers and brands are located mainly in Europe, Hong Kong still has its advantages. For example, Hong Kong designers/product developers have the locational advantage in which Hong Kong is closer to the manufacturer base of most brands in Asia (including but not limited to the mainland China). As a result, visiting Asian factories frequently is convenient and Hong Kong trading and manufacturing companies can easily communicate and check with Asian manufactures upon product construction and requirements. By closely minoring the product development process, fewer mistakes and remakes are needed. This can speed up the whole product development time to meet the ever-changing fashion works, and also saves the product development cost. Thus, there is no doubt that Hong Kong fashion designers/product developers have a niche.
- 2. Technologies: Hong Kong is a developed market with good technological infrastructures. For example, information technologies and networks are well established in Hong Kong. Financial services, business consultancy and legal services, logistics services are all well supported by information technologies.

For fashion companies, they should also explore the opportunity to employ information technologies to enhance the product development services that they can offer to fashion brands (Papahristou and Bilalis 2016). For example, Hong Kong fashion trading and manufacturing companies can establish themselves as the facilitators for product development and beyond, i.e., be a fashion supply chain coordinator. This act can provide additional values to the clients (i.e., the fashion brands) as well as the partners (i.e., the factories located in Asia). The Canadian model is a good reference for Hong Kong (Campaniaris et al. 2015).

2.7 Conclusion

To cope with the changing fashion retail and production environments, trading, and manufacturing companies in the Hong Kong fashion industry need to seek rooms for improvement. In this paper, we have first examined the product development process in a world-class international luxury fashion brand (Brand A). Then, we have discussed the common industrial features of Hong Kong fashion trading and manufacturing firms. By comparing between them, we have identified some critical differences. Then, inspired by the findings in Brand A's product development process and the literature's findings, we have further proposed several measures which may further enhance the competitiveness of Hong Kong fashion trading and manufacturing companies. In particular, treasuring quality of products and services, and providing more value-added services are both pertinent measures.

For future research, to try to generalize the findings, some more specific cases on product development processes of both international fashion brands and Hong Kong- based fashion trading and manufacturing firms of different brand levels and tiers should be conducted. In addition, in our discussion, even though we argue that Hong Kong fashion trading and manufacturing companies have a locational advantage and could act as a supply chain coordinator, from a systems perspective, how significant this role is still unclear. It deserves deeper and further analysis in the future.

Acknowledgements This paper is an extended version of a project report written by the first author. The authors sincerely thank the editor Linda Chow for her invitation and helpful comments on this paper. They also thank the suggestions by two anonymous reviewers.

References

Campaniaris C, Murray R, Hayes S, Jeffrey M (2015) The development of an apparel industry business model for Canada. J Fashion Mark Manage 19(3):328–342

Caniato F, Caridi M, Moretto A, Sianesi A, Spina G (2014) Integrating international fashion retail into new product development. Int J Prod Econ 147:294–306

Carr H, Pmeroy J (1992) Fashion design and product development. Blackwell, Oxford Choi TM (ed) (2013) Fast fashion systems. CRC Press

Dissanayake G, Sinha P (2015) An examination of the product development process for fashion remanufacturing. Resour Conserv Recycl 104:94–102

Goworek H (2010) An investigation into product development processes for UK fashion retailers. J Fashion Mark Manage 14(4):648–662

Granger M (2007) Fashion: the industry and its careers. Fairchild Publications, New York

Guthrie KM, Regni RJ (2006) Perry's department store: a product development simulation. Fairchild Publications. New York

Lau TW, Hui PCL, Ng FSF, Chan KCC (2006) A new fuzzy approach to improve fashion product development. Comput Ind 57:82–92

Moon KKL, Youn C, Chang JMT, Yeung AWH (2013) Product design scenarios for energy saving: a case study of fashion apparel. Int J Prod Econ 146:392–401

Papahristou E, Bilalis N (2016) A new sustainable product development model in apparel based on 3D technologies for virtual proper fit. In: Setchi et al (eds) Sustainable design and manufacturing, pp 85–95. Springer, Berlin

Vogt P (2007) Career opportunities in the fashion industry, 2nd edn. Ferguson, New York

Chapter 3 Application of Laser Technology in Fashion Industry

Guoxiang Yuan, Zhuoming Chen and Domenico Luzzi

Abstract With the integration of design, technology, and material, some new technologies were applied in fashion industry during manufacturing process. As a contactless processing, laser technology is being applied to in diverse areas for garment production and surface treatment due to its advantages such as no physical contact, no water, dyestuff, and solvents applied, high degree of automation, and fast and precise treatment. In this chapter, the application of laser technology in fashion industry were explored including laser cutting, laser engraving, fabric fault detection, objective evaluation of seam pucker, body scanning, welded garment production, bar code scanning, metal detection, garment counting, and antimicrobial finishes. The application of laser processing opens up new possibilities for apparel manufacture and surface embellishment for fashion design without involving water, dyestuff, and solvents. It is believed that this noncontact technology and environmentally friendly treatment process could appeal to the demands fashion industry sustainably as well as to facilitate the quick responses to market.

Keywords Laser technology • Fashion • Application • Production • Surface treatment

G. Yuan (⊠)

College of Fashion and Design, Donghua University, Shanghai, China e-mail: vogue@126.com

G. Yuar

Key Laboratory of Clothing Design and Technology, Donghua University, Ministry of Education, Shanghai, China

Z. Chen

School of Fashion Technology, Shanghai University of Engineering Science, Shanghai, China

e-mail: chenzhuoming178041@163.com

D. Luzzi

SEI Laser Italy (Hangzhou Branch), Hangzhou, China

e-mail: domenico.luzzi@gmail.com

© Springer Nature Singapore Pte Ltd. 2018 P. -S. Chow et al. (eds.), *Contemporary Case Studies on Fashion Production, Marketing and Operations*, Springer Series in Fashion Business, G. Yuan et al.

3.1 Introduction

The word "laser" is an acronym for light amplification by stimulated emission of radiation (Silfvast 2004). Laser technology treatment gradually has been widely used in the diverse industry for textile and apparel production since it was developed in 1960 (Maiman 1960, 1969). It can be precisely placed on a needed surface and has revolutionized related fields of science and technology. In the present industry, laser is a sustainable and indispensable tool for a variety of manufacturing processes, such as material removal, surface heating, bending, melting, alloying, cladding, texturing, roughening, marking, cleaning, shock hardening, and stereolithography and layered manufacturing processes (Roux 1989; Steen and Mazumder 1998; Wilson and Hawkes 1987; Yuan et al. 2017b).

One of the most important applications of lasers is for material treatment in a wide variety of commercial and scientific applications which can be achieved by different laser machines (Silfvast 2004), such as CO₂ laser (carbon dioxide laser), Nd: YAG (neodymium-doped yttrium aluminium garnet) lasers, and diodes lasers (Brichtová 2007). Different laser machines were produced by companies such as SEI, GFK, Laser System Technology (LST), Tonello, and Technoblast. In textile and apparel manufacture, the CO₂ gas laser has gained increasing interest and was applied widely to create designs (Jiang et al. 2016; Martín et al. 2003; Ondogan et al. 2005; Ozguney 2007; Yuan et al. 2017a). Owing to the unique characteristics such as high processing speed, low waste, precision of operation, and high-quality of treated products, the laser has great potential in different application areas of manufacture and design in the fashion industry which will be introduced in this chapter.

3.2 Laser Technology

3.2.1 Types of Lasing Media

There are different types of Lasers for the applications in research, industrial, commercial application, and medical uses. All the classifications are identified by the kind of lasing media involved including solid state, gas, liquid, and semiconductor.

- Solid state laser: include all optically pumped lasers composed of a crystal and
 an impurity dopant in which the gain medium is a solid at room temperature. In
 these lasers, glass or crystalline materials are used such as the ruby laser and
 neodymium-YAG (yttrium aluminum garnet) lasers.
- Gas laser: is a laser in which an electric current is discharged through a gas inside the laser medium to result in the emission of light. In gas lasers, the laser medium is in the gaseous state. Examples: CO₂, HeNe, Ar, XeCl, excimer lasers. Gas lasers are used in applications that require laser light with very high beam quality and long coherence lengths.

- Liquid laser: is a laser that uses the liquid as laser medium. A dye laser is a kind
 of liquid laser which use complex organic dyes in liquid solution as lasing media
 and are usually pumped by a flash lamp or another laser. They can be operated
 either as pulsed or CW and are wavelength tunable. They tend, however, to be
 complex systems with demanding maintenance.
- Semiconductor laser: as known as laser diodes, is the most common laser that
 constructed with small electronic devices with low power. This kind of laser is
 applied for the writing source in some laser printers or compact disk players, as
 well as some medical procedures.

3.2.2 Laser Classification Based on Hazards

Since the early 1970s, lasers have been divided by wavelength, power, energy, and pulse characteristics into four major classes and a few subclasses. These classifications were grouped depending on the potential for the beam to cause biological damage to the eye or skin, from class 1 to class 4 (Maini 2013). The larger the class number, the greater the potential hazard. The general laser classifications are summarized as follows (Table 3.1).

3.3 Application of Laser in Fashion Industry

3.3.1 Laser Cutting

In fashion industry, laser cutting was widely applied during the production process. The conventional method of fabric cutting is made by using a knife machine. Some smaller companies and couture houses still prefer to cut fabric in the traditional way by using scissors or a vertical vibrating blade, but these processes are relatively inflexible (Harder 2010; Wind and Mahajan 2001). With the development and application of computer-aided technology, laser was applied by more and more manufacturers to process cutting on material (Khurana and Sethi 2007). Since late 1990s, laser has been increasingly adopted by fashion and textile designers.

With laser technology, precise and clean cuttings can be achieved. Fabric can be both intricately and delicately cut one or a few layers at a time without frayed edges or hems on the materials as shown in Fig. 3.1 (Vidyasagar 2000; Yuan et al. 2012). When synthetic fabric materials are cut with laser, the hem of the fabric becomes fused and appears well finished, so that the cut edge does not need to be sewn. Fabric cutting by using laser has a wide range of applications for apparel and textile manufacture and design, as well as the accessory design such as footwear and bag production.

Laser also facilitates cut-out effects on fashion products from clothing to accessories. It can create not only innovative textures but also mesh-like structures

G. Yuan et al.

Table 3.1 Laser safety classification

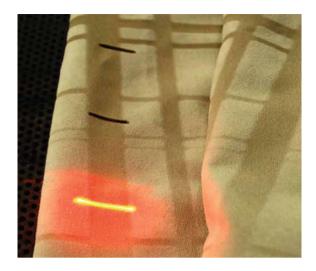
Class	Туре	Basis for classification
Class 1	Very low-power lasers or encapsulated lasers	Lasers are considered safe under reasonably foreseeable conditions of operation such as laser printers, CD players, and survey equipment. There are no safety requirements for the use of this kind of laser
Class 1 M	Very low-power lasers; either collimated with large beam diameter or highly divergent	Safe under reasonably foreseeable conditions of operation but may be hazardous if observed using viewing optics Example: Laser diode, LED, fiber communications system
Class 2	Visible low-power lasers	Low-power lasers and are safe for unintended exposure, prolonged staring should be avoided Example: Alignment HeNe lasers with powers below 1mW, supermarket bar scanners
Class 2 M	Visible low-power lasers; either collimated with large beam diameter or highly divergent	Same as Class 2, but potentially hazardous when optical instruments are used
Class 3R	Low-power lasers	Safe when handled carefully. Only small hazard potential for accidental exposure
Class 3B	Medium-power lasers	Hazardous when eye is exposed. Wear Eye Protection within nominal ocular hazard area (NOHA). Usually no hazard to the skin. Diffuse reflections usually safe
Class 4	High-power lasers	Hazardous for direct intra-beam, direct reflected and diffuse reflected beam viewing. They may cause eye or skin injuries and also may constitute a fire hazard

(Quinn 2002). This has been demonstrated in the shoe designs of both Valentino and Salvatore Ferragamo, and leather is now increasingly cut by means of laser. All the products in the market show that laser cutting can accurately cut patterns into a fabric, thereby achieving aesthetic effects. Novel textures and three-dimensional effects can also be achieved.

3.3.2 Laser Engraving

Laser engraving has been increasingly applied in the fashion industry to engrave designs onto fabric surface. Various textile materials can be laser engraved, and by

Fig. 3.1 Laser cutting for garment buttonhole



optimizing the factors such as laser power, scanning speed and resolution, different surface effects, and acceptable engraving quality can be achieved (Dahotre and Harimkar 2008). CO_2 laser is the most efficient and suitable gas laser for engraving organic materials such as fabrics which are not good conductors of heat and electricity, because at its wavelength of 10.6 μ m the laser can easily be absorbed by most organics that absorb 10 micron light (Rajagopal 2008; Yuan et al. 2013). With a computer control system, laser engraving is a relatively economical and flexible process to treat fabric surface for embellishment.

Laser engraving which different from laser cutting is used to engrave the fabric surface without cutting through. It is applied to remove certain materials as the laser beam vaporizes the surface (Ghorannevissa et al. 2007). Laser engraving for fabric surface treatment has long been conducted, but is mostly applied to engrave or decolor directly on denim fabric (Chow et al. 2012; Kan et al. 2010; Ondogan et al. 2005; Pezelj et al. 2004; Štepánková et al. 2010; Tortora and Johnson 2013). Traditionally, denim is treated with stone wash to produce unique effects. Laser offers an alternative to traditional denim fabric treatments such as whisker washing, acid washing, and sandblasting (Milda et al. 2014; Tarhan and Sariişik 2009). Laser engraving is used as a bleaching and cutting tool to create sophisticated patterns with noncontact marks on the denim fabric. When engraving denim, laser burns away the dyestuff to produce a worn look.

Recently, other kinds of fabrics such as polyester, wool, and blended fabrics were applied for surface embellishment by using laser engraving as shown in Fig. 3.2. With lower resolutions, engraved vague patterns with small laser beam dots can be achieved. While the treatment resolution increased, clear patterns could be performed. Based on the same resolution, the higher pixel time can export more energy which makes the pattern looks more clear. The results also indicated that different pattern appearances could be achieved on garments made from different kinds of materials through the laser engraving treatment.

48 G. Yuan et al.

Fig. 3.2 Laser engraving on rayon/polyester blended fabric



Fig. 3.3 Aluminium foil laminated fabric sample engraved using laser

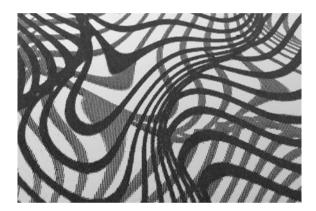


Figure 3.3 shows the combination of laser engraving with aluminum foil laminating, the color change effect on textile could be developed by treatment using different laser parameters (Jiang et al. 2015). All the applications of laser engraving for surface treatment in fashion and textile design indicate that after laser processing, a color fading, worn appearance, or printing effect can be created on fabrics for fashion design which can instead of ordinary and traditional chemical treatment. It demonstrates that the laser engraving is one of time- and cost-saving alternatives and has the advantages of design and treatment flexibility without causing any pollution.

3.3.3 Fabric Fault Detection

In textile and apparel manufacturing, defects of fabric are generated because of improper treatments in weaving machines, spinning errors, and inadequate preparations of fiber during the manufacturing process. During the manufacturing

process, fabric faults or defects are responsible for nearly 85% of the defects found in the garment industry (Sengottuvelan et al. 2008). Traditionally, the fabric defects inspection process which carried out with human visual inspection is insufficient and costly. With the development of technology, automate fabric inspection by using laser technique is applied to maintain the fabric quality in textile production. The laser beam can scan across the width of the fabric from one edge to another to generate images of fabric structure based on optical system. After image generation, all the images could be classified into different categories based on certain system to detected fabric defects (Kumar 2008; Mallick-Goswami and Datta 2000).

3.3.4 Objective Evaluation of Seam Pucker

Seam pucker is a wrinkled appearance along the seam and could influence the appearance of garment. The initial method of seam pucker evaluation was based on subjective assessment and the results are not reliable due to the higher evaluation time, inconsistency among judges, and need for training (Hati and Das 2011). Nowadays, the laser scanning technology has been applied for the evaluation of seam pucker. With a light-detecting semiconductor, the reflection from the puckered fabric surface could be detected by laser scanner. The output of the height of the reflecting point will be calculated and the data obtained will be grouped into different grades. For example, Kawabata developed an equation for the objective prediction of seam pucker by adopting the laser scanning method which demonstrated the relationship between the subjective pucker grade and physical quantity (Kawabata et al. 1997; Kawabata 1998). In 1997, a 3D Model Maker was developed to evaluate the seams on a 3D garment surface by using laser scanning technology. It found that the seam pucker close to four parts on the sample garment including yoke seam, pocket seam, placket seam, and armhole seam (Fan et al. 1999). It indicates that the evaluation of seam pucker combining laser technology could improve the evaluation process of seam pucker for products quality.

3.3.5 Body Scanning

The three-dimensional body-scanning technology has potential applications in the fashion and apparel industry, particularly for customization or mass customization. This contact-free scanning process with laser can generate digital data of relevant body factors including height, length of the spine, width of the shoulders, circumference of the head, waist and hips, and other features of the male and female body by capture the outside surface of the human body from the front and back by using optical techniques with light sensitive devices. There are different kinds of laser-based systems for body scanning in the market such as Cyberware, TecMath,

50 G. Yuan et al.

Vitus, VOXELAN, and so on (D'Apuzzo 2007). Body scanning systems consist of light sources, capturing devices, software, computer systems, and monitor screens in order to visualize the data capture process.

The laser scanning process is more precise and reproducible than traditional manual measurements process using measuring tapes, calipers, or other handheld devices. The scanner can project a line of laser light around the body and the laser line is reflected into cameras located in each of the scan heads. Data of the scanned object is obtained and then viewed simultaneously from two locations using an arrangement of mirrors. Viewed from an angle, the laser stripe appears deformed by the object's shape. CCD sensors record the deformations and create a digitized image of the subject. The cameras positioned within each of the four scanning heads records this surface information when the heads move along the length of the human body. After scanning process, a digital image of the human body combining all relevant data can be generated (Paquette 1996).

3.3.6 Welded Garment Production

Laser welding is one of the welding techniques utilized to join multiple pieces of materials through a laser beam. During the laser welding process, the beam can provide a concentrated heat source directly conducting on materials, allowing for narrow, welds with appropriate deep and high welding rates (Nayak and Padhye 2016). Therefore, it is an alternative process of joining fabrics for the high-volume applications in garment production using automation where the thermoplastic materials are joined together by the application of heat. At present, the laser welding technology is applied by increasing manufacturers as an innovative, rapid, economic, and accurate way for automatically seaming of fabrics, particularly for synthetic fabrics (Nayak and Padhye 2015). For the production of welded garment by laser, absorbent having good adhesion properties with fabric should be coated onto the two fabric surfaces which are required for seaming, and then the fabrics can be welded together after laser treatment. The adhesion between the two fabrics depends on the properties of the absorbent, the compatibility between the absorbent and fabrics. In addition, the laser welding provides better appearance because it does not contain bulky seam and it is more flexible in comparison to the sewn counterpart.

The laser conditions and the effectiveness of laser welding depend greatly on the dimension (thickness and volume) and physical properties (e.g.,: melting point, thermal conductivity and thermal diffusivity, et al.) of fabric to be welded (Cao et al. 2006). Prior to the laser welding processing, appropriate welding parameters should be determined to achieve an effective joining in depth without cracks or gas entrapment in the welding area (Bertrand et al. 2001). The fabrics are then edged to edge and welded without fillers or fluxes. The quality of the joining can be checked by metallographic observations on the welding sections.

3.3.7 Bar code Scanning

The scanners used to scan the bar codes for product identification typically utilize helium—neon (HeNe, at a wavelength of 632.8 nm) laser which is a type of gas laser excited by a DC electrical discharge. The laser bar code scanner is a device frequently applied in shops, warehouses, and other facilities to generate a laser-light to read bar code labels (Madej 2007). A bar code signal is obtained by capturing the laser-light bounced out from a rotating mirror when the laser beam scans over the linear bar code which stores the product information (Esedoglu 2004). The information is encoded in a bar pattern which represents a sequence of widths of black bars and white spaces (Krešić-Jurić 2005). In order to decode the bar code, the transitions between bars and spaces must be accurately located in space to make the widths to be precisely detected.

3.3.8 Metal Detection

Metal needles, such as sewing machine needle, sewing needle, needle pin, and tag gun, are the essential processing parts during garment production. However, broken metal needles may be left in the products and it is harmful to consumers. With the increasing security awareness of consumers and the establishment of relevant national standards on garment products, effective control and detection on metal needles during garment production is recognized to be indispensable to ensure the product performances (Gu et al. 2009). Metal detection machine by laser beam is an innovative, potentially fast, and fairly robust technique (Becker et al. 2009; Wal et al. 1999) to determinate if any needle part is there in the final finished garment, and there are increasing garment manufacturers has introduced the laser machine for metal detection during garment production. Metal detecting process can detect the presence of ferrous contaminants in garments containing the metals such as brass, tin, copper, aluminum used by textile accessory manufacturers such as YKK, Prym, and so on.

3.3.9 Garment Inventory Management

With the increasingly developing economic society, a tremendous amount of garments are produced and placed in logistic warehouses waiting for the sales (Ye et al. 2008). Warehouse management depending on traditional artificial management leads to a low efficiency and an unreasonable inventory structure of garment enterprises. Textile logistic warehouses desperately require automation to count and confirm the enormous number of garments in each batch. In order to achieve the aims including accurate determination, high storage of information, fast reading and

writing speed, strong anti-jamming capability, a novel automatic laser imaging system was designed to identify and count the number of garments hanged in a batch which is moved, transported, and managed within a textile warehouse (Martínez-Sala et al. 2013). During the garment counting, an image of the corresponding hanger hooks can be generated by an array of phototransistors sensors and a linear laser beam. Subsequently, the image is processed by using computer vision techniques to infer the number of garment units. This technique is very accurate and can work fast with good repeatability and reproducibility.

3.3.10 Antimicrobial Finishes

The growth of microorganisms on textiles can lead to the generation of unpleasant odor, discoloration, and strength degradation of the fabric and other harmful effects (Haji 2010). Textiles, especially those prepared by natural fibers, are an excellent medium for the growth of microorganisms when there are the humid and warm conditions (Paul 2014). Therefore, antimicrobial treatment should be conducted on textiles to prevent the proliferation of microorganisms and also to protect the textiles from strength and color loss, unpleasant odor, and quality deterioration. Silver as a safe antibacterial agent has recently been applied on textile finishing for improving the antibacterial properties of textile products. Antimicrobial durability of textiles is important for consumer usage as well as textile properties. In order to increase the enduring antibacterial effects, CO₂ laser was applied to treat on textile fabric to improve the adhesion of silver nanoparticles (Nourbakhsh and Ashjaran 2012). The experimental results indicate that the bacteria colonies of the silver coated on laser-treated fabric are significantly reduced when compared with that of the untreated fabric revealing an improving antibacterial effect.

3.4 Conclusions

This chapter presents different alternatives of laser technology in fashion industry to improve garment manufacture and design by manufacturer, designers, and researchers for production or surface embellishment as an area of academic study, manufacture, and design application which could support the integration of design, technology, and material that are applicable in fashion area. By achieving ideal function, appearance, and quality, appropriate types of laser and laser power should be applied by applying different types of laser or changing treatment parameters to conduct laser for diverse applications. In fashion industry, the efficiency garment manufacture can be improved by reducing human efforts, costs, and production time. Laser technology combined computer-aided production system could benefit the mass customization and production as well as small-scaled production to meet the demands of the market. For garment production, laser technology could enable

fabric cutting and engraving, fabric fault detection, objective evaluation of seam pucker, body scanning and dimension collection, welded garment production, bar code scanning, metal detection, garment counting, and antimicrobial finishes. Nowadays, laser cutting is very popular in fashion industry which can provide repeatability when cut small or large production for fabric cutting on different kinds of materials such as silk, polyester, cotton, leather, and silk for extreme accuracy and clean cuts. It also can make sealed fabric edges without fraving especially on synthetic fabric. Laser engraving is applied to engrave away part of surface area of fabrics to produce certain tons of logos or patterns on different types of garments such as T-shirt, polo shirt, jacket, pullover, and vest for unique and professional appearances. It also could benefit designers to create motif and patterns on garment for design innovation with novel appearance. Based on advances in computer technology, image processing and pattern recognition, laser inspection of fabric defects is an effective approach for pattern texture inspection which could provide reliable, objective, and stable performance on fabric defects inspection that differs with tradition human inspection process. A laser scanning system with laser sensor could measure the surface profile of seam pucker to demonstrate to reveal the basic features of garment sewing stitches which could provide accurate information to manufactures for garment production and quality control. Due to the garment sizing and fit problems, more consumers are far more concerned about the customization. To meet their needs, precise body size could be collected rapidly by scanning using noncontact method of laser technology with advanced instruments, and the garment patterns could be generated based on the collected data of body dimensions. Laser welding is a new technology which has potential application in the industrial garment production including flat, elastic, and skin-friendly seams. By using laser welding for production, a seamless effect and the outside of the fabric and garment will not be harmed. Because the laser seams are smooth and gentle, this treatment process is suitable for the garments that direct contact with the human skin such as underwear, shirt, bustier, and bra. Laser bar code scanning is widely applied in different industries as well as the fashion market. It could capture accurate manufacture and garment-related data and reduce the time it takes to capture and document important information. During the garment production process, metal detection is an essential and important quality assurance requirement for manufacturers. The metal detection process could ensure that the finished garments are safe and free from a broken needle tip or another ferrous contaminant during the manufacturing process. After garment manufacture, the number of garments needs to count in each batch. Unlike some conventional processes, this approach which applied laser technology is conducted based on image processing of hanger hooks of garments generated using the phototransistors sensors and laser beams. The generated image will be processed using computer to calculate the number of garments. In addition to these application areas, laser could also applied for surface modification of some fabric materials such as cotton to create carboxylic acid groups which can be attracted by silver. So silver nanoparticles could be absorbed on the surface of laser treated fabric material and the antibacterial properties will be enhanced with the increase of application of silver nanoparticles. It indicates that 54 G. Yuan et al.

diverse application areas applied laser technologies could not benefit garment manufacturers to deliver suitable and optimized products or materials but also assist consumers to find suitable garments. Based on the applications of laser technology, it shows that laser is more accurate and efficient than the conventional manufacture and design approach, which can benefit manufacturers, designers, and consumers. To conclude, the laser technique has a high potential to achieve surface treatment on garment as it is an environmentally friendly process and can make diverse surface appearances or develop manufacture process for new and innovative productions in fashion industry.

Acknowledgements This research was supported by Fashion Design and Brand Image Communication, Shanghai Summit Discipline in Design, and Key Laboratory of Clothing Design and Technology, Donghua University, Ministry of Education, under grant number 279-10-0001076.

References

- Becker JS, Lobinski R, Becker JS (2009) Metal imaging in non-denaturating 2d electrophoresis gels by laser ablation inductively coupled plasma mass spectrometry (la-icp-ms) for the detection of metalloproteins. Metallomics Integr Biometal Sci 1(4):312–316
- Bertrand C, Petitcorps YL, Albingre L, Dupuis V (2001) Prosthodontics: the laser welding technique applied to the non precious dental alloys procedure and results. Br Dent J 190(5): 255–257
- Brichtová L (2007) The diode laser system development for the cutting of the textile materials. 6th International Conference-TEXSCI 2007
- Cao X, Jahazi M, Immarigeon JP, Wallace W (2006) A review of laser welding techniques for magnesium alloys. J Mater Process Technol 171(2):188–204
- Chow YL, Chan A, Kan CW (2012) Effect of CO₂ laser irradiation on the properties of cotton fabric. Textil Res J. 82(12):1220–1234
- Dahotre NB, Harimkar S (2008) Laser fabrication and machining of materials. Springer, New York D'Apuzzo N (2007) 3D body scanning technology for fashion and apparel industry. Proceedings of SPIE—The International Society for Optical Engineering 6491. doi:10.1117/12.703785
- Esedoglu S (2004) Blind deconvolution of bar code signals. Inverse Problems 20(1):121–135(15) Fan J, Lu D, MacAlpine M, Hui P (1999) Objective evaluation of pucker in 3-dimensional garment seams. Text Res J 73(5):451
- Ghorannevissa M, Shahidia S, Moazzenchia B, Anvarib A, Rashidia A, Hosseinia H (2007) Comparison between decolourization of denim fabrics with oxygen and argon glow discharge. Surf Coat Technol 201:4926–4930
- Gu H, Gu W, Hu HQ (2009) Control and detection of metal pins in garment production. Mod Silk Sci Technol 24(4):32–33
- Haji A (2010) Functional dyeing of wool with natural dye extracted from Berberis vulgaris wood and Rumex hymenosepolus root as biomordant. Iran J Chem Chem Eng 29(3):55–60
- Harder F (2010) Fashion for profit: a professional's complete guide to designing, manufacturing,
 & marketing a successful line, 9th edn. Harder Publications, Rolling Hills Estates, CA, p 130
 Hatti S, Das BR (2011) Seam pucker in apparels: a critical review of evaluation methods. Asian J
 Text 1:60–73
- Jiang SX, Yuan GX, Huang JJ, Peng QX, Liu Y (2015) The effect of laser engraving on aluminum foil-laminated denim fabric. Text Res J 919–932
- Jiang SX, Yuan G, Huang J, Peng Q, Liu Y (2016) The effect of laser engraving on aluminum foil-laminated denim fabric. Textil Res J 86:919–932

Kan CW, Yuen CWM, Cheng CW (2010) Technical study of the effect of CO₂ laser surface engraving on the colour properties of denim fabric. Color Technol 126:365–371

Kawabata S (1998) Fibre science to apparel engineering. Text Asia 51-56

Kawabata S, Mori M, Niwa M (1997) An experiment on human sensory measurement and its objective measurement of seam pucker level. Int Cloth Sci Technol 9(2–3):203–206

Khurana P, Sethi M (2007) Introduction to fashion technology, 1st edn. Laxmi Publications, New Delhi, India, p 35

Krešić-Jurić S (2005) Edge detection in bar code signals corrupted by integrated time-varying speckle. Pattern Recogn 38(12):2483–2493

Kumar A (2008) Computer-vision-based fabric defect detection: a survey. Ind Electron IEEE Trans 55(1):348–363

Madej D (2007) Reversing convolution distortion in a laser bar code scanner. Autom Identif Adv Technol 2007 IEEE 140–145

Maiman TH (1960) Optical and microwave-optical experiments in ruby. Phys Rev Lett 4(11):564–566 Maiman TH (1969) Stimulated optical radiation in ruby. Nature 187:493–494

Maini KA (2013) Lasers and Optoelectronics fundamentals, devices and applications. Hoboken, NJ: John Wiley & Sons, pp 599–603

Mallick-Goswami B, Datta AK (2000) Detecting defects in fabric with laser-based morphological image processing. Text Res J 70:758–762

Martin OM, Marian P, Sofia EAO, Isaac C, Ma RHA (2003) A Comparison between characteristics of various laser-based denim fading processes. Opt Lasers Eng 39:15–24

Martínez-Sala AS, Sánchez-Aartnoutse JC, Egea-López E (2013) Garment counting in a textile warehouse by means of a laser imaging system. Sensors 13(5):5630–5648

Milda J, Virginijus U, Žaneta J et al (2014) The effect of laser technological parameters on the color and structure of denim fabric. Textil Res J 84(6):662–670

Nayak R, Padhye R (2015) Garment manufacturing technology. Elsevier, Amsterdam

Nayak R, Padhye R (2016) The use of laser in garment manufacturing: an overview. Fash Text 3(1):5 1–16

Nourbakhsh S, Ashjaran A (2012) Laser treatment of cotton fabric for durable antibacterial properties of silver nanoparticles. Materials 5(7):1247–1257

Ondogan Z, Pamuk O, Ondogan EN, Ozguney AT (2005) Improving the appearance of all textile products from clothing to home textile using laser technology. Opt Laser Technol 37:631–637

Ozguney AT (2007) The comparison of laser surface designing and pigment printing methods for the product quality. Opt Laser Technol 39:1054–1058

Paquette S (1996) 3D scanning in apparel design and human engineering'. IEEE Comput Graphics Appl 16(5):11–15

Paul R (2014) Functional finishes for textiles: improving comfort, performance and protection. Elsevier, Amsterdam

Pezelj E, Cunko R, Andrassy M (2004) Modification of denim surface using laser. In: World Textile Conference. 4th AUTEX Conference. Roubaix

Quinn B (2002) Techno fashion, 1st edn. Berg, Oxford, England, pp 163, 164, 181-182

Rajagopal K (2008) Textbook of engineering physics. Prentice-Hall of India Pvt. Ltd, New Dehli Roux R (1989) The laser in the French clothing industry. In: Belforte D, Levitt M (eds) The industrial laser annual handbook. PennWell Books, Tulsa, pp 129–138

Sengottuvelan P, Wahi A, Shanmugam A (2008) Res J Appl Sci 3(1):26-31

Silfvast WT (2004) Laser fundamentals. Cambridge University Press, Cambridge, p 1

Steen WM, Mazumder J (1998) Laser material processing. Springer, Berlin, pp 218, 264-265

Štěpánková M, Wiener J, Dembický J (2010) Impact of laser thermal stress on cotton fabric. Fibres Text East Eur 18:70–73

Tarhan M, Sariişik M (2009) A comparison among performance characteristics of various denim fading processes. Textil Res J 79:301–309

Tortora PG, Johnson I (2013) The fairchild books dictionary of textiles. A&C Black, London, p 243

56 G. Yuan et al.

Vidyasagar PV (2000) Encyclopedia of textiles—Textile automation, vol 3, 1st edn. Mittal Publications, New Delhi, India, p 169

- Wal RLV, Ticich TM, West JR, Householder PA (1999) Trace metal detection by laser-induced breakdown spectroscopy. Appl Spectrosc 53(10):1226–1236
- Wilson J, Hawkes JFB (1987) Lasers: principles and applications. Prentice Hall, England, pp 165–166
- Wind J, Mahajan V (2001) Digital marketing: global strategies from the world's leading experts, 1st edn. John Wiley and Sons, New York, NY, pp 102–130
- Ye JF, Wang ZX, Pan XH (2008) Application of RFID technology to the raw material warehouse of apparel enterprise. J Text Res 29(3):132–136
- Yuan GX, Jiang SX, Newton E et al (2012) Application of laser treatment for fashion design. J Textil Inst 103:48–54
- Yuan GX, Jiang SX, Newton E et al (2013) Application of laser engraving for sustainable fashion design. Res J Textil Apparel 17(2):21–27
- Yuan GX, Chen ZM, Jiang K (2017a) Laser engraving for tie-dye pattern design. In: Proceedings of Textile Bioengineering and Informatics Symposium (TBIS) 2017, 16–19 May 2017, 310–316
- Yuan G, Jiang S, Chen Z (2017b) Sustainable fashion design by using laser engraving technology.In: Proceedings of 14th Asian Textile Conference (ATC-14), 27–30 June 2017, 283–287

Part II Cases on Fashion Branding and Marketing

Chapter 4 Vintage Fashion Retailing: Building the Store Brand

Julie McColl, Catherine Canning, Linda Shearer and Louise McBride

Abstract Over the past few decades, vintage fashion has become an enduring trend and vintage fashion retailers have become an integral part of the fashion retailing landscape. This chapter explores vintage fashion retailing from the perspective of brand image and the brand story and examines the positioning elements that operationalise the vintage fashion retailer brand. Vintage fashion retailers have evolved into sophisticated entities capable of competing in today's fast paced omni-channel environment. They can benefit from the creation of a strong brand image that tells the story of an era or theme through the creation of a store/brand whose appearance and display elements bring that theme to life.

Keywords Vintage fashion \cdot Store brand building \cdot Brand story \cdot Brand image Brand positioning

4.1 Introduction

The increase in vintage fashion retailing has been credited to a number of developments in the fashion environment over the past 40 years. The vintage fashion movement is said to have evolved from the 1960s London, with the popularity of military uniforms associated with the Beatles' Sergeant Pepper record, and Edwardian dresses. The movement spread to New York and a yearning for the

J. McColl (⋈) · C. Canning · L. Shearer · L. McBride

Department of Business Management, Glasgow Caledonian University, Glasgow,

Scotland, UK

e-mail: j.mccoll2@gcu.ac.uk

C. Canning

e-mail: c.canning@gcu.ac.uk

L. Shearer

e-mail: l.shearer@gcu.ac.uk

L. McBride

e-mail: louise.mcBride@gcu.ac.uk

© Springer Nature Singapore Pte Ltd. 2018

P. -S. Chow et al. (eds.), *Contemporary Case Studies on Fashion Production, Marketing and Operations*, Springer Series in Fashion Business, https://doi.org/10.1007/978-981-10-7007-5_4

elegance of the 1940s and women's dresses and men's suits dating from the 1950s (Hamilton 2012). During the 1970s the vintage trend grew with the student movement adopting second-hand clothing as a means of accessing inexpensive items that could also serve as a means of self-expression. This trend continued into the 1980s when oversized shirts, coats and jackets became the uniform of the young representing the utilitarianism of the anti-fashion of the punk rock era and the androgyny and flamboyance of the New Romantic era (McRobbie 1989). During this period, the faithful vintage shopper continued to seek items of clothing from eras that represented their personal style, in particular, high end and iconic fashion brands such as Biba, Chanel, Karl Lagerfeld, Mary Quant and Thierry Mugler (McColl et al. 2013).

The new millennium saw a rapid increase in the number of "vintage" as opposed to 'second hand' or 'charity' stores. Since then, the vintage movement has grown as a means of self-expression, providing inexpensive, high-quality fashion items, and has for some become a lifestyle choice based not only on nostalgia for a particular era but as a demonstration against overconsumption of fast fashion and disposable clothing (Cassidy and Bennett 2012). There has been a steady rise in the number of vintage stores selling second cycle, used fashion clothing, which is not only more original but, given that it has been worn previously, is also sustainable and ethical (Pookulangara and Shephard 2013). This purchase and reuse of vintage clothing responds to the consolidation and polarisation of power in high street fashion retailing by moving away from fast, first cycle, new fashion clothing. Additionally, there has been a homogenisation of the high street over the past few decades which has seen a narrowing of the number of companies and, therefore, fashion choice (Martenson 2007). High street stores, on the whole, are driven by current fashion trends and sell very similar items of clothing which are often cheaply produced and can only be identified by their brand label (McColl and Moore 2014). These companies compete primarily on price and not on exclusivity. The vintage consumer, however, seeks differentiation and will often combine vintage pieces with high street items to create a unique and personal style (Tolkien 2002; Woodward 2009).

A number of high street fashion retailers have responded to the vintage phenomenon by introducing vintage ranges within stores. Sometimes these are faux vintage replicas and sometimes these are genuine vintage garments sourced from suppliers of vintage goods (Tungate 2008). Whilst these retailers are responding to vintage trends, they tend to sell small ranges with less variety than traditional vintage stores. Traditional vintage fashion stores tend to be small businesses based away from high street locations, now being joined by vintage cafés, hairdressers and home wear stores, in response to vintage lifestyle trends. The key to success for the vintage fashion retailers is the building of a strong identifiable brand image that can be reflected in a brand story and associated with a particular era. This brand image, on the whole, reflects the interests and personality of the owner and is supported by the elements of store positioning, these are, merchandise strategy, trading format (store/brand image), customer communications and customer service (McColl et al. 2013). This chapter addresses relevant literature and offers examples from three case study companies within the Glasgow area; these are Minted

	Case Study 1 Minted	Case Study 2 City Retro	Case Study 3 (anonymous)
Brand profile	Established small city centre business (3 years) selling streetwear predominantly for men. High quality, affordable and wearable clothing	Established small city centre business (10 years)	Established small city centre business (25 years)
Brand story	Minted clothes. Minted condition. Minted price	Fun, colourful, authentic, nostalgia, focus on 1960s and 1970s	Children's television character from the 1970s
Merchandise strategy	The majority of pieces in new, or nearly new condition. Sourced from personal contacts	Designer labels from 1960s–1990s, psychedelic attire, burlesque. Sourced from wholesalers and personal contacts	Everyday wear from a variety of different eras, military uniforms, evening dresses. Sourced from personal contacts
Brand store image	Boutique style, merchandised by product category, simple store design, spacious	Fun reflecting personality and interests of owner	Eclectic including variety of military regalia and Scottish artefacts
Customer communications	Traditional and social media	Traditional, social media	Web presence, social media
Customer service	Personalised	Personalised	Personalised

Table 4.1 Summary of the case study brands

(Case 1), City Retro, (Case 2) and Case 3 (this company selected to remain anonymous). These companies were chosen because they each represent a distinctive approach to vintage retailing in terms of retail brand story and retail design. Table 4.1 below provides a summary of the case study brands. This chapter seeks to identify the defining features of the successful vintage fashion retailer in terms of brand image and the story that the brand represents and finally considers the operational issues of store positioning that are associated with maintaining and building brand image in vintage fashion retailing.

4.2 Building the Fashion Retailer Brand

Brands have evolved from being the identifier of the product to being the identifier of the company, the principal asset that a company has in terms of offering a coherent image in a global environment, a symbolic meaning in the mind of the customer and ultimately as a means of building customer relationships (Kotler et al. 2015).

52 J. McColl et al.

Jevons (2007) defines the brand as:

A tangible or intangible concept that uniquely identifies an offering, providing symbolic communication of functionality and differentiation, and in doing so sustainably influences the value offered (p. 6).

Kapferer (2012) proposes that the most important elements of the brand are intangible and consist of an identity system made up of the brand image, the company values, the brand personality, image and identity as well as the name, logo, design and distribution. He suggests that the brand name is the principal indicator of brand communication and brand awareness, building consumer relationships with the brand and increasing its value. Ailawadi and Keller (2004) suggest that for retailers, the brand and brand image need to be built through the store image and store operations. In recent years, however, brand image has been extended through internet commerce and social media communications, becoming not only an important source of communication of image to the consumer but, for many small companies, the means by which they enter the market and continue trading. In some cases, companies build the online store first and transfer the brand image elements to the bricks and mortar store at a later date. Case study 1, Minted is an example of this.

The retailer brand, therefore, is multisensory and encompasses not only the physical products and services but also the whole retail firm, the name on the store front, the brands it sells, the prices and quality it offers, the image on the packaging, the levels of customer service and the image portrayed within the store (Kent and Stone 2007). It is, therefore, both the image portrayed by the elements of the brand and the operational processes that deliver that brand in an efficient, effective and coherent manner (Kent 2007). Most large high street fashion retailers develop and deliver their brand image on the basis of the brands that they sell. In general, high street fashion brands use the corporate retail brand, that is the corporate brand name and all the image associations that it portrays, to deliver the brand image throughout the store from the name above the door to the name on the product, communicating the brand in and out of the store with corporate images and appropriate models and celebrities to deliver the brand identity (Vahie and Paswan 2006). In essence, they are branding the shopping experience through the merchandise that they sell and the in-store and online delivery of that merchandise to the customer.

4.2.1 Telling the Brand Story

Practitioners and academics have stressed the importance of telling a brand story to help bring together the image and operational elements of the brand (Woodside et al. 2008). This brand story helps to clarify the meaning of the brand as well as the needs of the target market. Stories are an intrinsic part of society and culture and historians and psychologists believe that storytelling is one of the many things that define and bind society (Lundqvist et al. 2013). Take, for example, the case of a

Spanish fashion brand owned by the designers. The focus of the brand is on nature, in particular, flowers, trees and the colours of the natural environment, the greens, blues and autumnal hues favoured in seasonal collections. The inspiration for this image is the carefree, bohemian woman. The styles have a bohemian edge, flowing and emphasising the natural curves of the body. The stores take their cues from nature with light fittings shaped like flowers, natural coloured wall coverings and fitting rooms inspired in design by nature. For smaller fashion brands the telling of this brand story offers a brand coherency, particularly, where the store sells manufacturer brands and does not have an own/private label brand to take the consistent corporate brand image through the store. It is this brand name, the telling of the brand story, the portrayal of the brand image through the store image, and the success of the operational elements of merchandise management, communications and customer service that identify and build brand equity for the fashion retailer.

4.3 Building the Vintage Fashion Retailer Brand

For vintage fashion retailers, the development of brand image is equally enriched by the development of a strong brand name, a coherent brand story, unique merchandise, a consistent and creative store/online brand image, creative and targeted communication and excellent customer service. Because the product does not take the retailer's brand name, the key is to build a retailer brand, or what could be referred to as the corporate brand, albeit on a small scale, that represents an era or the story of the goods sold.

4.3.1 Defining Vintage Fashion

McColl et al. (2013), define vintage fashion as:

Garments and accessories which are more than twenty years old, which represent a particular fashion era, and which are valued for their uniqueness and authenticity (p. 148).

DeLong et al. (2005) propose:

In clothing, vintage usually involves the recognition of a special type or model, and knowing and appreciating such specifics as year or period when produced or worn (p. 23).

When McColl et al. (2013) carried out their vintage fashion research in 2011, the most popular vintage fashion period was the 1980s with a continuing interest in the 1940s to the 1960s. While interest in the 1980s has endured, the fashion forward are now looking to the late 1990s and the early 2000s for vintage fashion inspiration, thus continually widening and renewing the potential era and ultimately extending stock supply. With all this choice of different eras successful vintage fashion retailers need to build an individual and strong brand image based on the needs and wants of the target customer.

J. McColl et al.

4.3.2 Defining the Vintage Consumer

Unlike high street fashion stores, vintage consumers tend to be less homogenous in relation to age or interests. Hansen (2000) has segmented the vintage consumers into groups such as young professionals who want high-quality clothes at modest prices, or young people keen on retro subculture styles like Punk, Rave or Mod. Others propose the desire for differentiation (Coulson 2003; Finnigan 2006; Malem 2008; Woodward 2009) and groups such as taste-makers, stylists, designers and image makers use it as a source of inspiration and a reference point. McColl et al. (2013) identified two groups of customer, one aged between 18 and 25 years, the most common group driven by price and trends, and a group aged over 30, more loyal vintage consumers who appreciate individual and unusual pieces and who are less concerned with price. Additionally, there are customers of any age who look for items for special occasions, for example, a dinner suit or an evening dress. Other customers are, for example, television or theatre companies looking for costume, people interested in Burlesque and people who like to wear more unusual clothing traditionally worn by another gender.

In recent years, consumer trends have seen the rise of the 'hipster'. Hipsters have adopted all things vintage and made them cool, from drinking from jam jars to using typewriters, riding vintage bikes with no gears and wearing thick-rimmed glasses to seeking out workers' dungarees and heritage brands. It may be that the hipster as a concept has become mainstream, the beard being the most common representation of hipster style that has been adopted as a fashion trend by men in general (Greif 2010). There is, however, an aspect of sustainability, ethics and slow fashion that is associated with the hipster movement and is representative of vintage fashion. Like vintage consumers, hipsters are a group of people who embrace a more ethical and sustainable lifestyle.

4.3.3 Creating and Telling the Vintage Fashion Retailer Brand Story

Vintage fashion retailers are normally a reflection of the interests and knowledge of the owner-manager. They are usually the creators of the brand story (Woodside et al. 2008). This brand story often relates to an era, a music genre or a youth movement with a merchandise focus based around that era, for example, the 1950s rock n roll era, the 1960s and 1970s 'Harley Davidson' era, the mod era of the early 1960s, the 1940s Hollywood glamour and wartime (Hamilton 2012) or, more recently the street wear associated with skateboarding. The customer is very much part of the brand story. They seek out merchandise and request or favour certain pieces. The merchandise is selected and sourced for them by the retailer on the basis of their understanding of both the era and the story, as well as the needs of the customer.

The brand story then, is told from the perspective of the store owner, and artifacts around the store offer insights into the lifestyle elements of the story; for example, motorbike regalia, household objects, a radio, television, valuable merchandise pieces in frames and army uniforms. Take, for example, the case of the Glasgow based vintage retailer, Case Study 3 which specialises in vintage clothing, and in particular, army uniforms, vintage jewelery and evening/occasion dresses. Case 3 uses name of a children's television programme from the 1970s, based around a gentleman, who in each episode visited a fancy dress/costume store, dressed up in an outfit in a changing room, left the changing room through a magic door and entered a world where he had an adventure wearing that outfit. He returned through the door in the changing room back to his everyday life with a memento of his adventure. Examples of his adventures see the character dressed as a spaceman or travelling back in time as a knight in armour. In this case, it is clear that the brand story reflects the interests of the owner. It is represented by the brand name, translated into the store image and in turn it reflects the interests of the customer. In Case Study 1, the Glasgow based vintage store Minted, the name refers to the condition of the clothing but is also a reference to a portrayal of wealth. The company sells streetwear which is freshly laundered, repaired and presented by category and brand of garment as new stock might be presented in a high street fashion store. The shop sells relatively up market vintage brands such as Stone Island and Adidas classics as well as new clothing that reflects the vintage product offering and the interests and personality of both the owners and the customers.

Other cases of brand stories are where vintage fashion retailers build their image around the story of wartime. The clothing of the 1940s exemplifies the patriotism, scarcity and practicality necessary during this period. Simple trims, minimum amounts of fabric and masculine shoulder pads, symbolic of women taking on traditionally male roles in the workplace, all represent this period in history. The store image is represented by artifacts, for example, gas masks and ration books, from this period. Alternatively, the story might consist of post-war glamour and style of a more liberated period, for example; the 1950s images of Audrey Hepburn and Grace Kelly wearing the Dior 'New Look' full-skirted dress. The fullness of the skirting was made by gathering or pleating using six yards of lightweight fabric, a sign of the end of post-war scarcity. This may be represented in store by artifacts such as time-saving gadgets used in the home which tell the story of post-war female emancipation. In addition, music can be used within the store to represent and reinforce the story and can help to endorse the image of the era, for example, Glenn Miller's big band music from the 1940s to Punk Rock from the 1970s.

The brand image, therefore, is created through the telling of that brand story (Lundqvist et al. 2013) and is carried through the store by the merchandise and the store/online brand image. For vintage fashion retailers, this can be carried out in a creative, authentic and original manner. The store name displayed on the store front represents the brand and can act as the focus for creating the story, building the image and ultimately generating brand equity (Keller et al. 2011). The merchandise displayed in the window sets the scene for the story and is the first contact that the customer has with the brand image. This merchandise will, by the very nature of

J. McColl et al.

vintage clothing, be original and unique. The lifestyle artifacts used in the store can be more permanent and are a creative display of the image of the store. The artifacts are original to that store. The brand image created within the store tells the story of the brand and displays the personality of the owner in greater depth. The merchandise and artifacts create the atmosphere and contribute to the elements of design (Kent 2007). It is important, therefore, for the vintage fashion retailer to create a strong and specific brand image with which potential customers can identify. The vintage market is highly competitive and a strong brand image allows the retailer to become the destination brand of choice (Nobbs et al. 2011).

4.3.4 Operationalising Vintage Brands

4.3.4.1 Vintage Fashion Retailer Merchandise Strategy

Vintage fashion retailers are amongst the most enthusiastic and dedicated of fashion store owners. They are often interested not only in the merchandise but in the whole era or genre that it represents. As small companies, they are generally the centre of all operations both in-store and online, including sourcing, merchandising, pricing, packaging, communications and customer service. For any fashion retailer large or small, vintage or high street, merchandise is the most important aspect of brand positioning and brand image. The more closely this merchandise meets the needs of the customer the more successful the store will be. This is highly dependent on the owner-manager understanding the needs of the customer. Small stores are very close to their customer and have the opportunity to interact closely with them to meet their needs and wants (McColl et al. 2013). At a micro level, the owner-manager can identify individual customers and match them to individual pieces of merchandise. In turn, the customer can sell on relevant fashion pieces to the store owner, thus in a small way co-creating the brand by jointly supplying the merchandise for the store.

Merchandise then, is sought for its individuality and relation to the era and the brand image/story. Vintage store owners are able to build a profile of their customers and can respond easily to developing trends. The individual pieces of merchandise often tell a story themselves and customers will sometimes seek out that story. The merchandise then takes on a meaning for them because of its history. It is often sold to the vintage store owner by individuals selling on pieces that have meaning to them or their families (Tungate 2008). They will sometimes tell the story of the merchandise which can then be passed on to the customer.

Some vintage fashion retailers sell new products which represent the same theme or era alongside the vintage merchandise. This would normally only happen where they complement the existing stock. For high street retailers, the development of own brands allows them better control of their brand image and store operations and the own brand name would normally be the same as the corporate brand name (Burt and Sparks 2002). In some cases vintage fashion retailers produce their own brand

merchandise, thus helping to reinforce the brand image. This is a fairly unusual and bold move for a vintage fashion retailer, however, it demonstrates a fusion of first and second cycle clothing being presented under a vintage brand image and brand concept.

Most vintage fashion retailers, for example, in the cases of City Retro (Case 2) and Case 3, sell almost entirely used clothing. This ranges from well-known brands to traditional unbranded or lesser known brands of vintage items. For City Retro. the concept of vintage represents fun in the sense of dressing up, perhaps in colourful and unusual ways (Tseëlon 1992). Their most popular items tend to be 1960s and 1970s dresses that have a sense of the psychedelic, and sheepskin jackets, old Doc Martin boots and dungarees. Popular brands are always Biba, Bus Stop, Mary Quant, Burberry and designer labels such as Dior and Chanel, however, these are becoming more difficult and expensive to source. For vintage fashion retailers, as for any fashion retailer, the merchandise that they source and sell is modified as new vintage fashion trends arise. Customers will change allegiance to brands and styles over time whilst staying loyal to enduring brands and trends. For example, for Minted, the vintage fashion retailer specialising in street wear, Adidas and Stone Island are enduring brands that are always sought after. The brand Fila was popular over the past few years but has been surpassed by the American brand Specialist.

Vintage fashion retailers source from a variety of places. These include flea markets, car boot sales and second-hand stores (Bardhi and Arnould 2005; Marzella 2015). Berlin, in particular, has a burgeoning vintage market that provides sourcing opportunities. In the case of City Retro stock is sourced from warehouses in the UK and across Europe. These warehouses supply and ship merchandise to the retailers in bulk, which for some has proved to be cheaper than travelling and choosing their own stock. For other cases, this has led to them receiving poor quality and low-value merchandise resulting in high levels of wastage. This type of sourcing, however, has proved successful for City Retro where the supplier knows the store owner and understands the brand image and the brand story. The stock delivered from Europe comes from various places, particularly Eastern Europe where there is a rich heritage, vast areas of developing economies and, partly because of this, a lack of local interest in vintage goods.

Much of the stock sold in vintage stores comes from individual contacts. In all three cases, resale activity is now a common means of both sourcing and selling vintage items with sites such as eBay, Amazon and ASOS offering marketplace trading. Other sources of supply are from customers who are selling back worn vintage pieces and from people selling on the possessions of older relatives. Interestingly, vintage fashion retailers will source merchandise from each other's stores, for example, it is not unusual for vintage fashion retailers from the major cities to visit stores in Scotland to source individual pieces. This seems to be an acceptable vintage trading practice because, unlike high street fashion retailers, these pieces do not carry a brand name that may be damaged by being sold through an inappropriate outlet.

4.3.4.2 Building the Vintage Fashion Brand/Store Image

The predominant means for portraying the retailer and fashion brand retailer image is within the store and online. Vintage stores are often located close together in the 'vintage area' of a city. This can evolve when one or two stores which are 'concept leaders' move into the location and draw customers to that area. It is common for fashion stores who have a similar target customer to locate near each other so that they benefit from each other's trade (Newman and Patel 2004). The three case companies, Minted, City Retro and Case 3 are all in the same locale. The literature stresses the importance of creativity, as the appearance of the fashion store and the in-store experience become an integral part of the core brand (Vahie and Paswan 2006). Integral to the brand is the in-store experience portrayed in the design elements of visual merchandising and display as well as atmosphere and space (Davies and Ward 2005). These become the points of differentiation from nearby competitors. A key element of this is the vintage store image which is typically a representation of the store owner and brand story that they are telling, and the artifacts within the store that represent their personality and interests. In the case of City Retro, props are used in the windows as well as inside the store to represent a fun, vibrant and colourful story. These include, for example, a jukebox, a pinball machine, an ET doll from the 1980s movie, neon signs, an old ghetto blaster, children's and teenage Christmas albums from the 1950s to the 1980s, an original Star Wars poster from the release of the first movie in 1977, and a Raleigh Chopper bike from the 1970s. The company is, however, aware of the tendency to create a 'cluttered' image within the store due to limited space, high stock levels and mismatched displays of merchandise and will recycle stock that has been in the store for too long, reselling it at markets or sending it to charity shops.

4.3.4.3 Building and Maintaining Customer Communications

All of these vintage fashion retailer cases have an online presence that acts as a means of communication and reinforces the brand image. An online presence advertises the stock in the store, is an alternative sales channel, and is a way of building stronger relationships with the customer. It also acts as a means of collecting customer data and allows the store owner to see the most popular pieces and trends that customers are purchasing. In recent years, vintage stores, like all fashion stores, have embraced the internet and social media as a means of communication (Verhoef et al. 2015). The main means of advertising and direct communication are Instagram, Pinterest and Facebook. Facebook allows immediate feedback and direct communication with customers. It also allows communication of associated vintage or music events and sponsored advertising. In addition, it allows the store owners to raise interest in anticipated merchandise and existing pieces. Instagram and Pinterest act as storyboards for the Minted brand, in particular, and often include

images of not just the merchandise but associated images of the store interior and exterior and pictures that represent the brand image and help to tell the brand story. Additionally, all of the case study retailers use traditional methods of communication such as leaflets and posters to advertise at particular events and markets (Peterson and Balasubramanian 2002).

4.3.4.4 Delivering Customer Service

As with many small businesses, the case study stores are able to offer individualised customer service. This applies not just to in-store customer service but also when sourcing items for individuals. Customers will often ask store owners to look out for brands or pieces for them. Many customers will visit a store each week or regularly and enjoy the personalised aspects of customer service. Vintage stores offer more than personal service, they can engage in conversation about the garment, the story of the garment and the background to the brand. This, in turn, increases the length of time that the customer spends in the store and helps build stronger bonds between customer and staff (McColl et al. 2013). The customer is experiencing the brand, is delving into the treasure chest of clothing and is able to engage in conversation with like-minded individuals.

4.4 Conclusion

This chapter is based on three case studies of vintage retailers within the city of Glasgow. It has defined the successful features of vintage fashion retailing with regards brand image, telling the brand story and discussing the operational issues involved with maintaining the brand. Vintage fashion retailers are able to offer a unique retail experience. The customer can fully engage in the brand story, not only with the product but through the extended narrative of its provenance; its era, brand identity, lifestyle and heritage. Vintage fashion retailing is a fairly unique business model, particularly in terms of sourcing, where the customer in essence becomes in many instances, the supplier and purchaser. The vintage store owner is uniquely positioned to provide an exclusive, personalised customer service that is predicated upon a mutual interest and shared story between vendor and buyer. The ethical and sustainable issues which are intrinsic to vintage fashion are an increasingly important concern in the global environment. To help vintage fashion retailers become more successful and to further the need for sustainability in the fashion industry, additional research is required. Further empirical studies will help to provide a clearer picture of critical success factors in vintage fashion retailing and will help to define the diverse needs and wants of the vintage fashion consumer.

J. McColl et al.

References

Ailawadi KL, Keller KL (2004) Understanding retail branding: conceptual insights and research priorities. J Retail 80(4):331–342

Bardhi F, Arnould EJ (2005) Thrift shopping: Combining utilitarian thrift and hedonic treat benefits. J Consum Behav 4(4):223–233

Burt SL, Sparks L (2002) Corporate branding, retailing, and retail internationalisation. Corp Reput Rev 5(2–3):194–212

Cassidy TD, Bennett HR (2012) The rise of vintage fashion and the vintage consumer. Fash Pract 4(2):239–261

Coulson C (2003) The queen of vintage. The Telegraph 33

Davies BJ, Ward P (2005) Exploring the connections between visual merchandising and retail branding: An application of facet theory. Int J Retail Distrib Manag 33(7):505–513

Delong M, Heinemann B, Reiley K (2005) Hooked on vintage. Fash Theory 9(1):23-42

Finnigan K (2006) One careful lady owner. The Telegr 18

Greif M (2010) The hipster in the mirror. New York Times 12

Hamilton C (2012) Seeing the world second hand: mad men and the vintage consumer. Cult Stud Rev 18(2):223

Hansen KT (2000) Salaula: the world of secondhand clothing and Zambia. University of Chicago Press, Chicago

Jevons C (2007) Towards an integrated definition of "brand". In: 2007 Thought Leaders International Conference on Brand Management (Cleopatra Veloutsou 24 April 2007 to 27 April 2007). Birmingham Business School, University of Birmingham, pp 1–11

Kapferer JN (2012) The new strategic brand management: advanced insights and strategic thinking. Kogan page publishers, London

Keller KL, Parameswaran MG, Jacob I (2011) Strategic brand management: building, measuring, and managing brand equity. Pearson Education India

Kent T (2007) Creative space: design and the retail environment. Int J Retail Distrib Manag 35 (9):734–745

Kent T, Stone D (2007) The body shop and the role of design in retail branding. Int J Retail Distrib Manag 35(7):531–543

Kotler P, Keller KL, Manceau D, Hémonnet-Goujot A (2015) Marketing management, vol 14. Prentice Hall, Englewood Cliffs, NJ

Lundqvist A, Liljander V, Gummerus J, Van Riel A (2013) The impact of storytelling on the consumer brand experience: the case of a firm-originated story. J Brand Manag 20(4):283–297

Martenson R (2007) Corporate brand image, satisfaction and store loyalty: a study of the store as a brand, store brands and manufacturer brands. Int J Retail Distrib Manag 35(7):544–555

Malem W (2008) Fashion designers as business: London. J Fash Mark Manag Int J 12(3):398–414 Marzella F (2015) The second-hand market: the practice of reusing goods in cultures dominated by the new. Italian Sociol Rev 5(1):105

McColl J, Canning C, McBride L, Nobbs K, Shearer L (2013) It's vintage darling! an exploration of vintage fashion retailing. J Text Inst 104(2):140–150

McColl J, Moore C (2014) Developing and testing a value chain for fashion retailers: activities for competitive success. J Text Inst 105(2):136–149

McRobbie A (1989) Zoot suits and second-hand dresses. Mcmillan, London

Newman AJ, Patel D (2004) The marketing directions of two fashion retailers. Eur J Mark 38 (7):770–789

Nobbs K, McColl J, Shearer L, Canning C, McBride L (2011) An exploratory study into the strategic significance of visual merchandising: the case of vintage fashion retailing. In: 3rd Global Conference, Fashion: Exploring Critical Issues. Mansfield College, Oxford, pp 22–25

Peterson RA, Balasubramanian S (2002) Retailing in the 21st century: reflections and prologue to research. J Retail 78(1):9–16

Pookulangara S, Shephard A (2013) Slow fashion movement: understanding consumer perceptions—An exploratory study. J Retail Consum Serv 20(2):200–206

Tolkien T (2002) Vintage: art of dressing up. Harper Collins, New york

Tseëlon E (1992) Fashion and the signification of social order. Semiotica 91(1-2):1-14

Tungate M (2008) Fashion brands: branding style from Armani to Zara. Kogan Page Publishers Vahie A, Paswan A (2006) Private label brand image: its relationship with store image and national brand. Int J Retail Distrib Manag 34(1):67–84

Verhoef PC, Kannan PK, Inman JJ (2015) From multi-channel retailing to omni-channel retailing: introduction to the special issue on multi-channel retailing. J Retail 91(2):174–181

Woodside AG, Sood S, Miller KE (2008) When consumers and brands talk: storytelling theory and research in psychology and marketing. Psychol Mark 25(2):97–145

Woodward S (2009) The myth of street style. Fash Theory 13(1):83-101

Chapter 5 The Internationalization of Italian Luxury **Brands. The Missoni Case**

Andrea Runfola, Silvia Ranfagni and Simone Guercini

Abstract This chapter is about the international development of Italian luxury companies. It focuses on small-medium-sized family businesses, which characterize the Italian fashion industry. These businesses more than before have to manage internationalization processes by making stronger the relation between brand reputation and brand performance. Through the findings emerging from the literature and the analysis of the emblematic case of Missoni, the chapter aims to explain how a family luxury company develops a strong international brand in terms both of brand definition and of marketing strategies. The case investigated is built through a case analysis process that included the analysis of secondary data on Missoni and an in-depth interview with the General Manager.

Keywords Missoni • Italian luxury brands • Internationalization • Luxury family business · Marketing strategies

Andrea Runfola, Silvia Ranfagni and Simone Guercini share the final responsibility for this chapter. However, Simone Guercini wrote the Sect. 5.1, Andrea Runfola wrote the Sects. 5.2 and 5.3; Silvia Ranfagni wrote the Sect. 5.4. Andrea Runfola and Silvia Ranfagni composed together the Sect. 5.5.

A. Runfola (⊠)

Department of Economics, University of Perugia, Via Pascoli, 20, 06123 Perugia, Italy e-mail: andrea.runfola@unipg.it

S. Ranfagni · S. Guercini

Department of Economics and Business, University of Florence, Via Delle Pandette, 9, 50127 Florence, Italy

e-mail: silvia.ranfagni@unifi.it

S. Guercini

e-mail: simone.guercini@unifi.it

© Springer Nature Singapore Pte Ltd. 2018

P. -S. Chow et al. (eds.), Contemporary Case Studies on Fashion Production, Marketing and Operations, Springer Series in Fashion Business, https://doi.org/10.1007/978-981-10-7007-5 5

74 A. Runfola et al.

5.1 Introduction

This chapter is about the international development of luxury companies in the fashion industry. Many contributions have considered the role of luxury players in the fashion industry, especially taking into account the perspective of large and well-known global brands managed by large multinationals, such as Prada (Moore and Doyle 2010), LVMH (Cavender and Kincade 2014) or Gucci (Moore and Birtwistle 2005). Nonetheless, the specific case of small-medium-sized family business luxury companies seems to have received minor attention. Although there are no doubts about the leading role of large players, the luxury industry even consists of family-owned luxury fashion brands of a small-medium size. In several industries there are companies which albeit small show a high international reputation. In some cases, the disproportion between fame and prestige of the company name and market performance brings out specific research questions with respect to the business model adopted (Guercini 2014). The Italian fashion industry is a relevant case in this sense. In fact, according to some recent data, family businesses in the fashion industry are still predominant (Corbetta et al. 2015), and there is a great share of them with small-medium size (Guercini and Runfola 2015a). The changing competitive scenario (Moore and Doyle 2010) has leaded these types of companies to expand internationally and to propose their brands abroad. In this process of international development, the need to increase both the awareness of the brand as well as the economic performances appears to be crucial. Moreover, being within the luxury industry, this process may show specificities with regards to the case of the international development of other fashion companies. Consequently, this chapter specifically addresses the marketing strategies implemented by family business luxury companies in their growth process abroad, in their attempt to gain a strong international position. In particular, the focus of the chapter is related to the following research question: How can a family business luxury company develop a strong international brand? What types of marketing strategies could be implemented? How could the company's brand values be managed in international markets in this specific case?

This chapter investigates these research questions presenting the case of an Italian luxury company. In this context, this chapter discusses the international development of Missoni. The company is one of the leading players in the Italian luxury system that is particularly relevant to the topics under investigation. It decided to accelerate its process of international development in recent years, trying to establish a wider global presence. This chapter proposes an analysis on the main brand values, the main marketing strategies that Missoni adopted to grow abroad. It is organized as follows. In the next paragraph, we propose a literature review on the main drivers proposed within the literature influencing the development of luxury fashion brands abroad. Then the methodology is presented. Subsequently, this chapter considers the case of Missoni, a family owned luxury company and its strategies to develop internationally. We then propose a case discussion and some final remarks.

5.2 Fashion Luxury Brands and the Internationalization Process: A Literature Review

The literature on the luxury business has always stressed the specificity of the selling of luxury items (Kapferer and Bastien 2012). In addition, recent literature contributions on the luxury business (Chandon et al. 2016) pointed out how the current global landscape proposes new challenges for luxury companies that call for a rethinking of their marketing strategies (Chandon et al. 2016). In fact, many scholars highlight new opportunities for luxury companies, as well as to other companies, both considering the rising role of new consumers, especially in emerging markets (Cavusgil and Buckley 2016) and the impact that new technologies, such as the Internet, may provoke to the management of luxury branding (Moore and Doyle 2010; Kapferer and Bastien 2012; Chandon et al. 2016; Guercini and Runfola 2016).

In this context, the study of how luxury fashion companies expand abroad is still intriguing.

Within the fashion industry, the issue related to the management of the brand in international markets has been addressed previously in the literature (Moore et al. 2000). The study of the perceptions around a luxury brand has been analyzed within the luxury fashion industry, according to several streams of research (Cavender and Kincade 2014). It is possible to point out contributions that investigated the more general brand management strategies (Okonkwo 2007; Fionda and Moore 2009) and some relatively new topics such as that related to innovative methodologies to measure brand associations (Crawford et al. 2014).

Within the literature, the possibility for fashion luxury companies to propose a standardized approach to international markets has been highlighted (Moore et al. 2000). In other words, it has been stressed how luxury companies can try to propose a standardized positioning worldwide. Luxury fashion brands can then become global brands, where, following the definition of Craig and Douglas (2000), global brands are those that are characterized by three main components (Craig and Douglas 2000). In fact, according to the authors, other being characterized by a worldwide standardized brand image, to be global a brand needs even to have a wide international presence, in terms of total number of foreign markets served and a perception by consumers in terms of global availability of the brand (Craig and Douglas 2000, p. 275). Within the fashion industry, it is possible to note how some very well-known brands may be considered global in that sense. Moore et al. (2000) for example, studied the expansion of a sample of fashion design retailers, a list that included very well-known luxury brands, pointing out that the international development of these brands was reached, among the others, through a standardization approach of the brand communicated in each market (Moore et al. 2000, p. 935). In this process, according to Wigley et al. (2005), the role of product and branding strategies are intertwined and crucial.

Although the search for a global presence seems to be related to a standardized approach, at the same time it has been noted that new trends, such as the rising of

emerging markets, seems to push companies towards the consideration of some adjustment to local consumers (Cui et al. 2015; Liu et al. 2016) in their branding strategies towards international markets. Moreover, it has been stressed that opportunities may arise by the implementation of new marketing strategies (Chandon et al. 2016).

A relevant strategy to increase the awareness as well as to raise sales abroad is assigned to the management of the retailing phase, especially in the case of manufacturing companies that open stores in international markets (Guercini and Runfola 2015a). The investment in the retailing stage has become in the last decade one of the main strategies to penetrate and to increment sales in international markets in the fashion industry (Guercini and Runfola 2016). The store represents, in fact, a key mode to enter in the market, as noted by Moore et al. (2010), that studied the importance in this sense of a specific retail format, the flagship stores. Following this line of reasoning, recent studies analyze the experimentation of new retail formats for luxury companies. For example, Lassus and Freire (2014) pointed out the role of pop-up stores, an innovative retail concept. Moreover, as noted by Guercini and Runfola (2016), who studied the specific case of Italian fashion companies, the opening of retail outlets within the fashion industry, is relevant for all the companies, targeting both the middle and the upper classes in international markets. In a study that analyzed 300 Italian fashion brands, the two authors found that more than 2000 stores were opened worldwide in a 10 year period (Guercini and Runfola 2016). Consequently, the internationalization of luxury companies seems strictly related to the managing of the stores abroad and to the definition of a retail stores mix to use in their international development.

Along with the expansion through a significant investment in store outlets, recent attention has been given to the role of new technologies, with a specific focus on the Internet potential for the development abroad within the luxury fashion industry (Chandon et al. 2016; Guercini and Runfola 2015b).

The possibility to offer to the consumer a comprehensive and satisfying Internet experience has given rise to the wide use of social media even in the case of luxury companies (Kim and Ko 2012; Dauriz et al. 2014; Godey et al. 2016). In this sense, new opportunities for the communication of the brand may emerge, even though the understanding of how each foreign market may be peculiar requires a specific investment in learning processes (Guercini and Runfola 2015b). Moreover, even the role of fashion blogging as a phenomenon that substantially changes the word of mouth among consumers (Kulmala et al. 2013), should be addressed by luxury company (Moore and Doyle 2010).

Furthermore, it has been noted how the Internet could represent a relevant means for incrementing the sales abroad for luxury fashion companies, not only considering it as a direct distribution channel but also taking into consideration the development of multi-brand online retailers (Guercini and Runfola 2015b). During the last decades, taking into account a general perspective, the online sales of luxury products grew substantially and are expected to grow significantly even in the future. According to Remy et al. (2015), the online luxury sales of personal goods (including the fashion items) shown an annually percentage increase of 27% during

the last 5 years (Remy et al. 2015, p. 9). Considering this, the online presence in terms of e-commerce for a luxury company can be added as a significant marketing strategy to reach new targets and new markets (Chandon et al. 2016).

To summarize, new trends have emerged in the context of the luxury internationalization. These trends represent at the same time opportunities and challenges. In this chapter, we try to analyze how these new opportunities have been considered by a family owned and small-medium business company in its strategy to strengthen its international growth. In fact, although these new trends can support the foreign expansion of the company, according to the authors, they may affect differently the case of a family owned and small-medium business luxury company, that is the specific attention of this chapter, with respect to the case of a global brand already present worldwide. The traditional characteristics that affect small-medium-sized companies in their international development (Ruzzier et al. 2006) may, in fact, represent a further challenge for the company in managing new opportunities.

In the next paragraphs, after a brief overview of the methodology, we deeply describe the case of Missoni and how the company developed abroad.

5.3 Research Method and Case Selection

To empirically analyze the research questions proposed in the introductive paragraph, this chapter describes the case of an Italian luxury company and its successful process of growing in international markets. The case is built through a case analysis process (Yin 1989; Eisenhardt and Graebner 2007) that included both analysis of secondary data on the company and an interview with the General Manager.

The case selected for this chapter regards the luxury company Missoni. The case was selected for its importance within the Italian luxury fashion industry. It is a very well-known brand, and its iconic products are highly recognized within the luxury market. The company is particularly interesting for the purpose of our research. Although the company turnover reaches roughly 64 million euro (Missoni Annual Report 2015), the awareness of the brand is relatively high, both in the national market and in those international markets where the company has been traditionally present in the last decade. The company brand is now strengthening its international presence taking into consideration new markets and trying to reinforce the presence in the international markets in which it is already present. Hereafter, in the next paragraph, we describe the history, the main brand values, the main target markets and the strategies implemented to penetrate in international markets.

The case is built on data gathered by means of an interview with the General Manager of the company. The interview was realized following questions developed by the authors of the chapter. The case is then based on secondary data on the company gathered in sources such as annual reports, company website, publications and news appeared in specialized magazines.

78 A. Runfola et al.

5.4 Branding Strategies and Internationalization in the Missoni Case¹

5.4.1 A Brief History

Missoni is a family business that was originally founded to produce sports fabrics and clothing. Its founder, Ottavio Missoni, in fact, was an athlete who practiced sports competitively and participated in major events, including the Olympic Games in London in 1948. Thus, he decided to combine his passion for the sport with the business activity that he started by producing tracksuits. In 1953, he set up the Missoni company together with his wife, Rosita. She has possessed manufacturing skills. In fact, she had worked for many years in a company that produced household linen and had acquired specific skills in using fabric remainders to create patchwork used to design and develop prototypes of collections. Together with Rosita, Ottavio developed a unique style of dress based on the search for colours and on bringing together zigzag patterns, stripes, waves and yarns within geometric and floral jacquard patchworks. Today Missoni is a family business distinguished by a high level of both creative and technical skills in knitwear production; its sweaters embody, moreover, a content of craftsmanship thanks to the human skills involved and one of technology due to the highly innovative manufacturing equipment employed. This combination, inherent in all Missoni collections, is the result of an evolutionary process that the company has pursued over time and has earned it the reputation of being one of the most sophisticated fashion companies in the world. Missoni has never experienced times of turnaround but has grown steadily and continuously over time. It took off in the sixties: it made brand communications and it developed a brand popularity in European markets and especially in Paris, the undisputed fashion capital of the time. This market, more than others, was coherent with Missoni style. Later, in the seventies, the best-known fashion magazines elected Missoni as one of the most important international luxury brands. These are the years in which the company started to open the first stores in Italy, in Europe (France, Germany), Japan, the Middle East and the USA (New York). Beginning in the 80s there was an increasing intertwining between the Missoni brand and art; in 1994 first Florence, then Milan hosted Missonologia, an exhibition about the brand, and in 1996 two other exhibitions were held in Japan: the first at the Sazon Museum of Art, and the second at the Nagoya City Museum. Missoni collections are on permanent exhibition at the Museum of Modern Art in New York, at the Museum of Art in Dallas and at the Fashion Museum in Bath. Missoni has always been and still is a family business that distinguishes it from many other Italian luxury companies, which have been incorporated by multinational fashion groups. Ottavio and Rosita, in fact, decided to leave their shares to their three children (Vittorio, Luca and Angela), preparing the generational

¹In this section the quotes refer to the comments expressed by the General Manager during the interview.

succession when they were still fully active in the company. They assumed an attitude in contrast to that of many Italian family businesses, where generational successions tend to occur later and can be long and complex. The Missoni family, then, exhibits a different, somewhat revolutionary, mentality within the context of the Italian family firms. A reflection of this change can be seen in what happened in 1996, when the daughter Angela was asked to design the annual collection and entered as a creative director, replacing her mother. 2013 saw the deaths of Vittorio, who dies in a plane crash, and the father Ottavio. These were major losses for the company, which, however, was able to react quickly. Today it employs about 270 people; together with the family, its management involves an external manager, who is CEO and responsible for brand management and marketing activities. Missoni, while operating internationally, has always supported its growth without losing its family nature and making family continuity a source of differentiation in the panorama of Italian luxury.

5.4.2 The Brand Values and Collections

The people who work in the company contribute to realizing a brand that is an expression of specific values that have always characterized its identity. One of these is the extremely high level of sophistication in the processes of Knitwear production. Missoni is in fact equipped with manufacturing machines, which are designed and tested internally to realize products that are internationally recognized as technically unique. Another indelible value is the synergy and proximity to the world of art: from its first collections, the family was inspired by the Italian Abstractism of the early twentieth century. This combination between fashion and art has accompanied the entire history of Missoni. This explains its intense and continued interest in and commitment to the study of design and of the relationship it has with art. A recent exhibition organized in Milan (Gallarate) testifies to the triad of Missoni, art and colour. Colour is a brand component that more than others has always been apparent to customers in international markets. Another fundamental brand value is that of family. In this regard, the CEO remarks that 'our brand name, in fact, is not Giorgio Armani but Missoni, since it refers to a last name, not the name of an individual; Missoni is expressed through a family, and this was a characterizing and breaking element'. In fact the communications of Missoni as corporate brand present images depicting all the family members; the focus is not on the collections and models but on the family and its members. The Missoni brand identity is increasingly associated with the family and with art; moreover, the affinity for art has made the Missoni family capable of sensing emerging photographers and designers and thus of being talent scouts. Together with art and family, also sophistication finds its expression in the offering of Missoni; it includes collections for men, women, and children. Moreover, as initiator of a multicoloured aesthetic vision, Missoni manages to influence the contemporary lifestyle thanks to

A. Runfola et al.

the success of its Home line. The various collections constitute a *luxury at reasonable prices* if compared with those of its main competitors. The top line clothing collection 'belongs to the world of a more possible luxury, in the sense that they are not lines in which the garments cost seven, eight or ten thousand Euro, but lines that have always been designed to be worn by ordinary people and to belong to a world of luxury which cannot be called democratic, because that would be too much, but that practices accessible prices'. Then there are the lines intended for wider dissemination such as the M Missoni line. This is produced by Valentino Fashion Group and has a different position; in fact, its price is about 30% lower than that charged for the top lines.

5.4.3 The Brand Internationalization

Being different in the deep: the role of technologies and human abilities In its internationalization processes, Missoni seeks to transmit the founding brand values. The PR activities and the advertising campaigns it uses are largely the same in all markets, so there is a widespread and uniform brand image and, thus, a common brand concept. However, a theme is emerging that seems destined to characterize brand communications; it concerns the product sophistication as a synthesis of manufacturing technologies and skills accumulated over time. In doing so, the Company seeks to enhance one of its undeniable sources of differentiation that it has developed, but without drawing too much attention to it, by investing in continuous innovations and in human resources. The idea is to integrate in communications the sense of luxury infused by the values of family and of art with that of a rare manufacturing excellence that combines the latest technologies with an internal heritage of productive knowledge. This integration is not easy to achieve. The challenge is to find a communication approach that limits the risks that emerge when the focus is the deeper content of brand tangibility. Among the risks is that of being too rational, educational and didactic. At the moment the company is considering to combine different media resorting to digital channels and adopting a style reminiscent of story telling. 'Clearly, we cannot use traditional advertising media and the press, it is a question more closely connected to social media...they allow us to interact with consumers and to tell them things more accurately'. The value of the product sophistication as brand value could become important in markets like China and the United States, which are very sensitive to Made in Italy and to the uniqueness of product; using virtual communication to narrate something that Missoni does not need to invent, but that has always been part of its experience, could be appreciated in these markets.

Combining wholesale distributors with being retailer As to distribution choices, Missoni, although it has its own stores in the world's most important cities, is not a retailer, unlike many other luxury fashion companies. More specifically it has

created a network of stores including 9 owned and 6 in franchise; it has a total of 35 stores worldwide. The main shops are located in Saudi Arabia (Riyadh), Austria (Vienna), the United Arab Emirates (Dubai), France (Cannes, Paris, Saint-Tropez), Germany (Munich), Japan (Tokyo), Great Britain (London) Hong Kong, India (New Delhi), Italy (Capri, Florence, Forte dei Marmi, Milan, Portofino, Positano, Rome, Venice), Korea (Seoul), Lebanon (Beirut), Morocco (Casablanca), Qatar (Doha), Russia (Moscow, St. Petersburg), Singapore, Switzerland (St. Moritz), Turkey (Bodrum), USA (New York). The direct distribution channel which Missoni makes use of is integrated with the indirect one, which consists of a large number of wholesale distributors. The direct retail, while not large, is strategic, as it is considered one of the ways the company can fully transfer its brand values and, therefore, its true DNA; among the multi-brand stores that Missoni favours, however, are the American department stores. As regards the international organization of the distribution network, the company has no agents. It has a subsidiary in the US, which manages relations with the market and which deals with both its retail and its wholesale stores. In markets where Missoni intends to increase its presence, it has direct managers who contribute to creating brand awareness and building business relationships with new clients, who are usually then received at the Missoni showrooms in Italy. In the Japanese market, the direct responsible figure is atypical as it is a distributor, which operates its own stores. At the moment the company also makes use of travel retail, as it has sales spaces in some of the major international airports. In these spaces, the offer consists mainly of textile accessories such as scarves and gloves; the offer will be expanded as the company intends to invest in the creation of a collection of bags, accessories and small leather goods.

Searching for adaptations in the similarity Missoni is active in markets that are culturally diverse. Among these, the most important is North American, followed by Europe, the Middle East, Japan and Korea. In the Far East, Korea and Japan are markets where Missoni has historically achieved great success and where it has been operating for about 30 years; thus, the trade relations it has with both are well consolidated. China is now one of Missoni's development frontiers and offers considerable business potential for the near future. Less important is the internal market, that is Italy; here purchases at the various Missoni stores are made predominantly by tourists visiting the country. The Italian market is weaker than others and therefore less attractive. The development of brand in markets that are culturally diverse implies tangible adaptations of product. 'There are differences which are essentially physical between the various markets and these are also the most important at this time because the wearability suitable for a Korean, Indian, Chinese and or European is objectively different'. Although the best-selling models are developed taking into account the different types of wearability, the knitwear products, as they stretch, involve fewer adaptations than other apparel products. The trend, however, is on the one hand, to develop collections for different markets based on a common denominator and, on the other, to assess the need not only to make product adaptations but also to propose something that is specific to the A. Runfola et al.

different markets. 'The Lurex for example is a type of yarn that is good for the US but not for Japan and Korea being a synthetic yarn. Here in Korea and in Japan you need something different'. Despite these adjustments, the identity of the brand that is conveyed is unique everywhere, so it is not subjected to rebranding choices, that is a competitive repositioning in different markets. The Missoni values are therefore transversal to international consumers.

The force of Missoni family as a strategic asset for the company Despite the ongoing internationalization in the company, the family remains an important asset also in the management of relationships with customers. 'I think we gain a huge asset having the family in our company, a family of extremely nice and well-known people, not the least bit haughty, hospitable...this is a resource for a small company like ours, which helps us to manage clients'. Clients are in fact invited to the company headquarters in Sumirago (Varese): here they are shown the knitwear and more generally the collections and they are provided with an array of technical details concerning their production. These visits are combined with friendly and convivial gatherings in which the family plays a crucial role. Members of the family, in fact, organize pleasant activities that encourage socialization among clients, members of the Missoni family and business managers. 'We invite clients to dinner at the home of Rosita Missoni, all this provides a kind of cocktail of technique and a sense of familiarity that we can bring to life... being small we can do this easily, but if we were a big brand it would be more difficult'. Its Made in Italy quality is an essential ingredient of the Missoni identity: it is an Italian brand whose products are manufactured almost exclusively in Italy, except for a few t-shirts of the men's collection. The raw materials are Italian as well. Moreover, much of the production is made in the factories in Sumirago; therefore, they are not only for making prototypes and samples. The company is very close to Switzerland and therefore in the northern tip of the country; the choice of this location was made by the Missoni family, who liked to work in a very green place, in the woods. 'We are in a unique position in the world: while we work we can see the squirrels'. At the same time, the company is situated in an area that can supply technical skills related to textile production and knitting. Although it is not a district area, it has a wealth of knitting mills.

5.4.4 Rethinking How to Approach International Markets

Combining digital and tradition communication The communications of the Missoni firm will be increasingly transmitted no longer only through traditional channels but also through digital media. Digital media are considered to the most efficient means of communicating brand in international markets as they are capable of developing relationships with the end consumer and of rendering these relationships ever more interactive, thereby enhancing business potential. A digital

Missoni world by itself would not work, however. This world needs to be linked with the offline world. In this connection 'it is very important to maintain an efficient offline commercial reality which makes it possible to have direct contact with the client. This integration is absolutely essential, and in our case, it is growing more and more'. Currently, Missoni has an expert in digital marketing who is employing new analytical instruments and new techniques of online communication to study and enhance the brand online, seeking to facilitate access on the part of a broader public. It is precisely an increased accessibility of the brand that the company is most interested in, rather than the growth of brand familiarity. This familiarity is to a significant extent already in place. 'Missoni enjoys an enormous advantage compared with others in that when an actress or any other celebrity wears a Missoni outfit, you recognize it immediately. That is, you don't have to point it out. For other brands it's a bit more complicated, but Missoni has characterizing graphic features, which are unequivocal features of brand. Everyone knows that Obama's wife during her visit to Milan wore a Missoni outfit, and this advantage increases the value of this kind of virtual communication for the company'. In this context, the role of trade fairs Textile fairs continue without doubt to be of crucial importance, as operators can approach brands and observe the fabrics directly. Operators need to touch fabrics to understand their structure, weight and degree of softness. There are other cultural events that are more important than the fairs as loci of inspiration such as the design fair held in Milan, which is highly regarded also beyond its own sectorial context. 'If we turn to the fashion show, on the other hand, we are dealing with an event of considerable importance and visibility, perhaps even more so now than in the past, since it has the potential to become a global event. It is not an issue of fairs, then, but of events'.

The need of making the brand awareness take off Missoni feels an objective need to grow since the brand is certainly bigger and better developed than its total sales on the world's markets. There is, then, a certain dissonance between the end consumer's brand awareness and Missoni brand performance. It is necessary to reduce this dissonance. Given this premise, it is clear that Misson needs to develop a bit everywhere. 'Italy is certainly not our target. This is clear to everyone and hardly requires explanation, as the reasons are well known. If, on the other hand, we're talking about virgin markets, one that would be of considerable importance for us would be China, as I mentioned before, as we are not present there and we need to get in. In that case it would be interesting to enter even only online. Online sales are incredibly dynamic in China. We're talking about 800 million online customers, potentially an alternative system to traditional distribution'. Beyond China, other markets attract Missoni company. 'We're also present in Korea, Hong Kong, Singapore, and Japan, but we're not present in the southeast, in Thailand and Vietnam, where the opening of exclusive shops would be more than justified'. However, Missoni also thinks to redefine itself in some markets. 'On the question of the United States, we'll have to work on a repositioning the Missoni brand. In Japan, on the other hand, we have create renewed interest in the brand, as we've A. Runfola et al.

been present there for a long time, so it's considered a bit out-of-date, so we'll have to renew ourselves on the values of luxury and brand image'.

5.5 Case Discussion and Conclusions

In this paragraph, we try to propose some emerging issues from both the literature review and the case analysis of Missoni. As reported in the literature review, some new trends have affected the competitive landscape for luxury fashion companies. The analysis of findings drawn from the literature and the analysis of the Missoni case, allow us to consider some *research propositions* regarding the international development of a luxury company abroad.

A first result could be considered the fact that luxury companies deal with increasingly different and diversified markets. They are more and more socially complex. Moreover, the openness towards international markets (in both the advanced and the emerging ones) and thus, the emergence of new consumers and new values imply different modes of approaching international targets. It seems that strategies to approach these new markets and new values are based on brands whose personality has become more articulated. More specifically, brand values are now more sophisticated and give rise to an intriguing interweaving of brand associations that are able to valorize what the brand has always been, in other words, its authentic essence. In this regard, Missoni, in addition to the values of art and creativity, which emerge from the colours and patterns of the collections as the principle timeless brand values, tends to enhance the concept of 'being a family business' and the technology set of specific human skills. Consequently, art, family continuum, innovation and craftsmanship are intertwined to make Missoni a unique and more competitive brand in foreign markets. The diversity of brand lies therefore in a refined complexity of brand values that should reinforce its differentiation in the consumer's mind. In extending its brand values, Missoni has not compromised the historical values of brands. In fact, the international growth has led it to enrich the brand identity retrieving those values that, although defining the brand, have not been exalted in the competitive positioning strategies before. In this sense, the analysis allows us to propose the following research proposition:

RP1 The international development of luxury family businesses is related to the ability to create a complex system of brand values.

The family continuity, other than being an element of brand equity, also acts as a force that creates a feeling of community and impacts on the relational processes that the company develops with customers, mainly business clients. The involvement of family members in convivial occasions as contexts where they show the new collections allows customers to immerse themselves in unusual brand experiences. On these occasions, customers may also reinforce their social relations with the Missoni family and managers by exploiting a positive work atmosphere that may impact on the quality of business relationships. The association of the brand with an Italian

family strengthens the legitimacy that the market attributes to Missoni of being a 'Made in Italy' brand. The latter is not so obvious, and if perceived as such, can, in turn, enhance those brand associations as expressions of the family dimension embedded in the brand. There follows another research proposition:

RP2 The family dimension is a company-unifying force in the internationalization process of luxury family businesses.

The analysis of recent marketing trends in luxury fashion companies highlights the role that the different distribution channels play in reaching and intensifying the brand presence in the international markets. In the Missoni case, retail shops are mixed with the wholesale ones in a combination according to which the former become places where the brand DNA emerges in all its complexity due to the involvement of the company sales staff, while the latter are points of interaction with the market less controlled by the company even though driver of sales. At the same time, the multichannel approach also characterizes brand communication. More traditional communications are integrated with new digital channels to make the consumers' perception of the Missoni brand as complete as possible. Specifically, the digital media allow the company to both create brand engagement and render certain brand values (technological sophistication based on craft production skills) more accessible. In addition, the brand experience becomes more absorbing. The case shows how integration is a dominant marketing paradigm for Italian luxury family businesses involved in internationalization processes. However, this requires investment in new skills and abilities. Now the following research proposition can be advanced:

RP3 The development of international markets in a luxury family business is based on the integration of distribution channels and among means of traditional and digital communication.

The case considered here highlights the need to simultaneously achieve both the creation of a strong brand awareness and the development of market penetration strategies supported by targeted marketing actions. In other words, it is important to define what is the brand, but it is also essential to make it a sales engine. In competing in international markets, one of the main challenges that Italian family business has to face is to exploit diversity. In fact, consumers recognize brand diversity as a source of brand performance. Missoni seems to face this challenge by following two main paths: (a) the first is to invest in the integration paradigm expanding brand presence in stores and making communication deeper and more extensive and (b) the second is to enter new markets reviewing at the same time the brand positioning in the existing ones. This second strategic approach shows how, despite the high brand awareness, success in the international markets does not exclude the need to revitalize its brand and its ways of communicating. In this sense, there emerges a search for what we may call 'strategic parallelism', which we may define as the ability to assert the brand in foreign markets by combining the strengthening of the brand awareness and of the strategies used to transfer the brand values. Then leads to the following and final research proposition:

A. Runfola et al.

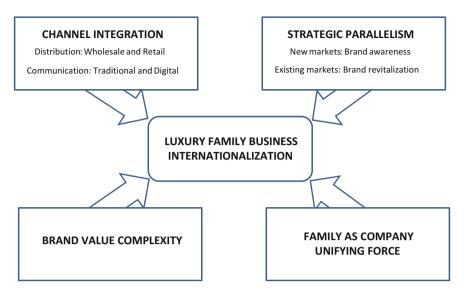


Fig. 5.1 Four key assets to manage in the internationalization process of a fashion luxury family owned and small-medium company

RP4 The development of luxury family businesses in international markets seems to call for a strategic parallelism between branding and building consumer relationships in international markets.

Figure 5.1 summarizes our thinking. In our view, integration and strategic parallelism play a fundamental role in supporting a strategic approach towards to a more complex brand identity by exploiting the unifying force of family.

To conclude, although our analysis considers only one case and the specific empirical setting of the Italian luxury industry, the findings may have implications for both the theory and practice of luxury fashion management. From a theoretical point of view, they stress the need to rethink the way in which luxury companies can approach international markets. Our research, in fact, points out the increased complexity that luxury companies need to face and what potential strategies may be implemented. In line with the prevailing academic literature, we have pointed out which main drivers could lay the foundations for implementing innovative marketing strategies. Moreover, with a focus on a small—medium-sized family business, our research gives additional insights into how such a brand may start and develop a successful internationalization process. From a managerial point of view, the chapter proposes four main key assets to manage to support the development of the luxury company abroad. In synthesis, our analysis points out the need for further studies into how to approach international markets from the perspective of a luxury based company.

References

- Cavender R, Kincade DH (2014) Management of a luxury brand: dimensions and sub-variables from a case study of LVMH. J Fashion Market Manag 18(2):231–248
- Cavusgil ST, Buckley PJ (2016) Interdisciplinary perspectives on the middle class phenomenon in emerging markets. Int Bus Rev 3(25):621–623
- Chandon, JL, Laurent G, Valette-Florence P (2016) Pursuing the concept of luxury: introduction to the JBR Special Issue on "Luxury Marketing from Tradition to Innovation". J Bus Res 69 (1):299–303
- Corbetta G, Minichilli A, Quarato F (2015) VIII Osservatorio AUB sulle aziende familiari italiane, Osservatorio AUB
- Craig CS, Douglas SP (2000) Building global brands in the 21st century. Jpn World Econ 12 (3):273-283
- Crawford Camiciottoli B, Ranfagni S, Guercini S (2014) Exploring brand associations: an innovative methodological approach. Eur J Mark 48(5/6):1092–1112
- Cui AP, Wajda TA, Walsh MF (2015) Luxury brands in emerging markets: a case study on China. Adv Int Mark 25:287–305
- Dauriz L, Remy N, Sandri N (2014) Luxury shopping in the digital age. McKinsey & Company, New York
- De Lassus C, Freire NA (2014) Access to the luxury brand myth in pop-up stores: a netnographic and semiotic analysis. J Retail Consum Serv 21(1):61–68
- Eisenhardt KM, Graebner ME (2007) Theory building from cases: opportunities and challenges. Acad Manag J 50(1):25–32
- Fionda AM, Moore CM (2009) The anatomy of the luxury fashion brand. J Brand Manag 16(5-6):347-363
- Godey B, Manthiou A, Pederzoli D, Rokka J, Aiello G, Donvito R, Singh R (2016) Social media marketing efforts of luxury brands: influence on brand equity and consumer behavior. J Bus Res 69(12):5833–5841
- Guercini S (2014) Profiting from creative performance and business models over time: the case of the Italian design industry. Int Stud Manag Org 44(4):26–42
- Guercini S, Runfola A (2015a) Small-medium sized manufacturers' internationalization through retail store openings abroad: a study of the Italian fashion industry. Adv Int Mark 26:61–84
- Guercini S, Runfola A (2015b) Internationalization through E-commerce. The case of multibrand luxury retailers in the fashion industry. Adv Int Mark 26:15–31
- Guercini S, Runfola A (2016) How western marketers respond to the new middle class in emerging market cities; the case of Italian fashion marketers. Int Bus Rev 25(3):691–702
- Kapferer JN, Bastien V (2012) The luxury strategy: break the rules of marketing to build luxury brands. Kogan Page Publishers, London
- Kim AJ, Ko E (2012) Do social media marketing activities enhance customer equity? An empirical study of luxury fashion brand. J Bus Res 65(10):1480–1486
- Kulmala M, Mesiranta N, Tuominen P (2013) Organic and amplified eWOM in consumer fashion blogs. J Fash Mark Manag Int J 17(1):20–37
- Liu S, Perry P, Moore C, Warnaby G (2016) The standardization-localization dilemma of brand communications for luxury fashion retailers' internationalization into China. J Bus Res 69 (1):357–364
- Missoni Annual Report (2015) Missoni SPA Bilancio consolidato. Retrieved on AIDA Bureau Van Dijk.
- Moore CM, Birtwistle G (2005) The nature of parenting advantage in luxury fashion retailing-the case of Gucci group NV. Int J Retail Distrib Manag 33(4):256–270
- Moore CM, Doyle SA (2010) The evolution of a luxury brand: the case of Prada. Int J Retail Distrib Manag 38(11/12):915–927
- Moore CM, Fernie J, Burt S (2000) Brands without boundaries-the internationalisation of the designer retailer's brand. Eur J Mark 34(8):919–937

88 A. Runfola et al.

Moore CM, Doherty AM, Doyle SA (2010) Flagship stores as a market entry method: the perspective of luxury fashion retailing. Eur J Mark 44(1/2):139–161

- Okonkwo U (2007) Luxury fashion branding. Trends, tactics, techniques. Palgrave Mcmillan, UK Remy N, Catena M, Durand-Servoingt B (2015) Digital inside: get wired for the ultimate luxury experience. McKinsey & Company, New York
- Ruzzier M, Hisrich RD, Antoncic B (2006) SME internationalization research: past, present, and future. J Small Bus Enterp Dev 13(4):476–497
- Wigley SM, Moore CM, Birtwistle G (2005) Product and brand: critical success factors in the internationalisation of a fashion retailer. Int J Retail Distrib Manag 33(7):531–544
- Yin RK (1989) Case study research: design and methods, revised edition. Appl Soc Res Methods Ser 5

Chapter 6 Luxury Branding and Digitalisation: The Case of European Brands in China

Serena Rovai

Abstract The main purpose of this research is to investigate how a luxury brand may be affected by the variables associated with the entry to a new market as in the Chinese one and how those new variables are integrated into the branding in the new geographical context. In doing so, this study reviews the main existing literature in the field—despite the limited literature in luxury digitalisation in China and following three derived propositions through a qualitative approach, it analyses the examples of the brand strategy of three European luxury brands after entering China. The luxury brands considered in our investigation are three international ones, each with a specific consolidated brand heritage and with a sectorial positioning. This research explores and analyses the specific luxury brand building and rebranding process adopted by these three luxury brands to enter the new market and specifically through the digitalisation of the brand. The empirical research evidences the critical impact of digitalisation for successful luxury branding in the entry market strategy and has justified its adoption in the exclusive luxury sector by the socio-cultural context-related factors of the new market. It provides specific orientations and recommendations as well as best practices for luxury corporations on the specificities of branding and digitalisation of luxury in China. The research shows that a successful model path for luxury branding when entering the Chinese market and the key impact of the 'luxury digitalisation' strategy is usually associated with high accessibility, when compared with the traditional 'luxury retailing' strategy which is usually associated to the exclusivity of the luxury sector.

Keywords Luxury branding • China • Digitalisation • Sociocultural context

This chapter is an extension of the following conference paper: Rovai, S., & Valle, D. (2016). Luxury Brand Building and Rebranding through Digitalisation: The Case of Italian Brands in China. Global Marketing Conference, Hong Kong.

La Rochelle Business School, 102 rue de Coureilles - Les Minimes, La Rochelle Cedex 17024, France e-mail: serenarovai@yahoo.com

S. Rovai (\subseteq)

90 S. Rovai

6.1 Introduction

During the last decades, we have assisted to a modification in the economic centre from western regions towards the eastern ones also reflected in the modification of the luxury markets. The fast-growing Chinese luxury market has become a key centre despite the decrease in sales of the last years. The Chinese market has also increasingly shown its own specificities and mode of functioning in particular with respect to the conspicuous and hedonic consumer behaviours in the luxury purchasing process and operations. The Chinese luxury market has started to show to differ from traditional luxury markets in terms of purchasing desire, expectations and motivations of purchasing process. It has also started to dictate its own mode of operating and influencing the entire luxury market and industry at the global level.

The traditionally complex purchasing process of the luxury industry—and specifically different from the mass consuming one—has been significantly disrupted and further made complex by the mode of luxury purchasing process of novice Chinese consumers and potential aspirer further complicates the branding strategy for luxury brands when entering China. The Confucian cultural heritage, the open market economy 'with Chinese characteristics', a frugal-value oriented collective society and the fast economic growth have and are highly impacting the Chinese society and its way of functioning, and resulting in a non-homogeneous scenario often difficult to be understood by luxury goods companies, in particular, with respect to the formulation of adequate branding strategies.

Asian countries have become the destination for 60% of world's luxurious products (Chevalier and Lu 2010). In relation to the increasing importance of the Asian and more specifically of the Chinese luxury market for global luxury brands, it has become increasingly essential for luxury brands to know and understand the purchasing behaviours of Asian luxury goods consumers and, in particular, the affluent Chinese, new consumers of luxury goods. Rapid economic growth, public policy and cultural factors have made Chinese affluent customers different from their peers in the most developed markets in the West as well as in the east.

Undoubtedly, the growth of the luxury market internationally—and, in particular, in the fast-growing economies—has started to pose new challenges and opportunities for luxury brands development and entry mode in the new geographical contexts. In the past years, the luxury market has reached than \$1 trillion U.S. in 2014 (D'Arpizio 2014), with an increasing number of consumers, in particular, from the Asian and Middle East geographical areas that have tripled in the past 20 years and are forecasted to reach 400 luxury consumers globally worldwide by 2020 (D'Arpizio and Levato 2014). In the past decade, China, one of the largest global economies with the largest global consumer market, has reached the role of an undisguisable strategic leader in the luxury market. Far from the exponential double-digit growth rates characterising China's growth in the past decades at the moment it is entering a different phase of growth. A recent report by Bain & Company's, the '2015 China Luxury Market Study', highlighted how mainland

Chinese luxury shoppers continue to indulge in luxury spending, however, focusing more on spending in their shopping tourism overseas (Bain and Company 2016).

At the worldwide level, new luxury trends are also witnessing the role of China in a multiplicity of diversified aspects impacting the global luxury market scenario. The ongoing Chinese growth in the last decade has been associated with a decrease in European and US markets. In addition to this, further issues have negatively affected the market growth more related to Chinese market specificity. Chinese exponential luxury market growth has negatively influenced the exclusivity aura associated with luxury goods and consequently disrupting non-Chinese luxury customers and Chinese top spenders' luxury brands orientation. In relation to the economic crisis in the most consolidated luxury markets, international luxury brands have focused their interest towards fast-growing economies. Global brands have focused their attention on attracting fast-growing economies with a specific growth in affluent consumers interested in foreign brands and in a perspective of increase in global consumption (Le Monkhouse et al. 2012). China has attracted much attention by significantly contributing to balance the sales decline in consolidated economies that in 2013 accounted for 28% of the €212 billion global luxury consumption (Schiliro 2013).

However, the new luxury 'China' oriented scenario has started to show its complexity and heterogeneity in luxury brand awareness as well as perception and purchasing behaviours amongst other luxury related concepts. Only recently, local shoppers have started to become more brand aware of what they were in the past and with a specific focus on luxury fashion brands (Bruce and Kratz 2007). However, it would be too limited to simply consider that the volumes of the market and a new brand awareness are harmonising and aligning luxury industry functioning and branding to the global market. Sociologically and culturally related factors affecting shoppers' luxury brand perception and luxury goods purchasing experience must be considered and as a consequence those context-related factors that may affect the branding process itself. China's culture is different from Western cultures and thus, Chinese luxury consumption may not follow the trends of the Western world. The Chinese perceive luxury brand value in terms of China's unique cultural background and as a consequence of the Chinese economic development, the Chinese luxury lifestyle is gradually evolving and beginning to show its own distinct characteristics.

Although prior research related to luxury examines different cultures and markets such as the US, Indian and European, there are relatively limited studies within the Chinese luxury context and the impact on luxury brand when entering this market have not been examined sufficiently. The main purpose of this research is to investigate how a luxury brand may be affected by the variables associated with the entry to a new market as in the Chinese one and how those new variables are integrated into the branding in the new geographical context.

92 S. Rovai

6.2 Literature Review

6.2.1 Luxury from Past to Present to the Future of Luxury

Luxury has evolved as a concept through the years and it is still highly influencing the markets (Herrmann and Huber 2000). Through the time, luxury has been associated with high price and high quality in craftmanship, scarcity, exclusivity, heritage, brand loyalty and subconscious associations (Hudders et al. 2014; Chevalier and Mazzalovo 2008; Dubois and Czellar 2001). In particular, luxury and fashion brands have to evoque and sell unicity in the experience as well as quality, originality and feelings of belonging. Luxury fashion products are defined as not available for everyone but highly desired (Okonkwo 2009), rarity being as one of the main characteristics of a luxury brand (Veblen 1899) defining its consumption together with exclusivity and uniqueness (Kapferer 1997; Mazzalovo 2012).

Literature teaches us that 'luxury' is used to denote the main category of highly prestigious brands (Vigneron and Johnson 2004). In the same way, luxury brands are related to wealth, exclusivity and power and are related to the fulfilment of nonessential desires (Brun et al. 2008 and Dubois and Gilles 1994). 'Luxury brands' comprise high quality, expensive and nonessential goods and services that are symbols of rarity, exclusivity, prestige and authenticity in for their consumers and they can provide high levels of symbolic and emotional value (Tynan et al. 2009). Vigneron and Johnson (2004) and later Wiedman et al. (2007) defined the concept of luxury as the physical and psychological values provided by prestige of luxury brands and consequently highlighting the symbolic and conceptual dimension associated with luxury. However, it was evidenced how the dimension is strongly associated with the cultural values and to the social environment by considering luxury goods representatives of individual and social identity (Vickers and Renand 2003). These elements of exclusivity, prestige, rarity as well as individual and social identity are the key values distinguishing luxury from non-luxury brands (Tynan et al. 2010). In the same perspective, Kapferer (1997, p. 334) highlighted the importance of those luxury brand values in evidencing that brand memory and brand values should not be abandoned when the brand is revised suggesting that rebranding is an incremental process in contrast to a radical change. Yet, the definition and concept of luxury has not reached a unanimous consensus in relation to the subjective and experiential dimensions of luxury (Hudders et al. 2014).

Together with a still ambiguous concept and definition of luxury, luxury also shows an increasingly diversified consumers' market, in particular, with the entrance of the new fast-growing economies and the China consumers' market in the perspective. It is generally assumed that consumers focus on luxury consumption is driven by either intrinsic and/or extrinsic motivations (Eastman and Eastman 2015). Personal respect, self-esteem and individual reward are motivating customers to acquire a specific social status and identity. Additionally, consumers may also be impacted by unique experiences in their inner self (Atwal and Williams

2009) specifically associated with the emotions of the individuals towards luxury brands (Keller 2009). In some cases, those personal emotions can be of amusement and excitement (Sung et al. 2014) but also the social dimensions of approval and self-respect (Fujiwara and Nagasawa 2015). However, luxury consumers do not only have in high consideration utility of the products but heritage, exclusivity and craftsmanship being the main differentiators of luxury (Deloitte 2015). In the same way, the democratisation of luxury has made these brands more accessible to larger volumes of consumers and the birth of a new luxury that is more democratised and more consumer-centric (Borstrock 2013) including new brand channels to reach the consumers and enrich and diversify their experience of the brand (Granot et al. 2013). This new orientation of luxury and the reach of new consumers segments has also contributed to modify consumers behaviour towards luxury through the digital experience of luxury (McKinsey 2015), a highly different experience from the 'store' one and including a different segment of consumers, high net worth individuals digitally and culturally savvy with an international exposure, looking for fast gratification and recognition from their shopping experiences (Akyn and Secilmib 2015).

The last decade has evidenced the beginning of a new conjuncture for luxury brands resulted from the increasing presence of information in social networks and from the opportunity to share brands information through mobile applications of the main international luxury fashion brands and multi-brand retailers (Dauriz et al. 2014). The new luxury phenomenon and the younger consumers segments have evidenced that luxury brands are driven by growing purchasing power of some segments of generation X—resulting from changes in consumption habits—and the increasing presence of generation Y individuals, or Millennials mainly the product of the so-called new rich or the Chinese middle—class (Bain and Company 2016) possessing a highly unique behaviour in luxury with a high purchasing power and a strong orientation on spending in experiences, in most cases also 'live' and not simply luxury goods.

6.2.2 Luxury Fashion and China: From Production Hub to Luxury and Fashion Driver 'Chinese Way'

Luxury customers' behaviours worldwide were supposed to be homogeneous in their purchasing behaviour of luxury goods. In the last decade, Chinese luxury fashion consumption market evolution showed the emergence of new customers' segments and consequently new customers' motivations and behaviours in the purchasing process of luxury fashion brands. New customer expectations and needs for luxury fashion brands appeared from the Chinese markets. The Chinese markets with its new customers segments and its unique sociocultural norms and values showed to have specific demands for luxury fashion brands not only with respect to

94 S. Rovai

the purchasing mode but also with respect to its business operations including communication with customers.

China's fast growth and an expanding consumer base focused on global luxury brands as status symbols has attracted international luxury retailers into the Chinese market. The recent anti-corruption regulation and the negative impact on luxury expenditures, a new orientation from the market with more sophisticated and discerning consumers are presenting new challenges for the luxury brands and retailers and requiring a specific understanding of the cultural differences and low brand awareness that are impacting luxury brands perception, awareness and purchasing modes. The consequent digital luxury fashion seemed to be the result of the new Chinese mode of luxury consumption and the fast-growing development of the Internet in China (Rovai 2016a, b; Bonetti et al. 2017).

If in western countries, the elder people mainly compose luxury customers, luxury consumers become younger (about under 40 years old) in China. The increasing number of middle-level class has been the main force of online luxury consuming. The consumption concept of younger customers is hugely different from that of traditional customers. Solomon (2009) expressed that customers' behaviour is a dynamic concept because they are influenced by the outer factors and inner elements (Solomon 2009). The new luxury fashion communication and purchase 2.0 have started to contribute to new and disruptive experiences of purchase for luxury fashion shoppers and at the same time have contributed to increase brands awareness, in particular, in the new fast-growing economies. Digitalisation and the 2.0 experience for luxury fashion shoppers has started to appear as a strategic component of the luxury experience, even if deploying a successful digital strategy and maintaining the brand identity may still represent a challenge (Okonkwo 2009), in particular, in the highly socially digitalised Chinese luxury context.

Chinese customers seemed attracted to have ready-to-use information related to luxury goods and services through the fruition of a diversified portfolio of online transition modes. Those customers oriented towards a new consumer behaviour and new purchasing pattern, together with a consolidated online technology, have clearly shown to have increased the network operations of luxury fashion products. After an uncertain start, the digitalisation for luxury brands in China seemed to start rivalling with the traditional branding approach (Rambourg 2014). Chinese consumers have showed that they first consider the fashion garments presented in the social media and, in particular, for those also recommended by their relatives or friends.

Social media in China has definitely appeared to represent one of the main sources of information for Chinese luxury fashion shoppers when in need to gather data and trends in order to make a choice in their shopping decisions. In particular, social media has shown to be highly considered when willing to collect trustable and updated information about some new fashion brands or goods entering the market highlighting how the blue ocean has certainly contributed to increase Chinese shoppers' luxury fashion brands awareness in the last years. Online luxury fashion marketing and communication platforms have evidenced to create a

different response in customers. Interactive presentations, videos and webinars have seemed to produce an immediate impression in customers and consequently, a growing number of luxury brands have decided to focus their communication campaign in the Chinese market using visual digital supports such as videos or interactive digital graphics to attract and impress their customers. Most of the luxury brands nowadays such as Dolce & Gabbana, Versace and Burberry have focused their customer relation and communication in China through a digital approach (Burberry 2014). Armani, as others, presented the seasonal collection and dedicated fashion shows through videos to know more about the clothing and apparel designed for that year.

However, social platforms are not only a vehicle for customer relation and communication in China. Luxury fashion brands are increasingly developing exclusive online shops dedicated to Chinese shoppers covering a diversified pool of luxury industry sectors from fashion and apparel to leather and accessories from perfumes and cosmetics to jewellery and watching; besides, the online shopping experience concerns multiple luxury lines not only for women but also for men and children.

The emergence of digital media has given the opportunity to a large volume of Chinese customers to become more aware of luxury brands and luxury and fashion blogs and forums have oriented them in developing a personalised individual style. Furthermore, multi-brand shops are adding up to the flagship store scenario, new choices in luxury goods to choose from; Lane Crawford, 10 Corso Como are helping Chinese luxury shoppers develop a more conscious luxury individual style but also become more demanding in luxury goods and service choices.

Chinese are getting increasingly 'luxury and fashion savvy' despite the fact that only relatively recently luxury brands entered the market. Social media are definitely helping Chinese luxury shoppers to become more informed but also more eager to get specific information on luxury brands and the products they sell. Nowadays, before purchasing, Chinese customers conduct a specific luxury brand research internationally thanks to digital media. According to the 'buzz' volumes ranking related to a brand, Louis Vuitton, Versace, Burberry, Dolce and Gabbana and Prada have been indicated as the most discussed and referred luxury brands reported online. However, the 'online' buzz is not only associated with positive information and comments but also to negative feedbacks related to counterfeits, customer service, product quality and celebrities (CIC 2011). According to a survey from McKinsey & Company, there are almost 90% of Chinese Internet users living in main Chinese cities have enrolled in a social-media site and Chinese people can be regarded as the world's most active social-media population, around 91% of respondents telling they visited a social-media site in the previous 6 months, followed by 70% in South Korea, 67% in the United States and 30% in Japan (Chiu et al. 2012). The Chinese social and cultural context is increasingly becoming 'digitally savvy' and Chinese citizens are more likely to gain information from Internet when they would make luxury shopping decisions.

Vickers and Renand (2003) suggest that the conceptual dimension of luxury is strongly influenced by cultural elements and by the social context. Literature has

96 S. Rovai

evidenced that the digitalisation of luxury is part of the social and cultural variables of contemporary Chinese consumers' market (Okonkwo 2009; Rambourg 2014). Accordingly, we propose the following:

First Proposition Digitalisation of luxury will be a core element in the rebranding process for luxury brands when entering the Chinese market.

Kapferer (1997) highlights that successful luxury rebranding has to keep at least certain core brand elements to have a proper transition from the existing luxury brand to the revised one.

Second Proposition The digitalisation process for rebranding may evidence the core elements kept as a part of the brand heritage and identity when revised for the Chinese market.

An international branding strategy may be concerned about new market segments partially or only focus on new markets (Kapferer 1997). Successful luxury branding in those new geographical locations may require meeting the needs of new market segments. As a consequence,

Third Proposition New attributes to the brand may be required to satisfy the new market.

This research aims to analyse the impact of cultural and social variables on the redefinition of a luxury brand when entering a new market, the Chinese one, and in particular:

- the evolution towards a new digital orientation as a response to the needs of the new customer segments
- the specific sociocultural characteristics of the new Chinese market customer segments

6.3 Methodology

In order to provide specific responses from the field, the empirical research methodology chosen follows the case analysis method (Yin 1984). Following Yin (1984) case study approach and guidelines, three luxury brands had been chosen with an 'opportunistic' approach—those brands that have positively responded to the request. The names of brands considered in the research have been kept anonymous as agreed with those luxury brands under the principle of confidentiality of the data during interviews and they were consequently referred as A, B and C.

The research data collection process has followed a specific timeline of 6 months during which the interviews had been organised. Data were collected from online conversations, communications and interactions during meetings with representatives of the three brands. Most of the interviews had been carried out in the coastal areas of China, where the main local headquarters of luxury brands are located—Beijing and Shanghai and Hong Kong. In each brands, 5/6 interviews had been

handled with the Marketing Director, Senior Communication Directors and in some cases with the local VP. Further interviews—approximately two per brand—had been organised in Italy with the Digital Marketing Director or with the Chief Digital Officer. For some of the brands, interviews with a sample of its customer segments had been organised at a flagship store in China and published data of the corporations were also consulted. A semi-structured interview guide was developed to ensure modifications to questions to suit the area of expertise of the respective industry professional. During data analysis, the inductive approach was used to derive the themes, categories and framework after triangulating data from transcripts, observations and netnography (Strauss and Corbin 1998).

6.4 European and Italian Luxury Fashion Brands: Discussion

6.4.1 Case 1: Italian luxury Brand A

A is an Italian global luxury brand with an established brand image and historic heritage internationally. Its brand positioning globally as 'authentic luxury brand worldwide' has specifically focused its image on exclusivity, originality and innovative design.

'Entering a new market for us has always meant letting our potential clients know the history of our brand, its values and its exclusive essence' evidence the Senior Marketing Director of *A* when referring to the challenges associated to enter a new geographical market.

With an existing solid presence in the traditional western luxury markets, A decided only in the last 5 years to develop a specific strategy to enter the Chinese market with a strong marketing development. China entered lately with respect to the other geographical markets in their global strategy, but nowadays has now become clearly a strong focus for the brand and for its development in the next 10 years to come. The delayed orientation to enter the Chinese market was mainly due to the awareness of the potential but also the complexities of the market and the impact of the social and cultural issues on luxury consumers' behaviours.

'We knew that we had to be in China directly and to develop a specific entry strategy. However, we were also conscious of the complexity and diversity of the Chinese markets and we were testifying numerous problematic experiences of our competitors: IP rights problems, brand image and identity in crisis because of the lack of brand awareness and the growth of the middle-class...'

The brand realised that the market had its own specificities and a disruptive way of functioning with respect to traditional luxury markets and they had to understand and incorporate it in their brand entry mode.

By understanding the importance of the relationship with the customers and the sociological factors affecting the purchasing process in China—digitalisation and

98 S. Rovai

democratisation in luxury—the entry strategy of A has been oriented towards a progressive reinforcement of relations between brand and market, in particular, in relation to the digitalisation of the market and its consumption mode. The brand started opening the main flagship store in the Mainland China capital Beijing and following with the fashion centre Shanghai at the beginning of 2006. After a few years of gradual expansion and monitoring of the market evolution, A can nowadays count on a consolidated flagship store network adding value to the brand awareness. Counting on the younger Chinese luxury market segments, the brand had a remarkable immediate growth in the market as a result of its brand core values and image as well as of its own digitalisation of the brand development strategy. The growth and consolidated positioning allowed the brand to start a brand expansion strategy by introducing the cosmetics line in department stores after clothing, apparel and perfumes.

A focused on a specific rebranding as entry strategy for the Chinese market through the integration between the sociocultural variables associated to the local context and the core components of the brand. It transferred the brand to the Chinese market by maintaining its own young style and image, specifically suitable for the young Chinese luxury market. In the initial phase of the Chinese market entry, A focused on reinforcing the brand image and awareness in the local socio-cultural context by developing their retail and distribution in particular by having key premium locations, fundamental to communicate the brand identity and core values. However, the retailing network was not perceived as sufficient to create 'a social buzz' in the Chinese young sociocultural context that is specifically influenced by digital media in this geographical environment. While it kept expanding in China from first to third tier cities, A approached to different targeted segments by developing an intelligent digitalisation of the brand. Starting from developing a Chinese version of the brand name, A modified its brand name as a main strategy to giving meaning to the brand in the Chinese socio-cultural context, as well as emphasising the heritage of the brand and creating a strong position in the mind of the Chinese consumer and creating a strong advantage in the digital search positioning. Furthermore, in analysing the market sociocultural digital trends and the decreasing reach of conventional media and the increasing one of the digital ones, A decided to focus on the diversified use of digital media in its entry strategy —through online video advertising and the growing digital out of home as well as local search engine as Baidu or local social networks, BAIDU Sina.com WeChat, Youku and, in particular, online influencers and BBS, Bullet Board Systems—by clearly choosing to rebrand through digitalisation of the luxury brand in compliance with the sociocultural variables and trends of the market.

6.4.2 Case 2: British luxury brand B

Similar to luxury brand A, the British luxury brand B has also consolidated a well-established brand image and heritage internationally. However, unlike A, B is

not positioned as authentic luxury but as a premium luxury brand worldwide. It has kept its brand identity internationally thanks to its ability to keep up its creative style with the spirit of the time.

'Keeping up the spirit of the time does not mean losing your brand identity. On the contrary, it means to understand the give an interpretation of the brand through the events, the time your brand live' evidenced one of the brand executives of *B*.

The brand was one of the first to enter the Chinese market and to understand the potential of the country not only as the country of reference 'the factory of the world' for manufacturing luxury and fashion brands with very low manufacturing costs but more specifically the potential of China as "THE" market to be for luxury brands in the next decades to come.

Since its entry into the Chinese market and following a very specific analysis of the market evolutions and geographical differentiations for customer segments, *B* has decided to immediately focus on the main fast-growing new segments of China—'the new rich middle class' and in particular its young shoppers' segments with a consequent adjustment to their sociocultural values and habits, including the main digitalisation of their luxury and fashion lifestyle.

'If we wanted to successfully perform in the market we had to understand the customers and in particular the new untraditional luxury segments of customers and to adapt to their desire and to their "digitalized" relationship with the brand but without putting at risk the brand essence'.

Similar to its main competitors in the field, *B* has started opening its own flagship stores in Beijing and Shanghai and to follow in the main developed coastal cities as Guangzhou and Xiamen. However, in the last decade, following the surge of the new third and fourth tier cities and the increasing purchasing power and luxury fashion awareness of those cities' young customers, the brand had started an aggressive expansion of 'technology aware' flagship stores combined with 'ad hoc' digital operations in dedicated luxury fashion platforms as 'Shangping.com' or WeChat. Those actions, in line with the sociocultural habits of those targeted Chinese shoppers, gave the opportunity to consolidate brand awareness locally and at the same time through 'heritage focused' activities in the flagship stores, to keep the brand identity and main core values.

B focused on a specific rebranding as entry strategy for the Chinese market through the adaptation of the brand to the sociocultural specific digital orientation, however, by keeping 'brand craftsmanship and heritage' activities in the flagship stores opened, they ensured to maintain the main components of the brand. Those in-store events were often associated with the presence of celebrities and VIPs as testimonials to endorse the event and the brand and comment on it on social platforms in order to create a 'social buzz' and amplify the brand recognition and awareness. Furthermore, in evidencing the sociocultural digital trends of the market the brand also decided to focalise on a diversified use of digital media in their entry strategy —through online video advertising, in particular, in their website but also through the Chinese specific digital platforms as Youku, Weibo and WeChat.

100 S. Rovai

6.4.3 Case 3: Italian Luxury Brand C

C entered the Chinese market at the end of 1996 with the opening of its first flagship store and opening the doors to the successful future development in the Chinese market that brought the number of flagship store to almost one hundred. The initial entry market strategy was focused on a traditional entry market development for upper segments of authentic luxury brands. In 1996, the Chinese market had not been stormed yet by 'the new rich' wave and the main segments of the luxury industry were still upper classes: the 'luxurisation' of the market had not started yet.

'At the beginning, when we entered the Chinese market, our brand was really the dream of the few privileged ones. Only few Chinese could afford buying a luxury garment and more important only very few of them had the international experience that allowed them to have a certain luxury brands awareness. Luxury was still almost unknown in the Chinese social context' evidenced the Greater China Director of C.

However, in the last decade, because of the increasing change in the Chinese market scene—in particular, from the sociological perspective—with the appearance of the middle class and the younger segment of luxury customers with specific extrinsic social-identity recognition seeking purchasing mode, the luxury brand started to adapt its communication and purchasing strategy to the new socio-cultural context.

'By having entered the Chinese market at the early beginning of its opening up to international companies, we have followed closely the evolution of the market, of consumers behaviours and the consequent impact on our country strategy, segments identifications and the brand image that might be at risk as we had to reposition ourselves in the market'

Senior Marketing Manager of C shared with us during the meeting.

The change of strategy and positioning in the market did not mean an adaptation of its brand identity, image and core values to the local social and cultural values; the management of C kept the core values, the strong heritage and the main components of the brand itself; brand storytelling was conductive to—and not only—evidence the historically strong authenticity, the exclusivity and the high quality of both handcrafting and textiles. However, the brand adapted its communication and customer relation to the local evolution towards digitalisation as well as the purchasing patterns taking into account the democratisation of luxury.

As for other brands, the Chinese market of the last decade showed that the retailing channels were not sufficient to create or to consolidate the brand awareness and also keep the new clientele segments, in particular, for the new young customers. The analysis of the brand and the evolution of its China strategy clearly shown that after its entry in the main coastal areas and more mature and evolved coastal cities, C kept expanding towards third tier cities and to different targeted segments by developing diversified digitalisation of the brand. In addition to that, through a specific analysis of the market and customer behaviours in the new tier

Table 6.1 Summarizes the findings from the three cases

	Brand A	Brand B	Brand C	
Country of origin	Italian	British	Italian	
Brand positioning	Authentic luxury brand worldwide	Premium luxury brand worldwide	d Authentic luxury brand worldwide	
Years of entrance to the Chinese market	2006	2010 1996		
Target market segment	Young Chinese luxury market segment	The new rich middle class	Elite and young Chinese luxury elite market segment	
Fundamental approaches to branding and digitalisation	Consolidated flagship store network to develop brand awareness Developed a Chinese version of the brand name for brand recognition and digital search advantage Diversified use of digital media for advertising	Expansion of "technology aware" flagship stores with ad hoc digital operations in local luxury fashion platforms to gain brand awareness In-store "heritage focused" events to keep brand identity In-store events with presence of celebrities to create social buzz on digital platforms	Consolidated flagship store network to keep brand identity Expansion of online presence to social platforms for smart technologies to reinforce brand awareness	
Key sociocultural specifics of the market	Democratisation and digitalisation of the consumer market acknowledged in their entry strategy	Digitalisation of the consumer market and generational influence	Evolution from only elite customers to middle class and young segments implying and adaptation for the brand	
Key brand essence and values kept in the market	Young and dynamic spirit proper to the image in the essence of the brand kept	Focus on brand craftsmanship and heritage in the essence of the brand	High quality in craftsmanship, textile and focus on heritage in the essence of the brand	
Key brand attributes in the new market	Diversified "China focused" digitalisation through multiplicity of local social media, tools and actors in the digital field	Offline and online rebranding strategy focused on local digital channels and attributes	"Smartphonisation" in the locally adapted branding process	

cities with those younger and highly digitalised segments, the brand had progressively started to integrate higher percentage of digital tools for communication or purchasing in addition to the traditional media and sales channels. Like the other brands, C also decided to use the local digital channels and, in particular, those exclusively focused on luxury as shangping.com but also Weibo and WeChat, to

effectively use social media to rebrand their purchasing and communication strategy in the Chinese context. In the last years, the young Chinese clientele has increasingly oriented their mode of purchasing through 'smartphone addiction'; smartphones have become a "luxury ecosystem" where the young generations discuss, develop and demonstrate what luxury is for them and how they conceive luxury before purchasing it. C has consequently adapted and in the past 2 years they have started adapting their social platforms to the format and need of smartphone technologies and use it to share their latest collections, creations but also organising 'smartphone addicted' only exclusive events online but also offline. The new development seemed very meaningful in particular in third tier cities—where increasing brand awareness was strategic to the successful entry strategy for the brand—by giving an easier access to information related to brand testimonials and ambassadors through the smartphone social tools Table 6.1.

6.5 Conclusion

Evidence from literature and interviews with some of the luxury brands contacted for the case analysis has shown that the Chinese luxury customers are increasingly younger with respect to the western ones and consequently the age is becoming a critical factor with respect to their behaviour and attitude towards luxury purchasing mode as well as brand awareness acquisition in the Chinese socioculturally influenced luxury market. Within this frame of context, the young generation profile has been reported to be particularly significant in the digital transformation of the client as they are those more inclined to refer to digital media to acquire luxury brands information and being influenced with consequently an orientation towards an online purchase. The Chinese luxury customers are increasingly younger with respect to the western ones and consequently, age is a critical factor with respect to their behaviour and attitude towards luxury purchase as well as brand awareness acquisition. In the branding strategy internationally Kapferer (1997) had highlighted that the new markets entered by luxury brands may require for those brands meeting the needs of the new market segments—as evidenced in the third proposition. Consequently, new 'digitally savvy' branding modes and attributes to the brand have been developed to meet the requirements of the Chinese luxury market.

The young generation profile is particularly critical in the digital transformation of the client as they are those more inclined to refer to digital media when searching for luxury brands information and as a consequence being influenced by those in their orientation towards an online purchase. Luxury brands analysed in this study have evidenced the increasing importance that they devote to digitalisation in communication, purchasing and further business operation of the brand when entering the Chinese market and confirming the first proposition and Vickers and Renard (2003) assumption evidencing the importance of the sociocultural impact of the context on the branding strategy. In the same way, the analysis of those brands' websites, digital platforms where brands communicate on their product or reinforce

their customer relation, as well as through specific events, but also conversations and dialogues with the brand executives have clearly evidenced how all the three brands have kept the main focus on their own brand identity and essence. Communication through social platforms and organisation of events at the local flagship stores evidencing the craftsmanship techniques used though the years and the timeless artistic inspiration in the essence of the brand have shown the strategy to reinforce the consistency and coherence in the brand values and a clear authenticity in the brand heritage and core values, valorising the second proposition by Kapferer (1997) theory that highlights the fact that successful luxury rebranding has to keep least certain core brand elements to have a proper transition from the existing luxury brand to the position in a new market.

References

Akyn Z, Secilmib Ý (2015) Risk behavior, risk perception and online shopping: an experimental approach. EconPapers.repec.org

Atwal G, Williams A (2009) Luxury brand marketing: the experience is everything! Journal of Brand Management 16(5-6):338-346

Bain and Company (2016) Luxury Goods Market Study

Bomsel OP (2014) Free-riding and luxury brands on the internet. Int Bus Res 7(3):60

Borstrock S (2013). The popularisation and democratisation of luxury (PhD). University of Hertfordshire

Bruce M, Kratz P (2007) Competitive marketing strategies of luxury fashion companies. Fash. Mark: Contemp Issues. Amsterdam: Elsevier

Brun A, Caniato F, Caridi M, Castelli C, Miragliotta G, Ronchi S, et al. (2008). Logistics and supply chain management in luxury fashion retail: Empirical investigation of Italian firms. *International Journal of Production Economics*, 114(2), 554–570

Bonetti F, Perry P, Fernie J (2017). The evolution of luxury fashion retailing in China. In: Luxury fashion retail management (pp 49–67). Springer, Singapore

Burberry (2014) Strategic Report

Chevalier M, Mazzalovo G (2008) Luxury brand management: a world of privilege. Wiley, USA Chiu C, Lin D, Silverman A (2012) China's social media boom. McKinsey Insights, May

Dauriz L, Remy N, Sandri N (2014) Luxury shopping in the digital age. Perspect retail Consum Goods. McKinsey

Deloitte (2015) Luxury goods research. www2.deloitte.com

Dubois B, Laurent G, Czellar S (2001) Consumer rapport to luxury. Anal. complex

Eastman J, Eastman K (2015) Conceptualizing a Model of status consumption theory: an exploration of the antecedents and consequences of the motivation to consume for status. Market Manag J 25(1):1–15

Fujiwara K, Nagasawa S (2015) Analysis of psychological factors that influence preference for luxury food and car brands targeting Japanese people. Am J Ind Bus Manag 5:590–600

Granot E, Russell L, Brashear-Alejandro T (2013) Populence: exploring luxury for the masses. J Market Theory Pract 21(1):31–44

Herrmann A, Huber F (2000) Value-oriented brand positioning. Int Rev Retail, Distrib Consum Res 10(1):95–112

Hudders L, De Backer C, Fisher M, Vyncke P (2014) The rival wears prada: luxury consumption as a female competition strategy. Evol Psychol, 12(3)

Kapferer J-N (1997) Managing luxury brands. J Brand Manag 4(4):251-260

104 S. Rovai

Keller K (2009) Building strong brands in a modern marketing communications environment. J Market Commun 15(2–3):139–155

Laurent G, Dubois B (1994) Attitudes towards the concept of luxury: an exploratory analysis.
AP—Asia Pacific Adv in Consumer Research Volume 1, eds. Joseph A Cote and Siew Meng Leong, Provo, UT: Association for Consumer Research, Pages: 273–278

Le Monkhouse L, Barnes B, Stephan U (2012) The influence of face and group orientation on the perception of luxury goods: a four market study of East Asian consumers. Int Mark Rev 29 (6):647–672

Mazzalovo G (2012) Brand aesthetics. Palgrave Macmillan

McKinsey (2015) Digital Inside. McKinsey

Rovai S (2016a) Luxury the Chinese way. Palgrave Macmillan

Rovai S (2016b) Luxury brand building and rebranding through digitalisation: the case of Italian brands in China, *Gamma Conference Proceedings*, Hong Kong

Schiliro A (2013) Luxury apparel brands—world. Xerfi Global. [Online]. Available from: http://www.xerfi.com/presentationetude/Luxury-Apparel-Brands—World 3XDIS01

Schramm W (1971) Notes on case studies of instructional media projects

Solomon M.R. (2009) Consumer Behaviour. Prentice-Hall

Strauss A, Corbin J (1998) Basics of qualitative research. Sage Publications, Los Angeles, Calif Sung Y, Choi S, Ahn H, Song Y (2014) Dimensions of luxury brand personality: scale development and validation. Psychol Market 32(1):121–132

Tynan C, McKechnie S, Chhuon C (2010) Co-creating value for luxury brands. J Bus Res 63 (11):1156–1163

Vickers JS, Renand F (2003) The marketing of luxury goods: An exploratory study—three conceptual dimensions. Market Rev 3(4):459–478

Vigneron F, Johnson WL (2004) Measuring perceptions of brand luxury. J Brand Manag 11 (6):484-506

Wiedmann KP, Hennigs N, Siebels A (2007) Measuring consumers' luxury value perception: a cross-cultural framework. Acad Market Sci Rev 7(7):333–361

Yin R.K. (2013). Case study research: design and methods. Sage publications

Chapter 7 Good Practices and Considerations in Conducting Email Survey for Fashion Retail Industry

Chi Wai Wu and Kwok Fai Geoffrey Tso

Abstract Correct and up-to-date market information is key to marketing strategy formulation and campaign planning. Email survey is often used by fashion retailers as a tool to capture the market information. It is particularly important for the email survey to capture the market information from a mass market in a short period of time. However, there are many cases that fashion retailers get poor quality result from survey rather than high-quality and reliable results with actionable findings. This paper intends to discuss good practices in conducting email survey for the fashion industry. It refers to a consultancy project administered by the authors to discuss issues and considerations on conducting email survey. A mixed-mode approach, of which email survey with telephone follow-up, incentives, and onsite face-to-face interview, was adopted to achieve a cost-effective survey with adequate response rate and high representativeness. The details about conducting email survey, which includes incentive, design, database, and follow-up action and facilitated the email survey are discussed.

Keywords Fashion industry • Email survey • Questionnaire • Methodology Survey method

7.1 Introduction

A large portion of the fashion industry is shifting toward fast fashion. Fast fashion is the practice which rapidly translates high fashion design trends to lower priced garments and accessories by *mass-market* retailers. The fast fashion sector is

C. W. Wu (⊠)

Tourism College, Institute for Tourism Studies, Colina de Mong-Há, Macau (SAR), China e-mail: donwu@ift.edu.mo

K. F. G. Tso

Department of Management Sciences, City University of Hong Kong, Kowloon, Hong Kong (SAR), China e-mail: msgtso@cityu.edu.hk

[©] Springer Nature Singapore Pte Ltd. 2018
P. -S. Chow et al. (eds.) Contemporary Case

featured by its trend-based nature, i.e., short product cycle and quick response to the dynamic market. New trends and styles evolve rapidly and, at the same time, go away just as quickly. The fashion brands are challenged by the necessity to keep track of the fast market trends, including knowledge about the market trends and response to ever-changing needs from customers. If not, the fashion products manufactured will not penetrate the market and reach the targeted customers.

Email survey is often used by fashion retailer as a tool to capture the market information. It has been considered as a relatively inexpensive survey method compared with others, for instance, in-home interviews, Computer-assisted personal interviewing (CAPI), and Computer-assisted telephone interviewing (CATI) (Burns and Bush 2007; Malhotra 2003). Nowadays, thanks to sophisticated information technologies and Internet, information has been more readily available, cheaper, faster, and easier access to all walks of lives. People, therefore, tend to assume using email as survey method as it would be of low-cost. People believe that just by a simple click on "send," they could reach countless people provided that they have Internet access.

Fashion brand representatives mostly rely on the survey to learn about their consumers' tastes, preferences, and perceived service quality on retailers. The marketer will, then, develop from the information to maintain a relationship between the brand and the customers. In other words, correct and up-to-date market information is key to start the marketing. In fashion industry, it is particularly important for the email survey to capture the market information from a mass market in a short period of time. However, there are many cases that fashion retailer gets poor quality result from survey rather than high-quality and reliable results with actionable findings

In spite of the advantages of being low-cost and easy, it is not rare to find that email survey failed to capture the market information as expected. A fashion retailer company, called TB Limited (TB Limited is a fictional name for concealing the company's identity and protecting its privacy), had conducted a mail survey by its in-house marketing team and wished to learn about customers perceptions on pricing, brand awareness, loyalty toward the TB brand, shop image, and customer service. However, the survey had suffered of low response rate, extreme information from respondents, and the partial completion from respondents. These would have brought negative impacts on the effectiveness and the representativeness of the survey.

Thus, this paper will first examine the cost-effectiveness of email as a survey method, followed by suggestions to improve the response rate and representativeness of the email survey by working on incentive, design, database, and follow-up. The author will propose a mixed-approach of email survey, which includes telephone follow-up, incentives, and onsite face-to-face interview, to address the special needs to achieve adequate respondents for the fast-paced and massive market size of fashion industry.

7.2 Literature Review

a. Survey method

Survey methods are classified by four main modes of administrations, namely telephone interview, personal interview, mail interview, and electronic interview. Nowadays, most telephone surveys are computer-assisted telephone interviewing (CATI) instead of traditionally using paper questionnaires and pencil to record the response. In interviewing, respondents are interviewed personally face to face. It may be categorized as in-home, mall intercept, and computer-assisted. Mail interviews may be administered in the ordinary mail and the mail panel. Lastly, the electronic survey can be conducted via email or the Internet. The telephone interview is the most popular interview method, whereas electronic interview is now growing rapidly. In this article, the discussion will focus on the evaluation of email survey (Fig. 7.1).

Email Survey is to send the questionnaires to respondents via email address. Email survey possibly is seen as the cost-saving survey method. Using email survey could take advantages regarding eliminating printing and mailing of survey instruments (Cobanoglu et al. 2001). It could save the logistics cost for distribution and return of survey. In general, there are two methods to carry our email survey. The first type of email survey is that the questionnaires would be provided in the form of document attached in an email. Another type of email survey would be web-based questionnaires and distributed in the form of a URL in the email. Both of

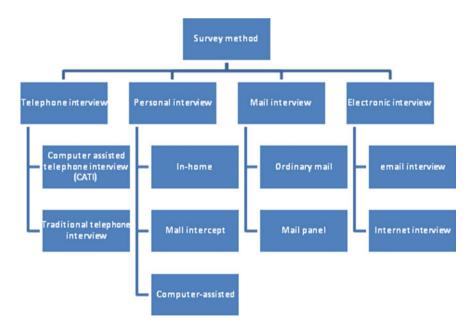


Fig. 7.1 Summary of survey method

these email surveys are time and cost saving compared with the personal interview or mail interview. The latter would save more time and cost as the survey data is already in digital format.

In term of the workforce, email survey requires fewer interviewers as the communication is via the internet and the speed of delivery is also faster. Regarding design and programming of the questionnaire, Email survey may be at high cost, especially for surveys with small sample group. However, nowadays, email and internet survey template is widely available. Researchers could create and analyze survey online by subscribing to online survey services instead of hiring a programmer to design an online survey. Free online tools for the survey are also available, for example, Google Forms which is free from Google. These online tools and services provide a variety of survey types and pre-made themes to create the survey, and researchers could view the real-time information and charts with the collected data. The cost of each respondent of email survey is, therefore, relatively small.

The efficiency and effectiveness of survey are measured by the willingness of people to respond to the survey. Personal interview is administered to the target population. Therefore, the rate of reply is the highest. However, email surveys are much less likely to achieve response rates as high as surveys administered on paper. For special populations that regularly use the Internet, email survey has been found to be a useful means of conducting research (Sills and Song 2002). A recent article on Forbes revealed that the response rate of a retail survey had dropped from 20 to 2% in the past two decades. Customers found it annoying and the results obtained were not found useful to achieve the goals.

On the other hand, the representativeness of email survey was also not guaranteed. The brand's representatives were expecting feedback from respondents who would like to work together to make the brand better. However, the response from email survey were sometimes in extreme conditions, which would lower the representativeness of the survey. The extreme conditions were attributable to the uncontrolled distribution of the email survey. It is not rare to see the URL link of survey distributed around without any control measures, especially those with incentives to the respondents, on social media. Worse still, according to Levitt, 80% of customers had abandoned a survey halfway through. 52% of customers said that they would not spend more than 3 min filling a feedback form. The survey quality would be deviated from brand representatives' expectation as these respondents just want to pull in a number of click to get a free gift. Also, email survey only gives perspectives from Internet users but not from all kind of populations. The results may be biased as in some developing markets the Internet usually helps to reach to the younger and more affluent populations but not the general population.

The reported case study discussed in the next part is based on the customer survey conducted for an international fashion retailer, TB Limited. TB Limited commissioned the author to conduct customer satisfaction and branding survey, which company targets middle-class customer profile. In Hong Kong, Internet users are over five million, with over 80% penetration rate (Census and Statistics Department of HKSAR 2015). Hong Kong people frequently access the Internet at

home, or via any device type and connection. Email survey could be suitable for TB Limited to conduct, as middle-class customers regularly access the internet and email.

b. Survey about fashion industry

Surveys on fashion industry were majorly divided to client initiate and academic initiate. The survey is commonly used for fashion field clients in investigating the market field and getting several insights on the market proposition and customer satisfaction.

For example, fast fashion giant Uniqlo uses online survey to monitor customer service and product quality in Hong Kong and Taiwan. Uniqlo invites customers to fill in online survey upon purchase in retail store by distributing physical cards with the survey link. The survey link is also available on their company web page (Uniqlo n.d).

Apart from conducting the survey by themselves, brand representatives would also appoint a third party to carry out surveys for fashion trend or industry benchmark. The United States Fashion Industry Association (USFIA) has collaborated with Department of Textiles, Fashion Merchandising, and Design, the University of Rhode Island to conduct U.S. Fashion Industry Benchmarking Study. The survey is to investigate fashion industry business outlook, sourcing practices, utilization of Free Trade Agreements and preference programs, and views on trade policy. The respondents are the executives at leading U.S. fashion brands and retailers (Lu 2014).

Moreover, consulting firms conduct surveys to gain insight into the fashion trends in the marketplace. For instance, The U.S. Fashion Innovation Index (FINdex) provides fashion market intelligence to U.S. retailers, so that they can have a better understanding of the link between consumer sentiment and retail sales, such as merchandising and pricing decisions each season. The survey includes Indiana University Kelley School of Business' Center for Education and Research in Retail, Kalypso, and Collegefashionista.com (FINdex n.d.). Another example is consulting firm Deloitte Financial Advisory which has conducted an online survey for the "Global Fashion & Luxury Market: Private Equity and Investors Outlook 2016." This one is to analyze the market trends, M&A deal monitor and private equity and investor's outlook of global fashion and luxury industry in 2016. Key findings help fashion and luxury clients to plan for marketing and sales strategy operations.

For academic study in the fashion industry, researchers conduct online survey commonly compared with the traditional paper survey. The study indicated that the survey is being carried out in an online questionnaire with various advantages, including lower financial and coding time costs, fewer coding errors, and more privacy and convenience for respondents. Kang and Park-Poaps (2010), for example, investigate fashion innovativeness in relation to various hedonic shopping motivations using online survey. And the finding is that fashion opinion leadership was positively associated with utilitarian shopping motivation. And the respondents are young college students who frequently access the Internet and computer use.

Another example is Verhagen and van Dolen (2011), who studied the relationships between online store beliefs and consumer online impulse buying behavior. An online survey was conducted, and the sample consisted of customers of an online store selling fashion items (clothing, accessories, jewelry) in The Netherlands. In Li et al. (2012) study on examining Chinese consumers' willingness to pay for luxury fashion brands related to their fashion lifestyle and perceived value. Researchers sent invitations to potential respondents from social networking site for business people, fashion and beauty online forum, and an online tourism community to visit the Qualtrics.com website and fill out the online survey.

Incentive and follow-up are also important in the fashion industry survey. Aghekyan-Simonian et al. (2012) conducted an online survey in product brand image and online store image impact on online apparel shopping and their perceived risks and online purchase intentions for clothing. The results of this study provide fresh insight into understanding the impact of product brand image and online store image on each type of perceived risk associated with online shopping. In this study, Researcher has solicited the participation and sent the email survey to the potential respondents. After the initial invitation email, a follow-up email was sent in 2 days. To increase the response rate, and it is also announced to have a random drawing of \$200.

7.3 Survey

a. Company background and Survey motive

The case study involved a company called TB under fashion retail industry, which has its headquarter based in Europe. TB is an international brand specializing in fashion accessories. With over 30 years history, it sells through outlets in Europe, the U.S., Asia and online. TB Company has the operation over 24 countries, and the stores located in airports, railway stations, and shopping malls. TB Company delivers different luxury accessories such as scarves, cufflinks, which prices range from HKD \$500 to HKD \$4000. Resulting from a SWOT analysis of TB in Hong Kong, the TB management team had decided to conduct a survey about customers' perceptions on pricing, brand awareness, loyalty toward the TB brand, shop image, and customer service.

Before commissioning the author to carry out the email survey, TB, indeed, had conducted another email survey itself. However, the customers were not active to the survey, i.e., only customers with high loyalty responded to the email survey, and this resulted in a response rate less than 10%. Also, the data collected from the survey was in extreme and the respondents completed the survey partially. The representativeness of the survey was a concern. Therefore, no useful information was able to retrieve from the survey and neither there was any action plan following the survey.

b. Research setting

The author was appointed by TB company to conduct an email survey for their customers in Hong Kong in 2012 which the project took about 4 months and completed in June 2012. The objectives of the survey for TB limited were to understand the perceptions among various segments, namely pricing, brand awareness, loyalty toward the TB brand, shop image, and customer service.

The survey was administered by an online questionnaire. A well-established online survey platform was employed by the author. This online survey platform allowed the author to capture, analyze, and act on the survey. The survey platform would provide data down to details like the response status of the interviewees, duration for each interviewee to complete the survey, and the number of attempts from each interviewee.

The survey was in control by the author in the following ways: That the survey was sent to interviewees with unique reference number to which allowed the author the monitor the response status of each interviewee. The online survey was programmed on the platform that the interviewees were guided to complete all parts in the survey. Neither traditional paper-and-pen survey nor email survey with attachment would allow the author have control on the survey. Nevertheless, the unique reference number to each interviewee was solely designed to keep track of the response status and incentive redemption. In case of no response, the authors would deploy interviewers for follow-up telephone call to increase the response rate during the data collection stage. During the analysis stage, the identity of the interviewees was kept anonymous to avoid any biased analysis and survey outcomes.

The respondent sampling frames were from TB company electronic customer database with around 2000 privilege club members. TB privilege club members were the VIP customers with purchases over HKD 2000 in a single order or accumulate spending of HKD 5000 within 6 months. For this study, emails were sent to customers to explain the objective of the project as well as offering incentives to them. The email was attached with a link that connects to a website for respondents to complete online survey.

The common obstacle to carry out online survey is the low response rate and uncertain representativeness. Therefore, a follow-up system was established to cope with the issues. An online survey platform was selected to carry out the email survey, which supported the response status of each targeted interviewees. Interviewers would contact the interviewees with no responses so as to draw their attention to the email survey.

On the other hand, an onsite face-to-face interview survey involved 100 respondents with 50 mainland shoppers and 50 non-shoppers in two shops. Two stages sampling method was employed. It was aimed to verify the survey results from email survey by the results from face-to-face interview so as to improve the representativeness of the email survey. The two stages of sampling of the onsite face-to-face interview were as follows:

- (a) Selection of sampling locations
- (b) Selection of individuals.

Admiralty and Festival Walk were selected as sampling locations. Interviewers were deployed to invite commuters to participate in the survey. A Systematic Random Sampling Method was used in the selection of individual during survey process. In order to reduce potential sampling bias, interviewers are required to select at least one respondent for every three people passed by within every 30 s.

The consultant, then, based on the survey findings and insights to provide suggestions regarding retail pricing strategies, marketing position, customer service strategy and brand image strategy to help TB limited to develop the proper marketing strategy.

7.4 Challenges and Considerations

First of all, to conduct an effective survey, it depends on the willingness of people to respond to questionnaires. However, as stated above, the response rate of email is little. Low response rates bring about small data samples and statistical power. Further, low response rates can create bias into survey results (Tomaskovic-Devey et al. 1994). As a matter of fact, higher response rates tend to result in more top credible findings (Rogelberg and Stanton 2007). Thus, it is important to increase the response rate to have a reliable survey. Apart from the response rate, the survey should be set to have high representativeness as well to have reliable survey findings.

a. Incentives

Offering incentives can significantly improve respondents' willingness to participate in the surveys. Incentives can be either monetary or non-monetary. Confidentiality, like respondent's name, known by the researcher but not exposed to a third party, is considered to be non-monetary incentives.

Studies have provided evidence that tangible monetary incentives increase in response rate in mail surveys. The larger the financial incentive, the greater is the increase in the rate of reply. It is important to note that the strong result major comes from prepaid monetary incentives instead of promised incentives. Promised incentives tend not to have the strong effect toward respondents (Armstrong 1975). The result of guaranteed incentive is relatively small due to the obstacle to getting the incentives, such as logistics issue. How could the monetary incentive deliver to the respondents once completed questionnaire efficiently? The fast and reliable way is to use a courier for delivery. On the other hand, couriers could be costly for large sample size survey with thousands of respondents.

It is important to note that electronic payment and e-voucher become increasingly applicable in Hong Kong. It makes monetary incentives more accessible and

convenient to deliver to respondents. Emerging markets like China also provide secure and efficient e-payment service such as WeChat pay. Electronic voucher or e-gift card meanwhile could reduce the completion procedure for physical redemption. It also encourages the visit of the online e-shop of the fashion shop.

Moreover, another common approach is that respondents leave an email address after complete questionnaire. Redemption letter is, therefore, sent to their email with a confirmation number, so that respondent could visit the fashion retail shop themselves to redeem the incentives. It is recommended as to increase store foot traffic and grow retail sales.

No incentives were deployed by email survey operated by TB in-house, while in the survey conducted by the author, certain measures were adopted to increase the low response rate from email survey. Redemption coupons were distributed to respondents that had completed the online questionnaire. Meanwhile, the retired product was giving out as a gift to increase the response rate. The redemption also increased store foot traffic and grew retail sales. Compared with the in-house TB survey, the author increased the response rate from less than 10% to around 30%.

One might argue that the incentives would affect the representativeness of the email survey. To cope with the issue, the incentives were only offered to interviewees from email survey only. The interviewees from onsite face-to-face interview were not offered with the incentive. It was aimed to ensure the onsite face-to-face interview could reach unbiased general population groups for verification purposes.

Attractive Questionnaire Heading

Also, survey design is correlated to response rate. The length and presentation of the questionnaire affect the response rate and response quality in email survey (Deutskens et al. 2004).

The attractive presentation in general and interesting subject line have been declared as being effective in increasing the response rate. Imagine you are the receiver of the survey invitation email, in what circumstance would you stick on? Two samples titles, original title, and amended title illustrate the attractive subject line and affect the open rate on the email survey.

A: Re: Customer Survey

B: \$50 coupon from TB, exclusively for (customer name).

Subject line A is a general statement to invite respondents to complete the survey, while B is more personalized and tailor-made. With engaging and personalized message respondents received, it is much easier to attract respondents to click and complete email survey. Moreover, the possibility to classify as spam email is lower. Email spam is unsolicited messages sent by email, which makes users spend a lot of time for sorting incoming mail and deleting undesirable correspondence.

The presentation of a questionnaire in email could provide new elements from traditional mail survey and telephone interview. A simple example could be

introduced with interactive images and 3D illustrations into the questionnaire. These items could enhance the attractiveness. It is likely that the response rate would be higher.

Studies usually show a negative relationship between the length of questionnaire and response rate. The shorter the questionnaire is, the more likely a high response rate. Short questionnaires will increase response rates compared to lengthy questionnaires.

b. Accurate and up-to-date Database

Clean customer database with valid email address helps a lot on effective email survey. This method contributes to improving the response rate to conduct an effective email survey. Having an accurate and updated VIP database not only helps in improving the effectiveness of conducting consumer surveys.

In this case, the company has not proactively updated customer database since customer applied for their membership. The client's database, such as customer contact email address and telephone number, therefore, is inaccurate and outdated which causes difficulty to conduct effective email survey.

The key issue with the database was typo error which led to delivery failure of email to the target recipient. The typo errors were attributable to handwriting, paper and pencil key in, and input error to the database. These errors from database accounted 10% delivery failure of the email sent.

Other issues that challenged the author's survey included the outdated email address from the database. Some email domain service provider was closed and no longer provided email service, such as hongkong.com. Also, customers applied for membership with company email address and it would be outdated once customers change their job. In quite a number of cases that customer was working at ABC Company when he applied for VIP. The customers changed their job but did not update TB limited with their new email address. This finally resulted in delivery failure of email to these customers.

Even though the email address was correct, the author still paid effort to verify the reliability of email address obtained from the database. Duplicated email address, accounting around 10% of the total email from the database, were identified. It was because registration as a VIP simply took amount of expense into account only. There was no mechanism to verify the identity of the registration history of the customers and hence repeated registration with similar personal information, including email address, was allowed.

In either case, it is recommended to ask customers to provide a primary and secondary email address, for example, personal email address and company email address, in the initial application for membership. Also, time to time proactively updating customer contact information is important. Regularly contacting customer to promote the latest offering meanwhile can update customer latest email address. Thus, it makes the client's database always accurate and up-to-date. It is crucial to have a clean database to make email survey work effectively.

c. Follow-up

The email will most likely be used in combination with the telephone for the best result. A mixed-mode strategy, as a means of exploiting the advantages of email surveys and minimizing nonresponse. As mentioned, the open email rate and click rate is relatively small in this type of survey. It is necessary to have followed up call and reminder to the respondents to increase response rate. According to author's experience in this survey, approximately 25% of the email recipient did not receive the survey email or they did not bother to read the email.

To check these results, the email survey operator could provide comprehensive survey tracking methods which the free of charge survey platform does not have. Once email sent to respondents, mega data statistic, such as some successful emails sent, email click rate, completion rate, is available. Customer response to the survey is confidential and non-disclosed to the company. Meanwhile, operators could provide a series of tracking and reminder to improve the successful response rate.

d. Verification on representativeness

The onsite face-to-face interview survey involved 100 respondents. This was aimed to verify the findings from email survey so as to achieve a higher representativeness. Despite the extra cost incurred on the survey, considered the nature of email could reach Internet user only while face-to-face survey guarantee respondents from a general population, the author suggested face-to-face interview as a way to verify the results.

7.5 Conclusion

It is no doubt that email becomes a more popular way to conduct surveys for market trend analysis. As fashion industry is now transforming to become much more customer oriented, fashion companies show lots of concern about their abilities to satisfy the need of clients. Customer satisfaction is a leading indicator of customer loyalty and potential for repurchase. Thus, the topic on how to conduct email survey correctly is important.

Nielsen, the leading global, independent measurement and Data Company, had commented on the email survey that the online survey methodology allowed for tremendous scale and global reach. However, the online survey could only show a perspective from Internet users only, but not the total population. To be specific, the online survey would more likely reach younger and more affluent population than the general population of most of the developing country. In addition, survey responses were based on claimed behavior rather than actual metered data.

The author intended to use TB Limited as the case study to discuss on practices improving representation and response on email survey. Few measures were deployed to increase the response rate for email survey, it included, incentive, attractive subject line, short questionnaires and proper presentation, and follow-up

call. By adopting these, the response rate increased from less than 10 to 30%. Clean customer database with valid email address helps a lot on effective email survey. This method contributes to improving the response rate to conduct an effective email survey.

Clean and complete customer database is also essential in customer relationship management (CRM). A Large company has various databases for customers, such as demographic data and member data, transaction data, product level mapping data, VIP member opt-in data. They could make use of these data for different marketing campaigns. According to authors' experience from another consulting project for an international cosmetic company, the sufficiency of the direct mail campaign has been improved with better use of customer database. It used to be a typical direct mail campaign sending direct post mail to potential customers and invite them to purchase. The main challenges on direct mail are the high cost for each successful customer as response rate of the mail are low. The project used previous data to identify high response group to reduce unnecessary invitation and hence increase response rate. As a result, the project reduced cost by 18% while ROI increased nearly a double. Therefore, clean and complete customer database is necessary to help to identify high response group with actionable characteristics. In order to make it efficiently, data mining techniques had been deployed to determine the best timing. It is no doubt that CRM with an accurate and updated VIP database is the successful factor on highly effective campaign.

In order to guarantee the representativeness of the email survey, an onsite face-to-face survey was conducted so as to verify the results from email survey. This act would unavoidably bring extra cost to the survey, yet it is worth the cost to ensure the reliability of the findings.

There are limitations to the case study. First, the survey is held in Hong Kong, but it is a place where over 80% citizens aged 10 and over who had used Internet service and had Smartphone (Census and Statistics Department of HKSAR 2015), therefore, email survey is common to be used. It provides a reference to the researcher to produce survey with high-quality and credible results. Second, incentives were deployed to increase the response rate from email survey. Future researches are suggested to work on details, including both amount and type, of incentives to be deployed to achieve optimum and cost-effective boost in response rate and, meanwhile, keep the representativeness.

Finally, it is hoped that this paper can serve as a starting point for those who plan to use email survey to capture customer voice and analysis.

References

Aghekyan-Simonian M, Forsythe S, Suk Kwon W, Chattaraman V (2012) The role of product brand image and online store image on perceived risks and online purchase intentions for apparel. J Retail Consum Serv 19(3):325–331

Armstrong JS (1975) Monetary incentives in mail surveys. The Public Opin O 39(1):111-116

- Burns AC, Bush RF (2007) Basic marketing research using Microsoft Excel data analysis. Prentice Hall, Upper Saddle River, NJ
- Census and Statistics Department of HKSAR (2015) Thematic household survey report no. 59. Hong Kong. http://www.statistics.gov.hk/pub/B11302592016XXXXB0100.pdf
- Cobanoglu C, Warde B, Moreo PJ (2001) A comparison of mail, fax, and web survey methods. Int J Market Res 43:441–452
- Deutskens E, De Ruyter K, Wetzels M, Oosterveld P (2004) Response rate and response quality of internet-based surveys: An experimental study. Market Lett 15(1):21–36
- FINdex (n.d) FINdex: the fashion innovation index. Retrieved from http://kalypso.com/FINdex
- Kang J, Park-Poaps H (2010) Hedonic and utilitarian shopping motivations of fashion leadership. Int Fashion Market Manage, 14(2):312–328 (7)
- Li G, Li G, Kambele Z (2012) Luxury fashion brand consumers in China: perceived value, fashion lifestyle, and willingness to pay. J Bus Res 65(10):1516–1522
- Lu S (2014) U.S. Fashion industry benchmarking study. United States Fashion Industry Association, 2014. http://www.usfashionindustry.com/pdf_files/USFIA-URI-Fashion-Industry-Benchmarking-Study-2014.pdf
- Malhotra NK (2003) Marketing research: an applied orientation, 4th edn. Prentice Hall, Upper Saddle River, NJ
- Rogelberg SG, Stanton JM (2007) Introduction understanding and dealing with organizational survey nonresponse. Organ Res Methods 10(2):195–209
- Sills SJ, Song C (2002) Innovations in survey research: an application of web-based surveys. Soc Sci Comput Rev 20(1):22–30
- Tomaskovic-Devey D, Leiter J, Thompson S (1994) Organizational survey nonresponse. Adm Sci Q 439–457
- Uniqlo (n.d) Retrieved from http://www.uniqlo.com/hk/
- Verhagen T, van Dolen W (2011) The influence of online store beliefs on consumer online impulse buying: a model and empirical application. Inf Manag 48(8):320–327

Part III Cases on Fashion Retailing and Operations

Chapter 8 The Key Role of Retail Stores in Fast Fashion Companies: The H&M Case Study

Elisa Arrigo

Abstract The chapter investigates the key role played by a system of directly operated stores in the fast fashion business model. For this purpose, a descriptive case study has been carried out on Hennes & Mauritz AB (H&M), one of the leading companies in the fast fashion sector with a wide network of retail stores across the global market. The case study has shown that the store represents the heart of H&M's business model, since, through direct control over the retail network the company is able to develop a profound level of market knowledge, advantageous for launching onto the market, continuous and successful ranges of fashion apparel.

Keywords Store design \cdot Directly operated stores \cdot Fast fashion retailing H&M case study

8.1 Introduction

The competitive dynamics characterizing the fashion market related to the process of globalization have emphasized the relevance of retailing strategy as a crucial aspect of fashion management. Beyond simply representing a sales channel, the point of sale constitutes an important channel of communication for fashion companies (Kapferer and Bastien 2009; Chevalier and Mazzalovo 2015).

In previous research (Kent 2003; Doyle and Broadbridge 1999), the fashion store has been considered as a vehicle of brand communication, since its environment and internal atmosphere characterize the touch point between customers and the fashion brand (Fionda and Moore 2009; Jackson 2004). Consequently, fashion companies take great care in making their stores a place, where they can express brand identity and reinforce a brand's power.

Specifically, this paper aims to examine the role of store management in the field of fast fashion, a very interesting area of research, although as yet underdeveloped. The research is based on a case study (Yin 2013) of H&M, one of the leading global companies in the fast fashion sector with directly operated stores spread across the global market.

The paper is organized as follows: after the Introduction, Sect. 2 analyses the theoretical background of the fast fashion business model, store design and flagship store format. Section 3 describes the methodology and examines the H&M case study; Sect. 4 contains the discussion of the findings; and, finally, Sect. 5 draws together the study's conclusions.

8.2 Theoretical Background

8.2.1 Fast Fashion Business Model

Over the last decade, the emergence of fast fashion has been considered a real innovation within the fashion industry since, for many years, fashion companies have tried to implement business strategies directed at reducing their time to market in order to respond rapidly to market requests (Barnes and Lea-Greenwood 2006, 2010; Cachon and Swinney 2011; Sheridan et al. 2006). Fast fashion refers to a retail strategy able to quickly adapt product assortments to current and emerging trends (Sull and Turconi 2008) by reducing demand uncertainty and variability and encouraging increased levels of fashion consumption.

Fast fashion companies combine a short time to market, i.e. the period between the production and sale of their products, while offering fashion items characterized by a clearly perceived value at an accessible price (Cachon and Swinney 2011). As argued by Barnes and Lea-Greenwood (2006), they can develop complementarity between manufacturing and distribution since they work on a system of in-season buying and provide in-store dynamic assortments of fashionable clothes capable of attracting customer interest.

Time-based competition has imposed on fashion companies the need to cut the time for each process inside the supply chain, from procurement through manufacturing to retailing (Mason-Jones and Towill 1998) and has even reduced the time between the design of a garment and its launch onto the market. When combined with efficient information management, this enables fast fashion retailers to sell garments that always remain 'fashionable'.

Two main research perspectives can be noted within the emerging literature in this area, namely the supplier-driven and consumer-driven approaches.

The first field of research studies the rapidity and efficiency of the fast fashion supply chain, directed at gaining a competitive advantage, which has seen a surge in fast fashion as a new innovative business model (Bruce et al. 2004; Christopher et al. 2004; Tyler et al. 2006; Mehrjoo and Pasek 2016). In fact, changes aimed at improving the responsiveness of fashion supply chains have been characterized by

the creation of agile supply chains (Christopher et al. 2004) oriented to real-time dissemination of new information. In addition, as argued by Choi (2016), specific information requirements must be respected in order to achieve an efficient fast fashion supply chain system.

Information is a key driver in the quick response approach based on the just-in-time manufacturing applied to clothing companies. Quick response aims at reducing markdowns and stock outs by postponing all risky production decisions until market demand becomes evident (Lowson et al. 1999; Fernie and Azuma 2004). As it is often very difficult to forecast fashion demand a priori (Choi et al. 2014), the only logical solution is to start selling the products and use early sales data to generate forecasts that are likely to prove more reliable (Christopher et al. 2004).

In contrast, an apparel manufacturing traditional cycle is composed of rigid and sequential phases separated over time by seasonality: collection's design, prototype, presentation to wholesalers, orders from wholesalers, production, delivery to wholesalers, shipping to retailers and final sale. In a similar production cycle, the presentation at fashion shows of new collections, twice a year (Autumn–Winter and Spring–Summer), is a critical stage for the subsequent production since manufacturers commence this stage only on the basis of the amount pre-purchased by wholesalers. Moreover, this latter group undertakes orders based on sales' forecasts made by retailers. Consequently, in the traditional model, the economic risk related to unsold goods has an effect only on retailers (Arrigo 2016).

Fast fashion companies have overcome this problem by introducing a major innovation in their value chain, namely garment design at the item-by-item level, instead of for the entire collection. By designing fashion products separately, they achieve two objectives: first, they can introduce new garments throughout the year without waiting for seasonal changes and, second, they can make constant use of corporate resources (facilities, employees, designers, etc.) avoiding workload peaks in particular periods (Caro and Martinez-de-Albeniz 2014). Furthermore, fast fashion production cycles require the launch of small batches of items with high frequency, resulting in flash collections, which are introduced every two weeks. This strategy affects customer behaviour and research in the field of consumer-driven perspective (Gabrielli et al. 2013; Cachon and Swinney 2011; Choi et al. 2010; Chang and Jai 2015) has focused specifically on customers. In particular, fast fashion consumption has been investigated (Joung 2014; Mcneill and Moore 2015) looking at the role that single elements within a store (such as layout, shelf allocation, lights, colours, sounds, windows and location) have on customers' shopping experience and store brand perception (Barnes and Lea-Greenwood 2006). In fact, Gupta and Gentry (2016) recently found that in perceived scarcity conditions such as those typical of fast fashion stores, where limited merchandise is supplied and merchandise availability is manipulated by the fast fashion retailer, consumers' exhibit urgency buying behaviour.

However, the store also represents for fast fashion companies a privileged way to acquire market knowledge (Barnes and Lea-Greenwood 2010) and to develop a good understanding of commercial phenomena in foreign countries. Through a system of directly operated stores disseminated globally, companies can offer

a unique assortment of fashionable products at reasonable prices. Sometimes they also have a number of stores coordinated through franchising systems that are set up to enter specific countries, where a collaboration agreement must be established to meet strict foreign legal requirements. In general, franchising is chosen by global companies to rapidly increase store coverage and brand awareness while containing the risk of failure in unknown foreign markets or, together with joint ventures, to enter countries with high entrance barriers, such as Asian countries, the Middle East or Africa (Arrigo 2010).

As claimed by Moore et al. (2010), the decision regarding store openings in new countries becomes strategic for fast fashion companies and requires detailed research at both the macro and micro level. After an exhaustive study of local players, fast fashion companies usually develop a rapid growth plan, with numerous new store openings close to the initial one. Generally, the chosen locations are in different areas of large cities, from the busiest inner city streets to any urban place or point that can guarantee a large catchment area of customers, such as shopping centres, airports and railway stations.

Finally, online commerce additionally constitutes a relevant sales channel for fast fashion companies since it allows the elimination of high costs derived from establishing and managing physical stores (such as rental charges and employee salaries) and is able to reach a broader customer base. Customer data is collected and profiled and makes it easier for the design team to identify the latest customer trends (Rickman and Cosenza 2007). Fast fashion companies can achieve superior performance using a radio frequency identification (RFID) system at the item level (Madhani 2015). In fact, besides obtaining reduced stock-out, reduced labour costs, reduced inventory costs, and enhanced visibility, they can implement a value added-customer centric approach with benefits in terms of enhanced customer lifetime value.

8.2.2 Store Design and Flagship Store Format

The process of retail store design is very complex since it involves decisions pertaining to store exteriors and interiors that need to match features of practical use and pleasant visual exteriority. Often, companies use the point of sale to differentiate themselves from rivals by providing customers with a shopping environment that is pleasant and attractive and offers a unique brand experience (Morrison et al. 2011). Using factors such as music and sound, aroma, colour and lighting, firms can generate sensory perceptions that influence each customer's experience (Turley and Chebat 2002; Turley and Milliman 2000).

As claimed by Orth et al. (2012), inside the point of sale, many cues are present and they are used by customers and stakeholders to evaluate the company. Obviously, dissimilar cues generate dissimilar customer responses. The design of the retail store environment is, therefore, a crucial element in the fashion brands' marketing strategy, as it contributes to developing a sense of prestige and excellence (Arrigo 2015; Lea-Greenwood 2013).

Many studies have been undertaken on the effects of the cues on customer behaviour and some have shown, for example, that colours can motivate or put stress on customers by influencing their desire to purchase, while music encourages pro-social behaviours and delivers store personality (Haug and Munster 2015). However, a key point in delineating store design concerns the creation of an environment capable of setting off the right customer reaction or feelings.

Haug and Munster (2015) have recently proposed a framework of fashion store design variables and constraints based on the work of Berman and Evans (1995) and Turley and Milliman (2000), in which they distinguish five categories of store variables:

- External variables (such as display windows, size of building, surroundings, parking availability, etc.);
- General interior variables (music, scents, lighting, temperature, etc.),
- Layout and design variables (space design and allocation, placement of equipment and merchandise, waiting rooms, placement of cash registers, etc.);
- Point of purchase and decoration variables (wall decoration, price displays, product displays, etc.);
- Human variables (employee characteristics and uniforms, customer characteristics and crowding).

One of these retail store variables, namely store architecture, is assumed to reflect the brand in the consistency of design and visual appearance; this is relevant predominantly for retailers whose identity is communicated and experienced mainly through their stores (Kirby and Kent 2010).

As stated by Barnes and Lea-Greenwood (2010), the retail environment contains physical elements, which converge to create a distinctive image appropriate to the fashion merchandise. The window display is the first element to interest customers and acts as a communication tool since, generally, it offers a preview of the store's assortment. Similarly, store layout is used to try to guide the movement of consumers inside the store and also provide communication cues.

For these reasons, previous research (Kent 2003; Clow and Baack 2010; Doyle and Broadbridge 1999) has noted that the store has been considered as a vehicle of brand communication, and the store environment and its internal atmosphere able to influence the relationship between customers and the retailer.

Usually, in the fashion industry, fashion garments are distributed through multiple retail formats, such as independent multi-brand stores, department stores, large specialized areas, store brand chains, flagship stores, factory outlets, hypermarkets, etc. (Hines and Bruce 2007). The retail format of the flagship store is designed to take the branding concept to an extreme level and Kozinets et al. (2002) proposed one of the first descriptions of this format based on the three key features:

- Flagship stores supply only a single brand;
- They are owned by their manufacturers; and
- Their primary purpose is building the brand image.

126 E. Arrigo

A further enlargement of definitions followed the first produced by Kozinets et al. (2002). For example, Mikunda (2006, p. 228) defined the flagship store as 'the principal store of a retail chain', Diamond (2005, p. 12) as 'the most important in a chain', and Frings (2009, p. 458) as 'the largest and most representative store in a chain organisation'. Many features of flagship stores provide a sense of tangibility to the fashion brands and offer a space, where fast fashion companies can leverage the impact of other tools and events connected to brand reinforcement, such as advertising, promotions or other related marketing activities. Consumers frequent flagship stores not only to observe fashion items, but also to experience a fashion brand in an environment completely controlled by the retailer (Kozinets et al. 2002). Due to the strong brand experience they provide, flagship stores have a marked impact on brand attitude, brand attachment and brand equity (Dolbec and Chebat 2013).

As suggested by Manlow and Nobbs (2013), flagship stores have some key features: they are located in a large outlet in a prominent area; they offer the widest and most in-depth product assortment and provide a high quality store environment; and finally, they serve to communicate the brand positioning and values. Frequently, fashion companies open flagship stores only in the most lucrative foreign markets and consider them as a market-entry strategy (Moore et al. 2010). In this case, flagship stores can serve as an important mediator in the development and management of collaborative relationships between the fashion company and its partners within a foreign market (Moore and Doherty 2007).

Flagship stores display a considerable size and provide strong visual impact in order to attract and retain customers, generating interest and curiosity towards a fashion brand. They are usually concentrated in shopping streets visited by customers or tourists, where the density of similar fashion flagship stores is very high and fashion companies can improve their brand positioning (Arrigo 2015).

Finally, Manlow and Nobbs (2013) demonstrated that flagship store design constitutes a key component in the process realized by customers to associate an identity with a fashion brand.

8.3 Methodology: The H&M Case Study

In the previous section, the literature review on the fast fashion business model and store design has been covered in detail. In order to provide a clear picture on the relevance of a system of directly operated stores for fast fashion companies, in this section a case study will be presented. This method has been chosen since the case study is a well-established research method in business studies (Yin 2013) offering an opportunity to better understand the match between current practice and existing theory. Therefore, it appeared as the most appropriate method to investigate the field of fashion store retailing.

The fast fashion company chosen for this case study is the Swedish Hennes & Mauritz AB (H&M) which has been selected for two main reasons:

- It is one of the leading fast fashion companies in terms of global revenues with 209,921 billion SEK (237,569 mil \$), +19% reported in 2014 (Annual Report 2016a); and
- It operates in 64 markets, has over 148,000 employees and its revenues are heavily dependent on these foreign countries (95.47%) (Annual Report 2016a).

Thus, H&M can be considered a strong prototype of a global fast fashion company. Data collection was based on the secondary sources and observation of H&M retail stores in a European context. To be more precise, Milan was the city selected for direct observation of fast fashion retail stores for reasons of proximity and since it represents one of the world's leading fashion capitals in which the most important fashion brands have flagship stores (Jansson and Power 2010). The store visits helped the author to understand the key dimensions of the flagship format and to perceive the internal store atmosphere.

Additionally, the following secondary sources were used for the case study: 2015 Annual Report (2016a); 2015 Sustainability Report (2016b); 2014 Annual Report (2015); H&M 2016 Six-Month Report (2017); and the official corporate website (www.abouthm.com/en). H&M pursues a disclosure policy concerning its business processes by making freely available a great deal of information about its stores. In order to enhance the reliability of the findings, news media and academic papers were also used as sources (Yin 2013).

8.3.1 *H&M History*

The history of H&M dates back to 1947 when Erling Persson, its founder, opened in Västerås (Sweden) the first store called "Hennes" of women's clothing. In 1964, the first foreign store was inaugurated in Norway and, after, Erling Persson bought the hunting and fishing store Mauritz Widforss in Stockholm in 1968; the company also started selling men's and children's clothing.

In 1974, H&M was listed on the Stockholm Stock Exchange and, in the 1980s and 1990s, started its global expansion outside Scandinavia into the United Kingdom, Germany, Austria, France, the Netherlands and Luxembourg. In the 2000s, H&M also entered the North American market with store openings in the United States.

Since 2004, collaborations with famous designers and fashion icons have been agreed in order to enhance the visibility of H&M clothing. In parallel, the online shopping channel 'at hm.com' was launched in Europe and the company started its conquest of emerging countries through the first franchise stores which opened in the Middle East in 2006.

Between 2007 and 2009 new stores were inaugurated in East Asia (Hong Kong), Shanghai and Tokyo and the H&M brand portfolio was strengthened with the launch of COS in 2007, and the acquisition in 2008 of the fashion company FaBric Scandinavien AB that owned the brands Cheap Monday, Monki and Weekday.

128 E. Arrigo

Finally, in 2009, H&M also entered the home furniture sector with the introduction of its H&M Home brand.

In succeeding years, the company showed great attention towards environmental sustainability by realizing the first clothing collection, called 'Conscious Collection', made with sustainable materials such as organic cotton and recycled polyester. In addition, it launched the project 'Garment Collecting' with the purpose of closing the circle for textiles, by becoming the first fashion company to offer clothes collection in stores worldwide for reuse or recycling. In 2011, the company developed a programme directed at its employees, the H&M Incentive Programme, that provided the winner with 1 billion SEK in H&M shares.

In 2013, the brand '& Other Stories' was launched, the number of H&M stores reached 3000 and the online channel was set up in the US. Moreover, the H&M product assortment became wider through the inclusion of sportswear (H&M Sport) and beauty products (H&M Beauty).

8.3.2 H&M Overview

H&M sells clothing, cosmetics, home furnishings, accessories and footwear for men, women, teenagers and children. Its business idea is to offer fashion and quality at the best price in a sustainable way in a range of markets. In reality, sustainability represents a key value deeply rooted in the H&M culture (Shen 2014).

Approximately, 200 employees work with sustainability as their core task, the majority of whom are based in 21 production offices worldwide, working directly with suppliers to make the supply chain more sustainable.

As a company with strong values and a long-term approach, H&M aims to use its size and influence to achieve better conditions for people by minimizing the environmental impact throughout the supply chain. H&M pursues a global development policy primarily based on: a multi-brand portfolio; new store openings and online commerce reinforcement; and digitalization and new technologies' adoption in their supply chain processes (Arrigo 2016).

Its rapid growth is represented in Fig. 8.1 showing company sales and store numbers over the last 5 years (2011–2015).

As depicted in Fig. 8.1, a positive relationship exists between the company's revenues and new store openings, since both variables show an increasing trend. This fact demonstrates how company growth is based on the development of store number's worldwide. In particular, in the 2015 fiscal year, the top 10 sales markets were Germany, USA, UK, France, China, Sweden, Italy, Spain, the Netherlands and Switzerland (Annual Report 2016a).

H&M operates in all its markets through six brands: H&M, COS, & Other Stories, Monki, Weekday and Cheap Monday. Each brand has its own unique identity, and together, they complement each other well by having the goal of dressing customers in a sustainable way.

In Fig. 8.2, store brands with the number of countries with stores are presented.

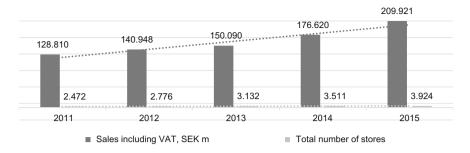


Fig. 8.1 H&M sales and store number (2011–2015). Source H&M annual reports (2015, 2016a)

Brand	Foundation Year	Markets with Stores	Online Markets	Store Number
H&M	1947	63	33	3,784
cos	2007	32	19	177
& Other Stories	2013	10	13	36
Monki	2006 (Part of H&M since 2008)	12	19	110
Weekday	2002 (Part of H&M since 2008)	6	18	23
Cheap Monday	2004	35 (via resellers and stores)	18	5 (2,000 resellers)

Fig. 8.2 The H&M multi-brand portfolio (August, 31, 2016). Source H&M website

8.3.3 H&M Business Model

Before analyzing store design and management at H&M, it is useful to explain the company's business model, namely how H&M designs, produces, distributes and sells its offer worldwide. As will be described, the H&M business model is based on in-house design, no intermediaries, large purchasing volumes, procurement of the right products from the right markets, efficient logistics and cost-consciousness across the entire organization (Annual Report 2016a).

Design

H&M creates fashion collections at its headquarters in Stockholm using a design team employing people of different ages and nationalities composed of designers, pattern makers and buyers that project new clothes focusing on good quality, the latest fashion trends, available at the best price. Moreover, H&M has been the first fast fashion company to develop capsule collections in collaboration with international designers and style icons, such as Karl Lagerfeld, in 2014 celebrating 10 years of cooperation.

Manufacturing

H&M does not own factories and its manufacturing is completely outsourced to 820 independent suppliers (of which 153 are preferred suppliers, namely strategic partners), mainly located in Asia and Europe that are continuously reviewed in order to safeguard future expansion, production capacity and geographical location (2015 Sustainability Report, 2016b). The company works actively to ensure that everything customers are offered is manufactured under good working conditions and with the minimum impact on the environment. In H&M's sourcing markets, over 130 employees work to support improvements and to make sure that suppliers live up to H&M's requirements of good social and environmental conditions (Annual Report 2016a). H&M has built a sustainable supply chain by developing eco-materials, providing safety training, monitoring sustainable manufacturing, and reducing carbon emission levels in distributing and promoting eco-fashion (Shen 2014).

Logistics

H&M considers logistics as a core activity by being simultaneously in the position of buyer and seller. Its efficient logistics and ecological transport systems form the basis of ensuring the availability of clothes in the stores, the best price for customers with the least impact on the environment. Efficient flows and cost-consciousness at every stage of the supply chain contributes to safeguarding the right goods in the right quantity for each store. Shipments from the suppliers' factories go directly to logistics centres that support stores placed in the geographical vicinity and, for this reason, stores do not need backup stocks since they are replenished as required from the distribution centres.

• Retailing

The store is considered as a key variable for H&M as consumer satisfaction takes place within this location and, consequently, H&M wants to guarantee the best shopping experience for its customers. Since every store must be easily recognizable, window displays are first designed and developed in the 'H&M test-store' in Stockholm and, then, sent to all outlets in order to be reproduced. The company target is to increase the number of stores by 10–15% per year. In addition, H&M products are offered online in many countries.

8.3.4 H&M Store Design and Flagship Stores

As explained previously in the business model description, H&M's evolution is based on the continual opening of new retail stores in major foreign cities. The process of retail store design emerges as very relevant from a brand communication perspective since it allows H&M to spread its brand identity's values worldwide.

Before examining the retail store design at H&M, it is useful to underline the rapid development of its directly operated chain of stores over recent years. In 2015,

only 156 stores were franchised, representing 4% of the total number of H&M stores, concentrated in the United Arab Emirates, Kuwait, Qatar, Saudi Arabia, Egypt, Bahrain, Oman, Lebanon, Israel, Morocco, Jordan, Thailand and Indonesia (Annual Report 2016a). Directly operated stores constitute the remaining 96%; in fact, the contract formula of franchising is chosen when entering emerging countries with high administrative barriers against foreign investors.

During the last 12 months, the company grew at a rate of more than one new store per day and moved into five new markets (Taiwan, Peru, Macau, India and South Africa) with great success. For example, the opening of H&M's 4000th store at the Indian DLF Mall represented the biggest flagship store opening that the country had seen up until that point.

In Fig. 8.3, store expansion is depicted in the period 2000–2015, also indicating the number of markets with a commercial presence.

In order to examine the geographical location of H&M's stores, in Fig. 8.4 the store breakdown by region is displayed (dated 31 May 2016).

The majority of stores are currently located in Europe and Africa. However, the company plans to increase its commercial presence worldwide in 2017, through the launch of 430 new stores in five new H&M markets (Kazakhstan, Colombia, Iceland, Vietnam and Georgia).

New retail stores have recently appeared in many locations and have always been well received by H&M customers. For example, the opening of the first store in Taiwan inside Taipei's Breeze Song Gao shopping centre represented one of the most successful, and was followed up with additional five stores during 2015. Further, the new store opening in Peru was particularly popular with queues of more than 2000 customers waiting to enter to the Jockey Plaza shopping centre in Lima. Moreover, in South Africa, customers began queuing more than 24 h before the opening of H&M's flagship store in the V&A Waterfront shopping centre in Cape Town.

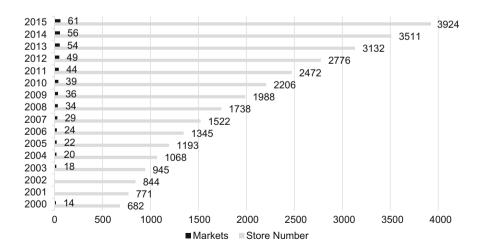


Fig. 8.3 H&M store expansion (2000–2015). Source H&M Annual Report (2016a)

132 E. Arrigo

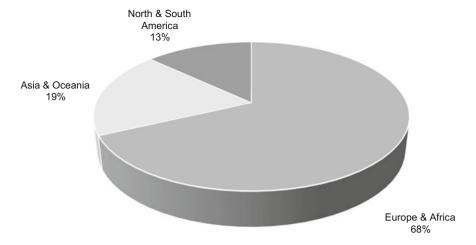


Fig. 8.4 Store breakdown by region. Source H&M 2016 Six-Month Report (2016)

An analysis with regard to store design and management, store location decisions, store layout and visual merchandising within H&M will now be outlined.

Firstly, concerning store locations, it is relevant to underline that in order to be sure at all times of selecting the best shopping locations, H&M does not own any store premises, instead, it arranges leaseholds. This provides the company with the flexibility to continually review the sites of its retail stores (H&M Annual Report 2016a). The chosen positions are in different areas of large cities and will certainly include the busiest inner city streets, such as Fifth Avenue in New York or Oxford Street in London, but also any point of the city guaranteeing a large catchment area and plenty of customer transit, such as shopping malls, airports and railway stations. Customers visit the former as a form of entertainment in their free time, while stations or airports are places where tourists or workers spend time while waiting to depart or carrying out their daily tasks.

Second, both product assortment and visual merchandising are carefully coordinated inside H&M retail stores. Their fashion collections are popular with customers living in large metropolises as well as those in smaller towns since they are designed to be both fashionable and classical and provide customers with the best value for money. In addition, in the retail setting, the traditional breakdown of display space into departments, typical of fashion points of sale, is replaced by large open spaces, where garments are already matched with accessories or cosmetics. Clothes are even frequently rotated in order to provide customers with a different display and encourage them to look for products seen during a previous visit. In this way, H&M aims at stimulating multiple purchases by customers and manages all the levers of the retailing mix such as lighting, wall décor, sound and in some cases even aroma, to positively influence the customer's retail experience. There are also specific instructions for store staff that control daily operations at the point of sale.

H&M flagship stores are connoted by a large, modern and new store environment able to deliver the company's brand values. As described earlier, the 'H&M store concept' is developed centrally by a team of architects in Stockholm. The team has also studied the design of the furniture for its most recent store (approximately 2385 m²) in the centre of Milan (Piazza Duomo) developing a specific project providing distinctive elements including marble, mirrors and plants of different sizes and drapes to recreate the atmosphere of an antique Milanese palace.

Generally, all H&M flagship stores are of considerable size with multiple floors and an extensive sales area. Moreover, the architecture, besides reflecting a youthful modern style, transmits the company's commitment to sustainability. In fact, environmentally friendly materials such as certified wood or recycled materials are chosen for the equipment and furniture. H&M has also undertaken to reduce the electricity consumption of each store by using electricity from renewable sources. Retail stores are also used to collect their customers' old clothes for recycling by the company. Over the 2013–2015 period, their stores globally collected 23,072 tonnes of old clothing for reuse and recycling, thereby saving both energy and natural resources (H&M website).

As stated in H&M's nine-month report (2016), in recent years the company has invested considerably in IT in order to develop and strengthen the shopping experience in different areas such as through the continued integration of physical and online stores, expanded and faster delivery options, and mobile payment solutions. In addition, H&M is working on various initiatives within advanced data analytics and RFID in order to gather sales data and deliver the best value propositions to its customers present in 64 markets, with 35 of them having online shops (H&M website). In fact, their e-commerce channel has expanded rapidly, with hm.com becoming one of the most visited fashion sites in the world; reflecting an easy to navigate website which is both interactive, and fully mobile-adapted, and features have been added in order to further increase its availability and services for customers.

8.4 Discussion

For H&M, the retail store represents a key element of its value chain by providing a space to build profitable relationships with customers and acquire a good understanding of customers in foreign countries. H&M manages almost all its stores directly and, in this way, is able to propose to customers a dynamic assortment of fashion items. From the analysis of H&M retail stores, it is possible to assert that the store environment is carefully designed to offer an open space, where customers can freely browse and try on clothes. All the retailing mix levers, such as store architecture, store display, customer service level and store atmosphere are designed in order to influence customer behaviour (as stated by Morrison et al. 2011; Turley and Chebat 2002; Barnes and Lea-Greenwood 2010).

134 E. Arrigo

Moreover, according to Manlow and Nobbs (2013), H&M flagship stores communicate the brand positioning and the company's commitment to sustainable development. In addition, the continual updating of its assortment by adding new items that remain on display for a brief period influences the behaviour of customers who are encouraged to visit more frequently H&M retail stores. In fact, only by so doing, are they able to checkout new offers and make purchases, increasing store traffic and multiplying sales opportunities for the company. This has a positive effect on the company's revenues and inventory costs since it generates very small stocks of items.

At this point, it is worth emphasizing that the strategic decision of having directly operated retail store chains allows H&M to achieve a number of objectives.

First, store openings in foreign markets create a link between the centralized corporate global strategy and local market need; in fact, H&M collects data on local sales that will be used to design the new product collections at the company's Headquarters. Traditionally, in fashion companies, the design of new collections is centralized around the figure of the stylist who works in isolation and, for this reason, collections are defined as 'designer-driven', strictly dependent on his ability to interpret market changes. In contrast, fast fashion companies have created a different dynamic where the designers work in teams driven by data on actual sales collected in real time, from the store network.

Second, by selling in different markets, H&M can better assess the economic risk derived from operating in the global market and can diversify the risk of failure in certain markets.

Thirdly, by owning the retail chain network, the company can gather in real time and in a direct way information and data about its customers. To restate, it is able to obtain immediate feedback about sales' performance useful to orientate the design of new fashion items. Furthermore, the choice of having many stores close to each other might appear risky for the potential effect of cannibalization between points of sale of the same company; nonetheless, it can be justified from a cost efficiency perspective. In fact, the presence of several stores in a single city makes it possible for a fast fashion company both to better control the development of its brand identity in the mind of the consumer and to split the cost of transport, delivery and communication across a broader base.

8.5 Conclusion

This chapter aimed to examine the role of the retail store in the fast fashion business model by addressing fast fashion at the supply chain-customer interface and contributing to the fast fashion academic literature from a marketing context.

The H&M case study revealed that the control over the sales network profoundly affects the company's ability to acquire market knowledge and, therefore, the opportunity to develop successful fashion collections. Through direct contact with customers and widespread dissemination of retail stores globally, H&M is able to

collect extensive data in order to build up its knowledge of a range of foreign markets. This information enables H&M to transform market instability into an element which supports the company's success. In reality, due to the accumulated data, the company is able to continuously create new collections in small batches that are immediately bought by customers.

Having a direct retail channel also provides fast fashion companies with the opportunity to better manage customer brand relationships, and to control their extended supply chains from the manufacturing to retailing stage. Moreover, in particular, flagship stores provide the right retail format in which to coordinate all elements of the retailing mix in order to communicate and disseminate the fast fashion brand's identity. As a result, it is possible to conclude that the retail store truly represents the heart of the fast fashion business model.

References

Arrigo E (2010) Innovation and market-driven management in fast fashion companies. Symphonya. Emerg Issues in Manage 2:67–85

Arrigo E (2015) The role of the flagship store location in luxury branding. An international exploratory study. Int J Retail and Distrib Manage 43(6):518–537

Arrigo E (2016) Fast fashion business model: an overview. In: Vecchi A, Buckley C (eds) Handbook of research on global fashion management and merchandising. IGI Global, Hershey, Pennsylvania, pp 186–209

Barnes L, Lea-Greenwood G (2006) Fast fashioning the supply chain: shaping the research agenda. J Fashion Mark Manage 10(3):259–271

Barnes L, Lea-Greenwood G (2010) Fast fashion in the retail store environment. Int J Retail and Distribution Manage 38(10):760-772

Berman B, Evans JR (1995) Retail management: a strategic approach, 6th edn. Prentice-Hall Inc., Englewood Cliffs, NJ

Bruce M, Daly L, Towers N (2004) Lean or agile: a solution for supply chain management in the textiles and clothing industry? Int J Oper Prod Manage 24(2):151–170

Cachon GP, Swinney R (2011) The value of fast fashion: quick response, enhanced design, and strategic consumer behavior. Manage Sci 57(4):778–795

Caro F, Martinez-De-Albeniz V (2014) Fast fashion: business model overview and research opportunities. In: Agrawal N, Smith SA (eds) Retail supply chain management: quantitative models and empirical studies, 2nd edn. Springer, New York

Chang HJJ, Jai T-MC (2015) Is fast fashion sustainable? The effect of positioning strategies on consumers' attitudes and purchase intentions. Soc Responsib J 11(4):853–867

Chevalier M, Mazzalovo G (2015) Management et Marketing du luxe, 3rd edn. Dunod

Choi TM, Hui CL, Liu N, Ng SF, Yu Y (2014) Fast fashion sales forecasting with limited data and time. Decis Support Syst 59:84–92

Choi T, Liu N, Liu S, Ching-Mak J, To Y (2010) Fast fashion brand extensions: an empirical study on consumer preferences. J Brand Manage 17:472–487

Choi T-M (2016) Introduction: key decision points and information requirements in fast fashion supply chains. Information systems for the fashion and apparel industry, pp 1–8

Christopher M, Lowson R, Peck H (2004) Creating agile supply-chain in the fashion industry. Int J Retail and Distribution Manage 32(8):367–376

Clow KE, Baack DE (2010) Integrated advertising, promotion and marketing communications, Global edn. Pearson, New York, NY

136 E. Arrigo

Diamond E (2005) Fashion Retailing: A Multi-Channel Approach. Prentice Hall, Englewood Cliffs, NJ

Dolbec PY, Chebat JC (2013) The impact of a flagship versus a brand store on brand attitude, brand attachment and brand equity. J Retail 89(4):460–466

Doyle SA, Broadbridge A (1999) Differentiation by design: the importance of design in retailer repositioning and differentiation. Int J Retail and Distribution Manage 27(2/3):72–81

Fernie J, Azuma N (2004) The changing nature of Japanese fashion: can quick response improve supply chain efficiency? Eur J Mark 38(7):790–808

Fionda AM, Moore CM (2009) The anatomy of the luxury fashion brand. J Brand Manage 16 (5/6):347–363

Frings GS (2009) Fashion: from concept to consumer. Prentice Hall, Englewood Cliffs, NJ

Gabrielli V, Baghi I, Codeluppi V (2013) Consumption practices of fast fashion products: a consumer-based approach. J Fashion Marketing and Manage 17(2):206–224

Gupta S, Gentry JW (2016) The behavioral responses to perceived scarcity—the case of fast fashion. Int Rev Retail, Distrib Consum Res 26(3):260–271

H&M (2016a) 2015 Annual report

H&M (2016b) 2015 Sustainability report

H&M (2015) 2014 Annual report

H&M (2017) 2016 Six-Month Report

H&M website www.about.hm.com. Accessed in Nov 2016

Haug A, Munster MB (2015) Design variables and constraints in fashion store design processes. Int J Retail and Distribution Manage 43(9):831–848

Hines T, Bruce M (2007) Fashion marketing. Contemporary issues. Elsevier, Second Edition, Butterworth-Heinemann, Oxford

Jackson T (2004) A contemporary analysis of global luxury brands. In: Bruce M, Moore CM, Birtwistle G (eds) International retail marketing. A case study approach, Elsevier, New York, pp 155–169

Jansson J, Power D (2010) Fashioning a global city: global city brand channels in the fashion and design industries. Reg Stud 44(7):889–904

Joung HM (2014) Fast-fashion consumers' post-purchase behaviours. Int J Retail and Distribution Manage 42(8):688–697

Kapferer JN, Bastien V (2009) The specificity of luxury management: turning marketing upside down. J Brand Manage 16(5):311–322

Kent T (2003) 2D23D: Management and design perspectives on retail branding. Int J Retail and Distribution Manage 31(3):131–142

Kirby AE, Kent AM (2010) Architecture as brand: store design and brand identity. J Prod Brand Manage 19(6):432–439

Kozinets RV, Sherry JF, DeBerry-Spence B, Duhacheck A, Nuttavuthisi K, Storm D (2002) Themed flagship brand stores in the new millennium: theory, practice, prospect. J Retail 78 (1):17–29

Lea-Greenwood G (2013) Fashion marketing communications. Wiley, Chichester

Lowson R, Russell K, Alan H (1999) Quick response: managing the supply chain to meet customer demand. Wiley, Chichester

Madhani PM (2015) Enhancing customer lifetime value in fast fashion retailing with RFID initiatives. Int J Bus Glob 15(2):205–237

Manlow V, Nobbs K (2013) Form and function of luxury flagships: an international exploratory study of the meaning of the flagship store for managers and customers. J Fashion Mark Manage 17(1):49–64

Mason-Jones R, Towill DR (1998) Time compression in the supply chain: information management is the vital ingredient. Logistics Inf Manage 11(2):93–104

McNeill L, Moore R (2015) Sustainable fashion consumption and the fast fashion conundrum: fashionable consumers and attitudes to sustainability in clothing choice. Int J Consum Stud 39 (3):212–222

Mehrjoo M, Pasek ZJ (2016) Risk assessment for the supply chain of fast fashion apparel industry: a system dynamics framework. Int J Prod Res 54(1):28–48

Mikunda C (2006) Brand lands, hot spots and cool spaces. Kogan Page, London

Moore CM, Doherty AM (2007) The international flagship stores of luxury fashion retailers. In: Hines T, Bruce M (eds) Fashion marketing. Contemporary issues. 2nd Edition Elsevier, New York, NY, pp 277–296

Moore CM, Doherty AM, Doyle SA (2010) Flagship stores as a market entry method: the perspective of luxury fashion retailing. Eur J Mark 44(1/2):139–161

Morrison M, Gan S, Dubelaar C, Oppewal H (2011) In-store music and aroma influences on shopper behaviour and satisfaction. J Bus Res 64:558–564

Orth UR, Heinrich F, Malkewitz K (2012) Servicescape interior design and consumers' personality impressions. J Serv Mark 26(3):194–203

Rickman TA, Cosenza RM (2007) The changing digital dynamics of multichannel marketing: the feasibility of the weblog. Text mining approach for fast fashion trending. J Fashion Mark Manage 11(4):604–621

Shen B (2014) Sustainable fashion supply chain: lessons from H&M. Sustainability 6(9): 6236–6249

Sheridan M, Moore C, Nobbs K (2006) Fast fashion requires fast marketing. J Fashion Mark Manage 10(3):301–315

Sull D, Turconi S (2008) Fast fashion lessons. Bus Strategy Rev, Summer, pp 5-11

Turley LW, Chebat JC (2002) Linking retail strategy, atmospheric design and shopping behaviour. J Mark Manage 18(1–2):125–144

Turley LW, Milliman RE (2000) Atmospheric effects on shopping behaviour: a review of the experimental evidence. J Bus Res 49(2):193–211

Tyler D, Heeley J, Bhamra T (2006) Supply chain influences on new product development in fashion clothing. J Fashion Mark Manage 10(3):316–328

Yin R (2013) Case study research: design and methods. Sage Publications

Chapter 9 Fashion Business Case Study on the German Click & Collect Situation

Peter Bug, Natalie Gordon and Ann-Sophie Staudenmaier

Abstract A case study with four German fashion retail brands was conducted in order to measure the performance of their Omnichannel services. In detail, their Click & Collect service was analyzed. Click & Collect is one of the first introduced Omnichannel services in fashion retailing. Omnichannel services integrate different sales and communication channels providing a seamless customer journey experience. Offline, online, and mobile app customer experiences should provide a seamless customer experience. Omnichannel performance of the four retailers Decathlon, Hunkemöller, Massimo Dutti and Galeria Kaufhof was measured via mystery shopping. A seamless customer journey experience is not yet a standard in German fashion retailing. The four companies differ in many process details. The biggest market potential and the recommendation for further research emerges in deficits of the offline store Omnichannel customer experience. Here, all four case companies have room to improve. Best overall results regarding the integration of offline, online, and mobile shops were found with Hunkemöller, followed by Decathlon, Massimo Dutti, and Galeria Kaufhof.

Keywords German fashion business • Case study • Click & Collect • Omnichannel

9.1 Omnichanneling and Click & Collect

Omnichanneling, understood as the integration of different sales and communication channels, is a new challenge for fashion retailers. After many of them added online channels to their offline stores, now the integration of these and other

P. Bug (☒) · N. Gordon · A. -S. Staudenmaier Reutlingen University, Alteburgstraße 150, 72762 Reutlingen, Germany e-mail: peter.bug@reutlingen-university.de

N. Gordon

e-mail: natalie_chole_sophie.gordon@student.reutlingen-university.de

A. -S. Staudenmaier

e-mail: ann_sophie.staudenmaier@student.reutlingen-university.de

[©] Springer Nature Singapore Pte Ltd. 2018
P. -S. Chow et al. (eds.), Contemporary Case Studies on Fashion Production,
Marketing and Operations, Springer Series in Fashion Business,
https://doi.org/10.1007/978-981-10-7007-5_9

communication and sales channels is an important task because they must provide a seamless, consistent, and integrative customer journey for the consumer.

This case study examines and evaluates the situation of four German fashion retailers providing Omnichannel services. Main goal is to measure how well existing services for consumers perform. For this reason, one of the first established Omnichannel services, 'Click & Collect' was chosen. After describing the Click & Collect process in theory and on practical case steps, the market research methodology mystery shopping was applied to measure the Omnichannel performance of four retail brand case companies.

In practice, the case keywords multichannel, crosschannel and omnichannel often appear undefined and are used in companies often synonymously. A crosschannel system is defined as an intermediate stage of integrating multiple channels on the way to Omnichanneling (Oeser 2016). Multichanneling only says that products are sold via several channels. These channels are neither linked nor integrated, so the costumer cannot operate across channels. Communication and sales are based on the isolated processes, applications, and data in each channel. Crosschanneling offers the costumer several channels and is considered a development of the multichannel environment because the channels are seamlessly interlinked but the process steps are not all optimized and integrated. Omnichannel is the most recent term and is understood as a further development of crosschannel. Omnichannel is not just about many channels, it is about all channels (Kirse 2015). Synergistic planning and control of all available sales channels and customer contact points optimize conversion rate and objectives like total turnover of all channels or the customer experience overall channels (Oeser 2016).

Customers are looking for convenient, easygoing shopping experiences, no matter where they are and when the shopping desire comes up. To meet the high demands of costumers, retailers give customers the opportunity to use online and offline channels, while creating a unified and seamless shopping experience (commercetools 2016). The offered communication and sales channels include online shops, mobile apps, and social media like Twitter, Facebook, Instagram, etc., offline retail locations, blogs, or mail order business with catalogs (Fig. 9.1).

As the borders between the individual channels disappear more and more, virtually every customer is an Omnichannel customer. The potential buyer is, for example, bracketed through a Facebook ad that points to the online shop. However, he orders the goods only there to pick them up the next day in the shop, because when ordering, he received a 5% voucher for self-collectors by email or by a notification on the smartphone.

Click & Collect as one of the first Omnichannel services enables shoppers to purchase items online and pick them up in the physical store, merging e-commerce and physical retail together. It can often make the shopping journey more convenient for consumers: making a purchase from the comfort of their own home, and collecting the item whenever it is most convenient for them, instead of paying for shipping and not being into take delivery of the item, or waiting for their delivery to

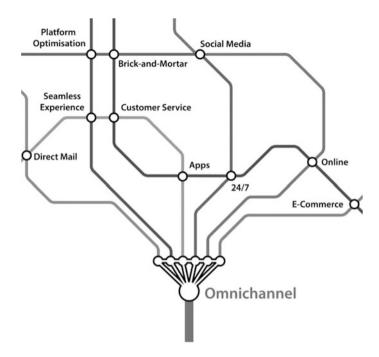


Fig. 9.1 Omnichannel overview (SDZeCOM 2016)

arrive (Retail Assist 2016). As illogical as it sounds, most shoppers would prefer to incur the cost and hassle of going into town and picking up their ordered items, than waiting at home or visit the shop, unsure that a liked product will be in stock. The buyers have the knowledge that the item is being held in a secure location at their selected store (Telegraph 2016).

There are four options for Click & Collect (IMRG Collect Review 2016):

In-store Click & Collect—where the shopper pays for the order at the website checkout and chooses to collect the order from one of the retailer's own stores. **In-store Reserve & Collect**—where the shopper asks the retailer, at checkout, to hold the order for them at a store but the payment is made only at the time of collection. The Reserve & Collect option can be processed with a smartphone or tablet that has installed an appropriate app.

Parcel Store—where the shopper pays for the order at the website checkout and selects a convenience store, petrol station, or other manned location—generally open "early 'til late, seven days a week"—from which to collect.

Lockers—where the shopper pays for the order at the website checkout and requests that the order is delivered to a locker box (accessed by QR- or PIN-code) which may be situated on a street site or at a supermarket, petrol station, bus, train or tube station (Fig. 9.2).

Fig. 9.2 Click & Collect process



The Click & Collect process takes three steps:

"shop": the costumer visits the online shop or smartphone app and chooses the wanted item.

"select": choosing the nearest or preferred collecting location that is proposed.

"collect": the customer goes to the chosen location or branch once informed about arrival via SMS or Email and picks the item(s) up for free.

The **in-store-Click & Collect** order process starts with **step 1** when the chosen item is in the shopping cart. Before choosing delivery options one should sign up for an account so the site has the customer information such as home and email address. The delivery options show Click & Collect and with non-additional costs. Normal parcel delivery to a given home address via DHL or to a pickup station, on the other hand, is charged with an additional $3.95 \in$ in Germany or $1.99-4.99 \pm$ in the UK.

If a customer picks the Click & Collect option, in **step 2** he will be requested to look for a branch, where he would prefer to pickup the order. In some cases, the nearest store or a store chosen in a previous order is automatically shown. After this, a suitable payment method is chosen.

After choosing the preferred store it sums up the address of the store and shows the opening hours (Fig. 9.3). After finishing this step one chooses the payment method. Not every chosen payment transaction is possible when picking up the item. The payment method and the collection are two different processes when it comes to Click & Collect. Like any normal online order process there is an order number given at the order checkout. Once the parcel arrives at the selected collection store, the customer receives a SMS smartphone notification and/or an email with this number (Fig. 9.4).

The received information leads to **step 3**. The collection process in which the customer goes to the selected store and picks up the parcel. The pickup process is generally quick. Some stores have a special cashier and pickup point while some only work with the normal cashier point.

The customer shows the staff the so-called Parcel Arrival Voucher and gets the item. The poster says: "Save delivery costs with Click & Collect." Most stores offer the customer to try the ordered item, before filling out any paperwork to make sure the customer is satisfied. Afterwards, the parcel is marked as "picked up", "cancelled", or "extended order".

If the customer chooses to take the item, most companies let the customer fill out a form in which is stated when and where the order was picked up from and which seller committed it. If the customer is not satisfied with the ordered item, it is possible to send the order back from the store, cost-free for the customer.

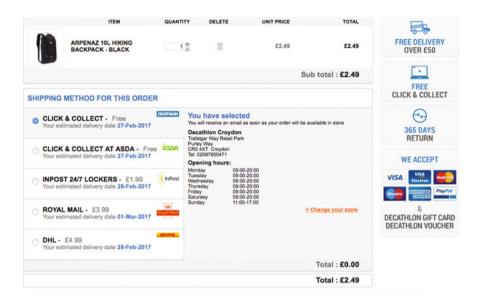


Fig. 9.3 Screenshot of Click & Collect order process 3, Decathlon UK

Customers expect a seamless shopping experience, meaning that they can shift effortlessly from a digital to physical channel whenever they like. Click & Collect, or Reserve & Collect provide such experiences. You return or exchange articles in-store, even if the article has been ordered via the online shop. Customers also want to cancel or change orders in any channel, no matter which channel has been used to initiate the transaction (Strähle 2015). The most beneficial point from a consumer perspective is that that the shipment is free. Using smartphones to order an item allows consumers to merge the digital and physical shopping experience in a convenient way. The pickup process in-store is mostly quick and easy. Regarding payment, unwanted items can be returned from the stores for free. Using the online Click & Collect or Reserve & Collect services saves all the hassle of navigating a busy store and waiting in line to pay. The risk of missing a delivery gets eliminated and stock availability is ensured (careco 2015).

As case examples four different fashion retailers, representing different fashion markets, were chosen. Hunkemöller represents a specialized lingerie/swimwear chain, Decathlon represents sportswear retailing, Massimo Dutti represents fast fashion retailing, and Galeria Kaufhof is a department store. Analyzing four companies in four different fashion markets gives an impression of Click & Collect cases without claiming to picture the complete German market.

The Dutch lingerie brand **Hunkemöller** Omnichannel retailing strategy helped to transform Hunkemöller from a single store to a multichannel global lingerie brand spanning across 16 countries in 656 shops. In terms of e-commerce, Hunkemöller kicked off its online store in the Netherlands in 2003 in Germany 2009 and in Belgium 2010. 2011 the smartphone app went live. They believe that

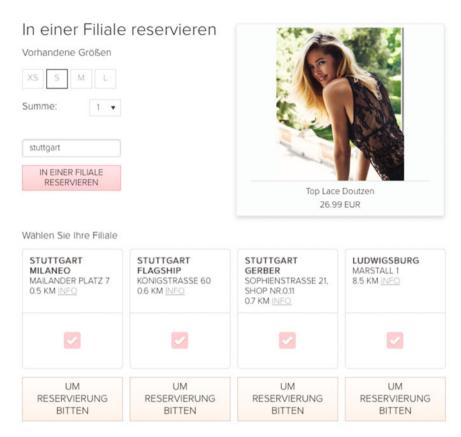


Fig. 9.4 Screenshot online shop—choosing one shop to collect—item is available

the customer should be able to shop always, whenever, wherever she wants. 2012 the personalized Customer Relationship Management App started which was the first step into the omnichannel world, according to CFO Ron Hemmer. Hunkemöller added functionalities like Check & Reserve, Click & Collect, and return of online goods to store and order in store. By enabling these functions, Hunkemöller gave their customers a better shopping experience, which resulted in a huge boost to the omnichannel growth and sales share (Shopping Center Forum 2016).

The French fashion, sportswear, and lifestyle retailer **Decathlon**, also has implemented a digital omnichannel strategy to connect consumers across channels for a full understanding of their purchasing behavior. Today, Decathlon has more than 1000 stores in 26 countries. Decathlon ensures consumers to interact with any channel. That could be Facebook, Google+, Instagram, YouTube, Twitter, Decathlon Blog, and the mobile app. Even though the app gives consumers the choice to scan the barcode and order the item directly from the app store, the app is being developed to give consumers a more experiential journey. For example,

it will be able to recommend places for the user to go hiking, and then the products to go with that. A two-day hike requires different equipment from a 10-day hike, and recommendations can be tailored accordingly (ClickZ 2016).

There is a focus on bringing customers into the online or offline stores. However, Decathlon also offers a secure Click & Collect service from easily accessible lockers, because one massive drawback of in-store Click & Collect generally can be the time it takes for an already thinned-out store staff to go hunting for parcels. There is a risk of leaving other customers waiting longer. So, the option for customers to drive and immediately pickup from a handily located lockers makes sense. Customers who opt to use in post receive a unique barcode to open their locker (eDelivery 2016).

Figures 9.5 and 9.6 show that Decathlon uses the physical stores to cross-promote online services and upsell. The Decathlon stores make a clear statement of their services. Decathlon also offers the possibility of scanning the barcode from the app to find the product in the online or app store. Decathlon's physical stores also have an extra pickup counter which is located near the entrance so customers become aware of their options (Fig. 9.5).

The third chosen store, Spanish Inditex groups **Massimo Dutti** brand with 681 stores in 64 countries has completely renewed its commercial strategy by committing to new technologies. Mobile payment and smart changing rooms with a system of automatic look suggestions, are some of the most significant innovations found in the newly opened Massimo Dutti flagship stores. These innovations make Inditex/Massimo Dutti to a leader in omnichannel solutions. The recently opened



Fig. 9.5 Pickup point of Click & Collect items at Decathlon store



Fig. 9.6 Decathlon store: scan, checkout, pay online (ClickZ 2016)

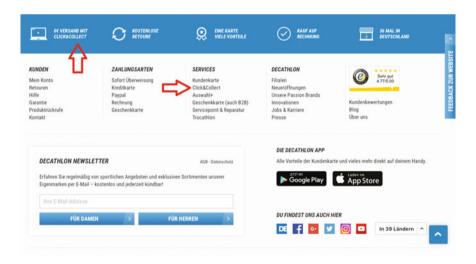


Fig. 9.7 Screenshot Decathlon online shop

Massimo Dutti store in Barcelona is considered the first store in the Inditex Group which involves the latest changes in Omnichannel technology. Big screens have been installed strategically with dynamic display pictures for a useful marketing tool. They not only allow one to refresh and customize the contents, which are very useful in season sales like black Friday, etc. but also engage the customer's attention more than static pictures. The smartphone is considered an essential element. Devices, along with smart fitting rooms have turned into the key tool in producing an Omnichannel experience. As a result, Massimo Dutti provides free Wifi to its customers to ease their connectivity. "See now, buy now" definitely is the new retail model and Massimo Dutti knows it. Since immediacy is becoming a very popular factor, Massimo Dutti now offers the possibility to buy items outlined in the shop-windows directly from its app. Through GPS, all the items in the store appear automatically on the screen to make them available at one tap. Based on the Massimo Dutti's app, they have developed an innovative online payment service wallet (only for iOS devices) which lets users buy directly from their smartphones with any card registered previously in the App. Customers only need to scan a QR code into the App to buy the item in a safe, secure way. It also allows users scan and save all the tags on their devices (Wide Eyes Technologies 2016). Not all these new technologies are to be found in German Massimo Dutti stores vet.

The fourth chosen retailer **Galeria Kaufhof** is an European-wide leading department store which employs about 21,500 people. In Germany, Galeria Kaufhof operates 102 department stores and 16 sports houses in 80 cities. Since September 2015, Galeria Kaufhof belongs to Hudson's Bay Company (HBC), which operates premium department stores worldwide. HBC would like to continue the Omnichannel strategy after the takeover of the department store group like in the USA and Canada (Galeria Kaufhof 2016). Previously, the multichannel strategy was offered with Click & Collect services as well as the services of tablets at the point of sale, Reserve & Collect at the online shop and by mobile app. Under the HBC, trade on the internet is now to be massively expanded and personal customer care improved. HBC promises high investments to make omnichannel retailing at Kaufhof strong. Customers should change more comfortable between online trading and the offline store. In addition, the department store company plans to rebuild up to ten additional branches according to the new concepts (Galeria Kaufhof 2016).

9.2 Click & Collect Performance Measurement Method

The chosen tool to measure the Click & Collect process performance is mystery shopping, a secret shopping checklist. The market researcher visits the store like a customer and collects data. A checklist allows to compare criteria of brick and mortar, online shops and the app for mobile phones, laptops, and tablets. Mystery shopping helps to anonymously evaluate customer service, operations, employee integrity, merchandising, and product quality in stores and to get information (MSPA 2016). The "MRS guidelines for mystery shopping research" (MRS 2014)

were applied. "Mystery shopping can be defined as the use of individuals trained to experience and measure any customer service process, by acting as potential customers and in some way reporting back on their experiences in a detailed and objective way. It differs from other research techniques in that the evaluator does not declare his/her presence and the participant is unaware at the time of the interaction that it is in any way different from a normal customer contact." (MRS 2014, p. 6). A big advantage of the method is providing a research possibility to monitor and observe the practice of new retail processes dealing directly with customers. Other methods like surveying with a questionnaire would not show underperforming processes in such a clarity. On the other hand, there are some drawbacks of the method. The data volume is lower than with other research methods, it is the documentation of a subjective experience which needs discussion among the mystery shoppers to avoid bias and secure validity of the observations. The two mystery shoppers were trained to avoid these drawbacks by performing on another store analysis research project before conducting the mystery shopping research.

The case study is designed to measure the Omnichannel performance and to test in what extent Omnichannel retailing has become a standard business model in fashion retailing. Nearly all major firms have developed online operations to complement their existing stores and the in-store or Click & Collect experience in brick and mortar, online shop, and app (Omnichannel Retail and the New Age Consumer 2016; Stella Service 2016). Mystery shoppers make a purchase in a store and report on the experience. A mystery shopping "assignment" can include a telephone call, email, letter, website survey, using checklists for face to face visits or a home visit (Mystery Shopper Scams 2016). A further drawback of the method is that there is only an indirect possibility to observe backoffice processes. Therefore, there was no possibility to evaluate why some companies need 2 days and others need 4 days to provide an ordered article in an offline store for Click & Collect. Since the aim of the study is to measure the Omnichannel experience from a customer point of view, this drawback of the method reduces not the relevance of the results.

As a research scenario for all companies first the online store analysis was conducted and a product was ordered via the Click & Collect option. In the offline store, the ordered product was collected, tried on and then additional questions about other products were posed in each store regarding the Omnichannel experience like ordering a product missing currently in the store. Mobile app functionality was used in three stores (Galeria Kaufhof did not provide an android app, yet), too, always in the same matter. The chosen assignment is a face to face visit to the stores after initiating the special Click & Collect service (Mystery Shoppers 2016) via app. The mystery shopper picks up the ordered items from the online shop at the store and a criteria assessment via checklist was performed. The mystery shopping questionnaire was adopted from Anklam (n.d.) and consists of the following criteria. Included are not only direct Click & Collect criteria, but also general Omnichannel criteria which add to the customer experience.

Online Store

Design: (a) clarity, (b) overall impression reflects also offline store.

Service/cross selling: (a) payment methods, (b) special requests possible, (c) Click & Collect process quick and easy (yes/no)?, (d) shipment including store finder (yes/no), (e) does order take longer to arrive at own address?, (f) is there an ad for Click & Collect (yes/no)?

Product: (a) same range (including color and size) as in offline store(yes/no)?, (b) same offers as in offline store (yes/no)?

Offline Store

Interior Design: (a) clarity, (b) overall impression reflects also an online store.

Service/cross selling/staff: (a) return policies (returning of ordered item at store possible?), (b) does salesperson inform about app?, (c) Click & Collect process quick and easy (yes/no)?, (d) much paperwork necessary at pickup (yes/no)?, (e) local payment and change of payment method possible (yes/no)?, (f) is there any advertisement for app or for the online store?, (g) if item doesn't fit could you order new sizes or another item to own address (yes/no)?, (h) does salesperson inform about special offers (yes/no)?, (i) how does salesperson react when something doesn't fit?, (j) how was item packed/wrapped?, (k) enough salespersons at collect point (yes/no)?, (l) friendly staff (yes/no)?, (m) salesperson knowledge (yes/no)?, (n) long waiting time until ordered item is given (yes/no).

Product: (a) same range (including color and size) as in online store (yes/no)?, (b) same offers as in online store(yes/no)?

Mobile Store

Design: (a) clarity, (b) overall mobile impression reflects also online store and offline store.

Service/cross selling: (a) QR or barcode scan possible?, (b) if one finds items with QR code or barcode—can it be sent to store or own address or locker via app?, (c) payment methods, (d) Click & Collect process quick and easy (yes/no)?, (e) shipment including store finder (yes/no), (f) is there an ad for Click & Collect (yes/no)?, (g) same service functions as in online store (Click & Collect, Reserve & Collect, locker)?, (h) is it complicated to get/download the app? (i) Do retail salespersons use mobile apps?

Product: (a) same range (including color and size) as in offline store (yes/no)?, (b) same offers as in offline store (yes/no)?

Mystery shopping criteria must reflect the case study purpose. Due to this, an original mystery shopping checklist of Anklam (n.d.) has been altered to fit the research subject. Mystery shopper survey questions must be designed to allow for clear, precise, measurable responses (Stella Service 2016). After grading each store individually, the two field researchers discussed their respective experiences in order to find a common grading of each question per store.

The checklist assesses the criteria on a 10-point Likert scale 1–10 points. 7–10 are the highest and best points for the fulfillment of the criteria and indicate that there are no complaints or need for an improvement proposal. 4–6 points mean the experience was acceptable but needs improvement. On the other hand, points from

1 to 3 mean a negative fulfillment of the criteria. The shopper had a bad experience and there is a need for improvement. The mystery shopping was conducted from November 2016 to January 2017 by two of the authors. It was important to choose criteria which also made the shopper ask sales persons questions. These conversations lead to a better examination by gaining additional information. Each company was known by the researchers before performing the mystery shopping analysis of the four retailers with one offline store per retailer.

After the mystery shopping each retailer gets an overall grade by his average points gained. The result helps to compare one retailer with another—in this case, all the companies which offer Omnichannel services and to detect weaknesses in relation to the customer. Mystery shopping results can also be used to measure and monitor the impact of changes in, e.g., products, systems or employee approach (Skrivnostni-Nakup 2016).

Mystery shopping allows to compare mobile, offline, and online store. When a retail store implements new policies or services like Click & Collect, it needs to see those policies put to practice. Mystery shopping also provides benchmarking between stores to see which stores are performing well in omnichannel experiences/services and which have room for improvement (Mystery Shopper Scams 2016). Around half of the large German multichannel retailers now offer such services like Click & Collect, apps for smartphones or tablets. Some of the retailers massively advertise this fact (Click & Collect 2016).

Figure 9.7 shows the online site of lifestyle retailer Decathlon. The Click & Collect option is easy to find, but not prominently advertised, in the category "services" and the reminder " $0 \in \text{shipping}$ with Click & Collect." There is also a page where Decathlon explains the benefits to the customer when using Click & Collect. Second, there is Hunkemöller which also makes a clear statement regarding the services on the online shop.

The tested stores also show different types of strategies for advertising their service offers in a physical store, a smartphone app and the online store. The Hunkemöller store made a clear statement of their services. For example, when using the app in the physical store the customer can enable direct access to internet contents to find out, if a wanted product is available online or even in a bigger range than in the physical store by scanning the barcode of the product. The Barcode (with other companies a QR-Code) can also serve to promote new products, offering coupons, comparing prices in other stores, direct online shopping, and provide product information. Another basic feature of the Hunkemöller app is the store locator which directs the customer into the store via GPS.

The parallel use of different sales and information channels is especially enhanced by the mobile internet. Smartphones or tablets can be used at physical stores and enable direct access to internet contents (Strähle 2015). Customers who normally only buy in the physical store get informed about the app while trying on items in the changing room. Figure 9.8 shows the ad "more ways to shop" for the app in the tested Hunkemöller store. The advertisement also informs the customer that sizes or models which are not available can be ordered from the store and sent to their personal address or to a physical store.

Fig. 9.8 Advert for app



When sellers were asked how many customers know about such services while mystery shopping it was surprising to learn that by far not all German consumers know what 'Click & Collect' and using apps for an "anywhere, anytime shopping experience" actually means. This shows that the customer does not have the needed knowledge of the distribution channels and what makes them attractive for the various phases of a purchasing process.

However, omnichanneling in the fashion retail industry is still in the developmental stage. For example, in the context of omnichanneling it is of increased importance to make simple payment methods across all channels possible. Especially mobile payments are of importance. If a customer has always paid his online purchase with PayPal, he should be able to pay this way in the physical store as well. There are different challenges a retailer faces when developing his multichannel strategy into an omnichannel one. The retailer must highlight the strengths of the different channels clearly so that the customer can select the channel depending on the situation or the preferences. The parallel use of different sales and information channels is especially enhanced by the mobile internet supported by price search engines, online marketplaces, social shopping services, social networks, or communities (Strähle 2015). The number of consumers taking advantage of this service and of retailers offering it varies strongly according to the sector. It is

most widespread in the following three branches: fashion/accessories, books/media, and consumer electronics/electrical goods (Click & Collect 2016).

Both omnichanneling as well as the design of the shopping experience can be considered as measures for the optimal satisfaction of customer needs. Retailers must understand that knowing the different customer segments is essential. There are customers who have preferences for channels. For some customers, a channel choice is an element of their past shopping experiences, where some only buy in physical stores. Price sensitive customers choose the channel based on the cheapest offer. Consumers are more and more using online retail such as ordering from the app because the range is wider, the shopping can take place at any time, any place. The high price transparency allows the customer to compare. The customer can read other customer reviews, advice about the product and, most importantly, the integration of social media (Strähle 2015).

9.3 Offline Shopping Experience

Decathlon is a far bigger store than Hunkemöller or Massimo Dutti. When entering the store the Click & Collect pickup point was nonetheless not to be overseen. Also, the stores suit the app and the online shop. However, the store is so big that there is no such clarity and it takes a bit of time to find the wanted sections if one does not ask. The category "Interior Design" got 8.5 points from 10. The shopper approached the saleswomen standing at the cashier and asked for the parcel. The saleswomen gave it to the shopper. The mystery shopper had to ask the salesperson if it is possible to try the item instead of the salesperson offering immediately this service. The process was quick and the shopper had to sign the pickup. After trying the item and deciding not to take it, the shopper went back to the salesperson. There was no reaction of offering something else. The item was ordered with a bill payment so the shopper should pay it afterwards. But because the item was being returned, the shopper got the money in cash and had to transfer it to Decathlon. Very complicated. This shows that every company handles the payment of returns differently. The service and cross selling category gets 7.3 points. As it is in all four brick and mortar stores, the range of the physical store is not as big as the online shop due to the limited space capacity but the offers where the same. The category product got 8.5 points (Fig. 9.9).

Upon entering the **Hunkemöller** store, the sales staff greets with the phrase: "Welcome to Hunkemöller." The shopper first looked around and checked if the online site and the physical store suit each other, meaning if a customer who only knows the Hunkemöller online site could recognize the physical store and know it is the same retailer. The store was organized. The NOS-articles (never out of stock basic articles) were easily found. In-store product and store colors had a good flow. So, for the category interior design at the physical store, Hunkemöller gets 10 points out of 10. After the shopper went to the cashier to ask for the ordered item the employee got the packet out of the stockroom. The employee then asked if the

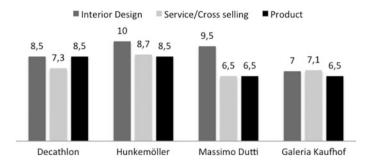


Fig. 9.9 Evaluation from mystery shopping: offline Omnichannel shopping experience

shopper is a member of Hunkemöller and if the shopper would like to try the ordered item. The saleswomen asked if she can open the package. While trying on the item, the saleswoman showed up at the fitting room and asked if everything was okay and if the item fits. After the shopper told her that it did not, she made it clear that she could help the shopper look for something different but similar. Then she asked the shopper if she knew which "Hunkemöller size" she has and if she could measure the shoppers so one could find the perfect size. This is clearly a good selling strategy, because this way the customer feels special and unique. After the shopper went to look for something new with the saleswomen, she told the shopper about the latest promotion sale and showed the products that are included. After telling the saleswomen that there was not anything suitable for her, she asked if the shopper was going to keep the ordered item just to make sure. After that, both went back to the cashier and the shopper got a credit note as an evidence of the returned item and for not having to pay the open bill. She asked if the shopper had the Hunkemöller app. When the shopper said no, she told her all the advantages of downloading and using it and gave the shopper a card with an explanation of how to download it. After that she explained that a customer could order online or from the app to their or other Hunkemöller shops. She made it clear that she had knowledge of Hunkemöller's integrated channels. The woman gave the shopper a paper to sign to make sure the right customer got the package. The process of getting the package was fast and the return process also. At the end, she told the shopper about upcoming sales and told the shopper to come by. Due to this, the category for service and cross selling at the Hunkemöller brick and mortar store is rated 8.7. There were a lot of selections at the physical store but after checking the app, there was clearly a much bigger range of color/sizes, models, and collections online. The offered promotion sales can be redeemed at all distribution channels. Because of that, the category "product" is rated 8.5.

When entering the **Massimo Dutti** shop, a clear line and a design was visible. The shop reflected clearly the appearance in the online channel, which reached 9.5 points. The confirmation mail contained a delivery date of approximately 4 business days. In the confirmation of the delivery to the store, it was expressly desired to address an employee. A customer does not necessarily has to go to the point of sales

when ordering the goods in the shop. First, the name of the recipient was needed so that the parcel could be retrieved from the warehouse. The carton package was wrapped in a foil containing a bar code and the store's address. Then the barcode is scanned with a special device, the customer had to sign on the device and then they took off the foil. Thus, the package assigns quickly and easy, which was rated with 10 points. It has been assumed that the package is taken home. It was only at the request of the customer whether the goods could be tried on site.

The package consisted of a solid box with the label 'Massimo Dutti', matching the label. It was additionally secured with a rubber band and looked high quality. Therefore, Massimo Dutti gets 10 out of 10 points for the appearance of the package. When opening the package, the products could not be seen immediately, it was specially packaged. The ordered boots were wrapped in a foil in a shoebox, which in turn was wrapped by a paper with the sign of Massimo Dutti. There was an envelope enclosed, in which was an acknowledgment of the order and the invoice including the instructions for the return. However, this guide was only for the return for a delivery which is sent home and not specifically aligned on the Click & Collect service.

During the fitting, there was no employee who looked for the customer in the dressing rooms. This was done exclusively on the sales floor. During the mystery shopping, there was another customer, who ordered several packages in the store and received no service of the staff. Thus, no suitable additional products were offered for the products ordered. When entering the sales area, a saleswoman asked if everything fits but she did not go further into the customer's response. At the request of the customer for a different size of the product ordered, the seller reacted. However, this product was not available in the store. After the fitting of matching pants in the unavailable size, the seller pointed out the customer should search the online shop later at home. They do not check the availability of products in other stores or order a different size in the online shop into the store or to the customer's home. Therefore, Massimo Dutti gets just 2 points out of 10 for the information about the app and online store and for 'service'.

The goods can either be returned directly in the store, or collection of the package must be requested from home via the online page and the account of the customer. The courier service then emails to the customer to arrange a pickup date at his home. When the package is returned to the store after the fitting, there is a special employee who is responsible for the acceptance of the packages. Because the package has been ordered into a store, it does not contain a return note. Subsequently, the employee checked the goods and filled out some forms, no reason for the return had to be indicated. Then she issued a clear confirmation of return in a Din A4 format. Basically, the return is easy. However, the return in the shop is much easier than returning from home, resulting in 8 out of 10 points.

When the ordered product is purchased, the invoice cannot be settled immediately in the store, e.g., the purchase on the account over Klarna runs. Klarna is an external company that handles the payment between Massimo Dutti and the customer. Selected payment method during the online order or the order by an app must be adhered to and cannot be changed at any time afterwards. The same

payment methods are available in the online shop and in the app. After the return process was completed, the customer was offered a feedback form to evaluate the process and the satisfaction Obviously, Massimo Dutti is in the process of optimizing the processes and networking the channels better. All in all, Massimo Dutti scored 6.5 points in the category "service and cross selling." After checking the app and online store one more time, it was obvious, that there are more offers and colors at the online site and the mobile app. Thus, the category "product" was rated 6.5 out of 10 points.

Galeria Kaufhof: After the articles had been ordered online, an order confirmation was sent. This Email was not specifically designed for offline store pickup. It was stated that the delivery time takes 2 to 3 business days. The shipping confirmation was sent the day after the order was placed online. This had explicitly indicated that a pickup notification will be sent as soon as the goods could be picked up at the selected store. After 3 days, the pickup notification was sent. The goods were ready to be picked upon the date it arrived and in a period of 10 days at the pickup station. For this, reminders were emailed at regular intervals, which communicated the remaining days. When picking up the package, the pickup station had to be searched but this was well signposted. Basically, it was a service station where various services were offered: order service, pickup station, delivery service, exchange service, store availability, and cash service (Fig. 9.10).

A valid German identity card, a driver's license or another official document had to be presented at the pickup counter during the collection. If a third-party wants to pickup the goods, this is only possible with the submission of a power of attorney.



Fig. 9.10 Pickup counter 'Abholstation' at Galeria Kaufhof

The staff at the pickup station was very familiar with the procedures and the technique. However, they had very little knowledge about the products, because the ordered package was checked first because the staff could not believe that there is a blouse in the small package. Afterwards the code was scanned with a special device. This took a long time because it did not make a network connection. After that, the customer had to sign on the device thus the package was assigned. Now the customer could decide for himself if he tried the package onsite or took it home with him. It was only at the customer's request that the further procedure, such as the fitting on site, was explained. The staff expected the products to be tried at home. The ordered goods were very simply packed, by putting each article into transparent film. These, in turn, were packed in a simple green-toned plastic foil.

During the fitting, no staff took care of the customer. It was neither asked whether the size fits, nor any other suitable product offered, although there was sufficient staff on the sales floor. However, the employees were only busy to bring new goods to the area and tidy up. In 2014, Galeria Kaufhof introduced the use of tablets in consultations. These operate either independently or with a salesperson to place orders. Desired article are sent to the store or to customer's home. If the customer decides to buy an item, a QR Code appears on the display, which is scanned at the point of sale. The register then jumps immediately to "deposit". The QR Code on the sales slip must then be scanned again by the tablet, and the order process is completed. In the store, you could not see that this business idea is implemented. The tablet was only used at the customer's request. However, it is not linked to the Click & Collect process and is not used by the staff independently.

It is also possible to return the package to the service desk. The staff took the package and asked if everything fitted. If the product is not purchased, no other size, color or even another product is suggested or presented with the tablet. This is only done if the customer explicitly asks for it. At the time of the return, the goods are inspected and the return label is produced and then glued to the package. The sender on the back sticker is Galeria Kaufhof Reutlingen including the address, but the name of the customer is also stated. This allows the customer to return the package directly to Galeria Kaufhof or to return the package to the post office. In the case of a normal online ordering at home, the name of the customer and his address will be mentioned on the return label. This shows, that the return label is specifically adapted to the Click & Collect process and the department store gets a better overview of the Click & Collect purchases to optimize them more precisely.

In the case of a purchase, the payment must be carried out exactly as indicated online. If the customer purchases on account, this can be settled immediately at the service desk. Upon completion of the return, the customer will be given a return note. This looks like a sales slip. In total, Galeria Kaufhof reached 7.1 out of 10 points in the category "Service and cross selling." Compared to the other channels, the department store offers fewer items per range. However, there is a large selection in all areas, whereby the category "product" is valued with 6.5 points. In the category "Interior Design", Galeria Kaufhof reached 7 out of 10 points. The dark green color of the label can be used to identify the company with its channels. The structure and clarity of the department store is not everywhere recognizable.

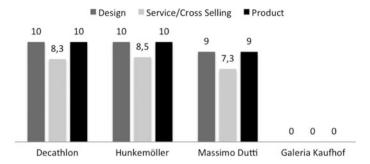


Fig. 9.11 Evaluation from mystery shopping: mobile Omnichannel shopping experience

9.4 Mobile Shopping Experience

The **Decathlon** saleswomen did not inform about the app. This could be because of the sales staff attitude towards online sales since they fear a reduction in their own sales. But there was an advert to be found in store while walking around the aisles. The mystery shopper downloaded the app, which worked. The app has a good, clear and easy to use design. The home site of the app shows the app scanner in a way that captures customer interest. Therefore, the app design rates 10 points. To the "service/cross selling-category", it can be noted that there are many functions found on the app. However, there are still some differences when it comes to the Reserve & Collect options. The app only offers the option to check if the product is in stock at available stores nearest to you and shows a phone number to call to reserve the item. So, this means the customer cannot reserve it online and pick it up then. There is now also a Click & Collect order option and an ad for the service. Again, this shows that every company still has a few improvements to make with their apps. The payment methods are the same as in the online and offline store. So, this category gives Decathlon 8.3 points. The product range is the same as the online shop and offers the same sales promotions which also leads to 10 points (Fig. 9.11).

A few days later after downloading the **Hunkemöller** app with no complications via the "App store", the shopper went to another Hunkemöller store to test the Hunkemöller app. The app design is clearer than the online shop design because it has not got as many features and hyperlinks. Nonetheless the app reflects the online and offline store. The customer gets the feeling of a smooth interaction while shopping. The design won 10 out of 10 points. When entering the store looking at the smartphone, the saleswoman came up to the shopper and asked if she knew about the Hunkemöller app. After the shopper said yes and that she was trying to order something from the online shop, the saleswoman showed the shopper how to do that by using the barcode. When ordering by app it is only possible to Reserve & Collect the item with a store locator or order it to a home address. There is no Click & Collect process possible by app. The apps payment methods are the same as at the online shop. This shows that the Hunkemöller app has had a deeper

development, than, e.g., Decathlon, when it comes to the payment methods. The app does not show any ad for the online shop's Click & Collect service which shows that in this aspect the online and app store are still managed separately. Not every item the shopper wanted was available at the store because they were out of stock so the shopper had to order it to her home and had to pay shipping of 4.95 €. The reserved item at the store can be returned at the store if not wanted. In the case of home delivery, the returns should be returned via a post office service. The fact that a few things could still be adapted gave the app 8.4 points from 10.

The app of Massimo Dutti is clearly designed and fits the other contests of the company. The app does not differ from the appearance and functions of the online shop, it has the same features. Therefore, it reached 9 out of 10 points. The ordering of the goods by the app in a shop was problematic. Downloading the app went smoothly, however, it is a problem that the app often crashes, which also gets confirmed from the reviews and comments of the app. It takes some time to understand the operation of the system. In addition, despite several attempts and with the help of the customer service no product with "Klarna invoice" payment method could be ordered neither online nor with the app. This was by no means due to the liquidity of the customer but to an error in the software. The order also did not work when using several mobile phones from other persons. The app is available for Android, iPhone, and iPad and it is promoted at the end of the online site. The app has a QR-Code/barcode scanner with which the codes on the clothing can be scanned but it is not possible to check the availability of items. By scanning the code, the customer can view the article with the app or online shop and order it if a size is not available in the store. Therefore, the category "service and cross selling" reached 7.3 points. When looking at the category "product", it was noticeable that the app offered much more goods than the store, by which Massimo Dutti reached a score of 9.

In the late autumn of this year, **Galeria Kaufhof** launched an app on the market to further promote omnichannel activities (Prokasky et al. 2016). Ordering by app was more difficult as this requires iOS 9.0 or a newer version. Therefore, this is only compatible with an iPhone, iPad, and iPod touch whereby not all customers can be reached. In this case, the shoppers did not have an iPhone at the time of the project meaning there was no possibility to use the app while test buying. In 2017, the app will launch for android devices. Considering that the app was not available to consumers with an android operating system, it could not be downloaded and thus not be tested. Therefore, no points could be awarded, the app reached 0 points in all categories.

9.5 Online Shopping Experience

The design of **Decathlon's** online site gets 10 points because it shows a clear structure and reflects both the physical store and the app. The return policies are like most of the stores. When an item is ordered with Click & Collect or with Reserve &

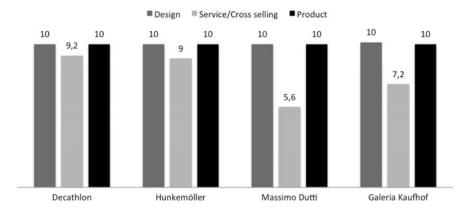


Fig. 9.12 Evaluation from mystery shopping: online Omnichannel shopping experience

Collect it is possible to return it directly to the store without any costs. When returning from home, there are also no costs but the customer must bring it to the post office. The Click & Collect order process has a few steps but these are quick. The item arrives within 2 business days. Decathlon advertises the Click & Collect order services more than Hunkemöller does. The service on the site cannot be overseen. Decathlon even tells the customer what benefits it brings to use the service. This shows a clear sign of wanting to inform the customer about everything that makes shopping a better experience. That is why the cross selling and service of the online shop gets 9.2 points. The product range is very wide in the online store and products have a clear description and at the bottom the customer can find customer reviews. The offers are the same on every channel. This category is rated with 10 points (Fig. 9.12).

The online shop of **Hunkemöller** has a packed home site with strong pink tones which could irritate some customers but all in all it owns clarity and is in line with the app and physical store. The category "Design" rates 10 out of 10. The return policies are not complicated because items ordered or reserved in store can be returned. Items ordered to own home should be returned by customer. It is yet not possible to return home-ordered at the store. The item the shopper ordered arrived at the store 2 days later. At the time of the order not every wanted item was available. The category for "service and cross selling" got 9 points from 10. The product range is the highest at the online shop and got 10 points.

The online page of **Massimo Dutti** is a very simple, white, and clear page. The articles are highlighted by large pictures. The online channel and the app have the same design, the store is kept in black and there is a lot of wood. A common thread is always present, whereby Massimo Dutti receives 10 of 10 points in the category "Design". The ordering of the fashion and lifestyle products did not work easily. It was difficult to obtain the required data, e.g., the date of birth or the store in which

the parcel is to be picked up, during the ordering process. It takes some time to understand the operation of the system. In addition, despite several attempts and with the help of the customer service no product with "Klarna invoice" purchase could be ordered neither online nor with the app. This was by no means due to the liquidity of the customer but to a fault in the software. The ordering process went well, apart from the above-mentioned difficulties. However, after the click on the "buy-button", there was always an error message. The order was again carried out by another laptop, another person and with another payment method and then it was successful, Generally, Massimo Dutti does not use the term Click & Collect. They communicate the process as "In der Filiale abholen" ('to pick up in store'). This can be selected during the ordering process and is free of charge compared to shipping home. The service is offered very clearly in the online shop. When you click on an item, it will be pointed out directly under the article description with 'Kostenlose Lieferung an eine Filiale und kostenlose Rückgabe' ("cost free shop delivery and cost free return"). During the ordering process, it is expressly pointed out that no delivery is carried out at packing stations. At the Massimo Dutti online shop, it is not possible to check the availability of items with the Reserve & Collect service in their stores. Thus, Massimo Dutti achieves only 5.6 of 10 points in "service and cross selling." In the category "product" the company receives the full score—10 out of 10 points. The online shop has all items in various colors, as well as sale items.

The Galeria Kaufhof website has a simple but clear structure which makes it easy to use. The online shop contains dark green tones of the logo and looks new that is why the online shop of Galeria Kaufhof gets 10 out of 10 points. The ordering process for the goods in the online shop was very easy. It was not only possible to order something into a store with the Click & Collect service, there was even a tool to check the availability of a fashion and lifestyle products in any store with the Reserve & Collect service. Galeria Kaufhof communicates the process of Reserve & Collect and of Click & Collect, which is free of charge, only through "Filialverfügbarkeit prüfen" ("checking store availability") respectively "Lieferung an eine GALERIA Kaufhof Filial" ("delivery to a GALERIA Kaufhof store") and not with the English terminology Reserve & Collect or Click & Collect. Among other things, delivery to a DHL packing station and to Hermes package shops is offered and the payment possibilities in the online shop are also broadly diversified. The fact that the delivery time of the items is 4 days, which is a long time for a Click & Collect service gives the "Service and cross selling" category 7.2 points. The product range is very wide and there is a large selection of articles online. Since the department store has a large area and many products, the difference to the product selection in the online shop is not excessive. That's why Galeria Kaufhof gets the full score of 10 out of 10 for the online shop in the category "product".

9.6 Discussion

All mystery shopping offline tests were conducted on a weekday at midday. That way, the frequency was not high and the mystery shoppers could analyze better, how salespersons react. The mystery shoppers went to the chosen stores and picked up the ordered item. The findings make it clear that Hunkemöller out of all four tested companies is the most developed company regarding the tested Omnichannel criteria. Decathlon shows a strongly developed company with the second best results. Massimo Dutti shows that the omnichannel strategy is still expandable. Galeria Kaufhof scored not so good. Among others, the researchers can justify the low score because of the missing app for android users.

The mystery shopping was performed during a period when many fashion retailers introduce or optimize their Click & Collect services in Germany. Therefore, the results are not representing the market reality for a longer time. Furthermore, only two researchers tested the offered services of the four retailers in one offline store. The stated lack of service with some salespersons could have differed with other offline stores of the same brand. The calculation of the scores is subjective. Considering different criteria or reducing the scope of the research could have led to other results. Although the two researchers had experiences in store analysis during a previous research project, they are no trained professional mystery shoppers with yearlong experience in store analysis. Therefore, some store facts could have remained unobserved a professional mystery shopper would have observed.

The aim of this empirical study was to critically reflect how the integrated distribution channels can be measured from a customer point of view. The method of mystery shopping was suitable for seeing things from a consumer perspective. From a consumer perspective, there is increased satisfaction in being able to select the optional distribution channel and changing it any time without risk. The method chosen made it easy to tell how far companies are to interweave their digital and offline channels. The most challenging task in this change process is to create a seamless **offline** Omnichannel experience. Here, the four chosen case companies indicate the biggest improvement potential. Further research should be therefore in this area. Retailers face challenges in the form of customer understanding, channel consistency and monitoring the attitude of the sales staff because they improve the customer linkage to different channels and influence Omnichanneling acceptance. Omnichanneling has become nonetheless a standard business model with the four German fashion retail case brands.

References

- Anklam P (n.d.) Marktforschung im Textileinzelhandel Sekundärforschung und Primärforschung. Skript. Link: Literatur-Shop Peter Anklam. Retrieved 23 Oct 2016, http://www.panklam.de/content.php?p=22
- careco (2015) Advantages and disadvantages of online grocery shopping (2015, August 21) Retrieved from http://blog.careco.co.uk/advantages-and-disadvantages-of-online-grocery-shopping/
- Click & Collect (2016) Retrieved 28 Dec 2016, from http://www.lunajournal.biz/de/click-collect/ ClickZ (2016) The face of omnichannel in APAC: spotlight on Decathlon's Clarence Chew. Retrieved 28 Dec 2016, from https://www.clickz.com/the-face-of-omnichannel-in-apac-spotlight-on-decathlons-clarence-chew/92572/
- commercetools GmbH (2016) Omnichannel commerce | commercetools platform. Retrieved 17 Dec 2016, from https://commercetools.com/de/loesungen/omnichannel?utm_source=Adwords&utm_medium=TextAd&utm_term=Omnichannel&utm_content=Ad_2&utm_campaign=Omnichannel SP&gclid=CPX65uDi-tACFTIo0wodzUEKWO
- eDelivery (2016) Decathlon gives Click and Collect a sporting chance with InPost lockers eDelivery.net (n.d.). Retrieved 28 Dec 2016, from http://edelivery.net/2016/08/decathlon-click-and-collect-inpost-lockers/
- Galeria Kaufhof (2016) Warenhaus der Zukunft. Retrieved 5 Jan 2017, from https://www.galeria-kaufhof.de/ueber-uns/unternehmen/aktuelles-warenhaus-der-zukunft.html
- Haller D (2014, April 25) Trend Omnichannel die Zukunft des Handels. Retrieved 8 Jan 2017, from https://www.techdivision.com/blog/trend-omnichannel-die-zukunft-des-handels
- IMRG Collect Review (2016) [PDF]. Retrieved 28 Dec 2016, from https://www.imrg.org/uploads/media/default/0001/02/e6e8b80af5533bd178220db39de4038351bfbfc9.pdf?st
- Kirse E (2015, April 28) Cross channel commerce wichtiger denn je. Retrieved 17 Dec 2016, from http://www.novalnet.de/magazin/cross-channel-commerce-wichtiger-denn-je
- MRS (2014) MRS guidelines for mystery shopping. Retrieved 4 Nov 2016, from https://www.mrs.org.uk
- MSPA (2016) Taking the mystery out of mystery shopping created for the MSPA by Mark Michelson. 1st MSPA President MSPA Hall of Fame Inductee. ppt download. (2016). Retrieved 12 Dec 2016, from http://slideplayer.com/slide/2499769/
- Mystery Shopper Scams (2016) Consumer information. Retrieved 12 Dec 2016, from zotero:// attachment/51/
- Mystery Shoppers (2016) Frequently asked questions. Retrieved 12 Dec 2016, from http://www.mystery-shoppers.co.uk/agent_faq.htm
- Oeser G (2016) Gabler Wirtschaftslexikon-omni-channel-management. Retrieved 17 Dec 2016, from http://wirtschaftslexikon.gabler.de/Archiv/-2046105398/omni-channel-management-v3.html
- Omni-Channel Retail and the New Age Consumer: An Empirical Analysis of Direct-to-Consumer Channel Interaction in the Retail Industry—viewcontent.cgi (2016) Retrieved from http://scholarship.claremont.edu/cgi/viewcontent.cgi?article=1667&context=cmc_theses
- Paragon (2016) The win-win benefits of Click & Collect. Retrieved 28 Dec 2016, from http://www.paragontruckrouting.com/paragon-blog/win-win-benefits-click-collect
- Prokasky A, Seidel H, Friedrich A (2016) Topshop und mehr Service: Kaufhof will Marktanteile gewinnen: EBSCOhost. Retrieved 30 Dec 2016, from http://web.b.ebscohost.com/ehost/detail/detail?vid=3&sid=97a6e0d2-40be-49d4-9ad7-9a2321da7ff1%40sessionmgr120&hid=128 &bdata=JnNpdGU9ZWhvc3QtbGl2ZQ%3d%3d#db=bth&AN=118580043
- Retail Assist (2016) Click and Collect benefits for retailers. Retrieved 28 Dec 2016, from http://www.retail-assist.co.uk/click-collect-benefits-retailers/
- SDZeCOM (2016) Omnichannel die Kunden auf allen Kanälen bedienen. Retrieved 17 Dec 2016 from https://www.sdzecom.de/omnichannel/
- Shopping Center Forum (2016) SCF: how omnichannel will benefit bricks and online. Retrieved 20 Dec 2016, from http://shoppingcenterforum.com/hunkemoller-omnichannel-will-benefit-bricks-online/

Skrivnostni-Nakup (2016) Advantages of mystery shopping research usage. Retrieved 12 Dec 2016, from http://www.skrivnostni-nakup.com/en/about-the-service/advantages-of-mystery-shopping-research-usage/

Stella Service (2016) 35 sample mystery shopping survey questions for retail brands— StellaService (2016). Retrieved 29 Nov 2016, from https://stellaservice.com/35-sample-mystery-shopping-survey-questions-for-retail-brands/

Strähle J (2015) Emotionalizing fashion retail. BoD- Books on Demand, Norderstedt

Telegraph (2016) Click and collect—the new way to go shopping—Telegraph. Retrieved 28 Dec 2016, from http://www.telegraph.co.uk/finance/newsbysector/retailandconsumer/9785532/Click-and-collect-the-new-way-to-go-shopping.html

Wide Eyes Technologies (2016, November 4) Massimo Dutti opens the most disrupting flagship store of the Inditex Group—Wide Eyes Blog. Retrieved 9 Jan 2017, from http://blog.wide-eyes.it/2016/11/04/massimo-dutti-opens-disrupting-flagship-store-in-barcelona/

Chapter 10 Supply Chain Strategic Fit: Two Fashion-Renting Cases

Xiangyu Lai, Shiting Song, Yaqing Xu and Chun-Hung Chiu

Abstract Choosing the right supply chain outsourcing strategy is crucial to the success of a business. This chapter presents two cases from the newly emerging online fashion-renting business: Rent-The-Runway (RTR) in the United States and Meilizu in China. At the early stage of their development, both companies embrace similar supply chain outsourcing strategies, and both alter their strategies to match their corporate objectives with the market environment. RTR brings its outsourced laundry and delivery services in-house to fit its expanding scale. Meilizu outsources part of its product supply to VIP customers to fit its customer culture. The two cases show that a tailor-made supply chain strategy is essential to each company, even though they are in the same industry.

Keywords Fashion renting • Supply chain • Logistics strategy Strategic fit • Outsourcing • In-house

10.1 Introduction

Many people confront this kind of problem: they have a variety of clothes in their wardrobe, yet still, complain about their lack of fashionable attire. According to one fashion company's internal research, an American woman buys an average of 64 new articles of clothing every year, half of which are only worn once. The appearance and prosperity of Facebook, Instagram, and other social media sites make the situation even worse. These platforms place social pressure on women to buy new clothes more often. If a woman sees her friends wearing the same outfit she owns, she may never wear it again to avoid embarrassment. On top of that, due to the major financial crisis of 2008, the economic environment in America is no longer what it once was. Americans now limit and reduce their expenditures to save money. For example, a woman may want to buy a fancy dress for a grand event,

X. Lai · S. Song · Y. Xu · C. -H. Chiu (⊠) Business School, Sun Yat-sen University, Guangzhou 510275, China e-mail: zhaojx5@mail.sysu.edu.cn; chchiu2000@gmail.com

[©] Springer Nature Singapore Pte Ltd. 2018
P. -S. Chow et al. (eds.), Contemporary Case Studies on Fashion Production,
Marketing and Operations, Springer Series in Fashion Business,
https://doi.org/10.1007/978-981-10-7007-5_10

166 X. Lai et al.

but then discover it is unaffordable. Alternatively, she may not want to buy an expensive dress she will wear only once. As a result, the fashion-clothing sharing economy is making its appearance in the U.S. Rent-The-Runway (RTR) was born from this kind of situation.

The fashion-renting business is growing rapidly in the U.S., and RTR is becoming bigger and bigger. At the same time, the fashion-sharing economy is also landing in China where several fashion-renting companies are being established (see Table 10.1). Chinese women are also concerned about fashion. However, in contrast to the U.S., where the new fashion-sharing economy is widely accepted by the public, fashion renting is not popular in China. Therefore, the growth rate of China's fashion-renting business is much slower than in the U.S., and the Chinese companies are smaller in size and sales volume compared with RTR.

Choosing the right supply chain outsourcing strategy is crucial to the success of a business (Caniato et al. 2011). Due to the rapidly changing fashion industry environment (Sen 2008), fashion companies always need to reexamine their supply chain strategies (Özlen and Handukic 2013; Macchion et al. 2015). Likewise, fashion-renting companies need to continuously redefine their supply chain strategies. As the market situation in the Chinese fashion-renting business is quite different from that in the U.S., different strategies should be adopted by U.S. and Chinese companies. In addition, companies at different development stages require different supply chain strategies. This chapter follows the model proposed by Chopra and Meindl (2015), using two case studies to explore how three influencing factors (company size, the demand uncertainty of products/services, and the specificity of the assets involved in the function) affect the logistics of outsourcing strategy decisions in the fashion-renting business. Two fashion-renting companies, RTR (a U.S. company) and Meilizu (a Chinese company), are selected as case studies for this chapter. Information on the two companies is collected from their official websites, publicly available websites, and journal/magazine articles. The two companies have similar supply chain strategies at the early development stage: they both outsource delivery and laundry cleaning services to third-party providers. Both companies then alter their strategies to meet their respective market environments. RTR changes from outsourcing its laundry and delivery service to managing it in-house to fit its expanding scale. In contrast, Meilizu outsources part of its product supply to its VIP customers. Aspects of the companies' supply chain operations become totally different after these changes to their supply chain strategies are made. This result indicates that although RTR and Meilizu are both online fashion-renting companies, having different tailor-made supply chain strategies is essential because each company faces a different market environment.

¹A partial list of websites is presented at the end of this chapter. The words used in the search are "rent the runway," "Meilizu" (In Chinese and English), and "fashion renting."

²The articles are collected from the database of the Sun Yat-sen University library from September to November 2016. The words used in the search are "rent the runway," "Meilizu" (In Chinese and English), and "fashion renting."

NameMSPARISNext dress yi23MSPARISMEILIZUEstablished time
(up to October 2016)24 months19 months19 months16 months

Table 10.1 Information on four Chinese fashion-renting companies

10.2 Literature Review

Outsourcing is very common in modern business, and extensive studies have considered outsourcing decision-making. Outsourcing is an especially common strategy for manufacturers wanting to reduce their production costs, and this has many different forms. For example, Festel et al. (2014) show how strategic partnerships increase the competitiveness of large pharmaceutical companies, Kabiraj and Sinha (2016) study strategic outsourcing with technology transfers, Morikawa (2016) presents findings on Japanese "factoryless goods producers" (FGPs, nonmanufacturing firms that outsource manufacturing processes entirely to other firms), and Rebiere (2016) reports the outsourcing and offshore practices of two textile groups: Inditex and H&M. For nonmanufacturing outsourcing, Shen and Li (2015) perform sustainability analysis of a retail outsourcing fashion supply chain with returns of unsold products. Shen et al. (2016) examine how design outsourcing affects the supply chain. This chapter addresses logistics/supply chain outsourcing, which is a nonmanufacturing type of outsourcing. Logistics outsourcing can improve the performance of a supply chain if it is properly executed. For example, Gadde and Hulthen (2009) find that increasing interactions between a buyer and provider are beneficial to the outcome of outsourcing. Hsiao et al. (2010) empirically show that outsourcing has no direct effect on service performance in transportation, packaging, and transportation management. However, in outsourcing distribution network management, performance increases with the increasing degree of demand complexity. Cai et al. (2013) propose that sources of double marginalization in three-tier fresh-product supply chains be eliminated. For examples of other logistics outsourcing studies, see Lai et al. (2012), Reeves et al. (2010), Yang and Zhao (2016), and Giri and Sarker (2017).

Most of the outsourcing literature examines the benefits outsourcing brings to companies. However, some studies suggest that backshoring and doing things in-house may be more advantageous in given situations. Martínez-Mora and Merino (2014) analyze backshoring in the footwear industry in Spain. They show that backshoring is a response to changes in both the economic climate and the market (smaller batches and shorter time frames). Andries and Thorwarth (2014) explore the situations in which R&D productivity benefits from outsourcing basic research. They posit that small firms benefit from outsourcing their basic research activities, whereas medium-sized and large firms do not. Gylling et al. (2015) study offshore outsourcing and backshoring decisions in the bicycle industry. They find there is increasing accuracy with cost allocation procedures, growing sales volumes,

168 X. Lai et al.

and shorter lead-time requirements. All of these results suggest that the market situation, company size, demand patterns, and customer requirements are important factors in outsourcing decisions, which is also shown in the two case studies in this chapter.

Most of the studies reviewed focus on outsourcing in traditional economies. This chapter analyzes the supply chain outsourcing strategies of two fashion-renting companies, which belong to the emerging sharing economy. Sharing economies have developed very rapidly in recent years. The literature reveals a number of studies in this area, and there are many different directions in which this emerging economic model can go. For example, Nica and Potcovaru (2015) investigate the potential advantages of the sharing economy from the social sustainability perspective. Santana and Parigi (2016) study the risk behavior of sharing economy participants. Roh (2016) describes three sharing economy business cases in which social enterprises use collaborative networks. Malhotra and Van Alstyne (2014) highlight the dark side of the sharing economy and suggest ways to lighten it. For a comprehensive review of the sharing economy literature, we refer to Cheng (2016).

Choosing the right supply chain strategy is crucial to the success of a business. Brun and Castelli (2008) propose a model for developing a portfolio of supply chain strategies depending on the product, retail channel, and brand. Caniato et al. (2011) identify three clusters within the luxury market, which depends on a company's selling volume and product complexity. The associated supply chain strategy applied within each cluster is revealed. Chopra and Meindl (2015) suggest that company size, the demand uncertainty of products/services, and the specificity of the assets involved in the function are three influential factors when selecting a supply chain outsourcing strategy for a company. This chapter focuses on the fashion- or clothing-sharing economy. We propose that the supply chain strategy selection models of Brun and Castelli (2008) and Caniato et al. (2011) are more suitable for manufacturing companies and that Chopra and Meindl's model (2015) is more suitable to servicing firms. Thus, we follow the model of Chopra and Meindl (2015) to analyze how their influencing factors affect logistics outsourcing strategies.

10.3 Case I: Rent the Runway

10.3.1 Company Background

Rent-The-Runway (RTR) was founded in November 2009 by Jennifer Hyman and Jennifer Fleiss. It was an e-commerce company offering rentals of famous fashion brands, from clothing to accessories. RTR's target customers were 15- to 45-year-old females with monthly salaried of US\$1500–2000 who hated outfit clash, and/or to wear the same kind of clothing with someone. This inevitably contributed to a huge scale of idle fashion products probably worn only once.

After six years of development, RTR offered over 50,000 dresses and 10,000 accessories from over 200 designer partners, including Badgley Mischka, Carolina Herrera, and Calvin Klein, and continued to sign new designers to expand its ever-growing roster. RTR had two sources of rental items: (1) designer dresses purchased from retail stores and (2) partner designers. The partner designers offered rental items, and in return, RTR offered the designers a platform for exposure and sales. RTR's rental prices ranged from US\$5 to US\$475, depending on the brand and retail price of the item. For example, one \$3500 dress rented for US\$175, and a \$1000 necklace rented for US\$150. The rental cost varied with the length of the rental. RTR sold these fashion products to its customers for 10–20% of the rental price. Due to the popularity of its rental service, RTR was valued at \$220 million with more than five million users. It earned \$54.4 million in 2014, and its valuation was estimated at up to \$600 million. By 2016, its revenue was expected to surpass \$100 million for the first time.

10.3.2 Distribution Channels and Rental Procedures

There were three channels for customers to make use of RTR's rental service.

- 1. PC end: customers visited RTR's website through a PC. Through the fixed Internet, RTR's capacity was broad and expansive, and thus its transaction environment was very stable. However, when and where to place an order were limited to the location of the PC.
- 2. Mobile devices: with a connection to a mobile network, customers could visit RTR's website anytime and anywhere, as they wished. Furthermore, customers could make use of GPS technology to find a nearby experience store, providing them with greater convenience. However, the transaction environment could be unstable, potentially affecting the customer experience.
- 3. Experience store: RTR operated several experience stores in Chicago; New York; San Francisco; Topanga; Washington, DC; and Las Vegas. Customers could visit the experience stores and receive professional advice from personal stylists. They could also decide whether to take items directly from the showroom or book dresses and accessories for future events.

Regardless of which channel they used to access the fashion-renting services of RTR, customers had to follow the same rental procedure, as illustrated in Fig. 10.1.

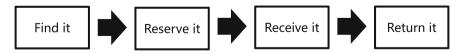


Fig. 10.1 Rental procedure of RTR

170 X. Lai et al.

First, the customer had to search for the desired fashion products by following the instructions. In this step, the customer was asked to input some personal information, which was stored and then made use of to provide a clearer user profile. This information was the key to improving service in the future. The second step was to reserve the desired item. The customer placed an order for selected fashion items and then paid RTR to reserve them. The customer had two reservation options. The first was to rent the items for 4 or 8 days. The second was a subscription, through which the customer could select three items, keep them for as long as she wanted, and exchange them anytime. The third step was waiting for the delivery of the items ordered. The delivery service was free of charge for customers. The final step was to return the leased fashion product to RTR. The customer informed RTR online, and RTR sent its staff to pick up the product.

10.3.3 Logistics Strategy

Having a logistics strategy is crucial to the success of a business like RTR. From the operational perspective, RTR placed a great deal of emphasis on the interactions with its customers. Thus, the level of service was given important consideration in determining its logistics and e-commerce strategies. In addition, the product's features influenced the choice of strategies. For RTR, higher turnover equated with more profit for each article of clothing it owned. In other words, the logistics strategy RTR chose should have been able to ensure high usage and provide its fashion products with strong protection.

10.3.3.1 Early Development Stage

In the early stage of development, RTR outsourced its dry cleaning and delivery services to third parties. Through the cooperation of the dry cleaning shops and third-party logistics companies, RTR received the orders reserving and retrieving its clothes, then passed the information to its outsourced associates. The dry cleaning shops were responsible for dry cleaning and the third-party logistics companies were responsible for the distribution and delivery of the orders and the collection of returned products. By using this strategy, in less than 1 year, RTR successfully attracted more than 750,000 members, with an average increase of 20,000 members per week, and established cooperative relationships with more than 100 designers. Its revenue in 2010 was almost US\$6 million.

With the wide acceptance of its rental service in America, by May 2011, RTR had acquired about 1 million active users. Thereafter, RTR's scale continued to grow, however, conflicts between RTR and the dry cleaners and third-party logistics service providers increased sharply because RTR was not the only business associate of these third parties. Although RTR brought in US\$10.9 million in 2011, it lost US\$5 million. The coordination cost for RTR became very high;

it missed some new profit points due to the lack of face-to-face contact with its customers, and the service provided by its third-party associates was inconsistent, which sometimes led to customer complaints and a bad reputation. In short, the service level of RTR became increasingly out of control as it grew.

10.3.3.2 Strategy Change

To fundamentally solve its conflicts, RTR reexamined its strategy and tried to achieve a balance between outsourcing and in-house services. Considering its total cost and service levels together, RTR changed its strategy from outsourcing to in-house services to achieve its goal of improving service levels at the lowest possible cost. RTR invested in building its own warehouse and logistics center, and its low-cost/high-service level strategy was divided into the following six areas matching its operation.

- 1. The search engine and recommendation system. When customers visited RTR, the company's search engine presented them with dresses selected on the basis of their browsing and rental history, age bracket, and other factors to help them find what they liked as quickly as possible. In addition, RTR's website encouraged customers to submit reviews of the dresses they rented and completed their reviews with selfies. Customers could input their height and weight into the website to see how those with similar measurements looked in certain dresses, and they could obtain further information by communicating with each other. Via the advertising effect of the network and word-of-mouth of the users, customers were more willing to become engaged in the rental service and likely to rent more frequently. Furthermore, the more information customers gathered on the clothes, the less likely they were to rent the wrong items. Thus, the logistics costs could be reduced because the possibility of clothes being returned was well controlled.
- 2. New reservation model. As most women do not need evening gowns with much regularity, they might have used RTR's rental service only for special occasions. Therefore, RTR's business appeared to be seasonal, and weekday demand was thin. To adjust to this, in addition to the previous model of renting items for four or eight days, RTR launched a new option: the "unlimited" rental. Customers could keep gowns as long as they liked at a slightly higher price and return them when they no longer needed them. In addition to this, RTR established physical showrooms to allow customers to try on and pick up dresses, making the rental process a little bit more like that of a normal fashion shop and increasing the attraction for customers. This strategy ensured the full use of the clothes, reduced inventory costs, and increased the profit margin of the company.
- 3. The garment-processing center. RTR built its own garment-processing center and stored the clothes in one place using standardized instruments, standardized dry cleaning services, unified storage, and centralized management. This achieved economies of scale and reduced the average fixed costs per product,

172 X. Lai et al.

while conforming to a high standard of cleanliness and improving customer satisfaction.

- 4. Smart algorithms for the delivery route. RTR could find the best delivery route through order frequency, the popularity of an item, and other factors. By using its designed smart algorithms, RTR could track and locate its inventory following an optimal route according to the orders and inventory information it obtained. In this way, RTR saved on its labor force, the delivery time, and thus the delivery cost. RTR also used smart algorithms to manage its inventory, based on the aforementioned factors, saving on the total cost.
- 5. New package design. RTR paid close attention to delivery details, especially for its packages. For example, when clothes were in transit, rather than casually folding them and randomly storing them in a box to save space and thus transportation costs, RTR carefully hung them on an exclusive clothes hanger and put each item into a dirt-proof bag. This was an innovative method to provide added value. In addition to providing good protection for the clothes, it also established the brand image and improved the customer experience. RTR's economy of scale allowed it to perform this service at a rather low cost.
- 6. Smart delivery service. This was an application of business intelligence. RTR had its own logistics system. By using smart algorithms, RTR could ascertain its customers' needs in advance, choose the right shipping method, and track the logistics of each rental item. The algorithms crawled the customer reviews and created forms that showed the different types of dresses rented for special occasions. RTR could predict customer needs to determine whether a prepaid-return-fee parcel could be sent back the next day or whether it would have to wait 3 days. This information allowed RTR to react quickly to the selection of its transportation mode and make rapid decisions on the sequence of deliveries, cutting the coordination and late delivery costs and maximizing customer satisfaction. In addition, for each delivery, RTR provided two of the same dresses in different sizes for its customers to try on, offering additional added value.

10.3.4 Discussion

10.3.4.1 Influential Factors in the Strategy's Redefinition

There were three influential factors in RTR's strategy redefinition: the company size, the demand uncertainty of the product/service, and the specificity of the assets involved in the function. Table 10.2 shows how the three factors influence an outsourcing decision (Chopra and Meindl 2015).

In terms of cost, due to the rapid expansion and growth of RTR, its company scale soon increased. In this process, RTR gradually acquired the ability to handle all of its operations on its own. By bringing all of its orders from the country

		Specificity of assets involved in a function	
		General	Specific
Company size	Small	High growth in surplus	Low to medium growth in surplus
	Big	Low growth in surplus	No growth in surplus unless cost of capital is lower for the third-party
Demand uncertainty	Low	Low to medium growth in surplus	Low growth in surplus
	High	High growth in surplus	Low to medium growth in surplus

Table 10.2 Factors influencing outsourcing decisions

together, RTR achieved an economy of scale and reduced its expenditures. Therefore, from this perspective, in-house service was a better choice for RTR.

However, if RTR operated its nationwide business totally on its own, its customers could vary to a great extent. Consequently, the demand uncertainty for the company could be very high, and it could be costly and risky to perform all of its operations in-house. RTR adopted advanced technologies to solve this problem. Thus, demand uncertainty could be well controlled within a certain range, and was not given much weight when a strategic decision was made.

Although costs, including the cost of establishing a warehouse and system, ascended as the extent of outsourcing declined, others including handling costs as mentioned previously and the cost of lost sales descended significantly. The total cost decreased and the service level was guaranteed due to more control throughout the process. Therefore, when the scale of RTR was large enough, the in-house strategy improved.

RTR was a service-oriented company. Accordingly, its service level should have been given first priority when determining the correct strategy. As RTR grew and new competitors emerged, customers requested additional service. Furthermore, while RTR dealt with its customers around the country, different individual demands contributed to the increased specificity of the assets involved in the function. As the assets required were specific (e.g., the ordering system, order fulfillment system, transportation requirements), outsourcing could not provide much cost savings to the company. It is not hard to discover, however, that the outsourcing strategy performed worse in each dimension of the service level represented by the loss and damage, and cleanliness levels. Clearly, outsourcing could not live up to RTR's initial expectations. Therefore, it selected an in-house model.

10.3.4.2 Benefits of the Change

The change in strategy brought a better match to RTR's corporate and supply chain goals of accomplishing a high level of service at a low total cost. This logistics strategy was one of the core factors facilitating RTR's ability to achieve a strategic

174 X. Lai et al.

fit. By operating in-house, RTR strengthened its control over the entire process from dry cleaning to delivery and kept a critical eye on everything for total quality management. It also benefited from process optimization and precise delivery to satisfy its customers' special needs and improve its service levels. In addition, the substantial decrease in coordination, transportation, and other costs contributed greatly to the reduction of the total cost and made the operation more economical. Furthermore, by reducing damage costs, RTR improved its number of rentals. On average, the turnover frequency of a given RTR piece was about 30 times, at which point it made up for discounting the clothing and funds lost from returns, enabling RTR to make a profit.

After modifying the logistics and e-commerce strategies, RTR significantly improved its business. In 2012, it brought in US\$17.8 million and lost US\$12.3 million. Its active users expanded tremendously to 2 million. In 2013, the company generated US\$28 million and lost US\$14.5 million. Although RTR did not become profitable, the proportion of costs to revenue shrank. Its revenues were expected to surpass \$100 million for the first time in 2016.

10.4 Case II: Meilizu

10.4.1 Company Background

In the major cities, the average clothing expenditure for Chinese white-collar workers was more than RMB3500,³ and 31- to 35-year-old urban women, in particular, spent more on clothing than others. However, these women also spent time learning how to dress. To address the demand, Meilizu offered an "entry lux" leasing service for this group of customers.

Meilizu, founded in April 2015, offered a rental service of clothing and accessories mostly from the well-known fashion and designer brands of Mikael D., Zuhair Murad, Lucian Matis, Just Cavalli, Badgley Mischka, Marchesa and Laberry, and others. Soon after the opening of its offline experience museum in August 2015, Meilizu announced its strategic cooperation with the China Merchants Bank and China Central Television (CCTV) to present Chinese brand innovations and development projects. Meilizu targeted 18- to 45-year-old white-collar workers who lived in first-tier cities and planned to expand to second-tier cities, such as Tianjin, Hangzhou, and Chongqing. Purchases of new products for its rental platform were made once in a while, and the company's general principle was "high-quality and price within a controllable range." For example, the daily rental of an RMB3500-item varied from RMB65 to RMB300.

Similar to RTR, there were two channels for customers to enjoy the fashion rental services offered by Meilizu: (1) the experience store and (2) the mobile

³RMB is the currency unit of China.

terminal. Customers followed four steps to find, reserve, receive, and finally return an article of clothing.

10.4.2 The Market Faced by Meilizu

Meilizu faced two difficulties. The first was low public acceptance of fashion and clothing sharing. In China, customers were uncomfortable sharing clothes with strangers. The second was the problem of coordination with business partners. It was not easy for a small startup company to build its own cleaning and delivery team, so it had to cooperate with third-party partners. However, as in RTR's growing stage, conflicts between the fashion rental companies and their third-party service providers arose. This had a profound effect on the user experience, and greatly reduced the service level. These logistics problems could have been solved by following the solutions RTR implemented. However, the declining target customer base was a totally different problem, which made the development of the fashion-renting business in China more complicated.

10.4.3 Strategy Choice

Although RTR and Meilizu had similar rental procedures and both outsourced cleaning, storage, and logistics services to third parties in their early development stages, the two companies had totally different supply chain strategies in their later stages of development. As opposed to the U.S., where the new sharing economy in fashion and clothing was widely accepted by the public, it was unpopular in China.

As mentioned previously, RTR chose to build its own warehouse and logistics center. Meilizu, however, continued to use an outsourcing strategy, and even further outsourced the supply of products to its customers. That means that unlike RTR, whose products were only purchased from fashion buyers or partner designers, 30% of Meilizu's SKUs were provided by their customers. Meilizu invited its VIP customers with good credit and high purchasing power to share their "idle" fashion items (valued below RMB2500) on its platform. In return, it provided a share of the revenue to the supplying VIP. Each piece of idle clothing provided by the supplying VIP underwent an inspection process and a quality examination according to a standard classification method and calculated formula. Meilizu provided the logistics and laundry services for the item supplied by its VIP customers. The portion of revenue shared with the supplying VIP was based on the condition of the clothing. The item was still owned by the VIP, and the duration of each garment rental was one month. Therefore, Meilizu was not only a B2C⁴ fashion-renting

⁴A B2C business sells products or provides services to end-user consumers.

176 X. Lai et al.

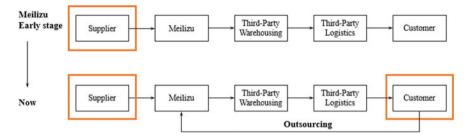


Fig. 10.2 Strategy change of Meilizu

company, but also a C2B2C⁵ fashion- and clothing-sharing platform. To reduce the operating costs of the company, the CEO of Meilizu planned to increase the percentage of SKUs from its users.

10.4.4 Discussion

As the consumer scale of Meilizu was small, it could not follow RTR in changing its strategy from outsourcing to in-house services. Moreover, the low acceptance of fashion rentals in China meant the demand for fashion renting was highly uncertain. Thus, in consideration of the cost, maintaining an outsourcing strategy for warehousing and logistics was a better choice for Meilizu.

To increase revenue, Meilizu needed to grow its customer value and reduce the cost of its supply chain to meet the objectives of the enterprise. As seen in Table 10.2, a company gains the most by outsourcing to a third-party if it is small in scale and highly uncertain in demand. Thus, Meilizu further "outsourced" its product supply to its customers (see Fig. 10.2).

Facing a situation of low customer acceptance, the low cost of the supply chain strategy was Meilizu's first choice, and outsourcing the product supply better met the company's goals of improving its service level while reducing its costs. This strategy change brought two benefits to Meilizu.

Lower costs: with consumers becoming Meilizu's suppliers, the new supply
costs for quarterly purchases were reduced, and having monthly lease contracts
also improved the circulation rate of the goods in the warehouse and reduced the
treatment costs for potential defects because the duration of the contract was
shortened and clothing rentals were returned to the customers.

⁵C2B2C stands for "consumer to business to consumer" (e-commerce model).

Better meeting customers' needs: having various sources for its products gave Meilizu greater diversification. Moreover, as its customers knew exactly what kind of products they wanted, delegating the supply of products to the customers better met the customers' needs.

10.5 Concluding Summary

Changes to the supply chain strategies of two fashion-renting companies, RTR, and Meilizu, are shown in this chapter. The two case studies show that although the companies' business models and operations are very similar, the supply chain strategies they adopt are totally different due to the diverse market situations they are facing. To analyze the changing strategies of the two companies, this chapter suggests that three influencing factors should be considered: company scale, demand uncertainty, and asset specificity. Due to the significant growth of RTR's company scale and the specific assets needed for its operations, moving from an all-outsourced supply chain strategy to an in-house strategy fits its development. Conversely, due to the low customer acceptance of the fashion-renting business, Meilizu's scale remains small after a year of development. Unlike RTR, under this situation, moving from total outsourcing to handling everything in-house does not make sense. For a small-scale company, outsourcing part of its operations to third parties can result in a high surplus. Thus, Meilizu makes use of the special features of e-commerce to further outsource the supply of its product to customers and transform from a B2C business into a C2B2C business. The major differences in the strategy changes of RTR and Meilizu are summarized in Fig. 10.3. All of these

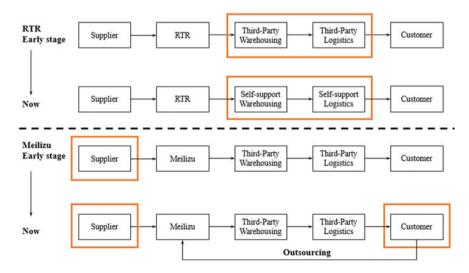


Fig. 10.3 Summary of the major strategy changes of RTR and Meilizu

178 X. Lai et al.

differences suggest that a tailor-made supply chain strategy should be developed for each company, based on not only the market situation, but also the business model the companies apply.

Acknowledgements Chun-Hung Chiu is partially supported by the National Natural Science Foundation of China with the Grant No. of 71371197.

References

- Andries P, Thorwarth S (2014) Should firms outsource their basic research? The impact of firm size on in-house versus outsourced R&D productivity. Creativity Innov Manage 23(3): 303–317
- Brun A, Castelli C (2008) Supply chain strategy in the fashion industry: developing a portfolio model depending on product, retail channel and brand. Int J Prod Econ 116:169–181
- Cai X, Chen J, Xiao Y, Xu X, Yu G (2013) Fresh-product supply chain management with logistics outsourcing. Omega 41:752–765
- Caniato F, Caridi M, Castelli C, Golini R (2011) Supply chain management in the luxury industry: a first classification of companies and their strategies. Int J Prod Econ 133:622–633
- Cheng M (2016) Sharing economy: a review and agenda for future research. Int J Hospitality Manage 57:60–70
- Chopra S, Meindl P (2015) Supply chain management: strategy, planning, and operation, 6th Global edn. Pearson Education Limited
- Festel G, De Nardo M, Simmen T (2014) Outsourcing of pharmaceutical manufacturing—a strategic partner selection process. J Bus Chem 11(3):117–132
- Gadde L, Hulthen K (2009) Improving logistics outsourcing through increasing buyer–provider interaction. Ind Mark Manage 38:633–640
- Giri BC, Sarker BR (2017) Improving performance by coordinating a supply chain with third party logistics outsourcing under production disruption. Comput Ind Eng 103:168–177
- Gylling M, Heikkilä J, Jussila K, Saarinen M (2015) Making decisions on offshore outsourcing and backshoring: a case study in the bicycle industry. Int J Prod Econ 162:92–100
- Hsiao HI, Kemp RGM, Van der Vorst JGAJ, Omta SWF (2010) A classification of logistic outsourcing levels and their impact on service performance: evidence from the food processing industry. Int J Prod Econ 124:75–86
- Kabiraj T, Sinha UB (2016) Strategic outsourcing with technology transfer under price competition. Int Rev Econ Finance 44:281–290
- Lai F, Tian Y, Huo B (2012) Relational governance and opportunism in logistics outsourcing relationships: empirical evidence from China. Int J Prod Res 50(9):2501–2514
- Macchion L, Danese P, Vinelli A (2015) Redefining supply network strategies to face changing environments. A study from the fashion and luxury industry. Oper Manage Res 8(1–2):15–31
- Malhotra A, Van Alstyne M (2014) The dark side of the sharing economy... and how to lighten it. Commun ACM 57(11):24–27
- Martínez-Mora C, Merino F (2014) Offshoring in the Spanish footwear industry: a return journey? J Purchasing Supply Manage 20(4):225–237
- Morikawa M (2016) Factoryless goods producers in Japan. Japan World Econ 40:9-15
- Nica E, Potcovaru A (2015) The social sustainability of the sharing economy. Econ Manage Financ Markets 10(4):69–75
- Özlen MK, Handukic I (2013) Fashion industry supply chain issues: Zara (Azel France). Eur Res 47(4–3):999–1008
- Rebiere P (2016) Outsourcing and offshoring practices: a reading from two textile groups Inditex and H&M. Int Bus Innov Psychol Econ 7(1):16–39

Reeves KA Jr, Caliskan F, Ozcan O (2010) Outsourcing distribution and logistics services within the automotive supplier industry. Transp Res Part E 46:459–468

Roh T (2016) The sharing economy: business cases of social enterprises using collaborative networks. Proc Comput Sci 91:502–511

Santana J, Parigi P (2016) Risk aversion and engagement in the sharing economy. Games 6(4): 560-573

Sen A (2008) The US fashion industry: a supply chain review. Int J Prod Econ 114:571-593

Shen B, Li Q (2015) Impacts of returning unsold products in retail outsourcing fashion supply chain: a sustainability analysis. Sustainability 7(2):1172–1185

Shen S, Li Q, Quan V, Dong C (2016) Design outsourcing in the fashion supply chain: OEM versus ODM. J Oper Res Soc 67(2):259–268

Yang Q, Zhao X (2016) Are logistics outsourcing partners more integrated in a more volatile environment? Int J Prod Econ 171:211–220

Websites Visited

Meilizu official website: http://meilizu.com.cn/

Rent the Runway official website: https://www.renttherunway.com/

Websites for Meilizu

Meilizu1: http://36kr.com/p/5038409.html (Chinese, accessed in Mar 2016)

Meilizu2: http://www.cyzone.cn/a/20151125/284427.html (Chinese, accessed in Mar 2016)

Websites for Rent the Runway

RTR1: https://www.fastcompany.com/3036876/most-creative-people/inside-rent-the-runways-secret-dry-cleaning-empire (accessed in Oct 2016)

RTR2: http://finance.eastmoney.com/news/1354,20140904420389529.html (Chinese, accessed in Mar 2016)

RTR3: http://www.tnc.com.cn/info/c-010006002-d-3578117.html (Chinese, accessed in Oct 2016) RTR4: http://www.forbes.com/sites/sashagalbraith/2013/12/03/the-secret-behind-rent-the-runways-success/#77d09ea6f37a (accessed in Jan 2017)

Websites for Other Fashion-Renting Companies in China

Other1: http://36kr.com/p/5046329.html (Chinese, accessed in Oct 2016)

Other2: http://luxe.co/post/39105/#top (Chinese, accessed in Oct 2016)

Other3: https://zhuanlan.zhihu.com/p/21438653 (Chinese, accessed in Oct 2016)

Part IV Cases on Sustainability and Fashion Industry

Chapter 11 Sustainable Innovation in the Apparel **Supply Chain: Case Study on TAL Apparel Limited**

Jiyoung Kim and Marissa Zorola

Abstract Sustainability has become a critical trend for US and European fashion industry, it led the retail brands to pressure manufacturers to operate in a more sustainable and socially responsible manner. However, TAL is a manufacturer that proactively embraced the concept of sustainable production without the pressure of their clients and remains one of the world leaders in sustainable manufacturing movement. TAL established its own detailed internal standards of environmental and social governance, that make sustainability an integral part of all aspects of its business; from environmentally sustainable manufacturing facilities, safe working environment, active employee engagement to supplier management. They further engage in industry wide collaborations that include participation in Sustainable Apparel Coalition and production of recycled cotton clothing collection with Patagonia. In this case study, we attempt to add to the current knowledge of sustainable supply chain management by providing an example of sustainable manufacturing model using the Sustainable Supply Chain Network Innovation Model. Data was collected through the use of secondary data and semi-structured interviews with the executive officers, Dr. Delman Lee, President and CTO and Christelle Esquirol, Vice President of Sustainability of TAL Apparel Group.

Keywords TAL · Sustainable innovation · Apparel supply chain

Department of Merchandising and Digital Retailing, University of North Texas,

Denton, TX, USA

e-mail: jiyoung.kim@unt.edu

M. Zorola

e-mail: mzorola@unt.edu

J. Kim (⊠) · M. Zorola

184 J. Kim and M. Zorola

11.1 Introduction

Today's consumer can be perceived as rather contradictory, with disposable fashion in high demand while requiring more transparency from retailers as it relates to manufacturing. Contradictory as it may be, with the sustainable movement going from grassroots programs to mainstream news, more fashion brands are interested in taking a strong initiative to improve environmental and social conditions along all sections of the supply chain, including fiber cultivation, garment manufacturing, shipment of finished product, and disposal of garments. Since sustainability has been the key trend in the retailing industry, the continuous improvement in the supply chain has been acknowledged as one of the most reported initiative (Kotzab et al. 2011). Therefore, it is critical for the retailers to be engaged in sustainable supply chain management and actively seek and partner with overseas manufacturers that are innovating the manufacturing process to be environmentally, economically, and socially sustainable. On the supplier side, a more proactive green supply chain practice can be brought upon by the rationalization of the supply base.

According to Van Bommel (2011)'s Sustainable Supply Network Innovation framework, *innovative pressures* (e.g. government policies, customer demands, response to stakeholders, competitive advantage, pressure groups, and reputation loss) and *innovation power* (i.e. innovation characteristics of the "focal" company and cooperative characteristics of the supply network) start the implementation process of *sustainable strategy* (i.e. resign, defensive, or offensive), *activities*, and *performance* in a supply chain. While his framework focuses on buyers and their relationship with the suppliers, this research presents a case study to illustrate the sustainable innovation process at the supplier level, applying the sustainable supply network innovation framework to the production source. The case is developed by collecting data through the use of secondary data and semi-structured interviews with the executive officers, Dr. Delman Lee, President and CTO and Christelle Esquirol, Vice President of Sustainability, of the focal company, TAL Apparel Group. Secondary data was collected through TAL's press release, their website, news reports and TAL Sustainability Report (2014).

11.2 Literature Review: Sustainable Supply Chain Innovation

Sustainable supply chain concerns the "management of material, information and capital flows as well as cooperation among companies along the supply chain while taking goals from all three dimensions of sustainable development, i.e., economic, environmental and social, into account which are derived from customer and

¹List of websites are presented at the end of the article.

stakeholder requirements" (Seuring and Müller 2008, p. 1700). Sustainable Supply Chain Management (SSCM) is defined as "the strategic, transparent integration and achievement of an organization's social, environmental, and economic goals in the systemic coordination of key inter-organizational business processes for improving the long-term economic performance of the individual company and its supply chains" (Carter and Rogers 2008, p. 368). SSCM is characterized by the explicit integration of environmental and social objectives that extend the economic dimension to integrate environmental and social considerations (Tseng 2013).

Supply Chain Innovation (SCI) is defined as "an integrated change from incremental to radical changes in product, process, marketing, technology, resource and/or organization, which are associated with all related parties, covering all related functions in supply chain and creating value for all stakeholders" (Gao et al. 2017, p. 1530). When the supply chain innovation results in balanced performance of economic, social and environmental dimensions, where all three dimensions have positive innovation performance, Sustainable Supply Chain Innovation (SSCI) is achieved (Gao et al. 2017). Innovation is one of the main drivers in the strategic orientation of a company (Paraschiv et al. 2012). Therefore, when sustainable development is given consideration in the process of integrating innovation into corporate strategy, the process becomes a path toward socio-ecological co-creation that is also highly consistent with the corporate's desired business outcome (Brown 2008). As innovations in terms of corporate sustainability "present the opportunity for firms [...] to reposition their internal competencies around more sustainable technologies", it remains as a critical element in establishing strategic advantage for the firm (Hart and Milstein 2003, p. 62). Therefore, companies must be able to drive innovation in terms of both corporate sustainability and their core strategy (Milton de Sousa Filho et al. 2010) in order to achieve strategic advantage. In addition, Baumgartner (2014) states that innovations and continuous improvement are necessary for corporate sustainability as part of strategic management. The linkage between the innovative firm and its supply chain is even more important when one considers that a sustainable supply chain is one of the few remaining ways for a company to achieve a sustainable competitive advantage (Damanpour 1991); hence, sustainable innovations need to extend beyond one individual firm to a connected supply chain of firms.

In introducing Sustainable Supply Network Innovation framework, Van Bommel (2011) maintains that supply chains should be regarded as complex network of participating organization with many linkages among and between the actors, rather than a linear chain. As a result, the relations between the different actors have become extremely complex and diverse. According to Van Bommel (2011)'s framework, the first element focuses on the *innovation characteristics* of the "focal" company. The second element includes the *cooperative characteristics* of the supply network. Together these two elements can be seen as the *innovation power* of the focal company and its supply network, and represent the capability of the focal company to react to the *innovation pressure* (Omta 2002, 2004). Examples of factors used to characterize the innovation power of the focal company include; external orientation and transparency, interdisciplinary and cross-functional

186 J. Kim and M. Zorola

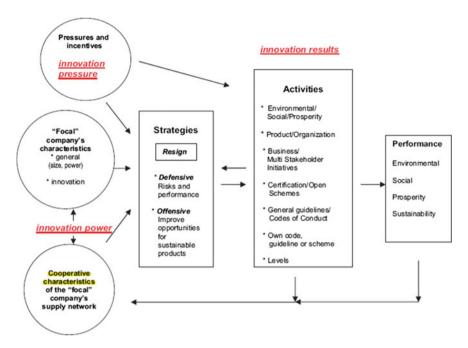


Fig. 11.1 The implementation of sustainability in supply networks from an innovation perspective (Van Bommel 2011)

cooperation between the departments, capacity of an organization to learn about the business-natural environment and to manage this knowledge, leadership, autonomy and possibility for experimenting, and the capability of the focal company to react (Van Bommel 2011). See Fig. 11.1 for the Sustainable Supply Network Innovation framework proposed by Van Bommel.

According to Gao et al. (2017), the development of sustainable supply chain innovation in the literature present partial or fractional views when evaluated from the perspective of the various actors within the supply chain. In previous literature, the role of the focal company is usually given to Western brands or retailers who are towards the end of the channel (Lambert and Cooper 2000). Most studies have mainly focused on buyers as focal companies and how they interact with suppliers (e.g., Vale 2004; Wong et al. 2013; Wuttke et al. 2013). Further, some studies give limited perspective regarding the three dimensions of sustainable development (Gao et al. 2017), mainly arguing the environmental dimension of sustainability known as green innovation or eco-innovation (e.g., Chiou et al. 2011; Seman et al. 2012; Wu 2013; Zhu et al. 2012). However, different actors within the supply chain with various responsible functions may have different insights on sustainable innovation depending on how it is perceived to affect their business (Hassini et al. (2012).

In order to better illustrate the social and environmental innovation within the supply chain, collaboration among the different players with the supply network

should be noted as key element to success (Gao et al. 2012). Collaborative relationship among the upstream and downstream parties in the supply chain is critical in achieving significant change and conquering the barriers in innovation process such as high-cost pressure, a shortened project cycle and increased competition (Gao et al. 2012). Lee (2010) presents a successful case of supply chain collaboration where companies such as Hewlett Packard, Electrolux, Sony and Braun reduced the recycling and disposal cost by 35% by developing a common European Recycling Platform. Further, collaborative planning, forecasting and replenishment systems help organizations to easily overcome financial barriers, which lead to the successful achievement of sustainability initiatives in supply chain (Attaran and Attaran, 2007). Grekova et al. (2016) suggest that supplier collaboration can enhance the buying firm's performance both directly (Zhu et al. 2007; De Giovanni 2012) and indirectly (Dyer and Singh 1998) by stimulating the firm to invest in and implement more sustainable processes that influence the firm's performance. While the importance of cooperative characteristics is well studied with the literature, the role of focal company is mainly given to the buyer where sustainable action is initiated by the Western brands and retailers rather than suppliers. Therefore, current study aims to extend the Sustainable Supply Network Innovation framework to focus on the source of production, the manufacturers, and present a case of collaborative relationship within the supply network in achieving successful SSCI strategy with balanced approach in all three dimensions of sustainability.

11.3 Innovation Strategy: TAL the Innovative Manufacturer

TAL Apparel was founded in Hong Kong in 1947 and has profited off of a strong reputation of manufacturing shirts, blouse, trousers, men's suits, and outerwear. It manufactures in 10 factories located in 5 different countries, producing over 50 million garments a year. TAL produces roughly one out of every six men's shirts that is currently being sold in the USA as well as selling a wide range of clothing around in Europe and Asia. The company's customers include Brooks Brothers, Calvin Klein, Hugo Boss, JC Penney, Liz Claiborne, Nautica, Ralph Lauren, Talbots, Banana Republic, and Tommy Hilfiger, to name a few.

TAL views itself as an innovator in apparel manufacturing. TAL has focused a lot of efforts on Research & Development and these have resulted in a range of patented products including non-iron, non-wrinkle shirts as well as Deodorant technology that protect fabrics against bacteria and fungi. *TAL*'s R&D team has between 15 and 20 staff, and collaborates from time to time with the Institute of Textiles & Clothing at the Hong Kong Polytechnic University. So far, the collaboration has brought forth a number of significant innovations in the development of textiles. TAL's most well-known innovations include their wrinkle-free technology, *SofTAL*® *Process*, which allows for production of a 100% cotton shirt that does not need ironing.

188 J. Kim and M. Zorola

There's also the *SofTAL®Wool*, the world's first garment wet processed machine-washable, tumble-dryable 100%, wool trousers and *EZCOOL®*, which allows a garment to dry twice as fast as a normal cotton product. The *DriXpert®* fabric provides moisture management to keep the skin cool and dry regardless of exertion. While TAL has long been established and known for its technology, recently they've garnered attention for a new form of innovation: sustainable manufacturing.

In addition to leading the technological improvement in textiles industry, TAL has put tremendous focus on sustainability. Sustainability has become a critical trend for major US and European fashion brands and retailers, who pressure their manufacturers to operate in a more sustainable and socially responsible manner. However, TAL is a manufacturer that proactively embraced the concept of sustainable production without the pressure of their clients and remains one of the leaders in sustainable manufacturing movement. Through series of interviews, it was found that the sustainable innovation pressure from stakeholders and clients (i.e. retail brands) is not as significant as in the case of retail brands. Rather, the impact of the company's innovative characteristics and organizational culture played a larger role in sustainable innovation. Dr. Lee comments that "it has always been in (founder's) motto to be sustainable. Even before it became a trend, he believed in conserving water, using less paper, and saving energy in our operation." Further, Esquirol adds that while factory audit is required by the clients, "companies will always find cheaper countries to produce and will move on regardless of what (TAL) is doing in terms of sustainability." As a result, the strategies were more offensive than defensive. They believe it is important to conduct audits from within and make sustainability an integral part of every aspect of its manufacturing activities in order to differentiate themselves through process innovation; from environmentally sustainable manufacturing facilities, safe working environment, and active employee engagement to supplier management.

11.4 Leveraging Network of Support and Co-creation

Through analyzing the case of TAL, this study proposes *innovation support* from internal and external stakeholders to be a critical force for manufacturer's innovation power. In addition, TAL has initiated a model of *innovation co-creation* through the partnership with and support from the stakeholders within their supply network. While the current model gives more focus to the activities and performance measured from the perspective of the focal company, innovation co-creation enables the model to view sustainable activities and performance as an outcome of the entire supply network that consists of multiple organizations. Further, several innovation co-creation effort initiated by the supplier/manufacturer provides new insight to the framework previously focused on buyers. Dr. Delman Lee, TAL's president and Chief Technology Officer who is guiding the company's sustainable approach in the entire business process, says that their participation in sustainable

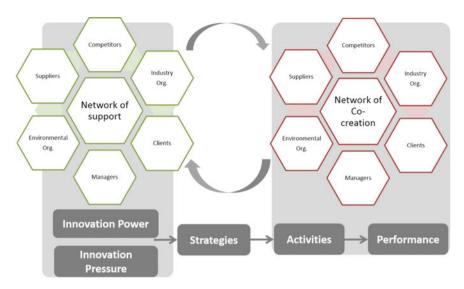


Fig. 11.2 Proposed Model of Sustainable Supply Network Innovation with an Emphasis on Network of support and Co-creation

innovation co-creation allows them the opportunity to interject in the conversation of creating processes for sustainable fashion production with manufacturer's perspective. TAL does see their sustainable operation as a competitive advantage, as they believe consumers purchasing their shirts from their clients put value on supplier's sustainability. In order to achieve this, TAL garnered network of support from various stakeholders (e.g., industry organizations, clients, suppliers, employees) and implemented sustainable innovation throughout its supply network which led to co-creation of innovation (Fig. 11.2). In the proposed framework, the importance of network of support is emphasized beyond the cooperative characteristics presented in the original framework, especially as the supplier is placed as a focal company. Network of support include various stakeholders and their networks that support and actively play a critical role in framing focal company's innovation power. Further, network of co-creation presents that, when supplier is placed as an initiator of innovative practices, the outcome often is co-created with various stakeholders within the supply network. The following sections will address TAL's strategic efforts and initiatives for garnering network of support to achieve innovation co-creation.

11.4.1 Shared Value with Suppliers

In order to ensure that the suppliers share the same value in sustainable production, TAL introduced Key Performance Indicators (KPIs) in 2014 through which they

190 J. Kim and M. Zorola

monitor suppliers' performance. Through monthly KPI report, TAL tracks the quantity and quality of self-monitoring audits conducted by the supplier and further provide each supplier with constructive feedback on their performance. Esquirol says that KPI reports enable TAL to better manage their suppliers' performance with data driven approach. TAL's initiative on factory self-monitoring aims to provide the suppliers with knowledge of KPIs, and further promote a proper mindset of sustainability. The goal is not only for suppliers to be compliant with local and international compliance standards but to also develop auditing skills and put in place systems to address social compliance issues.

11.4.2 Employee Engagement

In earning support from their employees, TAL approaches their workers with a long-term relationship in mind. In order to better care of their employees that are spread in multiple regions, TAL developed various strategies to listen to their employees and improve the work environment. Ethics Hotline directly delivers employee grievances to the internal audit team, letting employees to express their concerns anonymously. Big Sister Program launched in 2008 help new workers and provide communication channel for factory employees to share concerns related to worker treatment. Currently, it has evolved to a program that addresses various issues related to acclimating to factory life, community concerns, and overall everyday life matters, utilizing social media and face-to-face exchange.

Foreign migrant workers in factories is another focus area in TAL's social sustainability strategy. Due to the vulnerability of these workers, they are exposed in situation that can seriously harm their quality of living. In Malaysia, TAL has put efforts to enhance the quality of life of the workers, helping them in ways that go beyond the usual practices expected for the employers. Majority of TAL's manufacturing workforce in Malaysia is comprised of foreign migrant workers recruited through third party recruiting agencies. Through interviews with these workers, TAL found that there are unethical practices that exist in the fee payment process as the procedure set by the agencies often times lacked transparency; after foreign migrant workers pay recruitment fees to these agencies, they are not provided with a balance sheet with the exact amount and the interest rates they were charged. In order to address this issue, TAL worked with labor recruiting agencies to set up specific requirements for them to be transparent in their operations and recruitment process. Further, TAL took the initiative to change the recruitment fee payment system where TAL pays the recruitment fees upfront to the recruitment agency and then provides a payment plan where the foreign workers pay back TAL for the fee amount each month. In addition, free accommodation is provided to foreign workers and a checklist in relation to the quality of the housing is used by the factory team to perform regular audits. Continuous effort is made to ensure the quality living condition of the foreign workers by implementing a housing maintenance system to launch maintenance requests.

TAL also supports continuous training of their employees and has developed various programs to encourage workers in advancing their skillset. For example, Functional Skilled Knowledge (FSK) program focuses on technical skills for critical production roles. Professionals such as garment technicians and supervisory individuals such as quality control inspectors are enrolled in year-long courses to improve production efficiency and quality in relation to sewing techniques and machine maintenance. In 2014, 69 employees from the 2 pilot factories completed the training and by the end of 2014, FSK was launched in all factories with 559 enrolled employees. TAL also began to develop FSK training for non-production roles to build up product knowledge for the sales teams.

Further, TAL introduced 9 Managerial Leadership Competencies (MLCs) in 2010 to educate the employees, especially in supervisory and managerial role. This program encourages employees to learn specific behaviors that enhance their performance and apply the concepts at the workplace. In order to achieve this, TAL implemented strategies to reinforce MLC training through various activities (e.g., a writing competition and an experience sharing session) along with classroom training. Train-the-trainer activities were conducted to create MLCs Advocates who then drive the learning climate for MLCs in different TAL sites.

11.4.3 Industry Collaboration Through Sustainable Apparel Coalition

Further, the cooperation characteristics was found not only to be the antecedent of the implementation of sustainable strategies but also a co-created outcome. As TAL implemented a sustainable manufacturing program, their retailer partners started to seek cooperative partnership to develop a sustainable audit program to be used for other suppliers as well. In March of 2011, TAL was invited to become one of the initiating members of a global initiative, the Sustainable Apparel Coalition (SAC) due to the recognition for its work in the research and development of green textiles. Focus of the SAC is on reducing the environmental and social impact of apparel and footwear products using a collaborative approach with the hope of influencing the industry around the world.

One of SAC's goal is to successfully design a pre-competitive, universal index named Higg index to measure and benchmark sustainable practices and products for use by the entire apparel and footwear supply chain. Eventually, SAC hopes to use this index to create a consumer label that can be placed on individual products to inform consumers about the apparel's sustainability rating. Supported by the U.S. environmental Protection Agency as well as academic experts, SAC comprises of leading

192 J. Kim and M. Zorola

apparel and footwear brands, retailers, manufacturers, Non-Governmental Organizations (NGOs). These include major brands such as Adidas, Wal-Mart, H&M, Marks & Spencer, Levi Strauss, Gap, JC Penney, Hong Kong-based brands Esprit and Esquel as well as the Duke University's Center for Sustainability & Commerce. TAL is among SAC's 33 founding enterprises, and among three manufacturers within the group.

Through the inclusion of institutions throughout the supply chain, SAC was able to establish the Equal Partnership concept to be at the center of the SAC agenda. While some manufacturers like TAL already have developed a sustainability strategy, many brands and retailers bring a rather top down approach when they discuss sustainability with their suppliers, demanding suppliers to comply with their own specific list of requirements. This resulted in suppliers needing to deal with multiple audits and overlapping requirements from clients and eventually led to lack of ownership of the sustainability program. Through TAL's effort in communicating equal partnership in SAC, SAC promotes respect and consideration of the supplier's existing sustainability program and further brings acknowledgement of the unequal approach that inhibits suppliers from being included as a proactive member of the sustainable development.

11.4.4 Producing Recycled Cotton Clothing Line with Patagonia

TAL's sustainability program extends to the reduction of fabric waste and production of recycled cotton. For this project, TAL initiated a proposal to several brands with the recycled cotton concept in 2011. Partnering with Patagonia for their recycled cotton clothing collection called "Truth to Material" introduced in 2014, TAL was able to contribute in closing the loop by producing recycled cotton fabric using fabric remnants. In the process, cotton remnants collected from the factories are turned into lose fibers, and spinned into new yarn which is then weaved or knitted into recycled fabric used in garment production. TAL's study estimates that leftovers from 16 virgin cotton shirts can generate sufficient remnant for one recycled cotton shirt. Over 2013 and 2014, TAL collected close to 100 tons of cotton scraps and sold over 13,000 garments.

According to Dr. Lee, the challenge still lies in that most of the fashion brands do not embrace the concept of recycled fabric as its color cannot be guaranteed to be within industrial standard tolerance. While white-colored remnants are separated from dominant colors such as red and blue in the sorting process in order to ensure maximum consistency, the recycling process leaves the fibers with a greyish color. The process also restricts the range of color variety of the recycled fabric. Further, recycled yarns are generally of lower quality compared to virgin cotton yarns, as the fiber unraveling process shortens fiber length and the recycled yarns are a blend of fibers of different qualities.

Besides the difficulty in keeping the color and fabric quality consistent, there is also an issue of scaling the production. Recycled cotton fabric is more expensive than conventional cotton as the infrastructure and processes to reclaim and recycle material are not widespread and at scale yet. Production of recycled garments requires participation of various interlinked channels in the supply chain. For example, cotton-recycling companies need manufacturers like TAL to supply cotton remnants but also need retailers like Patagonia to use the fabric in design and manufacturers to be able to produce such garment. Therefore, cooperation and shared value among multiple parties is required in an effort to bring recycled cotton clothing to the market.

While the collaboration between Patagonia and TAL in 2014 can be noted as a significant move toward sustainable production, the future of recycled cotton production depends on consumer acceptance of the concept. Dr. Lee says, "I believe retailers need to feel confident about the appeal of sustainable products to consumers. For example, it is cool that the garment has some blemishes in it, because it is making a statement about what the wearer believes in. We continue to pitch the concept and I am happy to say that another customer expressed an interest in it recently."

11.4.5 Collaboration with Environmental Organizations

Multiple strategies are required when building up an environmentally friendly facility, including landscape building, waste water management, green house gas emission control and energy saving. As a supporting member of a World Wildlife Fund program to lower carbon emissions in manufacturing, one of TAL's factories participated in a test that won the company a Silver Label for its practices in recycling, exhaust emission management and energy-efficient facilities and procedures. TAL was also one of two apparel manufacturers to participate in a worldwide test under a greenhouse gas protocol initiative, which involved reporting its carbon footprint for manufacturing garments on a cradle-to-grave basis. Further, TAL received LEED (Leadership in Energy and Environmental Design) Gold standard in their Vietnam factory and further renovated their Hong Kong headquarters using the LEED Commercial Interiors standard in 2014. LEED features in their office include; LED light panels, low-flow faucets, eco-friendly housekeeping products, and furniture containing regional FSC certified wood, recycled metal and recycled plastic manufactured within the region.

Since TAL established their plan to reduce water consumption in their factories in 2011, they have evolved their program from water reuse to waste water recycling. In one of their facilities located in Dongguan, the company has invested over US \$3.2 million for the environmentally friendly infrastructure. In this specific facility, the water treatment surpasses international standards. With a total area of 1760 m², it has a treatment capacity of 2000 tons per day. After removing harmful substances and pollutants, the water is best recycled to save the use of clean water.

194 J. Kim and M. Zorola

For this reason, the company has built a huge outdoor water storage tank, largest in Guangdong province, made of stainless steel and materials used to build a submarine. With this tank, it is able to effectively recycle water to flower the greenery within the factory area and for toilet flush. About 35% of the total area of the facility is landscaped to contribute to a more comfortable working environment.

TAL's actions for efficient use of energy are to reduce energy consumption, as well as the production's impact on the environment. To monitor electricity consumption, managers had meters installed at various stages of the production line to measure energy consumption and flow and redirect generated heat and steam to areas that can be used. By reusing dissipation heat from steam system to preheat water for domestic use (e.g., showering of staff in the nearby dormitory) via application of heat exchanger system, the company is able to save 200 tons of water and 1200 L diesel each working day. This translates into a reduced cost of up to US \$ 395 per day. In addition, it reduces electricity consumption through even distribution of lighting and the application of light reflectors. Further, an online energy monitoring system is installed in their factory to monitor energy of each machine, allowing them to identify any machine that may be malfunctioning, inefficient or idle. This system eventually led to an estimated energy savings of 5%.

TAL has adopted various emissions control strategies, including installing systems to minimize the energy usage and emission during wet process and placing secondary insulation covers for high temperature machine. Further, TAL is increasing the proportion of light fuel oil and natural gas because their emission factors are lower while decreasing the use of heavy oil.

In order to monitor the environmental impact of the facilities' manufacturing process and prioritize the action plan, TAL has started to perform Environmental Aspect Impact Assessment (EAIA) to identify all environmental impacts at every step of the production process. Incorporating the EAIA methodology, each production activities such as cutting, sewing, ironing, washing and wet process are examined in terms of the type of activities related to environmental aspects, such as transportation, energy, waste production, air emissions, water use or discharge, noise and nuisance and land use. Afterwards, the activities are matched with impacts on air, water, ground and underground water and other natural resources. This analysis is to help TAL develop a robust action plan and to prioritize depending on their risks.

11.5 Challenges and Future Ahead

While sustainability has been acknowledged as a core value across various industries and in different levels of supply chain, one of the biggest challenges is that there are different perspectives and opinions when it comes to measurements and standards. Therefore, manufacturers can end up in difficult situations as apparel

brands often have contradicting values and policies. However, with the development of the standardized measurement and label such as Higg index, "there is much hope in what Asian manufacturers can contribute to environmental sustainability", Dr. Lee says.

In addition, Dr. Lee admits that these practices were not without some resistance at the factory level. Since they have to meet certain production standards, sustainability program could be perceived as additional burden, Dr. Lee says. However, they are continuing to communicate the importance of sustainable practices, while also linking the program to reduced energy bills, which can also be part of the incentive scheme.

Further, the threat lies in the fundamental issue of the pricing system set in the retailing industry. According to Esquirol, manufacturers like TAL has limited ability to address full spectrum of the issue in sustainable production as the apparel industry pushes manufacturers to work on a very small margin. Esquirol says "Our margins are so small that ... it makes it always more difficult for us to make heavy investment in important hardware essential to our sustainability efforts." "Retailers claim it is the consumer that keep asking for a lower price. To the defense of the consumers, if they are not explained the price distinction between a manufacturer with or without a Waste Water Treatment Plant (or below or above the minimum wage), I think they will continue to buy things on sale and ask for lower pricing," she adds. TAL's sustainable practices would be valued and integrated into the designing process and pricing structure only when consumers demand it. Dr. Lee and Esquirol therefore insist that it is consumers that can make a change in the apparel industry.

In their future endeavor, TAL plans to continue their efforts in contributing to environmental and social sustainability and refine their actions moving forward. For example, while TAL have set their own GHG and water footprint targets before, they have also adopted the Sustainable Apparel Coalition (SAC) Higg Index framework, and set their targets to improve our Higg score in all areas of sustainability.

In order to continue to include suppliers in their effort to streamline the supply chain, TAL plans to improve the Sales and Operations Planning (S&OP) project to better utilize and to increase efficiency of the resources. Accoding to Esquirol, TAL plans to extend the Vendor-Managed Inventory (VMI) concept that enable fabric suppliers to manage fabric stock and anticipate orders. "While some progress has been made in sharing forecast with our suppliers, there remains a lot of opportunities to create a more integrated supply chain. Specifically in enhancing the quality of data shared and ensuring that data is properly utilized to drive actions", Esquirol says.

Also, TAL is seeking more opportunities in recycled cotton fabric with fashion brands and stays optimistic in finding partners that will share the same value in the project, according to Dr. Lee. He hopes to work with more brands to integrate environmental considerations into their product design and bring recycled fashion into the mainstream. Further, in order to scale the production, he claims that better system and infrastructure should be established in the industry of recycled cotton fabric and more recycling companies should enter into this realm.

196 J. Kim and M. Zorola

11.6 Conclusions

While previous literature on Sustainable Supply Chain Innovation mainly focuses on buyers and its relationship with the suppliers, this research presents a case study to illustrate the sustainable innovation process at the supplier level, applying the Sustainable Supply Network Innovation framework to the production source.

As a manufacturer at the forefront of sustainable innovation, it is found that the sustainable innovation pressure from clients (i.e., retail brands) is not as significant as in the case of retail brands. The movement at TAL mainly comes from internal value systems, company's innovative characteristics (e.g. president's determination on technology and sustainability) and organizational culture. As a result, the strategies were more offensive than defensive. Further, TAL's innovation process proposes a critical element to the success of the model, innovation network of support and innovation network of co-creation. Cooperation characteristics was found not only to play a key support role for sustainable supply chain innovation but also shape the performance of the focal company in a form of innovation co-creation. TAL's sustainable supply chain innovation was leveraged by seeking innovation support from internal (e.g. employees and managers) and external stakeholders (e.g. suppliers, clients peer sustainability leaders and organizations). This has become a significant force for manufacturer's motivation for sustainable innovation. In addition, TAL implemented a sustainable manufacturing program and their retailer partners started to seek cooperative partnership to develop a sustainable production and audit program to be used for other suppliers as well (e.g., Patagonia).

References

Attaran M, Attaran S (2007) Collaborative supply chain management: the most promising practice for building efficient and sustainable supply chains. Bus Proc Manag J 13(3):390–404

Baumgartner RJ (2014) Managing corporate sustainability and CSR: a conceptual framework combining values, strategies and instruments contributing to sustainable development. Corp Soc Responsib Environ Manag 21(5):258–271

Brown T (2008) Design thinking. Harvard Bus Rev June, 84-92

Carter CR, Rogers DS (2008) A framework of sustainable supply chain management: moving toward new theory. Int J Phy Distrib Logistics Manag 38(5):360–387

Chiou TY, Chan HK, Lettice F, Chung SH (2011) The influence of greening the suppliers and green innovation on environmental performance and competitive advantage in Taiwan. Trans Res Part E: Logistics Trans Rev 47:822–836

Damanpour F (1991) Organizational innovation: a meta-analysis of effects of determinants and moderators. Acad Manag J 34:555–590

De Giovanni P (2012) Do internal and external environmental management contribute to the triple bottom line? Int J Operations Prod Manag 32:265–290

Dyer JH, Singh H (1998) The relational view: cooperative strategy and sources of interorganizational competitive advantage. Acad Manag Rev 23:660–679

- Gao D, Xu Z, Ruan Y, Lu H (2017) From a systematic literature review to integrated definition for sustainable supply chain innovation (SSCI). J Clean Prod 142:1518–1538
- Grekova K, Calantone RJ, Bremmers HJ, Trienekens JH, Omta SWF (2016) How environmental collaboration with suppliers and customers influences firm performance: evidence from Dutch food and beverage processors. J Clean Prod 112:1861–1871
- Hart SL, Milstein MB (2003) Creating sustainable value. Acad Manag Executive 17(2):56-69
- Hassini E, Surti C, Searcy C (2012) A literature review and a case study of sustainable supply chains with a focus on metrics. Int J Prod Econ 140:69–82
- Kotzab H, Munch H, Faultrier B, Teller C (2011) Environmental retail supply chains: when global Goliaths become environmental Davids. Int J Retail and Distrib Manag 39(9):658–681
- Lambert DM, Cooper MC (2000) Issues Supply Chain Manag. Ind Mark Manage 29:65-83
- Lee HL (2010) Don't tweak your supply chain rethink it end to end. Harvard Bus Rev 88(10): 62–69
- Milton de Sousa Filho J, Wanderley L.S.O, Gomez C.P, Farache F (2010). Strategic corporate social responsibility management for competitive advantage. Brazilian Adm Rev 7(3), 294–309
- Omta SWF (2002) Innovation in chains and networks. Chain Netw Sci 2:73-80
- Omta SWF (2004) Increasing the innovative potential in chains and networks. Chain Netw Sci 4:75–81
- Paraschiv DM, Nemoianu EL, Langa CA, Szabo T (2012) Eco-innovation, responsible leadership and organizational change for corporate sustainability. Amfiteatru Econ 14(32):404–419
- Seman NAA, Zakuan N, Jusoh A, Arif MSM, Saman MZM (2012) The relationship of green supply chain management and green innovation concept. Procedia—Soc and Behav Sci 57:453–457
- Seuring S, Müller M (2008) From a literature review to a conceptual framework for sustainable supply chain management. J Clean Prod 16:1699–1710
- Tseng ML (2013) Modeling the sustainable production indicators in linguistic preferences. J Clean Prod 40:46–56
- Vale M (2004) Innovation and knowledge driven by a focal corporation— the case of the Autoeuropa supply chain. Eur Urban Reg Stud 11:124–140
- Van Bommel HWM (2011) A conceptual framework for analyzing sustainability strategies in industrial supply networks from an innovation perspective. J Clean Prod 19:895–904
- Wong CWY, Wong CY, Boon-itt S (2013) The combined effects of internal and external supply chain integration on product innovation. Int J Prod Econ 146:566–574
- Wu GC (2013) The influence of green supply chain integration and environmental uncertainty on green innovation in Taiwan's IT industry. Supply Chain Manag 18:539–552
- Wuttke DA, Blome C, Foerstl K, Henke M (2013) Managing the innovation adoption of supply chain Finance Empirical evidence from six European case studies. J Bus Logistics 34:148–166
- Zhu Q, Sarkis J, Lai K (2007) Green supply chain management: pressures, practices and performance within the Chinese automobile industry. J Clean Prod 15:1041–1052
- Zhu Q, Sarkis J, Lai KH (2012) Green supply chain management innovation diffusion and its relationship to organizational improvement: an ecological modernization perspective. J Eng Tech Manage 29:168–185

List of Websites

TAL Apparel: http://www.talapparel.com/

TAL Press Release: http://www.talapparel.com/en/news

TAL Sustainability Report 2014: http://wpc.32bf.edgecastcdn.net/0032BF/www.talapparel.com/uploads/sus_report_pdf/4/TAL%20Sustainability%20Report%202013-2014-20160321103139-20161122124529.pdf

Chapter 12

Sustainable Development in the Supplier Chain: Analysis of a Brazilian Fashion Retailer's Social Responsibility Program

Rita de Cássia Lopes Moro, Francisca Dantas Mendes and João Amato Neto

Abstract With a responsible attitude, a company can identify risks and develop programs that aim at improving processes and products, differentiating itself in the market and earning higher profits in advance. This paper seeks to explore and describe the model of corporate social responsibility employed by a Brazilian fashion retailer in its supply chain. For this, a literature review was initiated for greater involvement with the subject, followed by a documentary research to verify the information together with semi-structured interview, resulting in the case study. It is concluded that the company adopted a social responsibility policy from the senior management level so that its supply chain is established and followed by both senior management and other employees. The process of conformity verification with the standards stipulated by the company and the Brazilian legislation is carried out through an internal audit in an unannounced manner.

Keywords Social responsibility • Strategies • Textile retail

12.1 Introduction

In the last decades, with changes in lifestyle and with the emergence of themes related to sustainability, many companies have been adopting socio-environmental measures as a strategy of competitiveness, in some cases resulting from consumers

R. C. L. Moro () · F. D. Mendes

Textile and Fashion, School of Arts, Sciences and Humanities, University of São Paulo, São Paulo, Brazil

e-mail: ritalopes@usp.br

F. D. Mendes

e-mail: franciscadm.tita@usp.br

J. Amato Neto

Production Engineering, Polytechnic School, University of São Paulo,

São Paulo, Brazil e-mail: amato@usp.br

© Springer Nature Singapore Pte Ltd. 2018

P. -S. Chow et al. (eds.), Contemporary Case Studies on Fashion Production, Marketing and Operations, Springer Series in Fashion Business, https://doi.org/10.1007/978-981-10-7007-5_12

200 R. C. L Moro et al.

seeking companies that present more human standards and incorporate socio-environmental criteria in the goods and services they offer (Parente 2000; Parente and Barki 2014).

The search for competitiveness and profitability linked to sustainable development acts as a driver for the advent of new methods and management practices. Social responsibility is embedded in this context, constituting a set of strategies that guide companies in social and environmental actions, seeking the satisfaction and well-being of their clients, employees and community. Dias (2011) emphasizes that these actions should be based on ethical behavior and should be applied both inside and outside the company (Porter and Kramer 2006).

For this new model of strategy and vision to be successful, it is necessary to engage the entire value chain with social and environmental issues, and in Sachs's (2009) view, social aspects must be prioritized. Mendes (2012) emphasizes that studies on sustainability prioritize environmental themes, since the degradation of natural capital is much more visible to the population than the errors in social relations, which are usually more related to the residing communities of the organization, suppliers, and employees.

In the fashion industry, the introduction of social responsibility becomes a challenge as it is delineated by different and complex supply networks and by demand for low-cost production, with the subsequent transfer of local to global activities, thus redesigning the productive limits (Macchion et al. 2015). According to Oliveira (2015), this format has brought with it the fragmentation of production processes and geographical dispersion, resulting in interconnected companies, under the leadership of a company (Gereffi 2001, 2014), which in many cases, causes an increase in the impacts observed in the society and the environment (Dillon 2012).

This new structural conformation has created an opening for the precariousness of labor relations, the exploitation of labor and informality, a situation similar to what occurs in the Brazilian fashion garment manufacturing sector, which has been the target of numerous denunciations of exploitation of the workforce in large and small national and international brands (Monteiro 2013). Berlim (2012) points out that the outlook for work in sub-divisions in Brazil is high, and the number of companies employing immigrant workers in degrading conditions is increasing.

A possible change in this scenario can be achieved by retailers due to their strategic position in the chain as the link between suppliers and consumers (Aligleri et al. 2009). This change can be achieved through implementation of management systems, monitoring, use of codes of conduct, audits and certifications, all of which tend to mitigate risks in fashion clothing retail chains (Adams 2002; Levis 2006; Turker and Altuntas 2014). In this way, textile retailers are creating internal and external programs to monitor their suppliers based on codes of conduct in conjunction with audits (Adams 2002; Ahmed and Peerlings 2009; Helin and Babri 2015; Lobel 2006; O'rourke 2006; Turker and Altuntas 2014).

In Brazil, the social responsibility certification program was created by ABVTEX (Brazilian Association of Textile Retail) in 2010, which seeks to establish a unified monitoring model for the chain of reseller suppliers of its

signatory retailers, of which company X analyzed in this report, is an active signatory. This certification program has criteria based on the principle of social responsibility and Brazilian legislation and aims to certify the supply chain with a seal of social responsibility, through third-party audits. These audits are carried out in loco, being announced and not announced, to ascertain the existing conformities and nonconformities at all levels of the supply chain, after which a report will be generated, which will allow verifying if the company was approved, disapproved or is in action plan.

This way, being the company X signatory of the ABVTEX program, it already pre-selects its suppliers with this entry barrier, which is, only companies approved in this program are part of its supply base. Thus, this paper aims to identify the strategies of social responsibility adopted by company X, and also to identify in which level of organizational learning this company is.

12.2 Literature Review

12.2.1 Sustainable Development

The impacts caused to the planet by a development based exclusively on the current economic model are great and result in climate change, soil degradation, water contamination, excessive generation of garbage, precarious working conditions, among others. Berlim (2012) asserts that this kind of growth sacrifices the environment and society and jeopardizes the future viability of humanity.

Ekwueme et al. (2013) emphasize that disclosure of commitments and social, environmental, and economic activities encourage managers to incorporate sustainable practices into corporate strategy. The concept of sustainable development is multidimensional, and has conditionality with environmental, social, and economic growth (Sachs 2008). A sustainable company is one that contributes to sustainable development, while generating economic, social and environmental benefits, triple bottom line (Elkington 2012), which is the great challenge in the short, medium and long term, and must occur in an integrated into the company's strategy.

Elkington (2012) argues that companies can be profitable by adopting responsive and strategic behaviors that extend their responsibility to the external environment, and companies that are not born with sustainable standards can adjust and incorporate behavioral change into their strategies. To do so, it is necessary for the company to change its vision and strategies in relation to the environment, productive practices, and social aspects (Dias 2011; Sachs 2008; Veiga 2010). New forms of development, for the most part, occur due to pressures suffered by several actors, as Hart and Milstein (2003) demonstrate in Fig. 12.1.

These motivators act in the strategy of companies seeking adequacy in process, products or services, making it possible to shed light on existing deficiencies inside and outside the process, allowing the identification of weaknesses and the

202 R. C. L Moro et al.

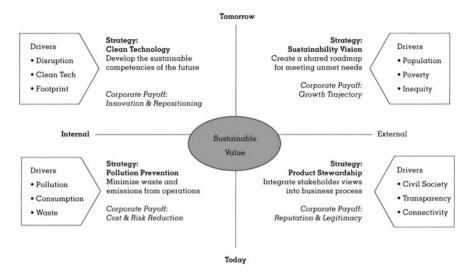


Fig. 12.1 Sustainable value model. Source Hart and Milstein (2003)

possibility of technological innovations, processes and practices, which differentiate, competitiveness, profitability and consequently strengthening the company's image in the market (Porter and Kramer 2006; Dias 2011; Hart and Milstein 2003).

12.2.2 Corporate Social Responsibility

The concept of corporate social responsibility goes beyond the design of the company's internal environment, encompassing other stakeholders involved in the process. Dias (2011) points out that it requires a new role for the company, evading the economic sphere, developing other relationships with the market and with the various players that make up its network.

Porter and Kramer (2006) and Zadek (2004), approach in their perspectives the concept and pressure factors of both change and proactivity. Social responsibility practices occur both within the company and outside. In this perspective, the actions involved in the internal environment are related to the issues human resources and the environmental part of it, also transparency, ethics, as well as factors related to health, safety, compensation, among others. External issues should also be on the company's agenda, such as follows: community, government, norms, environment, etc. (Porter and Kramer 2006).

Thus, these present two strategic models that the company can introduce: responsive and strategic. While the responsive acts in order to attenuate the social effects already existing or arising from industrial activity, acting from the perspective of the citizen company, on the strategic the company goes beyond good citizenship and mitigating harmful effects in its value chain, encompassing the

Generic Social Impacts	Value Chain Social Impacts	Social Dimensions of Competitive Context
Good citizenship	Mitigate harm from value chain activities	Strategic philanthropy that leverages capa- bilities to improve salient areas of
Responsive CSR	Transform value- chain activities to benefit society while reinforcing strategy	Strategic CSR

Fig. 12.2 The Company's involvement in society. Source Porter and Kramer (2006)

development of programs capable of generating social and business benefits in a differentiated, competitive, innovative, and shared value way, as shown in Fig. 12.2.

For Zadek (2004), most companies go through different stages of learning to be good corporate citizens, and to advance to a successful trajectory, it is necessary to identify and understand the failures, seeking internal and external improvements. The stages are five: defensive, compliance, managerial, strategic, and civil, as shown in Table 12.1. With this the author showed that, at each step in the search for a process of adequacy, the company adopts a different behavior and response to the problems encountered.

12.2.3 Productive Strategies

The Brazilian textile industry is modern and competitive in most of its segments. It is capital intensive and its size varies from medium to large. Most garments are manufactured by small and labor-intensive companies employing 70.5% of workers in the industry (Borger and Nazoe 2011).

The Brazilian textile sector, faced with the process of transforming the economy in the 1990s, due to economic openness and trade liberalization, underwent a great process of restructuring, outsourcing production, as a mode of economy and agility that, in the view of Guiraldelli (2010), led to the precariousness of labor relations, due to the flexibilization of contracts, also reflecting in the working conditions and stimulating the informality of companies. Outsourcing is a process that aims at increasing productivity, flexibility, agility and cost savings. Amato Neto et al. (2014, p. 49) defines it as:

Table 12.1 The five stages of organizational learning

Stage	What organization do	Why they do
Defensive	Deny practices, outcomes, or responsibilities	To defend against attacks to their reputation that in the short term could affect sales, recruitment, productivity, and the brand
Compliance	Adopt a policy-based compliance approach as a cost of doing business	To mitigate the erosion of economic value in the medium term because of ongoing reputation and litigation risks
Managerial	Embed the societal issue in their core management processes	To mitigate the erosion of economic value in the medium term and to achieve longer-term gains by integrating responsible business practices into their daily operations
Strategic	Integrate the societal issue into their core business strategies	To enhance economic value in the long term and to gain first- mover advantage by aligning strategy and process innovation with the societal issue
Civil	Promote broad industry participation in corporate responsibility	To enhance long-term economic value by overcoming any first- mover disadvantages and to realize gains through collective action

Source Zadek (2004)

An administrative technique that allows the establishment of a managed process of transferring to third parties the ancillary activities and support to the scope of the company, allowing this (so-called parent company) to concentrate on its main business, that is, on its Core business.

This process was more intense due to the great growth of the demand occurred in the years of 1980 and 1990 in Brazil. The clothing sector started to use outsourcing to increase its production capacity. Outsourcing implies a change or realignment of all the agents that operate in each supply chain. This practice also allows cost and investment savings and administrative reduction, allowing the company to focus on what it does best (Amato Neto and Marinho 2014). In practice, this process occurs with the relationships between retailers and their supply chain, and based on the three types of third parties described by Amato Neto and Marinho (2014), the Fig. 12.3 can be built.

In this demonstration, it can be observed the relationship between the leading company and its supply chain. The leading company exercises governance over its supply chain, resulting in a verticalization of relationships that determines the degree of control the leader has over its suppliers and distributors (Dillon 2012). It is possible to notice the presence of subcontracting services, where the suppliers act by outsourcing production to other companies (subcontractors) and these, in turn, act by passing part of the production or its totality to other subcontracted floating companies (quartirized) that, per Amato Neto et al. (2014), is the management of

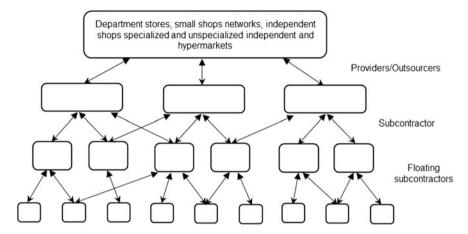


Fig. 12.3 Demonstration of the relationship between retailers and supply chain. *Source* Moro (2016)

outsourcing by an outsourcing delegation. This system poses risks to the management system.

This practice of transferring production to other companies is recurrent in this sector (Mendes et al. 2010). Most of the workshops are known in their region and often collaborate with each other to share services and lend out invoices to those that are informal. These authors point out that this sector has many cases of work at home, facilitating the process of disposing of production in periods with high volume of requests for formal and informal enterprises. Often, they also pass through creating a vicious circle to increase gain in scale through the consequent reduction of production costs (Cabreira and Wolff 2013; Guiraldelli 2010; Lima 2009).

12.2.4 Governance of the Production Chain of Fashion Clothing

The textile retail sector has a long, segmented, high flexibilization supply chain with predominant subcontracting processes (Kogg and Mont 2012). This chain is led by the buyers (Rech 2006; Gereffi 2001; Carvalhinha 2007), but the production is decentralized, usually carried out in developing countries (Gereffi 2001), and can be fragmented with the outsourcing of production processes.

In the chain led by the buyers, the companies act by exercising power over the subcontractors and the smaller participants, determining deadlines, quality standards and specifications of the product (Oliveira 2015). Humphrey and Schmitz

206 R. C. L Moro et al.

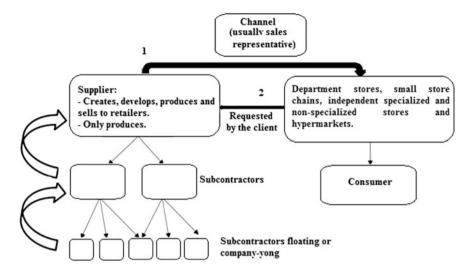


Fig. 12.4 Demonstration contracting textile retail services with its supply chain of Fashion Apparel Manufacturing. *Source* Moro et al. (2016)

(2001) and Gereffi (1999) highlight three areas that buyer-driven governance can exert control over the chain:

- Chain positioning in the market: buyers play a decisive role in what will be produced through market interpretation;
- Chain structure: the buyer's decision affects the whole chain, such as the number of companies involved and the distribution among them;
- Control and monitoring system: the buyer specifies the level of acceptable quality and other procedures to control the performance of the company, which will enable decisions such as the exclusion of suppliers from the chain.

There are two types of relationships where retailers can choose to buy branded products or develop under their own brand (Grose 2013), according to the Fig. 12.4 shows the way of contracting textile retail services with its supply chain.

Berlim (2012) explains that the development of this system in the clothing sector, occurs in two ways:

- The retailer contacts the supplier and requests the development of parts. In this
 case, the fabrics, supplies, and labor are supplied by the supplier itself. After
 approval of the prototype the products are made and the retailer company pays
 for the service;
- 2. The retailer determines the product together with its development department, buys the raw materials and supplies and outsources the production process, paying only for labor.

It can be noted that retail controls the production chain of the parts sold by it, whether buying items developed by the supplier (1) or developing products and

only contracting services (2). It is also possible to note the relation of transfers of parts or processes from suppliers to subcontractors. This relationship can become even more entangled, when subcontractors pass on requests to be produced to others, affecting the quarreling.

The ties formed by this type of strategy are fragile and present a high risk for the brand (retailer) and for subcontractors who are responsible for the share of social charges inherent in the payroll or for the remuneration of informal workers, in addition to the risks for reimbursement of defective garments (Lima 2009). The image of the brand can be compromised with the reduction of product quality and consequent decrease of sales, affecting its position in the market. Aligleri et al. (2009) emphasize that if the brand uses an ethical attitude based on social and environmental issues, its actions may be jeopardized by the misconduct of subcontracted companies.

Another factor that has relevance when analyzing this structure is the question of cost competitiveness. According to the report of the Brazilian Agency for Industrial Development (2008), small companies are mostly hostages of larger companies, although they do not declare this explicitly, but affirm that they do not impose their prices on either customers or suppliers. It is possible to infer that this parcel is completely governed in its supply chain and that most of these companies do not receive the attention they would like in their relationship with suppliers.

12.3 Methodological Procedures

This article began with a bibliographical research. Lakatos and Marconi (2003) point out that a secondary source covers the bibliography made public and leaves the researcher in contact with what has already been studied, seeking a delimited contextualization in some subjects, aiming at greater familiarity with the subject under study, these being: social responsibility, textile retail and strategies, subjects relevant to the understanding of the spheres that guide this study. This study concerns the social responsibility program of a Brazilian fashion retailer (hereafter referred as Company X¹). Qualitative analysis was employed to present details of the program and its extension. Yin (2010) states that a case study may involve direct observation, by the researcher, of events studied with the use of semi-structured interviews. The interviews were carried out with the manager and coordinator of the social responsibility team of Company X. As part of the complementary methodological procedures, a documentary survey was used with data collected from the company which is in material that has not yet received analytical treatment (Gil 2002).

¹The case company wished to remain anonymous.

208 R. C. L Moro et al.

12.3.1 The Company

Established more than sixty years ago, Company X operates in the fashion retail market and offers a vast collection of articles that is subdivided into: men's and women's clothing, accessories, footwear, home line, and others. It is the fourth largest clothing retailers in the Brazilian market and is traded in the Brazilian stock market. Its sales volume reached approximately 140 million pieces annually, with revenue of US\$ 255 million, resulting in an increase in net revenue of 7.5% in the third half of 2014. It has approximately 17,000 employees, 416 stores and 5 strategic distribution centers throughout the country.

12.3.2 Description of the Monitoring

The company began to implement its social responsibility program in 2009 in which only a minority of 50 non-sub-contracted suppliers were involved. The following year, however, one of the companies not included in that first group was audited by prosecutors of the Ministry of Labor and Employment (MTE) and was found,—with irregularities such as work analogous to slavery and severely harsh employment conditions. Company X was indicted, prompting it to realize the urgency to review and closely monitor its supply chain management process. In this case, the company felt the need to extend its social responsibility program to get all its suppliers and their subcontractors involved.

Faced with the lack of knowledge of its supply chain and aware of the demand from the market, Company X began a process of reactive change, through the registration of the real situation of service provision. Another factor influencing this reactive stance was the fact of trading shares in the stock market, since with the creation of the Corporate Sustainability Index (ISE), which is a tool for comparative analysis of the performance of companies listed on the stock exchange under the corporate sustainability aspect (BM&FBOVESPA website, n.d.), it becomes extremely important for the company's valuation to be guided by the ethics and transparency of its business.

In light of this, Company X sought to identify non-conformity to the labor and environmental legislation existing in its supply chain by setting up an action plan for the adequacy of these companies. Company X sought to develop the alignment of partnerships excluding only those that were unwilling to adapt.

By the time its social responsibility program started, the supply chain of Company X consisted of 250 direct partners, which in turn work with this article began with a bibliographical research over 2000 national subcontractors, representing approximately 73,000 employees. Chart 12.1 represents the total number of companies that make up this supply chain regarding the size according to the number of existing employees.

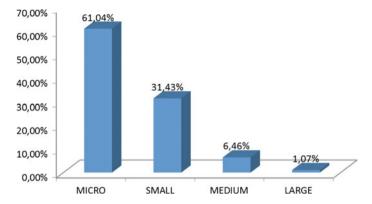


Chart 12.1 Proportion of local suppliers of Company X by size

Company X also had international suppliers in countries such as China, Bangladesh, Peru, Pakistan, and India, but subcontractors of whom were not known, as the process of auditing and monitoring was only possible with suppliers located in Brazil.

The reactive stance vis-à-vis MTE began with the establishment of a social responsibility team. The team composed of a coordinator and two auditors, all with higher education degree and with training in Brazilian norms and legislation, in addition to knowledge in international standards such as OHSAS 18001 and SA 8000. Company X also signed with MTE the term of conduct adjustment (TAC), an agreement between the company and the government body that stipulates actions to correct problems encountered and started the third-party audit process with the multinational certifier, second-party audit, jointly, adopted the process of certification of suppliers in social responsibility ABVTEX as an entry barrier.

12.3.3 Supplier Selection Criteria

With the internal social responsibility program, company X now only accepts new suppliers and subcontractors who are already certified in the ABVTEX program.

The ABVTEX certification program has a third-party audit in multinational and local companies, and audits companies that wish to maintain or start a business relationship with a retailer already associated with it. The audit includes issues pertinent to the Brazilian labor legislation present in the Consolidation of Labor Laws (CLT), as well as various environmental issues. Every supplier must maintain an up-to-date list of subcontractors with retailers and ABVTEX.

Amato Neto and Marinho (2014) warn that certification can help choosing the supplier, but should not be used as the sole criterion. It is necessary to maintain a strong and efficient monitoring, also counting on an external auditing program carried out by a multinational certification and internal auditing processes, which

210 R. C. L Moro et al.

Type of audit	Year	Year				Total	
	2009	2010	2011	2012	2013	2014	
Third part is mandatory and is part of the TAC signed	0	487	338	164	426	296	1.711
Second part (traceability applications + office audit)	150	0	853	1.241	1.597	1.988	5.829
Total audited companies	150	487	1.191	1.405	2.023	2.284	7.540

Table 12.2 Total audited companies

Source Moro et al. (2015)

comprise of maintenance and traceability of orders, all of which are unannounced. The audit seeks to portray the actual working conditions of the supplier companies and the maintenance check verifies the continued compliance with the stipulated requirements. The one of traceability consists in the verification of the production of the orders by means of a random choice, checking, through fiscal documents, the places where the pieces are being produced with the physical count of the quantities officially registered. These measures have been adopted to improve the reliability of the audit process and are constantly being improved.

More than 7500 audits were carried out until 2014. Table 12.2 shows the total number of companies audited since the beginning of the program implementation, from which, one can observe the increase in the number of audits performed.

12.3.4 The Analyzed Requirements

The requirements verified in audits of both ABVTEX and company X included: use of child labor, forced labor or analogous to the slavery, irregular foreign work, freedom of association, discrimination abuse and harassment, health and safety, monitoring and documentation, compensation, working hours, benefits, monitoring of the productive chain and the environment. Table 12.3 shows the points and areas of the company that are verified.

If a subcontracted company of the supplier has its certification suspended, it must be excluded. The serious nonconformities causing immediate suspension of the supplying company are: labor analogous to slavery, child labor and illegal foreign labor. In these cases, the company will only be allowed to return after six months of suspension and being re-audited.

Relevant documentation the area	Checkpoints
Human Resources	Log book or registration forms, point card, payslips, proof of address, etc.
Health and safety	Reports ergonomic, electrical, environmental prevention programs and occupational health
Environment	Environmental permits and licenses for operation with chemicals
Order traceability	Order retailer, pilot part and sheet, invoices and shipment of returned goods
General business conditions	Hygiene, infrastructure and organization

Table 12.3 Checkpoints and area of the company to be audited

Source ABVTEX (2015)

12.3.5 Results Obtained with the Corporate Social Responsibility Program

The results obtained in the auditing process show that, prior to the implementation of this program, the vast majority of suppliers and their subcontractors acted irregularly and in breach of the labor legislation, CLT.

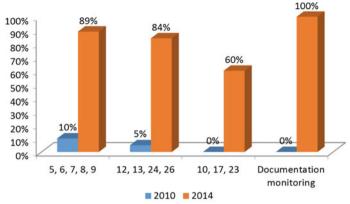
A change of scenery has been achieved with the implementation of the social responsibility program and currently all companies that are part of the supply chain are in compliance with labor legislation.

Chart 12.2 shows the evolution of companies that supply clothing for company X in relation to the process of auditing and monitoring of regulatory standards (NRs). These standards contained in the CLT must be obeyed by private or public companies that have regularly registered employees. There are currently 36 regulatory standards, but some are aimed at specific activities, which were not applicable to companies in the clothing manufacturing sector.

As can be seen, in 2010, only 10% of all audited companies met NRs 5, 6, 7, 8, and 9.5% met NRs 11, 12, 13, 24, and 26 and none for NRs 10, 17, and 23 as well as documentation monitoring. The change in scenario was progressive, with the percentage of attendance in 2013 being 89, 84, 60, and 100% respectively.

After the internal audit program and company X's adherence to ABVTEX's social responsibility certification program, the number of its suppliers and subcontractors was reduced by approximately 50%. Such reduction, per the manager of Company X, was due to both the new supplier selection criteria and the fact that some suppliers could not compete due to the compliance with the legislation required by the audit process or the noncompliance with the new program. This reduction is fundamental for supplier development since, according to Amato Neto (2014), this decrease leads the supplier to engage in the company's projects, improve its production processes, innovate, and reduce quality variation. It reduces the cost of non-quality, promotes the development of the partnership relationship,

R. C. L Moro et al.



NR 5: Internal commission of accident prevention

NR 6: Equipment for individual safety

NR 7: Medical control of occupational health program

NR 8: Buildings

NR 9: Program to prevent environmental hazards NR 10: Security in facilities and services in electricity NR 12: Work safety of machinery and equipment

NR 13: Boilers, pressure vessels and piping

NR 17: Ergonomics

NR 23: Fire protection

NR 24: Health and comfort conditions in the workplace

NR 26: Safety signs

Chart 12.2 Percentage of company X's suppliers in compliance with NRs and documentation monitoring

reduces transaction costs, and improves cooperation, sharing and trust with greater transparency.

An adverse effect of this noncompliance with legal standards by some companies, leave them in a condition of false competitiveness, as they continue to work for other retailers, remaining the vicious circle of unceasing demand for low prices and the practice of spurious forms of outsourcing (Sachs 2008), continuing to use the precarious forms of work, necessitating, for this, policies by the public power.

Company X does not yet have a supplier management program established corporately, but controls are performed and there are indicators that are used as a decisive factor in the negotiations by the purchasing, quality control and logistics sectors. However, there are still cases in which these indicators are not considered in the closing of an application, being limited also by the demand for low prices, having been only as a barrier to enter the certification process.

This picture tends to change with the implementation of the supplier management program. For Aligleri et al. (2009), the purchasing area can be an inducement of new socio-environmental behaviors of its suppliers. It should analyze the product and select the supplier, as well as be concerned with the conditions of the labor employed by these suppliers and create indicators that can help them in their

choices, that is, the demand should not be limited only by the price and Conformity of the product. There must be a constant dialogue between the buyer and the supplier so that together they can share information and seek continuous improvement of processes and products and contribute to the simultaneous development of social and environmental issues.

12.4 Final Considerations

The company was reactive in the face of stakeholder pressure, incorporating social responsibility into its strategy, establishing criteria for acceptability of new and current suppliers, auditing and monitoring according to the requirements established by the company and the legislation and using dialogue as an instrument of awareness.

The management model adopted by the company allows a control and monitoring of the supply chain, but the difficulty found in this process was the large number of companies that make up this chain and the high degree of informality and noncompliance with the labor and environmental legislation that existed. The company moved from a defensive stage evolving to the managerial stage through the routine of monitoring the supply chain as shown in Table 12.5. However, long-term strategies are being designed by the company to have a better and longer lasting relationship, mutual growth and supplier development through the creation of a supplier management sector.

Company X has gone from a defensive stage to being, at first, responsible for being found by government enforcement agents, degrading conditions and quantization in a company in its supply chain, denying direct involvement with the company and understanding that it is not directly related to the audited company.

The company understood its responsibility for the supply chain and started a more comprehensive monitoring, however focusing more on the criteria of social responsibility provided in the legislation, having a specific team for audits, includes entry barriers such as the use of companies certified by ABVTEX program and also advises the companies of its chain. It evolves to the managerial through the routine of the monitoring of the chain of suppliers, an inclusion of indicators, more involvement of the suppliers, as shown in Table 12.4.

However, long-term strategies are being designed by the company in order to have a better and more lasting relationship, mutual growth and supplier development through the creation of a supplier management sector, the incorporation of new criteria of Selection and extension of the relationship with supervisory bodies. These actions will take the evolution to the following stages.

Thus, with the creation of the supplier management sector in a corporate way, aligning social and environmental responsibility with the principles of sustainability, Company X could assist its suppliers in the search for sustainable production standards, achieving greater support for the brand, strengthening the

214 R. C. L Moro et al.

Table 12.4 Level of Organizational Learning of Company X

Stage	What organizations do	Organizational learning of company X
Defensive	1. Denied the relationship with the company audited, and continued with the lawsuit which won in the second instance. He signed the TAC with the MTE	1
Compliance	Started a reactive stance in front of the supply chain: 1. Adopted a social responsibility policy 2. Idealized and integrated the certification program in ABVTEX responsibility 3. Created an internal audit team 4. Deployed different types of audits	✓
Gerencial	Establish the ongoing dialogue between the area manager and the coordinator with the supply base Adopted closer monitoring of suppliers Incorporated reviewers to check the best performers	✓
Estratégic	Establishes contracts using indicators Prioritize companies that have better performance indicators Incorporate only partners with best practices of the market	Not yet started
Civil	Promote stakeholder discussions outside the company context Extensive dialogue with oversight bodies Press the government to adopt more restrictive public policies	Not yet started

relationship with its supply chain, enabling value creation with long-lasting links and evolving to strategic learning with long-term goals.

The company's new projects for continuous improvement of its chain monitoring process, seek an evolution in results, however, as shown in Table 12.5, there are barriers to be broken. The Table 12.5 presents the improvements, guide methods, expected results, and the possible barriers. These improvements will impact the company's results, ensuring better management and relationships with suppliers, reducing risks and costs with monitoring, and reinforcing the company's image vis-à-vis its internal and external stakeholders. Barriers are an impediment to taking on improvements, however, they can be overcome with the support of top management and clear communication about the company's new strategies.

The present study had, as the largest source of data collection, qualitative research, through semi-structured interviews and with only one company. The conclusions obtained, therefore, cannot be generalized. For further study and knowledge, it is suggested to include more companies that make up the group of signatories of the ABVTEX certification program in future research.

Improvements	How	Expected results	Barriers
Adopt partnership process between suppliers	Through a strategic selection of suppliers	Get the best quality level, implementing quality assurance, reducing the number of suppliers and lower costs with inspection and audits	Corporate vision and greater power supplier
Assist the provider with recurring quality problems	Through the creation of a technical group	Decrease refusing requests, reduced costs, better quality and lower environmental impact	Short-term cost and vendor resistance
Survey the productive capacity of suppliers	Through the survey of the number of machines and model, employees, part model and production efficiency	Decision tool for shopping in the choice of supplier, risk reduction and deliveries outside the scheduled deadline	The variety of parts (over 30 thousand)
Create an index of the cost of quality of suppliers	Through analysis of the costs	Decrease in the refusal process, research costs and inspections	Adaptation
Information exchange flow	By means of information systems	Improve communication between the company and supplier, generate greater transparency, monitoring of monthly quality standards	Cost of adequacy and difficulty in adaptation by the supplier

Table 12.5 Improvements suggested in the process

References

Adams RJ (2002) Retail profitability and sweatshops: a global dilemma. J Retail Consum Serv 9 (3):147–153

Agência Brasileira De Desenvolvimento Industrial (2008) Panorama Setorial: Têxtil e Confecção. Brasília: ABDI. (Série Cadernos da Indústria ABDI)

Ahmed N, Peerlings JHM (2009) Addressing workers' rights in the textile and apparel industries: consequences for the Bangladesh economy. World Dev 37(3):661–675

Aligleri L, Aligleri LA, Kruglianskas I (2009) Gestão Socioambiental: Responsabilidade e Sustentabilidade do Negócio. Atlas, São Paulo

Amato Neto J (2014) Requisitos de sustentabilidade socioambiental na cadeia de fornecedores. In: Amato Neto J et al (eds) Gestão Estratégica de Fornecedores e Contratos: uma visão integrada. São Paulo, Saraiva, pp 84–142

Amato Neto J, Marinho BL (2014) Estratégias de Fornecimento: Panorama e conceitos fundamentais. In: Amato Neto J et al (eds) Gestão estratégica de fornecedores e contratos: uma visão integrada. São Paulo, Saraiva

Amato Neto J, Marinho BL, Amato LF (2014) Terceirização. In: Amato Neto J (ed) Gestão estratégica de fornecedores e contratos: uma visão integrada. São Paulo, Saraiva, pp 45–81

R. C. L Moro et al.

Associação Brasileira Do Varejo Têxtil. Certificação de Fornecedores (2015) - ABVTEX. ABVTEX. [201-]. Disponível em: http://www.abvtex.org.br/certificacao. Acesso em: 12 abr. 2015

- Berlim L (2012) Moda e Sustentabilidade: uma reflexão necessária. Estação das Letras, São Paulo, p 2012
- BM&FBOVESPA (n.d.) Corporate Sustainability Index (ISE). http://www.bmfbovespa.com.br/en_us/products/indices/sustainability-indices/corporate-sustainability-index-ise.htm. Assessed on 2 Mar 2017
- Borger FG, Nazoe N (2011) Responsabilidade social e sustentabilidade da cadeia produtiva do setor de confecção. Fipe 1(373):14–18
- Cabreira LF, Wolff S (2013) Precarização e Informalidade na Indústria de Confecções em Cianorte (PR): crise na tutela trabalhista. In: Navarro VL, Lourenço EAS (eds) Avesso do Trabalho III: saúde do trabalhador e questões contemporâneas. Expressão Popular, São Paulo, pp 199–215
- Carvalhinha MP (2007) O setor do vestuário: Uma análise sobre as possibilidades estratégicas das empresas do vestuário no Brasil. 2007. 149 f. Dissertação (Mestrado em Engenharia de Produção)—Universidade de São Paulo, São Paulo
- Dias R (2011) Gestão ambiental: responsabilidade social e sustentabilidade. In: Gestão ambiental: responsabilidade social e sustentabilidade. [s.l.] Atlas
- Dillon S (2012) Princípios de gestão de negócios de moda. GG Brasil, São Paulo
- Ekwueme CM, Egbunike CF, Onyali CI (2013) Benefits of triple bottom line disclosures on corporate performance: an exploratory study of corporate stakeholders. J Manag Sustain 3 (2):79
- Elkington J (2012) Sustentabilidade: canibais com garfo e faca. M. BOOKS, São Paulo, p 486 Gereffi G (1999) International trade and industrial upgrading in the apparel commodity chain. J Int Econ 48(1):37–70
- Gereffi G (2001) Global sourcing in the US apparel industry. J Text Appar Technol Manag 2(1):1-
- Gereffi G (2014) Global value chains in a post-Washington Consensus world. Rev Int Polit Econ 21(1):9–37
- Gil AC (2002) Como elaborar projetos de pesquisa, 4th edn. Atlas, São Paulo
- Grose V (2013) Merchandising de moda. Gustavo Gili, São Paulo
- Guiraldelli R (2010) Mulheres que tecem a vida: trabalho o gênero em tempos precarizados. 2010. 213 f. Tese (Doutorado em Serviço Social)—Unesp, Franca
- Hart SL, Milstein MB (2003) Creating sustainable value. Acad. Manag Exec 17(2)
- Helin S, Babri M (2015) Travelling with a code of ethics: a contextual study of a Swedish MNC auditing a Chinese supplier. J Clean Prod 107:41–53
- Humphrey J, Schmitz H (2001) Governance in global value chains. Local Enterp Glob Econ: Issues Govern Upgrad 32(3):1–17
- Kogg B, Mont O (2012) Environmental and social responsibility in supply chains: the practise of choice and inter-organisational management. Ecol Econ 83:154–163
- Lakatos EM, Marconi MA (2003) Fundamentos da Metodologia Científica. Atlas, São Paulo, p 310
- Levis J (2006) Adoption of corporate social responsibility codes by multinational companies. J Asian Econ 17(1):50–55
- Lima ÂMS (2009) As Faces da Subcontratação do Trabalho: um estudo com trabalhadores e trabalhadoras da confecção de roupas de Cianorte e região. 2009. 355 f. Tese (Doutorado em Ciências Sociais)—Universidade de Campinas, Campinas
- Lobel O (2006) Sustainable capitalism or ethical transnationalism: offshore production and economic development. J Asian Econ 17(1):56-62
- Macchion L et al (2015) Production and supply network strategies within the fashion industry. Int J Prod Econ 163:173–188
- Mendes FCM (2012) Sustentabilidade no Varejo: as práticas ambientais e suas implicações na consolidação da marca institucional. 2012. 164 f. Dissertação (Mestrado em Ciências da Comunicação)—Universidade de São Paulo, São Paulo, 2012

Mendes FD, Sacomano JB, Fusco JPA (2010) Rede de empresas: a cadeia têxtil e as estratégias de manufatura na indústria brasileira do vestuário de moda. Arte & Ciência, São Paulo

Monteiro LL (2013) Responsabilidade legal e moral do varejo têxtil pelo modo de produção empregado em sua cadeia de fornecimento. In: Congresso Nacional de Excelência em Gestão. 4, 2013, Rio de Janeiro. Anais. Rio de Janeiro: CNEG/INOVARSE

Moro RCL (2016) Responsabilidade social na cadeia de fornecedores do varejo de vestuário de moda: estudo de múltiplos casos. 2016. 165 f. Dissertação (Mestrado em Têxtil e Moda)— Escola de Artes, Ciências e Humanidades, Universidade de São Paulo, São Paulo

Moro RCL, Marcelo CV, Mendes FD (2016) Approach of the requirements for the management of suppliers by retailers of fast fashion: case study. In: Proceedings of Production and Operations Management Society (POMS) annual Conference, Orlando, vol 27

Moro RCL, Mendes FD, Amato Neto J (2015) Sustainable development in the retail supply chain Brazilian fashion: case studies. In: Proceedings of Production and Operations Management Society (Poms), annual conference 2015, Washington, D.C. POMS. vol 26, pp 1–9

O'rourke D (2006) Multi-stakeholder regulation: privatizing or socializing global labor standards? World Dev 34(5):899–918

Oliveira SEMC (2015) Cadeias globais de valor e os novos padrões de comércio internacional: uma análise comparada das estratégias de inserção de Brasil e Canadá. FUNAG, Brasília

Parente J (2000) Varejo no Brasil: gestão e estratégia. Atlas, São Paulo

Parente J, Barki E (2014) Varejo no Brasil: Gestão Estratégica. Atlas, São Paulo

Porter ME, Kramer MR (2006) The link between competitive advantage and corporate social responsibility. Harv Bus Rev 84(12):78–92

Rech SR (2006) Cadeia produtiva da moda: um modelo conceitual da análise da competitividade. 2006. 282 f. Tese (Doutorado em Engenharia de Produção)—Universidade Federal de Santa Catarina, Florianópolis

Sachs I (2008) Desenvolvimento includente, sustentável e sustentado. Editora Garamond, São Paulo

Sachs I (2009) Caminhos para o desenvolvimento sustentável. Editora Garamond, Rio de Janeiro Turker D, Altuntas C (2014) Sustainable supply chain management in the fast fashion industry: an analysis of corporate reports. Eur Manag J 32(5):837–849

Veiga JE (2010) A emergência socioambiental. Senac, São Paulo

Yin RK (2010) Estudo de Caso: Planejamento e método, 4th edn. Bookman, Porto Alegre Zadek S (2004) The path to corporate responsibility. Harvard Bus Rev 82(12):1–11

Chapter 13 Towards Closed-Loop Fashion Supply Chains—Reflections from Retailer-Facilitated Used Apparel Collection Programs

Pui-Sze Chow and Cinty K. Y. Li

Abstract The fashion industry is one of the largest polluters in the business sector. Apart from the pollutions incurred during the production process, clothing disposal and landfill problem also impose a great problem to the environment and the situation has become increasingly adverse with the tremendous number of clothing being disposed every year. Many disposed garments are in fact in good condition that can be reused or they can be recycled into useful raw materials. The idea of closed-loop fashion supply chains has started to draw the attention in the industry. To achieve this, nevertheless, effective collection of post-consumer products is critical. In recent years, a number of fashion companies have been launching programs to collect used clothing from customers. The collected items are resold or donated as second-hand clothing, or are recycled into fibers or fuels, depending on their conditions. Based on secondary data, this study examines the used apparel collection (UAC) programs of four fashion retailers, namely: Fast Retailing Co., Ltd. (Uniqlo), Patagonia, Inc., Eileen Fisher Inc., and Hennes & Mauritz (H&M). It discusses the features and the advantages of these retailer-facilitated UAC programs.

Keywords Retailer-facilitated used apparel collection programs • Closed-loop fashion supply chains • Sustainability

P. -S. Chow (⊠) · C. K. Y. Li

Centennial College, 3 Wah Lam Path, Pokfulam, Hong Kong e-mail: lpschow@outlook.com

C. K. Y. Li

e-mail: cintykyli@gmail.com

13.1 Introduction

The fashion industry is the second largest polluting industries (EcoWatch 2015). The mounting volume of garment ended up in landfill was a direct consequence of the popularity of fast fashion, or cheap, disposable clothing. Americans now bought five times as much clothing as they did in 1980. Between 1999 and 2009, textile trash volume increased by 40% in America, particularly due to the emergence of cheap, disposable clothing (Cline 2014). In the United States, the average Americans recycled or donated only 15% of their used clothing. The remainder—about 10.5 million tons a year—went to landfills. In New York City, clothing and textiles made up 6% of all garbage (Cline 2014). A survey on 7950 UK adults found the average person estimated that they own £1800 worth of clothing in which 30% had not been worn during the past year, mostly because they did not fit anymore. Every year, 350,000 tons, or an estimated 31%, of end-of-life clothing, went to landfill (WRAP 2016).

Dumping used garment in landfill might solve the space problem in one's home, but it did not help the environment: sitting in the landfills, used t-shirt and pants decomposed and released landfill gas, a brew of toxic air pollutants that included carbon dioxide and methane. According to the American Environment Protection Agency, landfills were the third largest source of methane emission in the US. Methane was 28 times more efficient than carbon dioxide in trapping heat, thus contributing to global warming (Freeman 2016). Other garments made from synthetics were designed not to decompose. Even during production, synthetics released nitrous oxide, which was a much more potent greenhouse gas than carbon dioxide, absorbing as much as 270 times more heat. Lying in the landfill, synthetics might release toxic substances into groundwater and the surrounding soil (LeBlanc 2016).

Before they ended up in landfill, some garment could be repaired, reused, resold, or recycled into rags or insulations, if not incinerated. Donation to charities, or giving to friends and family are some common ways for consumers to dispose their unwanted clothing (Bianchi and Birtwistle 2012). Whereas donating used garment to charities might alleviate some of the clothing congestion in one's wardrobe, charities has started facing problems to deal with the ever-increasing volume of donated clothing. Accoring to the interviews with charity shop managers in UK, the sell-thru rate of the donated clothing was around 50–70% in general (Birtwistle and Moore 2007). Charities in US such as Goodwill and the Salvation Army could only sell what they could in their retail shops—typically less than 20% of what they received. For the remainders, they called for-profit textile recycling companies, like Viltex, who bought the leftover clothes by the pound and recycle them (Cline 2014). In 2013, Americans recycled 2.3 million tons of textiles which reduced greenhouse gases equivalent to taking 1.2 million cars off the road for a whole year (Freeman 2016).

In recent years, fashion companies began to reflect whether affordable and trendy fashion, although highly profitable, could strike a balance with ethical issues such as environmental sustainability, when global warming and carbon emission became a hot topic. Some of them started to factor in sustainability in their business

model. To reduce waste and preserve the environment, some advocate closing the textile loop by recycling clothes. To achieve this, nevertheless, effective collection of post-consumer products is critical. To make reverse logistics on a larger scale to close the loop of the apparel supply chain, perhaps international players in the fashion industry could be more effective.

Over the past two decades, a number of fashion companies have been launching programs to collect used clothing from customers. Based on their conditions the collected items are resold or donated as second-hand clothing, or are recycled into fibers or fuels, thus extending their product lives and reducing waste. This study examines the used apparel collection (UAC) programs of four fashion retailers, namely: Fast Retailing Co., Ltd. (Uniqlo), Patagonia, Eileen Fisher, and Hennes & Mauritz (H&M). These four companies are pioneers and representatives in operating used apparel collection programs. Secondary information about their UAC programs, as well as other sustainability initiatives, is available from various sources, such as company websites, reports and news. This study aims to provide an overview of the current practices of the retailer-facilitated UAC programs as well as discuss implications from these industrial cases on the features and the merits of retailer-facilitated UAC programs.

The organization of this chapter is as follows: Sect. 13.2 reviews the various concepts related to UAC. Section 13.3 presents the different cases of retailer-facilitated UAC programs currently observed in the industry. Section 13.4 discusses the various features of retailer-initiated UAC programs with respect to the business natures of the involved fashion retailers and the benefits of retailer involvement in UAC. Finally, Sect. 13.5 concludes the chapter and suggests future research directions on the topic.

13.2 Literature Review

UAC is closely related to the topics of the 3R concept, closed-loop supply chain management, and recycling in the fashion industry. We briefly review some of the influential and recent literature as follows.

13.2.1 The Concept of 3R "Reduce, Reuse, Recycle"

The notion of 3R—"Reduce, Reuse, Recycle"—is popular and fundamental in waste management. Its earliest documented origin may be traced back from the United States in the 1970s when it was mentioned in De Bell (1970) and appeared as a slogan for various environmental campaigns during the time. Essentially, the 3R concept encourages people to reduce the use of resources and waste, to reuse items for different purposes, to recycle items to reusable forms or as raw materials for new products. Later, Joshi et al. (2006) extend the 3R concept to the 6R concept from the life cycle assessment perspective by including three more factors, namely: Recover, Redesign,

and Remanufacture. Recover refers to the treatment of used items for further utilization such as used-product collection, disassembly, sorting and cleaning. Redesign involves the adoption of innovative techniques to make products more sustainable. Remanufacture focuses on converting used items or components into usable conditions whilst preserving the original functionality. Similarly, Esty and Winston (2009) extend the 3R concept to the 5R pollution prevention hierarchy by adding two levels, namely: Redesign and Reimagine. The former concerns the use of materials and processes for environmental friendly production whilst the latter involves invention and introduction of green products. Since then, different versions of 5R and 6R have been proposed by different organizations or people under different contexts. Under the domain of fashion supply chain management, Ho and Choi (2012) analyze the sustainability aspect of four apparel companies in Hong Kong with reference to the 5R framework of Esty and Winston (2009). With reference to this study, UAC programs aim to fulfill the 3R concept by reusing and recycling the apparels collected so as to minimize waste and reduce the use of resources.

13.2.2 Closed-Loop Supply Chains and Reverse Logistics

A closed-loop supply chain (CLSC) involves dynamic recovery of the values from different components of a product over time (Guide and Van Wassenhove 2009). With the increased attention and demand for sustainable business practices, a vast amount of research has been devoted to CLAS management. Atasu et al. (2008) review a series of closed-loop supply chain research from the business economics perspective. Govindan et al. (2015) conduct a taxonomy of the scientific journal papers in the field of reverse logistics and CLSC management and suggest future research directions. We refer readers to these excellent review papers in the development of the subjects.

The process to take back used products from consumers for recovery plays a critical role in effective CLSC management. Reverse logistics is "the process of planning, implementing and controlling flows of raw materials, in process inventory, and finished goods, from a manufacturing, distribution or use point, to a point of recovery or point of proper disposal" (De Brito and Dekker 2004). It involves four main activities, namely: acquisition and collection of post-consumer products, inspection and grading, processes for value recovery, and redistribution (Fleischmann 2001). In the fashion industry, Sas et al. (2015) study carpet recycling in the US and discuss the challenges and concerns for the design and organization of the collection and recycling network. The authors emphasize the need to identify new markets for recovered carpet materials, development of new recycling techniques, and proper reverse network design are critical to advance product recovery effectiveness.

The choice of the leader in a CLSC can make vast impact on its performance. Choi et al. (2013) investigate the effect of channel leadership on the performance of a CLSC with the retailer, the collector, and the manufacturer as a possible leader. They analytically show that the retailer-led CLSC is the most effective CLSC

structure as it results in the highest supply chain profit and product return rate. On the other hand, Gao et al. (2016) suggest that channel power structure and consumers' response to the collection effort are critical factors for the effectiveness of a CLSC with single retailer and single manufacturer. Specifically, the authors found that if the demand are less sensitive to the manufacturer's collecting effort activities (such as product design towards recycle and reverse logistics services), the CLSC is optimal and consumers are benefited by the lowest retail price when neither the manufacturer or the retailer has the dominant power over the CLSC. Otherwise, CLSC with the retailer being the channel leader performs the best. Apparently, the results of the above literature lack justification from real-world examples. In the fashion industry, for example, UAC is an important process for closed-loop fashion supply chain management. Whether similar results apply to UAC program leadership may need further investigation.

13.2.3 Remanufacturing and Recycling in the Fashion Industry

Despite the urgent need and its huge potential, the development progress of apparel recycling is comparatively slow. Larney and Van Aardt (2010) identify a lack of demand for recycled apparels, insufficient equipment and technology, and high cost as some of the obstacles to make apparel recycling cost-effective. A number of research studies are thus conducted to investigate this issue. For instance, Larney and Van Aardt (2010) empirically examine the practices of fabric waste disposal by the apparel manufacturers in South Africa and their perception towards recycling. The study suggests that increased consumer awareness and knowledge of recycled apparels could help ensure a market and encourage apparel manufacturers to recycle more extensively. Abraham (2011) investigates the reverse logistics of the apparel aftermarket in India. The author contends that collaboration amongst members in the reverse logistics chain could help enrich market knowledge, reduce market uncertainty and improve profitability. Curwen et al. (2012) study the challenges of sustainable apparel development in the fashion industry through the case of Eileen Fisher, a designer label in women's wear. The authors identify that a clear mission, strong company authorization, and like-minded suppliers are some critical factors to successful development of sustainable apparels. Laitala and Klepp (2015) discuss the benefits of clothing recycling and reuse to the environment and investigate the clothing disposal habits of people in Norway based on a wardrobe study and a survey. Payne (2015) examines the open-loop recycling and closed-loop recycling of textile products with reference to the frameworks of life cycle assessment and life cycle thinking.

In view of the above literature, UAC programs play a significant role in retrieving values and extending the lives of apparel products. Recently, retailer-facilitated UAC programs have become a popular green initiative for many

fashion retailers. Yet apparently there is a lack of study systematically examine the different formats of these programs. How fashion retailers' facilitation affects the implementation and the effectiveness UAC programs remains unknown. This chapter therefore aims to shed light on the answers to the following questions: (a) What are the different approaches of the UAC programs currently practiced by the fashion retailers? (b) How are the different features of the UAC programs related to the business nature of the involved fashion retailers? and (c) What are the merits of retailer-facilitated UAC programs?

13.3 Examples of Retailer-Facilitated Used Apparel Programs

In this study, the UAC programs of four fashion retailers are examined, namely: Fast Retailing Co., Ltd. (Uniqlo), Patagonia, Eileen Fisher, and Hennes & Mauritz (H&M). Table 13.1 summarizes the profiles of these companies and their respective UAC programs.

13.3.1 Fast Retailing Co., Ltd. (Uniqlo)¹

Established in 1963 in Japan, Fast Retailing Co., Ltd. (Uniqlo) is the third largest fashion retailer in the world. It adopts an SPA (Specialty store retailer of Private label Apparel) business model that monitors the production process from design through manufacture to retail. Apart from operating multiple brands including Uniqlo, GU, Theory, and Comptoir des Cotonniers, the company also develops functional materials like HEATTECH for thermo wear and AIRism for quick-dry innerwear (FR annual report 2015).

Uniqlo began its Fleece Recycling Campaign in Japan in 2001 as part of its corporate social responsibility activities. The project expanded to include all Uniqlo branded apparel in 2006 and was renamed as the All-Product Recycling Initiative. Originally the Initiative was conducted in March and September every year in Japan restricted to Uniqlo branded apparel. Starting from 2010, it has become a year round activity which also included fashion products from GU, another brand operated by the company. Since 2011, the company has been extending the Initiative to markets outside Japan, such as South Korea, France, the UK, the US, Hong Kong, and Shanghai, China.

The original objective of the Initiative was to recycle collected apparel into industrial textiles and fuel. Having observed that most of donated garments (around 90%) were still in good condition, the company shifted the theme of the campaign

¹Main source of reference: http://www.fastretailing.com/eng/csr/community/recycle.html.

Table 13.1 List of fashion companies with apparel collection and recycle programs examined in this study

	Company profile					Used app	Used apparel collection (UAC) program	JAC) program
	Company name	Product type	Headquarter Market (s)	Market (s)	Number of owned	Start	Main brand	Items covered
		(e)			30003 (a3 01 2012)	year	POVIDAIII (c)	
1	Fast Retailing	Private label	Japan	17 countries	Over 2900	2001	UNIQLO,	All UNIQLO and GU
	Co., Ltd. (Uniqlo)	apparel		and regions			GU	branded items
2	Patagonia Inc.	Outdoor	SO	18 countries	89	2005	Patagonia	All Patagonia items
	(Patagonia)	apparel and		and regions				
		gear						
κ	Eileen Fisher, Inc.	Designer	SO	US, UK,	Over 60	2009	Eileen	All items from own
	(Eileen Fisher)	label fashion		Canada			Fisher	brands
4	Hennes &	Fast fashion	Sweden	61 markets	Over 3600	2013	H&M	Apparels from any
	Mauritz (H&M)			worldwide				brands and any textiles

from recycling to reuse. In collaboration with the United Nations High Commissioner for Refugees (UNHCR) and local nongovernment organizations (NGOs), Uniqlo distributes donated clothing that are still wearable to refugees, homeless people and victims from natural disasters and humanitarian crises. The remaining garments that are not in wearable condition (around 10%) are recycled into industrial fibers or energy fuel.

Customers can return the unwanted Uniqlo and GU garments at the recycle boxes available in the stores of the two brands where the Initiative covers. Then, the collected garments are inspected and classified into wearable and non-wearable items according to their conditions. Wearable donated clothing is sorted based on season, gender and product type. Appropriate apparel is then selected and distributed to the refugees, homeless people, and victims from natural disasters and humanitarian crises with collaboration of UNHCR and local nonprofit organizations.

In October 2015, to mark the 10th anniversary of the All-Product Recycling Initiative, Uniqlo partnered with UNHCR to launch the 10 Million Way to HELP Project. The project aimed at collecting ten million clothing items for refugees worldwide. With the cooperation of partner companies, schools and educations institutions, and various community groups, the company successfully completed the target within 6 months and benefited needy people in countries such as Uganda, Nigeria, and Liberia (Fast Retailing Co., Ltd. 2016).

As of August 2015, the All-Product Recycling Initiative has been collecting 39.5 million apparel items at Uniqlo and GU stores in 16 countries and regions, over 16.3 million of which were donated to refugees and displaced people in 59 countries and regions.

13.3.2 Patagonia Inc. (Patagonia)²

Patagonia is a US-based company in outdoor clothing and gear founded in 1973. Its mission is to "build the best product, cause no unnecessary harm, use business to inspire and implement solutions to the environmental crisis". With its origin closely related to climbing and outdoor activities, the company has a strong emphasis on environmental sustainability. It has stringent policies to monitor its businesses to ensure its production process and operations create minimal impacts to the environment. The company has been the winner of different sustainability-related awards for many years. For instance, it has won the Accenture Strategy Award for Circular Economy Multinational 2017 for its "long-track record of sustainable innovation in the industry" (the other winner of the award being Nike) (Covello 2017).

²Main source of reference: http://www.patagonia.com/reuse-recycle.html.

Patagonia is perhaps the first company to operate a global recycling program for apparel (Green 2008). The company launched the Common Threads Garment Recycling Program in Fall 2005 with the goal to make all its products recyclable in five years' time. As an important component of the program, Patagonia invited customers to return used or unwanted products of the brand for recycling. Customers could donate their clothing by dropping them at the company's retail stores or selected dealers, or they could mail them to the company's service center at Reno, Nevada. Through the reverse logistics system established by the company, collected garments were sorted according to the quality and the types of materials before sending to designated fabric manufacturers for recycling. At the beginning of the program, owing to the recycling technology constraint, only Capilene® garments of the company were collected and TEIJIN, a Japanese fabric manufacturer, was the sole recycler. In 2007, the types of garments collected were expanded to include 100% cotton T-shirts, Patagonia fleece and Polartec® fleece from any brand. More fabric recyclers were involved in the program, including Calami and Toray (Patagonia 2009). A total of 45 tons of garments were collected through this program, 34 tons of which were made into new clothing (Patagonia 2011).

In 2011, Patagonia launched the Common Threads Initiative which incorporated the 5R concept: reduce, repair, reuse, recycle, and reimagine (Patagonia 2011). Extending the practices of the Common Threads Garment Recycling Program, the company collected all types of worn-out Patagonia garments from the customers for recycling into fabric or fiber, or for repurposing for other use. In addition, to enhance the reusability of the company's used products, Patagonia encouraged customers to donate unused clothing to charity or sell them to someone who needed them. For the latter, the company had collaborated with eBay for a period of time to establish the Patagonia Common Threads Initiative storefront on eBay. Customers who had taken the pledge to join the Initiative were entitled to list their unused products on eBay as well as the Used Clothing & Gear Section on the company's website.

In 2013, the company launched the Worn WearTM program under which customers could trade in their used Patagonia apparels at four of the brand's outlets in the US including Portland, Seattle, Palo Alto, and Chicago (Patagonia 2013). For each returned item that had been checked under good condition and clean, customers could earn trade-in credit valued at half of the price of the item, which could be redeemed for purchase in store or online at the company's website. The collected apparels will be sold through the Common Threads Worn Wear section in the respective stores. On Black Friday 2014 the company collaborated with the sharing app Yerdle to operate the all-day Patagonia Worn Wear Swap campaign (Simpson 2014). Customers could bring in their used Patagonia clothing at eight of their retail stores in the US in exchange of another piece of used clothing brought by others, or they could redeem Yerdle credits that could be used for purchase of any second-handed items available on the app.

As of 2016, Patagonia has been recycling over 95 tons of the apparel.

13.3.3 Eileen Fisher³

Founded in 1984, Eileen Fisher is a US designer label of women's wear. The company has been devoted to environmental protection and human rights, in particular those for women and girls. In 2015, the company announced its Vision 2020 campaign outlining its five-year plan towards the goal of 100% sustainability (Eileen Fisher, Inc. 2015).

In 2009, the company launched Green Eileen, a recycled clothing initiative that collected, sorted, and resold gently worn clothing of the company in the US. After cleaned and repaired whenever needed, the collected clothing was resold at the brand's Green Eileen stores, LAB stores and workshop centers. For items that could not be resold, Green Eileen operated various workshops through which the fabrics and materials were upcycled into other items. At first, the collected clothing was sold in the company's LAB store, a concept shop in Irvington, New York, where both current collection and donated clothing was displayed together. With the increasing number of donation, Green Eileen opened its first own store in 2011. To date, the collected clothing is available for sale in two Green Eileen stores in Irvington and Seattle as well as a few retail shops of Eileen Fisher.

Customers were encouraged to bring back their gently worn Eileen Fisher clothing at any of the brand's retail stores or the two recycling centers in the country. In return they were given a US\$5 reward card for each donated item, which can be redeemed for purchase at any of the company's retail stores as well as online portal. Being a nonprofit, Green Eileen used all the profits from the recycled clothing to support charities and programs for women, girls and the environment. Some of the tuition fees from the workshops were also for donation to the Eileen Fisher Community Foundation.

Starting from summer 2016, the company operated the Remade in the USA program, a social innovators project in collaboration with the Council of Fashion designers of America (CFDA), under which defective clothes collected from the recycling program will be remade into new clothes for sale.

Since the start of the Green Eileen initiative in 2009, over 600,000 Eileen Fisher pieces of apparel have been collected, around 200,000 of them were successfully resold. The company expects the recycling items can reach one million by 2020.

13.3.4 Hennes & Mauritz (H&M)⁴

Started in 1947 as a women's wear store in Sweden, H&M is the second largest fashion retailer in the world. The fashion group operates physical stores of six

³Main source of reference: http://www.greeneileen.org/.

⁴Main source of reference: http://sustainability.hm.com.

brands (H&M being the main brand) in 61 countries and regions and online portals in 23 markets worldwide. Apart from fashion for women, men and kids, the group is also involved in cosmetics and skincare, as well as home accessories under the brand of H&M Beauty and H&M Home (H&M 2015).

H&M's business idea is "to offer fashion and quality at the best price in a sustainable way" (H&M Annual Report 2015, p. 12) and its ultimate goal is "to make fashion sustainable and sustainability fashionable" (H&M Conscious Actions Sustainability Report 2015, p. 6). In 2010, the group introduced the H&M Conscious program under which a series of actions was taken to achieve its seven strategic commitments on sustainability. One of such commitments includes the group's pledge to "reduce, reuse, recycle" (H&M Conscious Actions Sustainability Report 2010). In the long run, H&M aimed at closing the loop on textile fibers by making new garments from the old ones (H&M Conscious Actions Sustainability Report 2012). To do so, the group partnered with I:COLLECT (I:CO), a global textile and footwear recycling solution provider, to pilot a UAC scheme in 17 H&M stores in Switzerland in 2011 (H&M Conscious Actions Sustainability Report 2011). Later on, the group formally started the UAC program in 2013 under which H&M was responsible for apparel collection from end customers whereas I:CO for the subsequent sorting and recycling arrangements.

H&M is the first fashion company that introduces a global UAC program with no restriction on the brand, the type, or the condition of the collected textiles products (I:CO 2012). Customers could drop their unwanted apparel and even used home textiles—of any brand and in any condition—into a green collection box located next to the cashier in an H&M store. As an incentive, for each bag of unwanted textiles collected, H&M offered to the contributing customers a voucher which could be redeemed for next purchase at H&M. Afterwards, I:CO picked up the collected textiles using the group's existing logistics system and sent to designated sorting facilities where items were hand sorted and graded (I:CO, n.d.a). Based on their condition, collected items were resold as second-hand clothing, reused as textile products like cleaning cloths, recycled into textile fibers or insulation materials, or used as fuel for energy production. Amongst all the collected items, it was estimated that 40-60% could be re-worn as second-hand garments, 5-10% could be reused as other textile products, 30-40% could be recycled into textile fibers or insulation materials, with the remaining 1–3% of them for thermal utilization (World Economic Forum 2014).

As part of the arrangement with I:CO collaboration, H&M sponsored the H&M Charity Star project depending on the amount of garments collected. Specifically, for each kilogram of garments collected, H&M donated 0.02 Euro to a chosen local charity organization such as UNICEF, Red Cross, and Save the Children. Besides, the group also donated all surplus obtained from the UAC program to the H&M Conscious Foundation, which funds research and innovations on closed-loop technology.

Since the start of the UAC program in 2013, the number of collected clothing has been constantly growing every year. As of 2015, it has collected over 23 tons of

garments. Currently, the program is available in almost all H&M stores (except a number of stores in franchised markets), as well as selected stores in other affiliated brands operated by the group, such as &Other Stories, Weekday, and Monki.

13.4 Discussion and Implications

13.4.1 Features of Current Retailer-Facilitated UAC Programs

Table 13.2 summarizes the different formats of the four retailer-facilitated UAC programs under study.

In the following, we discuss the possible underlying rationales for these different approaches.

13.4.1.1 Choice of Recycling Partners

Different fashion retailers have different choices on the recycling partners to operate their UAC programs and such decision may be related to their business models. For

Table 13.2 Summary—different approaches of the retailer-facilitated UAC programs u	ms under study	programs	C	Α(IJ.	d I	ed	itate	cili	r-fa	taile	he r	of t	ches	tapproac	v—different	Summary	13.2	Table
---	----------------	----------	---	----	-----	-----	----	-------	------	------	-------	------	------	------	----------	-------------	---------	------	-------

Feature	Approach	Adopting fashion retailer(s)
Choice of recycling	Fabric/clothing suppliers	Patagonia, Uniqlo
partner(s)	Third-party recycling solution provider	H&M
	Recycling/Upcycling handled by itself	Eileen Fisher
Types and brands of the clothing collected	Restricted to own branded and specific types of products	Eileen Fisher, Patagonia, Uniqlo
	Textile products of all brands and types welcome	H&M
Outlets for the clothing collected	Reuse—sold as second-hand clothing	Eileen Fisher, H&M, Patagonia
	Reuse—donated to the needy	Uniqlo
	Recycle—as fabrics, industrial textiles or fuel	H&M, Patagonia, Uniqlo
	Upcycle	Eileen Fisher
Incentive for customer participation	Monetary incentive provided	Eileen Fisher, H&M, Patagonia (for specific campaigns only)
	No monetary incentive provided	Patagonia, Uniqlo

instance, Patagonia works closely with its fabric suppliers (such as TEIJIN, Toray) for the recycling whereas H&M collaborated with the third-party global recycling solution provider I:CO for its UAC programs. Being an established retailer in outerwear and gear, Patagonia has been researching and developing new textile technology with specialized functionality. It also has a strong long-term relationship with its suppliers in development and production of functional materials for its products. Both parties would have the related expertise in the fabrics and materials of the collected products and may help enhancing the recycling effectiveness. Besides, the long-term relationship could also facilitate smoother coordination of the reverse logistics and recycling arrangement between the fashion retailer and the suppliers. By contrast, H&M does not operate any manufacturing facilities. Its UAC program leverages the large business scale of the fashion retailer in enhancing the collection capability as well as the expertise and knowledge of I:CO in subsequent sorting and recycling processes. Eileen Fisher, on the other hand, manages its UAC program mostly by itself. Being a designer label which emphasizes quality and style, Eileen Fisher operates its UAC program with the main focus on the reusability of its gently worn collected clothes as second-hand apparel. Delicate sorting of the collected items by style and seasonality would be required to match with visual merchandising and selling in store. Trained personnel within the fashion retailer who are familiar with the designer label would be more appropriate in dealing with the tasks.

13.4.1.2 Restriction on Brands and Types of Garments Collected

Almost all four fashion retailers, except H&M, collect used garments from their own brands only. At the initial stage of their UAC programs, Uniqlo and Patagonia even restricted to collecting specific types of their products (e.g. fleece for Uniqlo and Capilene® garments for Patagonia). The use and complexity of blended materials has always been one of the greatest obstacles to recycling apparel and textile products (Muthu et al. 2012). Being involved in the design and development processes, individual fashion retailers have the best understanding about the composition of their own products. They could provide useful information with recyclers on the proper handling of the collected items to achieve maximum recycling capability. Besides, the specific apparels collected can be recycled and become the input of the similar types of products, thus enabling formation of a closed-loop fashion supply chain.

13.4.1.3 Outlets for the Clothing Collected

Collection of used apparel products is an important procedure to close the loop of the fashion supply chain. With proper sorting and treatment, a majority of the products collected from the UAC programs will have the product lives extended either in the form of second-hand products for reuse, fabrics and industrial textiles after recycling, or new textile products with upcycling. A small portion of the collected items which quality fall below the requirement are recycled into fuel. Amongst the four fashion retailers, Patagonia and Uniqlo actively participate in the sorting and handling of the clothing collected from their UAC programs whereas Eileen Fisher handles all the processes involved in its UAC program by itself. For Patagonia and Uniqlo, the relationship with their designated suppliers is relatively close as they actively work with their suppliers in textile technology and product development. Some of their products are designed and developed to facilitate recycling into raw materials for production of similar apparels of their own brands. Eileen Fisher, on the other hand, emphasizes durability and sustainability of its apparels in terms of the quality and the design. The collected clothing of the designer brand is thus largely in good condition for reuse. The relatively smaller scale of operation also justifies the management of the UAC programs by the designer brand alone. H&M, by contrast, is the only one that does not involve in the treatment of the collected clothing. Collaborated with a third-party recycling solution provider, H&M mainly focus on how to enhance the collection capacity of its UAC program. It would be more effective for the professional third-party recycler to handle all the recycling activities while the fast fashion brand can leverage its extensive retail network and marketing approaches to enhance the collection capability.

13.4.1.4 Incentive Provision for Clothing Donation

Amongst the four fashion retailers studied, Eileen Fisher and H&M provide monetary incentive (in the form of redeemable vouchers for next purchase) for end customers to deposit used clothing to their UAC programs. By contrast, Patagonia and Uniqlo consider it as the responsibility and discretion of end consumers to properly handle their apparel after end-of life. It is generally agreed that consumer behavior plays a significant role in dealing with environmental issues of fashion products. Which of these two approaches could enhance the effectiveness of retailer-facilitated UAC programs is an interesting question and deserves further investigation.

13.4.2 Merits of Retailers' Facilitation on UAC Programs

Reverse logistics arrangement and development of markets for remanufactured products are some of the challenges to achieve closed-loop supply chains (Seitz and

Peattie 2004). From the above industrial cases, it is observed that retailer-facilitated UAC programs can help tackle these challenges in a number of ways as follows.

13.4.2.1 Fashion Retailers as Effective Post-consumer Waste Collectors

Collection of post-consumer waste from individual consumers is one of the great challenges for closed-loop supply chains (Payne 2015). Savaskan et al. (2004) analytically examine the effectiveness of different closed-loop supply chain structures in terms of investment in used-product collection effort and supply chain profit. Their analysis suggests that having the retailer as the collector for used products is the most effective scenario. Whereas nonprofit organizations like Oxfam and Salvation Army list on the top when people think of clothing donation, fashion retailers could also be a facilitator in the collection process as demonstrated by the UAC programs studied above. Several studies have reflected that convenience is one of the crucial factors for clothing donation and disposal (Ha-Brookshire and Hodges 2009; Joung and Park-Poaps 2013; Laitala and Klepp 2015). With the gigantic network of retail outlets, fashion retailers can provide ease of access and time-saving solution for end consumers to drop off unwanted clothing from end consumers. Besides, the existing logistics system could also help for establishing the reverse logistics system for the collected post-consumer apparel items. Moreover, bulk shipment of collected garments from fashion retailers to recycling facilities could also reduce delivery frequency and in turn reduce carbon footprints.

13.4.2.2 Fashion Retailers Provides Effective Marketing and Promotion Campaigns

Research has shown that a closed-loop supply chain with the retailer as the leader achieves the best performance when consumers proactively participate in the return process in light of the collection efforts exerted by the supply chain members (Gao et al. 2016). Such result is illustrated by the retailer-facilitated UAC programs. As remarked by some fashion retailers under study (e.g. H&M), UAC programs arouse end consumers the possibility to reuse and recover their unwanted clothing (Tsoulfas and Pappis 2006). Being the most downstream agent in the fashion supply chain, fashion retailers can utilize different marketing channels to promote their UAC programs and help conveys the message of environmental conservation to end consumers. For instance, Patagonia held the Worn Wear Swap campaign with the sharing app Yerdle in one single day 2014. Uniqlo launched the 10 Million Way to HELP Project in 2015 to celebrate the 10th anniversary of its UAC program. These one-off campaigns can fuel the UAC programs by providing new foci and talking points, thus reminding end consumers of the UAC programs as a possible channel to clothing donation.

13.4.2.3 Partnership Between Fashion Retailers and NGOs to Make Additional Social Impact

Fundamentally, all the UAC programs under study aim at reducing waste and mitigate clothing disposal problem. Apart from this, most of them are also incorporated with elements that induce social impact. For instance, under its All-Product Recycling Initiative, Uniqlo collaborated with UNHCR to donate clothing to refugees. Eileen Fisher makes use of the proceeds from the sale of the collected apparel to charities that care about the welfare of women and girls. H&M sponsors local charitable organizations based on the weights of collected garments under its UAC scheme through the H&M Charity Star project. Such approach can also provide additional meaning to ethically conscious customers to participate in the UAC programs.

13.4.3 Implications from the Cases

With reference to the above case studies, it is deemed that retailer-facilitated UAC programs could take variable forms to fit fashion retailers of different natures and business models, such as designer brands, specialty apparel brands, and mass-market brands. In general, quality and fashionable style are two key assets of designer brand products. The used designer brand apparel items are thus most suitable for reuse and upcycling. The relatively small scale in production also allows a UAC program to be mainly managed by a designer brand alone or in collaboration of some small-scale charitable organizations. Designer brands could make reference to the approach of Eileen Fisher to collect used/unwanted clothing of own brands, and sell the collected second-hand clothing with some charitable purpose. Designer brands can also incorporate the possibility for upcycling during their product design and development process so that the used apparel could be turned into other fashionable products that reflects the designer brands' unique fashion elements. This type of UAC programs could engage loyal consumers in closer connection with the designer brands. The quality and fashion aspects of the designer brands could also be highlighted. For specialty apparel brands, like those of outerwear and intimate apparel, product functionality is emphasized in their business models. They usually have close partnership with their suppliers for product development and a considerable proportion of specialized fabrics and materials are used for the specialty apparel. The special composition of these materials could be both an obstacle and a potential for recycling. In view of this, the UAC programs of Uniqlo and Patagonia may provide some useful reference for specialty apparel brands to contribute to sustainability of their products. On the one hand, specialty apparel brands should collaborate closely with their suppliers to increase the recycling capability of the products; on the other hand, they could initiate UAC programs for their products so that the used products could be fed back into the production process as part of the raw materials. The reverse logistics could also be more efficient by making use of the existing setup for the forward supply chain. Mass-market fashion brands are characterized by the extensive retail network and large volume of products. Their retail networks provide convenient locations for consumers to dispose their used and unwanted clothing. With the high capacity for clothing collection, it would be most efficient for mass-market brands to collaborate with independent clothing recyclers to handle recycling activities of the clothing collected whilst they could leverage their extensive retail network and marketing initiatives to enhance the collection capability of their UAC programs, similar to the case of H&M. In fact, a number of fashion brands, such as Marks & Spencer, Forever 21, Levi's, have been partnering with the third-party recycler I: CO to launch UAC programs similar to the one of H&M (I:CO, n.d.b).

Provision of monetary incentives and attachment to other charity activities are some optional measures that a fashion retailer could take into consideration when it plans to launch a UAC program. In general, green-conscious consumers are expected to be more voluntary to donate clothing in a UAC program. Monetary incentives may engage the less environmentally concerned consumers to participate in the UAC program since they could obtain tangible benefits from clothing donation. From the perspective of the fashion retailer, monetary incentives in the form of redemption coupons (e.g. like the case in H&M) may also help further boost sales. On the other hand, incorporating charity activities with a UAC program provides additional meaning to the clothing donors and their participation serves as a way to execute their social goodwill. They may have a higher level of intention to clothing donation and in turn increase the collection ability of the UAC program. For the fashion retailer, involvement in other charity activities further helps one to fulfill its corporate social responsibility. Employee participation in the UAC-related charity activities (e.g. like the case of Uniqlo's 10 Million Ways to Help Project with UNHCR) could also help strengthen employees' connection amongst one another and their sense of belonging with the company. Together with the achievement for the original purposes of the charity activities, social welfare for all concerned stakeholders could be enhanced.

The ultimate purpose of a UAC program is to fully extract and utilize all potential values from the collected clothing. To achieve this, creation of markets for recycled products and efficient recycling technology for textiles products are thus imperative (Sas et al. 2015). Some fashion companies have already started adopting initiatives for these. As observed from the above four cases, Patagonia and Uniqlo have been collaborating with their suppliers to develop fibers that can be recycled more easily and can be made of recycled apparels collected their UAC programs. H&M, on the other hand, have attempted to create more demand for recycled products by increasing the use of the recycled materials for its products. The fast fashion retailer has also been investing in and supporting closed-loop innovation (H&M Conscious Action Sustainability Report, 2015). In the long run, nevertheless, it will require the unanimous actions by all members in the fashion industry to close the loop of all fashion supply chains.

13.5 Concluding Remarks

Corporate social responsibility has been listed top in the agenda for many corporations nowadays. Being one of the largest polluters in the business sector, fashion supply chain members have been accused of bringing the largest impacts to the environment and the society. There has been an increasing demand for fashion retailers to do more to take up their responsibility as corporate citizens. As a result, many fashion companies have embedded sustainability into their business models and company visions. Recently, a number of leading fashion corporations have pledged to move towards a more circular fashion system (Global Fashion Agenda 2017). With the advance in technology, the feasibility to achieve closed-loop supply chains has become more promising. Proper handling of end-of-life apparel is critical in closing the loop of the fashion supply chain. As discussed in this study, retailer-facilitated UAC programs could make the post-consumer waste collection more effective. In particular, fashion retailers can initiate and implement UAC programs with features that fits with their respective business models to achieve the optimal collection capability.

There are several limitations of this study. Its discussion on retailer-facilitated UAC programs is based on four different cases only. Being one of the relatively recent forms of green initiatives by fashion retailers, retailer-facilitated UAC programs offer high potential and flexibility for further development. In particular, advance in textile recycling technology and consumers' increasing awareness for the need of proper clothing disposal could have influential impacts on the practices of retailer-facilitated UAC programs. Continual investigation on the evolution of the formats of the programs could be interesting and meaningful. Another drawback for this study lies on the use of secondary data. Owing to the limited information available, detailed description of the operation and execution of retailer-facilitated UAC programs are not feasible. In future, studies on the topic with primary data would be highly desirable and could generate more insights. Apart from the above, further investigation could also be undertaken to explore different possible means to strengthen the collection ability of UAC programs. For example, the use of alternative forms of incentives and partnership with charitable organizations, as well as their impacts on the effectiveness of UAC programs, offers some plausible future research directions. Literature has found empirical evidence that launching UAC programs can enhance brand awareness and attitude of the involved fashion retailers (Choi et al. 2015). In the future, the possible intangible and tangible benefits of UAC programs on fashion retailers could be explored to advocate its implementation. Profitability and the coordination issue of the closed-loop fashion chains with retailer-facilitated UAC programs can also be explored. Last but not least, the ultimate objective of the UAC programs is to extend the life cycles of apparel products. Development of recycled apparels and means to promote such market should be further explored to make closed-loop fashion supply chains more feasible.

Acknowledgements The authors acknowledge the helpful assistance of Rohini Sharma and Anita Yeung in searching literature and information for the study. This study is partially supported by the funding of the Research Grant Council of Hong Kong under grant number UGC/IDS12/14.

References

- Abraham N (2011) The apparel aftermarket in India—a case study focusing on reverse logistics. J Fashion Mark Manage 15(2):211–227
- Atasu A, Guide VDR, Van Wassenhove LN (2008) Product resue economics in closed-loop supply chain research. Prod Oper Manag 17(5):483–496
- Bianchi C, Birtwistle G (2012) Consumer clothing disposal behavior: a comparative study. Int J Consum Stud 36:335–341
- Birtwistle G, Moore CM (2007) Fashion clothing where does it all end up? IJRDM 35(3): 201–216
- Choi TM, Guo S, Ho SSY, Li WY (2015) Effects of used garment collection programs in fast fashion brands. In: Choi TM, Cheng TCE (eds) Sustainable fashion supply chain management: from sourcing to retailing. Springer International Publishing, Switzerland
- Choi TM, Li Y, Xu L (2013) Channel leadership, performance and coordination in closed loop supply chains. Int J Prod Econ 146:371–380
- Cline E (2014, July 18) Where does discarded clothing go? The Atlantic http://www.theatlantic.com/business/archive/2014/07/where-does-discarded-clothing-go/374613/. Accessed 23 Oct 2016
- Covello L (2017, January 17). Nike, Patagonia Win Awards at Davos for Efforts to Combat Waste. *Fortune*. Retrieved from: http://fortune.com/2017/01/17/nike-patagonia-davos/
- Curwen LG, Park J, Sarkar AK (2012) Challenges and solutions of sustainable apparel product development: a case study of Eileen Fisher. Clothing Text Res J 31(1):32–47
- De Bell G (1970) The environmental handbook: prepared for the first national environmental teach-in. Ballantine Books, New York
- De Brito MP, Dekker R (2004) A framework for reverse logistics. In: Dekker R, Fleischmann M, Inderfurth K, Van Wassenhove LN (eds) Reverse logistics: quantitative models for closed-loop supply chains. Springer, Berlin
- EcoWatch (2015, August 17) Fast fashion is the second dirtiest industry in the world, next to big oil. http://www.ecowatch.com/fast-fashion-is-the-second-dirtiest-industry-in-the-world-next-to-big-1882083445.html. Accessed 19 Nov 2016
- Eileen Fisher, Inc. (2015, March 19). EILEEN FISHER, Inc. Launches VISION2020 campaign detailing the first five years of its push towards 100% sustainability. PR Newswire. http://www.prnewswire.com/news-releases/eileen-fisher-inc-launches-vision2020-campaign-detailing-the-first-five-years-of-its-push-towards-100-sustainability-300052769.html
- Esty DC, Winston AS (2009) Green to gold: how smart companies use environment strategy to innovate, create value, and build competitive advantage. Wiley, Hoboken
- Fast Retailing Co., Ltd. (n.d.) All-product recycling initiative. [Webpage] Retrieved from: http://www.fastretailing.com/eng/csr/community/recycle.html
- Fast Retailing Co., Ltd. (2016, May 10). Collection target reached for "10 Million Ways to HELP" project providing clothing to refugees around the world. CSR Action—Fast Retailing Co., Ltd. [Press Release] Retrieved from: http://www.fastretailing.com/eng/csr/news/1605101600.html
- Fleischmann M (2001) Reverse logistics network structures and design. ERIM Report Series Reference No. ERS-2001-52-LIS. Available at SSRN: https://ssrn.com/abstract=370907
- FR annual report (2015) Retrieved from: http://www.fastretailing.com/eng/ir/library/annual.html Freeman D (2016, October 7) Why you should NEVER throw old clothes in the trash. The Huffington Post http://www.huffingtonpost.com/entry/why-trashing-old-clothes-is-so-bad-for-the-environment_us_57f408f1e4b015995f2b93cb. Accessed 5 Nov 2016

- Gao J, Han H, Hou L, Wang H (2016) Pricing and effort decisions in a closed-loop supply chain under different channel power structures. J Clean Prod 112:2043–2057
- Global Fashion Agenda (2017). 2020 Commitment, Copenhagen Fashion Summit. https://www.copenhagenfashionsummit.com/commitment/. Accessed 10 Sept 2017
- Govindan K, Soleimani H, Kannan D (2015) Reverse logistics and closed-loop supply chain: A comprehensive review to explore the future. Eur J Oper Res 240:603–626
- Green H (2008, November 6). Patagonia's ongoing recycling program. Bloomberg. Retrieved from: https://www.bloomberg.com/news/articles/2008-11-05/patagonias-ongoing-recycling-programbusinessweek-business-news-stock-market-and-financial-advice
- Guide D, Van Wassenhove L (2009) The evolution of closed-loop supply chain research. Oper Res 57(1):10–18
- H&M Annual Report (2015) Retrieved from: http://about.hm.com/en/investors/reports.html
- H&M Conscious Actions Sustainability Report (2010) Retreived from: http://sustainability.hm.com/
- H&M Conscious Actions Sustainability Report (2011) Retreived from: http://sustainability.hm.
- H&M Conscious Action Sustainability Report (2015) Retrieved from: http://sustainability.hm.
- Ha-Brookshire JE, Hodges NN (2009) Socially responsible consumer behavior? Exploring used clothing donation behavior. Clothing Text Res J 27(3):179–196
- Ho HPY, Choi TM (2012) A five-R analysis for sustainable fashion supply chain management in Hong Kong: a case analysis. J Fashion Mark Manage 16(2):161–175
- I:CO (n.d. a) I:CO system. Retrieved from: http://www.ico-spirit.com/en/downloads/
- I:CO (n.d. b) http://www.ico-spirit.com/en/referenzen/partner/. Accessed on 10 Sept 2017
- I:CO (2012) H&M first fashion company to launch global clothes collecting initiative. I:CO— Newsroom. Retrieved from: http://www.ico-spirit.com/en/news/hm-first-fashion-company-to-launch-global-clothes-collecting-initiative,13.html
- Joshi K, Venkatachalam A, Jawahir IS (2006) A new methodology for transforming 3R concept into 6R concept for improved product sustainability. In: IV global conference on sustainable product development and life cycle engineering, pp 3–6
- Joung HM, Park-Poaps H (2013) Factors motivating and influencing clothing disposal behaviours. Int J Consum Stud 37:105–111
- Laitala K, Klepp IG (2015) Clothing disposal habits and consequences for life cycle assessment (LCA). In: Muthu SS (ed) Handbook of life cycle assessment (LCA) of textiles and clothing, pp 345–365. Woodhead Publishing
- Larney M, van Aardt AM (2010) Case study: apparel industry waste management: a focus on recycling in South Africa. Waste Manage Res 28:36–43
- LeBlanc R (2016, February 29) The basics of recycling clothing and other textiles. The Balance https://www.thebalance.com/the-basics-of-recycling-clothing-and-other-textiles-2877780. Accessed 23 Oct 2016
- Muthu SS, Li Y, Hu JY, Ze L (2012) Carbon footprint reduction in the textile process chain: recycling of textile materials. Fibers Polym 13(8):1065–1070
- Patagonia (2009, March 4). Closing the loop—a report on Patagonia's common threads garment recycling program. Patagonia—The Cleanest Line. [Blog] Retrieved from: http://www.patagonia.com/blog/2009/03/closing-the-loop-a-report-on-patagonias-common-threads-garment-recycling-program/
- Patagonia (2011, September 7) Introducing the Common Threads Inititiave Reduce, Repair, Reuse, Recycle, Reimagine. The Cleanest Line. Retreived from: http://www.patagonia.com/blog/footprint-chronicles/introducingthe-common-threads-initiative/
- Patagonia (2013, September 18) Patagonia Worn wear™ section now open in Portland. PR Newswire. Retrieved from: http://www.prnewswire.com/news-releases/patagonia-worn-wear-section-now-open-in-portland-224238911.html

- Payne A (2015) Open- and closed-loop recycling of textile and apparel products. In: Muthu SS (ed) Handbook of life cycle assessment (LCA) of textiles and clothing, pp 103–123. Woodland Publishing
- Sas I, Thoney KA, Joines JA, King RE (2015) Reverse logistics of US carpet recycling. In: Choi TM, Cheng TCE (eds) Sustainable fashion supply chain management: from sourcing to retailing. Springer International Publishing, Switzerland
- Savaskan RC, Bhattacharya S, van Wassenhove IN (2004) Closed-loop supply chain models with product remanufacturing. Manage Sci 50(2):239–252
- Seitz MA, Peattie K (2004) Meeting the closed-loop challenge: the case of remanufacturing. Calif Manag Rev 46(2):74–89
- Simpson C (2014, November 24) This black friday, investing in the things we already own. Patagonia Works. [Posts] Retrieved from: http://www.patagoniaworks.com/press/2014/11/24/this-black-friday-investing-in-the-things-we-already-own
- Tsoulfas GT, Pappis CP (2006) Environmental principles applicable to supply chains design and operation. J Clean Prod 14:1593–1602
- World Economic Forum (2014, January) Towards the circular economy: Accelerating the scale-up across global supply chains. Retrieved from: http://reports.weforum.org/toward-the-circular-economy-accelerating-the-scale-up-across-global-supply-chains/. Geneva, Switzerland
- WRAP (2016) Valuing our clothes: the true cost of how we design, use and dispose of clothing in the UK. Waste & Resources Action Programme. Retrieved from: http://www.wrap.org.uk/sustainable-textiles/valuing-our-clothes%20

Index

A	Closed-loop fashion supply chains, 219
ABVTEX, 200, 201, 209-211, 213	Clothing disposal, 219, 223, 234, 236
Agile manufacturing, 8, 23	Clothing donation, 232, 233, 235
Antimicrobial finishes, 43, 52, 53	Company background, 110, 168, 174
Apparel supply chain, 221	Comparison, 28, 37, 50
	Consumer relationships, 86
В	Corporate Social Responsibility (CSR), 202,
Bar code scanning, 51, 53	211, 224, 235, 236
Body scanning, 43, 49, 53	Corporate sustainability index, 208
Brand awareness, 14, 62, 81, 83, 85, 91, 94,	Customer communications, 60, 68
97–100, 102, 106, 110, 111, 124, 236	Customer database, 111, 114, 116
Brand heritage, 89, 103	Customer Relationship Management (CRM),
Brand identity, 16, 22, 62, 69, 79, 84, 86, 94,	116
98–100, 103, 121, 130, 134	Customer service, 10, 12, 16, 17, 21, 22, 60,
Brand image, 37, 59–63, 65–69, 75, 84, 97, 98,	62, 63, 66, 69, 95, 106, 109–112, 133,
100, 110, 112, 125, 172	147, 158, 160
Branding strategies, 75, 90	
Brand internationalization, 80	D
Brand positioning, 66, 85, 97, 126, 134	Decathlon, 139, 143-146, 150, 152, 157-159,
Brand profile, 61	161
Brand story, 59, 60, 62–65, 67–69, 100	Digitalization, 128
Brand values, 74, 77, 80, 81, 84, 85, 92,	Digital marketing, 83, 97
103, 133	Digital media, 82, 85, 95, 98, 99, 102
Brazil, 199, 200, 204, 207, 209	Directly operated stores, 121–123, 126, 131
British luxury brand, 98	Distribution channel integration, 76, 81, 153,
	161
C	Distribution channels, 85, 151, 153, 161, 169
CAD/CAM sizing, 32	Domestic and balanced sourcing model, 3,
Case study, 9, 12, 14, 16, 18, 27–29, 38, 60,	21–24
62, 65, 69, 96, 108, 110, 115, 116, 121,	Domestic sourcing, 3, 20, 21, 23
122, 126, 127, 134, 139, 140, 148, 149,	
183, 184, 196, 207	E
Certification program, 200, 209, 211	Eileen Fisher, 219, 221, 223, 224, 228,
China, 17, 28, 34, 35, 37–39, 80, 81, 83,	230–232, 234
89–92, 94–100, 165, 166, 174–176,	Email survey, 105–111, 113–116
209, 224	Employee engagement, 183, 188, 190
City Retro, 61, 67, 68	Entry strategy, 97–99, 102, 126
Click & Collect, 139, 140, 142–145, 147–152,	Environmental sustainability, 128, 220, 226
154, 156–158, 160, 161	

© Springer Nature Singapore Pte Ltd. 2018 P.-S. Chow et al. (eds.), *Contemporary Case Studies on Fashion Production, Marketing and Operations*, Springer Series in Fashion Business, https://doi.org/10.1007/978-981-10-7007-5

242 Index

F	Logistics, 4, 40, 107, 112, 129, 130, 166, 167,
Fabric fault detection, 43, 48, 53	170–172, 175, 176, 222, 231–233
Face-to-face interviews, 105, 106, 111, 113,	Logistics strategy, 170, 173
115, 116	Luxury branding, 75, 89
Fashion industry, 4, 7, 8, 21, 27–29, 40, 43–46,	Luxury brands, 37, 75, 78, 89–96, 99, 100, 102
52–54, 69, 73–77, 105, 106, 109, 110,	Luxury family business, 84–86
115, 122, 125, 166, 200, 219–223, 235	
Fashion manufacturers, 28	M
Fashion production, 123	Made in the USA, 9–11, 13, 18, 20, 25
Fashion-renting, 165, 166, 168, 169, 175–177	Marketing strategies, 73–76, 86
Fashion traders, 38	Market knowledge, 121, 123, 134, 223 Massimo Dutti, 139, 143, 145, 147, 152–155,
Fast fashion business model, 121, 122, 126, 134, 135	158–161
Fast fashion retailing, 143	Materials sourcing, 29–31, 34, 38
3fe Apparel, 12	Meilizu, 165, 166, 174–177
Flagship store, 76, 95, 97–100, 103, 125–127,	Merchandise strategy, 60, 66
131, 133–135, 145	Metal detection, 43, 51, 53
Flagship store format, 122, 124	Methodology, 74, 77, 96, 115, 122, 140, 194
C	Minimum order quantities, 5, 13, 23
Gelorio Kouthof 120 142 147 148 155 156	Minted, 60, 62, 65, 67, 68
Galeria Kaufhof, 139, 143, 147, 148, 155, 156, 158, 160, 161	Missoni, 73, 74, 77–85 Mobile shopping experience, 157
German fashion business, 140, 161	Mystery shopping, 139, 140, 147–151, 153,
Glasgow, 60, 65, 69	154, 157, 159, 161
Green 3 Apparel, 18, 21	13 1, 137, 139, 101
5. Tippatet, 10, 21	N
Н	Network of co-creation, 189, 196
Hennes & Mauritz (H&M), 121, 122, 126–134,	Network of support, 188, 189, 196
192, 219, 221, 224, 228–235	New market, 76, 77, 84, 85, 89, 91, 97, 102,
Hong Kong, 27, 28, 34, 36–40, 81, 83, 96,	103, 131, 222
108–112, 116, 127, 187, 192, 193, 222,	Niche products, 4-8, 14, 18, 19, 21, 22, 24
224	
	0
I	Office of Textile and Apparel (OTEXA), 3, 9
Incentives (for survey), 105, 106, 108,	Offline shopping experience, 153
111–113, 116, 235, 236	Offshore production, 9, 10, 13, 15, 17, 19, 23,
Industry collaboration, 191	25
Innovation strategy, 187	Omnichannel, 139, 140, 143–145, 147, 148,
International markets, 74–77, 79, 82, 84–86	150, 151, 153, 158, 159, 161
Inventory management, 51 Italy, 4–6, 15, 17, 78, 80–83, 97	Omnichannel performance, 139, 140 Online shopping experience, 95, 159
Italy, 4–0, 13, 17, 78, 80–83, 97	Operationalising vintage brands, 66
L	Operation costs, 28, 35, 37, 160
Laser cutting, 43, 45–47, 53	Organizational learning, 201, 204, 214
Laser engraving, 43, 46–48, 53	Outsourcing versus in-house, 11, 12, 17–19,
Laser media, 44	31, 32, 39, 106, 113, 129, 165–167,
Laser safety classification, 46	171, 173, 177
Laser technology, 43–45, 49, 52, 53	
Laundry cleaning services, 166	P
Lela Rose, 14–16, 20	Patagonia, 183, 192, 193, 219, 221, 224, 226,
Literature review, 4, 74, 84, 92, 126, 167,	227, 231–235
184, 221	Pattern making, 11, 31, 35

Index 243

Product development, 11, 13, 15, 17, 18, 20, 27–29, 31–40, 232	188, 190, 191, 193, 194, 196, 200, 201, 207, 213, 214
Product inspection, 33, 38	Strategy change, 171, 176, 177
Product recovery, 222	Supplier selection criteria, 209, 211
Protectionism, 25	Supply chain, 27, 40, 122, 123, 128, 130, 134,
Proto making, 31, 32, 35	165–168, 173, 175–178, 183–187, 189,
	191, 193–196, 199, 201, 204, 206–208,
Q	211, 213, 214, 221–223, 231–233, 235,
Quality, 4–8, 10–24, 27, 28, 31, 33, 36–40, 44,	236
47, 49, 50, 52, 53, 60, 62, 64, 67, 82, 84,	Supply chain management, 184, 185, 222
92, 95, 100, 105, 106, 108, 126, 129,	Supply chain monitoring, 214
147, 174, 175, 190, 191, 193, 195, 206,	Surface treatment, 43, 47, 48, 54
207, 211, 212, 229, 232, 234	Survey cost-effectiveness, 106
Questionnaire, 107–109, 111–115, 148	Survey method, 106, 107
Questionnaire heading, 113	Survey motive, 110
Quick response, 4, 5, 8, 20 24, 25, 43, 106, 123	Sustainability, 29, 64, 69, 127, 130, 133, 167, 183–192, 194–196, 199, 213, 221, 222,
R	228, 229, 232, 236
Rebranding, 82, 89, 92, 98, 99	Sustainable Apparel Coalition (SAC), 191,
Recycled cotton clothing, 183, 192, 193	192, 195
Remanufacturing, 29, 223	Sustainable development, 44, 60, 69, 128, 130,
Rental procedures, 169, 175	134, 184, 185, 201, 223
Rent-The-Runway, 165, 166, 168	Sustainable innovation, 184–186, 188, 189,
Response quality, 113	196, 226
Response rate, 105, 106, 108, 110–116	TD.
Retailer-facilitated used apparel collection	T
programs, 219, 221, 223, 224, 230, 232,	TAL, 183, 184, 187–196
233, 236 Partition 20, 50, (1, (0, 7), 08, 100, 121, 122	Textile retail, 200, 205–207
Retailing, 29, 59–61, 69, 76, 98, 100, 121, 132,	Third-party service providers, 175
135, 139, 147, 148, 195, 224, 226	Traditional communication, 85
3R (Reduce, Reuse, Recycle), 221, 222	Trina Turk, 16–18, 20
S	Tydale, vi, 00
	U
Sample making, 31, 32, 34 Sampling, 38, 111, 112	_
Sampling, 38, 111, 112 Soom pucker, 43, 40, 53	Uniqlo, 109, 219, 221, 224, 226, 231–235
Seam pucker, 43, 49, 53 Shared value with compliant 180	Used Apparel Collection (UAC), 219, 221, 224
Shared value with suppliers, 189 Sharing economy, 166, 168, 175	V
Sharing economy, 166, 168, 175	
Social impact, 191, 234 Social media, 62, 68, 76, 80, 94, 95, 102, 108,	Value-adding services, 39 Vintage customers, 16, 60, 64–69
140, 152, 165, 190	=
Social responsibility, 199–202, 207–209, 211,	Vintage fashion, 59–61, 63–69 Vintage fashion retailer brand, 50, 63, 64
213	Vintage fashion retailer brand, 59, 63, 64 VIP customers, 111, 165, 166, 175
Social responsibility program, 207, 208, 211	***
Social sustainability, 168, 190, 195	W
Socio-cultural context, 89, 98, 100	WeChat, 98, 99, 101, 113
Store brand building, 123, 125, 128	Weibo, 99, 101
Store design, 122, 124–126, 129, 130, 132	Welded garment production, 43, 50, 53
Strategic fit, 174	
Strategies, 6, 7, 22, 23, 25, 75–77, 84–86, 122,	
150, 165, 166, 168, 170, 174, 175, 177,	