(*) 그 🕴 🕄 🗕 🛊 🌏 🗕 🕴 🏈 旦 ADVANCED OUTSOURCING PRACTICE RETHINKING ITO. BPO AND CLOUD SERVICES MARY C. LACITY AND LESLIE P. WILLCOCKS

TECHNOLOGY, WORK AND GLOBALIZATION



Advanced Outsourcing Practice

Technology, Work and Globalization

The *Technology, Work and Globalization* series was developed to provide policy makers, workers, managers, academics, and students with a deeper understanding of the complex interlinks and influences between technological developments, including information and communication technologies, work organizations, and patterns of globalization. The mission of the series is to disseminate rich knowledge based on deep research about relevant issues surrounding the globalization of work that is spawned by technology.

Also in the series:

Mary C. Lacity and Leslie P. Willcocks ADVANCED OUTSOURCING PRACTICE

Carsten Sørensen ENTERPRISE MOBILITY Tiny Technology with Global Impact on Work

Leslie P. Willcocks and Mary C. Lacity GLOBAL SOURCING OF BUSINESS AND IT SERVICES

Francesco Contini and Giovan Francesco Lanzara ICT AND INNOVATION IN THE PUBLIC SECTOR

Niki Panteli and Mike Chaisson EXPLORING VIRTUALITY WITHIN AND BEYOND ORGANIZATIOINS

Julia Kotlarsky, Ilan Oshri, and Paul C. van Fenema KNOWLEDGE PROCESSES IN GLOBALLY DISTRIBUTED CONTEXTS

Edgar Whitley and Ian Hosein GLOBAL CHALLENGES FOR IDENTITY POLICIES

Shirin Madon E-GOVERNANCE FOR DEVELOPMENT A Focus on Rural India

Mary C. Lacity and Joseph W. Rottman OFFSHORE OUTSOURCING OF IT WORK

Ilan Oshri, Julia Kotlarsy, and Leslie P. Willcocks OUTSOURCING GLOBAL SERVICES Knowledge, Innovation and Social Capital

Chrisanthi Avgerou, Giovan Francesco Lanzara, and Leslie Wilcocks BRICOLAGE, CARE AND INFORMATION

Shirin Madon E-GOVERNANCE FOR DEVELOPMENT

Mary C. Lacity, Leslie P. Willcocks, and Yingqin Zheng CHINA'S EMERGING OUTSOURCING CAPABILITIES

Jannis Kallinikos GOVERNING THROUGH TECHNOLOGY Information Nets and Social Practice

Leslie P. Willcocks, Sara Cullen, and Andrew Craig THE OUTSOURCING ENTERPRISE From Cost Management to Collaborative Innovation

Sjaak Brinkkemper and Slinger Jansen COLLABORATION IN OUTSOURCING A Journey to Quality

Advanced Outsourcing Practice

Rethinking ITO, BPO and Cloud Services

Mary C. Lacity University of Missouri, St. Louis, USA

and

Leslie P. Willcocks London School of Economics and Political Science, London, UK





Selection and editorial content © Mary C. Lacity and Leslie P. Willcocks 2012 Foreword © Michael J. Salvino 2012 Individual chapters © the contributors 2012 Softcover reprint of the hardcover 1st edition 2012 978-1-137-00557-1

All rights reserved. No reproduction, copy or transmission of this publication may be made without written permission.

No portion of this publication may be reproduced, copied or transmitted save with written permission or in accordance with the provisions of the Copyright, Designs and Patents Act 1988, or under the terms of any licence permitting limited copying issued by the Copyright Licensing Agency, Saffron House, 6–10 Kirby Street, London EC1N 8TS.

Any person who does any unauthorized act in relation to this publication may be liable to criminal prosecution and civil claims for damages.

The authors have asserted their rights to be identified as the authors of this work in accordance with the Copyright, Designs and Patents Act 1988.

First published 2012 by PALGRAVE MACMILLAN

Palgrave Macmillan in the UK is an imprint of Macmillan Publishers Limited, registered in England, company number 785998, of Houndmills, Basingstoke, Hampshire RG21 6XS.

Palgrave Macmillan in the US is a division of St Martin's Press LLC, 175 Fifth Avenue, New York, NY 10010.

Palgrave Macmillan is the global academic imprint of the above companies and has companies and representatives throughout the world.

 ${\sf Palgrave}^{\circledast}$ and Macmillan $^{\circledast}$ are registered trademarks in the United States, the United Kingdom, Europe and other countries.

ISBN 978-1-349-66823-6 ISBN 978-1-137-00558-8 (eBook) DOI 10.1057/9781137005588

This book is printed on paper suitable for recycling and made from fully managed and sustained forest sources. Logging, pulping and manufacturing processes are expected to conform to the environmental regulations of the country of origin.

A catalogue record for this book is available from the British Library.

A catalog record for this book is available from the Library of Congress.

10 9 8 7 6 5 4 3 2 1 21 20 19 18 17 16 15 14 13 12

Contents

Li	st of Tables, Figures, and Box	vii
Se	ries Preface	ix
Foreword – Time for a Rethink by Michael J. Salvino		
Preface		
Ac	knowledgments	xxix
No	otes on Contributors	xxxi
1	Robust Practices from Two Decades of ITO and BPO Research <i>Mary C. Lacity, Leslie P. Willcocks, and Stan Solomon</i>	1
2	What Providers Say about Establishing the Outsourcing Arrangement Mary C. Lacity and Leslie P. Willcocks	25
3	What Providers Say about Managing Outsourced Services <i>Leslie P. Willcocks and Mary C. Lacity</i>	47
4	Creating Shared Services in the Private and Public Sectors <i>Mary C. Lacity</i>	69
5	The Changing Role of Client Project Management Mary C. Lacity and Joseph Rottman	97
6	Best-of-Breed versus Bundled Services Leslie P. Willcocks, Ilan Oshri, and John Hindle	121
7	Rural Sourcing and Impact Sourcing Mary C. Lacity and Joseph Rottman	143
8	Shifting to Cloud Services: Current Challenges and Future Opportunities Leslie P. Willcocks, Will Venters, Edgar Whitley, and John Hindle	169

Appendix A: Research Method	197
Appendix B: Glossary	205
Bibliography	217
Index	241

Tables, Figures, and Box

Tables

1.1	ITO and BPO research topics	2
1.2	Outsourcing drivers	7
1.3	Outsourcing barriers	9
1.4	Common outsourcing risks	10
1.5	Client-retained capabilities	16
1.6	Provider capabilities	19
2.1	Things providers say	26
2.2	Contract duration	44
3.1	Nine core back-office capabilities	53
3.2	Provider capabilities	60
4.1	Savings generated from virtual consolidation	91
5.1	Company pseudonyms	98
5.2	Effects of offshore outsourcing on client project managers	99
6.1	Bundled services contracts, 2003–08	123
6.2	To bundle or not to bundle outsourcing services:	
	The decision matrix	126
7.1	Overview of provider organizations	147
7.2	Developing human capital	151
7.3	Value proposition, services, and clients	156
7.4	City population, county population, and Cost of Living Index	164
A.1	Coding scheme	199
A.2	Offshore outsourcing research base	201
A.3	Research base used for rural/impact sourcing	203

Figures

Determinants of outsourcing outcomes	22
Outsourcing learning curve	29
Client's bargaining power	36
Outsourcing outcomes from client and provider perspective	66
Conceptualizing shared services as four change programs	73
Phase I transformation programs at Reuters	75
Phase II transformation programs at Reuters	80
The new finance operating model	81
Process analysis at the activity level	83
	Determinants of outsourcing outcomes Outsourcing learning curve Client's bargaining power Outsourcing outcomes from client and provider perspective Conceptualizing shared services as four change programs Phase I transformation programs at Reuters Phase II transformation programs at Reuters The new finance operating model Process analysis at the activity level

4.6	Organizational redesign programs at the State of Missouri	88
6.1	Client propensity to buy bundled services	131
6.2	Sourcing factor analysis	136
6.3	Developing bundled services client capabilities	140
7.1	Relationship between rural sourcing and impact sourcing	144
7.2	Sourcing options	160
7.3	Evolution of client engagements	161
7.4	City populations, county populations, and Cost of Living Index	165
8.1	Cloud evaluations	176
8.2	The four big metrics for cloud	179
8.3	Cloud – Business and provider perspectives	182
8.4	Stratification of the supply industry	183
8.5	Innovation in the cloud	191

Box

3.1 An offshore captive center offshores – Next door	57
--	----

Series Preface

We launched this series in 2006 to provide policy makers, workers, managers, academics, and students with a deeper understanding of the complex interlinks and influences among technological developments, including in information and communication technologies (ICT), work organizations, and globalization. We have always felt that technology is all too often positioned as the welcome driver of globalization. The popular press neatly packages technology's influence on globalization with snappy sound bites, such as "Any work that can be digitized will be globally sourced." Cover stories report Indians doing US tax returns, Moroccans developing software for the French, Filipinos answering UK customer service calls, and the Chinese doing everything for everybody. Most glossy cover stories assume that all globalization is progressive, seamless, and intractable, and leads to unmitigated good. But what we are experiencing in the twenty-first century in terms of the interrelationships between technology, work, and globalization is both profound and highly complex.

The mission of this series is to disseminate rich knowledge based on deep research about relevant issues surrounding the globalization of work that is spawned by technology. To us, substantial research on globalization considers multiple perspectives and levels of analyses. We seek to publish research based on an in-depth study of developments in technology, work, and globalization and their impacts on and relationships with individuals, organizations, industries, and countries. We welcome perspectives from business, economics, sociology, public policy, cultural studies, law, and other disciplines that contemplate both larger trends and micro-developments from Asian, African, Australian, and Latin American, as well as North American and European viewpoints.

As of this writing, we have 14 books published or under contract. These books are introduced below.

1. *Global Sourcing of Business and IT Services* by Leslie P. Willcocks and Mary C. Lacity is the first book in the series. The book is based on over 1000 interviews with clients, providers, and advisors and 15 years of study. The specific focus is on developments in outsourcing, offshoring, and mixed sourcing practices from client and provider perspectives in a globalizing world. We found many organizations struggling. We also found some organizations adeptly creating global sourcing networks that are agile, effective, and cost-efficient. But they did so only after a tremendous amount of

trial and error and close attention to details. All our participant organizations acted in a context of fast-moving technology, rapid development of supply-side offerings, and ever-changing economic conditions.

- 2. *Knowledge Processes in Globally Distributed Contexts* by Julia Kotlarsky, Ilan Oshri, and Paul van Fenema examines the management of knowledge processes of global knowledge workers. Based on substantial case studies and interviews, the authors along with their network of co-authors provide frameworks, practices, and tools that consider how to develop, coordinate, and manage knowledge processes in order to create synergetic value in globally distributed contexts. Chapters address knowledge sharing, social ties, transactive memory, imperative learning, work division, and many other social and organizational practices to ensure successful collaboration in globally distributed teams.
- 3. *Offshore Outsourcing of IT Work* by Mary C. Lacity and Joseph W. Rottman explores the practices for successfully outsourcing IT work from Western clients to offshore providers. Based on over 200 interviews with 26 Western clients and their offshore providers in India, China, and Canada, the book details client-side roles of chief information officers, program management officers, and project managers and identifies project characteristics that differentiate successful from unsuccessful projects. The authors examine ten engagement models for moving IT work offshore and describe proven practices to ensure that offshore outsourcing is successful for both client and provider organizations.
- 4. *Exploring Virtuality within and beyond Organizations* by Niki Panteli and Mike Chiasson argues that there has been a limited conceptualization of virtuality and its implications on the management of organizations. Based on illustrative cases, empirical studies, and theorizing on virtuality, this book goes beyond the simple comparison between the virtual and the traditional to explore the different types, dimensions, and perspectives of virtuality. Almost all organizations are virtual, but they differ theoretically and substantively in their virtuality. By exploring and understanding these differences, researchers and practitioners gain a deeper understanding of the past, present, and future possibilities of virtuality. The collection is designed to be indicative of current thinking and approaches, and provides a rich basis for further research and reflection in this important area of management and information systems research and practice.
- 5. *ICT and Innovation in the Public Sector* by Francesco Contini and Giovan Francesco Lanzara examines the theoretical and practical issues of implementing innovative ICT solutions in the public sector. The book is based on a major research project sponsored and funded by the Italian government (Ministry of University and Research) and coordinated by Italy's National Research Council and the University of Bologna during the years 2002–06.

The authors, along with a number of co-authors, explore the complex interplay between technology and institutions, drawing on multiple theoretical traditions such as institutional analysis, actor network theory, social systems theory, organization theory, and transaction-costs economics. Detailed case studies offer realistic and rich lessons. These case studies include e-justice in Italy and Finland, e-bureaucracy in Austria, and Money Claim On-Line in England and Wales.

- 6. *Outsourcing Global Services: Knowledge, Innovation, and Social Capital*, edited by Ilan Oshri, Julia Kotlarsky, and Leslie P. Willcocks, assembles the best work from the active participants in the Information Systems Workshop on Global Sourcing, which began in 2007 in Val d'Isere, France. Because the quality of the contributions was exceptional, we invited the program chairs to edit a book based on the best papers at the conference. The collection provides in-depth insights into the practices that lead to success in outsourcing global services. Written by internationally acclaimed academics, it covers best practices in IT outsourcing, business process outsourcing (BPO), and netsourcing.
- 7. *Global Challenges for Identity Policies* by Edgar Whitley and Ian Hosein provides a perfect fit for the series, in that the authors examine identity policies for modern societies in terms of the political, technical, and managerial issues needed to prevent identity fraud and theft. The scale of the problem exceeds political boundaries and the authors cover national identity policies in Europe and the rest of the world. Much of the book provides indepth discussion and analysis of the United Kingdom's National Identity Scheme. The authors provide recommendations for identity and technical policies.
- 8. *E-Governance for Development* by Shirin Madon examines the rapid proliferation of e-Governance projects aimed at introducing ICT to improve systems of governance and thereby promote development. In this book, the author unpacks the theoretical concepts of development and governance in order to propose an alternative conceptual framework, which encourages a deeper understanding of macro- and micro-level political, social, and administrative processes within which e-Governance projects are implemented. The book draws on more than 15 years of research in India during which time many changes have occurred in terms of the country's development ideology, governance reform strategy, and ICT deployment.
- 9. Bricolage, Care and Information, edited by Chrisanthi Avgerou, Giovan Francesco Lanzara, and Leslie P. Willcocks, celebrates Claudio Ciborra's Legacy in Information Systems Research. Claudio Ciborra was one of the most innovative thinkers in the field of information systems (IS). He was one of the first scholars who introduced institutional economics in the study of IS; he elaborated new concepts, such as "the platform organization" and

"formative contexts", and he contributed to the development of a new perspective altogether through Heideggerian phenomenology. This book contains the most seminal work of Claudio Ciborra and the work of other authors who were inspired by his work and built upon it.

- 10. *China's Emerging Outsourcing Capabilities*, edited by Mary C. Lacity, Leslie P. Willcocks, and Yingqin Zheng, marks the tenth book in the series. The Chinese government has assigned a high priority to science and technology as its future growth sectors. China has a national plan to expand the information technology outsourcing (ITO) and BPO sectors. Beyond the hopes of its leaders, is China ready to compete in the global ITO and BPO markets? Western companies are increasingly interested in extending their global network of ITO and BPO services beyond India and want to learn more about China's ITO and BPO capabilities. In this book, we accumulate the findings of the best research on China's ITO and BPO sectors by the top scholars in the field of information systems.
- 11. *The Outsourcing Enterprise: From Cost Management to Collaborative Innovation* is by Leslie Willcocks, Sara Cullen, and Andrew Craig. The central question answered in this book is: How does an organization leverage the evergrowing external services market to gain operational, business, and strategic advantage? The book covers the foundations of mature outsourcing enterprises that have moved outsourcing to the strategic agenda by building the relationship advantage, selecting and leveraging suppers, keeping control through core-retained capabilities, and collaborating to innovate. The book provides proven practices used by mature outsourcing enterprises to govern, design, and measure outsourcing. The final chapter presents practices on how mature outsourcing enterprises prepare for the next generation of outsourcing.
- 12. *Governing through Technology* by Jannis Kallinikos offers thoughtful scholarship that examines the relationships among information, technology, and social practices. The author discusses the regulative regime of technology and issues of human agency, control, and complexity in a connected world. He provides a valuable counter-perspective to show that social practices are, in part, unmistakeably products of technologies; that technologies are, through historical processes, embedded in the social fabric; and that, if technological determinism is naive, the notion of the regulative regime of technology remains alive and well into the Internet age.
- 13. Enterprise Mobility: Tiny Technology with Global Impact on Work by Carsten Sørensen explores how mobile technologies are radically changing the way work is done in organizations. The author defines enterprise mobility as the deployment of mobile information technology for organizational purposes. The author contrasts how large technology projects in organizations, such as enterprise resource planning (ERP) implementations, will increasingly

be managed differently because of mobile technology. The introduction of mobile technology supporting organizational information work will often be driven by individuals, by small teams, or as part of departmental facilitation of general communication services.

14. Collaboration in Outsourcing: A Journey to Quality, edited by Sjaak Brinkkemper and Slinger Jansen, is based on an integrated program of outsourcing research at Utrecht University in the Netherlands. The book is written for practitioners and is based on interviews and case studies in many global outsourcing firms, including Cisco, IBM, Deloitte, Infosys, Logica, and Patni – to name a few. The 16 chapters are short, tight, and written to communicate best practices quickly. The chapters cover the topics of governance, knowledge management, relationship management, and new trends in software development outsourcing.

In addition to the books already published and under contract, we have several other manuscripts under review but always need more. We encourage other researchers to submit proposals to the series, as we envision a protracted need for scholars to deeply and richly analyze and conceptualize the complex relationships among technology, work, and globalization. Please follow the submission guidelines on the Palgrave Macmillan website (www.palgraveusa.com/Info/Submissions.aspx). Stephen Rutt (e-mail: s.rutt@palgrave.com) is the publishing director for the series.

> Leslie P. Willcocks Mary C. Lacity September 2011

Foreword – Time for a Rethink

As revolutionary moments go, the day in early October 1989 when Eastman Kodak Co. CIO Katherine Hudson struck a deal to outsource the bulk of the company's IT functions undoubtedly ranks among the least noted. But in business history, it was a seminal event – one followed soon thereafter by major and even innovative outsourcing deals made by such industry leaders as DuPont, BP, the London Stock Exchange, and the Dow Chemical Co. These companies legitimized a sourcing strategy that had been tentative and experimental until that point. Since then, the growth of outsourcing has been extraordinary. Today, it is a global market estimated to be worth more than \$300 billion – a number that could top the \$400 billion mark sometime in 2011. The practice has evolved dramatically since its "Kodak moment" 20 years ago.

What will outsourcing look like during its third decade, and what will it mean to the competitive nature of organizations around the world? This book asks for a rethink of what we have learned and will continue to learn, and I welcome the opportunity here to consider ways forward in light of the two decades we have had already of outsourcing practice.

Outsourcing has not altered the fundamentals of business. But it has changed the way companies create and distribute optimal value from and around those fundamentals. From its origins as a hardware operations play, outsourcing has moved with a kind of relentless logic up the value chain – first to applications and software, and then to higher level business processes and services. The next wave of change will take companies to unexplored territory: strategic value and innovation.

Old rules, new rules

Catching that wave, however, requires an understanding of the trajectory of outsourcing to date and the insight to see where the trajectory of value redistribution will lead. It also requires an improved ability to manage those evolving value streams. In the late 1980s, after years of stagnation, the world's economy was booming again. For global businesses, fundamental changes in the nature of competition were at hand. Value redistribution had begun.

For example, companies such as Microsoft and Intel were about to transform the technology world by breaking up, or "disaggregating," the PC industry. Instead of relying on a single provider for most of a computing solution, customers could go with the best provider for each part of the value chain. In this context, outsourcing can be seen as a disaggregation, not of an industry or market, but of the enterprise itself. This was the period when business strategy was beginning to be driven by the conviction that companies should focus on their core competencies and get out of markets or functions in which they could not compete at the highest level. So why shouldn't the company continue to run the parts of the disaggregated business that remained core to value creation, but let an external expert run the parts that did not?

According to this model, value is initially built up over time for any kind of product, technology, or service. Eventually, however, that value levels out and then begins to diminish.

The first part of the enterprise to experience the diminishing value of running a function internally was the hardware side of IT. As a result, many early outsourcing contracts, including those initiated by Eastman Kodak and General Dynamics Corp., focused primarily on IT infrastructure – taking over hardware operations and running a client's data center. The value from such an arrangement was measured primarily in cost reduction. These were also financial arrangements. The outsourcing provider would write a big check to the client for its hardware – which, in theory, could then be used to serve multiple clients as a data center provider. It was a play to establish economies of scale, and, to an extent, it worked.

One major drawback loomed over outsourcing hardware alone, however. It was summed up at the time by the phrase "my mess for less" – that is, some companies had IT operations that were costly, redundant, and inefficient, so in effect the client was asking a provider to "fix" that situation for them while also saving them money.

As IT hardware outsourcing entered a period of commoditization and price pressure, it didn't take long for the value redistributed to the outsourcing provider to level out and begin to decline. By the early 1990s, the central question for both companies and their providers had become: Where else can value be created by disaggregating the functions and processes of the enterprise?

Moving up the stack

In outsourcing, the key to delivering ongoing value to both parties was now to "move up the stack" – higher up the ladder of business value. For their part, providers had to rethink their role if they were to maintain an adequate level of value for themselves. They had to move beyond commoditization and build a business case that didn't rely only on the cost side of the equation. A new generation of outsourcing arrangements would also need to be about quality, efficiency, and effectiveness – measured and visible via spreadsheets.

One innovative example of how both client and provider could hold on to some of that value came in 1992 at the London Stock Exchange (LSE). At the time, the exchange's trading and information systems were showing signs of age. But while the exchange and its provider were able to develop a transformation program to dramatically upgrade systems, the LSE was short of capital. So the two parties worked out an innovative "gainsharing" mechanism between client and provider. The plan worked extraordinary well, and some £50 million of savings were redirected into the implementation of new systems.

People, not machines

The next rung on the business value ladder was managing a company's software – the business applications that, various studies show, can constitute as much as 75% of a typical company's IT budget. Running a company's applications well would prove to redistribute value in a manner that was less fleeting than a hardware play alone because it requires higher order skills. This was really about running people, not running machines.

Canada Post was one of the first major organizations to leverage an application management outsourcing relationship at scale. By the early 1990s, companies were beginning to migrate from mainframes to the world of client/server and distributed computing. Canada Post executives felt that its organization lacked the skills internally to accomplish that difficult migration alone. By using an outsourcing provider, Canada Post could reduce both risks and costs, and was able to focus its resources on its core business and customer obligations.

Delicate balance

Another milestone was reached in the mid-1990s with chemicals giant DuPont's decision to outsource both IT infrastructure and applications (both considered cutting-edge) in what the company called an "alliance partnership" with two providers. At \$4 billion over 10 years, it was then one of the biggest deals ever. The deal focused on cost reduction and efficiency, but also on other important business metrics: improving productivity, the speed of delivery, and the value of IT investments. Value redistribution from outsourcing had entered a new phase. DuPont and others were learning to discriminate between what could be commoditized – redistributing value by driving down costs and giving work to the lowest bidder – and higher level work, where the goal was to deliver more business strategy and performance. DuPont itself achieved several important goals: increased variability in spending, greater flexibility in responding to business needs, and access to diversified, state-of-the-art business solutions, methods, skills, and techniques.

Application outsourcing evolved still further with Dow Chemical's decision to outsource its application development and maintenance activities in an arrangement known as "co-sourcing." Dow retained responsibility for some aspects of the IT function while outsourcing most of the application work. One of the distinctive aspects of Dow's arrangement was the rigorous measurement of results. In addition to the traditional commitments of on-time and on-budget delivery of the project, the ability to meet defined response and resolution times on issues, and support, higher level metrics – such as development and maintenance productivity, quality measures in terms of defect rates, and business measures such as speed-to-value – were also tracked. This work marked a turning point in value redistribution and in effective management: measuring the value given back to the business units and functions at Dow was built into the deal.

DuPont's decision to form an alliance partnership and Dow's co-sourcing tactic revealed a more complex approach to governance, with both client and supplier working to improve the ways they managed the arrangement. The notion of what Professor Mary Lacity, International Business Fellow and Professor of Information Systems at the University of Missouri–St. Louis, calls "relational governance" had arrived.

Process pioneer

If managing applications was actually about managing projects and people, why couldn't the skills and experience from application outsourcing be transferred to the external management of business processes and the people performing them? The beginnings of this marketplace were already present with payroll outsourcers; improvement, not just performance, was the need now.

Global resources giant BP got this message very early. Until 1987, the company had been partly government-owned, and analysis had shown that the organization was still too bureaucratic and costly to succeed in a rapidly changing industry. In 1991, the CEO of the BP Exploration business unit took an important first step in what would be a thorough transformation of the company by outsourcing all of the division's accounting operations for Europe.

The 1991 agreement consolidated all of BP's accounting centers throughout the United Kingdom in a single accounting system and at a single site. Five years later, BP outsourced the accounting functions for its US upstream, downstream, and chemicals businesses. And in 1999, following its merger with Amoco, BP outsourced its upstream business to one outsourcing provider, and its downstream businesses to another.

BP's success became a model for other companies looking to improve the efficiency and effectiveness of their business processes. Telecommunications giant BT became one of the first enterprises to outsource its HR function, US hightech company Avaya pioneered end-to-end outsourcing for the enterprise learning function, and Deutsche Bank found that it could make wiser procurement decisions and better control its procurement expenses through an outsourcing relationship.

A second reason why BP stands out in the history of outsourcing is that its agreements made it clear that economies of scale would be an important part of the value redistribution caused by outsourcing. After its shared services center was established to provide finance and accounting services, it began to attract other companies in the oil industry.

Industrial strength

This kind of "one-to-many" delivery capability was a significant step in the industrialization of the outsourcing industry. Providers were demonstrating that, at scale, they could not only transition hundreds of employees into new organizations and manage them more effectively, they could also redeploy them where necessary to work with other clients on similar work. This approach boosted productivity and, because it rationalized the functions being performed, also drove down costs.

Notable in these early examples of BPO was the realization of how critical effective transition management is to realizing the full value of the deal. At BP, for example, as part of the initial agreement, European legislation dictated that a large group of BP employees (about 200) would have to be transferred to the provider.

Yet such a transfer was really more than a regulatory requirement; it was a key part of BP's strategy to move core players to the outsourcer, because of the importance of those employees' knowledge, skills, and experience with the company. At a higher level, companies were beginning to recognize that BPO could be a vehicle for radical change. For example, BP's decision to outsource its finance and accounting functions came as a shock – and was actually intended to have that effect.

New century, new goals

The next challenge for outsourcing came from an unlikely source: the looming Y2K emergency, requiring the massive rewrite code to prevent applications from recognizing "00" in date fields as 1900 instead of 2000. Given the enormity of the task, the answer was to take the work around the world.

This was when sourcing work to areas such as India and the Philippines took off. All the pieces were now in place – industrialized and standardized methods, transition planning, more effective relationships, and now, deep experience with global sourcing – to move outsourcing in a more transformational direction.

A 2001 Accenture study found that conventional outsourcing was reaching its limits in terms of generating incremental savings. Rigorous service-level agreements, and even establishing penalties for failure to meet performance targets, could not by themselves improve the business value provided by the kinds of outsourcing arrangements then in place.

The answer would be to pursue more collaborative relationships capable of driving both cost savings and innovations, in the same way that successful companies use a combination of internal resources and strategic partners for product development. Sometimes that meant sharing ownership for results – an insight adopted by many outsourcing pioneers.

In 2002, for example, when BP renewed its finance and accounting outsourcing agreement, two things happened. First, the company and its provider agreed to an enhanced risk-reward arrangement that set annual cost and service-level targets. The provider would receive additional financial rewards based on achieving those targets. Second, the contract set aside a number of days for BP to consult with the provider about innovation – new ideas, applications, and technologies. In effect, an annual commitment to spend time thinking about new and better ways of doing things was written into the agreement.

Recent research from Leslie Willcocks of the London School of Economics and Political Science, UK, stresses the importance of such collaborative relationships in taking outsourcing to the next logical phase of value redistribution: to innovation itself. According to Willcocks, both sides must strive for a deeper level of collaboration, "if outsourcing is to reach its next level of value creation" (Willcocks et al. 2011).

Bundled up

The move toward transformational outsourcing has led companies and academics alike to reconsider the merits of sourcing to multiple providers versus a single provider. The issue is complex, requiring careful balance. Independent research, including notably by the authors of the present book (see Chapter 1), has found that a combination of outsourcing and insourcing – rather than a total outsourcing approach – has historically achieved expected cost savings with a higher relative frequency. Yet this fact, perfectly applicable in a cost takeout environment, becomes problematic if the future of outsourcing is seen as a collaborative relationship focused on innovation and strategic value creation.

More recently, companies have begun to realize that the hidden costs of managing multiple providers are eating substantially into the value of the deals – and into the effectiveness of the overall collaboration. A 2009 research report from industry analyst IDC looks at the issue in dollars-and-cents terms, estimating that the governance costs in a multi-sourcing arrangement "can

range from approximately 5 percent to 8 percent of the contract value." In addition, the report notes that shorter deals, which must be renegotiated every three years on average, add to procurement costs. "In some cases," cautions IDC, "these hidden costs have actually nullified the additional price benefits."

Similarly, another 2009 study, from the Everest Research Institute, crunches more detailed numbers when analyzing this phenomenon. The savings from using fewer suppliers for application development and maintenance can be as much as 22–28% of multi-sourcing costs on an annualized basis, including a 35–40% annualized reduction in one-time setup costs and a 20–25% reduction in recurring costs. Key drivers of these savings include reduced governance costs to manage supplier relationships and delivery, as well as optimized resourcing from suppliers.

By combining or "bundling" functions and processes to a single provider, companies can generate significant synergies resulting in both greater cost savings and a bigger impact on the business, especially because of the ability to create a deeper collaborative relationship.

Bundled approaches can vary considerably from company to company. They can involve only the IT function – combining both infrastructure and applications – or they can bundle the management of multiple business processes. Or they can combine IT and business processes under a single arrangement, reflecting the increasing centrality of technology platforms in the enactment of business processes.

Several groundbreaking bundled programs stand out in recent years. Unilever has gained from bundling the management of its applications and its HR functionality. A comprehensive bundling arrangement at Bristol-Myers Squibb – application development and maintenance, finance, and R&D – has helped the company adjust to regulatory and industry challenges, and has helped the company in its productivity and transformation initiatives.

Companies can implement a bundled approach in "big bang" fashion, though more often than not the approach is sequential. BT, for example, decided to expand its BPO strategy over time – beginning with HR, and then moving to learning and then to finance and accounting. Chapter 2 in the present book deals with the bundling issue in great detail based on meticulous research, and gives us fresh insights into the occasions when bundling is suitable and the sorts of payoffs that can be achieved where the decision is right for the parties.

Redistributing knowledge, moving to cloud

What's next? As always, outsourcing will continue to be driven by customer needs, and that will result in market-driven innovations and new types of value redistribution. Basic outsourcing is already being extended into other innovative applications, such as product life-cycle management. Who would have expected, for example, that aerospace and defense firms would outsource the detailed specifications needed to build aircraft through "engineering services"?

Industry-specific outsourcing is also an important part of the future because it leverages the power of the one-to-many platform mentioned earlier. Accenture's Navitaire, for example, provides a comprehensive package of integrated, outsourced services to the airline industry – from reservations capabilities to resource planning and distribution, to back-office functions and revenue accounting.

As the global economy has become knowledge-based, so too has the outsourcing industry, and the next stage in value redistribution will involve nothing less than knowledge itself. The modern enterprise now has the ability to source not only hardware, applications, and services but also knowledge and skills, anywhere in the world. Some of the knowledge needed to achieve competitive advantage in the future will remain internal to a company – distinctive intellectual property that drives new products and services. Other forms of knowledge will be sourced externally, opening up the walls of collaborative innovation to drive better ways of doing business.

Companies will likely increase their reliance on universities and private research labs, and on their suppliers. Outsourcing providers are already retooling themselves as providers of differentiated products and innovative processes. As these capabilities grow, co-sourcing with such providers to drive innovation will become increasingly important. It also seems likely that companies will take equity positions in organizations focused on emerging markets and new ideas. The possibilities inherent in what has come to be called cloud services are also massive, but the challenges are also considerable, as the last chapter in the present book makes clear.

Committing to exciting, shared goals will be critical to winning in outsourcing's next phase. So will a model through which both client and provider benefit from the partnership, with creative deal structures reflecting value creation that exceeds initial targets. The time is coming soon when even the very word "outsourcing" will be obsolete. No one in the industrialized world thinks of grocery shopping, for example, as outsourcing their family's food production, though that of course is exactly what it is. We simply procure food from reliable sources at the quality and price we desire. That is where business strategy is now moving – inexorably. It's an exciting time.

This book

Given this history and these prospects, I am pleased to welcome the in-depth rethink that Mary Lacity and Leslie Willcocks offer in this volume. These two researchers have been the leading academics in global outsourcing research for over a decade. Their work is evidence-based, rigorously researched, and independent, and offers major insights into the workings of the outsourcing market and into individual deals – they have obviously got very close to what actually happens in outsourcing arrangements. But they not only get the research done; their findings also contain solid guidelines for practitioners about what works and what to avoid. Their approach is nuanced, always highlighting in what circumstances certain things work, and what the alternatives might be. This is evident, for example, in Chapter 6, in the work on bundling which Accenture supported, seeing it as a key issue in outsourcing going forward, given the changing needs of clients and the changing, strengthening capabilities of providers.

The book bears fruit in every chapter at a time when change is in the air, fueled by new developments in information technology. The last chapter on cloud services asks perhaps the biggest question of all - whether it is time for an outsourcing rethink. What sorts of promises and what sorts of challenges does the much mooted move to the "cloud" represent for clients, suppliers, and indeed the whole outsourcing industry? At Accenture we have our own insights into these questions, and we are actively collaborating with our key clients and alliance partners in shaping the cloud future. Again, we saw this as a particularly key topic for the industry as a whole, and therefore sponsored the research study that is partly represented in Chapter 8 of the present book. The authors draw out major insights into the promises, risks, challenges, choices, and actions needed – for practitioners and providers alike – with the growing deployment of cloud architectures. It is a tantalizing look into what the next ten years could bring us, and an evocative way to end a book that assesses the history of outsourcing and what it teaches us, as we ready ourselves for what is yet to come.

Michael J. Salvino

Preface

Practitioners have nearly 25 years of experience with ITO and about 15 years of experience with BPO. We wrote this book for thoughtful clients and providers who are ready to master advanced practices. In this book, we provide the latest thinking, proven practices, and advanced practices required to garner business advantage from the various sourcing options, including offshore outsourcing, shared services, bundled services, impact outsourcing, rural outsourcing, and cloud computing. Understanding and leveraging these markets will continue to be a key capability in both client and provider firms as the scale, scope, and complexity of the global markets continue to grow rapidly.

Size of outsourcing markets

The sizes of outsourcing markets are estimated by research firms such as Booz, Allen and Hamilton, Gartner, IDC, and Everest. Every year since the late 1980s, the global ITO and BPO markets have increased in value, with the exception of 2009. In 2011, the global ITO and BPO markets were estimated to be worth nearly half a trillion dollars. The ITO market has always been larger and more mature, worth about \$290 billion in 2011 compared to the BPO market, which was worth about \$170 billion that year. Some research firms, however, estimate that BPO is growing at a faster rate than ITO. For example, Booz Allen and Hamilton estimated that BPO is growing at 25% per year compared to ITO growing at 10% per year. BPO expenditures are in areas such as the human resources, financial and accounting services, procurement, back-office administration, call centers, legal, customer-facing operations, and asset management. BPO is outpacing ITO because many executives recognize that they under-manage their back offices, and do not wish to invest in back-office innovations. Providers are rapidly building capabilities to reap the benefits from improving inefficient processes and functions. IT provides major underpinning for, and payoff from, reformed business processes. Thus, many of the BPO deals will circumscribe back-office IT systems.

In this book, we look at various slices of the global ITO and BPO markets, including offshore outsourcing, bundled services, impact outsourcing, rural outsourcing, and cloud computing. The last one is predicted to be the largest market among these slices. Some of these markets – like rural sourcing and impact sourcing – are currently small, but are predicted to grow dramatically over the next few years. The offshore outsourcing market has been estimated to be about an \$80 million to a \$100 billion market, with India representing

the largest share of IT and business service exports. Bundled outsourcing is an interesting and dynamic market, with revenues of at least \$35 billion a year. Overall, the Rockefeller Foundation sizes the global impact sourcing market at \$4.6 billion in 2010. We estimated the US ITO "pure-play" rural outsourcing market to be about \$200 million in 2011. It is quite possible that the US rural outsourcing market would be worth \$1 billion if the value of work from all non-urban ITO and BPO delivery centers operated by large providers such as IBM, Accenture, or Dell Services was included. Cloud computing is one of the fastest growing markets in the ITO/BPO space. According to Gartner, cloud computing was a \$68.3 billion industry in 2010. Cloud-based service revenues have been projected to grow globally from \$44 billion to \$60 billion in 2013 by IDC and Harris and Nunn. Gartner predicts it will reach \$148.8 billion by 2014. Practitioners need deep understanding of these sourcing markets and the actual (not hyped) capabilities of providers serving these markets.

Overview of the chapters

In Chapter 1, we review what we call "robust practices" - practices that have been proven, time and time again, to be effective. Robust practices serve as a foundation for advanced practices addressed in other chapters. We extracted robust practices from 20 years of ITO and BPO research. Based on a review of 1365 findings, we extract the insights for practice that answer nine questions relevant to practitioners. The chapter begins with a rather disappointing statistic from the meta-analysis: only 60% of outsourcing outcomes were considered positive by clients. But we also report good news: researchers have a good understanding of the robust practices needed to ensure positive outcomes and to avoid negative outcomes. There are five areas that clients must master: making the best decisions, signing the best contracts, engaging in good relational governance, retaining strong capabilities, and selecting providers with complementary capabilities. According to the meta-analysis, the best decisions used a rigorous evaluation process that included the full commitment and support of top management and resulted in selective sourcing decisions, often with multiple providers. The best contracts were complete, with detailed clauses in the outsourcing contract. For ITO contracts, the optimal contract duration was in the three- to five-year range, although contract duration was not a determinant of BPO success. All parties need to behave as good partners by openly sharing knowledge and communicating about their expectations, progress, strengths, and weaknesses. Trust is also a vital component to good relationships. Clients need a different set of capabilities after outsourcing. These capabilities help clients transition from providing a service to managing a provider. And finally, clients need to find providers with

strong human resource, technical, methodological, and domain understanding capabilities.

In Chapters 2 and 3, we share in detail what providers have been saying to us about clients during the past two decades – the things they wish clients would know and do, as well as some things they wish clients did not know or do. Some of these statements will not shock experienced clients. But what will stimulate the interest of all outsourcing clients – both novice and experienced – is that we compare what providers say with best practices derived from academic research introduced in Chapter 1 and from our own 23 years of research (see Appendix A). In Chapter 2, we cover the ten statements providers make about establishing the outsourcing arrangement. These include statements about the ideal customer, outsourcing strategy, and contract negotiations. In Chapter 3, we cover the ten statements about delivering the outsourced service. These include statements about retained client capabilities and management, provider capabilities and management, relational governance, and outsourcing outcomes. We derive guidelines for client managers.

In Chapter 4, we discuss the first major sourcing option organizations should consider: shared services. The recent downturn in the economy has intensified the pressures for organizations in both the public and private sector to reduce costs, shed headcount, and do more and more with fewer resources. Shared services are seen as a powerful practice for relieving these pressures. Shared services offer the promises of lower costs, tighter controls, improved service levels, and scalability. Studies have shown, however, that not all organizations achieve the benefits they expect from shared services; many shared service initiatives take years to implement and result in meager cost savings. Among all the advanced practices for successfully implementing shared services, change management may be the most important and the most lacking practice. Based on case studies at Reuters and the State of Missouri, we found that creating shared services requires a coordinated integration of four change programs: business process redesign (BPR), organizational redesign, sourcing redesign, and technology enablement. The Reuters case presents lessons on implementing a global financial shared services organization, and the State of Missouri case presents lessons on public sector IT consolidation.

In Chapter 5, we address the disconnect between senior executives and middle managers concerning outsourcing in general and concerning offshore outsourcing in particular. While strategic outsourcing decisions are crafted by senior executives, they are executed by middle managers and staff who may not share the vision or enthusiasm of their senior leadership team. In order for senior executives to ensure their strategic outsourcing decisions are successful, they need a deeper understanding of the expectations, perceptions, and behaviors of the staff they assign to execute their vision. In this chapter, we deeply focus on one stakeholder within client organizations: the client project manager. Among the many stakeholders affected by outsourcing, the client project managers were most responsible for integrating providers into project teams and for delivering projects on time, on budget, and with the required quality and functionality. Based on interviews with 67 client project managers in 25 organizations, we develop a framework of 27 effects of outsourcing on the role of the client project manager. The framework targets one of the most challenging outsourcing decisions to implement: offshore outsourcing of software development and maintenance. By first understanding their challenges and experiences as captured in the framework, we next identify advanced practices senior executives can use to empower client project managers to more successfully execute strategic outsourcing decisions.

Chapter 6 more thoroughly examines multi-sourcing - a robust practice derived and discussed by academic research in Chapter 1 - versus bundled services. We define bundled services as "a mix of business process and/or IT services purchased separately or at the same time from the same provider where synergies and efficiencies are sought in end-to-end processing, governance, relationship management, cost and performance." Each option has its own benefits and drawbacks. Multi-sourcing was found to be positively associated with outcomes because of best-of-breed sourcing, mitigating the risks of relying too much on one provider, and helping clients adapt in changing environments. Despite the positive effects of multi-sourcing, it has several disadvantages, including increased transaction costs as clients manage more providers, interdependencies, and interfaces. The major advantages of bundled services include simplified procurement, simplified governance, fewer transaction costs, and economies of scale and scope. But bundled services increase switching costs and the risks of relying on one provider. To understand the trade-offs between bundling services and multi-sourcing, we studied over 1850 outsourcing contracts and carried out interviews with 69 leading clients and providers in ITO and BPO services. We identify 20 drivers to consider when deciding between bundled or unbundled ITO and BPO services. These drivers are grouped into these factors: client factors, relational factors, provider market and capabilities factors, and cost effectiveness characteristics, and form the basis of a decision-making matrix designed for client use. From the research we will also distill five profiles of clients more, or less, likely to buy bundled services: Strategic Explorer, Conservative, Operational Exploiter, Experimenter, and Multi-sourcer. This is a distinctive and new contribution to the understanding of clients, and how they can continue to develop their ability to harness the ever-increasing capabilities of business and IT service providers.

Chapter 7 encourages practitioners to consider sourcing to two overlapping niche outsourcing markets: rural sourcing and impact sourcing. Rural sourcing

is the practice of locating delivery centers in low-cost, non-urban areas. Impact sourcing is the practice of hiring and training marginalized people in the ITO or BPO industries that normally would have few opportunities for good employment. Rural sourcing and impact sourcing intersect when marginalized people in rural areas are hired, trained, and employed in ITO or BPO businesses. Based on five case studies, advanced practices in this chapter focus on how these niche markets fit into an outsourcing portfolio and how clients can best engage rural or impact sourcing providers.

Chapter 8 is about the biggest trend in outsourcing: cloud computing. The reality today is that cloud computing cannot achieve the plug-and-play simplicity of electricity, at least, not as long as the pace of innovation, both within cloud computing itself and in the myriad applications and business models it enables, continues at such a rapid pace. In this chapter, we challenge practitioners to think about what the cloud could mean in the long term. The real potential strength of cloud computing is that it can be a catalyst for more innovation. In fact, as cloud computing continues to become cheaper and more ubiquitous, the opportunities for combinatorial innovation will only grow. The distinctive features of cloud computing also offer many potential opportunities for business innovation, particularly given its service (and service quality) focus, coupled with the flexibility that new technology delivery mechanisms provide. These features serve to change the risk profile of business innovations to the extent that it is now increasingly possible to specify new business processes and their associated required service levels, experiment with them for a short time, and either disband them if they are unsuccessful or rapidly scale those that have potential.

In summary, these chapters provide robust and advanced practices for thoughtful practitioners ready to rethink their outsourcing strategies. Based on nearly 25 years of outsourcing research and practice, it is time to move beyond merely *managing* outsourcing decisions and implementations to *leading* them. Leadership is about shaping the context and mobilizing resources to deal with the adaptive challenges organizations face. In glimpsing the future, it is clear that changing business needs, the globalizing and technologizing of the supply of business services, and the much greater use of outsourcing will provide challenges that will require this shift from management to leadership. Leaders think outside the box, explore creative alternatives, envision the future, and most importantly influence others to realize the new vision. Leaders know that inspiring and empowering change are their most important tasks, whether this change involves outsourcing of a discrete service or involves a global transformation of bundled outsourced services.

This book is not the end of the journey, as we continue to study the space. We are currently working on many projects, including studies on next generation BPO, real innovation in outsourcing engagements, responses to

protectionist pressures that threaten the industry, measures on the health of outsourcing engagements, and continuing work on rural, impact, and cloud computing. Readers are welcome to contact us with comments and insights.

Mary C. Lacity (Mary.Lacity@umsl.edu) Leslie P. Willcocks (L.P.Willcocks@lse.ac.uk)

Acknowledgments

Since 1989, we have interviewed thousands of private and public sector clients, providers, and advisors in North America, Europe, Australia, Asia, and Africa on the topic of sourcing business and information technology services. We therefore first and foremost thank the now over 2500 executives across the globe who have participated in our research over the past 23 years. Without them our work would not have been possible. Due to the sensitive nature of outsourcing, many participants requested anonymity and cannot be individually acknowledged. Participants who did not request anonymity are acknowledged in the appropriate places throughout this book.

We wish to acknowledge the supportive research environments from our respective institutions. Mary thanks Vice Chancellor Nasser Arshadi, Dean Keith Womer, Dr Joseph Rottman, Dr Dinesh Mirchandani, Dr Ashok Subramanian, Dr Kailash Joshi, Dr Vicki Sauter, and Karen Walsh at the University of Missouri–St. Louis, USA. She also thanks the PhD students she has enjoyed working with, including Shaji Khan, Stan Solomon, Aihua Yan, and R. S. Prasad. She misses and thanks Dr Rajiv Sabherwal and wishes him well at the University of Arkansas, USA. Leslie thanks his great colleagues at the London School of Economics and Political Science, UK, for their patience, kindness, and moral and intellectual support over six years.

Work is pleasurable only in the context of a fuller life. Mary thanks her parents, Dr and Mrs Paul Lacity, and her three sisters, Karen Longo, Diane ludica, and Julie Owings. She thanks her closest friends, Jerry Pancio, Michael McDevitt, Beth Nazemi, Val Graeser, and Katharine Hastings. For Diane and Katharine, who are no longer with us, traveling mercies. Finally, she thanks her son, Michael Christopher, to whom this book and all things in her life are dedicated. Leslie would like to thank his circle of family and friends for their forbearance and humor, and especially George, Catherine, and Chrisanthi, not least for the getaway nights at the opera, and Andrew for persisting with the tennis, against odds. Above everything, love to his beloved wife Damaris, who brings joy to all life holds.

We thank the following publishers:

The Foreword – Time For a Rethink by Michael J. Salvino. A slightly longer version of this article first appeared in the October 2009 issue of *Outlook: The Journal of High Performance Business*. Reprinted with kind permission from *Outlook Magazine*.

Chapter 2 What Providers Say about Establishing the Outsourcing Arrangement. This chapter is developed and updated from Lacity, M. and

Willcocks, L. (2011), "What Suppliers Say about Clients Part 1 – Establishing the Outsourcing Arrangement," *Cutter IT Journal*, Vol. 12, 2. Reprinted with kind permission from the Cutter Consortium.

Chapter 3 What Providers Say about Managing Outsourced Services. Chapter 3 is developed and updated from Lacity, M. and Willcocks, L. (2011), "What Suppliers Say about Clients Part 2 – Managing Outsourced Services," *Cutter IT Journal*, Vol. 12, 3. Reprinted with kind permission from the Cutter Consortium.

Chapter 4 Creating Shared Services in the Private and Public Sectors. Chapter 4 is based on a new case study and a case study that was published in Lacity, M. and Fox, J. (2008), "Creating Global Shared Services: Lessons from Reuters," *MIS Quarterly Executive*, Vol. 7, 1, pp. 17–32.

Chapter 5 The Changing Role of Client Project Management. Chapter 5 is a reprint of Lacity, M. and Rottman, J. (2009), "Effects of Offshore Outsourcing of Information Technology Work on Client Project Management," *Strategic Outsourcing: An International Journal,* Vol. 2, 1, pp. 4–26. Reprinted with kind permission from Emerald.

Chapter 6 Best-of-Breed versus Bundled Services? Chapter 6 is an updated and edited version of Willcocks, L., Oshri, I., and Hindle, J. (2010). *To Bundle or Not to Bundle? Effective Decision-Making for Business and IT Services*. OU/Accenture, London. Portions of the original paper are reprinted with kind permission from Accenture, *Outlook Magazine*, and the London School of Economics (LSE) Outsourcing Unit.

Chapter 7 Rural Sourcing and Impact Sourcing. Chapter 7 is based on two new case studies as well as excerpts, as credited, from Lacity, M., Rottman, J., and Khan, S. (2010), "Field of Dreams: Building IT Capabilities in Rural America," *Strategic Outsourcing: An International Journal*, Vol. 3, 3, pp. 169–191, and from Lacity, M., Carmel, E., and Rottman, J. (2011), "Rural Outsourcing: Delivering ITO and BPO Services from Remote Domestic Locations," *IEEE Computer*, Vol. 44, pp. 55–62.

Chapter 8 Cloud Computing: Current Challenges and Future Opportunities? Chapter 8 is updated and developed from work sponsored by Accenture and the LSE Outsourcing Unit, in particular the first four in the series of working papers entitled *Cloud and the Future of Business*, authored by Leslie Willcocks, Will Venters, and Edgar Whitley. Portions of the original papers are reprinted with kind permission from Accenture, *Outlook Magazine*, and the LSE Outsourcing Unit.

Notes on Contributors

Lead Authors

Mary C. Lacity is Professor of Information Systems and International Business Fellow at the University of Missouri–St. Louis, USA. She is also Co-chair of the IAOP Midwest Chapter; Industry Advisor for the Outsourcing Angels and Everest Research Institute; Research Fellow at the Outsourcing Unit, London School of Economics; Senior Editor of the *Journal of Information Technology*; Co-editor of the Palgrave Macmillan series *Work, Technology and Globalization*; and on the editorial boards of *MIS Quarterly Executive, Journal of Strategic Information Systems, Strategic Outsourcing: An International Journal,* and *Journal of the Association for Information Systems (JAIS)*. She was the recipient of the 2008 Gateway to Innovation Award, sponsored by the IT Coalition, Society for Information Management, and St. Louis RCGA, and the 2000 World Outsourcing Achievement Award, sponsored by PricewaterhouseCoopers and Michael Corbett and Associates. She has published 13 books and over 100 publications in academic and practitioner outlets on the topic of outsourcing.

Leslie P. Willcocks is Professor of Technology, Work and Globalization at the London School of Economics and Political Science (LSE), UK; Head of the Information Systems and Innovation Group; and Director of the Outsourcing Unit there. He is known for his work on global sourcing, information management, IT evaluation, e-business, and organizational transformation as well as for his practitioner contributions to many corporations and government agencies. He holds visiting chairs at Erasmus (The Netherlands), Melbourne (Australia), and Sydney (Australia) universities and is Associate Fellow at Green-Templeton, University of Oxford, UK. He has been Editor-in-Chief of the Journal of Information Technology for the last 20 years, and is Joint Series Editor, with Mary C. Lacity, of the Palgrave Macmillan book series Technology, Work and Globalization. He has co-authored 34 books, including most recently The Outsourcing Enterprise: From Cost Management to Collaborative Innovation (2011) and The Practice of Outsourcing (2010, with Mary C. Lacity). He has published over 220 refereed papers in journals such as Harvard Business Review, Sloan Management Review, MIS Quarterly, MISQ Executive, Journal of Management Studies, Communications of The ACM, and Journal of Strategic Information Systems.

Contributors

John Hindle is a senior manager in Global Marketing for Accenture, and a founding partner of Knowledge Capital Partners. John has an extensive international business background, with over 25 years' experience as a senior executive and advisor to companies in both the United States and Europe. Prior to his business career, Dr Hindle was a university teacher, researcher, and administrator. He holds an appointment as Adjunct Professor of Human and Organizational Development at Vanderbilt University, USA, and publishes widely in trade, popular, and academic media.

Ilan Oshri is Associate Professor of Strategy and Technology Management at Rotterdam School of Management Erasmus, The Netherlands. Ilan holds a PhD degree in strategic management and technological innovations from Warwick Business School, UK. He is the co-author of three recent books – *Handbook of Global Outsourcing and Offshoring* (2009), *Knowledge Processes in Globally Distributed Context* (2008), and *Standards-Battles in Open Source Software* (2008) – and is Co-editor of *Outsourcing Global Services* (2008). His work has appeared in leading academic journals, including *MISQ Executive, Communications of the ACM*, and *Journal of Strategic Information Systems*, and also in trade press and numerous books. Ilan is the co-founder of the Global Sourcing Workshop and an associate member of the Outsourcing Unit at the London School of Economics and Political Science (LSE).

Joseph Rottman is Director of the International Business Institute, Associate Professor of Information Systems, and Research Fellow in the Center for International Studies at the University of Missouri-St. Louis, USA. He is also Associate Researcher at the Outsourcing Unit, London School of Economics and Political Science, UK. He has conducted case studies in over 40 firms and has been engaged by Fortune 500 firms to analyze their offshore strategies. His recent book Offshore Outsourcing of IT Work (with Mary C. Lacity) details models and practices IT professionals can utilize to effectively engage offshore providers and explores emerging outsourcing markets, such as rural sourcing and the Chinese market. His publications have appeared in Sloan Management Review, MIS Quarterly Executive, Information Systems Frontiers, Strategic Outsourcing: An International Journal, IEEE Computer, the Journal of Information Technology, the American Review of Public Administration, and Information and *Management* as well as in leading practitioner outlets such as *CIO* Insight and the Cutter Consortium. He earned his Doctor of Science in Information Management from Washington University in St. Louis, Missouri, USA. He has conducted research and spoken internationally on global sourcing, innovation diffusion, and public sector IT. He was Research Fellow with the Chinese Academy of Social Sciences in 2009, received the 2006 Anheuser-Busch Excellence in Teaching award, and is on the editorial board of *MIS Quarterly Executive*.

Michael J. Salvino is group chief executive, Business Process Outsourcing, with Accenture. He oversees the firm's comprehensive portfolio of horizontal and industry-specific BPO services, leading a team of over 42,000 BPO professionals globally. A recognized expert in the outsourcing industry, he is a previous winner of the prestigious *Outsourcing Journal's* Editor's Choice Award. Mike holds a Bachelor of Science degree in Industrial Engineering from Marietta College in Ohio, USA, where he graduated cum laude and currently serves as a Member of the Board of Trustees. He is based in Charlotte, North Carolina, USA.

Stan Solomon is a PhD student in Logistics and Supply Chain Management at the University of Missouri–St. Louis, USA. He holds a BSc in Electronics and Communication Engineering from Madras University, India, and a Master's in Electrical Engineering from California State University, Sacramento, USA. His research interests include simulation–optimization methodologies, business process, and ITO and human computer interaction.

Will Venters is a member of faculty within the Information Systems and Innovation Group, part of the Department of Management at the London School of Economics, UK. His main research interests include utility, cloud, and grid computing; distributed work practices; and knowledge management and communities of practice (http://utilitycomputing.wordpress.com/).

Edgar Whitley is Reader in Information Systems in the Information Systems and Innovation Group at the London School of Economics and Political Science (LSE), UK. He has a BSc (Econ) and a PhD in Information Systems, both from the LSE. Edgar is the co-editor for *Information Technology & People*. He is also currently involved in the EnCoRe project (www.encore-project.info), which is addressing the role of consent (and the revocation of consent) as a mechanism for providing control over the use of personal data. Together with Gus Hosein, he has recently published *Global Challenges for Identity Policies* (2010).

1 Robust Practices from Two Decades of ITO and BPO Research

Mary C. Lacity, Leslie P. Willcocks, and Stan Solomon

Introduction

This chapter reviews all the empirical academic research on information technology outsourcing (ITO) and business process outsourcing (BPO) published between 1992 and 2011 to extract robust practices. Robust practices are practices that have been academically tested and proven to be effective. Academics are uniquely positioned to study ITO and BPO. As scholars, academics are likely to be more objective than other sources of ITO and BPO research sponsored by industry consortiums or advisory firms. In the ITO and BPO domain, the 20 years (1992–2011) of academic research have generated a good understanding of practices. Overall, we have learned why firms outsource (mostly to reduce costs, access resources, and focus internal resources on more strategic work¹), what firms outsource (mostly a portion of their overall back-office portfolios), how firms outsource (mostly by formal processes), and outsourcing outcomes as measured by realization of expectations, satisfaction, and performance (Dibbern et al. 2004). Overall, we know that client readiness, good strategy, good processes, sound contracts, strong retained capabilities, and good relationship management are key success factors (Cullen et al. 2005a; Feeny and Willcocks 1998; Teng et al. 1995; Willcocks and Lacity 2006). Academics have also studied many different sourcing models. For example, there is much academic research on offshore outsourcing. Offshore outsourcing research addresses macroeconomic issues, provider capabilities in developing countries, and specific client and provider practices to ensure success. From the client perspective, researchers have found that offshore outsourcing poses additional challenges when compared to domestic IT outsourcing (Rottman and Lacity 2006). Some of these issues are so difficult to manage that, according to Carmel and Abbott (2007), practitioners are turning to nearshore alternatives. Most recently, academics have studied more current trends, such as multi-sourcing and bundled

Торіс	Questions relevant to practice
1. Outsourcing outcomes	How many ITO and BPO engagements have positive outcomes?
2. Client firm profiles	Which types of clients are more likely to outsource IT or BP?
3. Outsourcing drivers	What is the strategic intent behind outsourcing decisions?
4. Outsourcing risks	What are the risks of outsourcing and how are outsourcing risks mitigated?
5. Decision process	Which decisions are most successful?
6. Contractual governance	Which contracts are most successful?
7. Relational governance	What characterizes good relationships?
8. Client-retained capabilities	Which capabilities do client firms need to develop to successfully engage outsourcing providers?
9. Provider capabilities	Which capabilities do client firms seek in an ITO or BPO provider?

Table 1.1 ITO and BPO research topics

services (covered in Chapter 6), rural sourcing and impact sourcing (covered in Chapter 7), and cloud computing (covered in Chapter 8).

Our aim in this chapter is to summarize the academic ITO and BPO literature and to convey the most important and robust implications for practice. We answer nine intriguing questions relevant to practice (see Table 1.1), such as "How many ITO and BPO engagements have positive outcomes?" and "Which contracts are most successful?" Thoughtful practitioners will be interested in the lessons from over 1300 findings from ITO and BPO research streams. Appendix A explains how we were able to summarize such a large body of research. We begin at the end – by first looking at the overall success rates of ITO and BPO. From here, we answer the other eight questions that help practitioners understand the robust practices that differentiate successful from marginal or unsuccessful outcomes.

1. How many ITO and BPO engagements have positive outcomes?

Many academic studies have examined the extent to which outsourcing engagements have resulted in positive outcomes from the client's perspective. Most of this research is based on large-sample surveys of outsourcing clients or in-depth case studies at client sites. Across these studies, ITO and BPO researchers have used many different types of measures to examine the consequences of outsourcing. The most frequently used measures include outcomes that capture a client's general perceptions of the success or level of satisfaction
with outsourcing (see the definition of Outsourcing Outcomes - Success in the Glossary), offshore outsourcing (Outsourcing Outcomes - Success -Offshore), perceptions of the quality of relationships (Relationship Quality), and the effects of outsourcing on a client organization's business performance (Outsourcing Outcomes - Organizational Business Performance), such as improvements in stock price performance, return on assets, expenses, or profits after outsourcing (e.g., Gewald and Gellrich 2007). By aggregating the findings from both qualitative and quantitative studies and from both ITO and BPO studies, we have a solid statistic on outsourcing outcomes from the client's perspective: clients reported positive outcomes from outsourcing 60% of the time, negative outcomes 18% of the time, and no changes in performance as a consequence of outsourcing 22% of the time. When we uncouple the ITO from the BPO outcome statistics, we find interesting differences. Considering just the ITO outcome data, ITO clients reported positive outcomes from outsourcing 63% of the time, negative outcomes 22% of the time, and no changes in performance as a consequence of outsourcing 15% of the time. BPO clients reported positive outcomes from outsourcing business processes 56% of the time, negative outcomes 11% of the time, and no changes in performance as a consequence of outsourcing business processes 33% of the time. We may interpret these differences in a number of ways. These statistics might suggest that ITO is riskier than BPO, as the frequency of failure is greater. In comparison, BPO is more likely than ITO to result in no changes in performance.

Many people will consider these statistics quite disappointing – only 60% of engagements have been considered positive by clients. To us, this indicates the overall risk associated with outsourcing. The good news in this statistic is that we have a good understanding of what it takes to ensure positive outcomes and to avoid negative outcomes. This chapter and indeed the entire book offer insights into the decision processes, contractual governance, relational governance, and client and provider capabilities that are needed to ensure positive outcomes.

One interesting sub-stream of research conducted over the past 20 years has examined the effects of outsourcing announcements on stock price. Senior executives want to know how stockholders perceive their large-scale outsourcing decisions. Fourteen academic event studies have examined how announcements of large-scale outsourcing decisions affect stock prices (Farag and Krishnan 2003; Hayes et al. 2000; Loh and Venkatraman 1992b; Madison et al. 2006; Oh et al. 2006; Smith et al. 1998). Seven found significant positive effects on stock prices (e.g., Agarwal et al. 2006; Lee and Kim 2010), four found no relationship (e.g., Florin et al. 2006), and three found a negative effect on stock prices (e.g., Oh et al. 2006). Oh et al.'s (2006) is the best paper to help understand these mixed results. These authors summarize all prior event studies and also present the results of their own event study. Their

event study is unique, because they did not just look at the overall change in stock market value, which tends to be very small. Instead, they looked at the differences between announcements that led to *above* Average Abnormal Returns (AAR) versus announcements that led to *below* AAR. The authors examined 192 IT outsourcing announcements during a nine-year period (1995– 2003). On the day of an announcement, 97 announcements lead to negative AAR and 95 announcements lead to positive AAR. The authors conclude that the content of outsourcing announcement matters. *Investors reacted favorably to outsourcing announcements about smaller contracts, outsourcing contracts intending to reduce costs, transactions with low asset specificity (e.g., data centers and telecommunications), and contracts signed with larger provider firms.*

2. Which types of clients are more likely to outsource?

Researchers have examined a number of client firm attributes to determine which types of clients are more likely to outsource. Client firm attributes include *financial attributes* (firm profitability, return on assets, earnings per share, operating expenses, and financial slack in the organization), *size attributes* (size of the client firm in terms of total revenue, number of employees, or size of the department within the client firm), and *industry attributes*.

Financial Attributes. ITO and BPO researchers have examined client firms' financial positions just before outsourcing. Are client firms driven to outsource because of poor financial performance? When the ITO and BPO data are aggregated, there is no correlation between a client firm's financial performance and its propensity to outsource. However, there are differences in the ITO and BPO data. In the ITO data, 56% of the findings reported that IT outsourcing was primarily done by client firms with poor financial performance. Practitioners became aware of the ITO finding from Paul Strassmann's controversial 1995 article "Outsourcing: A Game for Losers." He looked at financial data and layoff data for 13 companies with the largest IT outsourcing contracts. He concluded, "Strategy isn't driving outsourcing. Statistics show the real reason companies outsource is simple: They're in financial trouble." In a 2004 publication, Strassmann conducted another statistical analysis on 324 companies and reached the same conclusion: "My 1995 assertion that 'outsourcing is a game for losers' still stood up in 2002." Academic research has generally found Strassmann's findings to be robust across time, from the most widely cited study by Loh and Venkatraman (1992a) to a more recent study by Mojsilovic et al. (2007). This was particularly true for client firms pursuing large-scale IT outsourcing, because academic researchers primarily rely on outsourcing announcements in the trade press to identify a pool of outsourcing clients to study. (Small IT outsourcing contracts are unlikely to be announced in press releases.) For example, Loh and Venkatraman's (1992a) is one of the first major articles on the determinants of IT outsourcing - it has been cited 537 times as of fall 2011. Based on data from 55 large US firms, the authors found that high business cost structures, poor business performance in terms of reduced profits, high levels of debt, high annual IT costs, and poor IT performance determine large-scale outsourcing of IT in client firms. Thirteen years later, the findings of Hall and Liedtka (2005) were very similar. They examined the financial determinants of large-scale IT outsourcing decisions. They used secondary data to compare 51 firms doing large-scale outsourcing of IT with 1261 control firms. The authors concluded that IT outsourcing is a practice of "financial losers" in that the 51 firms they examined had significantly lower profits, higher operating expenses, and less cash than control firms. Mojsilovic et al. (2007) studied 68 publicly traded firms and found that companies with lower profits and lower earnings per share were more likely to outsource IT.

In the BPO data, only 20% of the findings reported that BPO was done by client firms with poor financial performance. In contrast to ITO, the BPO research is based on only five studies, of which three found that good client firm performance was positively associated with BPO decisions. This result suggests that client firms with good performance were more likely to outsource business processes.

The difference between ITO and BPO research pertaining to prior client firm performance might be the result of large-scale ITO decisions, which are more likely than BPO decisions to involve the sale and transfer of expensive assets, and thus ITO may be a better way to raise cash than BPO. But there may be a different reason: the difference might be attributed to the dates of the studies. The ITO findings on prior firm performance are based on nine studies before 2007, whereas the five BPO studies on prior client firm performance were conducted between 2006 and 2010. ITO researchers might revisit this variable – perhaps the more current BPO research findings also apply now to ITO.

Size Attributes. Researchers have asked two questions about a client's size: Are large or small client firms more likely to outsource? Are large or small departments more likely to outsource? The research results are inconclusive: *effects of client size and department size on outsourcing decisions produce mixed results in both the ITO and BPO literatures.* There are 26 findings that examined the relationship between the size of a client firm (measured as total assets, sales, and/or number of employees) and the decision to outsource or insource. Of the 26 relationships we found in the empirical literature, eight found that larger client firms were more likely to outsource (e.g., Delmotte and Sels 2008; Nam et al. 1996), nine found that smaller firms were more likely to outsource (e.g., Ang and Straub 1998; Wahrenburg et al. 2006), and nine others found that size of the client firm did not matter (e.g., Grover et al. 1994b). Studies of the size of the department also produced mixed results. Of the 11 relationships we examined, six found that larger departments were more likely to outsource (e.g., Sobol and Apte 1995), two found that smaller departments were more

likely to outsource (e.g., Barthélemy and Geyer 2004), and three found no relationship between the size of the department and outsourcing (e.g., Miranda and Kim 2006).

Industry Attributes. We coded 16 relationships between client industry and outsourcing. Seven relationships found that industry did not matter (e.g., Barthélemy and Geyer 2005). Nine studies found that *some industries are more likely to outsource than others, but because researchers have used so many different industry classifications, there is no clear list of particular industries to report.* Some researchers use Standard Industry Classification (SIC) codes (e.g., Oh et al. 2006). Some researchers use dichotomous classifications such as public versus private (e.g., Slaughter and Ang 1996) or service versus industrial (e.g., Loh and Venkatraman 1992a). Some researchers use categories of industries such as manufacturing, finance, and health care (e.g., Grover et al. 1994b).

3. What is the strategic intent behind outsourcing decisions?

This section examines drivers and barriers to outsourcing. Research on client organizations has uncovered a long list of motivations or expectations driving outsourcing decisions. In total, ITO and BPO researchers have studied outsourcing drivers hundreds of times. We list the top 16 different drivers of outsourcing in Table 1.2. By far, cost reduction was the most common driver iden*tified by researchers.* Despite all the rhetoric of using outsourcing strategically, cost reduction has remained an important driver for a majority of client firms, from the earliest studies (e.g., Lacity et al. 1994) to more recent ones (e.g., Fisher et al. 2008). Focus on Core Capabilities was the second most frequently found driver of outsourcing. Of the 32 times it was examined, a significant positive relationship was found 29 times (e.g., Currie and Seltsikas 2001). Thus, there is strong empirical evidence that client firms outsource to focus on other core activities. The implication of this finding is that client firms were not outsourcing functions they considered among their core capabilities (Prahalad and Hamel 1990). This finding makes particular sense in light of the third most frequently found driver – Access to Skills/Expertise (e.g., McLellan et al. 1995). A client's desire or need to access provider(s') skills/expertise was a significant motivation in outsourcing 25 of the 27 times (93%) it was studied. The fourth most frequently found driver showed that client firms outsourced when they desired or needed a provider to help them improve a client's business process. The fifth most frequent driver was the client's desire to access the provider's leading edge technology. When considering the top five findings in this category, we see that researchers have found strong empirical support that what drove most outsourcing decisions was the desire to reduce costs on what is viewed as a noncore activity better provided by providers with superior skills, expertise, and technical capabilities.

Outsourcing drivers	Description	Number of times studied	Number of times found to be a significant driver
1. Cost reduction	A client organization's need or desire to use outsourcing to reduce or control costs	66	62
2. Focus on core capabilities	A client organization's desire or need to outsource in order to focus on its core capabilities	32	29
3. Access to expertise/skills	A client organization's desire or need to access provider(s') skills/expertise	27	25
4. Improve business/process performance	A client organization's desire or need to engage a provider to help improve a client's business, processes, or capabilities	25	24
5. Technical reasons	A client organization's desire or need to gain access to leading edge technology through outsourcing	10	9
6. Scalability	A client organization's desire or need to outsource to be able to scale the volume of services based on demand	9	8
7. Political reasons	A client stakeholder's desire or need to use an outsourcing decision to promote personal agendas such as eliminating a burdensome function, enhancing their career, or maximizing personal financial benefits	9	8
8. Flexibility	A client organization's desire or need to outsource to increase the flexibility of the use and allocation of resources	7	7
9. Rapid delivery	A client organization's desire or need to engage in outsourcing in order to speed up project delivery	7	7
10. Change catalyst	A client organization's desire or need to use outsourcing to bring about large-scale changes in the organization	6	6
11. Access to global markets	A client organization's desire or need to gain access to global markets by outsourcing to providers in those markets	5	5

Outsourcing drivers	Description	Number of times studied	Number of times found to be a significant driver
12. Innovation	A client organization's desire or need to use outsourcing as an engine for innovation	3	3
13. Headcount reduction	A client organization's need or desire to use outsourcing to reduce the number of staff	2	2
14. Need to generate cash	A client organization's desire or need to generate cash through the sale of IT assets to the provider	2	2
15. Cost predictability	A client organization's desire or need to use outsourcing to better predict costs	2	2
16. Strategic intent	A client organization's desire or need to outsource for strategic reasons, such as developing new capabilities that can be leveraged in the marketplace	2	2
	Total findings	214	201

Table 1.2	(Continued)
-----------	-------------

Researchers have also studied barriers to outsourcing (see Table 1.3). The most common barriers were fear of losing control and concern for security/intellectual property rights. *The greater the concern for security, the less likely a client firm chose outsourcing* (e.g., Sobol and Apte 1995). *Similarly, the greater the fear of losing control, the less likely a client firm chose outsourcing* (e.g., Patane and Jurison 1994). The other barriers to outsourcing, such as a client firm's concerns about complying with regulations and clients' concerns about career paths for employees, were less frequently studied.

Studies of the most frequent drivers and barriers to outsourcing can be juxtaposed with the few studies that *challenge practitioners to consider outsourcing for more strategic reasons than just cost reduction*. One of the most widely cited articles on this topic is by DiRomualdo and Gurbaxani (1998). Their article addressed three strategic intents for IT outsourcing: IS improvement (including cost savings), business impact (such as improving business processes), and commercial exploitation. Their article also suggested which types of contracts, incentives, measures, and pricing provisions should be used to match the strategic intent. The logic of their prescriptions is solid, but many of the examples cited in the article as exemplars of an IT strategy, including Xerox, J.P. Morgan, Swiss Bank,

Outsourcing barriers	Description	Number of times studied	Number of times found to be a significant barrier
1. Fear of losing control	A client organization's concerns that outsourcing may result in loss of control over IT or business processes	9	9
2. Concern for security/intellectual property	A client organization's concerns about security of information, transborder data flow issues, and protection of intellectual property	10	9
3. Career development	A client organization's desire or need to provide better career opportunities for employees	4	2
4. Concern for regulatory requirements	A client organization's concerns about complying with regulations	2	2
	Total findings	25	22

Table 1.3 Outsourcing barriers

and Delta Airlines, actually failed to deliver the expected benefits in the longer term. This suggests that realizing the strategic intent of IT outsourcing is exceedingly difficult and requires a high degree of managerial attention. Other authors have also tried to challenge practitioners to use outsourcing more strategically. The main issue is that their research relied on anecdotal evidence from a few exceptional firms. Most notable are three excellent papers by James Brian Quinn (Quinn and Hilmer 1994; Quinn 1999; Quinn 2000). His work, although based on anecdotal evidence, celebrates the most innovative and strategic uses of outsourcing. Linder (2004), Ross and Beath (2006), and Lacity et al. (2003, 2004) have also written about a few companies using outsourcing to facilitate large-scale transformation.

4. What are the risks of outsourcing and how are risks mitigated?

Another important topic for practitioners is the management of outsourcing risks. Risk is generally defined as the probability that an action will adversely affect an organization. Risk management is a set of activities geared toward identifying, assessing, prioritizing, and addressing risks in order to minimize their probability or impact. Researchers address two questions relevant to practitioners: What are the risks of outsourcing? How are outsourcing risks mitigated?

In the academic literature, we found 34 published papers on risks and risk management, of which 18 were conceptual. Conceptual papers primarily identify lists of risks (e.g., Earl 1996; Jurison 1995; Sakthivel 2007) or develop risk models (e.g., Aron et al. 2005; Osei-Bryson and Ngwenyama 2006). The empirical papers primarily address specific risks and risk management strategies as they pertain to outsourcing in general (Aubert et al. 1999; Bahli and Rivard 2005; Currie and Willcocks 1998; Willcocks and Lacity 1999; Willcocks et al. 1999), or as they pertain to specific types of outsourcing such as offshore outsourcing (Iacovou and Nakatsu 2008) or application service provision (Kern et al. 2002a, b, c). The measurement of risks has also been studied (e.g., Bahli and Rivard 2005; Whitten and Wakefield 2006). In the body of literature reviewed, the number of identified risks is quite daunting. For example, we counted 43 unique ITO risks from just the first three sources we coded (Jurison 1995; Kern et al. 2002a, c; Lacity and Rottman 2008). Some common risks are found in Table 1.4.

The most cited paper on outsourcing risks is by Michael Earl (1996). The author discussed 11 risks of IT outsourcing: the possibility of weak management, inexperienced staff, business uncertainty, outdated technology skills, endemic uncertainty, hidden costs, lack of organizational learning, loss of innovative capacity, dangers of an eternal triangle, technology indivisibility, and fuzzy focus. One of the reasons why this paper is so valuable is that it holds the client accountable for the success of outsourcing. Before IT outsourcing can work, "a company must be capable of managing the IT services first" (p. 27).

Backlash from internal staff	Loss of in-house capability
Biased portrayal by providers	No overall cost savings
Breach of contract	Perceived as unpatriotic (offshore)
Cultural differences between client	Poor provider capability, service, financial
and provider	stability, cultural fit
Difficulty in managing remote teams	Security/privacy breach
Excessive transaction costs	Supplier employee turnover/burnout
Hidden costs	Supplier employees are inexperienced
Inability to manage supplier	Supplier employees have poor communication
relationship	skills
Inflexible contracts	Supplier goes out of business
Infringement of intellectual property	Supplier has too much power over the
rights	customer
Lack of trust	Transition failure
Loss of autonomy and control	Treating IT as an undifferentiated commodity
Loss of control over data	Uncontrollable contract growth
Loss of control over provider	Vendor lock-in (high switching costs)

Table 1.4	Common	outsourcing	risks
-----------	--------	-------------	-------

Academic researchers have identified many specific practices designed to mitigate risks and therefore increase the likelihood of outsourcing success. In general, we found as many risk mitigation practices as we found risks. Advice, therefore, is tied to each specific risk. For example, one risk we found was that the "provider has too much power over the customer." Many practices mitigate this risk. These include engaging multiple providers (Currie 1998), signing short-term contracts (Lacity and Willcocks 1998), outsourcing standard services for which there are many providers capable of delivering good services (Apte et al. 1997; De Loof et al. 1995; Lacity and Hirschheim 1993a), and insourcing highly specific assets (Watjatrakul 2005).

Academics have also discussed risks specific to certain types of outsourcing, such as application service provision or offshore outsourcing (Kern et al. 2002a, b, c; Sakthivel 2007). Kern et al. (2002a) examine specific risks and risk mitigation strategies for application service provision. Sakthivel (2007) identifies 18 risks and 18 risk control mechanisms specific to offshore systems development. As new sourcing models emerge, early adopters will always face more risks.

Facing so many risks may prompt clients to rephrase the outsourcing question to "Why should we not insource services?" (Earl 1996, p. 27). Although the number of outsourcing risks and risk mitigation practices are daunting, practitioners may find that the best way to mitigate risks is through experience. Clients cannot fully bypass the learning curve based on explicit risk mitigation practices identified from other organizations – there is no substitute for the tacit knowing that comes from actual experience. Many researchers have found that learning curve effects and prior client experience are vital to outsourcing success (Barthélemy 2001; Carmel and Agarwal 2002; Kaiser and Hawk 2004; Lacity and Willcocks 1998; Rottman and Lacity 2006). Any organization that explores a new sourcing option in terms of new providers, new services, or new engagement models with existing providers must plan on false starts and early mistakes. Executives often manage learning by pilot-testing new sourcing options. This is a riskmitigating practice, but we also note that when pilot tests are too small, the learning is slow, provider capabilities are not fully tested, and expected benefits not often realized. Thus there is a trade-off between mitigating risks and achieving substantial benefits from outsourcing.

5. Which decisions are most successful?

Researchers have examined the relationships between the types of decisions made and their subsequent outcomes. In particular, researchers have examined how the degree of outsourcing, multi-sourcing, top management commitment, and the evaluation process have affected outsourcing outcomes significantly.

Degree of Outsourcing. The degree of outsourcing is the amount of outsourcing as indicated by percentage of budget outsourced and/or the type

and number of functions outsourced. We coded 24 relationships that looked at the effects of degree of outsourcing on outsourcing outcomes. Fifteen relationships found that the degree of outsourcing mattered (e.g., Bardhan et al. 2007). Overall, there seems to be a U-shaped curve – outsourcing improves performance or has positive outcomes up to a point, and then too much outsourcing hurts performance (e.g., Grimpe and Kaiser 2010). In general, too little outsourcing did not produce significantly positive outcomes because the transaction costs were so high that they canceled out production cost advantages. In addition, providers are not attracted to deals that are too small, or may not devote their best resources to service a tiny account (Lacity and Willcocks 2011). In general, too much outsourcing also was associated with lower levels of success (Currie 1998; Lacity and Willcocks 1998; Seddon 2001; Straub et al. 2008). As an example of "too much," Lacity and Willcocks (1998) found that clients who outsourced more than 80% of their IT budgets had success rates of only 29%; clients who outsourced less than 80% of their IT budgets had success rates of 85%. Seddon (2001) provides another example of outsourcing "too much." He examined one of the most aggressive public sector ITO programmes in the world – the Australian federal government's Au\$1.2 billion ITO program. The Australian federal government experienced poor results, both financially and operationally. One reason for the disappointing financial results is that the Australian government clustered disparate IT functions in the hope of achieving cost savings through economies of scale. However, the increased coordination costs across disparate IT functions canceled the intended effects of cost savings through economies of scale. The types of IT functions outsourced also mattered. For example, Grover et al. (1996) found clients had higher levels of satisfaction from outsourcing systems operations and telecommunications than they did from outsourcing applications development, end user support, and systems management.

Multi-Sourcing. Researchers have studied multi-sourcing, a client organization's decision to engage multiple providers. Of the eight times it was studied, four times there were positive effects on outcomes (e.g. Saxena and Bharadwaj 2009; Levina and Su 2008). In these four studies, *multi-sourcing was found to be positively associated with outcomes because of best-of-breed sourcing, mitigating the risks of relying too much on one provider, and helping clients adapt in changing environments* (e.g., Levina and Su 2008). Only one study found negative effects: In a study of call centers, Borman (2006) found that multi-sourcing made it more difficult to coordinate work and to protect service quality. Three studies found no relationship between multi-sourcing and outsourcing outcomes (e.g., Gewald and Gellrich 2007; Sia et al. 2008). In direct contrast to multisourcing is bundled services – the idea of extending relationships with existing providers to include more services. In Chapter 6, we discuss recent research that examines in detail the trade-offs between multi-sourcing and bundled services. **Top Management Commitment.** Top management commitment/support in outsourcing initiatives is a critical factor for success. Ten out of the ten relationships we coded suggest top management's commitment and support are critical for client satisfaction (e.g., Han et al. 2008; Lee and Kim 1999), offshore project success (Iacovou and Nakatsu 2008), and overall outsourcing success (e.g., Koh et al. 2004; Quinn 1999; Seddon 2001). For example, Lacity and Willcocks (1998) report the positive effects of joint IT and non-IT senior management involvement in ITO decisions on the cost savings realized. Smith and McKeen (2004) suggest top management's involvement in outsourcing decisions impacts overall outsourcing success.

Evaluation Process. The client organization's evaluation process for selecting providers seems to be a rather consistent predictor of the contract price, the outsourcing decision, expected cost savings being realized, and the achievement of outsourcing success in general. Eight out of the nine relationships we coded for the evaluation process reported significant findings (e.g., Cullen et al. 2005a; Kern et al. 2002c; Lacity and Willcocks 1998). For example, the inviting of internal and external bids has been identified as a proven practice (e.g., Lacity and Willcocks 1998; Smith and McKeen 2004). The most comprehensive research on the decision process was done by Cullen et al. (2005a). The authors identified 54 processes associated with the making and managing of outsourcing decisions and found that clients who performed more processes had better outsourcing outcomes.

6. Which contracts are most successful?

In all, we coded 72 relationships between contractual governance and outsourcing outcomes. Contractual governance was operationalized most frequently as contract detail (25 relationships), contract duration (13 relationships), and contract size (8 relationships).

Contract Detail. Contract detail is the number or degree of detailed clauses in an outsourcing contract, such as clauses that specify prices, service levels, benchmarking, warranties, and penalties for non-performance. *Overall, 20 of the 25 relationships found that higher levels of contractual detail led to higher levels of outsourcing success.* For example, Poppo and Zenger (2002) found that contractual complexity (i.e., contract detail) was significantly related to ITO performance. Lacity and Willcocks (2001) found that detailed contracts had a success rate of 75%, whereas loose contracts or standard off-the-shelf provider contracts had only an 18% success rate.

Contract Duration. Contract duration is the period of the contract in terms of time (e.g., Willcocks et al. 2004). Contract duration produced inconsistent findings in the combined ITO and BPO data. Of the 13 times contract duration was examined, five studies found that shorter contracts performed better than longer contracts, three studies found that longer contracts performed better

than shorter contracts, four studies found that contract duration results were insignificant, and one study found a moderating effect. However, there were differences between the ITO and BPO findings. In the ITO data, all six studies that examined contract duration found that shorter-term contracts had higher frequencies of success than longer-term contracts. *ITO contracts in the three-to-five-year range experienced successful ITO outcomes more frequently than contracts with a greater-than-five years' duration. Within the BPO literature, contract duration was not a significant determinant of BPO outcomes.*

Contract Size. The size of the outsourcing contract was measured as the total value of the contract in monetary terms (e.g., Gewald and Gellrich 2007; Oh et al. 2006; Rottman and Lacity 2008). Of the eight times contract size was examined, four studies found that larger contracts performed better than smaller contracts, three studies found that contract size results were insignificant, and one study found that smaller contracts performed better than larger contracts. Thus, *the preponderance of evidence suggests that either larger contracts performed better than smaller contracts or that size did not matter.* As an example of the former, Domberger et al. (2000) found that higher-value contracts (price) were positively related to service quality. Large contracts may lead to success because they spread the enormous transaction costs associated with outsourcing over more volume of work. As an example of the latter, Gewald and Gellrich (2007) found that contract size was not significantly related to outsourcing outcomes (stock price) at the p < 0.05 level.

7. What characterizes good relationships?

Relational governance covers the softer issues of managing client–provider relationships, including trust, norms, open communication, open sharing of information, mutual dependency, and cooperation. In total, we coded 132 relationships on relational governance and its effect on outsourcing outcomes. The most studied relational attributes were effective knowledge sharing, communication, trust, and viewing the provider as a partner. In 94% of the findings, the research showed that higher levels of relational governance were associated with higher levels of outsourcing success. In some ways, the findings are obvious and trivial. Few people would argue that withholding knowledge, closed communication, distrust, or treating the provider as a vendor would lead to better outsourcing relationships.

Effective Knowledge Sharing. Effective knowledge sharing is the degree to which clients and providers are successful in sharing and transferring knowledge (e.g., Lee 2001; Mahmoodzadeh et al. 2009; Murray et al. 2009). Of the 16 times it was examined, *effective knowledge sharing was always significantly and positively related to outsourcing outcomes.* For example, in an ITO survey of 195 Korean public sector organizations, Lee (2001) reported a significant positive correlation between overall knowledge sharing and outsourcing

success in terms of strategic, economic, and technological benefits. In the BPO literature, Mahmoodzadeh et al. (2009) studied an Iranian company's outsourcing relationship and developed a comprehensive BPO framework designed to show how effective knowledge sharing contributes to successful outsourcing.

Communication. Communication is the degree to which parties are willing to openly discuss their expectations, progress, capabilities, strengths, weaknesses, and directions for the future. *Communication has been examined 14 times and was always associated with better outsourcing outcomes.* For example, Sen and Sheil (2006) concluded on the basis of five case studies that "the frequency of communication with key opinion leaders in the client firm is critical to maintaining and fostering the relationship" (p. 153).

Trust. Trust is defined as the confidence that the behavior of another will conform to one's expectations and in the goodwill of another (Hart and Saunders 1997; Sabherwal 1999). Of the 13 times trust was empirically examined, trust was always associated with better outsourcing outcomes or found to matter. For example, in a survey of 267 project teams belonging to five major ITO providers in Korea, trust was found to be a strong determinant of ITO success (Han et al. 2008). Sabherwal (1999) studied 18 outsourced IS development projects in seven client organizations to determine the role of trust in client-provider relationships. His paper provides a good overview of the different types of trust, including (1) calculus-based trust that is rooted in rewards and punishments associated with a particular project, (2) knowledge-based trust that depends on the two parties' knowing each other well, (3) *identification-based* trust that follows from the two parties' identifying with each other's goals, and (4) performance-based trust that depends on early project successes. In Chapter 3, we discuss further how trust is earned - trust is based on performance and fair conflict resolution.

Partnership View. Partnership view is a client organization's consideration of providers as trusted partners rather than as opportunistic vendors. *Ten* (91%) of the eleven studies carried out found that higher values of partnership view were positively associated with higher values of outsourcing outcomes. For example, based on 34 interviews, Saunders et al. (1997) observed that clients who felt that their vendors were strategic partners (i.e., took a partnership view), as opposed to mere vendors, reported their outsourcing arrangements to be highly successful in economic terms.

8. Which retained capabilities do clients need?

Organizational capability is defined as the previous experience, productive capacity, personnel, and other resources that indicate that the applying organization can carry out a proposal. In general, this research topic asks and answers

the question "Which capabilities do client firms need to develop to successfully engage outsourcing providers?" In Table 1.5, we list the 12 most important client-retained capabilities identified in the literature.

The most important capability for clients was the rather generic Supplier Management Capability. This is defined as the extent to which a client organization is able to effectively manage outsourcing providers (e.g., Al-Qirim 2003; Cross 1995; Michell and Fitzgerald 1997; Ranganathan and Balaji 2007). *The supplier management capability was often found to be lacking in client organizations*

Client capability	Definition	Number of times studied	Number of times found to be a significant
Supplier management capability	The extent to which a client organization is able to effectively manage outsourcing providers	17	17
Technical and methodological capability	A client organization's level of maturity in terms of technical or process-related standards, and best practices such as component reuse	10	9
Risk management capability	A client organization's practice of identifying, rating, and mitigating potential risks associated with outsourcing	8	8
Business process management capability	The ability of a client organization to efficiently and effectively manage a business process using in-house resources	8	7
Contract negotiation capability	The extent to which an organization is able to effectively bid, select, and negotiate effective contracts with providers	7	7
Cultural distance management capability	The extent to which a client organization understands, accepts, and adapts to cultural differences	8	6
Client outsourcing readiness	The extent to which a client organization is prepared to engage an outsourcing provider by having realistic expectations and a clear understanding of internal costs and services compared to outsourced costs and services	6	6

Table 1.5 Client-retained capabilities

Absorptive capacity	A client organization's ability to scan, acquire, assimilate, and exploit valuable knowledge	6	5
Change management capability	The extent to which an organization effectively manages change	4	4
Human resource management capability	A client organization's ability to identify, acquire, develop, and deploy human resources to achieve its organizational objectives	3	3
Transition management capability	The extent to which an organization effectively transitions services to outsourcing providers or integrates client services with provider services	3	3
Proactive sense making	The extent to which executives proactively create awareness and understanding in situations of high complexity or uncertainty in order to make decisions	2	2
	Total	82	77

and was seen as a major reason for negative outsourcing outcomes. For example, Michell and Fitzgerald (1997) found that among clients that disputed with vendors, nearly four-fifths said they would "strengthen their ability to manage the vendor" (p. 232). Similarly, Sanders et al. (2007) interviewed 19 senior executives and found that the inability to manage providers was the primary cause of an unsatisfactory BPO outcome.

Technical/Methodological Capability was the second most frequently studied client capability, particularly in the ITO literature (e.g., Kishore et al. 2003; Levina and Ross 2003; Ross and Beath 2006). Technical/methodological capability is an operational capability that is important to both client and provider firms. *Clients experienced better outcomes when both clients and providers were technically and methodologically mature*. For the outsourcing of new application development, research has found that it is important for clients and providers to have shared processes (Davenport 2005) and that these should be standardized and mature. Rottman and Lacity (2006) interviewed 149 people from both client and provider organizations. They found that ITO success was greater when both the client and provider firms had at least CMMI² level 3 capabilities.

Risk Management Capability, Business Process Management Capability, Contract Negotiation Capability, and Cultural Distance Management Capability are the next most important client-retained capabilities. We have already discussed the many risks associated with outsourcing and therefore it is not surprising that Risk Management Capability was found to be one of the most important client-retained capabilities. A client needs to be able to identify, rate, and mitigate potential risks associated with outsourcing (e.g., Borman 2006; Smith and McKeen 2004). Researchers have studied the effects of a client's ability to manage a business process themselves. Clients are more likely to successfully outsource a business process that they can efficiently and effectively manage themselves. The better the clients could perform the business process themselves, the better the outcomes when they outsourced that process (e.g., Duan et al. 2009; Saxena and Bharadwaj 2009). This finding resonates with the maxim "you can't outsource your mess for less." Clients also need a strong contract negotiation capability, which is frequently supplemented with the aid of advisory firms.

Cultural Distance refers to the extent to which the members of two distinct groups (such as client and provider personnel) differ on one or more cultural dimensions. Higher values of Cultural Distance were negatively and significantly related to outsourcing outcomes 12 out of the 14 times it was studied empirically. For example, Beaumont and Costa (2002) report that ITO clients they interviewed cited "cultural match between the service provider and client" to be one of the factors most associated with successful ITO. *Clients must learn to understand, accept, and adapt to cultural differences between themselves and their providers* (e.g., Winkler et al. 2008). Examined eight times, Cultural Distance Management Capability positively and significantly affected outcomes six times (75%). It is particularly relevant in the cases of offshore outsourcing (e.g., Rao et al. 2006; Willcocks et al. 2007).

Other client capabilities have also been identified as affecting outsourcing decisions and outcomes: Contract Negotiation Capability, Absorptive Capacity, Client Outsourcing Readiness, Change Management Capability, Human Resource Management Capability, and Transition Management Capability. Our review treats all these capabilities as independent, but *the most widely cited and respected papers on this topic identify a mix of complementary capabilities that lead to outsourcing success*. The first paper to meaningfully address this question was one by Feeny and Willcocks (1998). The authors identified nine interrelated capabilities, depicted as three interlocking rings. Their model has been adopted by many large organizations, including DuPont and Commonwealth Bank in Australia. The model was initially developed for ITO clients, but has since been generalized to include both ITO and BPO client-retained capabilities. We cover this model in more detail in Chapter 3.

9. Which capabilities do providers need?

This research topic asks and answers the question "Which capabilities do clients seek most from providers?" In Table 1.6, we list the 13 most important client-retained capabilities identified in the literature. Clients most frequently assessed these capabilities of potential providers while also reporting that these provider capabilities led to positive outsourcing outcomes.

Table 1.6	Provider	capabilities
-----------	----------	--------------

Provider capability	Definition	Number of times studied	Number of times found to be a significant
HR management capability	A provider organization's ability to identify, acquire, develop, retain, and deploy human resources to achieve both provider's and client's organizational objectives	24	23
Technical and methodological capability	A provider organization's level of maturity in terms of technical or process-related and best practices such as component reuse	20	16
Domain understanding	The extent to which a provider has prior experience and/or understanding of the client organization's business and technical contexts, processes, practices, and requirements	8	8
Client management capability	The extent to which a provider organization is able to effectively manage client relationships	5	5
Business process management capability	The ability of a provider organization to efficiently and effectively manage a business process	6	4
Managing client expectations	The extent to which a provider fosters realistic client expectations, avoids overpromising, and informs clients about changes in project status in a timely manner	4	4
Supplier employee performance	The client's perception of the performance of individual provider employees	4	4
Risk management capability	A provider organization's practice of identifying, rating, and mitigating potential risks associated with outsourcing	3	3
Supplier's core competencies	A provider's set of capabilities that enables it to gain a competitive advantage over rivals	3	3
Security, privacy, and confidentiality capability	The proven ability of a provider to protect client data through investments in technology, training, process controls, audits, and other management practices	3	2

Provider capability	Definition	Number of times studied	Number of times found to be a significant
Absorptive capacity	A provider organization's ability to scan, acquire, assimilate, and exploit valuable knowledge	2	2
Environmental capability	The use of physical space for branding services and motivating staff	2	2
Corporate social responsibility capability	A provider organization's ability to behave in a socially responsible way, such as promoting environmental responsibility and promoting fair labor practices	2	2
	Total	86	78

Table 1.6	(Continued)
-----------	-------------

The most frequently studied and most important provider firm capabilities were Human Resource Management Capability, Technical and Methodological Capability, and Domain Understanding. We define Human Resource Management Capability as a provider's ability to identify, acquire, develop, and deploy human resources to achieve both the provider's and client's organizational objectives (e.g., Levina and Ross 2003). It was found to positively and significantly affect outcomes 23 of the 24 times it was examined (95%). Clients often engage providers because of their superior human resources in terms of both number and quality of staff. For example, Koh et al. (2004) found that a provider's "effective human capital management" capability – as evidenced by the assignment of high-quality staff to work on client projects and by the minimization of turnover - was linked to clients' perception of outsourcing success in terms of satisfaction with the contract and the desire to retain the outsourcing provider. The provider's Technical/Methodological Capability was the second most frequently studied capability and it was found to affect outcomes positively. Domain Understanding is the extent to which a provider has prior experience and/or understanding of the client organization's business and technical contexts, processes, practices, and requirements (e.g., Clark et al. 1995; Gopal et al. 2002). Other provider capabilities were also found to be important: Client Management Capability; Managing Client Expectations; Supplier Employee Performance; Risk Management Capability; Security, Privacy, and Confidentiality Capability; Supplier's Core Competencies; Absorptive Capacity; Environmental Capability; and Corporate Social Responsibility Capability.

Again, our review analyzed these provider capabilities as independent, but the most widely cited and respected papers on provider capabilities identify a mix of complementary capabilities that lead to outsourcing success. Levina and Ross (2003) found that ITO providers need three complementary capabilities: (1) IT personnel career development, (2) methodology development and dissemination, and (3) client relationship management. They showed how provider capabilities were complementary in that having one capability improved the other two capabilities. Jarvenpaa and Mao (2008) examined provider capabilities in small Chinese IT providers that service Japanese clients indirectly and directly through a Japanese IT provider. Based on interviews with three Beijing IT providers, the authors questioned how these providers built three critical operational capabilities: human resources capabilities, process capabilities, and client-specific capabilities. At first, providers focused on client-specific capabilities. They later focused on process capability development. Human resources capabilities remained the most challenging capabilities in the mediated model, yet human resources capabilities were the main determinants of the other two capabilities (client-specific and process capabilities). Finally, Feeny et al. (2005) developed a sister model to the Feeny and Willcocks client capability model that identifies the 12 most important, interrelated capabilities clients seek in a provider. This model is discussed in Chapter 3.

Interaction effects

We have discussed five broad categories that affect outsourcing outcomes: decisions, contracts, relational governance, client capabilities, and provider capabilities. In this section, we discuss some of the interaction effects researchers have found among the five broad categories. Positive outsourcing outcomes fueled higher levels of trust (relational governance), built stronger client and supplier capabilities, and determined the kinds of outsourcing decisions and contracts clients made moving forward (Gopal et al. 2003; Levina and Ross 2003; Sabherwal 1999; Seddon 2001; Whitten and Leidner 2006). Conversely, outsourcing failures fueled a greater need for controls, monitoring mechanisms, and tougher contracts, and also determined the kinds of decisions clients made moving forward (Choudhury and Sabherwal 2003; Lacity and Willcocks 1998; Sabherwal 1999).

The main interactions are depicted in Figure 1.1. We first note the bidirectional arrow between Outsourcing Decisions and Outsourcing Outcomes that shows that current decisions are affected by the outcomes of previous or current engagements. Outsourcing decisions are not made in isolation. Instead, most clients are in their second, third, and even fourth generation of outsourcing relationships. A client's prior history with delivering IT or business processes and prior ITO and BPO experiences are vital to understanding the outsourcing decisions a client makes today. Generally, *clients get better at outsourcing over time as they conquer the learning curve* that is discussed in Chapter 2.



Figure 1.1 Determinants of outsourcing outcomes

We also note the relationship between Contractual Governance and Relational Governance in Figure 1.1. A number of researchers have begun to simultaneously study contractual and relational governance. Are they substitutes? Are they complements? Several important papers have found that the interaction between Contractual Governance and Relational Governance is positive, and thus Contractual Governance and Relational Governance serve as complements rather than as substitutes (Goo et al. 2009; Kern and Willcocks 2000; Poppo and Zenger 2002; Sabherwal 1999; Wüllenweber et al. 2008a, b). Kern and Willcocks (2000) used 12 case studies to argue the importance of both contractual governance and relational governance. Poppo and Zenger (2002) surveyed 151 US client firms and found that ITO success was greater when both contractual complexity and relational governance were greater. Goo et al. (2009) also found that formal contracts and relational governance function as complements, rather than as substitutes, in a sample of South Korean firms. Goo et al. (2009) found that when higher values of two aspects of Contractual Governance (foundational characteristics and governance characteristics) were coupled with higher values of three aspects of Relational Governance (relational norms, harmonious conflict resolution, and mutual dependence), the interactions created higher values of trust and commitment (their ITO outcome variables). However,

they did find one exception. Contracts that specified high levels of change clauses actually interacted with relational governance in a negative way, leading to lower levels of trust and commitment. *Overall, research found that the best outsourcing relationships are based on sound contractual governance and on strong relational governance.*

Researchers have also studied the interactions between ITO decision and contractual governance. Lee et al. (2004) have written a very interesting article that used the same dependent variable to measure ITO success as Grover et al. (1996) and many of the same independent variables used in Lacity and Willcocks (1998), including ITO decision (degree of outsourcing) and contract governance (contract duration and contract type). The authors surveyed 311 South Korean firms. Instead of treating outsourcing decision scope, contract duration, and contract type as independent variables, they created three ideal profiles that integrate these constructs. For example, one ideal pattern is called "arms-length" and has the ideal value of selective outsourcing for decision scope, detailed contract for contract type, and medium contract duration. The expected effect of "arms-length" profile on ITO success is "cost efficiency." The other two patterns are "independent" and "embedded." The authors found that two of the three profiles were significant - the arms-length and the embedded profiles. Overall, the research shows the importance of matching decision type and contractual governance to achieve higher levels of outsourcing success.

In Figure 1.1, we also note the complex relationship between client and provider capabilities. Both partners need to have strong technical and methodological capabilities and strong business process management capabilities. This suggests that both parties need a deep understanding of the function that is outsourced. Other capabilities are also related – clients need a strong supplier management capability and providers need a strong client management capability. Clients value providers with strong domain understanding and a superior ability to manage human resources. Clients realize they need to understand, accept, and adapt to cultural differences.

Conclusion

In this chapter, we presented the research from 1356 findings to identify robust practices related to nine outsourcing topics that are most relevant to practice. We began this chapter with a rather disappointing statistic from the meta-analysis: only 60% of outsourcing outcomes were considered positive by clients. We also promised that there was good news to report: researchers have a good understanding of what it takes to ensure positive outcomes and to avoid negative outcomes. There are five areas that clients must master: making the best decisions, signing the best contracts, engaging in good relational governance, retaining strong capabilities, and selecting providers with

complementary capabilities. According to the meta-analysis, the best decisions were based on a rigorous evaluation process that included the full commitment and support of top management and resulted in selective sourcing decisions, often with multiple providers. The best contracts were complete, with detailed clauses in the outsourcing contract. For ITO contracts, the optimal contract duration was in the three-to-five-year range, although contract duration was not a determinant of BPO success. All parties need to behave as good partners in relationships by openly sharing knowledge and communicating about their expectations, progress, strengths, and weaknesses. Trust is also a vital component of good relationships. Clients need a different set of capabilities after outsourcing. These capabilities help clients transition from doing a service to managing a provider. And finally, clients need to find providers with strong human resources and with technical, methodological, and domain understanding capabilities.

In this chapter, we presented research results from the *client's perspective*. In the next two chapters, we take a different approach and interpretation of our research by focusing on the *provider's perspective*. We give voice to the hundreds of providers who have spoken to us about clients and about the outsourcing industry these many years.

Notes

- 1. Besides these rational reasons, some studies find personal agendas dominating largescale outsourcing decisions (Hall and Liedtka 2005; Lacity and Hirschheim 1993a).
- 2. CMMI (Capability Maturity Model Integrated) defines five levels of software development maturity and specifies what processes must be in place to achieve those levels.

2 What Providers Say about Establishing the Outsourcing Arrangement

Mary C. Lacity and Leslie P. Willcocks

Introduction

Over the course of many years, we have interviewed and surveyed thousands of outsourcing clients and providers. Clients have openly and willingly shared many outsourcing stories – both good and bad. Chapter 1 and much of our published work have focused on the client perspective – the things clients report about outsourcing. We have used their voices to identify best practices that differentiate outsourcing success from failure from the client perspective, including client decision-making frameworks (e.g., Lacity et al. 1996), contractual governance (e.g., Lacity and Hirschheim 1993), client capabilities to retain in-house after outsourcing (e.g., Feeny and Willcocks 1998), and various sourcing models including enterprise partnerships, netsourcing, offshore outsourcing, cloud computing, rural sourcing, and bundled sourcing (e.g., Kern et al. 2002a; Lacity et al. 2003, 2004; Lacity and Rottman 2008; Lacity et al. 2010b; Willcocks et al. 2010a, b, c, 2011; Willcocks et al. 2010b).

Providers have also been a key part of our research, but they are quite understandably more reticent to share failures publically, or to voice complaints about clients. In this chapter and the next, we aim to finally share in detail what providers have been saying to us about clients – the things they wish clients would know or do, as well as some things they wish clients *didn't* know or do. We have organized the top 20 statements providers make by outsourcing phase, beginning with the ideal client profile from a provider's perspective, through the processes of strategy formulation, contracting, post-contract client management, supplier management, and relational governance (see Table 2.1). *Among the 20 things providers say, 12 would actually benefit the client if they followed the providers' advice.* We understand that clients will immediately and rightfully question the previous statement. How can it possibly benefit clients if they do

	Outsourcing phase	Provider statements	Does research support this statement?
Chapter 2: Establishing the outsourcing arrangement	Client profiles	1. "We may not want your business."	?
		2. "We hate novice customers."	\$
	Strategy	3. "If procurement says 'it's all about price,' don't expect innovation."	\$
		4. "We are not insurance agents; we cannot absorb all of your risk."	?
	Contracting	5. "We can spot a faux bid."	?
		6. "The length of your RFP is ridiculous."	9
		7. "Get real with the numbers."	\$
		8. "Your advisor may not be helping."	?
		9. "There is no such thing as a fixed price."	S
		10. "The ideal contract is ten years or more."	Ţ
Chapter 3: Managing outsourced services	Client capabilities and management	11. "Where are your good people?"	6
		12. "Don't do man-to-man marking."	\$
		13. "Stay on your own side."	\$
	Provider capabilities and management	14. "We have internal problems too, and sometimes need your help."	\$
		15. "OK blame me – but was it really my fault?"	\$
		16. "There are limits to us working smarter."	S
		17. "We sometimes invent new buzzwords for old ideas."	9
	Relational governance	18. "If it favors us we'll stick to the letter of the contract; otherwise, it's the spirit that counts."	Ş
		19. "We have to trust you too."	\$
	Outcomes	20. "The worse our business gets, the worse your business gets."	\$

Table 2.1 Things providers say

Note: Supported by research; In or supported by research; In or research/mixed findings.

what providers say? We compare what providers say with best practices indentified in Chapter 1 and with best practices derived from our other research (see Appendix A for more information on the research method). In Table 2.1, we list 20 statements providers commonly made and indicate whether the statement is supported by research, not supported by research, or has not been studied (or studies have produced mixed results).

In Chapter 2, we cover the ten statements providers make about establishing the outsourcing arrangement. These include statements about the ideal customer, outsourcing strategy, and contract negotiations. In Chapter 3, we cover the ten statements about delivering the outsourced service. We begin with the question: "Are you a desirable outsourcing client?"

Client profiles

Clients often assume that any provider would be keen to have their business, particularly in these tough economic times. But providers have a profile of the desirability of a client engagement based on the prestige of the client firm, the size of proposed deal, the potential for additional revenue and good profit margins with this client (and other clients because of this deal), the opportunity to enter into new markets, the opportunity for knowledge transfer to provider, and the client's risk profile. (A client's business might also become more desirable as the end of the provider's sales cycle approaches.) From the provider's perspective, what kind of clients do they *not* seek? Providers say:

1. "We may not want your business"

Each provider has a business model in which they can earn a profit margin. The provider may not want a potential client's business if the proposed transaction does not fit the provider's business model. For example, we hear frequently that mature providers discourage staff augmentation models and prefer fixed-price project work. For many ITO firms in particular, their business model works best when clients hire providers for a *service* delivered by a well-balanced *team*. Each provider has an internal team structure that is designed to balance lower-cost workers (to keep prices low) with experienced project managers and team leads (to keep quality high). Disrupting the team structure threatens the ability of the provider to deliver on its value proposition. As one CEO of a provider said, "…outsourcing works best when a client engages a team, not a single person."

There are many other reasons why providers may not want a client's business: The deal may be too puny, the client may be too risky (such as potential for bankruptcy), or the work may be uninteresting or no longer part of the provider's future direction. The client may lack prestige, in which case winning the contract might not fit well with the track record the provider wants to show to future potential clients. The client may well have a "problem child" reputation, and be regarded as too much hard work, carrying too many hidden costs for little gain. The provider may calculate that there are too few opportunities for knowledge transfer from the client, or too few opportunities for additional work to offset initial low margins. There may well be more attractive contracts with other clients in the offing, or contracts already signed with a potential client, and this potential client represents a big opportunity cost. The provider may see the bidding process against an incumbent or favored provider as too costly, given the lower likelihood of success. Providers are not just driven by a "get the deal, at any cost" mentality, though this can become unbalanced where sales teams – aggressively incented to win bids – are unduly influential. However, wise providers take a commercial, more long-term view of the collective risks inherent in going with a particular client. Even in recessionary times, we have seen providers walk away from deals.

As far as the ability to partner effectively with clients, providers say:

2. "We hate novice customers"

Some clients may assume – wrongly – that providers would prefer naïve customers because they would be easier to manipulate or even to swindle. The main problems with naïve or novice customers are that they frequently overanticipate outsourcing benefits, underestimate the amount of detailed customer management it takes to make outsourcing work, and under-invest in the relationship (such as failing to invest enough in provider employee training or onsite provider liaisons). From the provider perspective, novice customers require patient tutoring, frequent intervention to explain the deal to disgruntled internal users, and education on how managing a provider is different from managing an internally provided service.

A provider CEO told us, "the customer from hell is the naïve buyer." Such novice customers all too frequently do not know what they want, or keep changing their minds, or are internally divided on objectives and priorities. Sometimes all three! They end up pursuing too many objectives and often these objectives are contradictory. For example, we have seen clients expect dramatic cost reductions, superior service, and innovation, not recognizing that there must be serious trade-offs within such ambitious objectives. This makes naïve clients more difficult to deal with, though it can also lead to a provider adopting a defensive tactic of playing the client representatives off against each other. Ultimately this does not result in good relationships or performance. When things go wrong, and the results do not match up to the promise and expectations, they turn to blaming the provider. No amount of "I told you so" really helps the provider in such situations.

What research found. As discussed in Chapter 1, there have been many academic studies that examined client firm characteristics. These studies ask, "what kinds of clients are more likely to outsource?" and "what



Figure 2.1 Outsourcing learning curve *Source*: Lacity and Rottman (2008).

kinds of clients get the best outsourcing results?" These studies have scoured over a dozen client firm characteristics, such as client firm size, the industry to which the client firm belongs, prior firm performance, prior performance of the internal department before outsourcing, and the size of the internal department. We reported that much of the research produced mixed results. Here we report on another finding from previous studies and from our own rich set of case studies. The most robust finding is the most intuitive – that client experience with outsourcing is highly correlated with outsourcing outcomes. *Experienced clients have better outsourcing outcomes than inexperienced clients*.

The reason for this finding is that outsourcing requires a significant learning curve (Lacity and Rottman 2008). Figure 2.1 illustrates the typical client learning curve for outsourcing. During Phase I, managers become aware of outsourcing through marketing hype ("you'll save 50% off your costs") or irrational propaganda ("we'll lose all our intellectual property"). Managers quickly learn about potential benefits, costs, and risks by talking to peers, advisors, and reading research. Most managers initially begin outsourcing with pilot projects to reduce costs on a few targeted projects (Phase II). Clients often make mistakes in this phase, such as focusing the deal so tightly on costs that they fail to invest enough resources to ensure quality service. They might have picked also a poor provider in terms of matching the provider's capabilities with client needs. As learning accumulates, managers move to Phase III when they have a more balanced emphasis on cost, quality, and speed of delivery (not just cost). Clients have learned better what it takes to make outsourcing work in terms of retained client capabilities and better contractual and relational governance. Two routes are prominent in Phase IV. Some mature adopters in Phase IV use outsourcing to strategically enable corporate strategies, such as increasing business agility, bringing products to market faster and cheaper, financing new product development, accessing new markets, or creating new business. Other mature adopters have "institutionalized" outsourcing in that they have a strong internal procurement function and a team of in-house advisors that manage a portfolio of outsourcing relationships. Outsourcing is an accepted and expected practice for non-core capabilities. From the provider's perspective, clients may be considered "ugly ducklings" in Phases I and II until they mature into "swans" during Phases III and IV.

Outsourcing strategy

Client organizations outsource for a number of reasons, including cost reduction, the ability to focus on core capabilities, access to expertise/skills, process performance improvements, technology upgrades, flexibility, scalability, change catalyst, access to global markets, cost predictability, speed delivery, and innovation (Lacity et al. 2010a). Some customers unrealistically expect providers to deliver on almost all of these objectives. As one provider said, "Clients want it all and take a 'Sherman's march to the sea' approach to contract negotiations."

Despite all the rhetoric of using outsourcing strategically, cost reduction has remained the most important driver for a majority of client firms, as found in the earliest studies (e.g., Lacity et al. 1994) to more recent ones (e.g., Fisher et al. 2008). If the extent of the outsourcing "strategy" is cost reduction, customers invariably ask, "Yes, the suppliers are delivering on the contract, but where is the innovation?" Customers frequently expect providers to proactively suggest and infuse innovation because outsourced work is core to a provider's business, but not core to the customer's business. Customers expect to reap the benefits of a provider's innovations in technologies and process maturity to constantly help customers achieve their business priorities. As one provider innovation executive put it, "For them it may be really innovative, while for us, it's just business as usual." So why aren't customers getting more innovation? Here's what providers say:

3. "If procurement says 'it's all about price,' don't expect innovation"

Providers want customers to know that when deals are driven by the customer's procurement function – as so often happens – the providers are treated as vendors, charged with delivering a non-core function as the lowest price possible. These deals are not designed for innovation; providers cannot deliver

innovation without expanding the scope (and price) of the contract. One provider voiced the issue this way:

We are an IT company, so we can transfuse current IT, state of the art IT, future IT, conceptual IT. But of course that transfusion as far as we are concerned is not free. The big problem is that people think that transfusion is free. All we are contracted to do is drive a service of this level.

(Quality Manager, CSC)

Clients and providers frequently have an innovation debate. At the beginning of the deal, the usual sticking point is how innovation is going to be paid for. Sometimes clients volunteer an innovation fund against which approved client/provider proposal can draw. However, if incarcerated inside a traditional cost–service focused contract, such an initiative rarely has the size or priority to make inroads into the attention given to primary and urgent operational issues. Two or three years into a deal, we find clients asking, as one provider executive told us, "well we've had the service but where's the innovation you promised?" The truth is that providers are reluctant to spend time and expert resources on an ancillary part of the contract, especially when clients themselves do not take the positive action required from them to work together with the provider to achieve the more business impactful innovations beyond minor IT operational changes.

The lack of innovation in an outsourcing deal often means that another innovation debate occurs when contract renewal time arrives. The more informed customers by then understand that a different form of leadership, business involvement, contracting, and teaming across client and provider will be required if innovation is going to be a key objective (Willcocks et al. 2011). Risk sharing and strong partnering behaviors are critical components in any outsourcing arrangement that is going to deliver meaningful technical and business process innovation. But the problem is, firstly, these may get negotiated down, or even out at the contracting stage, as client and provider representatives "de-risk" the deal from their own perspectives. Secondly, the step change needed to move to an innovation or "cost plus innovation" focus for the deal is not made seriously enough by either party to create a sustainable focus on the innovation objective.

What research found. In Chapter 1, we focused on the most common reasons clients outsource: to reduce costs on what is viewed as a non-core activity better provided by providers with superior skills, expertise, and technical capabilities. Although there are fewer research articles on outsourcing as a strategic practice, the little evidence we do have suggests that client firms can achieve strategic benefits and innovation from outsourcing. Studies have found that clients can gain the following strategic benefits: commercial exploitation (DiRomualdo and Gurbaxani 1998; Kishore et al. 2004), access to global markets (Beverakis et al. 2009; Rao et al. 2006; Sobol and Apte 1995), and innovation (Quinn 2000; Quinn and Hilmer 1994; Willcocks et al. 2011). We also know that two factors are vital to achieving strategic sourcing objectives: (1) top management involvement and (2) client stakeholder involvement.

Top management involvement is the extent to which senior executives from the client organization provide leadership, support, and commitment to outsourcing. In Chapter 1, top management involvement was identified as an important factor in making good sourcing decisions. Granted, it is not easy to convince the client's e-suite to get actively involved in the outsourcing of non-core capabilities. Our research (Willcocks et al. 2011) has identified five compelling reasons why client senior executives should get actively involved in outsourcing strategy:

- 1. Outsourcing impacts shareholder value.
- 2. Outsourcing spend is large and growing.
- 3. Outsourcing can disable business strategy if risks are not mitigated.
- 4. Outsourcing can play a positive, strategic role.
- 5. CEOs alone possess the crucial bargaining power.

Client stakeholder involvement means that in addition to the e-suite, other important client stakeholders are involved, committed, and supportive of the outsourcing decision (e.g., Lacity and Willcocks 2001; Seddon 2001). Providers are best empowered to innovate when the deal-making meaningfully involves client senior managers to define strategy, client process managers to identify operational complexities, and procurement to ensure favorable financial outcomes. These three client stakeholders balance cost, service quality, and innovation objectives, offering a better opportunity for providers to deliver the financial and business benefits clients seek.

The most recent research we have done on innovation (Willcocks et al. 2011) suggests that only Phase 4 customers (see Figure 2.1) are really getting serious innovation from their outsourcing arrangements. Why is this? Firstly, innovation is strongly correlated with highly collaborative behaviors not typical of, supported by, or needed in more traditional outsourcing contracts. Secondly, leadership is needed from senior client and provider executives to shape the context for dealing with the adaptive challenges inherent in innovation. Thirdly, different modes of contracting and incentives are required, including risk–reward and even joint venture components, but certainly ones that involve shared incentives targeted on an innovation agenda. Fourthly, in innovation situations where solutions and how to achieve them are inherently unclear, multi-functional teaming is required across client and provider groups. Finally, these leadership, contracting, and organizing preconditions need to translate into high-trust collaborative behaviors, signaled by flexibility, reciprocity,

proactivity, acceptance of risk, and commitment of resources (Willcocks et al. 2011).

4. "We are not insurance agents; we cannot absorb all of your risk"

In Chapter 1, we defined risks as the probability that an action will adversely affect an organization. Risk management is a set of activities geared toward identifying, assessing, prioritizing, and addressing risks in order to minimize their probability or impact. Providers voice concern that clients are increasingly seeking to push all the risk onto providers. This has been exacerbated in the period of austerity experienced from 2008 as a result of the financial crisis. Providers want customers to know, "If you demand too much, you will break our business model."

Clients rightly see outsourcing as inherently risky. Therefore, it is not surprising to find them applying risk mitigation measures. Our work shows that, ideally, the client should be looking at risk strategically, from sourcing portfolio, scope, and decision, how the sourcing arrangement is configured in terms of number and attributes of providers, length of contract(s), financial scale, pricing framework, governance structure, resource ownership, and commercial relationship, through to how the outsourcing arrangement is managed (Willcocks et al. 2011).

Providers can also help their clients on risk. Some examples are reducing financial exposure, improving tax positions, and rearranging payment schedules to benefit the client. In 2008–09, we found some providers offering to absorb transition costs in order to encourage clients to sign contracts more quickly at a time of high perceived uncertainty for clients, financially and operationally. Outsourcing can be used to reduce internal headcount, with the provider absorbing staff and related legal obligations. And of course contracts are designed to be risk-mitigating instruments, not least through penalty, performance, and termination clauses, as well as setting up payment and governance schedules, and stipulating items such escalation and dispute processes.

The problems set in when the provider is seen as a bottomless sink able to absorb every risk-escaping opportunity hit on by the client. The cumulative effect of a request for a rebate here, more flexibility there, more resources and work within the price, can be straining, but also difficult to resist, if seen initially by the provider as an investment in collaborative relationships. The issue then becomes the degree of reciprocity that the client exhibits. We have actually seen several outsourcing arrangements flounder within a year, because the clients, at the negotiation stage, passed all risks to the providers, and made the outsourced services virtually undeliverable within the price and timelines and penalty regime set.

Clients also increasingly pass the pain they are experiencing in their own markets and operations, for example lower profits, higher customer complaints, and human resource issues, on to outsourcing providers, for example disputing

and paying invoices as late as possible, outsourcing call centers, or areas with high levels of employee turnover or dissatisfaction levels. Here, in effect, risks are being transferred to the provider, but there are limits to the degree to which such client opportunism can work. Ultimately, the client is accountable for performance, may well experience adverse outcomes, and may well be creating the illusion rather than the reality of risk mitigation. And ultimately, of course, no provider can mitigate totally against the risks associated with poor, riskblind outsourcing management by a client.

What research found. As discussed in Chapter 1, academics have frequently studied outsourcing risks and risk mitigation from the client's perspective. By contrast, we found almost no academic research in this area from the provider perspective. (The only article on provider risks is by Aundhe and Mathew (2009).) In the academic literature, we found over 50 published papers that examine risks and risk management for ITO and BPO from the client's perspective. As discussed in Chapter 1, the most cited paper on ITO risks is by Michael Earl (1996). One of the reasons why this paper is so valuable is that it holds the client accountable for the success of outsourcing. Before outsourcing can work, "a company must be capable of managing the services first" (p. 27.). Our own research has identified a number of client practices that heighten risks in outsourcing, and we found that providers can do only so much to mitigate these risks. According to Lacity and Willcocks (2001), these include treating IT as an undifferentiated commodity to outsource; incomplete contracting; lack of active management and requisite capabilities; failure to adapt arrangements in the face of rapid business and technical change; poor sourcing and contracting for development and new technologies; and signing long-term contracts for short-term reasons, for example short-term financial restructuring or cash injection. More recently, Currie et al. (2008) identified six risks for knowledge process outsourcing: intellectual property risk, confidentiality risk, compliance and regulatory risk, geopolitical risk, operational risk, and reputation risk. In the BPO space, the following practices have been found to reduce a client's risk: process standardization, relationship-specific investments, detailed contracts (Tate and Ellram 2009), and relational governance such as trust, conflict resolution, communication, and cooperation (Wüllenweber et al. 2008ab).

Contract negotiations

In this section, we present the statements providers make about the entire contract negotiation process from request for proposal (RFP) to signing the deal. Providers say things about clients' intentions for outsourcing, the length and accuracy of bid documents, the role of advisors, the unintentional consequences resulting from clients' tough and unrealistic negotiations, and the ideal contract duration. From an academic perspective, we call these issues

"contractual governance," and it has found to be an important category affecting ITO and BPO outcomes (Lacity et al. 2010a). We begin this section with the first statement providers sometime make about client intentions:

5. "We can spot a faux bid"

A minority of clients go through an outsourcing evaluation process with motives other than a fair and objective selection of a provider. Some client managers launch an outsourcing initiative "because if I don't look at outsourcing, somebody will do it for me." The intention is self-preservation of the in-house function, not outsourcing. Some clients use an outsourcing evaluation to pressure the incumbent provider to reduce prices. Provider switching costs are prohibitively high, so clients do not have a real intention of terminating the relationship with their current provider, but an RFP can boost their bargaining power during negotiations.

Clients have also been known to use an outsourcing evaluation exercise as a way of, in fact, garnering information about what their costs and service levels could be against a market benchmark. This may simply be a short-cut and price-cut way of obtaining useful data, from a number of informed provider sources, or it might be a more ambitious tactic to then use those data to improve the performance of the in-house function which had not been previously seriously benchmarked.

Providers say they have many indicators when a client is not serious about outsourcing or not serious about switching providers: RFP turnaround times are too short, providers are not allowed inside the client organization, providers are not allowed to meet anyone but the client advisor or primary client contact, and our personal favorite – the incumbent provider's name is all over the request documents. Providers say they are, in fact, happy to provide an assessment of what the work can be done for, if that's what the client wants to know, but it needs to be done as a paid-for consultancy assignment, or on a reciprocal basis, rather than thinly disguised as a real bid process, whether competitive or not.

What research found. We are not aware of any specific research addressing the issue of "faux" bids. We did, however, certainly find examples in our own research in which clients initiated an outsourcing evaluation for political reasons (Lacity and Hirschheim 1993; Willcocks and Lacity 2009). Political rationales for why organizations examine outsourcing included proving efficiency, justifying new resources, and exposing exaggerated claims. Some participants in our study, especially middle managers, expected that an outsourcing evaluation would demonstrate to senior management that the internal department was cost efficient. By comparing internal costs with provider bids, middle managers could hold up their reports and say, "See, no one can provide services cheaper than us." The hard numbers appear objective and, therefore, add credibility



Client bargaining power

Figure 2.2 Client's bargaining power *Source:* Cullen and Willcocks (2003)

to their efficiency claims. Some managers initiated outsourcing evaluations in order to acquire new resources, such as new technologies and additional personnel. Because senior management all too many times view the back offices as cost burdens, they may be reluctant to provide additional funds for new investments without substantial justification. By showing that growth cannot be satisfied more efficiently through outsourcing, the back-office managers in the study expected that their resource requests would be granted. Some managers feared that favorable reports about outsourcing trends would seduce their senior managers into outsourcing. By taking the initiative, back-office managers expected outsourcing evaluations to temper the many exaggerated claims made in public information sources.

In the case of using bids to pressure incumbent providers, we can understand why some clients are motivated to do this. We analyzed the client's power during the outsourcing life cycle (Cullen et al. 2005a; Willcocks et al. 2011) and found that a client's bargaining power peaks during the selection phase and valleys during the manage phase (see Figure 2.2). This is particularly true for the outsourcing of transactions that require high levels of client-specific knowledge, high levels of assets (such as IT infrastructure), and high levels of client-provider integration. The client switching costs are prohibitively high, and a faux bid may be a way – from the client perspective – to gain back crucial bargaining power during contract negotiations. The downsides of this behavior are damage to the client's reputation which may dissuade providers from responding to legitimate bids in the future and damage to the advisor's reputation.

6. "The length of your RFP is ridiculous"

Providers want to know why clients request so much information from providers, particularly in the early stage of the selection process. Are clients really reading and pruning potential providers based on over-a-hundred-page responses from providers? Are they really comparing, can they compare, maybe dozens of providers across hundreds of pages? Does the information requested really differentiate one provider from another? Or is it too often a box-ticking exercise? Some providers think clients use the length of the RFP to prune providers based on provider *endurance* as a proxy for provider *capability*. Some providers suggest that documents are so long because clients do not in fact know the critical success factors, so they request everything "in case it is useful." Some providers say advisors must be getting paid by the word!

Providers often complain particularly about public sector agencies, and the rigidities and regular irrelevance in terms of the information requested. More positively, this has led to more framework agreements and preferred provider arrangements being introduced in a range of countries, including the United States and the United Kingdom, to reduce the cost and administrative burdens falling on providers, especially in the early stages of the bid process.

A complaint heard across sectors is where the considerable length of the response required is also combined with an imminent deadline. While this might sort out the serious and committed from the merely interested, it also can have the effect on the provider of rushing the analysis, arriving at unreal propositions, and recycling components from previous bids rather than tailoring the proposal carefully in light of client requirements. This builds in problems and issues that will surface and need to be sorted by all parties at later stages.

Of course, in some cases, the RFP may well be highly detailed and very indicative of what the contract terms and the performance levels might be, and so could be a very helpful foundation for the subsequent outsourcing arrangement. This would reflect an in-house team that really knew what it was doing. We have researched such cases, for example a major chemicals company that eventually contracted with a Dutch provider, and an energy multinational and three providers. In these cases providers did not complain, but actively welcomed the detail. At the same time we have seen relatively short RFPs, which also translated into relatively brief contracts, with no discernable fall-off in service performance or client–provider relationships across the outsourcing experience.

One provider CEO argued that the commercial aspects and provider capabilities should be primary in the bid process, and too often he had seen these subordinated to legal and bureaucratic concerns that also found their way into the contract. In such cases, not surprisingly, the contract was very often neither consulted nor really understood by most parties supposedly operating under its principles. In one global deal a client executive ruefully acknowledged that the lengthy RFP got converted into what he called "a five foot contract." The document was so forbidding that no one really actively referred to most of it for guidance – which was partly fortunate because several mistakes were made in the lengthy process of drawing it up. What research found. We are not aware of any research that has specifically looked at the length of RFPs and its relationship to outsourcing outcomes. One thing we do know is that the bidding costs for providers can be prohibitive, and lengthy RFPs can contribute to providers deciding that the business is not worth pursuing, especially if there is an incumbent provider also in the race. However, researchers have studied contract detail – the number or degree of detailed clauses in the outsourcing contract, such as clauses that specify prices, service levels, benchmarking, warranties, and penalties for non-performance. As discussed in Chapter 1, of the 25 times contract detail was studied, researchers found that more contract detail was associated with better outcomes 20 times (80%). Because many RFPs become the foundation of the contract, one might make the argument that a lengthy RFP benefits the client if it helps to create a detailed contract.

7. "Get real with the numbers"

During the contracting process, providers say that clients need to be more transparent, honest, and forthcoming. Providers want clients to be more transparent about their actual average baseline service levels – not their most optimistic guesses or their most favorable performance. Providers want clients to be more forthcoming about process complexity, process exceptions, and process volumes. Providers have a difficult time assessing these issues during due diligence, causing many surprises during the early months after transition. One provider said,

One thing in this business you cannot underestimate is: no matter how long you try to do due diligence from the outside, you will always get it wrong. It's only when you actually go in there and start running it that you find out what's going on. The sooner you do that the better for everyone.

(CEO, provider)

In practice, in-house service measurement and cost monitoring are often not that accurate or advanced. One provider told us of a 2001 outsourcing bid to an Asia Pacific–based insurance company whose cost estimates for IT were out by 50%. This was only discovered at the due diligence stage. It led to a radical revision in price and in the services covered. In another case, both the client and provider drew up a contract to cover the services required, only to discover during transition that the actual services formerly delivered by the in-house group were nearly one-fifth more in scope than contracted for. A national agency had scoped a very large potential outsourcing initiative and carried out due diligence on the base case for outsourcing. In its originally scoped IT organization, it had documented one centralized IT helpdesk. During base case development, it discovered that many of the business units had created their own helpdesks
due to the poor customer service of the centralized function. The original fulltime equivalent estimate of helpdesk staff tripled as a result. In a more recent case, a Canadian company and a major provider ended up in a multi-milliondollar court case over invoicing due to vagueness in costs and service scope and levels inherited from the inadequate numbers provided by the client at the pre-contract stage.

What research found. Research has found that client outsourcing readiness – the extent to which a client organization is prepared to engage an outsourcing provider by having realistic expectations and a clear understanding of internal costs, service levels, and service volumes compared to outsourced costs and services – is an important retained client capability that helps to achieve good outsourcing outcomes (e.g., Cullen et al. 2005a; Iacovou and Nakatsu 2008). It was the seventh client capability listed in Table 1.5 (see Chapter 1). In many cases, however, we found that clients did not even know the amount of assets or the amount of people performing back-office operations. For example, Sandy Ogg (2011), former Chief HR Officer for Unilever, said whenever he needed a headcount for the number of employees working for HR, it would take six weeks of investigation to get an answer. Clients also need to fully understand their own internal operations – including process complexity, process interdependencies, and process exceptions – before requesting provider bids. Overall, the research has thus corroborated providers' pleas for more accurate client data.

Our own work (Cullen and Willcocks 2003; Lacity and Hirschheim 1993; Lacity and Willcocks 2001; Willcocks and Lacity 2009) suggests a consistent finding. There must be an evaluation phase when the client measures everything that moves in the in-house area to be outsourced. The vital tasks here are measure baseline services and costs, develop evaluation criteria, create an RFP, and invite internal and external bids. This measurement period to establish the baseline may take up to three months in large-scale deals. If conducted in this way, invariably the process throws up a much more granular and accurate view on cost and service realities against which provider bids can be assessed. There then must be a negotiation phase with detailed service-level agreements (SLAs), work unit pricing, and terms for contractual change worked on, and due diligence carried out. While measurement needs to be constantly updated across the outsourcing arrangement, if the early pre-contract work is skimped, then both parties will find themselves on a flawed rather than an optimal path, with measurement needing radical surgery and updating in later phases of the deal.

8. "Your advisor may not be helping"

Clients frequently hire advisors to assist with the entire decision-making process – strategy formulation, RFP, provider short list, provider selection, and contract negotiation. Good advisors make the difference between a lousy deal and a good deal for both clients and providers. Because advisors are typically

paid by the client, their allegiances rightly align with the client's interests. This can sometimes perpetuate the "us versus them" approach to contracting. Providers wish that more advisors would help clients and providers build a relationship, not a contract. Providers want advisors to be less rigid and less evangelical about their template-driven processes. As one provider said, "Relationships are not based on templates." Instead, providers want advisors to help their clients build strategic relationships by working toward value and less toward lowering prices and shifting risks. Providers also need access to client senior managers if they are to build good partnerships.

Small providers often feel that advisors only "recommend the usual suspects." Some domestic providers claim that advisors immediately push clients to offshore providers. From an IT perspective, some providers think advisors need to be more knowledgeable about hosting and cloud computing services. One large provider remarked that invariably he found advisors pushing for multi-sourcing options, and felt that this was partly because this just offered them more work. These complaints all translate into one thing for clients: make sure your advisor has deep knowledge on the breath of provider capabilities and how a sourcing solution might bring the most value for the client.

How can clients identify a good advisor? According to providers, good advisors make sure the client is ready to evaluate providers by assembling client teams of senior executives, business managers, and internal procurement. Good advisors make sure clients have credible internal benchmarks on volumes, service levels, and costs. Good advisors do not let clients put out generic RFPs that attract 30 or more superficial provider responses. Rather, good advisors prescreen providers and help the client send a targeted RFP to less than ten providers. Good advisors quickly and rationally prune the RFP responses to three to five providers and get the contenders involved with the client team, particularly the senior client managers, soon thereafter. Good advisors remain neutral and promote transparency during the contracting and engagement processes. Good advisors can also traverse the murky lines between formal and informal communications with providers. Good advisors look for opportunities across provider bids. When it becomes clear that the client will chose the incumbent or chose to stay in-house, good advisors guide their clients to inform other bidders quickly (Lacity and Rottman 2010).

What research found. We are not aware of any research that has specifically examined the role of advisors on outsourcing outcomes. One assumption is that advisors are helpful and that there will be a strong correlation between the use of advisors and the health of their clients' outsourcing arrangements. This needs testing! One trend we have seen in work on large-scale outsourcing arrangements is that the same limited number of major advisors tends to be used, and this results in similarities in "best practice" advice given and solutions proposed. It would be important to discover whether this advice is optimal, or whether there are standardized approaches being adopted, or even fashions in advice, driven by producer rather than consumer (i.e., client) requirements and values. Another area of interest is the extent to which the advice given is "over-siloed" – that is, might be suitable for the specific area addressed (e.g., tight contract, SLA construction) but fits uneasily with the bigger outsourcing picture, for example firm and sector context, objectives, and relationships. This is certainly an area we plan to investigate in the future.

9. "There is no such thing as a fixed price"

Clients will consider a range of pricing options, all of which have strengths and weaknesses. Each will be suitable for certain types of outsourced activity. These options include lump sum fixed price (e.g., \$2 million annually for a call center), unit pricing (e.g., \$13 per call), and cost-based pricing (e.g., operators at cost plus 3% mark-up). Clients go for fixed price in order to lock down cost, to render costs predictable within specified volume bands, and to achieve an explicit financial goal important to them. They also see it as a mechanism for controlling providers' potential opportunistic behavior.

However, providers will often agree to a fixed-price arrangement, anticipating that the future is uncertain, that over even a three-year arrangement the client's requirements will change, that unanticipated services and demands will materialize outside contract scope, and that these services will incur additional charges at potentially higher price levels. As a result, providers are mostly very careful to define meticulously service scope, without always spelling out the full implications of what has been omitted (Willcocks and Lacity 2009).

The client may just choose the wrong pricing option for the tasks outsourced. Fixed price may be fine where costs, service type, and service levels can be meticulously defined, and are stable for long periods. But when it is difficult to predict demand, cost changes, or even the precise objective, as in development and innovation work, then any fixed price set will be increasingly unrealistic. The result? Both parties will have to re-negotiate continuously, or – better – move to a more suitable pricing model.

Parties with the best of intentions can still run into problems, for example through contractual ambiguities and misinterpretations over the implications of clauses or what is "in" and "out" of scope. For example, a major US bank signed a five-year data center deal, essentially to achieve large cost savings. The provider was on narrow margins and wanted to keep closely to the written agreement. One clause said, "the cost of the transfer of all software licensing agreements will be borne by the client." The first 35 license transfers cost little. The next ten outweighed the client's cost savings across the multi-year contract. Despite client protestations, the provider refused to change the terms, arguing that the deal was designed carefully to deliver the services at the agreed price, and that it would have made a different offer if it had to pay for any software

license transfers. The parties proceeded to beat each other up over every nuance in the contract for five years.

Clients also frequently misjudge future demand. Providers tell us that there is often a pent-up demand for IT services which gets released when the outsourcing "white knight" appears on the scene. Users not used to being seriously invoiced see the chance to get all that work on hold done. Subsequently, the client discovers an unexpected spike in cost. In one large aerospace deal we researched, the excess fees amounted to \$500,000 in the first month of operation. Providers tell us that clients, understandably, find it difficult to anticipate future requirements and costs. But in recent years clients have become better at putting the right processes in place for monitoring, though providers still see too much faith being placed in the power of the "fixed price" mechanism.

Providers tell us that clients also regularly underestimate the hidden costs of outsourcing. We agree. In addition to those mentioned above, we have found that the costs of management may be anything between 4% and 12% of contract value, depending on whether it is domestic or offshore outsourcing, type and scale of outsourcing activity, number of vendors and contracts, and in-house management capability. When outsourcing runs into problems, the in-house management costs rise considerably. Other transaction costs are easily underestimated across the lifetime of the deal. These include the cost of advisors, search costs, getting to contract, cost of termination, dispute costs, and not monitoring performance and market price regularly enough.

What research found. Our case study work over many years finds clients quickly losing track of the real costs of their outsourcing, whether these be fixed-price arrangements or otherwise (see Lacity and Willcocks 2001; Willcocks and Lacity 2006; 2009). In fact, our work shows that over long-term contracts in particular, so much new happens that initial estimates and cost controls have little relationship or influence on the final outcomes. For example, in the UK Inland Revenue, the initial estimate in 1993 was that the deal with EDS would cost £1 billion over ten years. The actual figure by 2004 was £2.4 billion (Willcocks and Lacity 2009). Our review of hidden costs extends to over 1200 outsourcing arrangements, and finds that it is the top risk that actually materializes for clients in their outsourcing arrangements (Willcocks et al. 2011). This is especially problematic when considered against the fact that the primary outsourcing objective continues to be cost saving – it appears as one of the top three objectives for the overwhelming number of outsourcing deals we have researched (Willcocks and Lacity 2009).

Vendor opportunism is well represented in theories on outsourcing, less so in the empirical research studies (Lacity et al. 2010). In transaction cost economics theory, the assumption is that providers will behave opportunistically unless curbed by governance mechanisms, by having multiple providers in competition, detailed contacts and service statements, regular benchmarking, and strong in-house management. Our research shows that the assumption of negative vendor behavior is unfair in more favorable circumstances, for example when the provider is making a reasonable profit, is dealing with a prestige client, and sees the potential for additional work. The emerging complementary alternative is to set up outsourcing arrangements on more collaborative, mutually dependent, risk-reward bases (Willcocks et al. 2011).

10. "The ideal contract is ten years or more"

Providers initially start an outsourcing engagement in a financial hole. They spent money responding to bid documents, negotiating the contract, visiting client sites, and conducting due diligence, and may have spent money transitioning new employees or even buying client assets. Furthermore, they continue in the financial hole after the contract is signed. Outsourcing has transition costs that not only defer provider profitability but delay the client's outsourcing benefits as well. No matter how rigorous the due diligence processes might have been, providers really do not understand what they have undertaken until they are responsible for the client's IT or business processes. It may take six months before providers have a handle on daily operations. For large deals, providers may also need from 6 to 18 months to apply all their transformation capabilities - such as centralization, consolidation, standardization, organizational redesign, and new technologies to improve client services (and to generate enough efficiencies to earn a profit margin). From the provider perspective, the longer the contract, the better. Investments can be recouped, rebidding and competition are staved off, cash flow and demand are guaranteed for a long period, and labor utilization can be stabilized.

Providers also argue forcefully for long-term contracts to establish the larger beyond-contract benefits from close relationships and customer intimacy, and for the provider to make strategic contributions to the client's business. However, one ex-provider executive turned chief information officer (CIO) told us (only half-jokingly), "when I worked for the provider the best deal was ten years; here as a client I would make it 18 months if I could." So what *is* good for the client?

What research found. In Chapter 1, we discussed that the meta-analysis found different results about contract duration for ITO and BPO. Within the ITO literature, contracts in the three- to five-year range experienced successful ITO outcomes more frequently than contracts with a greater-than-five-years' duration. Within the BPO literature, contract duration was not a significant determinant of BPO outcomes. In our own case study research, we found that *short-term contracts had a higher relative frequency of success than mid-term or long-term contracts* (Lacity and Willcocks 2001; Willcocks and Lacity 2009). We classified contract duration into three categories: "1 to 3 years," "4 to 7 years," and "8 or more years." Using these contract duration categories,

Contract duration	YES, most expectations met	NO, most expectations not met	Mixed results	Total
0- to 3-year contracts	28 (87.5%)	4 (12.5%)	0 (0%)	32
4- to 7-year contracts	19 (59%)	10 (31%)	3 (9%)	32
8- to 25-year contracts	8 (38%)	6 (29%)	7 (33%)	21
Total number of engagements	55	20	10	85

Table 2.2 Contract duration

Note: n = 85 outsourcing engagements.

the 85 outsourcing decisions with discernible cost outcomes are classified as follows:

- 32 outsourcing decisions were sealed with one- to three-year contracts (38%).
- 32 outsourcing decisions were sealed with four- to seven-year contracts (38%).
- 21 outsourcing decisions were sealed with contracts eight years or longer (25%).

Among these 85 outsourcing cases, short-term contracts realized expectations more frequently than long-term contracts (88% successful) (see Table 2.2). Short-term contracts involved less uncertainty and motivated provider performance. One reason for the success of short-term contracts is that participants only outsourced for the duration in which requirements were stable; thus participants could adequately analyze the cost implications of their decisions. Second, some participants noted that short-term contracts motivated provider performance because providers realized customers could opt to switch providers when the contract expired. As the IS director of an aviation company commented, "It's no surprise to me that the closer we get toward contract renewal, it's amazing what service we can get."

Conclusion

Outsourcing providers, not surprisingly, given their close-up view and their numerous bidding and contract experiences, can be very insightful about clients. What they would tell clients if they could is a mix of observation and frequently helpful advice, which ranges from the objective to the self-interested. Interestingly, in most of the cases we document above, the selfinterest of the provider frequently also serves the clients' interests. Our findings suggest a number of guidelines for managers responsible for establishing the outsourcing arrangement:

- 1. Becoming a desirable client is a key part of getting the provider to go "the extra mile" and invest in the relationship and performance. Check out whether the provider really does want your business, or an executive or two just have to make their numbers, or the real interest is mainly among sales people in hot pursuit of commission and bonuses. If you are a novice customer, be smart in your ignorance, and do not try to be too ambitious. Seek limited objectives, focus on signing three- to five-year contracts to cover areas you understand and can write detailed contracts for, and for which you can monitor the performance of the service provider.
- 2. On outsourcing strategy, providers signal two learning points. Innovation from outsourcing requires much closer collaboration between the parties at strategic, management, and operational levels. This can be secured over time if client and provider leaders shape the context for innovation, if more flexible risk-reward based contracts release innovation potential, and where a teaming approach to service performance and achieving innovation goals is adopted. Secondly, clients should not expect providers to absorb every risk they would like to pass on. Ultimately the client remains accountable for performance, and overloading the provider with risk may well impact adversely on the client's own outsourcing experience, and the pursuit of its business goals.
- 3. Providers provided particularly detailed suggestions in the area of contract negotiations. Faux bids by clients may well be past their "sell-by" date in the modern outsourcing market, and the accumulated evidence together with widespread provider skepticism would suggest they are more likely to be counterproductive than useful. Same is the case with lengthy RFPs, unless they are a very helpful foundation for the subsequent outsourcing arrangement, thus reflecting an in-house team that really knew what it was doing. Otherwise lengthy RFPs merely signal client characteristics naïve customer, do we want their business? that will dissuade providers from putting in time, effort, and money.
- 4. Screen closely the advisors you are thinking of hiring. Ensure they have a track record; for example, verifying providers help the client send a targeted RFP to less than 10 providers; quickly and rationally pruning the RFP responses to three to five providers and getting the contenders involved with the client team, particularly the senior client managers, soon thereafter; remaining neutral and promoting transparency during the contracting and engagement processes; and looking for opportunities across provider bids.
- 5. Providers support our own research findings on the importance of measuring everything in-house on cost and service before comparing provider bids

against the internal baseline, and against each other. Do not skimp on passing to the winning provider accurate cost and service information for this will provide a central foundation for SLAs, performance monitoring, and invoicing.

- 6. Be careful being lulled into a false sense of security about fixed-price deals. Do not skimp on detailed analysis of the many likely hidden costs in an outsourcing deal, and carefully consider whether another pricing mechanism might be more appropriate for the type of activities being outsourced.
- 7. Long-term contracts and relationships are for mature clients to consider. The research evidence suggests a higher disappointment rate for long-term arrangements. A client may mitigate the risks by moving into large-scale outsourcing incrementally, starting small and building up learning and inhouse capability over time. Switching costs out of long-term contracts can be prohibitive, and may mean staying in an arrangement that in fact you, as a client, are none too happy with. Better to start small; you can always outsource more; outsourcing less once in a long-term deal is a much more difficult proposition.

3 What Providers Say about Managing Outsourced Services

Leslie P. Willcocks and Mary C. Lacity

Introduction

In this chapter, we continue to share in detail what providers have been saying to us about clients during the past two decades – the things they wish clients would know and do, as well as some things they wish clients *didn't* know or do. In Chapter 2, we covered the first ten statements providers make about establishing the outsourcing arrangement. These included statements about the ideal potential customer, outsourcing strategy, and contract negotiations. In this chapter, we cover the last ten statements – statements 11 through 20 – providers make about the way clients should or should not manage outsourced services. These include statements about retained client capabilities and management, provider capabilities and management, relational governance, and outsourcing outcomes. In Table 2.1 (see Chapter 2), we listed 20 statements providers commonly make and indicated whether the statement is supported by research, not supported by research, or has not been studied (or studies have produced mixed results). Among the 20 things providers say, 12 are supported by academic research and would actually benefit the client if they followed the providers' (and researchers') advice. In this chapter, we show that only two of the remaining ten statements providers make are not in the clients' best interests.

Providers make three statements about a client's retained management capabilities that would benefit clients if they could embrace the truths within these statements. Providers say some clients retain too few good people to facilitate outsourcing (Statement 11), some clients retain too many people and subsequently over-manage providers (Statement 12), or some clients retain people who cannot make the switch from delivering a service to managing a service provider (Statement 13). In this report, we divulge research that identifies the key retained client capabilities needed to ensure successful outcomes.

Providers make four statements about their own capabilities and management, of which three can be beneficial to clients. Providers admit they don't always have the capabilities they need to service a client and that sometimes providers need their clients to bail them out of troubled waters (Statement 14). Providers say clients often unfairly blame them for service lapses caused by the client's behaviors (Statement 15). If clients want better services, they need to examine and fix some of their own behaviors. Providers say they too face constraints that limit their abilities to cut costs further for clients who have already centralized, standardized, and rationalized (Statement 16). Providers also admit – and don't really want clients to know – that they sometimes invent new buzzwords for old ideas to generate market interest (Statement 17). In this report, we present the overall capabilities found in the academic research at large and discuss the provider capabilities we identified from our own research.

Providers make two statements about relational governance. The first statement is clearly not in the best interest of clients: providers say if it favors them, they'll stick to the letter of the contract; otherwise, it's the spirit that counts (Statement 18). The second statement addresses the bi-directional nature of trust: providers say they have to trust clients too (Statement 19). Research has studied best practices for relational governance and also how relational governance complements strong contractual governance.

Finally, and most importantly, we discuss the most prominent statement and supporting research about achieving good outsourcing outcomes. Providers say, "The worse our business gets, the worse your business gets" (Statement 20). We reveal data that strongly show that it is in the best interest of the client to actively protect the provider's profit margin. For the corollary is also true: providers source and service well profitable accounts.

Client capabilities and management

Most clients understand they need to retain a *different set* of capabilities after outsourcing. Instead of managing resources, client managers must learn to manage the inputs to and outputs from providers. Client managers must also co-own the responsibility for the success of outsourcing. When internal users gripe, good client managers facilitate the diagnosis and user response in cooperation with the provider. The number of retained people on the client side is also an important factor. On some engagements, too few good internal people are left managing the relationship. On other engagements, too many internal people are left to micro-manage the provider. Providers want customers to know three things about client management. The first thing providers ask is:

11. "Where are your good people?"

Providers report to us that clients frequently do quite a good job of getting to contract, not least because they hire advisors and tend to put their best people

on the task. But they also report that some clients treat outsourcing as a "fire and forget" missile. The problem child has been handed over and only a skeleton crew on the client side is left to monitor performance against the contract. A small retained client group is also rationalized as protecting the business case by keeping the internal headcount to a minimum.

According to providers, some clients underestimate the amount of managers needed to facilitate outsourcing. Talking of his recent work in the European financial and government sectors, a senior provider executive said, "I have to say that clients often do not know what it takes to manage, really manage, outsourcing until quite late into their outsourcing experiences... nor do they get particularly quickly what it takes to become a customer." Sometimes a range of tasks need several client people with distinctive expertises, but land upon the desk of one person. In one major US bank a provider described the person he dealt with who carried the title of contract manager but was in fact a surrogate chief information officer (CIO), a service facilitator, a contract administrator, and a technology handyman. He suggested that the bank had misjudged the amount of sheer management that needed to be done once outsourcing becomes operational.

In several companies, the transfer of too many technical people to the provider caused gaps in client capabilities. In one energy company, the CIO admitted that, in retrospect, he had let too many technical people go: "We never had a 'techie' to discuss the architecture with. They flew blind for a long time and we found it very difficult to get their agreements to what we proposed." At one bank, technical architects and their role were handed over to the provider. Finding little use for them on a "sweat the assets" contract, the transferees were moved to other contracts. The provider admitted that he was reluctant to fill the positions, because "there was little in-house technical expertise in the bank to dialogue with." Subsequently, four years into the deal, the client began rebuilding its technical capability, and to reclaim its position on technical issues.

Part of this "hollowing out" of the retained function is that clients tend to focus on what is outsourced rather than what needs to be retained to manage outsourcing. The belief is that only a "residual" IT function is needed, since most of the management tasks and responsibilities have been handed over to the provider. Some of this, and its consequences, can be seen in the circumstance of a "Poacher Turned Gamekeeper" in a local government case study. The local government handed over its mainframe processing and desktop maintenance to a major provider on a five-year outsourcing contract. It negotiated for 70% of its IT staff to join the provider. The provider chose carefully the staff it wanted, also offering them higher salaries and better work prospects within the large range of contracts it was servicing, together with further training. The IT staff members that stayed behind were resentful for missing out on the

material advantages and also at the slight of not being transferred. However, the retained staff members were then put in positions of authority in terms of managing the contract, monitoring the provider's performance, and dealing with issues and complaints from the other departments – such as housing, benefits, education – that the provider was now servicing. They also became aggrieved at their former colleagues' improved positions which they were regularly reminded of, having to work closely with many of them in servicing the contract. The provider told us that they had a torrid time over five years as the in-house staff converted every issue into a major grievance, and a satisfactory working relationship between the parties was never seriously allowed to develop.

Client slowness to recognize the need to manage things differently recurs in providers' accounts of their experiences, as it does in our own case research over the years. Ironically clients promise themselves that outsourcing will make them more demand-led, business-focused, and strategically adept, but then under-resource their internal management capability in ways that cause their over-pressed and under-trained staff to end up firefighting much of the time. Following the pattern of the case experience in the local government case, providers also remark that clients often use the same staff they had before rather than recognizing that outsourcing requires different skills and capabilities – something our work has frequently pointed out (Willcocks and Griffiths 2010; Willcocks and Lacity 2009). At the opposite end of having a "residual" in-house function is micro-management. Providers say:

12. "Don't do man-to-man marking"

Some clients *over-staff* outsourcing oversight for one of several reasons: a determination not to lose control, the desire to maintain a tight rein on the provider's ongoing performance, or an inheritance from how things were managed as an internal IT shop. Moreover, previous chastening experiences of outsourcing may color the determination not to be caught out once more. For example, one IT bank executive said he would not allow a power imbalance to develop in favor of the provider ever again. He described a seven-year deal: "The bank outsourced the whole thing, and the supplier was seen as the holder of knowledge. Now, four years in, if you want anything done, you have to have one of those 'Come to Jesus' meetings with the outsourcer."

From these factors, one can understand how the rationale for tight control of the provider develops. The problem comes when such factors accumulate and get out of balance, for which the sight of the goal is lost. This can lead to micro-management of a distorted kind. According to providers, the results can be very counterproductive. One provider managing a contract with a major international bank described his own version of this phenomenon: "Meetings – they bring representatives of all their units, and ask us to do the same...lots

of audits, 'people in the loop,' sign-offs to be made, lots of waiting for the nod from someone." According to another provider account executive in a health-care outsourcing deal: "We spend 40% of our time being productive, and 60% preparing for, or in, client review. Exception reporting is just that – the exception."

Man-to-man marking develops under several scenarios. One scenario happens when clients erect mirrored organizations, with a corresponding client position for every provider position. This leads to redundancies, excessive oversight, and delayed results. Another scenario occurs when existing in-house function has built up large numbers and complex structures and processes, partly as an inheritance from previous mergers of companies or functions. In one European bank that outsourced to six providers in 2005, in-house staff reduction was also restricted by labor agreements and legislation. The result? While the bank retained a relatively large in-house capability, its use was not particularly optimal, with processes often designed to reflect the employees available rather than what needed to be done. In Europe, in 2010 one central government department had to make 20% cuts in its total operating budget, including in IT, within a year. A provider representative commented, "They have 850 staff and two outsourcing contracts. They plan to reduce internal numbers to 660 but we reckon they only need 330 – i.e. half that."

Providers reveal that clients often get the staff numbers wrong in terms of retained in-house capability. One scenario described in this section is that, for a variety of reasons, client organizations may keep too many staff in-house, and deploy them in sub-optimal ways through over-complex, often redundant, structures and processes. While this may seem a mistake in the right direction – control is better than lack of control – it can be counterproductive for provider performance and business outcomes, with too much activity diverted into monitoring, checking, and responding, and too little being done on the critical path tasks that make the difference. As one provider told us, "don't do man-to-man marking; it wastes your time and our time." From research, clients spending more than 10% of the annual contract value on outsourcing managing may be over-staffed.

13. "Stay on your own side"

One of the hardest things for clients to understand is that outsourcing for managed services is different from managing it yourself or managing augmented staff. With staff augmentation, clients are hiring a particular person to perform a particular job. For staff augmentation, the client quite rightly reviews provider employee resumes, interviews provider employees, and may even administer skill tests to candidates. With outsourcing, clients are paying fees in exchange for managed services. Providers want clients to understand that "managed services" means a service managed *by the provider*. Our own

definition of outsourcing reinforces this point: "outsourcing is the handing over to third party management of IT services, assets and/or activities to achieve required outcomes" (Lacity and Willcocks 2001).

Providers may not welcome clients prying into the background of each provider employee assigned to an account. Providers need to manage their employees' training and careers paths, and some novices – under the guidance of a provider expert – are likely working on client accounts. Providers say, "If the services are meeting SLAs and security processes are sound and in place, do clients really need to know every resource being used to provide that service?" Providers want clients to "stay on their own side."

"Staying on your own side" requires sharp defining of the responsibilities for client and provider staff. This should be made very explicit in the contractual agreement, with any changes agreed and documented as they (inevitably) happen across the lifetime of the outsourcing agreement. A fundamental sticking point is that outsourcing gives the client the opportunity to focus on outcomes rather than on the process of service delivery. One provider told us that she found people still crossing the line: "They can't help themselves sometimes, especially if they did the job before." Another type of in-house manager we identified in our own research was what we called the "comfort seeker" – a person who managed what was most familiar and what they liked to manage, whether or not that had any real relevance to the new work of managing the provider's performance. A provider executive described one case: "She clearly loved delivering the service...encouraged people to ring up like they used to do, gave second opinions, even did tasks that were really not her responsibility. The only solution in the end was to hire her."

A more formidable problem, from a provider perspective, comes from what we call in our own work "the adversary" (Willcocks et al. 2011). This type of manager tends to make the assumption that the provider is solely self-seeking, untrustworthy, and to blame for most, if not all, things. The adversary often combines operating unreasonably across the work dividing line with micromanaging the provider staff. One provider described his early experience in an energy company: "we got regular investigations into performance, questions about why our staff were doing x, in this way rather than that ... we used to call it the inquisition" In this case, the relationship became so bad that both client and provider account executives were replaced by people who were more relationship-oriented.

Again, the issue is one of balance. Providers do not complain about proactive assertive client staff. They do argue that intervening or aggressive client executives who fail to stay on their own side do not really help the outsourcing enterprise.

What research found about client capabilities. Academics have studied retained client capabilities many times. As discussed in Chapter 1, the

most important client capabilities from a review of the ITO and BPO empirical literature were Supplier Management Capability, Technical/Methodological Capability, Risk Management Capability, Business Process Management Capability, Contract Negotiation Capability, and Cultural Distance Management Capability. In our case study research, we addressed the question, "Which capabilities need to be kept in-house?" While common wisdom tells clients to insource core capabilities and to outsource non-core capabilities, the distinction is not very useful. We offered a richer distinction (Feeny and Willcocks 1998). We initially identified nine specific capabilities to keep in-house for IT functions. This work has been cited hundreds of times and adopted by many large organizations. We later extended the capabilities model to nine specific capabilities to keep in-house for any back-office function (Willcocks and Lacity 2006). These capabilities include leadership, business systems thinking, internal customer relationship building, architecture design, informed buying, contract facilitation, contract monitoring, and provider development (see Table 3.1). We also identified that all back offices need to keep a team of "process doers" to troubleshoot issues, to scrutinize provider activities and proposals, and to understand emerging innovations.

Core back-office capability	Description	
Leadership	Operate the back office as a business and deliver value by integrating the back-office effort with business purpose	
Business systems thinking	Envision back-office services in terms of the support of business strategy and operations	
Relationship building	Engage the business in back-office direction and governance	
Architecture design	Design a coherent, reliable, flexible, and scalable platform for service delivery that responds rapidly to current and future business needs	
Informed buying	Manage the back-office sourcing strategy to meet business needs	
Contract facilitation	Ensure the success of existing contracts from external service providers	
Contract monitoring	Protect the business's contractual position	
Supplier development	Seek additional value with external service providers beyond existing contracts	
Process doing	Troubleshoot issues, scrutinize provider proposals and activities, and understand emerging innovations	

Source: Willcocks and Feeny (2006b).

Overall, research supports what providers say: clients need a different set of capabilities after outsourcing. These capabilities shift from doing IT or BP work, to managing ITO or BPO providers.

Provider capabilities and management

In this section, we discuss the four things providers say about the consequences of the messy, complex, and real-world challenges on their own internal organizations. While providers are generally reluctant to "open the kimono" on the subject of how they deliver their performance, and at what profit margin, nevertheless their comments to us give considerable insight into the real complexities on the provider side. We found that providers also have internal problems and may need their client's assistance. But, arguably, they may not be responsible for all or even most of the things that go wrong. There are, after all, limits to them working smarter. On the other hand, they do own up sometimes to creating new buzzwords for old ideas.

14. "We have internal problems too, and sometimes need your help"

Providers focus on their strongest attributes during contract negotiations, but during the transition and operating phases of a contract, the provider's inherent problems and internal politics become evident. The provider engagement manager may need the client's help to overcome some of the provider's internal politics, to help fight for the provider's best and scarce resources, or to help supplement gaps in a provider's capabilities by transferring or loaning client staff. The client's senior management – including at times, the CEO – may have to intervene to be effective. These circumstances are further explained below.

Providers tell us that it is not always perfect back at their ranch. Sales people are incentivized to complete deals quickly, and can leave difficult loose ends, for example keen pricing, scope vagueness, and ambitious deadlines, for those who have to operationalize the agreement. Provider staff are not always well informed about the capabilities, and their limits, in the rest of their business. Staffing can be difficult in an organization committed to utilizing its people to the maximum, leaving little slack to service new customer problems or new requests. Often the best people are in scarce supply and the "A" team has to be moved around from client to client to where the priority is greatest at one particular moment. Sometimes the provider is structured for internal efficiencies, rather than to address client needs for service and fast resources. Budgetary processes can militate against keen pricing. For example, one major provider added on an internal profit margin for every resourcing transaction between internal departments. An insurance company client reluctantly swallowed the high aggregate service prices that resulted, really because the client was not aware of how they had arisen. When the new client CIO found out several years later, there were heated meetings, a price reduction, and a negotiated rebate.

At the bid stage, providers talk a lot about scale economies and superior skills and management, but sometimes have to admit that these cannot be delivered quite so strongly during the contract's actual enactment. Internal networks of influence can be a factor. An account executive may not have the political clout internally to command the resources needed to satisfy the client. As one Asia Pacific bank executive told us, "We get account executives from the parent country (USA) coming over on two year cycles. The differences are remarkable. When X was in place nothing happened. But Y came from the provider HQ and was really well connected ... it showed up in better pricing and faster resourcing."

When providers run into such internal problems, one of the first instincts is to cover them up. However, some providers feel able to share internal issues with their clients, as revealed in the following case involving an oil company and a medium-sized outsourcer they employed. According to the client manager, "The new account executive said they really were not making money. We cut some of the loss-making operations out of the contract, and took them back in-house, and renegotiated some of the pricing. We liked their work, but they had got the sums wrong."

Does offshore outsourcing solve these problems? Do lower labor costs offshore make a big difference? Not necessarily. We found providers who admitted needing client help. One pharmaceutical company signed an Indian provider for IT development work because the labor arbitrage was 50% cheaper, and the provider developers were technically superior individually and collectively compared to the internal group. However, if the technical expertise was strong, middle management was weak. A provider told us,

When we finally understood their expectations we realised we did not have the middle management. It ended up that the client supplied three middle managers and helped our people get some experience for about 18 months. It was an outlay for them, but it made us much more flexible, and eventually more capable for the client too.

Providers told us that clients actually quite often helped them at various points in outsourcing arrangements, and this tended to generate reciprocity and strengthen the relationship between the parties. One provider executive spelt out the implicit contract in such dealings: "Given their sunk investment and the switching costs, clients quite often help us. But we have to be credible and clearly working in their interests."

15. "OK blame me - but was it really my fault?"

Providers tell us, ruefully, that blame is partly the reason for which they are there. They have some research support (Lacity and Willcocks 2001; Willcocks and Lacity 2009), however, for the probability that more often than not 60%

of the fault lies with the client. The more mature clients can cite examples where this proposition has been valid. Consider the following admission from a senior executive of an Asian Pacific–based bank in a five-year deal with a global provider:

We never resolve the issues. It's irresolvable because the bank still doesn't lead on or own the outcome. So while we (client staff) continue to blame the outsourcer for not delivering something which we can neither describe nor write down nor articulate or agree on, it's just not going to work.

Another outsourcing client gave a further example: "90% of the service lapses were inherited from us." Providers frequently get taken to task for not making service-level agreement (SLA) targets. But consider further how clients may cause providers to miss these: by not defining requirements rigorously enough for the provider, by not following agreed upon procedures, by not providing accurate information, and by not communicating with provider in a timely manner.

When blaming the provider for something, it might be well to remember the following facts as they pertain to a particular outsourcing event: the client worded the contract, selected the provider, decided on scope required, agreed the pricing, set up the governance mechanisms and measurement regimes, and staffed your internal capability. Did you also, as providers sometimes mentioned to us, keep changing your mind, ignore their recommendations, disempower them on decisions, and fail to heed their warnings?

16. "There are limits to us working smarter"

Clients can get fixated on driving the price down while upping the service standards, even, as we have seen in Chapter 2, throwing in the demand for provider-initiated innovation. Invariably they suspect providers of some padding out of the price. More reasonably, clients regularly insist on providers keeping to both the contractual and non-contracted promises they made before and after signing the contract. But this gets more suspect when clients change the conditions under which those promises are expected to be implemented. In an even more realpolitik way, clients may seek to pass on to their providers the headaches or adverse risks and costs they wish to delimit (see Box 3.1 for an example). These can be received from their business units, or as a result of industry or bigger economic events, such as the financial crisis of 2008–10, or government spending cutbacks in the United States and the United Kingdom in 2010–11. Against such pressures, providers like to say that there are limits to them working smarter.

Box 3.1 An offshore captive center offshores - Next door

In 2008 a major US-based software company was running a service center in Bangalore, India, but was experiencing in its less skilled jobs a labor turnover of 35% a year. On their exit forms, employees complained of not getting promoted fast enough, of slow pay rises, and of lack of indepth training. They were also attracted to higher salaries readily being offered by other companies, sometimes in other Indian regions. The labor issue was distracting the managers of the captive center from their major role in improving the call center's service record.

The managing director decided to outsource the less skilled work to an Indian provider operating in the same business park. In practice this left the new provider in an unenviable position, with no real advantage to be had from location, labor practices, or superior processes. Moreover, the Indian provider was given the less attractive work to select, train, and retain people for. Not surprisingly, the new provider inherited a high labor wastage rate which stayed at the 30% plus a year level. Worse still, with a new outsourcer in play, further lines of communication were needed but these cut across the seamless service required by the call service's end customer. The managing director's view was that the hassle involved in managing this was much less than dealing with the labor wastage problem. He told us, "I will be honest – we didn't outsource for cost savings, in fact we don't get any. I outsourced to get rid of the HR (human resource) headache."

Meanwhile a senior executive with the Indian provider commented,

Our company wanted this prestige client, but we have run out of things to do to make the service better, and it gets low attention from the managers over there, so we get problems like in the handover of work, or complaints like when our staff leave and are not quickly replaced.

There may be other reasonable limits on the provider working smarter. The client might have achieved most of the efficiency and reengineering gains in-house already before outsourcing, or might have been given the gains by the provider in the early years of the new outsourcing arrangement. This was explicitly recognized by the IT director of an oil company looking back over outsourcing to three providers on five-year contracts: "We didn't expect big savings; we are looking for a dampener on future costs; that, together with our ability to refocus, get the headcount down, and make costs flexible; we really

did get most of the savings out in the standardisation and centralization effort over the three years before outsourcing."

On the other hand, the client may be so eager to achieve dramatic cost savings that the provider has little room to maneuver. In one ten-year financial services outsourcing deal, the provider said its technology investment policy was severely inhibited by the constant demand for cost savings despite both sides dubbing the deal a "strategic partnership," and the provider was left little option to do much other than "sweat the IT assets" for the first five years.

Some provider promises on "working smarter" are predicated on client assurances of additional work and contracts. But what happens if these do not come through? In one aerospace ten-year arrangement with a single provider – again labeled a "strategic IT partnership" – the provider made considerable investment in the front end of the contract, only to find the client's business units not commissioning new work. This eventually inhibited the provider's ability to give the client priority time, innovation, and additional resources, causing complaints from the very managers who contributed to this outcome. Following this line, internal politics sometimes prevents providers from innovating and achieving scale economies, for example. In one insurance company that outsourced its mainframe processing, the provider achieved a 15% cost saving over five years but could not achieve more, or much of a better service, because business units demanded their own data centers. As a result, data processing ran with four data centers rather than these being consolidated into one.

17. "We sometimes invent new buzzwords for old ideas"

Clients will recall over the last 20 years the many IT products and services they were sold as new and/or transformational. Hype has never been far from new technology and, by association, the ITO and BPO services market. Examples include artificial intelligence, reengineering, enterprise systems, automatic code generators, expert systems, group and decision support systems, e-business, and now cloud computing and business intelligence – all with their related consulting services. From what providers tell us, not only do clients need a hype detector, but they also need to be able to discriminate between the IT and service solutions that are made available and the IT they really need. Too much of IT is technical solutions in search of business problems. Not all of it is new, and its transformational capabilities might well be exaggerated. Consider the two following cases.

One CIO said, "We paid a consultant \$100,000 to advise us how to leverage cloud computing only to discover we've been doing it for five years!" Another client asked, "Isn't business analytics just a fancy term for displaying my stats on a flashy dashboard?" Infrastructure and applications hosting become "cloud computing"; statistics and dashboards become "business intelligence." Back in

2001 we wrote a book on cloud, but then it was called application service provision, or in our language "netsourcing." Providers do have great marketing capabilities, and these capabilities do not necessarily translate into client value. Over the years, it does not help that the new buzzwords have had almost religious undertones – the need to be born again and convert to the new, while leaving the old and "the sinners" behind (Willcocks et al. 2010c).

The most recent big buzzword is cloud computing, and we devote all of Chapter 8 to the topic (Willcocks et al. 2011). Larry Ellison, CEO of Oracle, perhaps gave some of the game away when he commented in September 2008 that "I don't understand what we would do differently in the light of cloud computing... other than change the wording of some of our ads.... It's crazy." He backtracked subsequently as the market for cloud services developed rapidly, though not nearly as quickly as provider generated hype and profile about the size of the market, and the power of the technologies and efficacy and ease of the services being made available. Cloud must be seen in the context of previous so-called "revolutions" - particularly in technology and in service outsourcing. Indeed from one perspective, cloud can be portrayed as a "back to the future" phenomenon - for example, there are resonances of application services provision, shared data centers, and even Systems Network Architecture (SNA), with its data and application "bunkers" feeding multiple devices. Is cloud really just a more open SNA architecture on steroids?¹ However, one must point out some significant differences from what has gone before - not least more powerful computing/processing capabilities, fatter transport pipes, virtualization technologies, broadband wireless access, more open and flexible protocols (IP), to mention just a few. Cloud is perhaps best seen as a convergence of technologies together with a new stress, and a fundamental reliance, on service. The problem as we see it is that providers regularly over-sell something like "cloud" and all it represents, while overplaying the relative ease with which the genuinely new aspects can be adopted and operationalized.

What research found about provider capabilities. As discussed in Chapter 1, academics have studied provider capabilities many times (Lacity et al. 2010a). The most frequently studied and most important provider firm capabilities were Human Resource Management Capability, Technical and Methodological Capability, and Domain Understanding. In our own research, we initially identified 12 important provider capabilities (Feeny et al. 2005; Lacity et al. 2006a, b). We found that clients cannot merely wrap the rhetoric of a partnership over a fee-for-service package and hope to achieve a high-performing back office. Instead, clients must find a partner with 12 specific capabilities: planning and contracting, governance, organization design, leadership, business management, customer development, domain expertise, behavior management, sourcing, process reengineering, technology

exploitation, and program management. These 12 capabilities were explained in detail in two previous Cutter Reports (Lacity et al. 2006a, b). We continue to study provider capabilities and we are in the process of updating the provider capability model to include other important emerging provider capabilities, such as the provider's demonstrated ability to protect, secure, and keep confidential client data and intellectual property. A provider's proven corporate social responsibility (CSR) capability is increasingly becoming an important selection criterion for clients (Babin and Nicholson 2009, 2011) (see Table 3.2).

Core provider capability	Description
Domain expertise	The extent to which a provider has prior experience and/or understanding of the client organization's business and technical contexts, processes, practices, and requirements
Business management	A provider's ability to consistently deliver against both customer service level agreements and its own required business plans
Behavior management	A provider's ability to acquire, develop, retain, deploy, and motivate human resources to deliver service with a "front office" culture that achieves both provider's and client's organizational objectives
Sourcing	A provider's ability to access whatever resources are required to deliver service targets based on expertise in procurement, subcontracting, and resource allocation management
Technology exploitation	A provider's ability to swiftly and effectively deploy technology in support of critical service improvement targets
Process reengineering	A provider's ability to design and implement process changes to meet improvement targets
Customer development	A provider's ability to transition "users" of an internally provided service to "customers" who make informed choices about service level, functionality, and the costs they incur
Planning and contracting	A provider's ability to develop and contract for business plans which deliver "win/win" results for client and provider over time
Organizational design	A provider's ability to design effective interfaces and processes and to deliver the necessary resources, wherever and whenever they are needed to achieve the business plan

Table 3.2 Provider capabilities

Governance	A provider's ability to define and agree, to track and assess the performance of service over time
Program management	A provider's ability to prioritize, coordinate, ready the organization, and deliver across a series of inter-related change projects
Leadership	A provider's ability to identify, communicate, and deliver the balance of activities required to achieve present and future success – for both client and provider
Security, privacy, and confidentiality	A provider's proven ability to protect client data through investments in technology, training, process controls, audits, and other management practices
Social responsibility	A provider's ability to behave in a socially responsible way, such as promoting environmental responsibility and promoting fair labor practices

Source: Updated from Feeny et al. (2005).

One of the most robust findings from our research is that economic efficiency has more to do with management practices than economies of scale associated with size (Lacity and Hirschheim 1995; Lacity and Willcocks 1998). The management practices include centralization, standardization, rationalization, technology enablement (like self-service portals), and tight accounting controls to bridle consumption. If client organizations have already used these practices to reduce costs before outsourcing, they may not leave many opportunities for providers to significantly reduce costs further. There are, indeed, limits to the provider working smarter.

Relational governance

As introduced in Chapter 1, relational governance is about the softer issues of managing client-provider relationships, including norms, open communication, open sharing of information, mutual dependency, and cooperation. Clients for a long time have heard providers utter, "you have to trust us." But providers also admit to sometimes operating on another basis:

18. "If it favors us, we'll stick to the letter of the contract; otherwise, it's the spirit that counts"

This section acts as a warning to clients, about not creating the situation where this provider behavior would develop, or at least being aware of the likely consequences. It is easy to understand why a provider would want to stick steadfastly to contract conditions. Providers tend to be more expert in contracting. As one IT manager told us, "Users may sign one or two in their career; a vendor may be signing one or two a week." They may have much more understanding of the deeper import of what they write into a contract. One contract manager told us, "Some of those clauses were put in by the vendor and we didn't understand the implications." A provider CEO told us, "Outsourcing contracts are agreed in concept but delivered in detail. That's why they can break down – the devil is in the detail." Providers are also, on the whole, careful about defining what is in scope, and what is out of scope, what the price per unit is, and how any change at all to the contract terms will be handled procedurally. This provider carefulness is particularly prevalent in cost reduction deals where margins may be quite slim. Sticking to a carefully worded contract is one way of safeguarding returns in a fast changing business environment. It is also a way of legitimately and differently charging for work outside contract scope.

But providers also know that contracts are eminently re-interpretable. This malleability can come from such factors as ambiguities in language, omissions, loose wording of objectives, and even, we have seen, punctuation. A provider who is having a particularly poor service experience may well see one recourse as going back to the contract to find if its terms can be leveraged in its favor. One manager told us of her experience of being recruited to a provider's "get well" team. After two years of making no returns, the provider decided to pour over every line of a very weighty contract, to see how it could cut down its obligations, invoice for more, and pass on costs to other providers. In the event, when the client complained of indifferent service, the provider confessed to not making a profit, and asked for, and got, an improved margin on certain work types where they were charging less than the market.

The other route that providers have been known to take is to work the relationship and "higher objective" part of the deal. This is when partnering rhetoric comes into play, sometimes in muted form, as when participants refer to the "meaning," "spirit," or "heart" of the contract, or beyond that, of the relationship. One client manager in a utilities company managed a provider who had taken over legacy systems for three years. The deal seemed straightforward enough. The client understood the activities and wrote a detailed service contract and SLAs based on previous performance. However, the provider was determined to follow the contract to the letter because it was making little profit. The client manager commented, "It was slim margins I know, but they argued about every word in the contract, and interpreted it in their favor, and when that didn't work they talked about the spirit of the agreement. It used to wake me up at night that phrase – 'spirit of the agreement.'"

19. "We have to trust you too"

While the main thrust in outsourcing seems to be clients building trust in the service, providers want clients to know that they have to learn to trust their clients also; that is, trust is a two-way street. From the provider perspective, trust building begins in the contract negotiation phase. Are clients honest

about their outsourcing intentions? Do clients provide accurate estimates of their baseline processes? Do clients let providers meet and deal with client senior managers and business process owners? Are clients fair negotiators? Are clients informed about outsourcing practices? After the contract is signed, trust becomes even more vital. Provider account managers need to be able to trust their counterparts in the client organization. They will need the client's help for many things, such as change management, problem diagnosis and resolution, proper and timely invoice payments, and fair conflict resolution. Providers cannot trust client managers who quickly blame the provider for faulty performance. Instead, providers trust client managers who feel jointly responsible for service issues.

Our own work supports what providers tell us. Initial trust is based on *beliefs*. Trust in outsourcing is the confidence that another will conform to one's expectations and in the goodwill of another. Fair contracts help to build this initial view of trust – the spirit of goodwill among parties. Long-term trust is based on *behavior*: clients trust providers that deliver promised services. Providers trust client relationship managers who facilitate the provider's success within the client organization. Trust is also built by resolving conflicts fairly. Trust is about open communications and knowledge sharing. Thus, trust is ultimately about performance and fairness (Willcocks et al. 2011).

Some typical quotes from outsourcing arrangements where these conditions do not prevail are the following:

- "We know where they have problems, but damned if I am going to tell them." (provider)
- "They always wait for us (the client) to react to something. They play dead until we kick them."
- "It's tougher dealing with the supplier people than our helpful in-house staff."

Contrast these statements with some typical ones we found in more trust-based outsourcing ventures:

- "We really handed them over a mess, so we're going to give them time to clean up...we couldn't do it ourselves."
- "Our contract wouldn't let them hire any of our people for two years, but we had to cut them some slack on that one."
- "We (the client) had to clean up our act we weren't as professional as they were."

Trust is a very perishable commodity in outsourcing arrangements. Interestingly in researching outsourcing arrangements we have never come across a case where trust and the relationship were not talked of as critical to the success, or in their absence, the failing, of the venture. Our case work gives an illustrative case example of how things can unravel quite quickly. A property company and a provider agreed to an "outsourcing alliance" – a partnering style of relationship. All worked very well together during negotiation and planning the transition. Then, on the first day of the contract, the provider walked into the client's office asking where the relationship manager would be accommodated (expecting an office next to the director in the spirit of "partnering"). The director was quite surprised - he had expected the provider's staff to be offsite and certainly was not going to provide free office accommodation. Reluctantly, the director gave the provider an office in the basement. The provider was wounded by what it thought was an overt gesture normally found in a "master-slave" relationship. Rather than discuss expectations of partnering behaviors, the provider went on the defensive stating that "If that's how they're going to treat us, fine." The provider instructed staff to perform only the letter of the contract and rely on the client's instructions as opposed to introducing the potential innovation ideas that were enthusiastically thrown about during negotiation. The client-to-be then interpreted this behavior exhibited by the provider – "Typical: say anything to get the deal, then run it the way they like" – and the adversarial relationship began.

What research found about relational governance. In our ITO and BPO meta-analyses discussed in Chapter 1, we coded 132 relationships on relational governance and its effect on outsourcing outcomes. We discussed the most studied relational attributes, including effective knowledge sharing, communication, trust, and viewing the provider as a partner. In 94% of the findings, the research showed that higher levels of relational governance were associated with higher levels of outsourcing success.

Some of the more interesting research in this area uses interviews and case studies rather than sample surveys (e.g., Heiskanen et al. 2008; Kern and Willcocks 2002). These qualitative methods allow researchers to understand why factors are important or how relational governance develops over time. For example, Sabherwal (1999) studied 18 outsourced IS development projects in 7 client organizations to determine the role of trust in client-provider relationships. The paper is one of the first to incorporate two important determinants of ITO success - trust (a form of relational governance) and structural control (a form of contractual governance). The author found that relational governance and contractual governance must both be in place to ensure success. More interesting, however, was the reciprocal relationships among trust, contractual governance, and outsourcing success. Success fueled further trust among clients and providers. By contrast, projects that suffered from delays or poor performance led to decreased trust. Since the publication of Sabherwal's (1999) article, a number of researchers have begun to simultaneously study contractual and relational governance. Are they substitutes? Are they complements? As discussed in Chapter 1, several important papers found that the interaction between Contractual Governance and Relational Governance is positive, and thus Contractual Governance and Relational Governance serve as complements rather than as substitutes (Goo et al. 2009; Kern and Willcocks 2000; Poppo and Zenger 2002; Wüllenweber et al. 2008a). This means that the best outsourcing relationships are based on sound contractual governance *and* strong relational governance.

Outsourcing outcomes

Our final statement addresses outsourcing outcomes. We show clients the hard evidence that it is in the client's best interest to help ensure the provider earns its profit margin. Providers want clients to know:

20. "The worse our business gets, the worse your business gets"

Providers need to earn a reasonable profit margin, and that means on every account, not just at the overall firm level. Some clients think if a provider is not earning a profit margin on their particular account, then positive margins from other accounts can absorb the loss. We have heard clients say, "It's not our fault they are losing money, they signed the contract." This thinking shows that clients do not quite understand what goes on in the provider organization when an account is missing profitability targets or – worse – is losing money. The provider account manager has trouble competing with his/her peers in the provider organization to attract the best resources to service the account. Provider senior executives do not want to throw good money after bad. Some providers also award bonuses based on an account's performance – which of the provider's top performers would clamor to serve a losing deal?

The provider sometimes makes unrealistic bidding promises to ensure it wins the contract, but already knows, or subsequently discovers, that it cannot earn a profit on the engagement. We call these "winner's curse" deals. How can this happen? Providers tell us they may need to satisfy aggressive growth targets demanded by shareholders. They may be short of business due to recession or increased competition. They may be seeking entrance into new markets or be seeking prestigious clients. Sometimes such circumstances lead to what one provider called "a race to the bottom I have seen fellow suppliers sign up to deals, where basically the calculation is: 'what is the lowest price we can work to without being terminated?' " Suppliers may believe they can recoup any loss through contract additions. They may reward bid teams for winning the contract, but not hold them accountable for its subsequent delivery. They may base bids on false assumptions about opportunities to improve the client's services. Or as we saw in Chapter 2, they may get misled by the poor data on costs and service passed on by the client.



Figure 3.1 Outsourcing outcomes from client and provider perspective

What research found about outcomes. In the meta-analysis in Chapter 1, researchers found that clients reported positive outcomes from outsourcing 60% of the time, negative outcomes 18% of the time, and no changes in performance as a consequence of outsourcing 22% of the time. One interesting question to ask, "What are the major differentiators between positive and negative outcomes?" Our case study research on 85 engagements provides some compelling data (Kern et al. 2002b; Willcocks and Lacity 2006). We captured both client outcomes and provider outcomes. Client outcomes are the extent to which the client stakeholders reported satisfaction with outsourcing across financial, operational, and strategic dimensions. We divided the client outcomes into "primarily positive outcome for client firm" and "primarily negative outcome for client firm." We also captured whether providers were earning their target margins or whether they were suffering "a winner's curse." A winner's curse occurs when the provider wins the bid but then fails to achieve a good profit margin on the account. Mapping the client and provider outcomes in Figure 3.1, we see that clients most frequently experience positive outcomes from outsourcing when providers earn their target profit margins. On only three engagements where providers were cursed with a losing account did clients report positive outcomes. These data strongly show that it is in the client's best interest to actively care about and protect a provider's profit margin.

Conclusion

As we observed in Chapter 2, outsourcing providers can be very insightful about clients. What they would tell clients if they could is a mix of observation and frequently helpful advice that ranges from the objective to the self-interested. Our findings suggest a number of guidelines for managers responsible for operationalizing and managing the outsourcing arrangement:

1. Providers confirm what our own research has shown over many years: the client's retained in-house capability is the single most vital ingredient in

outsourcing success. The client needs a high-performance in-house team to elicit and deliver on business requirements, manage external supply, retain control over the technology blueprint and non-routine technical challenges, and provide governance and coordination. Such an in-house team will be mature and expert enough to commit the sins that providers document, rightly of wasting time and effort with man-to-man marking and intervening in areas and in ways which are counterproductive and that incur unnecessary costs.

- 2. Clients should not believe all they read in providers' marketing brochures. A better policy is to verify every claim, and be realistic about what's going to happen "when the rubber hits the road" and across the agreement's lifetime. Provider capabilities are rarely seamless. Especially if you are hiring them, make a detailed assessment of their incapabilities as well as their strengths. At many stages they *will* need your help, just as you need theirs. This is best pre-empted by building strong relationships and communications structures and having a pragmatic, rather than ruthless, perspective, on what providers can really deliver for the money, with their capabilities and internal structures and budgeting processes. There really are limits to working smarter in any back-office function whether outsourced or kept in-house. Recognize that very often something has to give and that, when it comes to costs and service, genuine trade-offs have to be made.
- 3. At the same time, do not be thrown by clients digging in their heels on sticking to the letter of the contract, or invoking its spirit. See these as signals of the need for a better quality conversation about how the outsourcing is going, and what more the parties can do to make it work. Indeed they might be signals for the need to revisit the governance arrangements in place.
- 4. Investigate provider claims carefully. Navigate the hype, and be suspicious of claims of superior technology and service, especially when they are about the "new, new thing." The capability might be there, but it might be technical solutions in search of business problems. Define carefully the relatively few things the provider could do to hit targets that are important, even strategic, for you as a business. A contract scorecard might help here, to focus your attention on the key metrics, instead of getting buried in a welter of statistics, and prolonged arguments over those.
- 5. Trust is easily invoked as a panacea, but there is no such thing as instant trust. It emerges through both sides proactively nurturing the relationship, and through service performance. Effectiveness creates trust much more so than the other way around, though the two are correlated and affect each other. Treat trust as a two-way street, but always keep trust honest, in the sense of keeping it consistent with the commercial realities and objectives both parties have signed up together.

6. Providers always like us at this point, but the research does show strongly that it is in the client's interest to actively care about and ensure that a provider makes a reasonable profit. It's not your top goal by any means. But without due care and attention on this, the client can find itself rapidly experiencing service deterioration, inflexibility, stiff invoicing, indifferent staffing, adversarial meetings, high provider staff turnover – a sad end to what might have looked to be, at one stage, a promising relationship.

Note

1. SNA is IBM's proprietary networking architecture. Created in 1974, it is a complete protocol stack for interconnecting computers and their resources. SNA describes the protocol and is, in itself, not actually a program. The implementation of SNA takes the form of various communications packages, most notably virtual telecommunications access method (VTAM), which is the mainframe package for SNA communications. SNA is still used extensively in banks and other financial transaction networks, as well as in many government agencies.

4 Creating Shared Services in the Private and Public Sectors

Mary C. Lacity

Introduction

In this chapter, we discuss the first major sourcing option organizations should consider: shared services. According to Accenture (2005), the definition of shared services is "the consolidation of support functions (such as human resources, finance, information technology and procurement) from several departments into a standalone organizational entity whose only mission is to provide services as efficiently and effectively as possible." Mature shared services organizations are stand-alone entities with standardized processes, service level agreements (SLAs), user chargeback, and high-performance, "front office" cultures that service multiple departments (Lacity and Fox 2008; Schulz and Brenner 2010). According to a recent survey of 270 respondents reporting on 718 shared service centers, finance/accounting (93%) is the functional area most commonly moved to shared services, followed by human resources (60%), information technology (48%), and supply change management (47%) (Deloitte 2011). Although IT organizations have not adopted shared services as widely as finance and accounting, reports indicate that IT shared services are growing at a faster rate (Alsbridge 2007). Indeed, successful management of IT shared services was listed as one of the seven habits of effective CIOs (Andriole 2007).

The recent downturn in the economy has intensified the pressures for organizations in both the public and private sector to reduce costs, shed headcount, and do more and more with fewer resources (Customer1 2011; KPMG 2011). Shared services are seen as a powerful practice for relieving these pressures. Shared services offer the promise of lower costs, tighter controls, improved service levels, and scalability (Deloitte 2011). Among this list of benefits, cost reduction was and is the most important driver of shared services. Early adopters of shared services reported enormous cost savings. General Electric – recognized as the first leader of shared services – implemented shared financial and accounting services in 1984 and reduced staff by 30%. DEC created shared financial services in 1985, and reduced finance staff by 450 and reported annual savings of \$40 million to \$50 million (Davis 2005). Reuters created shared financial services in 2006 and reduced its staff by 47%. Some organizations even generate revenues from shared services. Among the 270 companies responding to a recent survey on shared services, 15% indicated that their shared service organizations service external clients (Deloitte 2011).

Studies have shown, however, that not all organizations achieve the full benefits they expect from shared services. For example, in a survey of 210 senior managers, IBM found that the results of shared services have been "mundane rather than magical" (IBM 2005). Another study of 140 executives in North America and Europe found that *actual* benefits were less than *expected* benefits in the majority of cases. Thirty-three percent of respondents reported no cost savings, and the average cost savings among the remainder was 14% (AT Kearney 2004). The average time to fully implement shared services was two years in Europe and four years in North America. Once established, it can take organizations from one to three years to educate internal customers about the services it offers (Forst 1997). Given the long implementation times and obvious risks of achieving only mundane outcomes, senior executives need advice on how to realize the full potential of shared services. In this chapter, we provide much needed advice, lessons, and insights. Most notably, we note that the simple notion of shared services has many complex choices.

Shared services may be as simple as consolidating a single service in a single location to as complex as managing multiple services from multiple functions in multiple locations. Increasingly, the trend is for business-shared services, with several functional areas such as finance, accounting, human resources, and information technology unified into one global shared services organization. A recent survey found that 47% of respondents had shared services for more than one functional area (Deloitte 2011). Amoco was one of the first companies to create business-shared services across multiple functional areas. "Senior Management reasoned that since these functions were addressing the same set of internal customers in the same business units, why perform them individually for each business unit?" (Forst 1997, p. 32). Companies that have followed a multifunctional approach like Amoco's include Procter and Gamble, Monsanto, Allied Signal, and Rhone-Poulenc (Forst 1997; Customer1 2011).

Shared services are not necessarily an insourcing option – shared services may involve various levels of outsourcing from out-tasking to strategic partnerships. Organizations may engage providers at any stage of the shared services implementation. Unilever, BAE Systems, and Lloyds of London engaged providers to help do the transformation, while Procter and Gamble engaged a provider after they had a well-functioning shared services organization (Gospel and Sako 2010; Lacity et al. 2003, 2004). Thus the choices are many, with many options along the continuums of silos versus cross-functional, local versus global, and insourced versus outsourced. To help managers make these choices, we have selected two case studies that represent each the two biggest trends in shared services.

According to Customer1 (2011), the two biggest trends in shared services are (1) Global Adoption and (2) Public Sector Adoption. Concerning the former, organizations are increasingly adopting shared service centers that service multiple countries. Global delivery centers are located mostly in the United States, China, the United Kingdom, India, Mexico, and Brazil (Deloitte 2011). Global adoption brings great opportunities for cost efficiency, but language, responsiveness, and local compliance are huge issues to consider in a global environment. Concerning the latter, governments are particularly feeling demands to share services (Deloitte 2009). Shared services are happening at all levels of government - federal, state, county, council, and city - and in many countries including the United States, the United Kingdom, Germany, and Sweden (Deloitte 2009; Joha and Janssen 2010; Lacity and Fox 2008; Niehaves and Krause 2010). According to a survey by Accenture (2005), 66% of senior government executives in 13 countries reported they have created or are in the process of creating shared services. A survey by Oracle (2007) found that 32% of state and local governments are in some stage of shared services planning or implementation. Local governments are also adopting shared services (Deloitte 2009). US county governments like Cumberland County, Cape May County, and Atlantic County are sharing services such as health services and police and fire dispatching (Tribune Business News 2011). UK County Councils of Cambridgeshire and Northamtonshire are sharing services for pension administration and investment services (Smith 2011). Clearly, better services are required in areas such as education, health care, taxation, welfare, and citizen support. This has helped shared services to become more widely accepted in the public sector, but governments face considerable obstacles. Government is one of the most difficult environments in which to implement shared services due to lack of necessary management skills, insufficient funding, lack of benchmarks, and resistance from unions and agencies.

In this chapter, we present lessons from two cases studies – Reuters and the State of Missouri – that represent each one of the major trends in shared services (see Appendix A for research method). The case study on Reuters offers lessons on creating global shared services. This massive transformation effort in its financial and accounting services took five years to complete. Overall, shared services at Reuters resulted in better services, increased cost controls and compliance, and lower costs. Reuters even won awards sponsored by the International Quality and Productivity Center for Best New Shared Service Organization, Best Use of Technology for Shared Services, and Best Shared Services Leader. But their journey was tough and required a tremendous amount

of change management. The case study on the State of Missouri offers lessons on creating a different kind of shared services called virtual consolidation. Virtual consolidation of the IT function involved transferring the state agencies' IT budgets for staff and equipment to the Office of Information Technology. Equipment physically moved, but staff did not. The virtual consolidation resulted in over \$6 million in onetime cost savings and over \$2 million in annual cost savings within two years. The IT consolidation was widely recognized as a model for other states to follow and contributed to the State of Missouri receiving an "A" grade from the Governing Magazine on State Performance in Information Technology in 2008. Missouri was one of only five states to earn that grade (Governing Magazine 2008).

Both of these cases demonstrate well how managers can implement the best shared services practices identified by the Shared Services and Business Process Outsourcing Association: (1) executive management and sponsorship, (2) quality of shared services leadership, (3) standardized processes, (4) clearly defined scope of services, (5) quality of shared services personnel, (6) well-defined business strategy and objectives, (7) communication and training, (8) sold technology platform, (9) change and journey management, and (10) well-defined vision and mission (Segantini 2005). Among all the best practices, change management may be the most important and the most lacking practice in share services initiatives. In a recent survey, increased change management was the number one lesson learned from shared services journeys (Deloitte 2011). Based on case studies at Reuters and the State of Missouri, we also found that change management was the most difficult challenge to create effective shared services. In particular, we found that shared services require senior managers to manage up to four change programs. This chapter describes the four change programs and identifies lessons that emerged during each change program.

Conceptualizing shared services as four change programs

Shared services are best conceptualized as the orchestration of up to four change programs: (1) business process redesign (BPR), (2) organizational redesign, (3) sourcing redesign, and (4) technology enablement (see Figure 4.1). BPR specifies *what* business processes the organization will perform. The main goals of BPR are to standardize processes around best practices, to reduce costs, and to improve controls. Organizational redesign specifies *where* business processes will be performed. The goal of organizational redesign is to locate staff based on the value of the services they provide; high-touch, high-value services are typically located close to internal customers while standard services are moved to shared services facilities. Sourcing redesign specifies *who* performs the business processes. Sourcing options include a mixture of in-house provision and outsourcing. Enabling technologies are used to implement the newly designed



Figure 4.1 Conceptualizing shared services as four change programs

business processes and to coordinate work across different organizational units and across sourcing partners.

Organizations must also determine the best sequence for carrying out these change programs. Some organizations (BAE Systems and Lloyds of London, for example) redesign business processes before implementing new technologies. However, as we describe below, Reuters let technology lead the design of business processes. Some organizations (again, BAE Systems and Lloyds of London, for example) outsourced first and let the provider lead the transformation initiative (Lacity et al. 2003, 2005). Reuters insourced shared services first, and then used selective outsourcing to fill in capability gaps. The idea is that managers have many possible routes to shared services.

Applying the four change programs at Reuters

In the Reuters case, the sequence for creating shared financial services was iterative and involved two overlapping phases. Phase I ran from 2001 to 2004. First, BPR, organizational redesign, and enabling technologies led to the creation of six regional shared services organizations. However, before the end of Phase I, senior executives required an additional 33% cost savings to help improve profitability. In Phase II, Reuters' finance managers focused on organizational redesign, BPR, and sourcing redesign. They established a new captive center in Bangalore, India, and outsourced specialized financial services to third-party providers.

Over five years, the two transformation phases resulted in the finance staff being reduced by 47% while both service satisfaction (as measured by user surveys) and controls increased. As the Reuters case shows, these change initiatives – if managed correctly – result in shared services organizations that are highly effective and function as a business within a business. Our research on Reuters and other businesses shows that great shared services organizations breed high performers focused on customer service excellence. Such organizations use SLAs to align expectations and define responsibilities between internal clients and the back-office providers. About 60% of shared service centers charge internal customers for services based on usage (Cecil 2000), although Reuters is not one of them.¹

Creating shared services thus requires radical transformation, which needs a tremendous amount of change management to achieve success. In the rest of this chapter, we present detailed, actionable practices learned from Reuters and the State of Missouri. We explain the choices they made and the lessons they learned.

Reuters Phase I change programs

In the late 1990s, Reuters faced significant changes in its external and internal business environment. The proliferation of the Internet had caused some of Reuters' core content to become commoditized. For example, companies were buying information from Reuters and widely distributing it over the Internet, thus eroding Reuters' revenue. Increased competition in both the European and US markets was causing prices to fall. Internally, rapid growth – both organically and through acquisitions – had created duplicate back offices, resulting in high costs and integration concerns. Increased profitability became the primary concern of Reuters' senior management team.

Reuters' finance leaders were concerned about the company's ineffective finance operating model and relatively high costs, which exceeded 2.3% of revenue. At that time, best-in-breed financial costs were approximately 1.5% of revenue. In 2001, the corporate CFO decided to significantly reduce finance costs by standardizing finance policies for global delivery (BPR), implementing standard, global enterprise resource planning (ERP) and workflow systems (technology enablement), and moving a significant amount of work from decentralized business units to six new regional service centers (organizational design). Each of these three change programs and the key lessons Reuters learned are described below. Although the programs posed significant challenges, Reuters reduced financial service staff by 35% and reduced finance costs from 2.3% to 1.8% of revenue. The major activities, challenges, and lessons for the three Phase I change programs are summarized in Figure 4.2.

Phase I business process redesign. Reuters' main BPR activity was to reduce the number of idiosyncratic business processes by creating global finance policies and standard business processes. In addition to reducing costs, another major reason for redesigning business processes was to prepare for the new organizational design. The company needed to standardize its processes so it
Business process redesign	Organizational redesign
Major activity: Create standard processes for global delivery Major challenge: Business acceptance Major lessons: 1. Coach, don't police 2. Solicit clients for innovations	 Major activity: Move end-to-end processes to six new, client-focused regional service centers Major challenge: Retaining finance staff Major lesson: 3. Envision the future for retained employees
	Technology enablement Major activity: Implement single instance of a global ERP system Major challenge: Timing Major lesson: 4. Invest in enabling technology first

Figure 4.2 Phase I transformation programs at Reuters

could relocate some of them from decentralized business units to new regional service centers.

Prior to Phase I, Reuters had nearly 600 finance processes. After the redesign, the number had reduced to 359. Of these, 279 were truly global standards and only 80 were localized business processes. Key control standards were implemented concurrently under the new global template. Although key controls added challenges to the implementation, they later served as the foundation for the Sarbanes–Oxley (SOX) program and other process standardization initiatives.

The major challenge of BPR was getting "clients" in the business units to accept the changes caused by the reengineered business processes. The purchasing activities within the source-to-payment process were the most difficult to change. For example, the finance team in charge of the redesign needed to implement unpopular policies such as "no purchase order, no payment" among nearly 2000 employees with purchasing authority. Local business units preferred to buy from their local providers even though some of the providers had no warrantee. In some cases, controls were ineffective and there was little accountability for expenditure. In many other areas, such as allowable travel and entertainment, policies varied widely by country. For example, some countries paid for family support costs when employees traveled for business. Other countries had generous, but expensive, health club policies. Reuters learned two valuable lessons in getting business unit clients to accept business process changes. *Lesson 1: Coach, don't police, business unit clients.* Rather than coerce business unit clients to accept the changes, Reuters' finance team acted as coaches who evangelized the vision set by the "owners" (in this case the CEO, the corporate CFO, and business unit CFOs). As coaches, the finance team constantly conveyed the message "This is your unit's vision – we are here to help." If users violated the new procedures – for example, bypassing the new policies to procure on their own – they were coached, not policed. The "offender" was gently reminded of the vision and rules. Once coached on the sidelines, offending users played by the new rules.

Lesson 2: Solicit innovations from business unit clients. The finance team fostered a culture that valued change by creating awards for the best continuous improvements. Any Reuters' employee could submit ideas, but the finance team found that the best ideas came not from its internal team members, but from business unit clients. For example, clients in the editorial division had difficulty sending new employees to training courses because they were remotely located. In particular, editorial employees needed to understand Reuters' travel and entertainment policies, procedures, and technology. The editorial division suggested that finance put a training video on the shared services website. A member of the finance staff created an inexpensive video that explained the travel and entertainment policies and showed employees how to submit expense claims electronically. The finance team gave awards to employees for ideas such as this that significantly reduced costs and increased service levels. Because the awards were very visible and prominent, they served as a positive motivator for behavioral change.

Phase I organizational redesign. Reuters' main organizational redesign activity in Phase I was to move as many end-to-end processes as possible from decentralized business units to the new regional service centers. The idea was that the new centers would be client-focused and house subject-matter experts.

Prior to the organizational redesign, Reuters' finance employees were located in 25 countries and supported business clients in 90 countries. The finance employees reported to one of three organizations:

- 1. *Corporate finance.* Eleven percent of the finance employees worked in the corporate finance group at Reuters' London headquarters. Their roles included financial reporting, internal audit, group treasury, group tax, and reporting to the audit committee.
- 2. Decentralized business units. Eighty-one percent of the finance employees worked in decentralized business units in 25 locations. They supported all the financial processes, such as strategic analysis, business planning, financial management, investments, budgeting and forecasting, and payroll.

3. *Non-integrated subsidiaries*. Eight percent of the finance employees worked in independent subsidiaries. In 2001, these independent businesses were completely separate from the corporate finance group and were thus outside the scope and control of the shared services initiative.

The finance team in charge of creating regional shared services estimated that half of the finance processes in decentralized business units provided direct value to the business or had to remain local. The activities in these processes included strategic analysis, budgeting and forecasting, performance management, financial reporting, statutory and tax accounting, payroll, and project investment management and analysis. These processes were not initially moved to the regional service centers. However, the finance team estimated that the other half of the work done by finance staff in decentralized business units provided only indirect value to the units. These processes included purchasing, payables, cash application and management, and account entries and reconciliations. Many of these processes were moved to regional service centers.

The six regional service centers were located in London, New York (later moved to St. Louis), Amsterdam, Buenos Aries, Nicosia (Cyprus), and Singapore. The choice of locations was based on balancing close physical proximity to internal clients against low-cost provision. Although London is an expensive location, a service center was needed there to closely support Reuters' London headquarters. St. Louis and Buenos Aries were low-cost areas that supported Reuters' operations in the Americas. Amsterdam supported European operations, Singapore supported Asian operations, and Nicosia supported Reuters' emerging markets. Reuters learned one important lesson during the initial organizational redesign.

Lesson 3: Envision the future for retained employees. During Phase I, some finance employees did not want to move from the business units to the regional service centers. Some simply did not want to relocate. Others perceived the changed roles as deskilling them, switching them from client-facing services to transaction processing. In the end, about 60% of the employees in the regional service centers were new hires. In hindsight, the shared service team felt they could have prevented much of the resistance by proactively articulating the vision and career paths for finance staff. In fact, the perceived deskilling did not occur. The resultant culture in these regional centers was strong and the finance staff members relished their expanded role of servicing more clients across more business units. Senior finance leaders did not repeat this mistake during Phase II. As described later, they identified early in Phase II which finance employees would remain at Reuters and more clearly articulated the career paths available to them.

Phase I technology enablement. The newly designed business processes and organizational structure were enabled by several technologies. The most

important activity in technology enablement was the migration to one single instance of Oracle ERP across all of Reuters. Oracle was implemented first in the United Kingdom in 2000. The company hired a management consulting firm to help the finance and HR functions roll out Oracle and launch the shared services initiative. The consulting firm's team of 25 people was instrumental in defining the shared services operating model, and supported the IT function in the global installation of Oracle. Most of the installation was completed by December 2002.

In addition to the ERP system, Reuters invested in systems for invoice scanning, approval workflow, and electronic employee expenses. These technologies helped it create a more paperless office and enable geographical independence. Reuters also customized existing systems to enable language transition workflow. This application reduced the risk of language dependency. The company also custom-built four applications. Two – electronic invoice uploads from major providers and accounts receivable cash application automation – were designed to reduce error rates. The third was a helpdesk logging and workflow application to track incidents across geography and functions. The fourth was an automated system for straight-through processing and approval of payments to ensure security and control. These technologies and applications enabled the business process and organizational redesigns during Phase I. The Reuters' case offers the following lesson about the timing of the technology enablement change program vis-à-vis other change programs.

Lesson 4: Invest in enabling technology first. Reuters found that technology was a critical enabler of its regional shared services. In particular, it discovered that its best initial investment was the global, single-instance ERP system. As one manager said, "This is worth investing in before anything else." The global ERP system drove process standardization and was the "engine" of the regional shared services. Its role during Phase II was even more important, because the now stable technology platform could be replicated in the new Indian captive center.

We note that this lesson is counter to the one published in the article by Lacity et al. (2003). In that article, we described how BAE Systems redesigned business processes before technology enablement. Its transformation partner – Xchanging – believed that technology enablement should follow BPR. At Reuters, implementation of the global ERP system started before business process standardization, which gave the finance team additional leverage in convincing business clients to accept the standard global policies. Because the global ERP system was imminent, business clients would need to follow the new policies as embedded in the new ERP system.

The finance team was proud of the results emerging from its three transformation programs. The team was well on its way to meeting the objectives of reducing finance costs while simultaneously increasing controls and service levels. The celebration, however, was short-lived because Reuters faced a financial crisis. In 2002, for the first time since it went public in 1984, Reuters recorded a pre-tax loss of £493 million (\$812 million). Revenue also dropped by 2%. Early in 2003, the company announced a formal three-year program to achieve total cost savings of £440 million (\$725 million). Senior management mandated that the finance organization reduce costs over two years by a further 33%, without reducing controls or service levels. The senior finance leaders brainstormed how they could deliver the additional savings, given that Phase I of the transformation program was almost complete. Initially, two possibilities were considered - outsourcing and commercialization - but both were rejected. Initially, the senior finance leaders tried to attract a provider to move Reuters' regional financial services to India and to continue supplying services once the move was completed. Although a few providers showed interest, they all required significant upfront management fees. In the end, the leaders were concerned that an outsourcing provider would not be able to manage the global complexity, and they eliminated fee-for-service outsourcing as a viable option. Next, the senior finance leaders considered commercializing the company's financial service support organization. Because Reuters considered this organization as best-in-class, the finance leaders were very excited about the possibility of exploiting this asset, much like Procter and Gamble did when it sold its shared services operations. However, Reuters' shared services operation was too small to excite a serious buyer. While Procter and Gamble was a \$40 billion company and had a few thousand people in its shared service center, Reuters was only a \$4 billion company with a few hundred people in shared services. With large-scale outsourcing and commercialization eliminated as viable options to achieve the savings, the finance leaders considered which other more aggressive organizational redesigns could deliver the savings.

Reuters decided to redesign regional service centers, build a captive center, and engage outsourcing partners. This option would entail moving some higher value work that remained in decentralized business units to the six regional service centers, and moving many of the standardized processes now in the regional centers to a new lower-cost captive center that would be located offshore. Selective use of outsourcing partners would fill in gaps in Reuters' capabilities. Independent of the finance organization, other units within Reuters were considering transferring some of their operations to Bangalore and Bangkok. As the finance leaders further considered this option, they quickly identified Bangalore as the preferred location for the captive center. They selected Bangalore because of available talent and because they thought they could leverage another Reuters' presence in that city. Reuters created a shared services team to manage a second phase of transformation for the finance organization.

Reuters Phase II change programs

During Phase II, Reuters launched three transformation programs (see Figure 4.3), the most challenging of which was organizational redesign (each program is described in detail below).

The shared services team needed to rethink the organization yet again. This time, the six regional shared service centers would further exploit their subject-matter expertise by assuming more customer-facing responsibilities. Thus, even more processes would be moved from decentralized business unit to the regional centers. In addition, the highly standardized transactional processes would be moved from the regional centers to a new captive center in India.

The organizational redesign prompted changes to business process flows. Although the policies, controls, and standards remained the same, the shared services team had to ensure seamless end-to-end delivery (BPR). In addition, the new organizational design left gaps in some areas, requiring Reuters to engage partners in selective outsourcing (sourcing redesign). Thus, a tremendous amount of work was moved around the organization.

After Phase II, finance staff located in decentralized business units decreased by 44%, finance staff in the six regional service centers decreased by 61%, and the captive center hired 174 new people. The net result of Phase II was a decrease in finance staff by 18% and cost savings within \$100,000 of the targeted \$6.5 million.

Business process redesign Major activity: Ensure processes work in new organizational design Major challenge: Linkages across multiple delivery channels Major lesson: 7. Reassemble processes to ensure seamless end-to-end delivery	Organizational redesign Major activity: Decide which processes to move where Major challenge: Move enough processes to obtain savings without sacrificing service or controls Major lessons: 5. Locate "gray-zone" activities to customer- focused service centers 6. Analyze processes at the activity level
Sourcing redesign Major activity: Create new captive center and outsource to fill gaps in internal capabilities Major challenge: Transitioning work Major lessons: 8. Keep transition managers until new service model is stable 9. Make those whose work will be transferred accountable for migration	

Figure 4.3 Phase II transformation programs at Reuters



Figure 4.4 The new finance operating model

Phase II organizational redesign. The new organizational design meant moving more processes from decentralized business units to regional service centers (arrow 1 in Figure 4.4) and moving the standardized processes in the six regional service centers to a new captive center in India (arrow 2 in Figure 4.4). The aim was to downsize the regional service centers, with remaining staff focusing on higher value-added processes that require specialist client knowledge. The Indian captive center would operate the standardized, transactional processes that had already been automated and optimized to minimize error rates. Reuters learned two lessons from the organizational redesign in Phase II.

Lesson 5: Locate "gray-zone" activities in customer-focused service centers. Although Reuters had already moved many business processes from decentralized business units to the six regional service centers during Phase I, senior finance leaders thought many more processes could be moved. The regional centers were earning a reputation for excellent customer service and were regularly highly rated in internal client surveys for enhanced user experience, improved self-service functions, and improved quality of information. Thus, they were ready for more client-focused work.

The shared services team decided to move processes that were nonstrategic but still required specific customer knowledge – so-called "gray-zone" processes – to the regional service centers (see arrow 1 in Figure 4.4). Gray-zone activities included preparing baseline budgets and forecasts, creating standard management reports, and performing standard accounting functions such as recoveries and statutory, tax, and payroll processing. The regional service centers were also responsible for processes that required physical proximity to customers, that required specialist knowledge, and that frequently changed. However, despite the increased responsibility for higher-value work, the overall headcount in the six regional service centers declined by 61% because many processes were moved from these centers to the new captive center in India (arrow 2 in Figure 4.4).

Deciding which activities to move from the regional service centers to the captive center in India required a more detailed level of analysis. While end-to-end processes could be moved from decentralized business units to regional service centers because of the centers' client expertise, the shared services team could not move entire processes from the regional centers to the Indian captive center. They could only move the standard, low-value transactional activities *within* processes to the Indian center. The next lesson shows how to analyze candidates for shared services at the *activity* level.

Lesson 6: Analyze costs, attributes, and readiness of process activities to identify contenders for shared services. The shared services team pulled apart the 279 global finance processes and assessed the component activities by cost, attributes, and readiness. For each of the six regional service centers, the team created an inventory of processes and the major activities within each process. The team was open to the idea that different activities within a process could be sourced in different locations. For example, a regional service center might work with a purchasing agent in a business unit to decide which server to buy from which provider, but the Indian center might create the requisition form. To decide which location should carry out which activity, the shared services team assessed the activities through three conceptual funnels (see Figure 4.5).

The first funnel tested activities for costs: would moving this activity from a regional center to India reduce costs? The volume of work had to be sufficient to justify the extra transaction costs of moving an activity. The second funnel tested for activity attributes: is this activity suited for shared services? The specific criteria used were the extent to which the activity:

- Is repetitive and transactional
- Has few touch points with internal customers
- Is highly structured and rules-based

- Uses standardized inputs, outputs, and technology
- Has low material business impact on internal customers
- Is independent of third parties
- Requires simple skills
- Is either language neutral (only requires a onetime translation of forms) or local-language-independent (does not require extensive oral or e-mail communications).

The shared services team also assessed whether it was legally possible to relocate an activity. This analysis funneled about 80% of the activities within the 279 processes to the next assessment step.

The third funnel tested for process readiness: could this activity be moved? Activities that were ready were well-documented, stable, and optimized (i.e., had low error rates); had common service levels; were technology ready; and were politically acceptable to move. The team also had to ensure that the sequencing of activities still made sense. For example, it did not want a process where the sequence of activities would be onshore, offshore, onshore, offshore, onshore. This assessment eliminated about 40% of the remaining activities within the 279 processes.

The activities that remained in the regional service centers included purchasing and call center activities. The shared services team knew that purchasing



Figure 4.5 Process analysis at the activity level

was the most politically sensitive process, so it had to be careful which purchasing activities would be transferred and when. The team also kept call center activities within the six regional service centers because it believed Reuters needed stability in the first line of communication between internal customers and shared services. The call centers also provided the best mechanism for spotting trouble and identifying opportunities for continuous improvement. Once the team had decided on the optimum location for each activity within a process, the process had to be reassembled to ensure seamless end-to-end delivery.

Phase II business process redesign. The shared services team did not intend to change any of the business process policies or standards, but moving activities within processes to new sourcing locations affected process flows. Reuters had to redesign all the flows to ensure end-to-end delivery. For example, the keying of invoices would be moved to the Indian captive center, but what would happen if the center received an invoice written, say, in Swedish? The Indian center would not support the Swedish language. In this example, employees in a business unit administrative function would translate the invoice from Swedish to English before sending it to India for keying. Reuters learned one lesson from its Phase II process redesign program.

Lesson 7: Reassemble activities to ensure seamless end-to-end delivery. Because different activities within a finance process could be sourced from three types of service centers (regional, captive, or outsourced), the shared services team had to build solid controls and interfaces across service centers and to/from business clients. Each process was fully documented. The documentation included the process name, process reference, author, service description, SOX control requirements, process narrative, and all process activities. The processes were fully diagramed to show inputs, automated process steps and sub-steps, manual process steps and sub-steps, control process steps and sub-steps, decision points, and outputs. Clear lines of responsibility were drawn around the diagrams, indicating the duties of each party. Service levels were defined for each process in terms of the quality and timeliness of outputs. In addition, the detailed process flows were used for training new hires at both the Indian captive center and outsourcing partners.

Phase II sourcing redesign. While the shared services team was engaged in the organizational redesign, it was also overseeing the set up of the new global captive center in India. Reuters purchased a new facility in Bangalore, and its internal IT department built and implemented the entire technology and communications infrastructure within four months. In July 2004, the company hired a new manager to head up the captive center. He had very relevant experience because he had spent three years establishing a 300-person captive center for a Fortune 500 company. Unlike other applicants who had managed captive centers with 1500 or more people, this man knew how to efficiently and

effectively manage a smaller center. (According to research done by Gunn Partners, it takes roughly 100 people to make a shared service center worthwhile and beyond 600 people, size becomes counterproductive (Cecil 2000).)

Reuters also hired 150 employees at a rate of 30 per month. To attract good people, it promised that employees would work normal hours, unlike many US-centric Indian support centers. Only nine employees worked the night shift at Reuters' Indian captive services center. Also, the company offered slightly higher than market rates. Once hired, the Indian employees were fully trained via courses delivered onsite in India and also traveled to Reuters' locations around the world for knowledge transfer. New hires shadowed the workers they would replace in the regional centers for 2–4 weeks to learn about business processes, clients, technology, and procedures. Once training was complete, the captive center began providing standardized transactional processes, optimized processes, structured processes, automated processes, processes with low error rates, and processes that would benefit from economies of scale.

Reuters needed a variety of outsourced partners to enable the new financial operating model. It selected one major outsourcing partner and several specialty partners and expanded relationships with its existing banking partners.

Reuters selected the major outsourcing partner to provide services for statutory accounting and for tax and filing - activities that could not be moved across borders. It leveraged this partner's truly global presence to provide country-specific processes, rather than trying to retain and develop deep functional expertise in specialized areas throughout the world. For example, Reuters couldn't afford to retain specialized staff versed in local Finnish tax law, but the outsourcing partner could. This outsourcing partner took on the work of approximately 40 full-time equivalents. It either hired Reuters' staff or leveraged its existing staff to fulfill Reuters' needs. In addition to the major outsourcing partner, specialty partners were engaged to perform very specific processes like scanning, facilities administration, and local taxes. The shared services team also expanded existing relationships with Reuters' banking partners to ensure that global shared services could handle payment transactions across borders and across partners. Because sourcing redesign changes who performs certain business processes, the transition of work to different people requires special care and attention. Reuters learned two important lessons.

Lesson 8: Keep transition managers until the new service model is stable. Part of the estimated cost savings for global shared services came from lower management costs. The "power players" on the shared services team knew they were planning for their own redundancies. The Senior Vice President of the Americas Shared Services said, "We actually did put our business case to management and said, 'you don't need the same level management layer you have today. You need a strong management layer in India, and you need the solid customer center management layer onshore, but you don't need us.' " In September 2004, senior management wanted the transformation plan accelerated by three months to capture an additional \$500,000 in savings. As a result, some members of the shared services transformation team were moved to other programs or left Reuters before the new service model had stabilized.

Although this decision accelerated the cost savings, there was a price to pay in terms of a loss of focus. The shared services transformation team had always envisioned that the captive center in India would be staffed with supervisors who acted as process experts and who would be responsible for the execution and quality of service delivery. However, the new manager hired to run the captive center had a different vision aligned more with Indian business culture. He organized the captive center so that supervisors were primarily responsible for managing employees and for allocating work to them.

Initially, the captive center suffered from the resulting lack of subject-matter expertise. For example, when payments were missing, a significant amount of client knowledge is required to find and reconcile errors. Initially, the Indian staff couldn't perform these duties, so the six regional centers took them back. Over time, however, the regional service center staff coached the Indians to better perform these tasks, and the processes were eventually moved back to India.

The captive center initially also experienced higher-than-expected staff turnover. Reuters had to hire more people in India than it had anticipated to provide a turnover buffer. It also had to hire more people than anticipated because the Indian employees were not as experienced or as efficient as the finance employees who were displaced. In all, 24 additional Indian employees had to be hired, but because they are so much cheaper to employ, the additional headcount did not significantly erode the anticipated savings.

Lesson 9: Make people whose work will be transferred accountable for successful migration. Many organizations find it difficult to retain the cooperation of employees targeted for redundancy. Reuters was very careful to treat fairly employees who would be made redundant and found a way to ensure they were accountable for the success of the migration. First, Reuters gave employees plenty of notice. It officially informed employees of the intention to downsize the regional centers in March 2004. Employees were told that the transition team did not know exactly who would be impacted, but that everyone would know by July 31, 2004. Some employees would be retained and some would be given severance packages. Some of those who would be let go were given 18 months advance notice that they would no longer have a job at Reuters. Second, Reuters built into the retention package a requirement that employees facilitate and sign off on the transfer of their work. Part of this responsibility was getting workers in the new Indian or outsourcing partner to shadow them in their daily jobs. To receive the full redundancy benefits, a person whose work was being transferred had to agree that his or her shadows were ready to take over the process. Reuters' Program Transformation Leader said, "If you remember nothing else from the transition process, remember this: let the people that are giving away the work give it away. Make them responsible for it. They know the job the best and most will enjoy the process of teaching what they do every day."

Reuters' finance leaders all but achieved the additional 33% mandated cost reductions (they fell short by just \$100,000) – significantly more than the average 14% cost savings most companies achieve (AT Kearney 2004). The cost savings came primarily from staff reduction. The senior finance leaders were successful because they were committed to the vision of global shared services, dedicated the right resources, and, most importantly, managed well the four change programs (BPR, organizational redesign, sourcing redesign, and technology enablement). The efforts by the finance (and other) functions helped to significantly improve Reuters' financial health since its losses in 2002. Reuters reported year-on-year growth in both revenue and operating profit from 2003 to 2006. Revenue in 2006 was £2.57 billion (a 7% increase from 2005) and operating profit was £256 million (a 24% increase from 2005). In May 2007, the boards of Reuters and Thompson announced a proposed merger, approved by the European Commission and the US Department of Justice in 2008. The company is now called Thomson Reuters.

Not all shared service initiatives require the global scale and scope as Reuters' five-year transformation effort. The next case on the State of Missouri primarily entailed one change program, organizational redesign, yet the initiative was successful and generated significant savings.

Applying organizational redesign at the State of Missouri

At the State of Missouri, the CIO implemented "virtual consolidation" by assuming authority and responsibility for IT budgets and IT personnel across state-wide agencies. In total, the Missouri IT consolidation held the CIO responsible for 1237 IT staff members from 14 state agencies and a consolidated IT budget worth \$255 million dollars from 121 separate funds that flowed through 188 individual appropriations. Prior to consolidation, all architecture, equipment, software, and telecom decisions were made locally in the autonomous silos of each of the 14 agencies by the IT Director and staff. After the consolidation, decisions regarding architecture, security, GIS, telecom, networks, end-user support, application development, disaster recovery, all procurement, and employee compensation and classification were provided or approved as a centralized service. Unlike shared services, virtual consolidation did not physically relocate many people or IT resources, but it did reap the same benefits of shared services: lower IT costs and better IT services. The virtual consolidation resulted in over \$6 million in onetime cost savings and over

Organizational redesign: Major activity: Centralize IT budgets, staff, and resources Major challenge: Agency resistance Major lessons: 10: Legitimate authority is the necessary but insufficient enabler of shared services 11: Not all services are suitable for shared services 12: Data is the best defense against sabotage 13: Challenge public sector assumptions
14: Timing is everything

Figure 4.6 Organizational redesign programs at the State of Missouri

\$2 million in annual cost savings within two years. In contrast to the Reuters case that entailed significant activities in all four change programs, the State of Missouri primarily redesigned the IT organization (see Figure 4.6). The major challenge was to get the CIO the authority to do the consolidation.

Organizational redesign. The idea for virtual consolidation was conceived in 2004. The Republican candidate for Governor ran on a platform of responsible government oversight. Among his many campaign ideas, he proposed to consolidate the IT functions housed in 16 state agencies. He won the election in November 2004 against the Democratic candidate. The State of Missouri had not had a Republican Governor since 1993. The Republican Party also held the majority in the State House of Representatives and State Senate. With a new party in place, the Governor appointed many new members to his cabinet. Cabinet members serve as Commissioners or Directors to the 16 state agencies: the Office of Administration, Agriculture, Conservation, Corrections, Economic Development, Elementary and Secondary Education, Heath and Senior Services, Higher Education, Insurance, Labor and Industrial Relations, Mental Health, Natural Resources, Public Safety, Revenue, Social Services, and Transportation. Within the Office of Administration, the Governor recruited a new CIO. At first, the recruit was reluctant to take the position because of his lack of technical knowledge. But the Governor-elect assured him he didn't need another technologist - he had 1200 of those - he needed someone to lead change. The recruit had over 35 years experience in public administration in Missouri, most recently serving for four years as Executive Deputy Secretary of State.

The new CIO took office on January 10, 2005. His vision was to create "an efficient, centralized, streamlined IT operation that delivered each cabinet agency the services it needed while relieving the agencies of the considerable burden of managing an IT shop." He brought back two possible proposals for the IT consolidation to the Governor. The first proposal was the "status quo" option. He had witnessed two prior CIOs announce very good proposals for consolidation that were ignored by the agencies and by decentralized IT staff. The CIOs had the previous Governors' emotional support, but not the political support to mandate consolidation. The second proposal empowered the CIO by transferring the agency's IT budgets, IT staff, and IT equipment to the Office of Information Technology. The Governor and CIO agreed on the second proposal. The CIO said, "When you have people's money and staff, you have their attention."

Sixteen days later, the Governor consolidated two centralized IT organizations – the Office of Information Technology (which housed the CIO and applications) and the Division of Information Services (which housed the state network, data center, and telecommunications) by signing Executive Order 05-07. The previous CIO would make pronouncements about IT architecture that were promptly ignored by the Head of the Division of Information Services. The executive order put the CIO in charge of both functions. The Governor issued a press release announcing the elimination of the position, which would save the state \$100,000, the cost of that position's salary and benefits. But more importantly, it enabled the CIO to implement change across the centralized IT department.

Next, the Governor empowered the CIO to take charge of IT resources currently housed in the agencies. The Governor announced the IT consolidation in one of his first cabinet meetings and told the members he expected each of them to fully cooperate with his CIO. According to the CIO, the timing was perfect because the new cabinet members had no entrenched interests in IT:

So I had the mandate from the Governor, and then it's a whole new administration, which meant that most of the Cabinet Members are new to their jobs. They were willing to salute and do what the Governor tells them. They had no vested history in building these IT budgets with these agency silos.

Define and measure agency-level service levels. Even with a Governor's mandate, the CIO and his team had to find a way to ensure the business leaders in the agencies that their loss of authority over IT would not lead to a decrease in IT services. The CIO and his team decided to use agency-driven SLAs. SLAs would clearly hold IT accountable for IT services, which should help assuage the fears of agency directors. Unlike most SLAs in the private sector,

the CIO did not create a "Master Service Level Agreement." Instead, his team spent six months in the agencies talking to customers about the services most important to them and agreeing on the ways that service outcomes (not service processes) could be measured. Each agency identified from 12 to 30 prioritized deliverables that could be accomplished within the budget funds transferred into the consolidation. Then IT had to actually measure baseline services for those products and services in each agency before the SLA was signed. This would be the only way to know whether service lapses were inherited or caused by the IT consolidation. The entire process took nearly a year.

Accumulate IT spend within each agency to one budget. The CIO launched the IT consolidation by first assigning a full-time accountant to determine how much each agency spent on IT within the last three to five years. The task was enormous because IT spend was commingled within agency projects or camouflaged under various accounts, including consulting services, travel, and training. In addition, job titles did not often match job duties. For example, a person in the agency called a "Data Manager" appeared to be an IT position, but he did not perform IT duties. Conversely, some IT people in the agencies had titles like "GIS" who didn't fall into the IT classification scheme, but who truly belonged in the IT consolidation. As expected, despite the Governor's mandate and support, some agencies did not fully cooperate with the CIO's office poking around their budgets. They often contested the accountant's claims. Because the CIO had access to the accounting systems for all the agencies, he had good data to support the accountant's claims.

The CIO used the accountants' findings to aggregate IT spend within each agency. But for the first year, he purposefully did not transfer the IT spend to his office. He merely created a separate IT budget for the aggregated IT spend within each agency. He was worried that some of the IT budget might be tied to state and federal grant matching programs, and he did not want to interfere with those monies. After determining there was no impact, the IT budgets were transferred from the agencies to the Office of Administration under control of the CIO.

Restructure the IT department. On October 11, 2006, the Governor signed Executive Order 06-34. This order created the Information Technology Advisory Board, made up of the consolidated agencies' IT Directors and CIOs of other executive branch agencies. The Board is responsible for advising the CIO on applications development, business continuity and disaster recovery, cyber security, and IT infrastructure including mainframes, servers, desktops, networks, and telecommunications. The order also empowered the CIO to establish state-wide policies and state-wide architecture. The CIO was also ordered to create an annual report called State of Information Technology in Missouri, due December 1 of each year to the Governor, Chief Justice of the Supreme Court, and the Senate Appropriation and House Budget Chairs. This

order also changed the name of the Office of Information Technology to the Information Technology Services Division (ITSD).

The CIO asked each cabinet head to identify a top-level manager in their organization to serve as the main guardian of IT priorities. These agency administrators prioritized as many as 30 IT initiatives. The ITSD allocated IT staff and resources to ensure each agency's top priorities are met each year. For example, the ITSD developed critical applications identified by the Department of Higher Education in 2007. These applications included a complete redesign and additional functionality to the website, a major enhancement to the Financial Aid for Missouri Undergraduate Students (FAMOUS) system to incorporate the new Access Missouri Financial Assistance Program, and a major upgrade and migration of the department's imaging systems.

By year end 2006, all IT staff, budgets, and equipment were consolidated under the direction of the CIO. The virtual consolidation resulted in over \$6 million in onetime cost savings and over \$2 million in annual cost savings within two years (see Table 4.1). The savings came from a number of initiatives, such as e-mail consolidation and bulk buying. E-mail consolidation began in January 2006 and was completed by December 2007. Over 30,000 e-mail accounts were migrated. E-mail consolidation resulted in onetime savings of nearly \$300,000 due to reducing the number of servers, software licenses, and management overhead. Because the consolidation made jobs redundant, the state also saved \$385,099 in annual salaries. In addition to the cost savings, the e-mail consolidation increased availability, reliability, and scalability.

Consolidation activity	Onetime cost savings (FY07–FY08)	Annual cost savings (i.e., eliminated positions)	Five-year annual cost savings
Consolidated and updated networks	\$769,895	\$1,704,029	\$8,520,145
Consolidated e-mail	\$3,000,000	\$385,099	\$1,925,495
Consolidated equipment	\$1,523,683	\$16,400	\$82,000
Consolidated software licenses	\$1, 115, 189	\$11,270	\$56,350
Consolidated hardware maintenance	\$7,039	\$42, 123	\$210,615
Total	\$6,415,806.00	\$2, 158, 921.00	\$10,794,605.00

Table 4.1 Savings generated from virtual consolidation

Bulk buying was another significant source of cost savings enabled by IT consolidation. The CIO found out that the state was overpaying for software licenses – they were paying for many more users than needed. He renegotiated the licenses. He bundled hardware purchases. Rather than negotiating prices on 73 laptops in one agency and 100 laptops in another, the CIO aggregated demand and negotiated better prices on a combined 2000 laptops needed across 14 agencies. He also better disposed of old machines. Because some agencies are better funded than others, the CIO discovered that the less funded agencies were thrilled to receive three-year-old computers from the better funded agencies. The Department of Corrections, for example, were thrilled whenever they replaced their green screen monitors with three-year-old hand-me-downs from other agencies. He bundled software purchases. Prior to consolidation, three agencies were paying license fees for web content filtering. By buying a bulk license, the CIO was able to disseminate web content filtering to all 14 agencies for a cheaper price than the 3 agencies paid combined. Many other opportunities for sharing resources surfaced. For example, the Department of Natural Resources and the Department of Conservation were each paying for a data line to the same Nature Center. By sharing the line, the tax payers were saved \$11,000 per year. One agency paid for an enterprisewide software license when they were the only agency using or aware of the software. The CIO made the application available to all 14 agencies without extra costs.

Where did the savings go? The CIO used the savings generated by the consolidation to invest in new technologies. The CIO always made pronouncements in the form, "I saved a million dollars on X and reinvested in Y." This allowed the CIO to make much needed investments without having to lobby for additional appropriations. For example, he bought SafeBoot encryption software for government notebook PCs. This way, if a notebook computer is ever lost or stolen, the data are protected.

The case of the State of Missouri offers a number of lessons for public sector managers.

Lesson 10: Legitimate authority is the necessary but insufficient enabler of shared services. Prior state CIOs had aimed to consolidate IT across the agencies but were ineffective at persuading the agency CIOs to cooperate. And why would an agency CIO voluntarily relinquish budget, staff, and resources? In the public and private sectors, top management support – often in the form of political mandates – is a necessary, yet insufficient enabler of shared services. A political mandate is necessary because it shifts the conversation from "should we implement shared services?" to "how should we implement shared services?" (see also Deloitte 2009). In the State of Missouri, the CIO was authorized by two Executive Orders from the Governor, along with the Governor's visible support. But a mandate is an insufficient practice to solicit the full cooperation of

agencies. The leaders of shared services initiatives still have to find ways to get people to cooperate. The CIO said,

Another factor was the "politics" of the consolidation. By that I mean, in a capitol city where technology lobbyists are plentiful and persuasive, I needed to reach out to that community to inform and involve them in my planning process. Once they understood my message that the purpose of the savings and efficiencies of consolidation was to reinvest those dollars in software and equipment upgrades to keep MO state govt. technology current, I had their support in the halls of the Capitol Building.

Internally, the CIO at the State of Missouri created a culture of "think like a tax payer" to get IT staff motivated. Other practices include moving redundant workers to other positions or using natural attrition to shrink the work force (a slower but more palatable option in strong union environments).

Lesson 11: Not all services are suitable for shared services. Just as important as deciding what to consolidate is deciding what not to consolidate. The CIO excluded several agencies and several budget items from the consolidation due to legal or political reasons. Two agencies – the Highway Department and the Conservation Department – were excluded from the consolidation for legal reasons. Both are constitutional agencies that report to a Commission. Politically, the CIO did not consolidate the telecommunications budgets from the agencies because there were few opportunities to reduce costs due to existing telecommunications contracts. The CIO feared that the accumulated dollars would be a visible target for legislators to reduce the budget, when in fact there was no waste. The CIO focused the consolidation on services that would generate savings, such as e-mail consolidation, server consolidation, and purchasing of hardware and software.

Lesson 12: Data is the best defense against sabotage. Although the agency heads gave their support for the IT consolidation, the CIO still had to solicit the cooperation from the agency IT Directors. Back offices like IT are notoriously complex and it would have been easy for the IT Directors to hide budget items or IT services performed by part-time people. It would have been easy for opponents in the agencies to claim the consolidated service levels were inferior to the service levels provided within the agencies. By having direct access to the accounting data, the CIO made sure he had all the budget data he needed to implement shared services and he focused his staff on measuring the agencies' current service levels before taking them over.

Lesson 13: Challenge public sector assumptions. A common precept in state government is that each agency has its own IT Director. The CIO challenged that assumption and looked for opportunities for agencies to share IT Directors. The Department of Labor and Industrial Relations and the Department of Economic Development now share one IT Director. This consolidation made sense because each of these agencies deals with employment issues. The Department of Higher Education and the Department of Elementary and Secondary Education also share one IT Director because both agencies deal with students. Although all four agencies were apprehensive about sharing an IT Director, there has been no measurable effect.

Lesson 14: Timing is everything. Adept managers, actors, and authors know the importance of timing:

I learned that we can do anything, but we can't do everything... at least not at the same time. So think of your priorities not in terms of what activities you do, but when you do them. Timing is everything.

(Dan Millman, author)

Timing played a key role in the success of the IT consolidation. The Governor's first Executive Order pertaining to the IT consolidation was made within his first month in office. During this month of drastic change – a new political party was in power and new cabinet heads were appointed – a "little" proposal on the consolidation of IT departments went practically unnoticed. Agency Directors had more pressing issues – like starting a new job – than to worry about the IT departments within their agencies. Here, accelerated timing was important. Once the CIO had gathered all the relevant budget data, he waited one year to actually transfer the budgets from the agencies to his office. He wanted to ensure that the consolidation would not violate any grant-matching requirements and he wanted to ensure current service level measures were valid. Here, delayed timing was important.

Conclusion

We have presented two case studies that vary considerably in scale and scope. Reuters represents well the challenge of massive change programs comprising BPR, organizational redesign, technology enablement, and sourcing redesign. Reuters' two phases of transformation took nearly five years (2001–06). The State of Missouri represents well what is needed to achieve shared services in government. The scope of change was much smaller than Reuters, comprising a significant organizational redesign program. The State of Missouri's transformation took less than two years (2005–06). In the end, Reuters and the State of Missouri realized their visions for effectively and efficiently delivering back-office services through shared services. In addition to the lessons previously identified, one high-level question remains:

Which transformation approach is best? To create shared services centers, a company requires major capabilities to manage large-scale change, re-orient

staff, redesign processes, install the enabling technology, establish and enforce standards, and re-organize. Senior managers must consider the right approach toward such major transformation programs. In a previous article, we described five approaches for creating shared services: (1) do-it-yourself, (2) hiring management consultants to manage the change, (3) fee-for-service outsourcing, (4) joint ventures for commercialization, and (5) transformational outsourcing through enterprise partnerships (Lacity et al. 2004). At the State of Missouri, the state followed a "do-it-yourself" approach. However, at other organizations, we found that many senior managers were not willing to make an upfront investment in shared services to pursue the do-it-yourself option. This is why many organizations use outsourcing options to create shared services because providers often make the upfront investment on behalf of the client.

Rather than pick one approach, Reuters selected a blended approach. This approach relied primarily on the do-it-yourself approach, but was supplemented by management consultants who helped implement the global ERP system, and by fee-for-service outsourcing that provided global coverage of country-specific processes. An IBM survey of 210 senior finance managers found that blended approaches are becoming recognized as a best practice. A recent KPMG report also identified blended approaches as the new norm and mentioned specifically that cloud computing will influence shared service practices:

What constitutes outsourcing is also evolving. Multi-point global sourcing has become the norm, combining shared services, offshore captive, and ITO/BPO efforts. While the scale and scope of global sourcing continues to expand, many buyers struggle to keep up relative to the skills and capabilities needed to manage global sourcing efforts. Cloud computing is beginning to heavily impact all aspects of outsourcing and the way IT and business services are designed, purchased, and consumed. Cloud computing has the potential to help buyers and providers standardize services while simultaneously improving price performance, long a desired but elusive outsourcing goal.

(KPMG 2011)

(While we agree that cloud computing will have long-term effects, we temper some of the exuberant promises of immediate transformation through the cloud in Chapter 8.)

The benefit of a blended approach is access to best-in-breed sources for the myriad capabilities needed to create shared services. The caveat, of course, is that the additional transaction costs associated with coordinating work across different centers and providers can be significant. In retrospect, though, Reuters found that the benefits of a blended approach outweighed the costs.

From this chapter, it becomes quite clear that this book is about advanced practices. There are no short-cuts to success. Shared services, like other sourcing options we discuss in this book, require a tremendous amount of change management. In the next chapter, we deeply focus on the changes offshore outsourcing brings to internal client project managers. Too often, senior managers make offshore outsourcing decisions without committing enough resources to protect quality, placing a heavy burden on the people charged with implementation.

Note

1. Proponents argue that usage-based chargeback motivates shared services staff to remain competitive, stimulates internal customers to think before they consume, and provides a way for shared services to generate revenue for further improvements. Opponents argue that usage-based chargeback creates too much administrative burden and can create conflicts between shared services organizations and internal clients. For more information, see Webster (2007); Ross et al. (1999).

5 The Changing Role of Client Project Management

Mary C. Lacity and Joseph Rottman

Introduction

Strategic outsourcing has been defined as "the strategic decision of a business to stop carrying out an activity in-house" (Busi 2008, p. 8). While strategic outsourcing decisions are crafted by senior executives, they are executed by middle managers and staff who may not share the vision or enthusiasm of their senior leadership team. Research has found that senior executives often have an overly optimistic view of their strategic sourcing decisions because their direct reports significantly filter information (Lacity and Rottman 2008). Consider the following quote from an IT Architect in charge of executing an offshore outsourcing decision made by his senior leadership team: "You didn't want to tell senior management the bad news too much because this was their baby and you didn't want to say, 'You have a terribly ugly baby!' " (Rottman and Lacity 2008, p. 272).

In order for senior executives to ensure their strategic outsourcing decisions are successful, they need a deeper understanding of the expectations, perceptions, and behaviors of the staff they assign to execute their vision. In this chapter, we deeply focus on one stakeholder within client organizations: the client project manager. Among the many stakeholders affected by outsourcing, the client project managers were most responsible for integrating providers into project teams and for delivering projects on time, on budget, and with the required quality and functionality. Based on interviews with 67 client project managers in 25 organizations, we develop a framework of 27 effects of outsourcing on the role of the client project manager. We use pseudonyms to protect the identity of organizations (see Table 5.1 and Appendix A for details on the research method). The changes to their roles are vast and profound.

The framework comprises one of the most challenging forms of outsourcing – the offshore outsourcing of information technology (IT) work including software development, software services, and software re-platforming. Offshore

Client pseudonym	Number of organizations
Aerospace	1
Beverage	1
Biotechnology	1
Electrical materials	1
Employee satisfaction	1
UK Financial Information Services	1
Financial services	8
Government IS Organization	1
Insurance	2
Manufacturing	3
Mining	1
Retail	1
Software	1
Telecommunications	1
Transportation	1
Total	25

Table 5.1 Company pseudonyms

outsourcing is harder than domestic outsourcing because of time zone differences (Carmel 2006), increased efforts in knowledge coordination (Kanawattanachai and Yoo 2007) and boundary spanning (Levina and Vaast 2008; Mahnke et al. 2008), the need for more controls (Choudhury and Sabherwal 2003), cultural differences (Carmel and Agarwal 2001; Carmel and Tjia 2005; Krishna et al. 2004), and difficulties in managing dispersed teams (Boh et al. 2007; O'Leary and Cummings 2007; Vlaar et al. 2008). IT work is more difficult than other domains such as call centers and low-end transaction processing because requirements are less certain and because IT work requires extensive domain knowledge (Cha et al. 2008; Gopal et al. 2003; Oshri et al. 2007a, b; Ramasubbu et al. 2008).

In this intense context of offshore outsourcing of IT work, client project managers had to learn to manage differently compared to projects sourced with internal employees or with domestic contract workers. They had to learn new ways to coordinate work and new practices to transfer, protect, and renew knowledge. By first understanding their challenges and experiences, we identified four practices senior executives can use to empower client project managers to more successfully execute strategic outsourcing decisions.

The framework on the effects of the client project manager's role is categorized by six areas of concern: organizational support, project planning, knowledge transfer, process standardization, managing work, and managing people. The framework is presented in Table 5.2. Our participants reported that offshore outsourcing had six positive effects on their role as project managers

Effect categories	Specific effects of offshore outsourcing on project managers	Seldom	Some- times	Often
Organizational support	1. Project managers had to fill many of the roles that should have been performed by the PMO	-	Х	-
	2. Project managers needed specialized training the first time they managed a project with offshore resources	-	-	Х
	*3. Project managers felt offshore outsourcing helped their career	Х	-	-
	4. Project managers felt offshore outsourcing hurt their career	Х	-	-
Project planning	*5. Project managers found that projects could be staffed quicker because of offshore outsourcing	-	-	Х
	* 6. Project managers had access to the provider's scarce IT skills	-	-	Х
	7. Project managers needed to thoroughly verify offshore provider's work estimates which tended to be optimistic	-	-	Х
	8. Project managers experienced higher transaction costs	-	-	Х
	9. Project managers experienced more project delays	-	-	Х
	*10. Project managers experienced faster development when time zone differences were coordinated	Х	_	-
	11. Project managers experienced project delays when time zone differences were not coordinated	-	_	Х
Knowledge transfer	12. Project managers had to do more knowledge transfer upfront	_	-	Х
	13. Project managers were forced to short-cut the knowledge transfer process because of deadlines set by senior IT leaders	Х	-	-
	14. Project managers had to ensure that knowledge transfer was successful by testing/verifying the provider employee's knowledge	-	-	Х

Table 5.2	Effects of offshore outsourcing on client project managers

Effect categories	Specific effects of offshore outsourcing on project managers	Seldom	Some- times	Often
	15. Project managers had to ensure knowledge renewal	-	-	Х
	16. Project managers had to ensure that provider's knowledge about the new applications or technologies was transferred to the client	Х	-	-
	17. Project managers had to gain knowledge about new applications or technologies independent of providers to ensure that the provider's information and bids were valid	Х	-	_
Process stan- dardization	18. Project managers had to provide greater detail in requirement definitions because of process standardization	-	-	Х
	19. Project managers had to ensure that the provider's employees were fully trained in process standards as promised by providers	-	Х	-
	*20. Project managers said provider process capability improved the client's internal processes	-	Х	-
Managing work	21. Project managers needed to set more frequent milestones	-	_	Х
	22. Project managers needed more frequent and detailed status reports	-	-	Х
	23. Project managers needed more frequent meetings to prevent client-caused bottlenecks	-	-	Х
Managing people	24. Project managers had to motivate the provider to share bad news	-	-	Х
	25. Project managers needed to accompany offshore providers to client-facing meetings	-	-	Х
	26. Project managers had to make offshore providers feel welcome and comfortable	-	-	Х
	*27. Project managers said offshore provider employees are bright and eager to please	-	-	Х

Table 5.2 (Continued)
-------------	------------

Note: * Indicates positive effects.

(denoted with an asterisk in Table 5.2), but also created 21 significant project management *challenges*. "Challenge" is our collective term for what project managers actually called "problems," "headaches," or even "crises." Each effect is discussed in more detail below.

Organizational support effects

Ideally, project managers should not be assigned to lead projects with offshore providers unless they have strong organizational support in the form of a robust Program Management Office (PMO) and extensive training on how to manage offshore providers. Researchers have shown that unstable organizational support can adversely affect an offshore outsourcing effort (Kotlarsky et al. 2008). In the 25 organizations we studied, no organization initially provided the ideal level of support for project managers. PMOs were typically understaffed. Most client organizations did hire outside firms to conduct cultural awareness training, but few project managers received training on how to actually manage offshore providers. The level of organizational support affected project managers in four ways.

1. Project managers had to fill many of the roles that should have been performed by the PMO

Roughly a third of project managers mentioned that the launch of their offshore projects was delayed by internal structural issues they had assumed the PMO had previously addressed. The most frequent issues that caused delays were as follows:

- the inability to quickly obtain visas (in 2007 the average time to obtain an H1B visa was six months)¹
- the inability to provide offshore personnel secure access to client systems and remote data (some project managers had to coordinate the erection of shadow systems on provider sites, replicate testing data, etc.)
- the inability to set up logon IDs (such as lack of social security numbers, requirements that a logon ID be assigned to a specific provider employee, not a generic job title).

According to the PMO Director of the Biotechnology company,

It really took us a long time to figure out how to make it [the on boarding process] run smoothly. Since the suppliers needed access to systems from various business units and IT sectors, we had to cross organizational boundaries and create new protocols and rights profiles. However, without these processes, the suppliers sit idle waiting for us to build a tunnel in the VPN. We should have had all these processes in place much earlier than we did.

2. Project managers needed specialized training the first time they managed a project with offshore resources

Researchers have found that IT project managers need specific training to successfully manage global projects (Tractinsky and Jarvenpaa 1995). In our study, nearly every client organization provided project managers with rudimentary offshore outsourcing training. Typically training was offered by an offshore advisory firm and focused on high-level cultural issues. However, over half the project managers said their training was too generic. They needed a better understanding of how to package and transfer work to/from providers, how providers assign work to teams, and how providers monitor and report on project status.

The Biotechnology company provides an interesting example of different stakeholder views on training. The PMO head was very proud of the training. His offshore consultant, in cooperation with the PMO, delivered multiple cultural awareness training sessions to educate the IT staff on the challenges of managing Indian providers. All initial staff members involved in offshore outsourcing (at all levels) attended. According to the Biotechnology's project managers, however, these training sessions only covered Indian economy, culture, music, and educational institutions. Particular attention was paid to the differences between US and Indian cultural norms, but little attention was paid to managing offshore projects.

The need for specialized training was also felt by a Financial Services firm. A participant relayed the fatal results of having inexperienced project managers working with inexperienced provider employees,

There was a project that had gone amuck. I thought my manager had enough training to work with an [offshore] supplier and we had a supplier employee that I thought had enough training, because I tracked him from an engineering position into a project management position. Well, he ended up facing off against my own inexperienced project manager. And so the two of them together, both inexperienced project managers, facing off against each other, led the project amuck.

Two participants mentioned that they relied on mentors to provide training. Although mentors are traditionally "senior" to the protégé, the two participants said the key characteristics of a good mentor for offshore outsourcing were (1) a project manager who had served in a similar role, (2) someone *not* in the protégé's chain of command, (3) someone the protégé trusted implicitly, and (4) someone who offered positive advice rather than merely commiserated.

*3. Project managers felt offshore outsourcing helped their career

The ability to manage provider relationships and the ability to manage globally dispersed teams are valued and relatively scarce skills (Zwieg et al. 2006). A few project managers in our study said that serving as project managers on offshore projects enhanced their careers. For example, one project manager from a Financial Services company was quickly promoted from managing IT offshore projects to the PMO that managed both IT and BPO providers. After two years in that position, he was recruited by a top global provider. Another project manager was promoted at another Financial Services company after a merger,

Well, after the merger and the renewed interest in offshore, my path was clear: I was the only one with any offshore experience, and so I was fast tracked and ended up running the PMO and now we have over 200 active projects. I was in the right place at the very right time!

4. Project managers felt offshore outsourcing hurt their career

Two project managers at the Biotechnology company did everything possible to avoid managing more offshore outsourcing projects. They were worried that the difficulties related to project cost overruns and missed deadlines would follow them throughout their career. One project manager worried about the "offshore stigma." The other project manager said,

I can't wait to move off of this [offshore] project! And, I am not alone, I know other project managers who are actively avoiding any projects with an offshore component. Here at [Biotechnology] we move around quite a bit from area to area and when it is time to move, I will make that decision based on which area is least likely to use offshore. I don't want unsuccessful projects to follow me.

Project planning effects

Although project plans are often negotiated with business sponsors, capital budgeting committees, IT planning committees, and providers, project managers are responsible for delivering those projects on time, on budget, and with promised functionality (Nelson 2005). On the positive side, project staffing was much easier because of access to the providers' large IT staff according to participants. However, the inclusion of offshore providers, particularly for the first time, challenged many project managers to deliver projects on time and on budget. Project plans were often unrealistic. False assumptions about costs and schedules were not uncovered until the project was already under the

project manager's control. The inclusion of offshore providers affected project planning in seven ways.

*5. Project managers found that projects could be staffed quicker because of offshore outsourcing

Most project managers welcomed the offshore providers initially because their projects were staffed quickly. A provider's deep bench of available talent was certainly a positive attribute from the project manager's perspective. One participant from the Retail company said, "Our supplier is great at finding people. Before them, I would be scrambling within Retail trying to find more people. Nobody had anybody available. So, I can just go to [the supplier] and say send me three people and they are here."

*6. Project managers had access to the provider's scarce IT skills

Many project managers were delighted to have access to the offshore provider's scarce technical skills. At one US financial services firm, for example, project managers used the offshore providers to meet critical skill shortages in Java, Perl, and web-based development. The provider provided 250 people in all. As one participant from this company said, "Our take on cost savings with offshore, even if it's a wash on cost savings, I'd have a hard time finding and bringing in 250 employees here at headquarters."

7. Project managers needed to thoroughly verify offshore provider's work estimates which tended to be optimistic

More than half the project managers said that their offshore provider's work estimates were too low. For example, one Program Lead at the Biotechnology company said,

We estimated internally (using offshore rates) that a project we had pegged for offshore should cost about \$80,000 and take about six to nine months. The supplier's bid was \$40,000 and they estimated it would take four months. I wanted an accurate estimate of the effort and time it would take more so than just trying to get the lowest dollar I could on the project. The supplier ended up spending an additional six months and we ended up fixing a lot of the code and doing the testing ourselves.

At the Retail company, the underestimated bids were so pervasive that the CIO assigned an offshore task force to investigate the reasons. The task force identified three reasons. First, providers underestimated work because they did not fully understand what Retail needed. Second, providers were unfamiliar with complexities of Retail's technical environment. Third, providers underestimated because they are inherently optimistic or wanted to please the client.

To counterbalance this tendency to underestimate, some project managers had frank discussions with their offshore provider managers and said, "this estimate is too low." They had to re-enforce that they wanted the "most likely" forecast, not the "most optimistic" forecast. Some project managers simply added a buffer by increasing time estimates 30–50%.

8. Project managers experienced higher transaction costs

Much research has identified the higher transaction costs associated with offshore outsourcing compared to domestic outsourcing (Dibbern et al. 2008; Qu and Brocklehurst 2003). These higher costs include search costs, travel costs, monitoring costs, and coordination costs. According to a study by the Meta Group, Gartner Group, and Renedis, transaction costs of offshore sourcing range from 15.2% to 57% of contract value for vendor selection, transitioning the work, layoffs and retention, lost productivity due to cultural issues, improving development processes, and managing the contract (Amrosio 2003). By contrast, transaction costs of domestic outsourcing range from 4% to 10% of contract value (Lacity and Willcocks 2001).

More than half the project managers we interviewed discussed transaction costs. We note, however, that project managers frequently called transaction costs "hidden costs." The project managers from the Retail company offer two examples of higher infrastructure costs. Several project managers said additional software license fees were not included in their budgets. On large projects with 50 people offshore, software licenses proved to be quite costly. The project managers had assumed the providers held licenses for most products, but providers did not: "I'm buying licenses for my offshore team and I'm buying licenses for my onshore team because both teams have to be able to troubleshoot and test the same piece of code. Seems like they should foot the bill for this but their expectation was that we would pay for those licenses."

Project managers also had to unexpectedly replicate the testing environment. The offshore providers could not effectively use the testing environment at Retail's headquarters because it was too slow. So a shadow testing environment had to be built offshore. In addition, the testing data had to be frequently updated, shipped to India, and synchronized with the US data. All this contributed to cost escalation.

9. Project managers experienced more project delays

In addition to unidentified costs, more than half the project managers also experienced project delays. Some project managers experienced project delays because of the lack of *client-side* readiness, such as obtaining visas and logon IDs (addressed in Effect 1 (Table 5.2)). Some projects were delayed because of

lack of provider-side readiness. For example, an IT Lead at the Biotechnology company said,

[The small providers] would take forever to find resources with the skills and levels of experience we needed. The small vendors did not seem to be able to attract and retain good people. That really hurt our projects – it took longer to ramp up and if there was unplanned turnover – we were dead.

The most frequent reason, however, for projects delays were the consequence of Effect 7 (Table 5.2): providers underestimated the amount of time it would take to complete work. Assigning more staff to the project did not accelerate project completion, a phenomenon in IT long known as "the mythical man month" (Brooks 1975). Some project managers identified the offshore provider's holidays and personal events as sources of project delays. Personal events (i.e., weddings and births) and national events (i.e., elections and holidays) often take much longer in Eastern cultures than in Western cultures. For example, weddings in India are frequently two-week events.

*10. Project managers experienced faster development when time zone differences were coordinated

One of the unique promised benefits of offshore outsourcing is the ability to offer sunrise-to-sunrise development (Carmel and Tjia 2005), provided that project managers can effectively coordinate work across time zones (Carmel 2006). Some project managers said that their projects were indeed completed more quickly because of the offshore provider. For example, one participant from the Retail company said his large system was built in three months with the help of an offshore provider instead of the estimated six months for internal development. He synchronized work so that the Indian employees were working on the project while US workers slept, and *vice versa*. Although there were more bugs (in his opinion) with offshore than in-house development, the delays caused by fixing more bugs were still offset by an overall shortened development cycle. On this project, "follow the sun" development was possible because of good project management.

11. Project managers experienced project delays when time zone differences were not coordinated

Project managers found that time zone differences hindered their projects. When the timing was not well-coordinated, employees in India remained idle for an entire workday while waiting for the US team to respond to a query or to review work. One project manager from a Financial Services company, for example, said the client's database administrator "leaves at 5:00 every day even it means my team in India will be idle for a day waiting for him to add the schema." Time zone challenges are so pervasive that many organizations

are now pursuing nearshoring to source to providers with significant time zone overlap (Carmel and Abbott 2007).

Knowledge transfer effects

Knowledge transfer to providers (whether domestic or offshore) has long been recognized as a ubiquitous outsourcing challenge (Willcocks et al. 2004; Willcocks and Lacity 2006). Koh et al. (2004) found that knowledge transfer was one of six critical outsourcing success factors, along with accurate project scoping, clear authority structures, taking charge, effective human capital management, and effective inter-organizational teams. Chua and Pan (2008) examine how clients transfer knowledge about technology, applications domain, IS applications, organizational processes, and IS development processes. The authors found that knowledge is easily grafted in some areas, but other areas require "intense vicarious and experiential learning."

Our study also found that project managers had difficulty transferring knowledge to offshore providers. Many client organizations initially ignored or drastically underestimated knowledge transfer requirements. For example, an IT Lead from the Biotechnology company said,

We had no way to get requirements from the user and get them to the offshore team. We could have easily done this project onshore because we know how to go back and forth with the user, but the offshore team just couldn't do it....We didn't have anything in place that was really allowing us to transfer the knowledge. There was, like, a huge leak.

The provider needs deep knowledge on the client's idiosyncratic business requirements, technical platforms, and internal practices and procedures before the provider could be assigned actual work. A participant in a Financial Services firm noted,

When we begin to talk making offshoring strategic, this is where I talk about developing in the vendor an understanding of the business. For example – it's not adequate that the vendor have a vertical in banking. They have to come to understand how [Financial Services] processes credit cards for our business customers. Very specific knowledge.

In comparison to transferring knowledge to new internal IT employees or to domestic contractors, project managers had to learn new ways to transfer, test, and renew knowledge to/from offshore providers. Specifically, project managers described six effects of offshore outsourcing on knowledge transfer.

12. Project managers had to do more knowledge transfer upfront

When team members comprised only internal IT staff and domestic contractors, project managers said they transferred knowledge incrementally. However, when a project included offshore employees, knowledge transfer occurred in a more concentrated time frame. Some members of the offshore delivery team were only on site for a few weeks, so the project managers planned for intensive knowledge transfer. A participant from the Retail company said,

When you have an internal person, you give them a little bit because you know they are around. They can come up and ask you a question. When you bring in someone offshore, knowledge transfer is more structured. We have to invest more time. When you know they are going back offshore, you need to take advantage of those three to four months and give them as much information as you can.

Similarly, a development manager in a Financial Services firm reported the need for knowledge transfer:

When a large project was delivered, we ran into problems with bad code. I got the distinct impression the supplier had placed novice programmers on the job. In fact I think just a few of the nine developers had received any knowledge transfer from the more experienced members of the team. This caused us to see all résumés for all developers and take a more diligent approach to knowledge transfer.

This effect was quite common, and mentioned by nearly three-quarters of project managers.

13. Project managers were forced to short-cut the knowledge transfer process because of deadlines set by senior IT leaders

This effect was only mentioned by two project managers, but it is quite interesting. In one Telecommunications company, senior IT leaders told the project managers that they only had eight weeks to transfer knowledge before turning control over to the offshore provider. The project managers said they needed four to six months. Senior IT leadership enforced the mandate. After eight weeks, the work was outsourced to the offshore provider and client-side project managers were reassigned or terminated. Quality deteriorated. The provider kept trying to track down the reassigned project managers to ask for help. Two months later, a substantial system bug made it through the provider's testing phase, causing the client company financial losses and loss of goodwill with their external customers.

14. Project managers had to ensure that knowledge transfer was successful by testing/verifying the provider employee's knowledge

We heard from many project managers that Indian employees often do not express incomprehension. A client's superficial question such as "Do you understand?" prompted superficial provider responses such as "Yes." To the offshore provider, a "Yes" to that question meant, "Yes, I hear what you are saying to me" not "Yes, I understand the user's requirements." To ensure knowledge transfer has truly occurred, many project managers orally quizzed their Indian contractors. A participant from the Retail company said, "During the knowledge transfer portion, the project manager actually gave them oral tests every Monday based on what they learned. She quizzed them to see what they learned so she could tell 'Are they really picking up the knowledge?' And she'd say, 'yeah, they did well!' " Of course, "quizzes" were not official tests, but rather frequent and detailed conversations to ensure that provider employees understood the business requirements.

15. Project managers had to ensure knowledge renewal

According to the majority of participants, unexpected provider turnover threatened to erode the client's initial upfront investment in knowledge transfer. Project managers reported a number of strategies to protect the knowledge investment by requiring the provider to implement knowledge renewal practices.

The Retail company ensured knowledge renewal by including a contractual clause that required the provider to have replacements shadow incumbent employees for a period of two to four weeks, depending on the nature of the work. The problem was that the project managers often had no good way of verifying the work shadowing actually occurred because workers were located offshore. A few project managers suspected that new hires were assigned to projects and billed to clients before the required shadowing period took place.

A Manufacturing company had one of the most formalized approaches to knowledge renewal. This company's project managers spent a considerable amount of time initially training the provider's IT Leads brought onshore for knowledge transfer. Once this initial training was done, the client project managers never planned on doing more provider training. Instead, the provider was responsible for additional knowledge renewal and transfer to other provider employees. Before the client-trained provider IT Leads returned to India, they were required to train their replacements through onsite work shadowing for a few months. The provider welcomed this practice: "The overlap allows us to help ease the transition. We can share the stories, and the history at a personal level. For example, there are 'inside jokes' that only the delivery teams would understand. We can transfer that 'soft knowledge' along with technical lessons learned about the creation of embedded software" (provider IT Lead at a Manufacturing company). According to the client engineer, "Once we started overlapping the liaisons, our customers [internal users] felt much better about rolling people off the project. The outgoing liaisons made our job much easier since they took their initial training and subsequent learning and were able to convey it to their replacement much, much better than we can." The provider

IT Leads then went back to India and further trained the provider employees. This practice has worked quite well for the Manufacturing company since 2004.

16. Project managers had to ensure that provider's knowledge about the new applications or technologies was transferred to the client

In addition to transferring knowledge to offshore providers, some project managers also discussed the issues of transferring knowledge from offshore providers. With domestic contractors, knowledge transfer from the provider to client was frequently informal. Client IT staff literally looked over a domestic contractor's shoulder or sat by their side to learn about the domestic contractor's deep technical expertise and to understand the systems they were building for clients. By contrast, offshore contractors were located remotely from client IT staff; thus, informal knowledge transfer did not take place.

For the Retail company, this issue meant that Retail's project managers could not always support the applications built by offshore teams. After years of a good outsourcing relationship with their large Indian supplier, Retail began to assign them more strategic work. One particular application determines the type and volume of products to stock in retail stores. Retail's project managers were very pleased with the provider's work. However, one negative consequence of the project was that Retail's internal team did not learn enough about the application to support it in production. The offshore provider was given the maintenance contract. A Development Director said, "If something happens to [the offshore provider], God forbid, we'd be at a complete standstill."

17. Project managers had to gain knowledge about new applications or technologies independent of providers to ensure that the provider's information and bids were valid

Some project managers realized that they needed to make their own informed opinions about new technologies from sources other than their providers. Some project managers and their senior IT leaders seek independent expertise by attending symposiums, engaging independent research firms, taking courses, and talking to other client firms. As one Retail manager put it, "We need to know what we think."

Process standardization effects

Outsourcing is increasingly enabled by standards defined by such groups as the International Standards Organization (ISO), the Supply Chain Council, the American Productivity and Quality Center (APQC), and the Software Engineering Institute (SEI). Business process standards help organizations reduce costs, increase quality, transform many processes into commodities, facilitate communication, and enable smooth hand-offs of work. Business process standards
also make its easier to evaluate in-house costs versus outsourcing costs and to compare service providers (Davenport 2005).

In the context of software development, different cultures rely on different software development processes (livari and Huisman 2007). Many offshore providers rely on their advanced levels of the SEI's Capability Maturity Model² (CMM) and Capability Maturity Model Integrated (CMMI) to develop applications for clients (Jalote 2000). Research has certainly found that higher CMM levels are associated with higher software quality (Adler et al. 2005; Harter et al. 2000; Ramasubbu et al. 2008). In addition to improving software quality, CMM/CMMI are designed to facilitate communication and enable smooth trade-offs between clients and providers (Davenport 2005). This assumes, however, that clients and providers have similar maturity levels. In our research, the majority of the 25 client firms had lower CMM capabilities compared to their offshore providers. This posed real problems for the transfer of work to/from offshore providers. Our participants are not unique in this regard: "Having standardized processes can help keep costs down, but there may not be much of an advantage for a company at a CMM level 2 to hire a software company at a CMM level 5. The client company doesn't have the internal discipline to take advantage of the Level 5 provider's standardized routines. They will pay a higher price and not be able to take advantage of all the provider can offer them." "It's like being a car salesman in Alaska touting a car's great air conditioning. It may be great, but you can't take advantage of it," says Bill Peterson, program director for software engineering process management at the SEI (King 2003, p. 50).

A second issue that emerged from our study was the extent to which providers were truly committed to CMM/CMMI processes. Because CMM/CMMI levels are only assessed once, providers may lay claim to their CMM/CMMI capability for life. Some project managers claimed that providers did not always follow their own CMM/CMMI processes. However, project managers noted one positive effect: providers helped them improve their internal processes. We further discuss the three effects of process standards on the role of the project manager below.

18. Project managers had to provide greater detail in requirement definitions because of process standardization

One consequence of the fact that client organizations had lower CMM/CMMI levels than their offshore providers was that client project managers had to provide much greater detail in their requirement definitions. In many client organizations, requirement definitions had traditionally been less formal. Close physical proximity between project managers and users allowed them to iteratively define requirements during systems development. At the Biotechnology company, for example, requirement definition is still an informal process when

done onshore. Project managers speak frequently with users who are usually located on campus headquarters. The user feedback cycle is quick. By contrast, project managers working on the offshore pilots had to engage in many formal and planned communications with providers and users to create the provider's required CMM/CMMI documents. One participant said, "the overhead costs of documenting some of the projects exceeded the value of the deliverables."

We heard many other stories on the level of details required with offshore outsourcing. One project manager from an Insurance company said he was surprised when a financial statement came back with the dollar fields left justified. According to him, the provider responded, "You didn't say you wanted them right justified." The project manager at a Financial Services company noted, "You ask for one button to be moved and the supplier has to first do a twenty page impact analysis – we are paying for all this documentation we don't need." One participant from the Retail company said she was surprised about how much she needed to define requirements:

It's been a real shift for us to have to deal in the level of detail that this offshore model requires. I'm used to delegating something to very knowledgeable people who could fill in details. With offshore, you first have a high level design called a use-case. My folks [at Retail] can take that use-case and run with it. [With offshore] you have to turn use-cases into detailed requirements.

Whereas these projects managers felt burdened by the provider's commitment to CMM/CMMI, other project managers actually complained that providers failed to follow their own CMM/CMMI processes.

19. Project managers had to ensure the provider's employees were fully trained in process standards as promised by providers

At Retail, one project manager said that the offshore provider bragged about its CMM processes during sales and negotiations, but the provider employees assigned to her team were slow to respond when she asked to see their code reviews, inspections, and test cases. After a significant delay, she would be handed something that was of inferior quality. After much probing, she found out that the provider assigned new hires to her account before they completed their advertised "intensive CMM training." What annoyed this project manager most was that the new provider people were not introduced as new. They were introduced as fully trained. It wasn't until the project was underway that she discovered their low level of experience: "We expected to get someone pretty experienced. They should be able to read a dump. And they should know what a soft seven is, that kind of stuff. On average, two were fine, but one couldn't answer very basic questions."

*20. Project managers said provider process capability improved the client's internal processes

Some project managers said that their offshore providers actually helped to improve their internal software development processes. These participants suggested that the best way to extract value from the provider's CMM/CMMI processes is to become CMM certified³ themselves. One participant from a Transportation company said,

A real problem we had was our CMM level 1.5 guys talking to the vendor's level 5 guys. So together, we have worked out a plan with our vendor to help bring our CMM levels up. When we do, it will be a benefit to both of us; our specifications will be better and so they can use them more efficiently.

In the discussion of Effect 18 (Table 5.2), we noted that the Biotechnology company had traditionally relied on close physical proximity to users to define requirements. Many project managers thus had difficulty formalizing requirements for offshore providers. Some of the project managers eventually abandoned the informal process in favor of formal documentation of business, technical, and procedural requirements. Project managers pursuing this option generally agreed that it facilitated knowledge transfer. According to a Technical Architect, "They [the offshore provider] improved our internal processes. They all have been documenting procedures and processes. Now, we've got it so proceduralized that we've anticipated 90% of the questions."

The final quote is from a project manager at a Manufacturing company. He said it took nearly four years to figure out how to effectively engage offshore providers. Improving their internal processes was a key enabler of success:

We have come a long way in four years. The first time we did this (utilize offshore development teams), we thought we could 'throw the requirements over the ocean' and good code would come back. It was a terrible mistake and looking back we really didn't understand our own processes. We had to rethink our entire development process and analyze how we train our own people, how we manage the development process and how we actually develop code. Our second attempt is moving along much better.

Managing work effects

Research has shown that the geographic dispersion of teams often caused by offshore outsourcing creates significant barriers for project managers (Maznevski and Athanassiou 2006) and requires specialized mechanisms to overcome those barriers (Maloney and Zellmer-Bruhn 2006). The changes to the client project manager's role were particularly evident in our study for turnkey projects. On turnkey projects, client project managers had to manage the provider's work *products* rather than the provider's *staff*. Many client project managers said this was difficult because offshore providers uniformly did not report when they were going to miss a deadline. This made it difficult for project managers to trust the provider to independently complete a packet of work. In order for the client project manager to manage the provider's work products, they created more frequent milestones, required more detailed status reports, and requested more frequent work meetings. These three effects were pervasive and mentioned by more than half the participants.

21. Project managers needed to set more frequent milestones

To help project managers manage work (not people) many project managers required more frequent milestones for work packets. For example, project managers at a Manufacturing company segmented work into small, well-defined tasks. These tasks were typically five to seven business-day activities that had clearly defined objectives and requirements. Project managers at the Retail company created intermediate milestones and more frequent "code drops" so that project mangers could better track progress. For domestic contractors, Retail typically has two or three milestones for an eight-month project. For offshore providers, some project managers went to weekly milestones.

22. Project managers needed more frequent and more detailed status reports

At several client companies, project managers requested more frequent and more detailed status reports from offshore providers than from domestic providers. At one US bank, the project manager required daily status reports using a form with very targeted and specific questions for the offshore team lead. She said that it was easier for the offshore team lead to report delays in written form. At Retail, several projects managers went from weekly status reports to daily updates. One participant said, "When they first came, we were meeting weekly with them. We do it daily now. Every single day on both projects we spend an hour with them going over what they're doing. Every single thing."

23. Project managers needed more frequent meetings to prevent client-caused bottlenecks

On development projects, many project mangers said that offshore providers halted work when they needed the client to answer a question, approve a deliverable, enable the infrastructure, or test the provider's work. These are quite legitimate reasons to halt work, so client project managers had to find ways to avoid the bottlenecks. The project manager at a Financial Services firm had to appeal to senior IT leadership to "light a fire" under the client's infrastructure staff. At the Retail company, project managers created two daily meetings during the requirements analysis phase for large-scale development. Project managers met with the offshore provider engagement managers everyday from 4:30 to 5:30 pm. During this meeting, client project managers gathered unresolved issues from the offshore provider and provided answers from users to yesterday's queries. Every morning, client project managers met with users to seek answers to the provider's questions in time for the 4:30 pm meeting. A participant from the Retail company said, "When there are 50 people offshore and everybody has a very specific thing to do and they are stuck, they need a quick turnaround."

Managing people effects

While project managers must learn to manage work when assigning concrete tasks to offshore teams, project managers could not fully escape managing people. For example, project managers needed to fully understand the work of each provider employee to verify provider invoices on staff augmentation engagements. And in particular, project managers had to manage the provider's onsite engagement managers and staff. Besides welcoming and integrating onsite provider employees, the main issue that arose from our research was the need for project managers to manage the user-provider interface.

24. Project managers had to motivate the provider to share bad news

One uniform complaint we heard is that the Indian providers did not like to report when they were going to miss a deadline. Ramingwong and Sajeev (2007) call this the offshoring "mum effect." This makes it difficult for client project managers to trust the provider to independently complete a packet of work. A participant from the Retail company said, "They don't like to tell you that they're going to miss a deadline. I think they think they can make up for it and hustle and get there, but they can't. So you find out very shortly before the deadlines that they are going to be missed." Several participants from the Biotechnology company mentioned this. The Offshore Project Coordinator said, "When the project was going so far off course, they never really told us that they were behind on deadlines. They always said everything was going well" (Offshore Project Coordinator Biotechnology). One Biotechnology IT Lead summed it up by saying, "The place could be on fire and they would say, 'Oh it's great, a little warm, but it is great!"

To motivate the provider to deliver bad news, one development director had a very frank discussion with the provider. She said she needed advanced notice when a deadline might be missed. She would work with the provider to determine the best way to address the issue. She said it was in his best interest to forewarn her because then she could not accuse him of being late because he made a decision without her. With advanced notice, the decision was made together. Furthermore, she said the provider was losing money by pouring resources in, working the weekends, and working nights, when some of this could be avoided if the provider provided realistic status updates.

25. Project managers needed to accompany offshore providers to client-facing meetings

By accompanying onsite engagement managers to client-facing meetings, project managers (or their designees) served important social boundary spanning roles. The client project manager prevented scope creep, ensured understanding, and fostered the user–offshore employee relationship. Concerning scope creep, one project manager from the Retail company said,

Scope creep? It was scope explosion! If the client wants it, then that's a new project or something to that effect. Because they're so willing to do things and so willing to please, that's their culture, we were finding they were doing things that we couldn't afford. Now even though they may go to user meetings, there's always an IT person there.

Another project manager from a Manufacturing company said,

In our first round [the failed attempt at offshore sourcing], projects were allowed to creep and the only people who saw the creep were the accounts payable people on our end and the accounts receivable people at the supplier. Now, each task has an owner and we watch the projects from a functional perspective, not an accounting perspective. By using this strategy, we are seeing much less re-work and the quality has improved considerably!

Besides controlling scope, a second reason for accompanying providers to client-facing meetings was to foster the user-offshore employee relationship. Without the client project manager's presence, some users complained about speaking directly to the offshore staff: "There were a couple of occasions where Provider A went directly to the person that had the issue and there was a language thing there. Why is this man calling me? I don't know what he is asking. I don't know his name" (Director of Development, Retail company).

26. Project managers had to make offshore providers feel welcome and comfortable

Offshore provider employees need to develop a rapport with the client's team members (Kotlarsky et al. 2008). Nearly all the project managers in our study

appreciated that it was difficult for foreign workers to come to a strange country for extended periods of time. Client project managers welcomed them by including them in social events at work and by being considerate of cultural differences. For example, one project manager said she made sure every work event included vegetarian meals when offshore employees were invited to attend. By including them in social events, the rapport among providers and clients strengthened, and some even developed lasting friendships. One participant from a Manufacturing company said,

They got to be friends with and got to know all of the people here and the people here got to know them. So when they go back to India they're not some nameless face that's just working on software. They're friends of the people who are here. They know them and trust them to some degree, and there are relationships that have been built that it turns out are important, or add to the success of that kind of work.

*27. Project managers said offshore provider employees are bright and eager to please

Even though there are significant cultural differences to understand between US and offshore providers, nearly all US project managers noted that provider employees are intelligent, pleasant, have good senses of humor, and are eager to please their clients. Following is a sample quote from Retail: "Most of the Indian folks who worked for me during my career – they're very hard working and very bright. I mean they really catch on and they do very well."

Senior executive practices

We believe that our framework on the effects of offshore outsourcing on the role of the client project manager makes an important contribution to knowledge. First, we believe that successful offshore outsourcing engagements require a deep understanding of the expectations, perceptions, and roles of all the stakeholders from both the client and provider organizations. In this chapter, we provide a deep understanding on one of those stakeholder groups, the client project managers responsible for the daily operations of offshore engagements. Second, it is important to understand that perceptions are reality for the people who hold theses views. Whether some of these client project managers were "wrong" or merely whiners and complainers is irrelevant. The bigger issue is that these are their perceptions, and understanding their perceptions is a first step in helping improve relationships. The second step is for senior executives to enact practices that will better help their middle managers and staff deliver on their strategic outsourcing decisions. From our research, we found that senior executives that used the following practices had better outcomes in terms of aligning and empowering their employees and achieving expected business benefits from outsourcing.

1. Provide enough resources to implement the sourcing strategy

According to client project managers, senior executives need to invest enough resources to make sure they can execute their duties. These resources include the following:

- top internal talent to manage the outsourcing program
- top project managers to lead project teams
- outside consultants to help select destinations, investigate providers, and negotiate contracts
- training for internal staff that will be assuming new roles
- investments in knowledge transfer, knowledge protection, and knowledge renewal, including training, work shadowing, and mentoring for provider staff
- onsite provider managers (who cost more than provider staff located offshore)
- sufficient funds for travel, infrastructure, etc.

Simply stated, it takes money to save money. At one Financial Services firm, the CFO invested \$13.5 million upfront in order to achieve the expected benefits. By contrast, one of the biggest causes of offshore outsourcing failure in our case companies was insufficient internal resources. We were shocked that so many PMOs, for example, were understaffed considering all the roles they were expected to fulfill. Lack of funding of a PMO pushed these PMO roles onto the already burdened client project managers. Insufficient resources were primarily found in companies using offshore outsourcing primarily to reduce total IT costs. Senior executives were legitimately afraid to invest too many resources because they knew these additional costs would erode much of the expected savings. However, total cost savings cannot be generated unless the senior executives commit enough of these internal resources. For example, a provider employee will only be productive and produce high-quality work after a significant investment in knowledge transfer. The solution is that the outsourcing program has to be large enough to generate overall savings given the required investment in these resources.

2. Be willing to change internal work practices

While senior executives often hold the view that providers need to adapt to the client's work practices, client organizations had more success with outsourcing when they formalized their internal processes to match better provider process

capability. Providers adopt best-in-class work practices and follow process standards more closely than client organizations. To us, it makes sense for clients to increase formality given the empirical evidence that process maturity increases quality and reduces development time and effort (Harter et al. 2000). In the long term, process standardization facilitates communication, enables smooth hand-offs, and makes its easier for client firms to compare service providers (Davenport 2005).

3. Build social capital with key provider executives

While senior executives from large organizations are not involved directly with project work involving providers, it is important that senior executives establish relationships with the provider's senior management. A close relationship with senior provider executives increases the provider's commitment to the client organization, provides a conduit to access the provider's best resources, and establishes the clout to quickly remedy problems. Client project managers cannot successfully navigate through big issues, such as excessive provider employee turnover or crises in the provider organization. For example, one CIO spoke many times with the offshore provider's CEO and operating officers about the nuclear tensions between India and Pakistan: "I had their chief officers calling me at least monthly to update me on the political situation and their planned responses. They were positioning resources in Canada to be able to pick up operations and provide business continuity outside of India."

Most importantly, social capital must be viewed as a business asset. While friendships among client and provider employees are pleasant, the real purpose of social capital is to add business value. Social capital enables knowledge and resource exchanges that add value in terms of increased efficiency, better quality, and more innovation. Because work gets done through people, these relationships matter.

4. Seek independent assessment of sourcing strategy effectiveness

Senior executives should occasionally engage an independent third party to assess the effectiveness of sourcing strategy. Although it was common among our cases for senior executives to assign this task to internal teams or the PMO, we found that lower level employees are less likely to honestly report on sourcing issues. Many client project managers simply did not feel they could complain to senior leaders (which is why they may have complained anonymously to us).

At one company, for example, the PMO reported each month to senior executives that offshore outsourcing was successful in meeting cost objectives, yet our own interviews with client project managers found mixed results. We found that success varied widely across projects. Many team leads and project managers did not report significant issues to their superiors because the message was "offshore outsourcing had to succeed." While a senior executive's strong commitment to success is a key enabler, the commitment cannot come at the price of lost learning. Independent assessments of a sourcing initiative will objectively gather learning across projects without compromising the IT staff's confidentiality.

As this research shows, client project managers face unique challenges when managing projects that include offshore team members. These challenges relate to organization support, project planning, knowledge transfer, process standardization, and the management of work and people. By understanding the 27 effects on the project managers detailed here, senior management can better understand the evolving roles and responsibilities of global project managers and increase project success by empowering their management team with the organizational support, training, and resources needed to successfully engage offshore providers.

Notes

- 1. http://en.wikipedia.org/wiki/H-1B_visa.
- 2. CMMI defines five levels of software development maturity and specifies what processes have to be in place to achieve those levels. At the highest level (level 5), organizations have at least 23 key processes, such as proactively preventing software defects and managing change.
- 3. Organizations do not actually get CMM/CMMI *certified*; organizations are *assessed*, preferably by an third party whose assessors are certified in SCAMPI (Standard CMMI® Appraisal Method for Process Improvement).

6 Best-of-Breed versus Bundled Services

Leslie P. Willcocks, Ilan Oshri, and John Hindle

Introduction

This chapter details the key research findings on the purchasing decisions clients make about bundling, or not bundling, ITO and BPO services. We define bundled services as "A mix of business process and/or IT services purchased separately or at the same time from the same provider where synergies and efficiencies are sought in end-to-end processing, governance, relationship management, cost and performance." On this definition there can be bundling *within IT*, for example the same provider for infrastructure, applications, development; *within BPO*, for example training and development and payroll in the HR function; or *across ITO and BPO services*, for example procurement, IT applications, selected HR activities. The possible choices for bundling are considerable, making these complex decisions, with important cost and service consequences. In our view, bundling is an important trend that will grow considerably in the next five years, as providers mature their ability to deliver bigger scope offerings and clients develop their ability to plan for host and manage such deals.

In contrast to bundling is best-of-breed sourcing, also known as multisourcing, a strategy in which a client organization engages multiple providers. Best-of-breed sourcing recognizes that providers have different strengths and weaknesses and carves out work that is best suited for each provider. Multisourcing continues to be an important trend (Lepeak et al. 2009; Tisnovsky 2006; Simonson 2008). In Chapter 1, multi-sourcing was found to be positively associated with outcomes because of best-of-breed sourcing, mitigating the risks of relying too much on one provider, and helping clients adapt in changing environments. Despite the positive effects of multi-sourcing, multi-sourcing has several disadvantages, including increased transaction costs as clients manage more providers, interdependencies, and interfaces. Governance, contracting, measurement, and comparison become complex tasks (Sharma 2008; Simonson 2008). Multi-sourcing also means that providers incur more transaction costs – providers must bid more frequently because contracts are shorter, providers face more competition because smaller-sized deals mean that more providers qualify to bid, and providers need to attract more customers in order to meet growth targets. Given these experiences, especially in the 2003–09 period, this suggests that bundled and unbundled outsourcing produce different trade-offs that need to be assessed more closely than they have been.

To understand the trade-offs between bundling services and multi-sourcing, we studied over 1850 outsourcing contracts and carried out interviews with 69 leading clients and providers in ITO and BPO services (see Appendix A). The chapter assesses the myths and realities inherent in the trade-offs between bundling and best-of-breed sourcing. We identify 20 drivers to consider when deciding between bundled or unbundled ITO and BPO services. These drivers are grouped into five areas: client factors, relational factors, provider market, capabilities factors, and cost effectiveness characteristics; they form the basis of a decision-making matrix designed for client use. From the research we also distill five profiles of clients more, or less, likely to buy bundled services: Strategic Explorer, Conservative, Operational Exploiter, Experimenter, and Multi-Sourcer.

Market analysis: Bundled ITO/BPO services 2003-08

We have analyzed 865 bundled outsourcing contracts signed between 2003 and 2008 to draw a conclusion about bundled services market trends, as described in Table 6.1. The value of bundled outsourcing contracts signed in 2003 was \$US 38 billion. This rose to a peak of \$95 billion in 2006 when 204 such contracts were signed. In 2007, 200 contracts were signed at a value of \$46 billion. Clearly bundled outsourcing is an interesting and dynamic market, with revenues never less than \$35 billion in any one year between 2003 and 2008.¹

When comparing the different types of bundled services, the following market trends emerge:

- 1. IO-AO is by far the most popular bundled services between 2003 and 2008 (per number of contracts and per market size).
- 2. For both AO-BPO and AO-IO-BPO, it is more common to have a second provider than in the other bundling arrangements (e.g., IO-AO).
- 3. The leading industries (i.e., with the highest number of contracts and total contract value) vary depending on the bundling arrangement. Local and federal governments are the leading industries in AO-BPO and IO-BPO. It is also among the leading industries (either 2nd or 3rd) in AO-IO-BPO, bundled BPO and IO-AO. Banking is the leading industry in AO-IO-BPO and bundled BPO. Health care and process manufacturing are among the three top industries in IO-AO.

2003-08
contracts,
services
Bundled
Table 6.1

Bundle	# contracts	% contracts	secondary vendor	solution area	leading client industry	client charact.	leading vendor	Market size
AO-BPO	20	2.3%	23.8%	application management	local gov	varies	no lead	4.5 B
AO-IO-BPO	47	5.4%	27.1%	AM, Data centers, various BPOs	banking/fed & local gov	varies	EDS, IBM	17B
bundled BPO	127	14.5%	11.8%	billing, finance and accounting	banking/local&fed gov	most large firms	accenture, IBM, EDS	21B
IO-AO	658	75.4%	5.0%	AM, data centers	banking/local&fed gov/health care/process manufecturing	US/UK, varies	EDS, atos,	149B
IO-BPO	21	2.4%	9.1%	customer care, billing	local&fed gov	varies	no lead	3.7B

Note: IO = IT outsourcing; AO = applications outsourcing; BPO = business process outsourcing.

- The average contract length is 76 months, with the varying averages for the bundling arrangements as follows: AO-BPO, 99 months; AO-IO-BPO, 97 months; bundled BPO, 77 months; IO-AO, 74 months; and IO-BPO, 90 months.
- 5. Competitive bid type is by far the most common bidding practice than any other approach (e.g., incumbent or sole sourced).

To bundle or not to bundle? Insights for client organizations

Our work has created a range of insights that are useful to clients considering whether to bundle or not to bundle.

Insight 1

The maturity of the organization to manage innovation and providers has a big influence on their ability to move into bundled services. This was the case with a major oil company and a telecom multinational, both mature and with their in-house capability sorted, and both willing to bundle services as they felt necessary going forward. Secure in their own ability to manage and implement sourcing strategy, they had high propensity to buy bundled services if they could find the right provider and right risk/reward deal. Other players that were relatively smart clients – for example a global mail company and a European telecoms firm – rated the relationship dimension as very high as an attraction into bundled services, but also saw innovation with a provider as dependent on their own (client) shaping of the context, contract, and relationship. Both still went down the multiple (relatively few) providers route but could see the point of bundling, especially as they were confident of their own in-house capability to manage that. This needs to be contrasted with another client who seemed to move into bundling because the provider was incumbent for consultancy services, with whom they had a good relationship, and felt they did not really have the capability in-house to manage multiple providers. Also another client organization moved into bundling because of poor governance and learning capability in-house.

Insight 2

We found that clients do not know how to evaluate getting value from bundled services. As a result they tend to evaluate based on function or silo. This is quite an important, if worrying finding. We would suggest that this inhibits their ability to identify the value of the bundled service proposition and pushes them into uncoupling services and leaves them open to multiple provider solutions. Clients need some way to identify in detail the synergies from bundled services, and how to value those synergies. In interviewing one European and one Indian-based major provider we found that they also struggled to demonstrate the financial advantages accruing from both technical synergies (production costs) and common management arrangements (transaction costs) though could point to how such financial advantages could arise. Clients would then request, "show me actual examples."

Insight 3

The follow-on insight from Insight 2 is that as a result, on bundled services, an organization will tend to take an even more "political" than "economic" approach to decision-making. With no strong financial support for gains from bundling, other client and relationship factors take on much greater weighting in the decision. This is supported by our 20-factor framework detailed below. Of course, if our factor weightings turn out to be correct, client and relationship and political factors will also be key, but this shaping context would be greatly assisted if a way of providing reliable economically-based reasons for bundling services could be found.

Insight 4

Mature organizations will look at bundling if they can get innovation – that is, they have high ambition in these sort of deals – and if they can shift risk to, or share risks with, the provider – they see large providers as more able to absorb such risk over long periods of time. The message here to a provider is to offer both.

Insight 5

More mature organizations all emphasize the relationship – if you know them well and the track record is okay to good, you are more likely to go for bundled services. This was not a prompted response.

Insight 6

Some organizations we interviewed did bundle as start-ups (e.g., a major Asia Pacific telecom) or achieve fast change but were immature in their ability to manage outsourcing and had poor experiences subsequently. One consequence was a move to multi-provider sourcing in their second- and third-generation outsourcing arrangements. All seemed unlikely to move back to one major provider, but on the other hand, all worried that, through a combination of poor sourcing strategy and over-reaction, they had commissioned too many providers, and were working on consolidation and reduction. This offered some scope for bundling, but recognizing that such clients still rated the importance of retaining a semblance of competition between their providers.

Insight 7

Bundling occurs often where there is a strong and large-scale change agenda, through peer pressure, or in a belief that, in a recession, with limited resources available it will provide a cheaper alternative.

Insight 8

A strong insight from talking to clients about how their organizations make decisions is that a bundled service proposition really does need a client board member driving it. The ancillary strong finding was that the relationship factors we identified as key (discussed below) received strong independent endorsement but that relationships needed to be many-to-many between client and provider with lots of touch points and "glue."

Insight 9

One interesting route to pursue further is the notion of a tipping point where a client is likely to pursue an add-on strategy, gradually bundling services over time. What factors create this tipping point? Our weighted 20-factor framework can be used here to help a client make decisions (see Table 6.2).

Client factors (weighting 40)	Tend to bundle	Tend <i>not</i> to bundle
1. Decision-making process (3)	Centralized	Decentralized
2. Dominant coalition preferences (12)	Possible	Possible
i.e., procurement, COO, CIO, CEO, advisors		
3. Maturity of company with outsourcing (5)	Yes	Best-of-breed if
i.e., history of success/learning, internal capabilities built		desire for vendor competition
4. Organizational and technological factors (6)		1
Size	Large	Small
Complexity	High	Low
Interdependent activities	High	Low
Reliability needs	High	Low
Technological integration	High	Low
Seamless information/technical service	High	Low
5. Burning platform (4)	0	
Cost crisis	Yes	No
New CEO or CIO	Possibly	Possibly
Acquisition/merger	Likely	Possibly
New consolidation strategy	Yes	Unlikely

Table 6.2 To bundle or not to bundle outsourcing services: The decision matrix

6. Business profile (4)		
Business doing badly/need to do something	Yes	Unlikely
Large, well performing firm	Likely	Possible
7. Heavy users and high spenders on	Yes	No
outsourcing (3)		
8. Risk attitude to back-up, security,	Perception of	Perception
complexity (3)	risk	of low fisk
Relational factors (weighting 12)	Tend to bundle	Tend <i>not</i> to bundle
9. Culture (2)		
Transaction-orientated, e.g., UK, USA	Less likely	Probably
Relationship-orientated, e.g., South Korea	Very likely	Less likely
10. Prior relational aspects: Client and		
provider (4) Strong relations between senior	Voru likolu	Loss likely
managements	very likely	Less likely
11. Relationships/performance as incumbent	Strong	Weak
provider (6)	relationships	
	m 1 1 6	D 1
	service delivery	Poor record
Client market forces and characteristics (weighting 10)	Track record of service delivery Tend to bundle	Tend not to bundle
Client market forces and characteristics (weighting 10)	Track record of service delivery Tend to bundle	Tend not to bundle
Client market forces and characteristics (weighting 10) 12. Strong regulatory compliance needs (2)	Track record of service delivery Tend to bundle Reduce complexity	Tend not to bundle
Client market forces and characteristics (weighting 10) 12. Strong regulatory compliance needs (2)	Track record of service delivery Tend to bundle Reduce complexity If provider	Tend not to bundle If no complexity reduction If no provider
Client market forces and characteristics (weighting 10) 12. Strong regulatory compliance needs (2)	Track record of service delivery Tend to bundle Reduce complexity If provider assistance	Tend not to bundle If no complexity reduction If no provider help
Client market forces and characteristics (weighting 10) 12. Strong regulatory compliance needs (2) 13. Geography – advanced market (3)	Track record of service delivery Tend to bundle Reduce complexity If provider assistance	Tend not to bundle If no complexity reduction If no provider help
Client market forces and characteristics (weighting 10) 12. Strong regulatory compliance needs (2) 13. Geography – advanced market (3) e.g., USA and UK	Track record of service delivery Tend to bundle Reduce complexity If provider assistance More likely	Tend not to bundle If no complexity reduction If no provider help More likely
Client market forces and characteristics (weighting 10) 12. Strong regulatory compliance needs (2) 13. Geography – advanced market (3) e.g., USA and UK e.g., North and South Europe 14. Level of innovation required (2)	Track record of service delivery Tend to bundle Reduce complexity If provider assistance More likely More provider	Tend not to bundle If no complexity reduction If no provider help More likely
Client market forces and characteristics (weighting 10) 12. Strong regulatory compliance needs (2) 13. Geography – advanced market (3) e.g., USA and UK e.g., North and South Europe 14. Level of innovation required (2)	Track record of service delivery Tend to bundle Reduce complexity If provider assistance More likely More provider investment	Tend not to bundle If no complexity reduction If no provider help More likely Low innovation required
Client market forces and characteristics (weighting 10) 12. Strong regulatory compliance needs (2) 13. Geography – advanced market (3) e.g., USA and UK e.g., North and South Europe 14. Level of innovation required (2)	Track record of service delivery Tend to bundle Reduce complexity If provider assistance More likely More provider investment More integrated	Tend not to bundle If no complexity reduction If no provider help More likely Low innovation required Low integration
Client market forces and characteristics (weighting 10) 12. Strong regulatory compliance needs (2) 13. Geography – advanced market (3) e.g., USA and UK e.g., North and South Europe 14. Level of innovation required (2)	Track record of service delivery Tend to bundle Reduce complexity If provider assistance More likely More provider investment More integrated services	Tend not to bundle If no complexity reduction If no provider help More likely Low innovation required Low integration
Client market forces and characteristics (weighting 10) 12. Strong regulatory compliance needs (2) 13. Geography – advanced market (3) e.g., USA and UK e.g., North and South Europe 14. Level of innovation required (2) 15. Sector influence (3)	Track record of service delivery Tend to bundle Reduce complexity If provider assistance More likely More provider investment More integrated services	Tend not to bundle If no complexity reduction If no provider help More likely Low innovation required Low integration
Client market forces and characteristics (weighting 10) 12. Strong regulatory compliance needs (2) 13. Geography – advanced market (3) e.g., USA and UK e.g., North and South Europe 14. Level of innovation required (2) 15. Sector influence (3) e.g., telecoms and utilities o g_rotail	Track record of service delivery Tend to bundle Reduce complexity If provider assistance More likely More provider investment More integrated services Likely Poscible	Tend not to bundle If no complexity reduction If no provider help More likely Low innovation required Low integration
Client market forces and characteristics (weighting 10) 12. Strong regulatory compliance needs (2) 13. Geography – advanced market (3) e.g., USA and UK e.g., North and South Europe 14. Level of innovation required (2) 15. Sector influence (3) e.g., telecoms and utilities e.g., retail e.g., high preference for industry verticals	Track record of service delivery Tend to bundle Reduce complexity If provider assistance More likely More provider investment More integrated services Likely Possible Likely	Tend not to bundle If no complexity reduction If no provider help More likely Low innovation required Low integration Possible Likely Possible

Table 6.2 (Continued)

Provider/outsourcing market characteristics (weighting 18)	Tend to bundle	Tend <i>not</i> to bundle
16. Initial choices and incumbent vendors shape future bundling (4)	Incumbent vendor with additional services and integration canabilities	Poor record
	capazintico	No strong additional capabilities
17. Provider capabilities (10)		
Widely capable across different services	Yes	Concern over too few providers
Able to use IT in each scope of service geographically	Yes	
Can deal with large contract size	Yes	
18. "Lock-in" through provider services (2)		
Provider offerings as interdependent services 19. External media and bandwagon effect (2) High media attention on bundled services	More likely Likely	Less likely Likely if performances do not improve and if providers fail to develop dependencies between bundled services
Cost effectiveness characteristics (weighting 20)	Tend to bundle	Tend <i>not</i> to bundle
20. Management and integrated services efficiencies		
Management and transaction costs (10)	If demonstrably lower	Possible
Integrated service efficiencies (10)	Yes	Unlikely

Assessing the trade-offs: Myths and reality

This is an assessment, based on our findings, of the common trade-offs clients consider and how far these trade-offs are based in reality.² Five common concerns emerging from our interviews were as follows:

- Control Does multi-sourcing or bundling give you more control? How?
- Risk Is going with one provider more risky or less risky?
- Incremental or Big Bang? Should we grow into bundled outsourcing or can it be done in one deal?
- Tidy then Outsource? Should we straighten out our technology and processes first, or does bundling obviate this need?
- Cost and Operational Gains? Is there really a big difference in the costs of management for bundling versus multi-provider and silo outsourcing? Does a primary contractor model solve the problem?

On control, multi-sourcing may well give you more power and more control over each individual provider, with less dependence on each. However, increased control comes at a price in terms of increased management cost, time, effort, and measurement. At the same time, an argument can be made that bundling makes a client larger and more important to a provider, thus making the provider more responsive. In multi-provider environments retained management capability needed to manage outsourcing regularly costs between 4 and 10% of total contract value (Willcocks and Lacity 2006). Our more recent analysis finds these management costs for offshoring to be even higher – to be between 12 and 15% of total contract value (Willcocks and Lacity 2009). As multi-sourcing governance has been moving up the outsourcing agenda in the last three years, we are seeing these costs also rise further (Lacity and Willcocks 2009).

On risk, there is more risk in depending on one or two providers – much depends on their capabilities and their financial strength, for example. However, with multi-sourcing the risks move into other areas, including cracks between service, security issues, hidden costs with continued monitoring and renewal of contracts, and possible replacement of providers. One must also ask how big the risks are with bundling or not bundling relative to the other risks a business will take in its main line of operations. In other words, often an organization will impose – inconsistently – a higher standard of risk for a back office deal than even for a strategic business initiative.

On incremental bundling, we found many organizations taking this route over time, but we also found several organizations gaining from making a major one-off bundling deal, though this was a relative rarity when it came to complex BPO arrangements (see Table 6.1). As we indicate elsewhere in this chapter, much depends on the ability of both the client and provider to manage such arrangements and such capabilities are not yet commonly held. A related approach that we have seen in organizations is where they have straightened out their own IT and/or business processes first, sometimes through a shared services route, and then sought a bundled outsourcing arrangement. This is a more tactical route and mitigates some of the risk of outsourcing inefficient IT and processes, though the risk may well be worth taking, if it saves time and cost, as we saw in some cases. On cost, the cost gains of bundling two or more business functions, for example IT and HR, or procurement and HR, rather than outsourcing them separately to different providers can be of the order of 10–15% (Equaterra 2005). This may well be more where a provider can bring in a more standardized management and measurement process, and can truly implement standardized business processes and IT. A primary contractor model can be a half-way house, but it is unlikely to achieve significant cost savings or process standardization or innovation over a bundled outsourcing arrangement. The primary contractor model also runs its share of risks and has not always had a happy history. Lacity and Willcocks (2001) and Willcocks and Lacity (2009) point to cases where management costs were not noticeably lower than other models, and best practices were not shared between the different providers.

When, then, does bundled outsourcing make operational sense? The major advantages experienced with bundling included the following:

- Simplifies and expedites procurement and contracting (sole-source v. tendering)
- Simplifies the governance process
- Reduces duplicate management layers, processes, and costs
- Reduces operating risk by limiting points of failure
- Standardizes and simplifies operations
- Can achieve operational synergies across business processes and between a business process and supporting IT
- Mitigates delivery risk through simplified points of contact
- Reduces service provider costs/prices through simplified management and scale economies
- Supports a pre-existing standardizing technology and process trajectory. A prime example is with ERP.
- Can drive larger holistic back office change.

However, this does not make bundled outsourcing a "no-brainer"; far from it. These gains are possible but a great deal really does depend on the maturity and capabilities of both client and provider to deliver on the promises inherent in the bundling deal they go for. Given this, then it is not surprising to find clients display a range of profiles when it comes to bundled outsourcing.

Drivers of bundling/unbundling decisions

We analyzed prior literature drawn from strategy, economics, marketing, information systems, and our own research work. We also placed our preliminary



Figure 6.1 Client propensity to buy bundled services

model in front of outsourcing specialists to gain further feedback. From this we arrived at a provisional list of *factors*. For each factor, from prior research, we established the rationale as to why each factor would influence buying behavior. At this stage we called each rationale a *hypothesis*, indicating that it required further testing. From our database of 650-plus outsourcing arrangements, we selected 300 deals where there was sufficient data to draw conclusions on all 20 factors. We established, through piloting ten deals, that a total scoring of 100 seemed to work. Using this as the total 20-factor score, we worked through each deal. Each factor was weighted in importance in that deal. For the whole 300 sample, we then found the median for each factor. We then tested the factors framework against our 69 interviewees and finalized a weighted 20 decision factors framework (see Table 6.2).³ Figure 6.1 shows that the key factors shaping bundling and unbundling decisions group into five major areas. Let us look at each of these in more detail.

Client factors. There are eight client factors. Their combined weighting of 40 indicates client factors to be the most influential of the five groupings shown in Figure 6.1. The first factor is whether the **decision-making process** is centralized or decentralized. A more centralized process favors a bundled service decision. It is interesting to note that organizations that multi-source wrestle continually with the issue of needing to simplify and coordinate gov-ernance and decision-making, but while decision-making processes remain more fragmented, bundled service decisions, especially across ITO and BPO, are unlikely.

The main decision-makers and influencers in the sourcing decision, and their preferences, have a considerable role to play in what decisions are made.

Is procurement in charge, what is the influence of advisors and their recipes, and how CEO, CIO, and COO knowledge and preferences play out – these are difficult to predict and need close attention to understand. But key influencer preferences are important in shaping a "dominant coalition" in favor or against a degree of bundling services.

The maturity of an organization's ability to develop sourcing strategy and manage providers, and its history of success, learning, and requisite capabilities built – all these influence bundling decisions. Mature clients are in a better position to undertake a bundled services option. But a strong preference for competitiveness among providers and question marks on provider capabilities can also lead mature clients to adopt a best-of-breed strategy. On the other hand, we have examples of clients with limited resources or weak learning capabilities also going for single-source contracting.

Organizational and technological factors also have a bearing on bundling decisions. These relate to size, infrastructure, interdependence of activity, degree of reliability, and transparency of information needed. Large size, high complexity, high interdependence of activities, and high reliability needs will favor longer-term bundled service contracts. Organizations needing technological integration and seamless information and technical service will prefer to go for bundled services, where available.

Business profile and the existence of a "**burning platform**" may well work in favor of a bundled decision. A business doing badly, or needing to do something different, may well see bundled services as a cost-driven, low-management solution. But we also found large, well-performing firms tending to buy bundled services, where other factors were favorable. A burning platform – we found examples relating to cost reduction, a new CEO/CIO, a change in business strategy, or a change in acquisition policy – may well favor a bundling decision.

Heavy users and high spenders on outsourcing will tend to consider bundled services. A further factor we identified related to risk attitude. Organizations with a high-risk perception concerning IT or back office back up, security, and complexity tend to favor bundled services.

Relational factors. We identified three sets of relational factors, scoring them a combined weighting of 12. **Culture** – whether clients were transactionorientated or relationship-orientated – had a role to play here. For example the United States and the United Kingdom tend to be more transactionorientated than South Korea and Scandinavian countries. Other things being equal, relationship-oriented cultures will favor service bundling. **Prior relations** between client and provider, especially where the provider has had good communications with a client's dominant coalition, can influence client's propensity to contract for bundled services. However, more influential is where relationships were developed as an **incumbent provider**. Strong relationships as an incumbent were combined with a track record of service delivery, which inclines a client to outsource more services to the incumbent provider (ERI 2007).

Client market forces and characteristics. We gave a combined weighting of 10 to four factors under this heading. In a highly regulated environment the strong requirement for regulatory compliance will favor bundled decisions, on the whole. Bundled services will lower complexity, especially if the provider offers assistance with regulatory mandates. Geography can have an effect. Bundled service options are more likely to be taken up in the lead markets of the United States and the United Kingdom, perhaps canceling out their transaction-orientated cultures, but more relationship-orientated cultures not in the United States and the United Kingdom could now start to grow faster into bundling. We found strong propensity among large companies in Norway and Netherlands, for example, and also in South Korea. Additionally, bundling is favored by organizations requiring a higher level of innovation from a provider. Here, bundling is the quid pro quo to the provider for its innovation investment and its provision of more integrated services. There is also sector influence. For example telecoms, manufacturing and utilities sectors take the lead on bundling, especially where a firm is based in a single region and is large buyer. Some sectors prefer industry verticals, for example UK military logistics in 1990s. Thus certain sectors are to be found creating a momentum in favor of, or against, bundling.

Provider and outsourcing market characteristics. Here we identified four factors, with a combined weighting of 18. *Initial choices and incumbent providers shape future bundling* – incumbency and capability to do other services lead to client propensity to give them bundled services. This goes beyond the relationship effect mentioned earlier. Incumbents with additional capability shape bundled services strategy and stand to gain from these. Reinforcing this finding, a 2007 Everest Research Institute survey of BPO scope aggregation found that if a buyer initially selected a generalist provider, 40% of the time the buyer will select the same provider for other functions. Clearly the first outsourcing decisions and who the incumbent providers are can have considerable effect on subsequent bundling patterns (ERI 2007). Everest Research Institute calls this the "penetrate and radiate" model.

Part of this incumbent advantage relates to demonstrable additional capabilities. Indeed **provider capabilities** are a bigger influence than mere incumbency. Here clients look for a provider that is widely capable across different services and able to use IT in each, offers a wide scope of service geographically, and can deal with large contract size. The few providers that can service largescope, bundled deals will be prioritized, but there is a caveat – a limited number of provider options may also inhibit bundled service decisions.

We identified two sub-factors under this heading. Where a provider offers **interdependent services**, there a "lock-in" effect can occur, where the client

is more likely to buy the combined service, already integrated, as bundled services. Finally, external media attention given to bundled services can create a **bandwagon effect**, increasing a firms' propensity to look for bundled services. However, this effect can be short-lived if performance does not improve and should providers fail to develop dependencies between bundled services, and deliver on their promises.

Cost effectiveness characteristics. The area of cost is weighted 20 out of 100. Cost emerged as a constant key concern in our research, and received even more emphasis in the 2008–09 interviews. In particular two types of costs emerged from the study, namely **management and integrated services efficiencies**. As we discussed earlier, management and transaction costs should be demonstrably lower and integrated service efficiencies much more achievable with bundling of services.

From a client's perspective, we suspect the transaction cost savings from bundled service purchase are large but hidden. They include typically the following:

- Risk reduction
- Less governance
- Simpler contracting (cheaper legal costs)
- Ability to move to standardized practices
- Synergies across services and processes
- Less management time getting to contract
- Lower relationship management costs

It is possible that the transaction cost savings between a single and multiple provider route may be substantial enough to offset where a single provider might offer a less attractive deal on production costs, but it is likely – if the provider is instituting the practices listed below – that these will also be lower anyway.

Most large providers are now busy reducing their internal transaction costs (the costs of doing business with themselves), and their production costs through focusing on standardizing as a shared service across *all* processes and the customer contact part of a process they run for a client, and likewise for its administrative back-end, for example, reporting. This leaves the middle sections of a process which tend to be more domain-specific, for example procurement or sub-components, HR (recruitment, training remuneration), and here the idea is to standardize for the client globally on the relevant process and charge the client for idiosyncrasies away from that standardized process. This then enables the provider to provide a standard contract for all standardized shared services (but not necessarily the domain-specific ones). Obviously the reduction in both transaction and production costs is large if this can be achieved across a client's several IT/BP activities. The size of this gain as passed on to the client will be one attractive aspect of bundled service purchase.

Action point: Making the optimal decision

There is a surprising thing in mathematics. In a multi-variate problem, the optimal result is often reached with none of the variables at its maximum value.⁴

This observation applies equally well to decisions on bundled/unbundled services. Organizations have pursued, and will continue to adopt, multi-sourcing and "best-of-breed" strategies and will find plenty of good reasons for doing so. However, the market has moved on, technologies have developed, client and provider capabilities have grown apace, and new possibilities have opened up. One important growing trend, containing several mini-trends within it, has been the bundling of ITO and BPO services. Under what circumstances can a client take business advantage of this rising set of capabilities? What sort of client is likely to gain from bundling rather than unbundling? And what sort of client is better suited to multi-sourcing approaches?

How to use the decision matrix

An evaluation is based on five sets of factors. Each set is weighted, with the sets combined factors forming a total possible score of 100. The factors and weighting are as follows:

1. Client	40
2. Relational	12
3. Client Market Forces and Characteristics	10
4. Provider and Outsourcing Market Characteristics	18
5. Cost Effectiveness	20
Total	100

Step 1 – The unit of analysis is a group of services that an organization is wishing to outsource. For example, this could be an HR payroll, related IT applications, and HR training and development. Should these be bundled and outsourced to one provider, or left unbundled and outsourced to several providers?

Each factor has an individual weighting. Score each factor from a "Tend To Bundle" perspective. Thus for factor 1, if the decision-making process is highly centralized, score 3. If, however, it is very decentralized, score 0 or 1. As another example, under Relational factors if the culture is very transaction related, score 0 or 1, but if it is very relationship-orientated, favoring bundling, score 2. As another example, under Client Market Forces and Characteristics, if the level of innovation required is high, then a bundled decision is more likely so score it 2. If innovation needs are low, or very low, then score this factor 1 or 0. Under Provider and Outsourcing Market Characteristics, provider capabilities (factor 17) are a key issue. If a provider really can support bundling, then score it 9 or 10; otherwise make a judgment as to what the provider can support, and score it to suit. As a final example, under Cost Effectiveness Characteristics, does bundling lead to demonstrably lower management and transaction costs? If so, score this factor between 7 and 10. If not, score it lower than this to suit.

- Step 2 Having scored each factor, total the scores to make a single score out of 100.
- **Step 3** See Figure 6.2. A score between 66 and 100 means that the organization is past the tipping point for bundling, and should certainly make a *bundled* decision for the services under consideration. A score between 0 and 33 is past the tipping point for *unbundling* and means that an unbundled decision is the right one. Scores between 34 and 65 need much further analysis. A score between 34 and 50 suggests unbundling is the right way to go, but you need to assess which factors need to be leveraged



Figure 6.2 Sourcing factor analysis

to make this a good decision, and perform a risk assessment of the consequences of leveraging these factors. Alternatively, a score between 51 and 65 suggests bundling is a better decision but only after further assessment, leveraging salient factors, and ensuring that the risk profile of the consequent decision is sensible.

While this analysis is at the level of several services, we also found five types of clients, each type tending to be making bundled or unbundled decisions (see Figure 6.2). The next section develops Figure 6.2 and provides details of these five types of client organizations.

Emerging client profiles

Our analysis included generating client profiles of those organizations more, or less, likely to buy bundled services. Five client profiles emerged:

- 1. The Strategic Explorer type
- 2. The Conservative type
- 3. The Operational Exploiter type
- 4. The Multi-Sourcer type
- 5. The Experimenter type

The Strategic Explorer type. The Strategic Explorer possesses highly developed outsourcing capabilities in most areas critical for successful outsourcing projects such as provider selection, relationship management, provider management, domain expertise, and learning capabilities, all of which developed through scale and advanced management systems. The Strategic Explorer, which outsources both low-value and high-value activities and which experimented with both single- and multi-provider settings, is confident in its ability to enter a large bundled services contract mainly because of its strong retained organization and highly developed domain experience. This type will expect from the provider innovations and the ability to realize synergies between the different services outsourced. The Strategic Explorer will be able to assess the degree to which synergies between the different services have been realized and will aspire to systematically measure these outcomes. Its approach to bundled services is "My provider and I can improve my value proposition only when we innovate across my end-to-end services." In our sample, we found that none of the firms have developed a full-blown Strategic Explorer profile. Some firms, though, are thinking strategically about bundled services; however, they may fail to design and implement a system that leverages the potential value across the range of services.

The Conservative type. The Conservative type has been outsourcing for a while; however, the organization tends to work with one provider or a very small number of providers. Its learning and outsourcing management capabilities, which tend to be limited and in most cases focus on low-value activities, have been developed mainly based on the long-term relationship that this type has had with one or a very small number of service providers. For this reason, bundling services seems like another step in the outsourcing activities that the Conservative type has pursued. Its approach to bundled services is "it is only making sense to outsource another service to my service provider." In other words the Conservative moves further into bundling services through an incremental "add-on" strategy, as it builds its own ability to build internal capability to manage few providers, strengthens relationships with incumbent providers, and satisfies itself that provider capabilities merit extending both contract length and scope of work. A Conservative buyer will have a dominant coalition favoring provider consolidation, and will recognize that its size, complexity, and interdependence of operation are continually pointing toward the need for reliability, technological integration, and seamless service. A Conservative buyer will also be looking to outsource more ITO/BPO in the future, though it may not be too clear on the cost advantages of bundling rather than unbundling specific services. A Conservative type will come to be worried about becoming more strategic in its approach to use of the market and aligning its sourcing approach with business strategy. Quite a few of the cases we have studied fell into this category.

The Operational Exploiter type. The Operational Exploiter has very likely developed good outsourcing management capabilities focused on the daily operational aspects of managing individual outsourcing contracts through SLAs but less on the long-term, strategic, innovative, and relational aspects. The Operational Exploiter will very likely have limited learning capabilities developed around synergies between the various outsourced services, though this type has developed routines and practices to ensure the delivery of value from each single outsourced service. The Operational Exploiter tends to outsource mainly low value but also some high-value activities and has experimented with both single- and multi-provider settings. Bundling outsourced services would become an option when more and more services are outsourced and where potential operational efficiencies start becoming evident. The Operational Exploiter will be aware of the synergies between the outsourced services; however, it will be able to extract little value from these synergies mainly because of the way its outsourcing management capabilities have been developed which are focused on extracting value and efficiencies from a single contract, and also because of an inability to assess the impact of synergies between individual outsourced services. Its approach to bundled services is "I should outsource another service because there are cost advantages and efficiencies in bundling this service with the others." Some of the firms we studied have focused on developing operational excellence around the management of outsourcing and therefore their selection of provider. In such cases the services to be outsourced and managed have been geared toward what we have titled here as Operational Exploiter.

The Multi-Sourcer type. Typically, the Multi-Sourcer type has built a strong capability to manage multiple providers, and is into its third generation of outsourcing contracts. Its dominant coalition favors both outsourcing, which it does extensively, and also a best-of-breed strategy, which it manages tightly, in an aligned way with business strategy, and with strong governance mechanisms in place. The Multi-Sourcer tends to outsource in ways which keep low the switching costs in and out of different providers, while retaining advantages from keeping providers in competition for work. The Multi-Sourcer will readily incur the management and transaction costs required to maintain this multi-provider strategy, though it works hard to continually reduce these costs. The organization may well be large and in parts complex, but does not have high needs for reliability, interdependence, seamless service, and technological integration, or manages these aspects itself, or is willing to manage the gaps between provider service and what is required on these aspects. Where a Multi-Sourcer achieves integrated service cost efficiencies, this will be because it manages and runs these itself. A Multi-Sourcer tends to look to itself for innovation rather than through relationships with a provider, though more recently Multi-Sourcers have been looking for closer relationships with, and more value from, their longer-serving providers.

The Experimenter type. The Experimenter type has just got on the learning curve with outsourcing; therefore, its outsourcing management capabilities are underdeveloped and so likewise its learning abilities. Its learning is based on sporadic experimentation with various sourcing models and settings which addressed some specific needs. In most cases, these are small-scale outsourcing contracts covering low-value, stable services. At the same time its lack of experience can result in the Experimenter making sometimes quite serious mistakes in outsourcing risky or critical areas to the wrong provider(s) on poor contracts. The Experimenting type tends to switch between providers and sourcing settings in a continuous search for superior performance. Bundled services are just another value proposition in this regard. As the Experimenting type's approach is neither strategic nor operational, its philosophy is "This could be gold." The issue for the Experimenter type is its underdeveloped internal management capabilities, making it unable to manage large-scale contracts, form strong relationships with providers, or assess the economics of different outsourcing models. This may well be combined with an understandable orientation among decision-makers and influencers toward risk mitigation through multi-sourcing, shorter term contracts, and a "best-of-breed" approach

to providers. Experimenters were much more frequent in the period 1992–2003, but in our most recent sample, only a small number of firms followed this profile of behavior.

Changing lanes: Building client capabilities for managing bundled services

Our analysis demonstrates that many clients have not developed their outsourcing management capabilities to realize the synergies and efficiencies offered by bundled services. As discussed above, none of the firms studied have, to date, managed to develop an ideal Strategic Explorer profile. Most of the firms have developed their outsourcing management capabilities to correspond with the Operational Exploiter or Conservative type. At the same time the Multi-Sourcers in our sample revealed a strategic sourcing approach that worked for them, based on their assessment of the limited capabilities providers were offering in the marketplace, the need to engender competition among providers, the advantages of retaining considerable internal capability, and their own specific needs that would not necessarily be served by bundling certain services. For companies that would consider pursuing bundled services as a strategic approach, we offer the framework shown in Figure 6.3. For those organizations that wish, and have strong rationales for, retaining a Multi-Sourcer stance, the recommendation is to still improve their management and strategic sourcing capabilities.

Looking at Figure 6.3, there are two areas needing development within the firm in order to capitalize the promises of bundled services. One is the strategic sourcing capabilities developed in-house, mainly focusing on aligning sourcing strategy with dynamic business strategy over a five-year period, and



Figure 6.3 Developing bundled services client capabilities

creating the conditions for partnership with the various providers. The second area is sourcing management capabilities – focusing on extracting efficiencies, building management capabilities, and developing tools and methodologies to realize the potential in strategically partnering with providers. On our analysis, most of the firms identified as Operational Exploiters are well positioned to improve the benefits from bundled services by further investing in relational capabilities and provider development. Firms identified as Conservatives are even more inclined toward bundling and will be even more willing to make the necessary investment in strategic sourcing and sourcing management capabilities. But Experimenters require massive investment in both areas, and therefore should first assess whether bundled services is a strategic direction they need to take.

In Figure 6.3 we map the development path emerging from our research. The Experimenter tends to move toward being an Operational Exploiter. Its hardwon experience leads it to take a multi-provider route, outsourcing relatively stable, mature activities on three- to five-year contracts. It has learned to mitigate operational risk with outsourcing, and will look to build up its sourcing management capability but will not focus strongly on building strategic sourcing capability. The Operational Exploiter will tend to develop that strategic sourcing capability based on its heritage in multi-provider outsourcing and will tend to evolve into a Multi-Sourcer. A Conservative has a different heritage and more strategic understanding. Improvement lies in evolving toward the Strategic Explorer profile. Multi-Sourcers have a huge learning and capability investment in a multi-provider approach but, because they have strategic sourcing insight, may well see the advantages of bundling some services where they identify that providers have the requisite capability, the technology has developed to support integration of services, they can see a strong economic rationale, and they feel confident that reducing provider numbers will not lose them control of their sourcing arrangements.

Conclusion

Decision-making on bundling is an unglamorous but perennial, major challenge in sourcing strategy. As ever in strategy, it is important first to understand where you are. The 20-factor model provided in this chapter offers a degree of precision in answering this question previously not available. Our research also enabled us to provide a reliable set of weightings to these factors that help decision-makers to discover the sort of decisions they need to lean toward, whether these be for the whole organizations, a business unit, a set of IT processes and activities, or a mix of business/IT processes or functions. The potential for more effective decisions using the 20-factor matrix and the related decision-making tool is immense. A client can provide much more structure, gain more information, and have a much surer grasp on direction when using the tool. A provider can, either separately or with a potential client, sit down and work through a pre-qualifying process using the tool. This might persuade the provider not to make large financial outlays on attempting to win bids that will either fail or could succeed but might turn into very hard work indeed. Alternatively, working through the tool with a potential client, the two may discover the shape of a more suitable level of bundling for both to contract for, again saving effort and also improving the likelihood of a successful outsourcing experience.

Our research did not intend to invent a new client typology but the data led eventually in that direction, and, better still, showed which clients needed to be making what sort of bundling decisions, and also how they could evolve in their sourcing strategy, capabilities, and management. Again, this is a distinctive and new contribution to the understanding of clients, and how they can continue to develop their ability to take advantage of the ever-increasing capabilities of the external business and IT services marketplace.

Notes

- 1. Raw data on these outsourcing deals were collected by IDC. Analysis was by Ilan Oshri.
- 2. This section was strengthened by conversations with Martin McPhee, Simon Sammons, Barbara Duganier, and Charles Sutherland of Accenture. Their perspectives and sharing of experiences were very helpful and we gratefully acknowledge their contribution.
- 3. It should be noted that the final weightings represent the collation of judgments, and that for each weighted factor the median expresses the middle value. In such a large sample we found many cases where certain factors outweighed others in different ways than the ones expressed here (note that the median tends to be more robust than the mean in the presence of such outlying values).
- 4. Our thanks to Simon Sammons of Accenture for this observation.

7 Rural Sourcing and Impact Sourcing

Mary C. Lacity and Joseph Rottman

Introduction

This chapter explores two overlapping niche outsourcing markets: rural sourcing and impact sourcing. Rural sourcing is the practice of locating delivery centers in low-cost, non-urban areas (Lacity et al. 2010b). Rural sourcing is a *location* strategy. Impact sourcing is the practice of hiring and training marginalized people in the ITO or BPO industries that normally would have few opportunities for good employment (Rockefeller Foundation 2011). Impact sourcing is a *social responsibility* strategy. Rural sourcing and impact sourcing intersect when marginalized people in rural areas are hired, trained, and employed in ITO or BPO businesses. But not all rural sourcing firms employ marginalized people and not all impact sourcing happens in rural communities. The relationship between rural sourcing and impact sourcing is depicted as a Venn diagram in Figure 7.1 and is populated by five case study examples from our own research. In this chapter, we describe the phenomenon of both markets in more detail and compare and contrast experiences, practices, and lessons learned from the case studies.

Rural sourcing: A location strategy. ITO and BPO service providers are constantly struggling to attract, train, and retain a qualified workforce. Most providers locate operations in urban centers like Dallas, New York, Bangalore, Hyderabad, Dalian, Beijing, and Tel Aviv, where a large labor pool exists. But the downsides of these urban locations are that both salaries and turnover are high. Some providers are pursuing a rural location strategy by building ITO and BPO delivery centers in rural areas, away from the major cities currently serving as centers for ITO and BPO (Lacity et al. 2011a). The main idea of rural sourcing is to locate centers in low-cost areas so that employees can be paid lower wages, allowing providers to pass cost savings to clients in the form of lower prices.

The US providers with delivery centers in remote, non-urban, low-cost areas include small-but-fast-growing entrepreneurial firms like CrossUSA and Rural



Figure 7.1 Relationship between rural sourcing and impact sourcing

Sourcing, Inc. (RSI) with ITO delivery centers in Eveleth, Minnesota (population 3865), and Jonesboro, Arkansas (population 55,515). Large global providers, like IBM and Dell/Perot Systems, have built delivery centers in rural areas like Columbia, Missouri (population 100,733), and Twin Falls, Idaho (population 40,380). We estimated that the US ITO "pure-play" rural outsourcing market to be about \$200 million in 2011 (Lacity et al. 2011a). This estimate was based on the identification of about 20 entrepreneurial rural ITO providers in the United States, with average revenues of \$10 million per firm. We have no good way to estimate the value of all the work performed in rural-based ITO or BPO delivery centers that are operated by larger providers like IBM or Dell/Perot Systems. It is quite possible that the US rural outsourcing market is worth \$1 billion if the value of work from all non-urban ITO and BPO delivery centers were included.

Rural sourcing as a location strategy is a global phenomenon. Providers in many countries are locating delivery centers away from the metropolises currently serving as ITO and BPO hubs (Parakala 2011; Zouhali-Worrall 2009). In the article by Lacity et al. (2011a), we studied providers in India, China, and Israel building delivery centers in rural locations. Consider India: despite the global economic recession, global demand for Indian ITO and BPO services is still very strong and consequently Indian providers are still experiencing 14–22% turnover in urban areas (Everest Research Institute 2011). By building delivery centers in Tier 3 cities, Indian suppliers lower costs and attrition rates, by locating in Tier 3 cities. Specifically, they reported that labor costs

are up to 50% lower and real estate costs are 70–90% lower in Tier 3 cities compared to Tier 1 cities (Lacity et al. 2011a). Because the term "rural" means very different things in different countries (and can even be considered a pejorative term in some cultures), we called this practice remote domestic locations (RDLs) when discussing non-US based providers.

Impact sourcing: A social responsibility strategy. A 2011 global study supported by the Rockefeller Foundation called "Job Creation Through Building the Field of Impact Sourcing" examines how organizations hire and train marginalized people to perform ITO or BPO work. (BPO is seen as offering bigger opportunities for impact sourcing around the world because BPO work requires considerably fewer technical skills than ITO work.) The report views impact sourcing broadly; it considers low-employment BPO opportunities in middle- to high-income countries such as the United States, South Africa, Brazil, and Mauritius and urban or rural BPO opportunities in low-income countries like India, China, Vietnam, Ukraine, and Philippines as impact sourcing. Overall, the report sizes the global impact sourcing market at \$4.6 billion in 2010.

The Rockefeller report highlights five case studies of impact sourcing: Samasource, txteagle, Ruralshores, eGramIT, and Digital Divide Data. From these examples, we can also see the overlap between rural sourcing and impact sourcing. Two companies are primarily rural – Ruralshores and eGramIT, both located in rural India. The other three companies have distributed operations, covering urban, peri-urban, and rural locations in India, China, Indonesia, Kenya, South Africa, Pakistan, Haiti, Cambodia, and Laos. Two companies are non-profit (Samasource and Digital Divide Data) and three are for-profit (txteagle, Ruralshores, and eGramIT).

In this chapter, we focus on five US-based case studies of rural sourcing and impact sourcing: CrossUSA, RSI, Onshore Technology Services (OTS), Cayuse Technologies, and Samasource. The five case studies are based on 48 interviews and visits to delivery centers operated by four of the five companies (see Appendix A). CrossUSA and RSI are rural sourcing but not impact sourcing. Both companies have rural delivery centers and both companies hire people that have been trained in information technology through a college degree and/or relevant work experience. OTS and Cayuse Technologies are rural sourcing and impact sourcing. Both companies have delivery centers in rural communities and both primarily pursue an organic workforce development model that trains people for ITO or BPO that otherwise would have no such opportunity. (Both companies also recruit experienced people as well, so the workforce is a mixture of people with and without prior relevant ITO or BPO training/experience.) Samasource is impact sourcing but not necessarily rural sourcing. Samasource distributes low-level digital work to 16 service providers based in all-sized cities, including large urban cities (e.g., Nairobi,

Kenya, population 3.1 million; Chennai, India, population 8.2 million) as well as small rural communities (e.g., Dharamsala, India, population 19,000).

We have been studying providers since 2010 and one message is quite clear: rural sourcing and impact sourcing providers are in a state of constant adaptation. The suite of services offered adapt swiftly to changing client demands, delivery centers open and close, recruitment and training practices change quickly, cultures morph as companies grow, and providers adjust to environmental disasters like a tornado that left 10,000 people jobless in Joplin, Missouri. These are their stories.

The five providers: A brief history and overview

The five providers vary by location within the United States and by organizational age (see Table 7.1). The providers are based in different US states: Minnesota, Arkansas, Missouri, Oregon, and California. The oldest company we could identify as a rural provider is CrossUSA, founded in 1998. Three companies are in the middle stages of development: RSI was founded in 2003, OTS was founded in 2005, and Cayuse Technologies was founded in 2006. The newest organization, Samasource, was founded in 2008. Below we describe how each company was founded.

CrossUSA. CrossUSA was founded by Nick Debronsky in 1998. As a businessman, he saw that clients still needed mainframe skills such as COBOL, JCL, ISPF, CICS, and VSAM but that these skills were no longer being taught in universities. He also saw that the people with these skills were increasingly older, isolated, and under-valued. His vision was to aggregate these skills in rural delivery centers. The company primarily hires mid-career employees from all over the country who are looking for a rural lifestyle. The workforce is generally seeking a lifestyle focused on family, good education, and tightknit, small communities where crime and large-city headaches are absent. The corporate office is located in Burnsville, Minnesota, about 10 miles from Minneapolis/St. Paul. The three rural delivery centers were initially located in Sebeka, Minnesota (population 710), Eveleth, Minnesota (population 3865), and Watford City, North Dakota (population 1435). In 2007, CrossUSA closed the delivery center in Watford City because an oil discovery brought an influx of workers that inflated the housing market. CrossUSA successfully relocated 23 of its 30 employees from Watford City to Eveleth. About 60–65% of CrossUSA's workload is long-term, full-cycle development and 35% is remote staff augmentation, support, and managed maintenance (Lacity et al. 2010b). The current CEO is Kevin McCloughan. Kevin was actually a CrossUSA client from a Midwestern-based health-care company before becoming CEO. As of summer 2011, CrossUSA had nine clients, mostly long-term. The company had 100 employees, generates over \$6 million in annual revenue, and is profitable.
Company	Founded	Sales office	2011 delivery center locations	Rural sourcing?	Impact sourcing?
CrossUSA	1998	Burnsville, Minnesota (MN)	Eveleth, MN; Sebeka, MN	Yes	No
RSI	2003	Atlanta, Georgia (GA)	Jonesboro, AR; Augusta, GA	Yes	No
OTS	2005	Macon, Missouri (MO)	Macon, MO; Joplin, MO; St. Louis, MO	Yes	Yes, organic workforce development from rural communities
Cayuse Technologies	2006	Pendleton, Oregon (OR)	Pendleton, OR	Yes	rural communities Yes, the Confederated Tribe of the Umatilla Indian Reservation (CTUIR) created Cayuse Technologies to diversify the local economy and to create living wage jobs that allow the people of the Umatilla Indian Reservation and surrounding rural communities the opportunity to live
Samasource	2008	San Francisco, California (CA)	16 service providers in Haiti, Kenya, India, Cameroon, Zambia, Uganda, Pakistan	Urban, peri-urban, and rural	Yes, Samasource aims to end poverty

Table 7.1 Overview of provider organizations

Rural Sourcing, Inc. RSI was founded in 2003 by Dr Kathy Brittain White. Born and raised in Oxford, Arkansas (population 642), she knew that many students are educated in rural universities but move to urban areas for employment after graduation due to the lack of opportunities in rural America. This phenomenon, called "The Rural America Brain Drain," prompted her to build delivery centers in rural areas anchored by excellent rural universities. She spent a considerable amount of her time and energy building relationships with the universities to establish three delivery centers. She built facilities in Jonesboro, Arkansas (population 59,358 near the University of Arkansas), Greenville, North Carolina (population 84,986 near East Carolina University), and Portales, New Mexico (population 17,000 near Eastern New Mexico State). By 2007, RSI had 75 employees but the company was losing money and suffered financial losses in 2008. Some of the losses had to do with clients not being able to afford to pay their bills due to the recession. Some of the losses were attributed to poor quality of work, so clients refused to pay. The Greenville and Portales centers closed. By year end, less than 20 employees remained. In 2008, Clarkston Consulting bought RSI because it believed in the rural sourcing model. It has a vibrant ERP business and sought to source some of its client work through RSI. Clarkston gave RSI employees training in ABAP (a programming language in SAP) and implemented quality assurance, project management, and mentoring processes. In January 2009, Monty Hamilton, a long-time partner at Clarkson, became CEO of RSI (Lacity et al. 2010b). As of summer 2011, RSI had delivery centers in Jonesboro, Arkansas, and Augusta, Georgia, and employed 100 people. The company is profitable and has had rapid revenue growth: sales were \$300,000 in 2008, \$1 million in 2009, \$3 million in 2010, and between \$8 and \$9 million in 2011.

Onshore Technology Services. OTS was founded by Shane Mayes in 2005 in Macon, Missouri (population 5538). His wife was attending medical school nearby and there were no job opportunities for him – or other highly skilled knowledge workers - in this small town. He was, what he refers to as, "asymmetrically motivated"; he had no other choice but to create his own opportunities for himself and for his newly adopted community. Before moving to rural America, he worked for a large publisher in St. Louis where he managed globally dispersed IT teams, including 150 people based in India. He knew the value proposition as well as the challenges of offshore outsourcing and thought he could develop a skilled workforce in Macon. His idea was to develop a completely organic workforce by "taking underemployed, dislocated workers who don't have a culture of winning, maybe they are working at McDonald's, and we turn them into software developers." OTS focuses training on.Net and Microsoft certifications. OTS has delivery centers in Macon, Missouri, and Joplin, Missouri (population 49,775), and also has staff based in St. Louis (Lacity et al. 2010b). As of summer 2011, OTS had 100 employees, earned about \$7 million in annual revenues, and was profitable. In summer 2011, Mayes participated in former US president Bill Clinton's Global Initiative-America and pledged to bring 1000 new jobs to Missouri over the next five years.

Cayuse Technologies. Cayuse Technologies was founded in 2006 and is owned by the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) of the northeast region of Oregon. The idea for the company came from Randy Willis – an Accenture executive and a Lakota tribe member – when he was visiting friends on the reservation. Willis knew that the reservation, with 17% unemployment, needed opportunities for employment beyond the Wildhorse Hotel and Casino. Accenture needed more low-cost domestic delivery centers. In 2006, CTUIR and Accenture signed a five-year transitional management agreement – extended for five more years in 2011 – in which Accenture agreed to train employees, to provide the technology, and to provide management assistance. CTUIR and Cayuse Technologies signed an operating agreement that defines their relationship, establishes a joint Board of Directors, and defines how payments are distributed to the tribe. Cayuse recruited locally and held boot camps to train new hires to perform IT work. They had 25 employees in January 2007. Cayuse initially launched in a trailer until the tribe built a new delivery center in 2008 in the tribal-owned Coyote Business Park in Pendleton, Oregon. Since its inception, Cayuse Technologies has expanded its services to include BPO work in addition to ITO work. Cayuse primarily serves as a contractor or subcontractor for Accenture. As a contractor for Accenture, about 50 Cayuse employees serve as remote Executive Assistants to 4000 Accenture managers. As a subcontractor for Accenture, Cayuse develops software and provides a variety of BPO services for Accenture's clients. As of summer 2011, Cayuse Technologies employed 280 people, of which 54 were tribal members. The company earns about \$14 million in revenue and is profitable.

Samasource. The CEO and Founder of Samasource, Leila Chirayath Janah, created her non-profit company to give dignified, digital work to marginalized people around the world. Samasource uses micro-sourcing (i.e., the outsourcing of small tasks) to employees at the "base of the pyramid" that otherwise would have few employment opportunities. Headquartered in San Francisco, Samasource currently has work distributed to 16 BPO delivery center partners located in India, Haiti, Pakistan, Kenya, Uganda, and South Africa. Janah's business model is to partner with existing remotely located delivery centers. Samasource has developed a proprietary work platform that routes work from the cloud to local delivery centers, where it is completed by employees hired by the delivery center partners. Janah knows that rural employees have a great work ethic, but that remote partners need Samasource's marketing and account management capabilities to attract and satisfy serious business customers. Samasource provides low-level digital services, such as audio or video transcriptions and digitizing receipts, business cards, land records, books, and archives from both print and handwritten sources. The daily wage of about \$5 a

day is enough to sustain a rural Indian family, and certainly an attractive price point for business customers (Lacity et al. 2011a).

How do providers attract, develop, and retain talent?

Each provider in our study has a strategy for recruiting, training, on-boarding, and developing employees (see Table 7.2). Among our five cases, three providers primarily recruit locally and use boot camps to train employees (RSI, OTS, and Cayuse). One provider (CrossUSA) primarily recruits nationally for experienced IT workers and thus does not need an extensive boot camp for training. Samasource relies on partners for workforce development.

CrossUSA's model is challenging because it has to find employees willing to relocate to rural Minnesota. OTS and Cayuse, with their organic workforce development strategy, have a challenging recruitment and training model because they primarily take locally unskilled, underemployed, unemployed, and/or uneducated people and train them to be ITO or BPO workers. All providers stray from their primary recruiting model as needed. OTS and Cayuse also recruit trained ITO and BPO employees, particularly for middle and senior positions. CrossUSA recruits college graduates and younger people from Minnesota. Some specific aspects of each provider's workforce development practices are described below.

CrossUSA. CrossUSA invests heavily in recruiting because it is primarily looking to relocate mid-career professionals from all over America to rural Minnesota. A Director of Recruiting noted, "We recruit people to a life style change, not a career change." Prospective employees are typically recruited for a specific client account, and thus the applicant must demonstrate specific business domain knowledge as well as technical knowledge. For example, a person hired for a health-care client might be required to demonstrate knowledge of claims administration and adjudication in addition to the required technology skill set. Applicants must pass online proficiency exams, technical interviews with Tech Leads, background checks, and drug tests. CrossUSA also spends considerable time getting to know the prospective employee and his/her family to ensure a good fit. It does not want to hire people who are not committed to relocation. One red flag, as a Director of Recruiting said, is a "trailing house or trailing spouse." A "trailing house" means that the recruit does not intend to sell his or her home. A "trailing spouse" means that the spouse does not intend to relocate with the recruit. Once relocated with spouses in tow and with prior homes sold, employees are very committed to their clients and to their new rural communities. Although CrossUSA has primarily hired experienced workers, in the past two years it has been actively seeking to diversify its workforce to attract some younger people. In summer 2010, about 10% of employees were

Company	Primary recruitment strategy	Typical training	On-boarding process	Career path
CrossUSA	National Recruitment; Relocation	Minimal; mostly hiring experienced workers	2–4 week on-boarding/ orientation program; dedicated mentors	 Junior Developer Programmer Analyst Systems Analyst Senior Systems Analyst Team Lead
RSI	Local Recruitment; primarily college students	Boot camps	Paid and unpaid internships	 Intern Programmer Analyst I Programmer Analyst II Senior Analyst: PM track Senior Analyst: SME track
OTS	Local Recruitment; primarily organic workforce development	12-week boot camp taught by OTS employees at a renovated vocational college	3-month internship	 Intern SE1 SE2 SE3 Project Manager
Cayuse Technologies	Local recruitment; primarily organic workforce development of tribe members and non-tribe members	Onsite training in special training rooms; initially held boot camps to train software developers	4–8 week paid boot camps; probationary period for new hire	 Junior Associate Associate Senior Associate Managing Associate Manager Senior Manager
Samasource	Primarily relies on existing partners and thus does not actively recruit employees; does incubate new development partners			

<i>Table</i> 7.2	Developing human capital

under age 35, about 15% were between the ages of 35 and 50, and about 75% were over the age of 50 (Lacity et al. 2010b).

Rural Sourcing, Inc. RSI relies heavily on local universities to provide the talent necessary to staff the projects in the sales pipeline. For example, recruitment for RSI's Jonesboro delivery center is enabled by close connections with faculty and advisors at Arkansas State University (ASU) and Hardin University. In fact, the majority of the current employees in the Jonesboro center are graduates of the Computer Information Systems (CIS) program at ASU. According to the Vice President of Client Services, "Our VP of HR has a very close relationship with the faculty at ASU, and reaching out to professors of IS to find out who their leading students are and who are staying in the area." The Director of Operations also sits on the advisory board for ASU and has encouraged ASU to increase the amount of ABAP (the primary programming language of SAP) covered in the curriculum in order to better prepare the students for a potential position at RSI. During the interview process, RSI looks for both the basic programming and project management capabilities but also looks closely at the potential for a good cultural fit with RSI. It uses a combination of technical and behavioral interviews to find a good capable resource. According to the Vice President of Client Services, "We are really looking for people who enjoy learning new things and have the ability to stretch their own skills and capabilities." New employees participate in an extensive boot camp and almost all of the participants who complete it become paid interns that finish the preengagement training. Once hired, RSI uses a combination of a relatively high wage, a generous benefits package, a challenging work environment, and significant opportunities for personal advancement to achieve a very high retention rate. In the 18 months prior to our interview, RSI had only one person leave voluntarily and terminated two employees. Additionally, several people had been referred by current employees and hired, thus enhancing the work environment and improving retention (Lacity et al. 2010b). The average age of employees is about 28 years.

Onshore Technology Services. This company, as previously noted, primarily pursues an organic workforce development strategy. To identify candidates, OTS holds local job fairs that attract about 100 to 150 people. People interested in OTS are asked to take an online aptitude test that assesses a person's logical reasoning skills. Candidates who pass that test are interviewed to assess their attitudes and behaviors. Candidates who pass the behavioral interview qualify for the 12-week boot camp. The boot camp curriculum was developed and is delivered by OTS in the wing of a vocational college in Macon that OTS transformed into an IT training center. The company runs about three boot camps per year. The cost of tuition is about \$3500. Students must pass two Microsoft certifications and successfully complete a capstone project before being hired as an intern. Internships last three months, and successful interns

are offered positions as SE1 (Systems Engineer 1). The employees come from quite diverse backgrounds, including young men with no higher education but with an interest in computer games, single women taking care of children or parents, older men that had careers in older technologies, and residents who left for a good education, want to return home, but cannot find work in their chosen fields. According to the Mayes, "It isn't easy to turn blue-collar workers into white-color workers. It's a labor of love" (Lacity et al. 2010b).

Cayuse Technologies. Cayuse Technologies aims to offer job opportunities for tribe members as well as for local non-tribe members. Pertaining to tribal member recruitment, the Business Development Manager said Cayuse seeks to retool tribe members "from brawn to brain jobs... We are pulling people from the wheat fields, off their horses, and giving them full time employment with health benefits." Cayuse advertises positions in the tribal newsletter, attends local job fairs, and relies on word of mouth to attract recruits. Cayuse does not require recruits to have college degrees. Employees are trained at boot camps which range in duration from four to eight weeks, depending on the type of work the employee will be performing. BPO employees may need very little training prior to being assigned to a project, but highly technical skills such as .Net and Java require significant training. In addition to technical training, Cayuse also uses Accenture's delivery methodology to improve the employees' communication, relationship building, and public speaking skills. In addition to boot camps, employees can also have tuition reimbursed if they choose to pursue further education. Cayuse recently partnered with Eastern Oregon University (about 50 miles away) to offer college computer programming courses onsite at Cayuse Technologies, taught by Cayuse employees. Eastern Oregon University students and current Cayuse employees may take the courses. Both Eastern Oregon and Cayuse hope that this initiative will pave the way for future Cayuse employment. Career paths at Cayuse are being realigned to create one career path, regardless of whether an employee is performing ITO or BPO work. The new "unified career model" aims to promote an equitable culture among employees and to more easily transfer employees between ITO and BPO service lines. The model comprises the following levels: junior associate, associate, senior associate, managing associate, manager, and senior manager.

Samasource. Samasource primarily relies on local partners to hire and train employees. The partner companies and their workers are featured on the Samasource website (see http://www.samasource.org/impact/). For example, one featured partner is Ken-Tech Data Ltd, based in Nairobi, Kenya. This company employs 100 workers. Ken-Tech Data recruits Kenyan youngsters from economically challenged backgrounds and helps develop their skills, both educationally and professionally. Usha Martin Rural Services, based in Jharkhand, India, is another featured partner. Jharkhand is one of the least developed areas of India and has a large tribal population. Usha Martin Rural Services trains

and employs youth and women from villages. The company currently employs 37 workers. A third example of a partner is the Woman's Digital League, located in Rawalpindi, Pakistan. This is the first company incubated by Samasource. The company is woman owned, operated and staffed by 22 women.

Client perspectives: The value proposition

In this section, we provide the client's perspective on rural/impact outsourcing. Based on our US client interviews, clients can be generally classified into three groups: (1) clients seeking an alternative to expensive domestic models (i.e., hiring part-time contractors or engaging urban-based providers), (2) clients seeking an alternative to frustrating relationships with offshore providers, and (3) clients pressured to perform work onshore. In general, the value proposition of rural outsourcing is that clients pay lower prices for ITO or BPO services compared to services based in urban areas; and clients receive a better service experience compared to offshore outsourcing (Lacity et al. 2010b). Price-wise, rural outsourcing offers prices that are 25–50% less expensive per hour than urban rates in cities such as New York City, Los Angeles, and Chicago. Compared to offshore outsourcing, hourly rates are more expensive with rural outsourcing. For IT work, rural outsourcers charge blended rates between \$40 and \$65 per hour for software developers, but the transaction costs are significantly lower compared to offshore outsourcing. Compared to offshore outsourcing, rural outsourcing clients spend less money on travel, coordination, rework, knowledge transfer, and onsite liaisons. Concerning service quality, rural outsourcing promises to offer superior services when compared to offshore outsourcing because of better domain knowledge, greater cultural compatibility, and time zone advantages. Furthermore, the high retention rates in rural outsourcing firms protect knowledge transfer investments. We also heard from clients who wanted to send work offshore because they are satisfied with the prices and service quality, but regulations or end-client preferences/restrictions prevent them from doing so. For example, a health-care company manages benefits for low-income families supported largely by government programs like Medicare. Their IT manager said, "We work for state governments. It's important for them to know where the work is happening. It's a very different conversation to say that work is going to go to St. Louis or rural Missouri than it is to say that work is going to go offshore."

We also asked clients of rural providers (CrossUSA, RSI, OTS, and Cayuse), "Is patriotism driving client demand for rural outsourcing?" Our findings suggest the answer is no. US clients are attracted to rural outsourcing because of the value proposition. Although US clients like the idea of employing American workers, they would never do so if another sourcing model offered better financial or business benefits. One client said, "I wasn't going to make a fiduciary

mistake just because I like to fly the American flag." Another client said, "No flag waving, no corporate social responsibility, quality is the main concern [for selecting rural outsourcing]." A third client stressed that his company's margins are tight, so that he would never pick rural outsourcing just for its political appeal. He said, "Let's be frank, if the price doesn't work, your conversation has ended." The rural providers also agreed. The President of CrossUSA said, "The customer doesn't care that you are rural. The customer cares that you can solve their problems, and can offer good value."

However, for some clients, appealing to patriotism helped sell the idea of rural outsourcing to their organizations. One health-care company provides health care to a highly unionized population. The CTO was able to use the rural location of the provider as a selling point to convince his customers that rural outsourcing was preferred to offshore outsourcing. The CTO said,

That was my selling point here. In 2002, one third of our customers were union – firemen, police, sanitation – and with all the noise around outsourcing and September 11th, my strong selling point was, Look, "I need to be able to lower my costs, I need to meet the demands of the business, I need to help the company be profitable, and help our members, and by the way many of our members are union employees. I have a way of doing it that keeps the jobs in the USA." That was a very strong selling point to get the concept funded.

Impact sourcing providers aim to make the world a better place by employing marginalized populations. At OTS, founder Shane Mayes aims to give rural people better lives. At Cayuse, tribal leaders aim to diversify their economic base beyond casino gaming, fishing, and agriculture. At Samasource, founder Leila Chirayath Janah aims to end poverty in the digital age. Impact sourcing providers, however, do not prophesize their social missions to clients; they sell clients good services at a good price. Some clients do prefer to select providers not only for price and service, but also to help meet corporate social responsibility objectives, such as buying a certain amount of services each year from minority-owned businesses. For clients, then, *the overall value proposition of impact outsourcing is favorable pricing, good services, and meeting corporate social responsibility objectives*.

In Table 7.3, we list the value proposition, services, and sample clients for each provider as found on their websites. Below we provide sample client experiences for four providers.

CrossUSA. In 2004, Richard Jones,¹ CTO of a \$10 billion health-care company located in New York City, was paying \$90 per hour for domestic contractors to help support his mainframe legacy systems. Besides the high hourly

	Client value proposition from provider websites	Services portfolio	Sample client list
CrossUSA	 "The alternative to offshoring" "Rural business model that leverages lower cost IT resources with high performance and quality results" "High quality, rural lifestyle to our employees and cost savings to our clients" 	 Full Life Cycle Application Development Long-term Staff Augmentation Application Outsourcing Enhanced Maintenance 	 East Coast Health Insurance Company Midwestern Life Insurance Company Midwest Steel Manufacturing Company East Coast Media Company
RSI	 "Domestic Sourcing as an alternative to offshore outsourcing" "Low cost of living US-based locations" "Hiring and training skilled IT professionals" "Competitively priced with offshore firms" "Easily expandable and collapsible staffing" "On-site and off-site resources" "Experience with Industry Standards and American business practices" 	 Business Application Management Application Design and Development Integration Data Migration and Conversions Quality Assurance and Testing Comprehensive Project Management 	 Clarus Information BlueCross BlueShield Seneca Foods RJ Reynolds The Rawlings Group

Table 7.3 Value proposition, services, and clients

OTS	 "Rural outsourcing offers a cost effective yet risk-averse alternative to offshore outsourcing" "Ideal for Export Control work" "100% American-English speaking" & "Cultural Fit" "Commitment to Partnership" "Highly scalable, customizable workforce" "Cost-Effective" "Low start-up costs over offshore" "Simplified engagement model" 	 Software Development and Integration Testing Business Intelligence Maintenance and Support Consulting 	 The State of Missouri ABB Classic Air Crafts MasterCard Medical Technologies Group Missouri University of Science & Technology Macon Atlanta State Bank
Cayuse	 "Cayuse Technologies' business model provides customer satisfaction by leveraging a well-trained, knowledgeable and specialized technology workforce" 	 Software Development Customer Contact Center Business Process Outsourcing Document Image Processing 	• Accenture
Samasource	 "Get your work done. Save money. Improve quality" "Samasource offers high quality business listing verification, data entry, content moderation, and more – so you can focus on your customers and profits, instead of the busy work" 	 Content Moderation Text-Based Judgments Transcription Digitization Data Entry Data Mining Business Listing Verification 	BenetechIntuitGoodGuideLinkedIn

wages, the domestic contractor model had other limitations – high turnover and high transaction costs. According to Jones,

We had a revolving door of consultants coming into our building and leaving after one project. We would spend a lot of money training these consultants, then they would work on a project, and then they would leave. We were also dealing with many small firms. If I had 30 consultants on site, I was dealing with 10 different firms.

Weber engaged CrossUSA in 2004. Jones initially sourced five people from CrossUSA, but now engages over 30 people. He finds the overall value of rural outsourcing to be high in terms of price, quality of work, low turnover, and management of a single provider. He said, "CrossUSA delivers quality work. They take a project from the beginning to the end, through the entire project life cycle. They have become an integral part of our organization" (Lacity et al. 2011a).

Rural Sourcing, Inc. In 2008, John Watson, Senior Project Manager at a software company located in Boston, had engaged a provider based in India to build a strategic dashboard for their core data analysis tools. The provider said it would take six months to build. After 18 months, it was still not properly built. Watson said, "They would tell us a bug was fixed and it pops up again three months later and they want to be paid again to fix the same bug. How many times do you pay the mechanic to fix the car?" Besides the project delays and excessive rework, the offshore sourcing model required Watson to start his workday at 5:00 am to conduct calls with the Indian provider. On these calls, Watson said, "All you heard was 'yes, yes, yes,' but by the next meeting they still haven't done it." Watson engaged RSI in June 2009. Currently, six RSI employees are devoted to the account. Watson reports similar satisfaction as Jones with both the price and quality of service from rural sourcing: "RSI is opposite of the Indian supplier. We tell them give it to us in a month, and they give it to us in a week. They built the 20 platforms in a month that would have taken the Indian company six months" (Lacity et al. 2011a).

Onshore Technology Services. Jones and Watson served as examples of engaging rural outsourcing providers for application support and application development. A Midwestern Financial Services serves as an example of outsourcing data analysis to a rural provider. This company receives millions of credit card transactions per day from banks all over the world that must be matched with the merchants. Data matching often requires human intervention, interpretation, and processing. Data analysts require quite a bit of training on the company's transactions, processes, and data. Sending this work offshore was troublesome because of the high supplier employee turnover, which meant multiple cycles of knowledge transfer. The company engaged OTS in 2006, and

the same analysts still work for them five years later. Thus – for this financial services firm – workforce stability is a significant benefit of rural outsourcing. The Client Lead said, "It's been a great relationship."

Cayuse Technologies. Cayuse Technologies' main client is Accenture. Where appropriate, Accenture subcontracts to partners like Cayuse Technologies to provide good work that costs less than urban-based alternatives. Cayuse has to compete for work along with other Accenture delivery options. In subcontracting engagements, an Accenture Client Lead serves as the interface between Cayuse Technologies and Accenture's client. Accenture's end clients do not typically engage directly with Cayuse Technology employees, except for customer contact center work. One of Cayuse's largest subcontracts is for a 60-seat, Tier 1 call center support for a Fortune 500 company. The Fortune 500 company found that insourcing the call center was too expensive, but that outsourcing to Asia was not a good cultural fit for this work. Cayuse Technologies was selected because call center rates were less than in-house rates and because the service quality was expected to be better than Asian-based providers. Compared to offshore rates, Cayuse is about \$15 an hour more expensive than an Indian call center. The Accenture Client Lead for the contact call center subcontract is most pleased with the quality of service. He said,

We are exceeding all customer satisfaction metrics with Cayuse. I just had a meeting with my Vice President and two Executive Directors and I love showing our satisfaction numbers. The call center handles 12,000 calls a month and our numbers are 'off the chart.' Most of the responses rate the Cayuse service as 8.5/9.0. That is unheard of in a call center. They go the extra steps to follow up with clients and make sure the problems are resolved. I don't tell them to do that, but I am very happy they do!

Lessons for clients

The clients of CrossUSA, RSI, OTS, and Cayuse all report high levels of satisfaction with the quality of services. Beyond their verbal reports, all clients are "repeat customers," which is perhaps the most convincing evidence of client satisfaction with rural/impact sourcing providers. During our research, we identified four lessons for clients seeking to engage such providers.

Lesson 1: For large clients, rural/impact outsourcing will be part of a global sourcing portfolio (Lacity et al. 2011a). Rural outsourcing/impact outsourcing will likely complement many large-sized clients' sourcing portfolios, which include in-house labor (insourcing), strategic partnerships, staff augmentation, urban-based domestic providers, nearshore providers, captive centers, and offshore providers. To understand how rural outsourcing and impact outsourcing fit into a global sourcing portfolio, see Figure 7.2. This figure



Figure 7.2 Sourcing options

maps work to the ideal sourcing model based on the *degree of work complexity* and the *degree of business criticality* and is adapted from Lacity et al. (2011a). Work complexity is the degree to which work requires compound steps, requires highly idiosyncratic knowledge (e.g., high human asset specificity; Williamson 1991a, b), involves the control of many variables, and/or where cause and effect are subtle and dynamic. Business criticality is the degree to which a client organization views IT or BP work as a critical enabler of business success (Saunders et al. 1997; Straub et al. 2008; Teng et al. 1995) or the degree to which "failure" to execute the work properly would critically harm the business, such as the potential harm caused by piracy, lost intellectual property (Khalfan 2004; Rao et al. 2006; Walden 2005), or raising the public's ire in the case of offshoring (Sen and Shiel 2006).

Client organizations frequently use their own employees (insourcing) or engage in strategic partnerships to perform work that is highly complex and highly critical to the business. Insourcing is appropriate when the client has the skills and resources in-house to execute such work. Strategic partnerships are appropriate when clients and providers can identify a mutually beneficial engagement that fosters innovation and trust and when the partners can align incentives and share risks and rewards. Client organizations frequently source work that has medium complexity and medium criticality to domestic contractors, to onshore liaisons from offshore providers, to urban-based domestic providers, and increasingly, to rural-based providers. For example, a US client engaged OTS to run legacy systems while her staff focuses on work that is highly complex and highly critical to the business. Client organizations find that the easiest work to send offshore is work that is low in complexity (so that it can be packaged, priced, and shipped offshore), and the work that is not critical to the business yet, such as new software that is not yet "live." Clients with a strong sense of corporate social responsibility might also consider impact sourcing, particularly for very low-level micro-work. Of course, the global sourcing portfolio depicted in Figure 7.2 captures generalizations. We certainly have studied exceptions, such as client firms sourcing innovation offshore (Rottman 2008) and client firms performing low-complexity and low business criticality tasks in-house (Hirschheim and Lacity 2000).

Lesson 2: Engagements evolve over time (Lacity et al. 2011a). Clients from CrossUSA, RSI, and OTS primarily began their engagements on a small scale using a remote staff augmentation model. At first, these clients managed the provider's employees, typically as part of a client-directed project team. Clients started their engagements with as few as two provider employees. Initial tasks were typically part-cycle development (such as coding or testing) or partial maintenance of existing systems, again under close client supervision. Over time, many clients added more people from the providers, extended services to more complex work, and even evolved some engagements into managed services (see Figure 7.3, originally published in the article by Lacity et al. 2011a). The largest client engagements we studied were also the longest



Length of client/supplier relationship

Figure 7.3 Evolution of client engagements

engagements we studied. One US financial services firm grew from six rural sourcing employees in 2006 to 30 people in 2010. They also moved from a staff augmentation model in 2006 to managed services within the last few years. The US East Coast health-care company started with five people in 2004 and grew to 31 people in 2010. The CTO talked about the evolution of the relationship:

Initially, the model really was remote staff augmentation. We now allow them to work directly with our business where initially we were cautious about that because we did not know if this concept was going to work or not. We have moved away from staff augmentation. The [rural supplier's] systems analysts actually now directly communicate with our business people. Now if we have a project, it is very common to assign a [rural supplier] systems analyst as the project lead. That systems analyst is working remotely. Or they deal with business leaders using video conferencing.

Lesson 3: Clients need to plan ahead. The US clients we learned from all report high levels of satisfaction with rural outsourcing in terms of price, quality of service, stability of the workforce, and the political appeal of the model. Clients were driven to rural outsourcing because of the lower costs compared to urban-based domestic providers or because rural outsourcing providers were easier to engage than offshore-based providers. However, there were struggles along the way; the one consistent complaint we heard about rural outsourcing was, "I wish the rural outsourcing provider could scale up faster." For example, one client said he wanted to engage 50 people from his rural sourcing provider, but the provider only had six people with the required technical knowledge and business domain experience. Unlike Indian providers who can staff hundreds of people quickly because of their deep benches, rural outsourcing providers often recruit for a specific client, which can take months. Subsequently, US clients work with rural providers to plan well in advance for workforce needs (Lacity et al. 2010b).

Lesson 4: Clients must invest in the relationship (Lacity et al. 2011a). Most clients also noted that they need to invest in the relationship with the providers, particularly knowledge transfer, to ensure success. When work has middle to high complexity, the client organization must properly transfer knowledge to the provider through training, shadowing, and mentoring. At a US Midwestern Legal Firm, the IT manager did "man-to-man" marking. He said,

It is still true that you get what you pay for. If you need a rock star, you're going to have to pay for a rock star. You're probably not going to get a rock star at rural outsourcing prices, so pair the [rural outsourcing employees] up with one of your own rock stars. So a lesser-skilled person from the [rural

outsourcer] can absorb and learn quickly and are able to do higher-level tasks quickly.

(Lacity et al., 2011a)

Another key message we heard over and over again was the need to frequently and meaningfully communicate and interact with providers. For applications development projects, daily calls from the client site to the remote delivery site are the norm. For applications support, weekly meetings are scheduled and ad hoc voice and video calls are common. For team building, clients also visit the rural delivery centers and invite the rural employees to visit the client site. For example, the US Midwestern Financial Services firm brings the remote employees to her site twice a year not only for face-to-face meetings, but for social activities like picnics. The CTO from a US East Coast health-care firm described how his visits to the rural delivery center affect the staff:

Just like you have to make an investment in an employee, like investing in their training, making them part of your organization and culture, we realized quickly that we would have to treat these remote people from [the rural outsourcer] just like we would treat our employees. I went to visit them. I spoke to all of their employees like I would speak to my employees when I conduct town hall meetings. My job is to make them feel that they are part of our organization. That is very important for retention of these resources.

Lessons for providers

The four rural providers – CrossUSA, RSI, OTS, and Cayuse – are all successful enterprises as evidenced by rising revenues, profitability, low turnover, and satisfied and repeat customers. As more providers consider establishing rural sourcing centers, they may well benefit from their experiences.

Lesson 1: Adapt or perish. US-based rural/impact sourcing providers need to be incredibly nimble to adapt to changes in the external environment, like conditions that erode a location's advantage or shifting client needs that require providers to alter their service portfolio. Concerning the former, three providers have closed delivery centers in Portales, New Mexico, Greenville, North Carolina, Watford City, North Dakota, and Lebanon, Missouri. Concerning the latter, CrossUSA expanded services beyond mainframe technologies, OTS moved more work from application development to application support, and Cayuse Technologies moved more work from application development to business processes. Shane Mayes, CEO of OTS, says it best, "Everything we did up to now was exactly the right thing we needed to do to get here, but may be exactly the wrong thing we need to do to move forward; Everything I say is gospel as of today, but by tomorrow everything could change."

City	Population	County population	Cost of Living Index
Sebeka	710	13,269	73.6
Eveleth	3,865	197,767	76.0
Macon	5,538	15,359	76.4
Joplin	50,208	118,179	77.3
Lebanon	12, 155	35,432	77.7
Pendleton	4,406	75,889	82.8
Jonesboro	55,515	95,457	82.9
Augusta	136, 381	539, 154	90.2
St. Louis	319,294	1,016,301	90.4
Ann Arbor	112,852	347,563	96.4
Chicago	2,695,598	5,376,837	116.8
Los Angles	3, 792, 621	9,519,331	136.2
New York City	8, 175, 133	1,537,395	216.4

Table 7.4 City population, county population, and Cost of Living Index

Lesson 2: Location, location, location. With rural sourcing, providers consider a number of factors when choosing the locations of their delivery centers, including the cost of living, the ability to hire and retain a qualified workforce, and support from local governments, regional economic development groups, and academic institutions. These criteria are in conflict. For example, the cost of living criterion is at considerable odds with the ability to hire a qualified workforce. In general, the lower the cost of living, the smaller the hiring pool population. Overall, it is easier to recruit in areas with larger populations but harder to retain employees as they have more opportunities to change companies. Turnover is a serious consideration to providers because of the considerable investment they make in training new hires. In Table 7.4, we mapped the Cost of Living Index with city and county populations for the US delivery centers in our case providers and for some large US cities and counties. The county populations give a good idea of the resource pool available to providers. For example, CrossUSA's delivery center in Eveleth, Minnesota, is located in one of the cities with the smallest population, but Eveleth is in a county that includes nearly 200,000 people. In Figure 7.4, we ranked the city population, county population, and cost of living for the 13 cities in Table 7.4. This figure depicts the positive relationship between population and cost of living.

One common theme across providers is that the availability of physical facilities is not a primary criterion for location selection. Every provider said that facilities are easy to acquire because so many rural communities have large, abandoned manufacturing facilities that can be easily refurbished with technology. For example, Nick Debronsky of CrossUSA bought and refurbished a carpet factory, and Shane Mayes of OTS refurbished a sewing machine factory.



Figure 7.4 City populations, county populations, and Cost of Living Index

RSI spent the first years of its operation in a facility supported by the University of Arkansas. In summer 2010, it outgrew the space and refurbished property in downtown Jonesboro.

In contrast to rural sourcing, impact providers seek to erect delivery centers in the communities within their target populations, even though other criteria may not be favorable. Clearly, Cayuse was to be built on the reservation. OTS was to be built in the founder's hometown community. Samasource partners with organizations located in the most impoverished locations.

Lesson 3: Let employees help build the culture. Many large-sized, urbanbased providers have a culture that places the client as the top priority. This culture typically expects employees to have the initiative do everything to satisfy a client by working shifts that match the client's time zone, by working long days to meet deadlines, or by taking extended trips to client sites. Employees trained in the IT profession certainly know and expect such a culture. At some rural or impact providers, however, this type of culture is completely foreign to the local population and creates work family conflicts that can interfere with the employees' ability to do good work. Some cultures also have very different concepts of "hard work." In tribal, agricultural and fishing cultures, people typically work excessively hard for several months, followed by several months' off work. This work culture is different than the work culture needed in an ITO or BPO business. So how can rural and impact providers create a culture focused on clients and empower employees? Let employees help build the culture. Consider how this approach helped Cayuse be successful.

Because Cayuse Technologies had a management contract with Accenture, Accenture quite naturally replicated their processes – from training to supervising - onto the tribal employees when the company first started in 2006. As Accenture's Executive Director noted, "At first we almost regurgitated the Accenture culture onto the tribe, which didn't work." Accenture had to learn how to deal with the differences between urban and rural workforces and between tribal and non-tribal cultures. Many people in the tribe are single parents who want and need to work, but have difficulty managing a full-time job. Absenteeism was a problem. In urban areas, single parents have resources like day-care facilities and public transportation that ease their home lives so they can be productive at work. So Cayuse management began to question, "How can we help you get your home life in order so you can come to work? Do you need a ride to work?" In 2007, Cayuse managers and employees rebuilt the culture from scratch. The employees identified a new set of core values: diversity, harmonious heart, integrity, quality, teamwork, family, and work ethic. The employees created artwork to go with each value and signed their names. This art is displayed along the main hall of the delivery center. Employees are keepers of the culture and nominate and award annually their peers who best display each value. Attendance is acknowledged and rewarded and has significantly improved. The attrition rate dropped significantly, to about 8% in 2011, which is very low turnover, particularly for BPO work. Cayuse management continues to experiment with new practices, such as creating part-time positions. So far, four part-time employees have been hired.

Lesson 4: Create a rural sourcing advocacy group. As an emerging market, the rural sourcing providers we studied are tackling the same issues, such as educating the client market about rural sourcing, explaining ITO and BPO opportunities to potential employees living in rural communities, and fighting legal issues. For example, a provider said that the client's procurement team has to be sold on the concept of rural outsourcing: "You would think rural sourcing would be an easy sell, but to some procurement teams, it's not an easy sell because it's different from the incumbent solution." Concerning legal issues, some foreign providers with no corporate office presence in the United States do not pay prevailing wages when they send employees to work in the United States, creating an uneven playing field. For example, one rural provider bid \$50 per hour for development work, only to lose the bid to an Indian provider who could bring work onshore for \$20 per hour. The provider is working, on their own, with their state Senators to investigate this issue. We believe that rural providers would benefit from their own formal advocacy group. Currently, there are some informal groups, such as the USA OnShoring and Outsourcing Group on LinkedIn. Participation in prestigious organizations, such as the Rural subgroup from Clinton's Global Initiative-America, is advantageous, but not focused specifically on ITO and BPO work. A formal, industry-specific rural sourcing advocacy group might be modeled after the National Association of Software and Services Companies (NASSCOM), considered to be a critical success factor for India's \$60 billion ITO and BPO industries. Perhaps it is indeed time for a RASSCOM.

Conclusion

Within the context of the overall global ITO and BPO markets, outsourcing to rural and impact providers, like the previous innovations in sourcing (outsourcing, offshoring, nearshoring, etc.), adds to the menu of choices available in the ITO and BPO industries. Client sourcing needs vary based on the degree of work complexity and the degree of business criticality. Impact sourcing generally finds its place on the low end of the complexity and criticality continuums. Rural sourcing generally finds its place mid-range along the continuum of sourcing options and seems best suited for work with mid-range complexity and mid-range criticality to the client's business.

Although rural and impact sourcing markets are currently small, we are seeing tremendous interest from clients. Clients we interviewed want rural sourcing providers to scale faster because of the favorable value proposition. Overall, US clients reported favorable experiences with their rural/impact providers. Client satisfaction stems from lower prices compared to urban rates, ease of doing business and lower turnover rates compared to offshore outsourcing, and in some cases, meeting corporate social responsibility objectives. Research shows that clients increasingly are assessing providers based on demonstrated corporate social responsibility (Babin and Nicholson 2009).

Scalability is the main complaint from clients. US providers will point to the fact that of the 300 million people living in the United States, about 60 million live in non-urban areas, and thus rural sourcing is highly scalable. Entrepreneurs have quite ambitious goals for growth. For example, Shane Mayes of OTS envisions growing his company to \$1 billion in revenues with 10,000 people. "I want to build a hundred year old business." Monty Hamilton has frequently said his long-term goal is to build RSI to 3000 people. CrossUSA envisions it could grow to a \$30–\$50 million company. Juxtaposed to the long-term goals, these providers actually scale operations in reasoned measure. Start-up enterprises struggle with cash flow and most rural providers cannot afford to have a deep bench of non-billable human resources. Instead, growth for providers is in the sequence, "sell then build." This is particularly challenging for the leadership team, as they constantly struggle to balance supply of employees with demand from new clients.

In the next chapter, we investigate a sourcing option that is also predicted to grow exponentially: cloud computing.

Note

1. Client representatives and their firms are assigned pseudonyms to protect their identity.

8 Shifting to Cloud Services: Current Challenges and Future Opportunities

Leslie P. Willcocks, Will Venters, Edgar Whitley, and John Hindle

Introduction

The First Law of Technology certainly applies to cloud computing: "we invariably overestimate the short term impact of new technologies, while underestimating their long-term effects" (Naughton 2008). In his work on the future of the Internet, John Naughton makes a strong case for this law (Naughton 1999). It is clear that if the much hyped take-off period from 1995 ended in the bursting of the "e-business bubble" in 2000–01, all predictions of its impact now have to go way beyond the technology and hi-tech sectors, into widespread social, economic, and indeed global impacts (ECISM 2009).

Many researchers who take a big-picture perspective see developed economies as on a fifth "Kondratieff" long wave cycle of innovation and technological change, this time based on a raft of transforming technologies in the form of computers, telecommunications, and biotechnology (Freeman and Louca 2001). The past 30 years have seen the rise of a digital age based on massive computing power, the Internet, high-speed data transmission, mobile communication, and most recently the cloud, which represents a potentially highly disruptive convergence within these developments. However, it is important to locate cloud in the long wave and as part of Internet developments, rather than as a relatively autonomous group of technologies with fast radical impacts.

There are reasons for seeing the impacts of cloud as emerging more slowly and over a much longer time horizon than many commentators are suggesting. One is that a *technical innovation, or set of technical innovations like cloud, typically goes through three phases – invention, commercialization, and diffusion.* By 2012 cloud is still dominantly in the commercialization phase, though diffusion of parts of cloud business services, as with many Internet-related services such as eBay and Facebook, could be very rapid. A second reason is that diffusion of an innovation rarely takes place at a steady linear rate. Rather research shows it tends to follow an S-curve, starting quite slowly, needing to demonstrate many attributes, and passing through several phases before being fully adopted (Rogers 1995). Clearly, cloud will be on a far from frictionless journey toward having substantive impacts on individuals, organizations, sectors, and economies.

Finally, cloud and its developers and users are on a learning curve which will take considerable time to climb before the sizable impacts anticipated actually materialize. In our view, there are near-term developments involving a relatively fast take-up of new services, together with supportive technical and contractual advances. Here the cost imperative will dominate, but organizations and providers will mature in their ability to manage services and learn better. This will enable them to move to more innovative uses of cloud computing at the organizational level. We see this learning strand as accelerating over the next ten years.

Our findings in this chapter draw from research that was conducted in the latter months of 2010 and throughout 2011. This research included a survey of more than 1000 business and IT executives and more than 50 interviews with key international players in the cloud computing ecosystem. We collected insights from cloud providers, system integrators, and users of cloud services. Full details of the research and methodology appear in Appendix A. This chapter proceeds with our research findings on the promise and challenges cloud computing represents to the IT industry and business. We then focus on the key emerging from the research, and the likely impacts and innovation possibilities presented by shifts to cloud services over the next decade.

The cloud promise

As an outcome of this research, we believe it is important not to buy too heavily into the language of radical transformation, and to avoid the rush of business hype and fashion, while recognizing that something very real is happening now, and will play out with very notable consequences over the rest of this decade (Willcocks and Lacity 2012). We see this promise taking shape in the confluence of two very distinct technological streams. The first one can be thought of as the stream of *maturing technological infrastructure* and the second one can be considered as the stream in which we see a strong *service perspective* when thinking of computing capability. With "maturing technological infrastructure" we are talking about three things:

- More reliable Internet services,
- Higher throughput and resilience, and

• Virtualization techniques that enable computing facilities to be easily replicated and reproduced.

In all three of these areas, we have seen a powerful maturation over the past decade – with important business implications. Take virtualization, for example, with the current capabilities in this field, it is now possible to shift computing and storage capabilities "into the cloud," where you can benefit from economies of scale. But a maturing technological infrastructure will not, in and of itself, get an organization straight to cloud computing. The unique proposition is that cloud computing comes about when the technology stream and the service perspective stream are both relatively mature. An illustration can be seen at the media agency RAPP, which provides video-streaming services for the motion picture industry. From the *technology* stream, RAPP makes use of virtualized servers in the cloud to deliver movie trailers over the Internet, and from the service perspective stream, RAPP makes sure that the virtualized servers are used only as much or as little as needed for any given release of a motion picture. So if the movie is a hit, many virtualized servers are rallied to the cause. But if the movie is a relative failure, only a handful of virtualized servers are enlisted. RAPP never worries about needing more than it has, or paying for more than it needs.

However, cost minimization is not the core promise of cloud computing. For example, there is growing evidence that IT outsourcing relationships based purely on cost minimization are unlikely to provide sustainable competitive advantage and will rarely lead to innovation. Instead, the most effective forms of long-term outsourcing tend to focus on risk-sharing and collaboration (Willcocks et al. 2011a). We think the same thing is true of cloud computing. But because we are wary of the language of radical transformation, we have developed a "desires framework" that helps us consider the relative benefits of cloud offerings without depending on marketing claims and counter-claims. In this framework, which we take from Willcocks et al. (2011), we identify four things an informed IT executive would be looking for:

- the desire to access services that are at least *equivalent in quality* to the performance of a locally running service on a PC or server. We call this the desire for **Equivalence**.
- the desire to *hide the lower-level complexity* of the application stack. We call this the desire for **Abstraction**.
- the desire to *automatically manage* the running of a service. We call this the desire for **Automation**.
- And there is the desire to *tailor the provided service* to the specific needs of your enterprise. This desire, we call **Tailoring**.

With this framework, we can look at the four key types of cloud computing offering and evaluate them according to specific needs:

- SaaS, or Software as a Service, is strong on Abstraction and Automation, while Tailoring is limited by its author.
- PaaS, or Platform as a Service, is relatively high in Automation, but its Tailoring is constrained by the building blocks provided by the vendor.
- IaaS, or Infrastructure as a Service, offers Equivalence and Tailoring very close to owning a server, but limited Automation.
- Hosted Services provide a full Equivalence to owning a server, and Tailoring very close to server ownership but no Abstraction and minimal Automation. Hosted Services are well suited for intensive business applications that are inappropriate for virtualization.

Once Equivalence is achieved between the local data center and the cloud, it is possible to create what has been termed a **cloud ecosystem**. This ecosystem is a mash-up of SaaS, PaaS, and IaaS services and providers. It requires considerable technical skill to integrate these services, and it is limited by the service quality of the weakest component. Also, as Equivalence is achieved between internal data center computers and cloud-provided services, it is possible to exploit "**cloud-bursting**," where you use a mixture of internal machines and cloud-provided machines within a business process. Why would you do this? Answer: To handle sensitive data internally and non-sensitive data in the cloud. Or, you may want to handle all your data internally and then "burst" to the cloud when demand spikes beyond your internal capacity to handle it.

There are also private clouds and virtual private clouds. In a private cloud, software vendors provide the capability to run large-scale internal data centers as if they were pay-as-you-go. And in a virtual private cloud, providers of cloud services actually dedicate part of their data center to the client's enterprise – as if it were his/her own private cloud accessed by secure virtual networking. Another development has been the Container Data Center, in which a complete data center is provided within a portable, modular box. All that is required locally is power, water for cooling, and network connectivity. And finally, there is this: Moore's Law still applies, even in the cloud. As microprocessors continue to double in power and speed, the benefits of moving to the cloud must be continuously compared to buying those same benefits outright. In a few years, it may be possible to purchase one server that is equivalent to an entire data center built on today's machines. This suggests that long-term cost–benefit modeling for cloud computing is immature, and demands much further attention.

Today's cloud challenges

In this analysis, we focus on four specific challenges that seem particularly critical at this stage in the development of cloud in organizations. We will take a look at each challenge in terms of its relative importance, the likelihood of its impact changing over time, and what can be done to mitigate its effect on a business.

Challenge 1 – Weighing up the security and legal risks. Our survey of business and IT executives indicates that the most significant perceived risks for cloud are data security and privacy together with offshore data housing and security. For now, offshore issues can be avoided by using domestic cloud facilities. Longer term, we expect the system to improve with market developments and new legislation. With this in mind, we do not see the legal risks to be a serious barrier to adopting the cloud, near term or long term. Security concerns, however, are a different matter. People worry about the security of data outside their corporate firewalls, and indeed the cloud does come with a few new risks – most notably the danger of hosting in a multi-tenant environment alongside other brands that may get hacked by people intending to do harm.

It is our view that these concerns should be weighed in a context that includes the risks of *not* using cloud. Existing systems are not risk-free either; for example, organizations are perennially at risk from poorly implemented policies, employee breaches, and security system failures. In fact our research indicates that cloud providers are often better managed and can invest in more sophisticated security hardware and software, while their scale can enable effective responses to large attacks through high levels of redundancy. Further risk mitigation is possible with hybrid clouds – where most servers are in the cloud, but key data are hosted internally and linked to the cloud. Another way is to automatically encrypt or anonymize corporate data as they leave the firewall. Either way, of course, there are cost and processing overheads. Taking all of this into consideration, you can see why we labeled this first challenge "*Weighing up* security and legal risks" with an emphasis on the "weighing up" part. The real challenge is to evaluate the upsides and risks of both the cloud and existing systems, and figure out how to manage them effectively.

Challenge 2 – Defining the relationship through contracting. At its most fundamental level, a cloud computing contract is a hybrid of three agreements: one for *outsourcing*, one for *software*, and one for *leasing*. These contracts are focused typically on the service-level agreement, or SLA, regarding security and service quality. At the current state of development, we are not seeing robust SLAs from cloud providers. This is partly due to technical problems, and partly linked to the cloud business models. Eventually, competition and the development of cloud standards should result in better SLAs. We believe that in

time, SLAs for cloud will better represent the needs of their customers – and also, service integrators will step in to create value-added SLAs on top of cloud environments, to provide the level of robustness that an enterprise expects. Meanwhile, however, it is important to remember that the primary aim of an SLA is to establish a level of service on which a partnership can be built. A less-than-robust SLA does not mean that the quality of service is poor, or if it is, that it will remain poor.

In today's environment, then, what should a business look for in a cloud partner? We suggest three assessments:

- 1. How does the cloud SaaS provider manage its growth? The growth of an SaaS service center means greater demand on the provider's data center, and hence greater risk that the SLAs will be breached for their multi-tenanted data center.
- 2. How open is the cloud SaaS provider to allowing testing of its services by customers?
- 3. How well does the cloud SaaS provider's strategic ambition for service quality align with your desires for service quality?

Challenge 3 – The lock-in dilemma. We have identified two forms of lockin for cloud services. We term them *the Technology Lock-In* and *the Institutional Lock-In*. A *Technology Lock-In* occurs when the cost of moving a service inhibits taking a business from one cloud platform to another one. Some cloud services have higher switching costs than others, and network effects will become highly significant further down the line, as it becomes more economical to contract for additional services that are compatible from existing services from incumbent providers. Separate from these technological inhibitors are *the Institutional Lock-Ins*. These occur when users become attached to the technologies embedded in organizational routines. Such institutionalism can have a serious impact on a business's ability to switch providers. In contracting for a cloud service, both types of lock-in – *Technology* and *Institutional* – should be considered.

Challenge 4 – Managing the cloud. We see two key issues facing those who manage the immediate transition period into longer-term, deeper changes. These issues are *Maintaining Strategic Control* and *Managing Cloud Services*. Strategic control is important because, once cloud services have been introduced into the enterprise, they can be updated and changed easily by technology providers without internal IT's control or direction. In practice, it is in a provider's direct interests to develop functionality that causes product use to expand, become more institutionalized, and spread across the organization. For example, by 2011 Salesforce.com had incorporated social networking through its Chatter product. It is simple, low-cost, and suddenly there, with people using it, without any overt decision from the IT function. In the face of such stealth

proliferation, IT strategy must move up into the CxO level and work to be seen as vital – or become irrelevant.

The issue of managing cloud services covers a broad range of topics. Monitoring usage, SLAs, performance, robustness, and business dependency are vital. And monitoring the rapid entry of cloud-based competition should become part of your corporate strategy. Moreover, as the Internet generation continues to enter the business world, their demands for consumerized services will put pressure on IT strategy – as will their often limited understanding of Internet boundaries. IT will need to develop strategies for improving end-user applications – or risk losing the argument for strategic IT.

If these four challenges are clear and present today, there are latent challenges that could quickly eclipse the current collection. The biggest of these could be what we might call *the challenge of False Security* – which affects people who believe cloud will take away all the pain and problems of computing. In reality, cloud is unlikely to solve all the technology problems of corporations and governmental agencies. Indeed, cloud may create all-new pain points, for example, the challenges of integration, when to make go and drop decisions, which infrastructures to rely on, what to keep control of internally, and which part of the business – back office, operations, or strategic positioning – cloud can really impact best. Our research shows that cloud represents a considerable opportunity, but the challenges in the way of realizing cloud's potential, especially for business advantage, remain real.

Cloud: Future impacts

On a larger canvas, we see a number of drivers of near-term development, but also three big future impacts of cloud – a radical shift toward service performance, a move from products to business services, and in radical reconfiguration of the supply industry. But let us look first at the likely near-term developments.

Drivers of near-term development

Cloud computing is the consequence of the evolution of two distinct strands: technological innovation – based around virtualization and shared computing provision – and a distinctive service-based perspective on computing. Following from this dual-strand perspective on cloud computing, the drivers of the near-term development of cloud computing will have their origins in both streams. For an analysis we draw on results from our interviews and survey findings (see Appendix A).

Of the 21% of survey respondents who were in an IT role in client organizations, 90% had an influence on IT investment decisions in their department (48% with significant influence, 42% with some influence/provide input).





Source: HfS Research and the outsourcing unit at the London School of Economics, November 2010 Sample: 628 Enterprises

A further 40% of respondents were in business and operations functions (i.e., not IT-related roles) and of these 85% had influence on IT investment decisions in their function (35% significant influence, 50% some influence/provide input). This suggests that the results of our survey are representative of the likely direction of cloud services in the coming years.

Although it is common to think about technology innovations over the next five to ten years, our survey suggests that significant developments in cloud are likely to be found in many organizations in the 2011–13 period. Thus, while around 17% of these respondents were "maintaining a watching brief on cloud computing" and 17% had already deployed some cloud services, a further 30% of respondents were "currently considering and evaluating" cloud services (see Figure 8.1).

In terms of existing cloud services, corporate e-mail, websites, storage, and customer relationship management were already cloud based for 20% of respondents with similar numbers planning to make the transition in the next 18 months – a doubling of cloud usage in that 18-month period.

When asked what proportion of their IT budget would be allocated to cloud services, 44% of respondents suggested that at least 10% of their budget would be allocated to cloud in the next 18 months (23% of respondents suggest 10–20% of their budget in the cloud within 18 months, with a further 21% of respondents suggesting that over 20% of their budget would be in the cloud in this period). (A lower proportion of respondents were uncertain (11%)/did not know (16%) about their future cloud budgets.) These trends were more marked for business executives with significant influence on cloud investment decisions in the near term and less marked for near-term decisions from IT managers. Whilst these IT managers did not see as much investment in the next 18

months, over the next five years they expected similar levels of investment as business managers did.

The longer term shift

In our survey nearly two-thirds of business and IT executives saw cloud as an enabling business service and IT delivery model that *drives innovation* in organizations, while half saw it as a new technology platform that can *transform organizational forms*. If cost advantages from moving to the cloud figured highly on the executive radar, around half of business executives saw cloud as innovatory in getting access to and implementing best-in-class business applications quicker, in supporting moves to a distributed virtual organization, and in enabling a refocus away from IT, and onto transforming the business.

Taking into account the technology developments we described earlier (see also Willcocks and Lacity 2012) and our more comprehensive research findings, we would suggest a more fundamental shift to cloud, though over a ten-year rather than a five-year horizon, from a cost to a growing innovation agenda. This agenda at the organizational level will, in our view, move cumulatively over time from IT operational innovations, through an increasing number of business process innovations to product/service and market positioning innovations.¹ These will be discussed below. But this is only looking at the implications of cloud and the innovative opportunities it presents at an organizational, competitive level. Looking across our present study, we identified three much larger impacts that the technological developments cloud embodies, make more likely but also more necessary. As such these developments are both opportunities and challenges. Let us consider three propositions in more detail.

Cloud and service performance

The proposition here is that cloud escalates greatly the importance of service performance in the external IT and business services industry. The role of service has been key to the IT and business services industry (Lacity and Willcocks 2009).² But at the same time in a series of studies across industries and countries, we have shown through survey and case study work that the BPO industry's record on providing service (as opposed to services) has been very mixed indeed (Cullen and Willcocks 2003; Willcocks et al. 2011; Willcocks and Lacity 2009). We have found that this situation has been slowly improving over the last five years, but has this been fast enough to meet fast-rising expectations emerging on two major fronts?

On the first front, the indications are that customers are becoming both more knowledgeable of the services they are buying and also more demanding. A recent survey (RightNow 2010) is typical in confirming that consumers have been challenging companies to sit up and take notice, and if they were not willing to care for their customers, they will go elsewhere. The survey found 86%

of consumers quit doing business with a company due to a bad customer experience – up 27% from four years ago. Even in a depressed economy, customer experience remained the top priority; 60% of consumers would always or often pay more for a better experience. The survey also confirms the importance of speaking with a live service agent, interactions with the company, and the growing importance for the customer experience of web information, twitter, and social networks.³

On the second front, the emergence of cloud makes the role of service much more differentiating of a provider than before. One senior supply industry executive illustrates this well for us:

[With cloud] you do not have all the buffers between you and the customer that corrects problems, like consultants or internal IT people. You have the direct link with the customer and that means that you have to change yourself to make a software service really ready. In the past we have thrown 170 DVDs over the fence and said, okay, it's yours now. Try it and good luck. But now we deliver a service that needs to run from the first time on. That means day-by-day, every hour we are faced with customer needs and that also educates the software vendor to become really a true service player in terms of high customer service, higher than ever before in terms of easy-to-use and flexible software.

Cloud developments, and the high customer expectations emerging from our survey, mean that IT and business service companies have to "up their game" massively on service. Cloud business models make service a much more differentiating and competitive component in any customer offering. A way of understanding and dealing with this step change is to think in terms of what needs to be measured. A CEO we interviewed put it succinctly: "I am moving to only two sets of metrics - customer satisfaction and key business performance indicators." In the cloud world, the customer experience of service is going to be key, yet few current cloud companies are focused on this metric. One way forward is to import service knowledge from other more service-focused industries in terms of people and practices. A way of directing this is to move more ambitiously toward applying more service-based metrics. In Figure 8.2 we show a way of directing attention to the fact that in cloud what matters is not just what the service organizations does, nor what it provides, but what the customer actually experiences.

In Figure 8.2 we show that the traditional measures of quantity and performance remain important, though even more important is the value metric – gauging performance against key business performance indicators.

- Quantity How many we did, how much time
- Performance Quantity versus target
- Value Did it make business sense
- Quality Did our customers like what we did?

SERVQUAL dimensions:

'Tangibles'	=	Physical evidence – The physical facilities and equipment available, the appearance of staff, how easy it is to understand communication materials.
'Reliability'	=	Accuracy and dependability – Performing the promised service dependably and accurately.
'Responsivenes	s' =	Timing and speed – Helping customers and providing a prompt service.
'Assurance'	=	Relevance and trust – Inspiring confidence and trust
'Empathy'	=	Attention to user - Providing a caring and individual service to customers

Figure 8.2 The four big metrics for cloud

But a heavily charged emphasis needs to be placed on what the customer experiences through utilizing service quality metrics.⁴ Research regularly finds reliability as the single most important quality dimension, but the others accumulate an impact, and several are quite subjective, needing care, experience, and insight on how they can be delivered to specific customers (Pitt et al. 1995). In cloud environments we would expect both clients and providers to be assessing performance on these types of dimensions, thus raising the standards for cloud service across the board.

Cloud and business services

The proposition here is that cloud accelerates the existing shift from IT-based products to business services. Just as there has been a rising aspiration to move from IT inputs and SLAs to business outcomes, so there is a continuing shift in the IT and business services market from IT products toward business services. Moves to the cloud accelerate this shift. Some of this can be glimpsed with, for example Microsoft's Office 365, providing a "pay-by-the drink" service for always updated office software instead of a customer having to buy a copy of the software for every PC. Why should a consumer be expected to download an iTune update every two weeks and maintain huge libraries of files, when services such as Spotify offer music in the cloud without regular software updates? SAP has been separating its classical ERP business from their SAP On Demand, while Oracle has been making the same move, with the same language, with Oracle On Demand. The concept here is to collapse the distance

and implementation time between the IT product and the business services it supports.

As one example among many of this trend, consider Qantas, which has moved its massive Frequent Flyer program onto a cloud-based computing platform in order to keep up with growing demand. Its 22-year-old Fortran-based system has been replaced by an On Demand service provided by Oracle, incorporating a scalable architecture designed to cope with changes in demand. Using Oracle's Siebel Loyalty and On Demand offerings, the system is able to provide consistent service to some seven million members, while also dealing with rapidly growing activity. Qantas also sees the new platform as providing the opportunity to target loyalty promotions and extend its loyalty program by introducing new partners – something that would have been difficult with the older system.

Avon provides another example. As a leading global beauty company with 100,000-plus sales leaders and millions of representatives worldwide, Avon runs regular campaigns but reports on these were received too late to affect current sales activity. A single standardized platform and reporting function was needed to support global campaigns, but these needed to interact seamlessly with existing technologies and Internet portals. Avon has been evolving onto a Salesforce.com platform that becomes integrated with Avon's own data-warehousing platform. Successful pilots and deployments were run out in 2009–10 across more than ten countries. There is a twicedaily information flow from order transactions through the data warehouse to the Force.com portal, supported by easy-to-use interfaces customized to be consistent with the Avon look and feel. There is also seamless integration with Avon's web portal, with single sign-on, making it easy for sales leaders to access all the information they need in one place. Mobile access is planned.

Business performance has also been enhanced in a number of ways. Sales leaders can act quickly on exception-driven information, maximize their earnings, and drive Avon's revenue growth. Standard business processes and performance metrics help control and efficiency worldwide. The easy-to-use system attracts recruits and increases retention levels.

As a series of innovations, the speed of this trend from IT products to business service is dependent on two functions. The first – illustrated by the Avon and Qantas cases – is the degree to which clients and providers work together to identify and deliver upon the business service possibilities created by the imaginative deployment of cloud-based technologies. The second – which we have alluded to earlier – is the role of service integrators in configuring hardware, software, cloud capabilities, and cloud providers into new value propositions, commoditizing technology and provider complexity into offerings experienced as relatively straightforward business services.

Cloud and the supply industry

Our third proposition is that cloud leads to reconfiguration of the supply industry. Our research strongly supports cloud technologies combining as a major disruptive innovation for the IT industry, with widespread anticipated knock-on impacts for business across sectors and economies. Marketed as platform independent, scalable, and cost effective, cloud computing promises to deliver IT resources as a utility similar to water, electricity, gas, and telephony. It is seen as a new paradigm for provisioning hardware and software resources over the Internet where the management and location of physical computing resources are shifted from local to external providers. Cloud computing is increasingly being offered by established IT service providers such as Amazon (Elastic Computing Cloud), Google (App Engine), Microsoft (Azure), and Yahoo (Y!OS), as well as emerging providers such as Zoho. Cloud-based service revenues have been projected to grow globally from \$17 billion in 2009 to anything between \$44 billion and \$60 billion in 2013 (Harris and Nunn 2010; IDC 2009).⁵

But what will be the substance of this rupture and what changes can we expect? A useful way of thinking about the cloud future is in terms of two scenarios. The one advanced by the media and the industry suggests an "All-Change" scenario. This is not surprising but has merit in that the industry has clearly reached a trigger point and has "crossed the chasm," rapidly making large-scale cloud investments that are both offensive and defensive, as strategic bets on the future but also in an effort to mitigate risks and not get left behind. Invariably, as we saw in the 1995–2001 e-business era, such rhetoric of transformation tends to underplay the complexities of adoption and diffusion of innovation. The empirical studies (discussed below) demonstrate that there need to be antecedents for innovation in terms of right structure, absorptive capacity for new knowledge, and a receptive context. The innovations themselves need to demonstrate attributes such as relative advantage, compatibility, low complexity, trialability, observable results, and potential for reinvention. Client organizations and the industry need to be ready for innovation. Diffusion of innovation requires complex communication, influence, and implementation processes (Greenhalgh et al. 2004; Rogers 1995). Given these realities, it is more likely that a "hybrid" scenario will play out, with an evolution to cloud as a major set of technologies underpinning businesses on a ten-year horizon, while in the next five years providers develop and sell their cloud capabilities and innovation and change occurs within the industry as clients also learn to exploit cloud opportunities more extensively, beyond a cost, scalability, and speed remit. Such a picture is much more consistent with our study findings, and the views of experienced clients, providers, consultants, and analysts whose views we have sought.



The focus should be on Cloud Business Services

Figure 8.3 Cloud – Business and provider perspectives

Let us look at this hybrid future in more detail. We can define the shift in computing we are observing in our research in terms of consumerization and elasticity (see Figure 8.3). The effect of these shifts is already evident. Few enterprise products are being created which are not cloud enabled. Industry is focusing on providing services not software. Computing is increasingly commoditized (standard processing or storage units) or consumerized – purchased off the shelf and competing on functionality rather than performance statistics.

We envisage that this shift will lead to a stratification of the industry as shown in Figure 8.4. At the bottom of the industry stack shown in Figure 8.4, we will continue to see production of commodity processing, storage, and communications infrastructure. This infrastructure will mostly be targeted at supporting what we have termed the "cloud power stations." In the long term we believe PaaS will be the main choice for enterprise businesses because of its abstraction. These PaaS power stations (initial examples are being created by Google and Microsoft) will supply the raw computing potential for most enterprise applications – and will provide the elasticity required. We see PaaS as successful because of its ability to hide unnecessary complexity – but also to provide value-added services such as authentication, databases, and IDEs.⁶ The impending "data-deluge" referred to by Hey and Trefethen (2008) and the Economist (2010) faced by enterprises exploiting data analytics, business intelligence, and integrated services will demand efficient data support and database technologies - not just based on SQL but also supercomputing based on data management (Google's MapReduce⁷ is a contemporary example).

For niche markets "PaaS in a box" may emerge, drawing on the container data center model, but with monitoring and maintenance provided by power station providers. IaaS will however most likely remain central but increasingly hidden. We anticipate PaaS and SaaS providers exploiting IaaS providers to


Figure 8.4 Stratification of the supply industry

create value-added services. Further IaaS will remain for niche applications – particularly those founded on OpenSource.⁸ We also envisage the emergence of OpenSource PaaS clones based on commodity IaaS – just as Jumpbox.com provides platforms based on OpenSource Software using Amazon EC2 IaaS service.

Above these power stations will run business services. We envisage these as the evolution of SaaS. Founded upon PaaS (and sometimes IaaS), such services will be smaller and more easily integrated. We envisage a fragmentation of this SaaS market into interoperable and thus easily integrated "Cloud Service Components" allowing smaller SaaS players to develop complete suites of services to compete with existing industry behemoths. These services will be integrated to create Business Process as a Service (BPaaS) using basic glue and interface programming. BPaaS will be created either by Cloud Service Component producers (with expertise in their component offerings – examples might include Oracle and SAP and SaaS providers) or by Systems Integrators with specialist understanding of industries and their requirements.

These amorphous BPaaS will be the point at which enterprises of all sizes interact with the cloud. Their amorphous nature will allow easier collaboration

between enterprises that can easily share elements of the applications with third parties – just as SalesForce.com currently offers Salesforce-to-Salesforce (S2S) integration – and thus enable the creation of new forms of enterprise based on closely integrated business services.

Access to these services will be through commodity networking and IT. Enterprises will not necessarily have to install their own networking, instead relying on wimax, public wifi, and 4G. Their IT equipment will be commodity-consumerized Internet access devices, including Smartphones, Tablets, TV screens, PCs – with minimal configuration to access the enterprise's cloud portals. Designing IT architecture will thus be the design of the IT-rich enterprise – and thus management and IT consultancy will merge in places.

Cloud and innovation

As we have indicated, the potential for innovation through cloud is considerable. However, speed of such innovation is likely to be shaped by four key antecedent factors. The *first* of these is attributes of the innovation itself. Research shows that key issues are as follows: Does it give relative advantage? Is it compatible with existing ways of operating? What is the risk level? Is it too complex or is it administratively feasible? Is it easily trialable with tangible outcomes? Is technical support given? Is there potential for reinvention? (Greenhalgh et al. 2004).⁹ As they find positive answers to these questions, in the context of cloud, organizations will pursue the following:

- **IT operational innovations** technology and IT operational and personnel changes that do not impact firm-specific business processes;
- **business process innovations** that change the way the business operates in some important ways; and
- market (business product/service) innovations that significantly enhance the firm's product/service offerings for existing customers or enable entry into new markets (Willcocks et al. 2011).

The innovation trajectory with cloud will be cumulative, starting mainly with IT operational innovations and then gathering pace over time on business process and market innovations.

The *second* antecedent factor is that in pursuing such innovations, organizations, providers, and providers' partners will need to become much more collaborative than ever before. Collaboration is here defined as a cooperative, commercial arrangement in which two or more parties work jointly in a common enterprise toward shared goals. Our ongoing research in outsourcing has identified a very strong correlation between the levels of collaboration and innovation within and across organizations. Simply put, superior performance through innovation is made feasible by cloud developments, but this will require a step change in client–provider and provider–provider relationships in terms of objectives and behaviors. This step change needs to be toward new forms of collaboration involving mutual flexibility, trust, reciprocity, risksharing, and investment in resources and time (Whitley and Willcocks 2011). Such a step change has been observable among a small number of outsourcing arrangements where the payoffs from the three types of innovation have been considerable.¹⁰ Innovation through cloud, we suggest, would come from an acceleration of such collaborative tendencies, but, as we have found in more traditional outsourcing arrangements, this will be a challenge to many client and provider organizations alike.

The *third* antecedent factor is the speed with which diffusion through informal unplanned communication and influence moves to formal, planned dissemination. There are already clear signs that with cloud there is a real uptake across the supply industry and all other major economic sectors on this antecedent factor.

The *fourth* antecedent factor is the innovation implementation process, which is the range of factors that support or slow an innovation's progress from design to adoption, diffusion, and usage, through to exploitation. Key issues here are (1) sectoral structure, absorptive capacity for new knowledge, and sectoral receptiveness to change; (2) adopter attributes; (3) organizational readiness for innovation; (4) how easy is the innovation to assimilate – whether it is a complex, non-linear process, with many "soft" elements; and (5) quality of organization's implementation processes.¹¹ Our cloud research suggests that these challenges are very real, cannot be assumed away, and may well be particularly significant for large organizations with a large legacy of IT investments, infrastructure, and outsourcing contracts. There are also cultural, structural, and political legacies that will shape and determine the speed of implementation, exploitation, and reinvention.

Of these antecedent factors, only the third is unequivocally supporting cloud adoption and exploitation though speed is gathering pace in the other three areas. On one scenario, there could be a rapid acceleration in innovation if the supply side is ready with manifestly advantageous new services, and if both sectors and client organizations see those advantages and apply them quickly and in a wholesale manner. A recent study by CERS (2011) suggests this may be the case, predicting that the adoption of cloud computing has the potential to generate 763 billion euros of cumulative economic benefits over the period 2010–15 across five European economies of France, Germany, United Kingdom, Italy, and Spain. The benefits would come from business development opportunities, business creation, net cost savings, and indirect gross value added (GVA). The study also suggests an additional direct and indirect job creation impact of nearly 2.4 million jobs.

Our own research at the organizational level reviews the status of the four antecedent factors listed above and suggests that these claimed benefits are somewhat overstated. The challenges are larger and there is more friction associated with the adoption of cloud. Cost savings will come through, but the business benefits needing an eight- to ten-year rather than a five-year horizon to come to fruition. We also anticipate initially more process innovation – associated with net job losses – as a result of cloud, before job creating product innovations come through, and would therefore predict much smaller net job creation from the cloud, especially for the 2011–15 period.

These introductory remarks frame our study findings on what innovations clients will be anticipating and seeking from their moves to cloud. We distill our findings into three areas: innovation through infrastructure and service; executive support for the cloud innovation agenda; and long-term moves to what we call the "Cloud Corporation."

Cloud innovation through infrastructure and service. Despite a common myth suggesting that cloud computing is mostly about an alternative payment/ subscription model, two critical cloud streams – flexible infrastructure and service – do offer novel opportunities for innovation. The service-based, infrastructural flexibility of cloud promotes the possibility of "seed and grow" type activities, where the capabilities of the cloud are demonstrated through the rapid development of prototype systems. Some of our respondents talked about this capability in terms of "low friction" activities, echoing the language of transaction cost economics. Whereas previously a decision to prototype a new system might involve the procurement and installation of new hardware (with the associated checks and delays that conventional purchasing requires), cloud provisioning can be implemented rapidly and at low cost.¹² Such low-friction approaches allow a business to experiment and innovate

because you'll be able to acquire these services, use them where it makes sense, and then decommission and get rid of the services when you no longer need them.¹³

The service flexibility of cloud services changes the risk profile associated with innovation. Projects and processes that would have been too risky to attempt if they required a capital investment (say, hiring two servers on two-year contracts) become worth attempting if unsuccessful experiments can be decommissioned easily. The speed of a project in terms of time to market is also affected if it is implemented in the cloud. Whilst there are numerous examples of rapid prototypes being used to capture the imagination of a corporate board about cloud computing, what is less clear is how the organization makes

the transition from experimenting with using the cloud as a demonstrator to using the cloud for "production" systems that, in many cases, have much more stable demand patterns.

As is the case with IT outsourcing, there will be distinctive skills required from the in-house IT function, from existing system integrators and outsourcing partners to make the most effective use of cloud computing. For example, when specifying their computing requirements, they will be making their requests in terms of "power at this rate, computing at this rate, at this level of security, with this compliance requirement, this level SLA."¹⁴ The skills required to specify and procure cloud in this way will be discussed in more detail in our fifth report.

Perhaps the most distinctive feature of cloud computing from a *service* perspective is the possibility for innovation that it offers by, in one way, confirming Nicholas Carr's argument that "IT doesn't matter." In cloud computing, IT does, of course, matter, but a service perspective allows business to think much more about what it needs (or would like to have) without having to worry about whether its IT function (or outsourcing partners) has the requisite skills, hardware, or resources to deliver it:

If you take it to its logical conclusion and a place most people, if you describe it to them, would want to be is that the acquisition and deployment of IT would be secondary. What you would acquire and deploy would be a business process or it would have a business services orientation.¹⁵

To illustrate this, consider an organization's desire to acquire sales support. That is, the organization recognizes that it needs "the ability to track contacts, the ability to manage the pipeline, the ability to convert our pipeline into sales, the ability for sales to be recognized as revenue."¹⁶ This does not (or perhaps should not) mean that the organization knows it wants to go out and buy a particular package. Instead

what you would provision in effect is probably a combination of a SalesForce.com, some of the functions from an ERP system or financial management system, etc., and for any given employee they have a certain usage profile, they would have access to certain functions and you would provision that employee with sales support.¹⁷

Another of our respondents made a similar suggestion when discussing how they used cloud services to provide solutions for their own (media) customers:

It's providing us with the ability to create much more, produce many more solutions without having to worry how are we going to do that. Where four,

five years ago, or even two, three years ago, that was a massive concern. Now we can almost forget the technology and just think this is what we're going to do.¹⁸

The management of cloud services from a cloud provider's perspective also offers opportunities for innovation as there are current shortfalls in terms of "orchestration, monitoring, performance monitoring, capacity management monitoring and capacity management modeling and capacity planning"¹⁹ while others see the scope for business process automation and integration²⁰ and automated marketplaces²¹ for provisioning.

Executives and cloud: Support for an innovation agenda. Cloud computing appeals to business and IT executives. In our survey, around 65% of business executives believe that cloud drives down the overall cost of business applications, 50% believe that it facilitates a virtual/distributed organization, and 60% of these executives believe that business applications can be provisioned far more quickly when they are in the cloud. Whilst the business appeal of cloud might appear to be driven solely by cost and efficiency savings, our survey also provides strong support from business executives for the claim that "Cloud enables us to focus on transforming our business and not our IT" (50%). As one of our respondents noted,

these technologies are enabling companies to do things they never could have imagined before. It changes the financial model of the company. It changes the talent model. It changes just about everything.²²

Cloud computing allows the business to focus on the tasks it needs and wants to perform, not how they are going to be performed:

they're going to get a form to fill out that says, I want to run this workload, I want to run it at this cost, I need this level of performance, this level of availability.²³

Cloud offers the opportunity for the focus to be truly put back on the business function, not the technology constraints. The business user, as has always really been the case, does not care and does not want to know how the computing is provided. Some of our interviewees made a comparison to the net generation's use of the Internet (see Barzilai-Nohon and Mason 2010) and smart (phone) mobile devices:

Now increasingly my iPad, are becoming oxygen for how I need to operate. And I've got an expectation that I can access my business information in real time wherever I am. So I think when IT organizations look to the next ten years, they need to look at the consumer trends that are hitting us right now and start to think about, from an IT strategy, how am I going to adapt my business to this trend in consumerization.²⁴

End-users are now expecting, I think we all expect, that we can use multiple devices during the course of a day to access the information we need to do our jobs, right? I've an iPhone and an iPad, I have got a computer, in fact three or four computers. I can go log into my friend's computer, get online, get my stuff that I need. I can access my information from everywhere. And so older applications and older systems that were very locked into only being accessible through terminals and stuff, is quickly fading away.²⁵

These users want the high levels of service that they have come to expect but tell us they do not know (and do not care) how it is provided. Another common thread from a business perspective is frustration with the limitations of the existing, in-house IT function. For most organizations IT is just a means to an end rather than an end to itself. Some estimates suggest that 70% of the IT function is being devoted to "keeping the lights on." It is therefore unsurprising that the IT function is frequently seen as unresponsive to changing business needs, that it is perceived as performing poorly, and, typically, has large backlogs of unimplemented applications (Willcocks et al. 2003).

If technology deployment (and the day-to-day management of the IT infrastructure) is moved to the cloud, then arguably some of this unresponsiveness and backlog can be addressed. Whilst this shift might cause short-term disruption for the IT function, in the long term it offers the opportunity for the (remaining) IT function to become increasingly aligned with the business needs of the organization and provide innovative, sustainable advantage to the organization. Indeed, some of our respondents argued that the shorter cycle times offered by cloud enabled, indeed required, the IT function to be more closely aligned with business needs. Even cloud providers recognize that with a service pay-per-drink model of computing they earn their business "every quarter or every month you know, when subscriptions or renewals are due." This forces them to align their "entire business to the success of that project and the success of the customer."²⁶

From a cloud provider perspective, there is also the question of how flexibly they can provide their services: "whether the billing is down to a day, a week or a month it ultimately kind of defines how mature you are in cloud."²⁷

From a technology perspective, cloud computing offers distinct advantages that are recognized by IT professionals. Although moving to the cloud may be disruptive to the existing IT function, it does allow the forward thinking, business-focused CIO to have meaningful answers to board-level questions about the current organizational IT environment, including how much it costs and how quickly new services can be provisioned:

I guess the wise CIOs of today have started to think about how much do their services cost and how can they leverage these models within their business or how they can actually terminate existing models to be able to deliver these kind of levels of services internally. And I think we're seeing that in the kind of commercial sector people are approaching this as a financial thing, wondering about how they can drive costs out of their business and use these services.²⁸

A technological benefit of cloud computing is the more detailed provisioning and planning that managed services can provide. For example, cloud providers can build in detailed performance metrics that can be utilized by clients to optimize their performance. Alternatively, the cloud model allows the IT function to manage its own service-level requirements by building redundancy into its cloud provisioning. Therefore, rather than having the IT function worry about providing 100% uptime capability from its in-house equipment, it can provide this capability by sourcing the same functionality from a variety of independent cloud providers. In so doing, cloud also offers novel disaster recovery solutions that address many of the pressing concerns of the modern CIO.

Although most IT functions are currently not charged for their consumption of electricity (to power their computers and provide necessary air conditioning), as costs continue to be trimmed across the organization, it is likely that the IT function will begin to be charged for its power consumption. Consolidation of IT through cloud computing therefore has the potential to offer significant environmental savings, for example, by locating the cloud service in a zero-carbon facility in Iceland. This also increases the green credentials of the organization.

Innovating the business: Toward the cloud corporation. Our predictions above envisage changes in the IT supply market and in the internal IT function. This suggests a medium-term situation in which organizations (and consumers) collaborate and interact through configured business services provided from the cloud. CIOs would then consider BPaaS as real services to the business – not assessed as SLAs but against key business performance indicators and profit.

Once in place the amorphous nature of such BPaaS would allow third parties to be directly integrated within them – accountants, providers, regulators, for example. The role of the systems integrator might thus be as a business integrator – connecting real business services together through BPaaS – rather than worrying about technology. For most organizations, such a change would improve their processes, free IT staff time to have a business and strategy focus,

Innovation Focus	Proposition	Cloud Services
Incremental Innovation	Cost control through consolidation and virtualization. Direct replacement of Apps with SaaS	Virtualization, Hybrid Clouds, IaaS, SaaS
Architectural Innovation	Improvement in business processes; increasing mobility; increasing	Mobilization, consumerization, PaaS, IaaS, SaaS
Radical Innovation	Skunk-work IaaS, collaboration (intra & inter organizational)	Elasticity, consumerization, market-based, PaaS, SaaS

Figure 8.5 Innovation in the cloud

and allow a much easier relationship with providers of services. Such a change is an evolution rather than revolution – what have been termed "incremental innovations" on the existing outsourcing path, albeit with certain "architectural innovations" which improve processes and technologically advance the organization's business.

Most organizations must be, to some extent, ambidextrous (O'Reilly and Tushman 2004). Alongside incremental innovations they must also continually seek to explore new ground. As a radical innovation in technology, cloud computing thus offers organizational units a chance to alter radically their business services – most probably through the innovation and collaboration beyond the enterprise as we identified earlier. For, as Brown (2003) reminds us, Nicholas Carr's pronouncements that "IT doesn't matter" ignored the fact that each new computing facility creates new possibilities and options – that can be exploited for market advantage.

We believe therefore that, for innovative organizational units, cloud computing may provide a platform for radical innovation in business process. A summary of the possibilities is shown in Figure 8.5.

We see glimpses of this today – Avon, as described above, exploits a Facebook application to allow its sales leaders to socially network:

it's these young girls that are on Facebook all day. And they have huge networks of friends...they're not going door-to-door like they use to and selling a product. It's all about just going out through their network. Well, Avon did a fascinating thing where they built a Facebook application on

[the salesforce] platform and on the Facebook platform, you know, and largely kind of just plug in external applications quite easily.... They built this custom application to help manage their network of Avon ladies within Facebook. So now as an employee of Avon, as an Avon Lady, all I do is, you sign into Facebook. You get all the promotions coming to you. You're understanding what the new products are, what things you should be pushing, and then within the same application, you turn around and you start to push that out into your network. And it's amazing. So they've actually used that as like their portal for their sales people in Facebook.

(Jim Revera – Salesforce.com)

Here Avon's Sales and Marketing business processes extend into Facebook, and through that into the social networks of their customers. Their processes have moved outside the traditional organizational boundary to create amorphous collaborations, through sales leaders, with customers and their social networks.

Such collaborative, innovative relationships, supported by BPaaS, hint at a new organizational form – amorphous, agile, and ambidextrous (in focusing on delivery but also on radical innovation) – a form we term the "Cloud Corporation." Knowing what such an organization might look like is difficult – few commercial enterprises are yet in the position to collaborate and integrate business services sufficiently. We therefore need to look beyond the commercial enterprise. One example exists among the particle physicists working at CERN on the Large Hadron Collider (LHC).

In order to analyze the staggering 15 million gigabytes of data that are being produced every year by the LHC's experiments there was a need to create a global organization of over 140 computer centers (each part of a university or research facility) working together to pool their computing into a Grid Computing Infrastructure (Britton et al 2004). This infrastructure – a kind of globally distributed PaaS service and the bedrock of many cloud technologies – was developed, and is run collectively by this loosely organised group of physicists and their data centers.

Interestingly though, this new organization connects the computer centers through loose memoranda of understanding and business processes (particularly around support, data analysis, and technology upgrades). Its bureaucratic hierarchies are very limited in scope and power and most work is achieved through collaboration among equals (Zheng et al. 2011). Crucially, technology (in the form of monitoring, support, and control dashboards) allows collaborators to implicitly understand the state of the grid, of their collaboration, and of their part within it. The technology, and the social networking around the technology, is taken for granted, is institutionalized, and is part of their agility – weaved within their management practices. For example, when Steve

(a collaborator in the United Kingdom) wished to steer other UK collaborators' actions, he did so by "mashing-up" a new BPaaS which showed, hour by hour, elements of the grid infrastructure which he felt were deficient. Called "Steve's Jobs" these new BPaaS provided an incentive and direction to other collaborators to change their work, and innovate around "Steve's Jobs." Particle physicists at CERN are unusual – they have highly collaborative tendencies (Knorr-Cetina 1999; Traweek 1988) (for which they invented the web to support). However, we believe they provide a first glimpse of how an agile, innovative global organization can be created when founded upon collaboration and shared cloud-based technology.

Conclusion

How to position the cloud's likely impacts? In our view, cloud represents a further progression of technical innovation within the fifth Kondratieff long wave. By 2011 growing cloud investment and technical innovation have not yet been matched by a large market. But we expect over the next five years increasing technical innovation starting to begin to diffuse to a wider range of applications, and finding a broader market. It may well be that within the long wave cloud moves through both the prosperity and maturity phases over the 2010–25 period. Long wave theorists would see such a period marked by considerable technical innovation, and with the transformation, in the context of Internet developments, also changing major areas including working lives, business models, leisure patterns, and the structure and shape of business organizations themselves. One would expect an acceleration also of business institutional changes typical of the fifth long wave, namely in network structures for organizations, alliances, joint ventures, and outsourcing (Smith 2010).

In all this we have pointed to some major near-term developments, in particular a relatively fast take-up of the new cloud services being made available through the 2011–15 period, together with technical and contractual advances developing to render those services robust and more attractive to clients. Client appetite is likely to move from a cost reduction agenda to a cost *plus* innovation agenda, with clients becoming more ambitious about wanting not just IT operational benefits but also business process and market innovations from cloud adoption. At the same time we point to cloud implying and, indeed, making necessary three longer term, major game changers – radical shifts toward service performance, and from products to business services, and radical reconfiguration of the supply industry. With such changes in the offing, we expect *innovations* – technical, business, contractual, service, product, process, organizational – to cluster as the fifth long wave of technological change moves through its prosperity and maturity stages. The reality is that cloud computing cannot achieve the plug-and-play simplicity of electricity, at least, not as long as the pace of innovation, both within cloud computing itself and in the myriad applications and business models it enables, and continues at such a rapid pace. The real strength of cloud computing is that it is a catalyst for more innovation. In fact, as cloud computing continues to become cheaper and more ubiquitous, the opportunities for combinatorial innovation will only grow. The distinctive features of cloud computing also offer many potential opportunities for business innovation, particularly given its service (and service quality) focus, coupled with the flexibility that new technology delivery mechanisms provide. These features serve to change the risk profile of business innovations to the extent that it is now increasingly possible to specify new business processes and their associated required service levels, experiment with them for a short time, and either disband them if they are unsuccessful or rapidly scale those that have potential.

The pattern therefore may well follow past diffusions of other potentially powerful technological innovations, including the Internet itself. The technology innovations will move in packs covering base technology, technical service, and process innovations. With cloud, these innovations in combination are likely to be radical and disruptive, if over a longer time period than many are anticipating. From a business perspective, these technology innovations will have a cumulative impact on the possibilities for more business-focused innovations, though these will be through the filter of the four antecedent factors discussed in this chapter. From a business executive perspective, the innovation plan then is relatively easy to state, but much more difficult to make the right choices on: navigate the hype, test out the capability, find the useful application, ensure the capability to leverage, and learn further how to exploit the innovation for strategic, business purpose. And move from cost gains through incremental, architectural, and radical innovation to the cloud-based, agile, ambidextrous organization.

Notes

- 1. The typology of innovations comes from Willcocks, L., Cullen, S. and Craig, A. (2011) *The Outsourcing Enterprise: From Cost Management to Collaborative Innovation*. Palgrave, London.
- 2. Out of recognition of this, the BPO pure player Xchanging established itself in its first contracts in 2001 at BAE Systems and the London Insurance Market with seven competencies, one of which was Service. Studies of the key competencies of outsourcing providers frequently list Customer Development as core, with service suffused through several others. See Lacity and Willcocks (2009) for more details of these examples.
- 3. RightNow (2010) Customer Experience Impact Report. RightNow/Harris, USA. This report was conducted online within the United States by Harris Interactive for

RightNow Technologies between September 11 and 15, 2009 among 2295 US adults ages 18 years or older. Results were weighted as needed for age, sex, race/ethnicity, education, region, and household income. www.RightNow.com accessed Dec 10, 2010.

- 4. ServQual is a well-researched, longstanding, simple, and useful model for qualitatively exploring and assessing customers' service experiences and has been used widely by service delivery organizations. It is an efficient model for identifying the gap between perceived and expected service, and is the most complete attempt to conceptualize and measure service quality for use across industries. A detailed assessment appears in Pitt, L. Watson, R. and Kavan, C. (1995) Service Quality – a measure of information systems effectiveness. *MIS Quarterly*, 19, 2.
- 5. Figures from IDC 2009, "IDC's New IT Cloud Services Forecast: 2009–2013," http:// blogs.idc.com/ie/?p= 543, and from twitter.com/raconteur media (2010) Raconteur on Enterprise Cloud Computing, July 20. Also Harris, J. And Nunn, S. (2010) Agile IT Reinventing The Enterprise. *Outlook,* October 2, 40–47. There are various estimates on cloud, and much depends on what is counted as cloud. IBM, for example, launched 11 cloud computing labs worldwide, and in 2009 the company expected the market to grow from \$47 billion in 2008 to \$126 billion in 2012. Others have suggested a market revenue size of \$US 150 billion by 2014.
- 6. Integrated Development Environments. The tools and workbenches used by developers to aid the development of applications.
- 7. MapReduce is a means of integrating vast clusters of data beyond the capability of SQL. It is based on clustering of data and thus suited to cloud infrastructures like those in Google's data centers (http://labs.google.com/papers/mapreduce.html).
- 8. For example Jumpbox.com provide complete downloadable virtualized servers based on open-source products. Traditionally if you wanted to install software like SugarCRM (an open-source CRM product), you would need to install Linux, MySQL, and various application packages and undertake a large amount of configuration. With Jumpbox the whole application stack can be downloaded either to a local server or direct to Amazon Elastic Compute Cloud.
- 9. The authors also point to fuzzy boundaries, task issues, and the nature of knowledge required being lesser issues emerging from research studies.
- 10. We studied 26 organizations who had moved to what we call "collaborative innovation" in their outsourcing relationships. All experienced IT operational innovation while 21 were getting business process, and seven business product/service innovations. These findings come from additional research carried out in 2011. See Whitley and Willcocks (2011).
- 11. Greenhalgh T., Glenn, R., MacFarlane, F., Bate, P. and Kyriakidou, O. (2004), "Diffusion of Innovation in Service Organizations: Systematic Review and Recommendations," *The Milbank Quarterly*, Vol. 82, 4, pp. 581–629 provide a comprehensive review of all innovation studies and these factors emerge strongly from their work.
- 12. One famous case is of a pharma company where they paid for capability with a credit card and got the results of the analysis sooner and cheaper than the formal request for computing resources.
- 13. Interview with Jimmy Harris, Accenture, November 2010.
- 14. David Leyland, Glasshouse interview July 2010.
- 15. Interview with Jimmy Harris, op. cit.
- 16. Interview with Jimmy Harris, op. cit.
- 17. Interview with Jimmy Harris, op. cit.

- 18. Interview with Steve Furbinger, December 2010.
- 19. Interview with Kevin Lees, November 2010.
- 20. Interview with Jim Rivera, November 2010.
- 21. Interview with Russell Marsh, December 2010.
- 22. Interview with Jimmy Harris, November 2010.
- 23. Interview with Steve Beck, December 2010.
- 24. Interview with Tim Barker, November 2010.
- 25. Interview with Mike Dino DiPetrollo, November 2010.
- 26. Interview with Tim Barker, December 2010.
- 27. Interview with Jim Spooner, November 2010.
- 28. Jim Spooner interview, op. cit.

Appendix A: Research Method

This book is based on original research conducted by the authors and co-authors. Since 1989, we have interviewed thousands of clients and providers in North America, Europe, Australia, Asia, and Africa and we have conducted several large-scale sample surveys. Our primary co-authors, in alphabetical order, have been Andrew Craig, Sara Cullen, David Feeny, Guy Fitzgerald, John Hindle, Rudy Hirschheim, Thomas Kern, Julia Kotlarsky, Ilan Oshri, Joseph Rottman, Peter Seddon, Eric Van Heck, Will Venters, and Edgar Whitley. Our initial research projects focused on IT outsourcing. In 2000, Lacity, Feeny, and Willcocks began to study business process outsourcing based on 70 interviews. We studied companies that outsourced business processes from human resources, policy administration, claims settlement, and indirect procurement (see Feeny et al. 2005; Lacity et al. 2003, 2004). In 2003, we began studying offshore outsourcing, primarily to Asian providers. Rottman and Lacity interviewed 238 people, including 53 provider employees in India and 34 in China (Lacity and Rottman 2008). Ilan Oshri, Julia Kotlarsky, and Leslie Willcocks also began a large research project on offshore outsourcing. So far, they have interviewed 150 executives in Mumbai, Gurgaon, Bangalore, Amsterdam, San Paulo, Zurich, and Luxemburg (Oshri et al. 2007a, b). Lacity and Rottman are currently studying rural and impact outsourcing and have completed 52 interviews at remote provider locations. Since 2007, Willcocks and colleagues have completed major research projects on collaborative innovation, bundled services, the future shape of IT, IT governance, transformation projects, offshore attractiveness, and IT skills and capabilities. In 2011, Willcocks, Whitley, and Venters completed a large cloud computing project, sponsored by Accenture (see www.outsourcingunit.org). Combined, this work forms a research base of over 1200 companies on five continents. The research base covers all major economic sectors including chemical, defense/aerospace, energy, financial services, health care, manufacturing, IT services, retail, telecoms, transportation, and utilities. We have also studied central, state, and local governments. The sample includes client and provider organizations of all sizes, ranging from start-up ventures to the world's largest multinationals. Most importantly, we have tracked many of our cases over the life of their outsourcing contracts; thus, we have unique insights into clients' and providers' a prior expectations juxtaposed to actual outcomes.

In our research, we have always sought to understand sourcing from the perspective of multiple client and provider stakeholders. What did each stakeholder expect from outsourcing? What roles did they play in the decisions and implementation of outsourcing? What practices were used to manage the relationship? How do they perceive the outcomes? We often used field interviews to explore these questions for several reasons. First, field interviews allow new ideas to emerge from the research process (Glaser and Strauss 1999; Yin 2003). Second, many people would likely perceive outsourcing as a *sensitive* subject; thus, we selected an interview method because it allows researchers to clearly communicate the purpose of the research, to ensure confidentiality, and to build trust during a personal interview (Mahoney 1997). Third, we believed that *busy* professionals would be more likely to respond to a personal interview than to an anonymous survey. We often selected *semi-structured* interviews because we wanted to leave the method fluid enough to let ideas emerge but rigid enough to compare responses across participants.

We have also done many case studies. Case studies comprise extensive field interviewing but also include document collection, site visits, and participant observations. Although case studies are time consuming, they offer rich contextual understanding of sourcing practices and help to answer how and why research questions (Eisenhardt 1989b; Yin 2003). We've chosen this method to study critical and innovative cases, such as Kodak and Enron back in 1989 because they were among the first large-scale adopters of ITO. We chose DuPont as a case study because it had one of the largest global deals that operated in 22 countries. We chose Lloyds of London and BAE Systems because of their innovative partnership model with Xchanging. We chose to study start-up providers like Host Analytics, Onshore Technology Services, and Cayuse Technologies (see Chapter 7) as well as some of the largest providers like EDS (now HP Enterprise Services). We chose case studies in the public sector to understand how sourcing issues compare and contrast with the private sector, including Inland Revenue, Internal Revenue Service, Westchester County, the government of South Australia, and the State of Missouri. We validate our case studies using a number of positivist and interpretive validity checks such as participant review, embedding direct quotations in the text, and providing a logical chain of evidence from data collection to coding and analysis (Dubé and Paré 2003; Klein and Myers 1999).

In addition to our own empirical work, we've done two large-scale meta-analyses of all the academic literature on ITO and BPO (see Lacity et al. 2010a, 2011c). We coded the empirical findings from 167 ITO articles and 87 BPO articles. In total, we've coded all the empirical academic findings on the determinants of outsourcing decisions and outcomes, of which 741 findings pertain to ITO and 615 findings pertain to BPO. Below we describe the specific slices of research that were used in each of the chapters.

Research method used in Chapter 1: Insights for practice

In Chapter 1, we've combined the findings from the ITO and BPO meta-analyses and extracted the lessons most relevant for practitioners. Our study goal required a complete review of past ITO and BPO empirical research relevant to practice. To identify papers that adequately represent the topics above, we searched the full text of articles within ABI/INFORM, EBSCOHost, and JSTOR databases with ITO- and BPO-related keywords. We found hundreds of articles. Upon closer read, we dropped papers for one of the following reasons: the paper studied captive centers or spin-offs but not outsourcing (e.g., Festal et al. 2011); the paper was theoretical or mathematical, but not empirical (e.g., Sankaranarayanan and Sundararajan 2010); the paper was about outsourcing physical goods, not information technology or business processes (e.g., Holweg et al. 2011), or the paper lacked a dependent variable about decisions or outcomes (e.g., Wickramasinghe and Kumara 2010). After eliminating these papers, we were able to code 251 empirical papers (167 papers on ITO¹ and 87 papers on BPO²) published in 104 different journals. These articles span the years 1992 to the first half of 2011. The review includes 116 qualitative papers, 121 quantitative papers, and 14 papers that used mixed methods.

As ITO and BPO researchers will well attest, there are few standard terms and definitions applied across studies. For example, outcomes have been measured as cost expectations realized (Lacity and Willcocks 1998); project duration, re-work, and quality (Gopal et al. 2002); perceptions of strategic, economic, and technical benefits (Grover et al. 1996); and effects on stock price performance (Hall and Liedtka 2005). In order to aggregate findings across studies, we needed a list of master codes and master code descriptions. We first extracted the authors' terms and definitions for dependent and independent variables to begin building a master list. We then began to combine variables that had similar definitions, altering the master list with each pass through another article. For example, 28 articles empirically examined the variable we call "Access to Expertise/Skills" (e.g., Currie et al. 2008; Lam and Chua 2009). The specific variable names

Relationship	Code	Meaning
Significant	+1	Positive Relationship: higher values of the independent variable were associated with higher values of the dependent variable; $p < 0.05$ for quantitative studies or strong argument by authors for qualitative studies
	-1	Negative Relationship: higher values of the independent variable were associated with lower values of the dependent variable; $p < 0.05$ for quantitative studies or strong argument by authors for qualitative studies
	М	A relationship between a categorical independent variable and a dependent variable mattered; $p < 0.05$ for quantitative studies or strong argument by authors for qualitative studies
Not significant	0	Relationship was studied and no significant relationship was found

Table A.1 Coding scheme

in the articles were, for example, "Technical expertise for new IT" (Kishore et al. 2003), "Access to experts" (Al-Qirim 2003), and "Access to a larger group of highly schooled professionals" (Sobol and Apte 1995). Each pass through a new article also triggered a re-analysis of the master list and a re-examination of previously coded articles, until all articles were coded against the master list of terms and definitions. In the Glossary, we list and define the master codes used in this chapter and throughout this book.

We also coded the empirical relationships found between an independent variable and a dependent variable within each study. The relationship coding scheme, which was used in Lacity et al. (2010a), Lacity et al. (2011c), and Jeyaraj et al. (2006), assigned four possible values to the relationship between independent and dependent variables: "+1," "-1," "0," and "M" (see Table A.1). We coded a "+1" for positive relationships, "-1" for negative relationships, and "0" for relationships that were studied but not empirically significant. If the study was quantitative, we used p < 0.05 as the requirement for a significant positive or negative relationship. If the study was qualitative, we relied on the authors' strong arguments for a significant positive or negative relationship. We also used the code "M" for a categorical relationship that mattered. The "M" code was needed because some significant relationships were categorical (i.e., not ordinal, interval, or continuous), but a relationship clearly mattered between the independent and dependent variables. For example, Reitzig and Wagner (2010) found that applicants from different countries experienced significantly different outsourcing performance outcomes. The relationship between the independent variable "Country" and the dependent variable "Outsourcing Outcomes - Organizational Business Performance - Client" was coded as "M" where a relationship mattered. All told, we initially coded 1356 relationships between an independent and dependent variable. From these data, we answered nine questions relevant to practice.

Research method used in Chapters 2 and 3: Things providers say

Because so many of our research products focus on client perspectives, we wanted to finally give voice to the hundreds of providers we have interviewed. In Chapters 2 and 3,

we created a list of 20 things providers have been saying frequently to us during our many research projects. These are statements providers make about clients, including the things they wish clients would or would not do and the things they wish clients knew or did not know. After identifying the 20 provider statements, we compared what the statements assert against the best practices identified from the research bases described above, including our own empirical work as well as the lessons extracted from the ITO and BPO meta-analyses.

Research method used in Chapter 4: Shared services

Chapter 4 on shared services is based on cases at Reuters and at the State of Missouri. The cases comprised interviews and site visits. The interview guide asked questions about the back offices prior to the creation of shared services in terms or organizational structure, management leadership, services provided, internal headcount, service-level measures, size and characteristics of the internal user communities, and perceived strengths and weaknesses. The interviewees were then asked to tell their shared services story. They were asked to describe the people involved in the shared services implementation, including the champions, supporters, and opponents. They were asked to timeline the major events, challenges, and responses to challenges during implementation. They were asked to provide evidence of the outcomes of shared services. All interviews were tape-recorded and transcribed. The Reuters case was largely informed by the co-author of the article by Lacity and Fox (2008) and reviewed by the CFO for fact checking and approval. The State of Missouri was based on three site visits and interviews with the CIO, Deputy CIO, three Agency Commissioners affected by the IT consolidation, and staff members in the IT and three agency departments. The case was reviewed by the CIO for fact checking and approval.

Research method used in Chapter 5: Client project managers

During our offshore outsourcing research, we interviewed 232 people from 68 organizations (see Table A.2) in client, provider, and advisor organizations. Most participants were interviewed in-person on the client site in the United States or at provider sites in India, China, or Canada. Most interviews were tape-recorded and transcribed, allowing us to sprinkle the participants' rich quotes throughout the chapter. We solicited insights from 25 client organizations, 33 provider organizations, and 10 offshore advisor firms.

The focus of Chapter 5 is on the 67 stakeholders collectively labeled as client project managers. In reality, these participants held various titles such as Project Manager, Assistant Project Manager, Team Lead, Team Architect, Senior Software Engineer, and Process Lead. Their common role was integrating offshore providers into their internally managed teams. These 67 project managers worked in 24 US-based organizations and one UK-based organization and represent many industries. The size of the client organizations in terms of annual revenues ranged from \$6 million to \$117 billion. The mean revenue among the client firms was \$32.2 billion, and the median revenue was \$15.7 billion. The size of the client organizations in terms of employees ranged from 43 to 327,000 people. The mean number of employees in the client firms was 74,852 people and the median number of employees was 38,000 people.

The framework on the effects of the client project manager's role emerged from the interview data. We categorized the effects into logical groupings and indicated the approximate frequency with which project managers mentioned these effects. The effects are categorized by six areas of concern: organizational support, project planning, knowledge transfer, process standardization, managing work, and managing people.

Stakeholder category	Stakeholder group	Number of research participants
Client	Senior management (CEO, CFO, COO, VP)	4
	IT management (CIO, PMO, Directors)	31
	Client project managers	67
	Users/business unit managers	3
	Specialists	2
Provider	Senior management	31
	Sales and marketing	13
	Account/engagement managers	11
	Delivery team	50
Advisors	Lawyers	6
	Consultants	5
Officials	Economic and software park officials	9
	Total number of participants	232

Table A.2 Offshore outsourcing research base

We independently assessed the number of project managers who mentioned these issues. For each effect, we coded whether the effect was "seldom," "sometimes," or "often" mentioned by project managers. An effect was classified as "seldom" when it was mentioned by one or two client project managers. An effect was classified as "often" if it was mentioned by at least half the client managers. Between these two extremes, the effect was classified as "sometimes." We independently agreed on the coding of 24 of the 27 effects. We discussed the remaining three effects and changed some of the language of the effect to agree on a coding (such as removing the term "always" from an effect).

Research method used in Chapter 6: Bundled services

Our review of extant research examined firstly an IDC database of 877 plus 303 outsourcing deals (including 865 bundled contracts) signed globally between 2003 and 2008. This exists as a listing of headline characteristics of these deals and gives insight into propensity to buy bundled services at the level of who is buying, what they are buying, where these services are being delivered, and who is delivering those services. We also reviewed the existing ITO and BPO literature from 1990 to 2008. Virtually none focuses on client propensity to buy bundled services. But there are major studies on determinants of outsourcing decisions, goals sought from outsourcing, and sourcing strategies pursued during this period. These provided insight into buying behavior, outcomes, and how these affect subsequent buying patterns. Our own research in ITO and BPO from 1991 to 2009 was also reviewed, including recent studies into BPO, offshore outsourcing, the configuration of outsourcing arrangements, and objectives pursued by clients. This database consists of 650-plus outsourcing arrangements. We also reviewed the marketing literature to seek further insight on factors that explain the purchasing of bundled services. We developed two deliverables. Firstly, a provisional model of the weighted factors that need to be investigated to establish outsourcing purchasing behavior, with the specific purpose of attempting to identify which factors can explain propensity to buy bundled services either as ITO bundles, BPO bundles, or ITO/BPO hybrid bundles. Secondly, we developed an open-ended questionnaire for using with interviewees at organizations that do buy, or potentially will buy bundled services, to determine the key factors for them.

For this chapter we then conducted 54 further interviews with 32 client organizations of ITO and BPO services in the United States, Europe, and Asia Pacific. This sample was opportunistic and gave insights into a range of sectors and cultures including energy, mining, retail, oil, insurance, telecoms, ICT services, gaming, utilities, financial services, manufacturing, health care, parts distribution, mail, and communications. We also interviewed a further 15 outsourcing experts drawn from three major suppliers, including Accenture. The analysis of the interviews provided insights into buying practices and helped us to refine the weighted model of client propensity to buy bundled services in the ITO/BPO space and develop the five major client profiles.

Research method used in Chapter 7: Rural and impact sourcing

The five case studies featured in this chapter are based on 48 interviews and visits to delivery centers operated by four of the five companies. We interviewed founders, senior executives, delivery center managers, staff, and clients (see Table A.3). For provider interviews, we asked questions about the history of the company, growth of the company in terms of sales and employees, the financials of the companies, current and future competitive positioning, reasons for choosing the delivery center locations, core capabilities in terms of their service offerings, current and past clients, employee recruitment, development, and retention, and lessons learned. For client interviews, we asked questions about their reasons or drivers of outsourcing, reasons for selecting the provider, the transition period, the quality of services received, the costs incurred, and lessons learned. All provider interviews were conducted face-to-face at provider sites with the exception of one phone interview at Samasource. Client interviews were conducted either by phone or face-to-face. In addition to formal interviews, we learned about outsourcing to rural providers from three clients presenting at a conference, for which we were also presenters. These clients are indicated by an asterisk in Table A.3.

Research method used in Chapter 8: Cloud computing

This chapter draws on three main sources – an interview base, industry and academic reports, the LSE Outsourcing Unit 1600 organization database, and a large-scale survey. We undertook 53 interviews with leading industry players across the cloud supply chain during 2010–11. The case study and interview research work was sponsored by Accenture, together with research funding from the LSE. We interviewed providers of cloud infrastructures and services, system integrators, and users of cloud services. In terms of roles, we spoke to CEOs, CIOs, marketing managers, and service directors. Interviews were normally undertaken by one person and were held over the phone. They typically lasted at least one hour, with some running to over two hours.

Each interview was then transcribed and the transcripts were shared among the research team. Each interview was then coded by one member of the team. Initially codes were used to simply classify each element ("quotations") of the interview. For example, some parts of the interviews related to "hybrid clouds" others to "lock-in" or "pay-as-you-drink models." As the interviews were being coded, a parallel process of consolidation took place.

The first step toward consolidating codes into analytically distinct segments that can be examined together both within and between interviews involved tidying up the initial

Firms studied	Country	Number of employees in 2011	Provider/ Client	Number of interviews
CrossUSA	US	110	Provider	15
Rural Sourcing, Inc.	US	100	Provider	6
Onshore Technology Services	US	100	Provider	9
Cayuse Technologies	US	280	Provider	8
Samasource	US	15	Provider (non-profit)	1
East Coast Healthcare	US	5,400	Client	1
Midwest Healthcare 1	US	600	Client	1*
Midwest Healthcare 2	US	4,200	Client	1
Midwest Legal	US	650	Client	1
Midwest Utility	US	9,500	Client	1*
Midwest Financial Services	US	5,500	Client	2*
Global Provider	Global	225,000	Client	1
East Coast Software	US	400	Client	1
			Total	48

Table A.3 Research base used for rural/impact sourcing

Note: * Indicates client presentation.

codes, for example by combining codes that covered the same concept but were labeled slightly differently. For example, codes initially labeled as "pay-as-you drink" and "payper-drink" models were merged. This process of analysis was also based on, and contrasted with, themes from the cloud and outsourcing literatures (Eisenhardt 1989b). The process involved an iterative reading, coding, and cycling through the codes. The validity of the coding and analysis was constantly checked by searching for counterexamples and nuances in the text and codes.

The resulting codes and associated quotations were then shared with the remainder of the project team. This resulted in further insights and themes to explore. Finally, a selection of the coded quotations was selected for presentation in Chapter 8. The selection process was guided by the need for a coherent narrative flow.

In addition to reviewing the academic literature and associated industry reports, a distinctive feature of the work reported is the inclusion of results from a large-scale survey of IT industry practitioners. The survey was undertaken by HfS Research³ in conjunction with the LSE Outsourcing Unit. HfS Research is a leading research analyst firm and socialnetworking community that is focused on helping enterprises make complex decisions with their global sourcing strategies. It has 120,000 monthly visitors and 37,000 subscribers and leverages this community of sourcing professionals to deliver rapid insights on the global sourcing industry.

The survey ran between October and November 2010. Other views on the data are available on the HfS site.⁴ The survey was conducted online and disseminated across a broad number of networks and media to collect a random sample of (1) business (non-IT) executives, (2) IT executives, and (3) technology vendors, advisors/consultants, and service providers of cloud-based services. The survey was sent in a number of outgoing e-mails and was also available live on a number of popular websites and blogs. Three

separate question sets were developed that were tailored to these three groupings. Each question set was completed via a 12-minute web-based questionnaire. IP addresses were collected to ensure duplicate responses were deleted. Networks were spread across multiple technology blogs and media, largely ZDNet blogs, Global Services Media, Shared Services and Outsourcing Network, and the HfS Research subscriber base (accounting for 75% of respondents). In total 1035 responses were collected, 214 from IT executives, 414 from business executives, 407 from technology vendors, advisors/consultants, and service providers of cloud-based services.

Notes

- 1. The ITO papers were coded by Mary Lacity, Shaji Khan, and Aihua Yan.
- 2. The BPO papers were coded by Mary Lacity, Stan Solomon, and Aihua Yan.
- 3. http://www.horsesforsources.com/research-services.
- 4. Link to HfS blog is http://www.horsesforsources.com/

Appendix B: Glossary

Absorptive Capacity: An organization's ability to scan, acquire, assimilate, and exploit valuable knowledge (e.g., Cohen and Levinthal 1990; Grimpe and Kaiser 2010; Lee 2001; Lin et al. 2007; Luo et al. 2010; Reitzig and Wagner 2010).

Access to Expertise/Skills: A client organization's desire or need to access provider skills/expertise (e.g., Clark et al. 1995; Currie et al. 2008; Lacity et al. 1994; Lam and Chua 2009).

Access to Global Markets: A client organization's desire or need to gain access to global markets by outsourcing to providers in those markets (e.g., Gorp et al. 2007; Rao et al. 2006; Sobol and Apte 1995).

Adaptability: The extent to which a party is able to adapt a business process to meet changes in the environment (e.g., Sia et al. 2008).

Alignment of Outsourcing and Business Strategy: The fit or congruence between a firm's business strategy and its outsourcing strategy (e.g., Lee 2006; McLellan et al. 1995).

Asset Specificity: The degree to which an asset can be redeployed to alternative uses and by alternative users without sacrifice of productive value (Sia et al., 2008; Williamson 1976, 1991b).

Benefits and Risk Sharing: Degree of articulation and agreement on the benefits and risk sharing between partners engaged in an outsourcing arrangement (e.g., Lee and Kim 1999).

Bundled Services: A mix of business process and/or IT services purchased separately or at the same time from the same provider where synergies and efficiencies are sought in end-to-end processing, governance, relationship management, cost, and performance.

Business Process Management Capability: The ability of an organization to efficiently and effectively manage a business process (e.g., McIvor et al. 2009; Saxena and Bharadwaj 2009).

Business/Process Performance Improvements: A client organization's desire or need to engage a provider to help improve a client's business, processes, or capabilities (e.g., DiRomualdo and Gurbaxani 1998; Gewald and Dibbern 2009).

Business Strategic Type: An organization's strategy to address three fundamental business problems – entrepreneurial, engineering, and administrative. Categorized under the Miles and Snow typology as Defenders, Prospectors, Analyzers, and Reactors (Aubert et al. 2008, 2004; Kenyon and Meixell 2011; Miles and Snow 1978; Shih et al. 2005; Teng et al. 1995).

Captive Center: An ITO and/or BPO delivery center that is based in one country but is owned by a company based in a foreign country.

Career Development of Employees: A client organization's desire or need to provide better career opportunities for employees (e.g., Apte et al. 1997; Lacity et al. 2004).

Centralization of Department: The degree to which the department's decision-making is concentrated within a particular group or location (e.g., Delmotte and Sels 2008; Sobol and Apte 1995).

Change Catalyst: A client organization's desire or need to use outsourcing to bring about large-scale changes in the organization (e.g., Gospel and Sako 2010; Linder 2004).

Change Management Capability: The extent to which a client organization effectively manages change (e.g., Lacity et al. 2004).

Chargeback Structure: The extent to which a client organization charges users for services, usually categorized as either a cost center or profit center (Barthelemy and Geyer 2005).

CIO-CEO Proximity: The reporting level of the CIO vis-à-vis the CEO (e.g., Arnett and Jones 1994).

City Size: The size of a city in which a client or provider is located (e.g., Rajeev and Vani 2009).

Clear Authority Structures: A provider's obligation to the client firm in terms of delineating the decision-making rights and reporting structures for an outsourcing engagement, in terms of the roles and responsibilities of all parties involved.

Client Age: The age of a client organization in years (e.g., Delmotte and Sels 2008).

Client Dependency: The degree to which a provider depends on a client (e.g., Gainey and Klaas 2003).

Client Experience with Multiple Governance Modes: A client organization's level of experience with multiple governance modes, such as captive centers and offshore outsourcing (e.g., Hutzschenreuter et al. 2011).

Client Experience with Outsourcing: A client organization's level of experience with outsourcing or offshoring (e.g., Gopal et al. 2003; Mani et al. 2010).

Client Management Capability: The extent to which a provider organization is able to effectively manage client relationships (e.g., Howells et al. 2008; Levina and Ross 2003).

Client Outsourcing Readiness: The extent to which a client organization is prepared to engage an outsourcing provider by having realistic expectations and a clear understanding of internal costs and services compared to outsourced costs and services (e.g., Cullen et al. 2005a; Iacovou and Nakatsu 2008; McIvor et al. 2009).

Client Size: The size of a client organization, usually measured as total assets, sales, and/or number of employees (e.g., Ang and Straub 1998; Wahrenburg et al. 2006).

Client User Participation: The degree to which users in the client organization participate in outsourcing (e.g., Iacovou and Nakatsu 2008).

Client/Provider Alignment: The degree to which client and provider incentives, motives, interests, and/or goals are aligned (e.g., Sen and Sheil 2006).

Client–Provider Interface Design: The planned structure on where, when, and how client and provider employees work, interact, and communicate (e.g., Rottman and Lacity 2006; Sen and Shiel 2006).

Client-Specific Knowledge Required: The degree to which a unit of work requires a significant amount of understanding/knowledge about unique client systems, processes, or procedures (e.g., Aubert et al. 2004; Dibbern et al. 2008; McKenna and Walker 2008; Nam et al. 1996).

Cloud Computing: Internet-based computing, whereby shared resources, software, and information are provided to computers and other devices on demand, like the electricity grid (Wikipedia).

Coalition: A strategy in which an agent enlists the aid or endorsement of other people to influence a target to do what the agent wants (e.g., Bignoux 2011).

Commercial Exploitation: A client organization's desire or need to partner with a provider to commercially exploit existing client assets or to form a new enterprise (e.g., Agarwal et al. 2006; DiRomualdo and Gurbaxani 1998).

Commitment: The degree to which partners pledge to continue the relationship (e.g., Bhargava and Sundaresan 2004; Lee and Kim 1999; Levina and Su 2008).

Communication: The degree to which parties are willing to openly discuss their expectations, directions for the future, their capabilities, and/or their strengths and weaknesses (e.g., Gainey and Klaas 2003; Klepper 1995).

Concern for Regulatory Requirements: A client organization's concerns about complying with regulations (e.g., Howells et al. 2008).

Concern for Security/Intellectual Property: A client organization's concerns about security of information, transborder data flow issues, and protection of intellectual property (e.g., Khalfan 2004; Rao et al. 2006; Walden 2005; Wüllenweber et al. 2008a, b).

Configurational Approach: The client firm matches multiple factors in configurations that maximize their chances of outsourcing success. For example, matching strategic intent with contractual governance, matching transaction attributes with contractual governance (e.g., Saxena and Bharadwaj 2009; Sen and Shiel 2006).

Conflict: Degree of incompatibility of activities, resources, and goals between partners (e.g., Lee and Kim 1999).

Conflict Resolution: The degree to which clients and providers quickly, fairly, and meaningfully resolve disputes (e.g., Wüllenweber et al. 2008a).

Contract Detail: The number or degree of detailed clauses in the outsourcing contract, such as clauses that specify prices, service levels, key process indicators, benchmarking, warranties, and penalties for non-performance (e.g., Handley and Benton 2009; Luo et al. 2010; Pinnington and Wookcock 1995; Poppo and Zenger 2002).

Contract Duration: The duration of the contract in terms of time (e.g., Willcocks et al. 2004).

Contract Flexibility: The degree to which a contract specifies contingencies and enables parties to change contractual terms (e.g., Kern et al. 2002d; Sia et al. 2008).

Contract Management Capability: The extent to which a client organization is able to effectively manage contracts with providers, including the ability to track service levels and verify invoices (e.g., Sanders et al. 2007).

Contract Negotiation Capability: The extent to which a client organization is able to effectively bid, select, and negotiate effective contracts with providers (e.g., Feeny and Willcocks 1998).

Contract Recency: Contract date as either the year the contract was signed or years lapsed (e.g., Lacity and Willcocks 1998).

Contract Size: The size of the outsourcing contract, usually measured as the total value of the contract in monetary terms (e.g., Gewald and Gellrich 2007; Oh et al. 2006; Rottman and Lacity 2008).

Contract Type: A term denoting different forms of contracts used in outsourcing. Examples include customized, fixed priced, time and materials, fee for service, and

partnership-based contracts (e.g., McFarlan and Nolan 1995; Poppo and Zenger 2002; Ross and Beath 2006).

Control Mechanisms: Certain means or devices a controller uses to promote desired behavior by the controlee (e.g., Choudhury and Sabherwal 2003; Daityari et al. 2008; Kirsch 1997).

Convenience: A client organization's desire to select a sourcing option based on ease of use, convenience, and less frustration (e.g., McKenna and Walker 2008).

Cooperation: The degree to which client and provider employees are willing to work together in common pursuit (e.g., Dibbern et al. 2008; Wullenweber et al. 2008a).

Corporate Social Responsibility Capability: An organization's ability to behave in a socially responsible way, such as promoting environmental responsibility and promoting fair labor practices (e.g., Brown 2008).

Cost Predictability: A client organization's desire or need to use outsourcing to better predict costs (e.g., Sobol and Apte 1995).

Cost Reduction: A client organization's need or desire to use outsourcing to reduce or control costs (e.g., Barthelemy and Geyer 2004; Borman 2006).

Country: The nationality of the client or provider organization (e.g., Barthelemy and Geyer 2005; Reitzig and Wagner 2010).

Country – Business Attractiveness: The degree to which a country is attractive to BPO clients because of favorable business environmental factors such as economic stability, political stability, cultural compatibility, infrastructure quality, security of IP (e.g., Doh et al. 2009; Malos 2009).

Country – Financial Attractiveness: The degree to which a country is attractive to BPO clients because of favorable financial factors such as labor costs, taxes, regulatory, and other costs (e.g., Doh et al. 2009; Malos 2009).

Country – Human Resource Attractiveness: The degree to which a country is attractive to BPO clients because of favorable people skills and availability factors such as size of labor pool, education, language skills, experience, and attrition rates (e.g., Malos 2009; Mehta et al. 2006).

Critical Role of Activity – Organization: The degree to which a client organization views the business process or IT activity as a critical enabler of business success (e.g., Klaas et al. 2001; Saunders et al. 1997; Straub et al. 2008; Teng et al. 1995; Wahrenburg et al. 2006).

Cultural Distance: The extent to which the members of two distinct groups (such as client and provider organizations) differ on one or more cultural dimensions (e.g., Dibbern et al. 2008; Mehta et al. 2006).

Cultural Distance Management: The extent to which client and provider organizations understand, accept, and adapt to cultural differences (e.g., Tate et al. 2009; Winkler et al. 2008).

Culture: Shared values, beliefs, practices, and assumptions that characterize a group (e.g., Allen et al. 2002; Rajeev and Vani 2009; Roberts and Wasti 2002).

Decision Sponsorship: The stakeholders involved in an outsourcing decision (e.g., Lacity and Willcocks 1998).

Delivery Capability: A provider's ability to deliver a contracted service on time, on budget, and with agreed upon service quality (e.g., Howells et al. 2008).

Demonstratability: The extent to which a provider organization articulates outcomes in a convincing way to the client (e.g., Oza et al. 2006).

Department Performance: CXOs', CEOs', or organizational members' perceptions of the function's performance or competence (e.g., Klaas et al. 2001).

Department Power: The level of influence of the department on the organization (e.g., Dunbar and Phillips 2001).

Department Size: The size of a department usually measured as total department budget, number of functions, and/or number of employees (e.g., Calantone and Stanko 2007).

Domain Understanding: The extent to which a provider has prior experience and/or understanding of the client organization's business and technical contexts, processes, practices, and requirements (e.g., Clark et al. 1995; Gopal et al. 2002; Luo et al. 2010).

Effective Knowledge Sharing: The degree to which clients and providers are successful in sharing and transferring knowledge (e.g., Lee 2001; Mahmoodzadeh et al. 2009; Murray et al. 2009).

Engagement of Multiple Providers: The situation in which a client organization engages more than one provider or when one provider subcontracts client work (e.g., Currie 1998).

Environmental Capability: The use of physical space for branding services and motivating staff (e.g., Budhwar et al. 2006).

Ethnocentricism: The tendency to believe that one's own race or ethnic group is the most important and that some or all aspects of its culture are superior to those of other groups (e.g., van den Berghe 1981).

Evaluation Process: The client organization's process for evaluating and selecting providers (e.g., Cullen et al. 2005a; Handley and Benton 2009).

Exchange: A strategy in which an agent explicitly or implicitly offers to provide a favor or benefit to a target in return for doing what the agent requests (e.g., Bignoux 2011).

External Production Cost Advantage: The degree to which a provider is perceived to have an advantage over a client organization in production cost economies (e.g., Ang and Straub 1998; Rajeev and Vani 2009; Williamson 1991b).

Fear of Losing Control: A client organization's concerns that outsourcing may result in loss of control over IT or business processes (e.g., Collins and Millen 1995; Lewin and Peeters 2006; Patane and Jurison 1994; Sanders et al. 2007).

Financial Leverage: The degree to which a business utilizes debt rather than equity to fund its operations (e.g., Hall and Liedtka 2005).

Financial Slack: Financial resources an organization possesses in excess of what is required to maintain the organization (e.g., Ang and Straub 1998; Hall and Liedtka, 2005).

Flexibility Enablement: A client organization's desire or need to outsource to increase the flexibility of the use and allocation of resources (e.g., Slaughter and Ang 1996; Tate and Ellram 2009).

Focus on Core Capabilities: A client organization's desire or need to outsource in order to focus on its core capabilities (e.g., Carey et al. 2006; Gewald and Dibbern 2009; Lacity et al. 1994; Linder 2004).

Frequency of Project Status Meetings: The regularity with which project status meetings between the client and the provider take place (e.g., Gopal et al. 2002).

Future Business Potential: A provider's perception of the possibility of obtaining future contracts from a client (e.g., Gopal et al. 2003).

Geographic Distance: The physical distance between two locations (e.g., Dibbern et al. 2008; Doh et al. 2009).

Headcount Reduction: A client organization's need or desire to use outsourcing to reduce the number of staff (e.g., De Loof 1995).

HR Management Capability: An organization's ability to identify, acquire, develop, retain, and deploy human resources to achieve both provider's and client's organizational objectives (e.g., Kuruvilla and Ranganathan 2010).

Impact Sourcing: The practice of hiring and training marginalized people in ITO or BPO industries that normally would have few opportunities for good employment (Rockefeller Foundation 2011).

Industry: The primary industry classification of a client organization. Common classifications include service versus manufacturing, private versus public, banking versus others, and so on (e.g., Bardhan et al. 2007; Barthelemy and Geyer 2004; Grover et al. 1994a, b; Loh and Venkatraman 1992a, b, c; Mani et al. 2010).

Influences – Coercive: Influences that result from both formal and informal pressures exerted on an organization by other organizations upon which they are dependent (e.g., Ang and Cummings 1997; Bignoux 2011; DiMaggio and Powell 1991).

Influences – External and Internal: The combination of external media, provider pressure, and internal communications at the personal level among managers of companies (e.g., Borman 2006; Collins and Millen 1995; Hu et al. 1997; Lewin and Peeters 2006; Pinnington and Woolcock 1995).

Influences – Mimetic: Influences that arise from the perception that peer organizations are more successful; by modeling themselves based on peer organizations, the mimicking organizations aim to achieve similar results (e.g., Ang and Cummings 1997; DiMaggio and Powell 1991; Klaas et al. 2001).

Influences – Normative: Influences arising from norms of professionalism, including formal education and professional and trade associations (e.g., Borman 2006; DiMaggio and Powell 1991).

Information Intensity: An indicator of whether a client organization is IT intensive; as measured, for example, by IS budget as percentage of sales (e.g., Grover et al. 1994a, b).

Innovation: A client organization's desire or need to use outsourcing as an engine for innovation (e.g., Ciravegna and Maielli 2011; Quinn 2000).

IT Management Competence: Senior executives' perceptions of the IT manager's competence (e.g., Willcocks and Plant 2003).

Key Performance Indicators: A set of measures to assess performance (e.g., De Toni et al. 2007; Mahmoodzadeh et al. 2009).

Knowledge Required: The degree to which a unit of work requires a significant amount of understanding/knowledge about unique, specialized, or advanced content (e.g., Lam and Chua 2009).

Learning Curve Effects: The degree to which clients and/or providers learn from their experiences (e.g., Daityari et al. 2008).

Legal and Political Uncertainties: The extent to which a county's legal and political environments are uncertain, unstable, or unfamiliar (e.g., Currie et al. 2008; Penfold 2009; Smith and McKeen 2004).

Length of Relationship: The number of years a client and a provider organization have worked together (e.g., Gainey and Klaas 2003; Gopal et al. 2003; Lee and Kim 1999).

Managing Client Expectations: The extent to which a provider fosters realistic client expectations, avoids over-promising, and informs clients about changes in project status in a timely manner (e.g., Oza and Hall 2005; Taylor 2006).

Measurement Difficulty: The degree of difficulty in measuring performance of exchange partners in circumstances of joint effort, soft outcomes, and/or ambiguous links between effort and performance (e.g., Eisenhardt 1989a; Tate and Ellram 2009).

Middle Management Commitment/Support: The extent to which middle managers provide leadership, support, and commitment to outsourcing/offshoring (e.g., Levina and Su 2008).

Modifiability: "The ability in outsourcing to allow alteration of service attributes to address changing business requirements" (e.g., Sia et al. 2008).

Mutual Dependency: The degree to which a client and provider organization depend on each other (e.g., Lee and Kim 1999).

Mutual Understanding: Degree of understanding of behaviors, goals, and policies between partners (e.g., Lee and Kim 1999; Sen and Shiel 2006).

Need to Generate Cash: A client organization's desire or need to generate cash through the sale of IT assets to the provider (Smith et al. 1998).

Number of Liaisons: The number of people who serve as intermediaries between client and provider organizations (e.g., Gopal et al. 2002).

Opportunism: "Self-interest seeking with guile" or "Making of false or empty, that is self-disbelieved, threats and promises" (Tate and Ellram 2009; Williamson 1976, 1991b).

Outsourcing – Applications Development and Maintenance: The outsourcing of new application development and/or the support and maintenance of existing applications (e.g., Grover et al. 1996).

Outsourcing – End-User Support: The outsourcing of activities pertaining to end-user support such as help/service desk (e.g., Grover et al. 1996).

Outsourcing – Planning and Management: Outsourcing of activities involving IS planning and management (e.g., Grover et al. 1996).

Outsourcing – Systems Operations: Outsourcing of activities pertaining to systems operations such as data centers (e.g., Grover et al. 1996).

Outsourcing – Telecommunications and Networks: Outsourcing of activities associated with telecommunications and networks (e.g., Grover et al. 1996).

Outsourcing Decision – Degree of Outsourcing: The amount of outsourcing as indicated by percentage of budget outsourced and/or type and number of business processes outsourced (e.g., Gilley et al. 2004; Lacity and Willcocks 1998; Salimath et al. 2008).

Outsourcing Decision – Offshore: A client organization's decision to engage an offshore provider (e.g., Fifarek et al. 2008; Lee and Kim 2010; Mirani 2007; Rao et al. 2006).

Outsourcing Decision – Make or Buy: The fundamental make or buy decision (e.g., Williamson 1991b) in which a client organization decides to keep a business process in-house or decides to engage an outsourcing provider, measured as a binary variable (e.g., Lee and Kim 2010).

Outsourcing Decision – Multi-Sourcing: A client organization's decision to engage multiple BPO providers (e.g., Sia et al. 2008).

Outsourcing Outcomes – Activity Performance Improvements: The degree to which a client organization reports IS or BP performance improvements as a consequence of outsourcing, such as reports of costs savings realized or better quality of services (e.g., Dibbern et al. 2008; Lacity and Willcocks 1998; Mani et al. 2010).

Outsourcing Outcomes – Activity Performance Improvements – Offshore: The degree to which a client organization reports IS or BP performance improvements as a consequence of offshore outsourcing, such as reports of costs savings realized or better quality of services (e.g., Levina and Su 2008).

Outsourcing Outcomes – Organizational Business Performance – Client: The degree to which an organization reports firm-level business performance improvements as a result of an outsourcing decision, such as stock price performance, return on assets, expenses, and profits (e.g., Agarwal et al. 2006; Gopal et al. 2003; Madison et al. 2006; Mojsilovic et al. 2007; Rajeev and Vani 2009; Reitzig and Wagner 2010).

Outsourcing Outcomes – Project Performance: Reports on project outcomes in terms of costs, quality, and/or time for outsourced projects (e.g., Gopal et al. 2002).

Outsourcing Outcomes – Project Performance – Offshore: Reports on project outcomes in terms of costs, quality, and/or time for projects outsourced offshore (e.g., Rottman and Lacity 2008).

Outsourcing Outcomes – Success: A client organization's general perceptions of success and satisfaction with outsourcing (e.g., Levina and Ross 2003; Sia, et al. 2008).

Outsourcing Outcomes – Success – Offshore: A client organization's general perceptions of success and satisfaction with offshore outsourcing (e.g., Vivek et al. 2008; Winkler et al. 2008).

Partnership View: A client organization's consideration of providers as trusted partners rather than as opportunistic vendors (e.g., Kishore et al. 2003; Saunders et al. 1997; Sen and Shiel 2006; Willcocks et al. 2004).

Persistence of Expectations: "The tendency for prior beliefs and expectations to persevere, even in the face of new data or when the data that generated those beliefs are no longer valid" (e.g., Ho et al. 2003; Lewin and Peeters 2006).

Political Reasons: A client stakeholder's desire or need to use an outsourcing decision to promote personal agendas (e.g., Hall and Liedtka 2005; Lacity et al. 1994; Maelah et al. 2010).

Prior Client/Provider Working Relationship: The situation in which the client and provider organizations have worked together in the past (e.g., Gopal et al. 2003; Lee and Kim 1999; Mani et al. 2010).

Prior Firm Performance - Client: Firm performance usually measured as net profits, return on assets, expenses, earnings per share, and/or stock price prior to an outsourcing decision (e.g., Dunbar and Phillips 2001; Gilley et al. 2004; Hall and Liedtka 2005).

Prior Firm Performance – Provider: Firm performance usually measured as net profits, return on assets, expenses, earnings per share, and/or stock price prior to an outsourcing decision (e.g., Gewald and Gellrich 2007; Hall and Liedtka 2005; Nadkarni and Herrmann 2010).

Proactive Sense Making: The extent to which executives proactively create awareness and understanding in situations of high complexity or uncertainty in order to make decisions (e.g., Sia et al. 2008).

Process Complexity: The degree to which a task requires compound steps, the control of many variables, and/or where cause and effect are subtle and dynamic (e.g., Penfold 2009; Ventovuori and Lehtonen 2006).

Process Integration: The degree to which clients and providers are able to integrate processes (e.g., Sen and Sheil 2006).

Process Interdependence: The level of integration and coupling among tasks; processes that are highly integrated are tightly coupled and difficult to detach (e.g., Sanders et al. 2007).

Process Interoperability: The extent to which a business process can operate on many provider platforms (e.g., Sia et al. 2008).

Process Standardization: The degree to which a process is standard (e.g., Tate and Ellram 2009).

Product Quality: The quality of the end product delivered as part of an outsourcing/offshoring arrangement (e.g., Whitten and Leidner 2006).

Project Execution Swiftness: The speed with which a project was carried out and deployed (e.g., Agarwal et al. 2006).

Project Scoping Accuracy: A provider firm capability to estimate the contract scope accurately (not underbid or overbid) (Koh et al. 2004).

Prompt Payment: A client's prompt payment to providers (e.g., Ho et al. 2003).

Public Awareness: The degree to which there is publicly available information about outsourcing or offshoring (e.g., Hutzschenreuter et al. 2011).

Public Perception of Outsourcing: The degree to which the public has a negative perception of outsourcing or offshoring (e.g., Sen and Sheil 2006).

R&D Spend: The amount of money an organization spends on R&D (e.g., Calantone and Stanko 2007; Grimpe and Kaiser 2010).

Rapid Delivery: A client organization's desire or need to engage in outsourcing in order to speed up delivery (e.g., Bandyopadhyay and Hall 2009; Khan and Fitzgerald 2004; Lam and Chua 2009).

Relational Governance: The unwritten, worker-based mechanisms designed to influence inter-organizational behavior (Macneil 1980; e.g., Kim 2008; Poppo and Zenger 2002).

Relationship Flexibility: The willingness of client and provider organizations to adapt the relationship to changing circumstances (e.g., Haried and Ramamurthy 2009; Klepper 1995).

Relationship Management Capability – Provider: A provider firm's capability to effectively manage its relationships with client firms (e.g., Levina and Ross 2003).

Relationship Quality: The quality of the relationship between a client and provider (e.g., Lee 2001; Saxena and Bharadwaj 2009; Sia et al, 2008; Whitten and Leidner 2006).

Relationship-Specific Investment: Specific investments made over time which discourage opportunism, reinforce signals of the client firms, and create extendedness of the relationships (e.g., Goo et al. 2007; Tate and Ellram 2009).

Risk: The extent to which a transaction exposes clients to a chance of loss or damage (e.g., Wullenweber et al. 2008a).

Risk Management Capability: An organization's practice of identifying, rating, and mitigating potential risks associated with outsourcing (e.g., Borman 2006; Smith and McKeen 2004).

Rural Sourcing: The practice of locating delivery centers in low-cost, non-urban areas (Lacity et al. 2010b).

Scalability: The ability to scale volume of service up or down based on demand (e.g., Currie et al. 2008; Redondo-Cano and Canet-Giner 2010; Ross and Beath 2006).

Security, **Privacy**, **and Confidentiality Capability**: The proven ability of a provider to protect client data through investments in technology, training, process controls, audits, and other management practices (e.g., Sen and Shiel 2006).

Senior Leadership: The extent to which the senior executives of an organization are effective leaders (e.g., Lacity et al. 2004).

Service Quality: The quality of a service, frequently measured as a client's perception of a satisfactory service performance by the provider (e.g., Lewin and Peeters 2006; Park and Kim 2005).

Shared Services: The consolidation of support functions (such as human resources, finance, information technology, and procurement) from several departments into a stand-alone organizational entity whose only mission is to provide services as efficiently and effectively as possible (Accenture 2005).

Social Capital: The sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit (Nahapiet and Ghoshal 1998; Rottman 2008).

Social Norms: An individual's perceptions of the social pressures put on him or her to perform or not to perform the behavior in question (Ajzen and Fishbein 1980; e.g., Raman et al. 2007).

Sourcing Capability: Expertise in procurement and the ability to leverage aggregate purchasing power (e.g., Lacity et al. 2004).

Stakeholder Buy-In: Gaining commitment and support from all parties involved in outsourcing-related decisions (e.g., Seddon 2001; Tate and Ellram 2009).

Stakeholder Resistance: The degree to which stakeholders oppose an outsourcing decision (e.g., Ventovuori and Lehtonen 2006).

Strategic Flexibility: An organization's ability to precipitate strategic changes and adapt to substantial, uncertain, and rapidly occurring environmental changes (e.g., Nadkarni and Herrmann 2010).

Strategic Intent: A client organization's desire or need to outsource for strategic reasons, such as developing new capabilities that can be leveraged in the marketplace (e.g., Sanders et al. 2007).

Supplier Age: The age of a provider firm in years (e.g., Lahiri and Kedia 2009).

Supplier Business Growth: A provider increases revenues by extending services to existing clients, obtaining new clients, or through mergers and acquisitions (e.g., Saxena and Bharadwaj 2009).

Supplier Competition: The presence of multiple, reputable and trustworthy service providers which can provide a range of choices for the clients (e.g., Ang and Cummings 1997; Levina and Su 2008).

Supplier Employee Performance: The client's perception of the performance of individual provider employees (e.g., Daityari et al. 2008; Grover et al. 1996; Lam and Chua.2009; Winkler et al. 2008).

Supplier Employee Turnover: The percentage of the workers that are replaced in a given time period (e.g., Budhwar et al. 2006).

Supplier Management Capability: The extent to which a client organization is able to effectively manage outsourcing providers (e.g., Feeny and Willcocks 1998; Sanders et al. 2007; Willcocks et al. 2007).

Supplier Ownership: The provider's ownership structure; private, public, jointly owned with primary client (e.g., Kuruvilla and Ranganathan 2010).

Supplier Profitability: The profit possible for a provider on an outsourcing contract (Kern et al. 2002d).

Supplier Reputation: The public's perception of a provider's capabilities based on past performance and financial status (e.g., Gewald and Gellrich 2007; Levina and Ross 2003).

Supplier Size: The size of a provider organization usually measured as total assets, sales, and/or number of employees (e.g., Nadkarni and Herrmann 2010; Oh et al. 2006).

Supplier's Core Competencies: A provider's set of capabilities that enables it to gain a competitive advantage over rivals (e.g., Feeny et al. 2005; Klepper 1995).

Switching Costs: The costs incurred when a client organization changes from one provider or marketplace to another (e.g., Wahrenburg et al. 2006; Whitten and Leidner 2006).

Task Complexity: The degree to which a task requires compound steps, the control of many variables, and/or where cause and effect are subtle and dynamic (e.g., Gopal et al. 2002).

Task Interdependence: The level of integration and coupling among tasks (e.g., Mirani 2007).

Task Structure: The degree of clarity and structure pertaining to tasks (e.g., Daityari et al. 2008; Mirani 2007).

Technical and Methodological Capability: An organization's level of maturity in terms of technical or process-related standards, and best practices such as component reuse (e.g., Bardhan et al. 2007; Bharadwaj and Saxena 2009; Sia et al. 2008).

Technical Reasons: A client organization's desire or need to engage in an outsourcing relationship in order to gain access to leading edge technology available through the

providers and which may not be available in-house (e.g., Altinkemer et al. 1994; Sobol and Apte 1995).

Time Zone Differences: The difference in local times between two locations as measured in hours (e.g., Gokhale 2007; Mehta et al. 2006).

Top Management Commitment/Support: The extent to which senior executives provide leadership, support, and commitment to outsourcing/offshoring (e.g., Lee and Kim 1999; Seddon 2001; Tate and Ellram 2009).

Training: The nature or extent of provider employee training by either the client or provider organization (e.g., Malik 2009; Raman et al. 2007).

Transaction Costs: The effort, time, and costs incurred in searching, creating, negotiating, monitoring, and enforcing a service contract between buyers and providers (Williamson 1991b; e.g., Ang and Straub 1998; Levina and Su 2008).

Transaction Frequency: The number of times a client organization initiates a transaction, typically categorized as either occasional or frequent (Williamson 1991b; e.g., Wahrenburg et al. 2006).

Transaction Homogeneity: The degree to which the bundle of products and services are homogenous (e.g., Seddon 2001).

Transaction Size: The size of a transaction in terms of dollar value or effort (e.g., Gopal et al. 2003; Luo et al. 2010).

Transition Management Capability – Client: The extent to which an organization effectively transitions services to outsourcing providers or integrates client services with provider services (e.g., Luo et al. 2010; Saxena and Bharadwaj 2009).

Trust: The confidence in the other party's benevolence (e.g., Dibbern et al. 2008; Gainey and Klaas 2003).

Uncertainty: The degree of unpredictability or volatility of future states as it relates to the definition of requirements, emerging technologies, and/or environmental factors (Williamson 1991b; e.g., Aubert et al. 2004; Mani et al. 2010; Poppo and Zenger 2002).

Upward Appeals: The tactic of invoking the authority and power of higher management; for example, providers may bypass client liaisons by appealing to client management (e.g., Bignoux 2011).

Virtual Teaming: The extent to which the service provider and the client perceive and behave as part of the same team (e.g., Saxena and Bharadwaj 2009).

Bibliography

- Accenture (2005), Driving High Performance in Government: Maximizing the Value of Public-Sector Shared Services, white paper.
- Adler, P., McGarry, F., Talbot, W. and Binney, D. (2005), "Enabling Process Discipline: Lessons from the Journey to CMM Level 5," *MIS Quarterly Executive*, Vol. 4, 1, pp. 215–227.
- Adler, T. (2003/2004), "Member Trust in Teams: A Synthesized Analysis of Contract Negotiation in Outsourcing of IT Work," *The Journal of Computer Information Systems*, Vol. 44, 2, pp. 6–16.
- Agarwal, M., Kishore, R. and Rao, H. R. (2006), "Market Reactions to E-business Outsourcing Announcements: An Event Study," *Information & Management*, Vol. 43, pp. 861–873.
- Agerfalk, P. J. and Fitzgerald, B. (2008), "Outsourcing to an Unknown Workforce: Exploring Opensourcing as a Global Sourcing Strategy," *MIS Quarterly*, Vol. 32, 2, pp. 385–409.
- Ajzen, I. and Fishbein, M. (1980), Understanding Attitudes and Predicting Social Behavior, Prentice-Hall, Inc, Englewood Cliffs, NJ.
- Alami, A., Wong, B. and McBride, T. (2008), "Relationship Issues in Global Software Development Enterprises," *Journal of Global Information Technology Management*, Vol. 11, 1, pp. 49–68.
- Allen, D., Kern, T. and Mattison, D. (2002), "Culture, Power, and Politics in ICT Outsourcing in Higher Education," *European Journal of Information Systems*, Vol. 11, pp. 159–173.
- Al-Qirim, N. A. (2003), "The Strategic Outsourcing Decision of IT and Ecommerce: The Case of Small Businesses in New Zealand," *Journal of Information Technology Cases and Applications*, Vol. 5, 3, pp. 32–56.
- Alsbridge (2007), "Shared Services: Can You Be an Internal Outsourcer?," Alsbridge Consulting, Webinar on October 18. For an article based on this Webinar, See http:// www.outsourcingleadership.com/internal-outsourcer.shtml. However, in the government sector, Accenture (op. cit., 2005) found that there are more shared services centers for IT than for finance.
- Alsudairi, M. and Dwivedi, Y. K. (2010), "A Multi-Disciplinary Profile of IS/IT Outsourcing Research," *Journal of Enterprise Information Management*, Vol. 23, 2, pp. 215–258.
- Altinkemer, K., Chaturvedi, A. and Gulati, R. (1994), "Information Systems Outsourcing: Issues and Evidence," *International Journal of Information Management*, Vol. 14, pp. 252–268.
- Alvarez-Suescun, A. (2007), "Testing Resource-Based Propositions about IS Sourcing Decisions," *Industrial Management and Data Systems*, Vol. 107, 6, pp. 762–779.
- Amrosio, J. (2003), "Experts Reveal Hidden Costs of Offshore IT Outsourcing," *CIO Magazine*, http://searchcio.techtarget.com/tip/0,289483,sid19_gci895385,00.html. Accessed October 2011.
- Andriole, S. (2007), "The 7 Habits of Highly Effective Technology Leaders," *Communications of the ACM*, Vol. 50, pp. 67–72.
- Ang, S. and Cummings, L. (1997), "Strategic Response to Institutional Influences on Information Systems Outsourcing," *Organization Science*, Vol. 8, 3, pp. 235–256.

- Ang, S. and Straub, D. (1998), "Production and Transaction Economies and IS Outsourcing: A Study of the U.S. Banking Industry," *MIS Quarterly*, Vol. 22, 4, pp. 535–552.
- Applegate, L. M. and Montealegre, R. (1991), "Eastman Kodak Company: Managing Information Systems through Strategic Alliances," *Harvard Business School Case* 9-192-030.
- Apte, U., Sobol, M., Hanaoka, S., Shimada, T., Saarinen, T., Salmela, T. and Vepsalainen, A. (1997), "IS Outsourcing Practices in the USA, Japan, and Finland: A Comparative Study," *Journal of Information Technology*, Vol. 12, pp. 289–304.
- Arnett, K. and Jones, M. (1994), "Firms that Choose Outsourcing: A Profile," *Information & Management*, Vol. 26, pp. 179–188.
- Aron, R., Clemons, E. and Reddi, S. (2005), "Just Right Outsourcing: Understanding and Managing Risk," *Journal of Management Information Systems*, Vol. 22, 2, pp. 37–55.
- AT Kearney (2004), "Success through Shared Services," http://www.atkearney.com/ images/global/pdf/Shared_Services_S.pdf. Accessed October 2011.
- Atesci, K., Bhagwatwar, A., Deo, T., DeSouza, K. and Baloh, P. (2010), "Business Process Outsourcing: A Case Study of Satyam Computers," *International Journal of Information Management*, Vol. 30, pp. 277–282.
- Aubert, B., Beaurivage, G., Croteau, A. M. and Rivard, S. (2008), "Firm Strategic Profile and IT Outsourcing," *Information Systems Frontiers*, Vol. 10, 2, pp. 129–143.
- Aubert, B., Rivard, S. and Patry, M. (2004), "A Transaction Cost Approach to Outsourcing Behavior: Some Empirical Evidence," *Information & Management*, Vol. 41, pp. 921–932.
- Aubert, B. A., Dussault, S., Patry, M. and Rivard, S. (1999), "Managing the Risk of IT Outsourcing," *Proceedings of the 32nd Annual Hawaii International Conference on System Sciences*.
- Aundhe, M. D. and Mathew, S. (2009), "Risks in Offshore IT Outsourcing: A Service Provider Perspective," *European Management Journal*, Vol. 27, 6, p. 418.
- Babin, R. and Nicholson, B. (2009), "Corporate Social and Environmental Responsibility and Global IT Outsourcing," *MIS Quarterly Executive*, Vol. 8, 4, pp. 203–212.
- Babin, R. and Nicholson, B. (2011), "How Green Is My Outsourcer? Measuring Sustainability in Global IT Outsourcing," *Strategic Outsourcing: An International Journal*, Vol. 4, 1, pp. 47–66.
- Bahli, B. and Rivard, S. (2005), "Validating Measures of Information Technology Outsourcing Risk Factors," *Omega*, Vol. 33, 2, pp. 175–187.
- Baldwin, L. P., Irani, Z. and Love, P. E. D. (2001), "Outsourcing Information Systems: Drawing Lessons from a Banking Case Study," *European Journal of Information Systems*, Vol. 10, pp. 15–24.
- Bandyopadhyay, J. and Hall, L. (2009), "Off-shoring of Tax Preparation Services by US Accounting Firms: An Empirical Study," *Advances in Competitiveness Research*, Vol. 17, 1&2, pp. 72–90.
- Banerjee, A. and Williams, S. (2009), "International Service Outsourcing: Using Offshore Analytics to Identify Determinants of Value-Added Outsourcing," *Strategic Outsourcing: An International Journal*, Vol. 2, 1, pp. 68–79.
- Bardhan, I., Mithas, S. and Lin, S. (2007), "Performance Impacts of Strategy, Information Technology Applications, and Business Process Outsourcing in US Manufacturing Plants," *Production and Operations Management*, Vol. 16, 6, pp. 747–762.
- Bardhan, I., Whitaker, J. and Mithas, S. (2006), "Information Technology, Production Process Outsourcing, and Manufacturing Plant Performance," *Journal of Management Information Systems*, Vol. 23, 2, pp. 13–40.
Barney, J. (1999), "How a Firm's Capabilities Affect Boundary Decisions," Sloan Management Review, Vol. 40, 3, pp. 137–145.

Barthélemy, J. (2001), "The Hidden Costs of IT Outsourcing," *Sloan Management Review*, Vol. 42, 3, pp. 60–69.

- Barthélemy, J. and Geyer, D. (2004), "The Determinants of Total IT Outsourcing: An Empirical Investigation of French and German Firms," *The Journal of Computer Information Systems*, Vol. 44, 3, pp. 91–98.
- Barthélemy, J. and Geyer, D. (2005), "An Empirical Investigation of IT Outsourcing Versus Quasi-Outsourcing in France and Germany," *Information & Management*, Vol. 42, 4, pp. 533–542.
- Barzilai-Nahon, K. and Mason, R. M. (2010), "How Executives Perceive the Net Generation," *Information, Communication and Society*, Vol. 13, 3, pp. 396–418.
- Beaumont, N. and Costa, C. (2002), "Information Technology Outsourcing in Australia," Information Resources Management Journal, Vol. 15, 3, pp. 14–31.
- Benamati, J. and Rajkumar, T. M. (2002), "The Application Development Outsourcing Decision: An Application of the Technology Acceptance Model," *The Journal of Computer Information Systems*, Vol. 42, 4, pp. 35–43.
- Beulen, E. and Ribbers, P. (2003), "International Examples of Large-Scale Systems: A Case Study of Managing IT Outsourcing," *Communications of the AIS*, Vol. 11, pp. 357–376.
- Beverakis, G., Dick, G. and Cecez-Kecmanovic, D. (2009), "Taking Information Systems Business Process Outsourcing Offshore: The Conflict of Competition and Risk," *Journal of Global Information Management*, Vol. 17, 1, pp. 32–48.
- Bhalla, A., Sodhi, M. S. and Son, B.-G. (2008), "Is More IT Offshoring Better? An Exploratory Study of Western Companies Offshoring to South East Asia," *Journal of Operations Management*, Vol. 26, 2, pp. 322–335.
- Bharadwaj, S. and Saxena, K. (2009), "Building Winning Relationships in Business Process Outsourcing Services," *Industrial Management and Data Systems*, Vol. 109, 7, pp. 993–1011.
- Bharadwaj, S., Saxena, K. and Halemane, M. (2010), "Building a Successful Relationship in Business Process Outsourcing: An Exploratory Study," *European Journal of Information Systems*, Vol. 19, pp. 168–180.
- Bhargava, H. and Sundaresan, S. (2004), "Computing as Utility: Managing Availability, Commitment, and Pricing through Contingent Bid Auctions," *Journal of Management Information Systems*, Vol. 21, 2, pp. 201–227.
- Bignoux, S. (2011), "Partnerships, Suppliers, and Coercive Influence," *Journal of Applied Business Research*, Vol. 27, 3, pp. 117–135.
- Boh, W., Ren, Y., Kiesler, S. and Bussjaeger, R. (2007), "Expertise and Collaboration in the Geographically Dispersed Organization," Organization Science, Vol. 18, 4, pp. 595–612.
- Borman, M. (2006), "Applying Multiple Perspective to the BPO Decision: A Case Study of Call Centers in Australia," *Journal of Information Technology*, Vol. 21, pp. 99–115.
- Bowen, D. and Jones, G. (1986), "Transaction Cost Analysis of Service Organization-Customer Exchange," *Academy of Management Review*, Vol. 11, 2, pp. 428–441.
- Braun, I., Pull, K., Alewell, D., Störmer, S. and Thommes, K. (2011), "HR Outsourcing and Service Quality: Theoretical Framework and Empirical Evidence," *Personnel Review*, Vol. 40, 3, pp. 364–382.
- Britton, D., Clark, P., Cass, A. J., Clarke, P. E. L., Coles, J., Colling, D. J., Doyle, A. T., Geddes, N. I., Gordon, J. C., Jones, R. W. L., Kelsey, D. P., Lloyd, S. L., Middleton, R. P., Patrick, G. N., Sansum, R. A. and Pearce, S. E. (2004), A Grid for Particle Physics – From

Testbed to Production, GridPP – The UK Grid for Particle Physics, http://www.gridpp.ac. uk/papers. Accessed October 2011.

- Brooks, F. (1975), *The Mythical Man Month: Essays in Software Engineering*, Addison-Wesley, Reading, MA.
- Brown, D. (2008), "It is Good to be Green: Environmentally Friendly Credentials Are Influencing Business Outsourcing Decisions," *Strategic Outsourcing: An International Journal*, Vol. 1, 1, pp. 87–95.
- Brown, J. S. (2003), "Does IT Matter? Letter to the Editor," *Harvard Business Review*, July, pp. 109–112.
- Budhwar, P., Luthar, H. and Bhatnagar, J. (2006), "The Dynamics of HRM Systems in Indian BPO Firms," *Journal of Labor Research*, Vol. 27, 3, pp. 339–360.
- Busi, M. (2008), "Editorial," *Strategic Outsourcing: An International Journal*, Vol. 1, 1, pp. 5–11.
- Busi, M. and McIvor, R. (2008), "Setting the Outsourcing Research Agenda: The Top-10 Most Urgent Outsourcing Areas," *Strategic Outsourcing: An International Journal*, Vol. 1, 3, pp. 185–197.
- Calantone, R. and Stanko, M. (2007), "Drivers of Outsourced Innovation: An Exploratory Study," *Journal of Product Innovation Management*, Vol. 24, pp. 230–241.
- Carey, P., Subramanian, N. and Ching, K. (2006), "Internal Audit Outsourcing in Australia," *Accounting and Finance*, Vol. 46, pp. 11–30.
- Carmel, E. (2006), "Building Your Information Systems from the Other Side of the World: How Infosys Manages Time Zone Differences," *MIS Quarterly Executive*, Vol. 5, 1, pp. 43–53.
- Carmel, E. and Abbot, P. (2007), "Why Nearshore Means that Distance Matters," *Communications of the ACM*, Vol. 50, 10, pp. 40–46.
- Carmel, E. and Agarwal, R. (2001), "Tactical Approaches for Alleviating Distance in Global Software Development," *IEEE Software*, March/April, pp. 22–29.
- Carmel, E. and Agarwal, R. (2002), "The Maturation of Offshore Sourcing of Information Technology Work," *MIS Quarterly Executive*, Vol. 1, 2, pp. 65–78.
- Carmel, E. and Tjia, P. (2005), *Offshoring Information Technology: Sourcing and Outsourcing to a Global Workforce*, Cambridge University Press, Cambridge.
- Carter, R. and Hodgson, G. (2006), "The Impact of Empirical Tests of Transaction Cost Economics on the Debate on the Nature of the Firm," *Strategic Management Journal*, Vol. 27, pp. 461–476.
- Cecil, B. (2000), "Shared Services: Moving Beyond Success," *Strategic Finance*, Vol. 81, pp. 64–45.
- CERS (Centre for Economics and Business Research) (2011), *The Cloud Dividend Part Two*, CEBR/EMC, London.
- Cha, H., Pingry, D. and Thatcher, M. (2008), "Managing the Knowledge Supply Chain: An Organizational Learning Model of Information Technology Offshore Outsourcing," *MIS Quarterly*, Vol. 32, 2, pp. 281–306.
- Chaudhury, A., Nam, K. and Rao, H. R. (1995), "Management of Information Systems Outsourcing: A Bidding Perspective," *Journal of Management Information Systems*, Vol. 12, 2, pp. 131–159.
- Cheon, M., Grover, V. and Teng, J. (1995), "Theoretical Perspectives on the Outsourcing of Information Systems," *Journal of Information Technology*, Vol. 10, pp. 209–210.
- Chou, T., Chen, J. and Pan, S. (2006), "The Impacts of Social Capital on Information Technology Outsourcing Decisions: A Case Study of Taiwanese High-Tech Firms," *International Journal of Information Management*, Vol. 26, pp. 249–256.

- Choudhury, V. and Sabherwal, R. (2003), "Portfolios of Control in Outsourced Software Development Projects," *Information Systems Research*, Vol. 14, 3, pp. 291–314.
- Christensen, C. M. (2006), "The Ongoing Process of Building a Theory of Disruption," *The Journal of Product Innovation Management*, Vol. 23, pp. 39–55.
- Chua, A. L. and Pan, S. (2008), "Knowledge Transfer and Organizational Learning in IS Offshore Sourcing," *Omega*, Vol. 36, 2, p. 267.
- Ciravegna, L. and Maielli, G. (2011), "Outsourcing of New Product Development and the Opening of Innovation in Mature Industries: A Longitudinal Study of Fiat During Crisis and Recovery," *International Journal of Innovation Management*, Vol. 15, 1, pp. 69–93.
- Clark, T. D., Zmud, R. and McCray, G. (1995), "The Outsourcing of Information Services: Transforming the Nature of Business in the Information Industry," *Journal of Information Technology*, Vol. 10, 4, pp. 221–237.
- Cohen, W. M. and Levinthal, D. A. (1990), "Absorptive Capacity: A New Perspective on Learning and Innovation," *Administrative Science Quarterly*, Vol. 35, pp. 128–152.
- Collins, J. S. and Millen, R. A. (1995), "Information Systems Outsourcing by Large American Industrial Firms: Choices and Impacts," *Information Resources Management Journal*, Vol. 8, 1, pp. 5–13.
- Cross, J. (1995), "IT Outsourcing: British Petroleum's Competitive Approach," Harvard Business Review, Vol. 73, 3, pp. 94–103.
- Cullen, S., Seddon, P. and Willcocks, L. (2005a), "Managing Outsourcing: The Life Cycle Imperative," *MIS Quarterly Executive*, Vol. 4, 1, pp. 229–246.
- Cullen, S., Seddon, P. and Willcocks, L. (2005b), "IT Outsourcing Configuration: Research into Defining and Designing Outsourcing Arrangements," *Journal of Strategic Information Systems*, Vol. 14, 4, pp. 357–387.
- Cullen, S. and Willcocks, L. (2003), *Intelligent Outsourcing*, Computer Weekly/Blackwell, Oxford.
- Currie, W. (1998), "Using Multiple Suppliers to Mitigate the Risk of IT Outsourcing at ICI and Wessex Water," *Journal of Information Technology*, Vol. 13, pp. 169–180.
- Currie, W., Michell, V. and Abanishe, A. (2008), "Knowledge Process Outsourcing in Financial Services: The Vendor Perspective," *European Management Journal*, Vol. 26, pp. 94–104.
- Currie, W. L. and Seltsikas, P. (2001), "Exploring the Supply-side of IT Outsourcing: Evaluating the Emerging Role of Application Service Providers," *European Journal of Information Systems*, Vol. 10, pp. 123–134.
- Currie, W. and Willcocks, L. (1998), "Analyzing Four Types of IT Sourcing Decisions in the Context of Scale, Client/Supplier Interdependency and Risk Mitigation," *Information Systems Journal*, Vol. 8, 2, pp. 119–143.
- Customer1 (2011), White Paper: Business Shared Services: A Model for Streamlined Support, http://info.customer1.com/business-shared-services-white-paper; also "Three Major Trends in Shared Services," http://www.customer1.com/blog/shared-services-trends-2011. Accessed October 2011.
- Daityari, A., Saini, A. and Gupta, R. (2008), "Control of Business Process Outsourcing Relationships," *Journal of Management Research*, Vol. 8, 1, pp. 29–44.
- Davenport, T. (2005), "The Coming Commoditization of Processes," *Harvard Business Review*, Vol. 83, 6, pp. 101–108.
- Davis, T. (2005), "Integrating Shared Services with the Strategy and Operation of MNEs," *Journal of General Management*, Vol. 31, 2, pp. 1–17.

- Deloitte (2009), "Stop, Start, Save: Shared Service Delivery in Local Government," http://www.deloitte.com/assets/Dcom-UnitedKingdom/Local%20Assets/Documents/ Industries/GPS/UK_GPS_StopStartSave.pdf. Accessed October 2011.
- Deloitte (2011), "Global Shared Services Survey Results," http://www.deloitte.com/ assets/Dcom-UnitedStates/Local%20Assets/Documents/IMOs/Shared%20Services/ us_sdt_2011GlobalSharedServicesSurveyExecutiveSummary.pdf Accessed October 2011.
- De Loof, L. A. (1995), "Information Systems Outsourcing Decision Making: A Framework, Organizational Theories and Case Studies," *Journal of Information Technology*, Vol. 10, 4, pp. 281–297.
- De Toni, A., Fornasier, A., Montagner, M. and Nonino, F. (2007), "A Performance Measurement System for Facility Management," *International Journal of Productivity and Performance Management*, Vol. 56, 5/6, pp. 417–435.
- DeDrick, J., Kraemer, K. and Carmel, E. (2011), "A Dynamic Model of Offshore Software Development," *Journal of Information Technology*, Vol. 26, pp. 1–15. doi:10.1057/jit.2009.23.
- Delmotte, J. and Sels, L. (2008), "HR Outsourcing: Threat or Opportunity," *Personnel Review*, Vol. 37, 5, pp. 543–563.
- Desai, D., Gearard, G. and Tripathy, A. (2011), "Internal Audit Sourcing Arrangements and Reliance by External Auditors," *Auditing: A Journal of Practice and Theory*, Vol. 30, 1, pp. 149–171.
- Dibbern, J., Goles, T., Hirschheim, R. and Bandula, J. (2004), "Information Systems Outsourcing: A Survey and Analysis of the Literature," *Database for Advances in Information Systems*, Vol. 34, 4, pp. 6–102.
- Dibbern, J. and Heinzl, A. (2002), "Outsourcing of Information Systems in Small and Medium Sized Enterprises: A Test of Multi-Theoretical Model," In *Information Systems Outsourcing: Enduring Themes, Emergent Patterns and Future Directions*, R. A. Hirschheim, A. Heinzl and J. Dibbern (Eds.), Springer-Verlag, Berlin, Heidelberg, New York, pp. 77–99.
- Dibbern, J., Winkler, J. and Heinzl, A. (2008), "Explaining Variations in Client Extra Costs between Software Projects Offshored to India," *MIS Quarterly*, Vol. 32, 2, pp. 333–366.
- DiMaggio, P. and Powell, W. (1991), "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields," In *The New Institutionalism in Organizational Analysis*, W. Powell and P. DiMaggio (Eds.), Chicago, The University of Chicago Press, pp. 63–82.
- DiRomualdo, A. and Gurbaxani, V. (1998), "Strategic Intent for IT Outsourcing," *Sloan Management Review*, Vol. 39, 4, pp. 67–80.
- Dobrzykowski, D., Tran, O. and Tarafdar, M. (2010), "Value Co-creation and Resource Based Perspectives for Strategic Sourcing," *Strategic Outsourcing: An International Journal*, Vol. 3, 2, pp. 106–127.
- Doh, J., Bunyaratavej, K. and Hahn, E. (2009), "Separable But Not Equal: The Location Determinants of Discrete Services Offshoring Activities," *Journal of International Business Studies*, Vol. 40, pp. 926–943.
- Domberger, S., Fernandez, P. and Fiebig, D. G. (2000), "Modelling the Price, Performance and Contract Characteristics of IT Outsourcing," *Journal of Information Technology*, Vol. 15, 2, pp. 107–118.
- Downing, C. E., Field, J. M. and Ritzman, L. P. (2003), "The Value of Outsourcing: A Field Study," *Information Systems Management*, Vol. 20, 1, pp. 86–91.

- Duan, C., Grover, V. and Balakrishnan, N. (2009), "Business Process Outsourcing: An Event Study on the Nature of Processes and Firm Valuation," *European Journal of Information Systems*, Vol. 18, pp. 442–457.
- Dubé, L. and Paré, G. (2003), "Rigor in IS Positivist Case Research: Current Practices, Trends, and Recommendations," *MIS Quarterly*, Vol. 27, 4, pp. 597–635.
- Dunbar, A. and Phillips, J. (2001), "The Outsourcing of Corporate Tax Function Activities," *The Journal of the American Taxation Association*, Vol. 23, 2, pp. 35–49.
- Dutta, A. and Roy, R. (2005), "Offshore Outsourcing: A Dynamic Causal Model of Counteracting Forces," *Journal of Management Information Systems*, Vol. 22, 2, pp. 15–36.
- Earl, M. (1996), "The Risks of Outsourcing IT," *Sloan Management Review*, Vol. 37, 3, pp. 26–32.
- ECISM (2009), Future Internet 2020: Visions of an Industry Expert Group, EC Information Society and Media Brussels.
- The Economist (2010), "The Data Deluge," The Economist, June.
- Eisenhardt, K. (1989a), "Agency Theory: An Assessment and Review," *The Academy of Management Review*, Vol. 14, 1, pp. 57–76.
- Eisenhardt, K. (1989b), "Building Theories from Case Study Research," Academy of Management Review, Vol. 14, 4, pp. 532–550.
- Ekeh, Peter. (1974), *Social Exchange Theory: The Two Traditions*, Harvard University Press, Massachusetts.
- Equaterra (2005), Bundled versus Unbundled Outsourcing Deals, Equaterra, London, September.
- ERI (Everest Research Institute) (2007), "Scope Aggregation in Outsourcing: Why the Strong Get Stronger," http://www.everestgrp.com/2011-05-the-risky-side-of-offshore-growth-operational-challenges-with-indian-majors-sherpas-in-blue-shirts-4987.html. Accessed October 2011.
- ERI (Everest Research Institute) (2011), "The Risky Side of Offshore Growth," http://www.everestgrp.com/2011-05-the-risky-side-of-offshore-growth-operationalchallenges-with-indian-majors-sherpas-in-blue-shirts-4987.html. Accessed October 2011.
- Farag, N. and Krishnan, M. (2003), "The Market Value of IT Outsourcing Investment Announcements: An Event-study Analysis," *Proceedings of the 9th Americas Conference on Information Systems*, 1623–1629.
- Feeny, D., Lacity, M. and Willcocks, L. (2005), "Taking the Measure of Outsourcing Providers," *Sloan Management Review*, Vol. 46, 3, pp. 41–48.
- Feeny, D. and Willcocks, L. (1998), "Core IS Capabilities for Exploiting Information Technology," *Sloan Management Review*, Vol. 39, 3, pp. 9–21.
- Fersht, P., Herrera, E., Robinson, B., Filippone, T. and Willcocks, L. (2011), *The State of Outsourcing in 2011*, Horses for Sources and LSE Outsourcing Unit, London, June.
- Festel, G., De Cleyn, S., Boutellier, R. and Braet, J. (2011), "Optimizing the R&D Process Using Spin-Outs: Case Studies from the Pharmaceutical Industry," *Research Technology Management*, Vol. 54, pp. 32–41.
- Fifarek, B., Veloso, F. and Davidson, C. (2008), "Offshoring Technology Innovation: A Case Study of Rare-Earth Technology," *Journal of Operations Management*, Vol. 26, pp. 222–238.
- Fink, L. (2010), "Information Technology Outsourcing through a Configurational Lens," *Journal of Strategic Information Systems*, Vol. 19, 2, pp. 124–141.

- Fisher, J., Hirschheim, R. and Jacobs, R. (2008), "Understanding the Outsourcing Learning Curve: A Longitudinal Analysis of a Large Australian Company," *Information Systems Frontiers*, Vol. 10, pp. 165–178.
- Fjermestad, J. and Saitta, J. (2005), "A Strategic Management Framework for IT Outsourcing: A Review of the Literature and the Development of a Success Factors Model," *Journal of Information Technology Case and Application Research*, Vol. 7, 3, pp. 42–60.
- Florin, J., Bradford, M. and Pagach, D. (2005), "Information Technology Outsourcing and Organizational Restructuring: An Explanation of their Effects on Firm Value," *Journal of High Technology Management Research*, Vol. 16, 2, pp. 241–253.
- Forst, L. (1997), "Fulfilling the Strategic Promise of Shared Services," *Strategy and Leadership*, Vol. 25, 1, pp. 30–34.
- Freeman, C. and Louca, F. (2001), *As Time Goes By: From Industrial Revolution to Information Revolution*, Oxford University Press, Oxford.
- Gainey, T. and Klaas, B. (2003), "The Outsourcing of Training and Development: Factors Impacting Client Satisfaction," *Journal of Management*, Vol. 29, pp. 207–229.
- Galliers, R. and Leidner, D. (2009), Strategic Information Management: Challenges and Strategies in Managing Information Systems, 4th edition, Routledge, United Kingdom.
- Gefen, D. and Carmel, E. (2008), "Is the World Really Flat? A Look at Offshoring at an Online Programming Marketplace," *MIS Quarterly*, Vol. 32, 2, pp. 367–384.
- Gewald, H. and Dibbern, J. (2009), "Risks and Benefits of Business Process Outsourcing: A Study of Transaction Services in the German Banking Industry," *Information & Management*, Vol. 46, pp. 249–257.
- Gewald, H. and Gellrich, T. (2007), "The Impact of Perceived Risk on the Capital Market's Reaction to Outsourcing Announcements," *Information Technology and Management*, Vol. 8, 4, pp. 279–296.
- Gilley, K., Greer, C. and Rasheed, A. (2004), "Human Resource Outsourcing and Organizational Performance in Manufacturing Firms," *Journal of Business Research*, Vol. 57, pp. 232–240.
- Glaser, B. and Strauss, A. (1999), *The Discovery of Grounded Theory: Strategies for Qualitative Research*, Aldine de Gruyter, New York, (first published in 1967).
- Gokhale, A. (2007), "Offshore Outsourcing: A Delphi Study," Journal of Information Technology Case and Application Research, Vol. 9, 3, pp. 6–18.
- Gonzalez, R., Gasco, J. and Llopis, J. (2006), "Information Systems Outsourcing: A Literature Analysis," *Information & Management*, Vol. 43, 7, pp. 821–834.
- Goo, J., Kishore, R., Nam, K., Rao, H. R. and Song, Y. (2007), "An Investigation of Factors that Influence the Duration of I Outsourcing Relationships," *Decision Support Systems*, Vol. 42, 4, pp. 2107–2125.
- Goo, J., Kishore, R., Rao, H. R. and Nam, K. (2009), "The Role of Service Level Agreements in Relational Management of Information Technology Outsourcing: An Empirical Study," *MIS Quarterly*, Vol. 33, 1, pp. 1–28.
- Gopal, A., Mukhopadhyay, T. and Krishnan, M. (2002), "The Role of Software Processes and Communication in Offshore Software Development," *Communications of the ACM*, Vol. 45, 4, pp. 193–200.
- Gopal, A., Sivaramakrishnan, K., Krishnan, M. and Mukhopadhyay, T. (2003), "Contracts in Offshore Software Development: An Empirical Analysis," *Management Science*, Vol. 49, 12, pp. 1671–1683.

- Gospel, H. and Sako, M. (2010), "The Unbundling of Corporate Functions: The Evolution of Shared Services and Outsourcing in Human Resource Management," *Industrial and Corporate Change*, Vol. 19, 5, pp. 1–30.
- Gould, S. J. and Eldredge, N. (1977), "Punctuated Equilibria: The Tempo and Mode of Evolution Revisited," *Paleobiology*, Vol. 3, pp. 115–151.
- Governing Magazine (2008), "Measuring Performance: The State Management Report Card for 2008," March, pp. 26–27, http://www.governing.com/mag/March-2008.html. Accessed October 2011.
- Greenhalgh, T., Glenn, R., MacFarlane, F., Bate, P. and Kyriakidou, O. (2004), "Diffusion of Innovation in Service Organizations: Systematic Review and Recommendations," *The Milbank Quarterly*, Vol. 82, 4, pp. 581–629.
- Grimpe, C. and Kaiser, U. (2010), "Balancing Internal and External Knowledge Acquisition: The Gains and Pains from R&D Outsourcing," *Journal of Management Studies*, Vol. 47, 8, pp. 1483–1509.
- Grover, V., Cheon, M. and Teng, J. (1994a), "A Descriptive Study on the Outsourcing of Information Systems Functions," *Information & Management*, Vol. 27, pp. 33–44.
- Grover, V., Cheon, M. and Teng, J. (1994b), "An Evaluation of the Impact of Corporate Strategy and the Role of Information Technology on IS Functional Outsourcing," *European Journal of Information Systems*, Vol. 3, 3, pp. 179–191.
- Grover, V., Cheon, M. and Teng, J. (1996), "The Effect of Service Quality and Partnership on the Outsourcing of Information Systems Functions," *Journal of Management Information Systems*, Vol. 12, 4, pp. 89–116.
- Gupta, A., Seshasai, S., Mukherji, S. and Ganguly, A. (2007), "Offshoring: The Transition from Economic Drivers toward Strategic Global Partnership and 24-Hour Knowledge Factory," *Journal of Electronic Commerce in Organizations*, Vol. 5, 2, pp. 1–23.
- Hall, J. and Liedtka, S. (2005), "Financial Performance, CEO Compensation, and Large-Scale Information Technology Outsourcing Decisions," *Journal of Management Information Systems*, Vol. 22, 1, pp. 193–222.
- Han, H., Lee, J. and Seo, Y. (2008), "Analyzing the Impact of a Firm's Capability on Outsourcing Success: A Process Perspective," *Information and Management*, Vol. 45, pp. 31–42.
- Handley, S. and Benton, W. (2009), "Unlocking the Business Outsourcing Process Model," *Journal of Operations Management*, Vol. 27, pp. 344–361.
- Haried, P. and Ramamurthy, K. (2009), "Evaluating the Success in International Sourcing of Information Technology Projects: The Need for a Relational Client-Vendor Approach," *Project Management Journal*, Vol. 40, 3, pp. 56–71.
- Harris, J. and Nunn, S. (2010), "Agile IT Reinventing the Enterprise," *Outlook*, October 2, pp. 40–47.
- Hart, P. and Saunders, C. (1997), "Power and Trust: Critical Factors in the Adoption and Use of Electronic Data Interchange," *Organization Science*, Vol. 8, 1, pp. 23–42.
- Harter, D., Krishnan, M. and Slaughter, S. (2000), "Effects of Process Maturity on Quality, Cycle Time, and Effort in Software Product Development," *Management Science*, Vol. 46, 4, pp. 451–467.
- Hayes, D., Hunton, J. and Reck, J. (2000), "Information Systems Outsourcing Announcement: Investigating the Impact on the Market Value of Contract Granting and Receiving Firms," *Journal of Information Systems*, Vol. 14, 2, pp. 109–125.
- Heeks, R. (2008), "ICT4D 2.0: The Next Phase of Applying ICT for International Development," *IEEE Computer*, http://research.microsoft.com/en-us/um/people/cutrell/heeks-ICTD%20two-point-zero.pdf. Accessed October 2011.

- Heiskanen, A., Newman, M. and Eklin, M. (2008), "Control, Trust, Power, and the Dynamics of Information System Outsourcing Relationships: A Process Study of Contractual Software Development," *Journal of Strategic Information Systems*, Vol. 17, 4, pp. 268–286.
- Hey, T. and Trefethen, A. (2008), E-Science, Cyberinfrastructure, and Scholarly Communication. Scientific Collaboration and the Internet, http://cisnet.mit.edu/Scientific-Collaboration-on-Internet/28. Accessed October 2011.
- Hirschheim, R., Heinzl, A. and Dibbern, J. (Eds.) (2002), *Information Systems Outsourcing: Enduring Themes, Emergent Patterns and Future Directions*, Springer-Verlag, Berlin.
- Hirschheim, R. and Lacity, M. (2000), "Information Technology Insourcing: Myths and Realities," *Communications of the ACM*, Vol. 43, 2, pp. 99–108.
- Hirschheim, R., Loebbecke, C., Newman, M. and Valor, J. (2007), "Offshoring and its Implications for the Information Systems Discipline: Where Perception Meets Reality," *Communications of the AIS*, Vol. 20, Article 52.
- Hirschheim, R. and Newman, M. (2010), "Houston, We've Had a Problem ... Offshoring, IS Employment, and the IS Discipline: Perception Is Not Reality," *Journal of Information Technology*, Vol. 25, 4, pp. 358–372.
- Ho, V., Ang, S. and Straub, D. (2003), "When Subordinates Become IT Contractors: Persistent Managerial Expectations in IT Outsourcing," *Information Systems Research*, Vol. 14, 1, pp. 66–86.
- Holweg, M., Reichhart, A. and Hong, E. (2011), "On Risk and Cost in Global Sourcing," International Journal of Production Economics, Vol. 131, pp. 333–341.
- Howells, J., Gagliardi, D. and Malik, K. (2008), "The Growth and Management of R&D Outsourcing: Evidence from UK Pharmaceuticals," *R&D Management*, Vol. 38, 2, pp. 205–219.
- Hsiao, H., Kemp, R., van der Vorst, J. and Omta, S. (2011), "Logistics Outsourcing by Taiwanese and Dutch Food Processing Industries," *British Food Journal*, Vol. 113, 4, pp. 550–576, http://money.cnn.com/2009/07/08/smallbusiness/internet_for_india.fsb/ index.htm. Accessed October 2011.
- Hu, Q., Saunders, C. and Gebelt, M. (1997), "Research Report: Diffusion of Information Systems Outsourcing: A Reevaluation of Influence Sources," *Information Systems Research*, Vol. 8, 3, pp. 288–301.
- Huber, R. (1993), "How Continental Bank Outsourced Its 'Crown Jewels,' " Harvard Business Review, Vol. 71, 1, pp. 121–129.
- Hutzschenreuter, T., Lewin, A. and Dresel, S. (2011), "Time to Success in Offshoring Business Processes," *Management International Review*, Vol. 51, pp. 65–92.
- Iacovou, C. L. and Nakatsu, R. (2008), "A Risk Profile of Offshore-Outsourced Development Projects," *Communications of the ACM*, Vol. 51, 6, pp. 89–94.
- IBM (2005), "Finance Shared Services and Outsourcing," IBM Business Consulting Services, http://www-935.ibm.com/services/uk/bcs/pdf/g510-6143-finance-sharedservices.pdf. Accessed October 2011.
- IDC (2009), "IDC's New IT Cloud Services Forecast: 2009–2013," http://blogs.idc.com/ie/ ?p=543. Accessed October 2011.
- Iivari, J. and Huisman, M. (2007), "The Relationship between Organizational Culture and the Deployment of Systems Development Methodologies," *MIS Quarterly*, Vol. 31, 1, pp. 3–58.
- Jalote, P. (2000), CMM in Practice, Addison Wesley, Boston.
- Jarvenpaa, S. and Mao, J. (2008), "Operational Capabilities Development in Mediated Offshore Software Service Models," *Journal of Information Technology*, Vol. 23, 1, pp. 3–17.

- Jayatilaka, B. (2002), "IT Sourcing: A Dynamic Phenomenon: Forming an Institutional Theory Perspective," In *Information Systems Outsourcing in the New Economy*, R. Hirschheim, A. Heinzl and J. Dibbern (Eds.), Springer-Verlag, Berlin, Heidelberg, New York, pp. 100–130.
- Jayatilaka, B. and Hirschheim, R. (2009), "Changes in IT Sourcing Arrangements: An Interpretive Field Study of Technical and Institutional Influences," *Strategic Outsourcing: An International Journal*, Vol. 2, 2, pp. 84–122.
- Jeyaraj, A., Rottman, J. and Lacity, M. (2006), "A Review of the Predictors, Linkages, and Biases in IT Innovation Adoption Research," *Journal of Information Technology*, Vol. 21, 1, pp. 1–23.
- Joha, A. and Janssen, M. (2010), "Public-Private Partnerships, Outsourcing, or Shared Service Centers? Motives and Intents for Selecting Sourcing Configurations," *Transforming Government: People, Process, and Policy*, Vol. 4, 3, pp. 232–248.
- Jurison, J. (1995), "The Role of Risk and Return in Information Technology Outsourcing Decisions," *Journal of Information Technology*, Vol. 10, pp. 239–247.
- Kaiser, K. and Hawk, S. (2004), "Evolution of Offshore Software Development: From Outsourcing to Co-Sourcing," *MIS Quarterly Executive*, Vol. 3, 2, pp. 69–81.
- Kamyabi, Y. and Devi, S. (2011), "An Empirical Investigation of Accounting Outsourcing in Iranian SMEs: Transaction Cost Economics and Resource-based Views," *International Journal of Business and Management*, Vol. 6, 3, pp. 81–94.
- Kanawattanachai, P. and Yoo, Y. (2007), "The Impact of Knowledge Coordination on Virtual Team Performance over Time," *MIS Quarterly*, Vol. 31, 4, pp. 783–808.
- Karimi Alaghehband, F., Rivard, S., Wu, S. and Goyette, S. (2011), "An Assessment of the Use of Transaction Cost Theory in Information Technology Outsourcing," *The Journal of Strategic Information Systems*, Vol. 20, 2, available online doi:10.1016/j.jsis.2011.04.003.
- Kenyon, G. and Meixell, M. (2011), "Success Factors and Cost Management Strategies for Logistics Outsourcing," *Journal of Management and Marketing Research*, Vol. 7, pp. 1–17.
- Kern, T. and Blois, K. (2002), "Norm Development in Outsourcing Relationships," *Journal* of *Information Technology*, Vol. 17, pp. 33–42.
- Kern, T., Kreijger, J. and Willcocks, L. (2002a), "Exploring ASP as a Sourcing Strategy: Theoretical Perspectives, Propositions for Practice," *Journal of Strategic Information Systems*, Vol. 11, 2, pp. 153–177.
- Kern, T., Lacity, M. and Willcocks, L. (2002b), *Netsourcing: Renting Business Applications* and Services Over a Network, Prentice Hall, New York.
- Kern, T. and Willcocks, L. (2000), "Exploring Information Technology Outsourcing Relationships: Theory and Practice," *Journal of Strategic Information Systems*, Vol. 9, 4, pp. 321–350.
- Kern, T. and Willcocks, L. (2001), *The Relationship Advantage: Information Technologies, Sourcing and Management*, Oxford University Press, Oxford.
- Kern, T. and Willcocks, L. (2002), "Exploring Relationships in Information Technology Outsourcing: The Interaction Approach," *European Journal of Information Systems*, Vol. 11, pp. 3–19.
- Kern, T., Willcocks, L. and Lacity, M. (2002c), "Application Service Provision: Risk Assessment and Risk Mitigation," *MIS Quarterly Executive*, Vol. 1, 2, pp. 113–126.
- Kern, T., Willcocks, L. and Van Heck, E. (2002d), "The Winners Curse in IT Outsourcing: Strategies for Avoiding Relational Trauma," *California Management Review*, Vol. 44, 2, pp. 47–69.

- Khalfan, A. (2004), "Information Security Considerations in IS/IT Outsourcing Projects: A Descriptive Case Study of Two Sectors," *International Journal of Information Management*, Vol. 24, 1, pp. 29–42.
- Khan, N. and Fitzgerald, G. (2004), "Dimensions of Offshore Outsourcing Business Models," *Journal of Information Technology Cases and Applications*, Vol. 6, 3, pp. 35–50.
- Kim, G. (2008), "E-Business Strategy in Western Europe: Offshore BPO Model Perspective," Business Process Management, Vol. 14, 6, pp. 813–828.
- Kim, G. and Kim, S. (2008), "Exploratory Study on Effective Control Structure in Global Business Process Sourcing," *Information Resources Management Journal*, Vol. 21, 3, pp. 101–118.
- Kim, J. (2009), "Online Reverse Auctions for Outsourcing Small Software Projects: Determinants of Vendor Selection," *E-Service Journal*, Vol. 6, 3, pp. 40–55.
- Kim, S. and Chung, Y. -S. (2003), "Critical Success Factors for IS Outsourcing Implementation from an Interorganizational Relationship Perspective," *The Journal of Computer Information Systems*, Vol. 43, 4, pp. 81–90.
- King, J. (2003), "The Pros & Cons of CMM," Computerworld, Vol. 37, 49, p. 50.
- Kirsch, L. J. (1997), "Portfolios of Control Modes and IS Project Management," *Information Systems Research*, Vol. 8, 3, pp. 215–239.
- Kishore, R., Agarwal, M. and Rao, H. R. (2004), "Determinants of Sourcing During Technology Growth and Maturity: An Empirical Study of e-Commerce Sourcing," *Journal of Management Information Systems*, Vol. 21, 3, pp. 47–82.
- Kishore, R., Rao, H., Nam, K., Rajagopalan, S. and Chaudhury, A. (2003), "A Relationship Perspective on IT Outsourcing," *Communications of the ACM*, Vol. 46, 12, pp. 86–92.
- Klaas, B., McClendon, J. and Gainey, T. (2001), "Outsourcing HR: The Impact of Organizational Characteristics," *Human Resource Management*, Vol. 40, 2, pp. 125–138.
- Klein, H. (2002), "On the Theoretical Foundations of Current Outsourcing Research," In *Information Systems Outsourcing: Enduring Themes, Emergent Patterns*, R. A. Hirschheim, A. Heinzl and J. Dibbern (Eds.), Springer, Berlin, Heidelberg, New York, pp. 24–44.
- Klein, H. and Meyers, M. (1999), "A Set of Principles for Evaluating Interpretive Field Studies in Information Systems," MIS Quarterly, Vol. 23, 1, pp. 67–94.
- Klepper, R. (1995), "The Management of Partnering Development in I/S Outsourcing," *Journal of Information Technology*, Vol. 10, pp. 249–258.
- Knorr-Cetina, K. (1999), *Epistemic Cultures: How the Sciences Make Knowledge*, Harvard University Press, Cambridge, MA.
- Koh, C., Ang, S. and Straub, D. (2004), "IT Outsourcing Success: A Psychological Contract Perspective," *Information Systems Research*, Vol. 15, 4, pp. 356–373.
- Kotlarsky, J., Oshri, I. and Van Fenema, P. (2008a), *Knowledge Processes in Globally Distributed Contexts*, Palgrave Macmillan, United Kingdom.
- Kotlarsky, J., Oshri, I., van Hillegersberg, J. and Kumar, K. (2007), "Globally Distributed Component-based Software Development: An Exploratory Study of Knowledge Management and Work Division," *Journal of Information Technology*, Vol. 22, 2, pp. 161–173.
- Kotlarsky, J., van Fenema, P. and Willcocks, L. (2008b), "Developing a Knowledge-based Perspective on Coordination: The Case of Global Software Projects," *Information and Management*, Vol. 45, 2, pp. 96–108.
- KPMG (2011), KPMG 2Q11 Sourcing Advisory Pulse Survey, http://www.equaterra.com/ 2Q11-KPMG-Sourcing-Advisory-Global-Pulse-Survey-2298C514.html?LayoutID=28. Accessed October 2011.
- Krishna, S., Sahay, S. and Walsham, G. (2004), "Managing Cross-Cultural Issues in Global Software Outsourcing," *Communications of the ACM*, Vol. 47, 4, pp. 62–66.

- Kuruvilla, S. and Ranganathan, A. (2010), "Globalization and Outsourcing: Confronting New Human Resource Challenges in India's Business Process Outsourcing Industry," *Industrial Relations Journal*, Vol. 41, 2, pp. 136–153.
- Lacity, M., Carmel, E. and Rottman, J. (2011a), "Rural Outsourcing: Delivering ITO and BPO Services from Remote Domestic Locations," *IEEE Computer*, Vol. 44, pp. 55–62.
- Lacity, M., Feeny, D. and Willcocks, L. (2003), "Transforming a Back-Office Function: Lessons from BAE Systems' Experience with an Enterprise Partnership," *MIS Quarterly Executive*, Vol. 2, 2, pp. 86–103.
- Lacity, M., Feeny, D. and Willcocks, L. (2004), "Commercializing the Back Office at Lloyds of London: Outsourcing and Strategic Partnerships Revisited," *European Management Journal*, Vol. 22, 2, pp. 127–140.
- Lacity, M., Feeny, D. and Willcocks, L. (2006a), "The Twelve Supplier Capabilities: Part II," *Cutter Sourcing & Vendor Relationships Executive Update*, Vol. 7, 15, pp. 1–4.
- Lacity, M., Feeny, D. and Willcocks, L. (2006b), "The Twelve Supplier Capabilities: Part I," *Cutter Sourcing & Vendor Relationships Executive Update*, Vol. 7, 13, pp. 1–4.
- Lacity, M. and Fox, J. (2008), "Creating Global Shared Services: Lessons from Reuters," MIS Quarterly Executive, Vol. 7, 1, pp. 17–32.
- Lacity, M. and Hirschheim, R. (1993a), *Information Systems Outsourcing: Myths, Metaphors and Realities*, Wiley, Chichester.
- Lacity, M. and Hirschheim, R. (1993b), "The Information Systems Outsourcing Bandwagon," *Sloan Management Review*, Vol. 35, 1, pp. 73–86.
- Lacity, M. and Hirschheim, R. (1995), Beyond the Information Systems Outsourcing Bandwagon: The Insourcing Response, Wiley, Chichester.
- Lacity, M., Hirschheim, R. and Willcocks, L. (1994), "Realizing Outsourcing Expectations," *Information Systems Management*, Vol. 11, 4, pp. 7–18.
- Lacity, M., Iyer, V. and Rudramuniyaiah, P. (2008), "Turnover Intentions of Indian IS Professionals," *Information Systems Frontiers*, Vol. 10, pp. 225–241.
- Lacity, M., Khan, S. A. and Willcocks, L. (2009), "A Review of the IT Outsourcing Literature: Insights for Practice," *The Journal of Strategic Information Systems*, Vol. 18, 3, pp. 130–146.
- Lacity, M., Khan, S., Yan, A. and Willcocks, L. (2010a), "A Review of the IT Outsourcing Empirical Literature and Future Research Directions," *Journal of Information Technology*, Vol. 24, 4, pp. 395–433.
- Lacity, M., Rottman, J. and Khan, S. (2010b), "Field of Dreams: Building IT Capabilities in Rural America," *Strategic Outsourcing: An International Journal*, Vol. 3, 3, pp. 169–191.
- Lacity, M. and Rottman, J. (2008), *Offshore Outsourcing of IT Work*, Palgrave Macmillan, United Kingdom.
- Lacity, M. and Rottman, J. (2010), "Can't We All Get Along: What Does It Take to Get Advisors and Suppliers to Collaborate?" *Globalization Today*, March, pp. 47–49.
- Lacity, M. and Rottman, J. (2011), "Building a Better Outsourcing Community," *Globalization Today*, March, pp. 29–31.
- Lacity, M. and Rudramuniyaiah, P. (2009), "Funny Business: Public Opinion of Outsourcing and Offshoring as Reflected in U.S. and Indian Political Cartoons," *Communications of the Association for Information Systems*, Vol. 24, Article 13.
- Lacity, M., Solomon, S., Yan, A. and Willcocks, L. (2011c), "Business Process Outsourcing Studies: A Critical Review and Research Directions," *Journal of Information Technology*, Vol. 26, 4, pp. 221–258.

- Lacity, M. and Willcocks, L. (1995), "Interpreting Information Technology Sourcing Decisions from a Transaction Cost Perspective: Findings and Critique," Accounting, Management and Information Technologies, Vol. 5, 3/4, pp. 203–244.
- Lacity, M. and Willcocks, L. (1998), "An Empirical Investigation of Information Technology Sourcing Practices: Lessons from Experience," *MIS Quarterly*, Vol. 22, 3, pp. 363–408.
- Lacity, M. and Willcocks, L. (2000), "Survey of IT Outsourcing Experiences in US and UK Organizations," *Journal of Global Information Management*, Vol. 8, 2, pp. 5–23.
- Lacity, M. and Willcocks, L. (2001), *Global Information Technology Outsourcing: Search for Business Advantage*, Wiley, Chichester (Korean translation, 2004; Arabic Translation, 2005).
- Lacity, M. and Willcocks, L. (2009), *Information Systems and Outsourcing: Studies in Theory and Practice*, Palgrave Macmillan, London.
- Lacity, M., Willcocks, L. and Feeny, D. (1996), "The Value of Selective IT Sourcing," *Sloan Management Review*, Vol. 37, 3, pp. 13–25.
- Lacity, M., Willcocks, L. and Khan, S. (2011b), "Beyond Transaction Cost Economics: Towards an Endogenous Theory of Information Technology Outsourcing," *The Journal* of Strategic Information Systems, Vol. 20, 2, pp. 139–157.
- Lacity, M., Willcocks, L. and Rottman, J. (2008), "Global Outsourcing of Back Office Services: Lessons, Trends and Enduring Challenges," *Strategic Outsourcing: An International Journal*, Vol. 1, 1, pp. 13–34.
- Lahiri, S. and Kedia, B. (2009), "The Effects of Internal Resources and Partnership Quality on Firm Performance: An Examination of Indian BPO Suppliers," *Journal of International Management*, Vol. 15, pp. 209–224.
- Lam, W. and Chua, A. (2009), "An Analysis of Knowledge Outsourcing at Eduware," *Aslib Proceedings New Information Perspectives*, Vol. 61, 5, pp. 424–435.
- Lee, A. (1999), "Rigor and Relevance in Information Systems Research: Beyond the Approach of Positivism Alone," *MIS Quarterly*, Vol. 23, 1, pp. 29–34.
- Lee, J. (2001), "The Impact of Knowledge Sharing, Organizational Capability and Partnership Quality on Is Outsourcing Success," *Information & Management*, Vol. 38, pp. 323–335.
- Lee, J. (2006), "Outsourcing Alignment with Business Strategy and Firm Performance," *Communications of the AIS*, Vol. 17, pp. 1124–1146.
- Lee, J. and Kim, Y. (1999), "Effect of Partnership Quality on IS Outsourcing Success: Conceptual Framework and Empirical Validation," *Journal of Management Information Systems*, Vol. 15, 4, pp. 29–61.
- Lee, J., Miranda, S. and Kim, Y. (2004), "IT Outsourcing Strategies: Universalistic, Contingency, and Configurational Explanations of Success," *Information Systems Research*, Vol. 15, 2, pp. 110–131.
- Lee, J. N., Huynh, M. Q. and Hirschheim, R. (2008), "An Integrative Model of Trust on IT Outsourcing: Examining a Bilateral Perspective," *Information Systems Frontiers*, Vol. 10, pp. 146–163.
- Lee, R. and Kim, D. (2010), "Implications of Service Processes Outsourcing on Firm Value," *Industrial Marketing Management*, Vol. 39, pp. 853–861.
- Leonardi, P. M. and Bailey, D. E. (2008), "Transformational Technologies and the Creation of New Work Practices: Making Implicit Knowledge Explicit in Task-Based Offshoring," *MIS Quarterly*, Vol. 32, 2, pp. 411–436.
- Lepeak, S., Toon, M. and Morris, P. (2009), *Equaterra Pulse Survey Period 4, 2008*, Equaterra, London.

- Levina, N. and Ross, J. (2003), "From the Vendor's Perspective: Exploring the Value Proposition in Information Technology Outsourcing," *MIS Quarterly*, Vol. 27, 3, pp. 331–364.
- Levina, N. and Su, N. (2008), "Global Multisourcing Strategy: The Emergence of a Supplier Portfolio in Services Offshoring," *Decision Sciences*, Vol. 39, 3, pp. 541–570.
- Levina, N. and Vaast, E. (2008), "Innovating or Doing as Told? Status Differences and Overlapping Boundaries in Offshore Collaboration," *MIS Quarterly*, Special Issue on Offshoring, Vol. 32, 2, pp. 307–332.
- Lewin, A. and Peeters, C. (2006), "Offshoring Work: Business Hype or the Onset of Fundamental Transformation?" *Long Range Planning*, Vol. 39, pp. 221–239.
- Lin, C., Pervan, G. and McDermid, D. (2007), "Issues and Recommendations in Evaluating and Managing the Benefits of Public Sector IS/IT Outsourcing," *Information Technology & People*, Vol. 20, 2, pp. 161–183.
- Linder, J. (2004), "Transformational Outsourcing," *Sloan Management Review*, Vol. 45, 2, pp. 52–58.
- Liu, R., Feils, D. and Scholnick, B. (2011), "Why Are Different Services Outsourced to Different Countries?" *Journal of International Business Studies*, Vol. 42, pp. 558–571.
- Loebbecke, C. and Huyskens, C. (2006), "What Drives Netsourcing Decisions? An Empirical Analysis," *European Journal of Information Systems*, Vol. 15, 4, pp. 415–423.
- Loh, L. and Venkatraman, N. (1992a), "Diffusion of Information Technology Outsourcing: Influence Sources and the Kodak Effect," *Information Systems Research*, Vol. 3, 4, pp. 334–358.
- Loh, L. and Venkatraman, N. (1992b), "Determinants of Information Technology Outsourcing: A Cross-Sectional Analysis," *Journal of Management Information Systems*, Vol. 9, 1, pp. 7–24.
- Loh, L. and Venkatraman, N. (1992c), *Stock Market Reaction to IT Outsourcing: An Event Study*, Sloan School of Management, MIT, Cambridge.
- Lucena, A. (2011), "The Organizational Designs of R&D Activities and their Performance Implications: Empirical Evidence for Spain," *Industry and Innovation*, Vol. 18, 2, pp. 151–176.
- Luo, Y., Zheng, Q. and Jayaraman, V. (2010), "Managing Business Process Outsourcing," *Organizational Dynamics*, Vol. 39, 3, pp. 205–217.
- Lyytinen, K. (2009), "Data Matters in Is Theory Building," Journal of the Association for Information Systems, Vol. 10, 10, pp. 715–720.
- Lyytinen, K. and King, J. (2004), "Nothing at the Center?: Academic Legitimacy in the Information Systems Field," *Journal of the Association for Information Systems*, Vol. 5, 6, Article 8.
- Macher, J. and Richman, B. (2008), "Transaction Cost Economics: An Assessment of Empirical Research in the Social Sciences," *Business and Politics*, Vol. 10, 1, Article 1.
- Macneil, I. R. (1980), *The New Social Contract: An Inquiry Into Modern Contractual Relations,* Yale University Press, New Haven, CT.
- Macneil, I. R. (1983), "Values in Contract: Internal and External," *Northwestern University Law Review*, Vol. 78, 2, pp. 340–418.
- Madison, T., San Miguel, P. and Padmanabhan, P. (2006), "Stock Market Reaction to Domestic Outsourcing Announcements by U.S. Based Client and Vendor Firms," *Journal of Information Technology Case and Application Research*, Vol. 8, 4, pp. 6–26.
- Maelah, R., Aman, A., Hamzah, N., Amiruddin, R. and Auzair, S. (2010), "Accounting Outsourcing Turnback: Process and Issues," *Strategic Outsourcing: An International Journal*, Vol. 3, 3, pp. 226–245.

- Mahmoodzadeh, E., Jalalinia, S. and Yazdi, F. (2009), "A Business Process Outsourcing Framework Based on Business Process Management and Knowledge Management," *Business Process Management Journal*, Vol. 15, 6, pp. 845–864.
- Mahnke, V., Overby, M. L. and Vang, J. (2005), "Strategic Outsourcing of IT Services: Theoretical Stocktaking and Empirical Challenges," *Industry and Innovation*, Vol. 12, 2, pp. 205–253.
- Mahnke, V., Wareham, J. and Bjorn-Andersen, N. (2008), "Offshore Middlemen: Transnational Intermediation in Technology Sourcing," *Journal of Information Technology*, Vol. 23, 1, pp. 18–30.
- Mahoney, C. (1997), "Common Qualitative Techniques," in User-Friendly Handbook for Mixed Method Evaluations, Published by the Division of Research, Evaluation and Communication for the National Science Foundation, publication number NSF97-153, pp. 1–17.
- Malik, A. (2009), "Training Drivers, Competitive Strategy and Client Needs: Case Studies of Three Business Process Outsourcing Organizations," *Journal of European Industrial Training*, Vol. 33, 2, pp. 160–177.
- Maloney, M. and Zellmer-Bruhn, M. (2006), "Building Bridges, Windows and Cultures: Mediating Mechanisms between Team Heterogeneity and Performance in Global Teams," *Management International Review*, Vol. 46, 6, pp. 697–720.
- Malos (2009), "Regulatory Effects and Strategic Global Staffing Profiles: Beyond Cost Concerns in Evaluating Offshore Location Attractiveness," *Employee Responsibilities and Rights Journal*, Vol. 22, pp. 113–131.
- Mani, D., Barua, A. and Whinston, A. (2010), "An Empirical Analysis of the Impact of Information Capabilities Design on Business Process Outsourcing Performance," *MIS Quarterly*, Vol. 34, 1, pp. 39–62.
- Mayer, K. J. and Salomon, R. M. (2006), "Capabilities, Contractual Hazards, and Governance: Integrating Resource-based and Transaction Cost Perspectives," Academy of Management Journal, Vol. 49, 5, pp. 942–959.
- Maznevski, M. and Athanassiou, N. (2006), "Guest Editors' Introduction to the Focused Issue: A New Direction for Global Teams Research," *Management International Review*, Vol. 46, 6, pp. 631–646.
- McDonald, M. (2007), "The Enterprise Capability Organization: A Future for IT," *MIS Quarterly Executive*, Vol. 6, 3, pp. 179–192.
- McFarlan, F. W. and Nolan, R. (1995), "How to Manage an IT Outsourcing Alliance," *Sloan Management Review*, Vol. 36, 2, pp. 9–24.
- McIvor, R., Humphreys, P. and McKittrick, A. (2010), "Integrating the Critical Success Factor Method into the Business Process Outsourcing Decision," *Technology Analysis & Strategic Management*, Vol. 22, 3, pp. 339–360.
- McIvor, R., Humphreys, P., McKittrick, A. and Wall, T. (2009), "Performance Management and the Outsourcing Process: Lessons from a Financial Services Organisation," *International Journal of Operations and Production Management*, Vol. 29, 10, pp. 1025–1047.
- McKenna, D. and Walker, D. (2008), "A Study of Out-Sourcing Versus In-Sourcing Tasks within a Project Value Chain," *International Journal of Managing Projects in Business*, Vol. 1, 2, pp. 216–232.
- McLellan, K., Marcolin, B. and Beamish, P. (1995), "Financial and Strategic Motivations Behind IS Outsourcing," *Journal of Information Technology*, Vol. 10, pp. 299–321.
- Mehta, A., Armenakis, A., Mehta, N. and Irani, F. (2006), "Challenges and Opportunities of Business Process Outsourcing," *Journal of Labor Research*, Vol. 27, 3, pp. 323–337.

- Michell, V. and Fitzgerald, G. (1997), "The IT Outsourcing Market-Place: Vendors and their Selection," *Journal of Information Technology*, Vol. 12, pp. 223–237.
- Miles, R. E. and Snow, C. C. (1978), *Organizational Strategy, Structure, and Process,* McGraw-Hill Book Company, New York.
- Miranda, S. and Kavan, B. (2005), "Moments of Governance in IS Outsourcing: Conceptualizing Effects of Contracts on Value Capture and Creation," *Journal of Information Technology*, Vol. 20, 3, pp. 152–169.
- Miranda, S. and Kim, Y. (2006), "Professionalism Versus Political Contexts: Institutional Mitigation and the Transaction Cost Heuristic in Information Systems Outsourcing," *MIS Quarterly*, Vol. 30, 3, pp. 725–753.
- Mirani, R. (2007), "Procedural Coordination and Offshored Software Tasks: Lessons from Two Case Studies," *Information & Management*, Vol. 44, pp. 216–230.
- Mojsilovic, A., Ray, B., Lawrence, R. and Takriti, S. (2007), "A Logistic Regression Framework for Information Technology Outsourcing Lifecycle Management," *Computers & Operations Research*, Vol. 34, 12, pp. 3609–3627.
- Murray, J., Kotabe, M. and Westjohn, S. (2009), "Global Sourcing Strategy and Performance of Knowledge-Intensive Business Services: A Two Stage Strategic Fit Model," *Journal of International Marketing*, Vol. 17, 4, pp. 90–105.
- Nadkarni, S. and Herrmann, P. (2010), "CEO Personality, Strategic Flexibility, and Firm Performance: The Case of Indian Business Process Outsourcing Industry," Academy of Management Journal, Vol. 53, 5, pp. 1050–1073.
- Nahapiet, J. and Ghoshal, S. (1998), "Social Capital, Intellectual Capital, and the Organizational Advantage," *Academy of Management Review*, Vol. 23, 2, pp. 242–265.
- Nam, K., Rajagopalan, S., Rao, H. R. and Chaudhury, A. (1996), "A Two-Level Investigation of Information Systems Outsourcing," *Communications of the ACM*, Vol. 39, 7, pp. 36–44.
- Narayanan, S., Jayaraman, V., Luo, Y. and Swaminathan, J. (2011), "The Antecedents of Process Integration in Business Process Outsourcing and its Effect on Firm Performance," *Journal of Operations Management*, Vol. 29, pp. 3–16.
- Naughton, J. (1999), A Brief History of the Future. The Origins of the Internet, Phoenix, London.
- Naughton, J. (2008), "Thanks Gutenberg But We're Too Pressed for Time to Read," *The Observer*, January 27, p. 12 business section.
- Ndubisi, N. (2011), "Conflict Handling, Trust, and Commitment in Outsourcing Relationship: A Chinese and Indian Study," *Industrial Marketing Management*, Vol. 40, pp. 109–117.
- Niehaves, B. and Krause, A. (2010), "Shared Service Strategies in Local Government: A multiple Case Study Exploration," *Transforming Government, People, Process, and Policy*, Vol. 4, 3, pp. 266–279.
- Nelson, P., Richmond, W. and Seidmann, A. (1996), "Two Dimensions of Software Acquisition," *Communications of the ACM*, Vol. 39, 7, pp. 29–35.
- Nelson, R. (2005), "Project Retrospectives: Evaluating Success, Failure and Everything in between," *MIS Quarterly Executive*, Vol. 4, 3, pp. 361–372.
- Niederman, F., Gregor, S., Grover, V., Lyytinen, K. and Saunders, C. (2008), "IS Has Outgrown the Need for Reference Discipline Theories, or Has It?" Panel Discussion, *International Conference of Information Systems*, Paris.
- Nieto, M. and Rodríguez, A. (2011), "Offshoring of R&D: Looking Abroad to Improve Innovation Performance," *Journal of International Business Studies*, Vol. 42, pp. 345–361.

- Niranjan, T., Saxena, K. and Bharadwaj, S. (2007), "Process-oriented Taxonomy of BPOs: An Exploratory Study," *Business Process Management Journal*, Vol. 13, 4, pp. 588–606.
- Ogg, S. (2011), "The Role of Outsourcing in Business Transformation," presented to the participants of the IAOP World Summit, Indian Wells, California, February 22.
- Oh, W., Gallivan, M. and Kim, J. (2006), "The Market's Perception of the Transactional Risks of Information Technology Outsourcing Announcements," *Journal of Management Information Systems*, Vol. 22, 4, pp. 271–303.
- Olsson, H. H., Conchulr, E. O., Agerfalk, P. J. and Fitzgerald, B. (2008), "Two-stage Offshoring: An Investigation of the Irish Bridge," *MIS Quarterly*, Vol. 32, 2, pp. 257–279.
- O'Leary, M. and Cummings, J. (2007), "The Spatial, Temporal and Configurational Characteristics of Geographical Dispersion in Teams," *MIS Quarterly*, Vol. 31, 3, pp. 433–452.
- O'Regan, N. and Kling, G. (2011), "Technology Outsourcing in Manufacturing Small and Medium Sized Firms: Another Competitive Resource?" *R&D Management*, Vol. 41, 1, pp. 92–105.
- O'Reilly, C. III and Tushman, M. (2004), "The Ambidextrous Organization," Harvard Business Review, Vol. 82, 4, pp. 74-81.
- Orlikowski, W. and Baroudi, J. (1999), "Studying IT in Organizations: Research Approaches and Assumptions," *Information Systems Research*, Vol. 2, 1, pp. 1–28.
- Osei-Bryson, K. -M. and Ngwenyama, O. K. (2006), "Managing Risks in Information Systems Outsourcing: An Approach to Analyzing Outsourcing Risks and Structuring Incentive Contracts," *European Journal of Operational Research*, Vol. 174, 1, pp. 245–264.
- Oshri, I. (2011), Offshoring Strategies: Evolving Captive Center Models, MIT Press, Boston.
- Oshri, I., Kotlarsky, J., Rottman, J. and Willcocks, L. (2009), "Global sourcing: Recent Trends and Issues," *Information Technology and People*, Vol. 22, 3, pp. 192–200.
- Oshri, I., van Fenema, P. and Kotlarsky, J. (2008), "Knowledge Transfer in Globally Distributed Teams: The Role of Transactive Memory," *Information Systems Journal*, Vol. 18, 6, pp. 593–616.
- Oshri, I., Kotlarsky, J. and Willcocks, L. (2007a), "Global Software Development: Exploring Socialization and Face-To-Face meetings in Distributed Strategic Projects," *Journal of Strategic Information Systems*, Vol. 16, pp. 25–49.
- Oshri, I., Kotlarsky, J. and Willcocks, L. (2007b), "Managing Dispersed Expertise in IT Offshore Outsourcing: Lessons from Tata Consultancy Services," *MIS Quarterly Executive*, Vol. 6, 2, pp. 53–65.
- Oza, N. and Hall, T. (2005), "Difficulties in Managing Offshore Software Outsourcing Relationships: An Empirical Analysis of 19 High Maturity Indian Software Companies," *Journal of Information Technology Case and Application Research*, Vol. 7, 3, pp. 25–41.
- Oza, N., Hall, T., Rainer, A. and Grey, S. (2006), "Trust in Software Outsourcing Relationships: An Empirical Investigation of Indian Software Companies," *Information and Software Technology*, Vol. 48, pp. 345–354.
- Parakala, K. (2011), "Rural BPOs in India: Are they Over-Hyped?," http://www. globalservicesmedia.com/Experts/Home/Rural-BPOs-in-India:-Are-they-Over-Hyped/ 30/27/0/GS110309159353. Accessed October 2011.
- Park, J. and Kim, J. S. (2005), "The Impact of IS Outsourcing Type on Service Quality and Maintenance Efforts," *Information & Management*, Vol. 42, pp. 261–274.
- Patane, J. R. and Jurison, J. (1994), "Is Global Outsourcing Diminishing the Prospects for American Programmers?" *Journal of Systems Management*, Vol. 45, 6, pp. 6–10.
- Peled, A. (2001), "Outsourcing and Political Power: Bureaucrats, Consultants, Vendors, and Public Information Technology," *Public Personnel Management*, Vol. 30, 4, pp. 495–514.

- Penfold, C. (2009), "Off-Shored Services Workers: Labour Law and Practice in India," The Economic and Labour Relations Review, Vol. 19, 2, pp. 91–106.
- Pfeffer, J. and Salancik, G. (1978), The External Control of Organizations: A Resource Dependence Perspective, Harper & Row, New York, reprinted by Stanford University Press, Stanford, 2003.
- Pinnington, A. and Woolcock, P. (1995), "How Far is IS/IT Outsourcing Enabling New Organizational Structure and Competences?" *International Journal of Information Management*, Vol. 15, 5, pp. 353–365.
- Pitt, L., Watson, R. and Kavan, C. (1995), "Service Quality A Measure of Information Systems Effectiveness," *MIS Quarterly*, Vol. 19, 2, pp. 173–189.
- Poppo, L. and Zenger, T. (1998), "Testing Alternative Theories of the Firm: Transaction Cost, Knowledge-Based, and Measurement Explanations for Make-or-Buy Decisions in Information Services," *Strategic Management Journal*, Vol. 19, pp. 853–877.
- Poppo, L. and Zenger, T. (2002), "Do Formal Contracts and Relational Governance Function as Substitutes or Complements?" *Strategic Management Journal*, Vol. 23, pp. 707–725.
- Prahalad, C. K. and Hamel, G. (1990), "The Core Competence of the Corporation," *Harvard Business Review*, Vol. 68, 3, pp. 79–91.
- Qu, Z. and Brocklehurst, M. (2003), "What Will It Take for China to Become a Competitive Force in Offshore Outsourcing? An Analysis of the Role of Transaction Costs in Supplier Selection," *Journal of Information Technology*, Vol. 18, pp. 53–67.
- Quinn, J. B. (1999), "Strategic Outsourcing: Leveraging Knowledge Capabilities," Sloan Management Review, Vol. 40, 4, pp. 9–21.
- Quinn, J. B. (2000), "Outsourcing Innovation: The New Engine of Growth," Sloan Management Review, Vol. 41, 4, pp. 13–28.
- Quinn, J. B. and Hilmer, F. (1994), "Strategic Outsourcing," *Sloan Management Review*, Vol. 35, 4, pp. 43–55.
- Rajeev, M. and Vani, B. (2009), "India's Exports of BPO Services: Understanding Strengths, Weaknesses, and Competitors," *Journal of Services Research*, Vol. 9, 1, pp. 51–67.
- Raman, S., Budhwar, P. and Balasubramanian, G. (2007), "People Management Issues in Indian KPOs," *Employee Relations*, Vol. 29, 6, pp. 696–710.
- Ramasubbu, N., Mithas, S., Krishnan, M. S. and Kemerer, C. (2008), "Work Dispersion, Process-Based Learning, and Offshore Software Development Performance," *MIS Quarterly*, Vol. 32, 2, pp. 437–458.
- Ramingwong, S. and Sajeev, A. (2007), "Offshore Outsourcing: The Risk of Keeping Mum," *Communications of the ACM*, Vol. 50, 8, pp. 101–103.
- Ranganathan, C. and Balaji, S. (2007), "Critical Capabilities for Offshore Outsourcing of IS," *MIS Quarterly Executive*, Vol. 6, 3, pp. 147–164.
- Rao, M. T., Poole, W., Raven, P. V. and Lockwood, D. L. (2006), "Trends, Implications, and Responses to Global IT Sourcing: A Field Study," *Journal of Global Information Technology Management*, Vol. 9, 3, pp. 5–23.
- Redondo-Cano, A. and Canet-Giner, M. T. (2010), "Outsourcing Agrochemical Services: Economic or Strategic Logic?" *Service Business*, Vol. 4, pp. 237–252.
- Reitzig, M. and Wagner, S. (2010), "The Hidden Costs of Outsourcing: Evidence from Patent Data," *Strategic Management Journal*, Vol. 31, pp. 1183–1201.
- RightNow (2010), Customer Experience Impact Report, RightNow/Harris, USA.
- Roberts, C. and Wasti, S. A. (2002), "Organizational Individualism and Collectivism: Theoretical Development and an Empirical Test of a Measure," *Journal of Management*, Vol. 28, 4, pp. 544–566.

- Rockefeller Foundation (2011), Job Creation through Building the Field of Impact Sourcing, Working paper.
- Rogers, E. (1983), Diffusion of Innovations, The Free Press, New York.
- Rogers, E. (1995), Diffusion of Innovations, The Free Press, New York.
- Ross, J. and Beath, C. (2006), "Sustainable IT Outsourcing: Let Enterprise Architecture be Your Guide," *MIS Quarterly Executive*, Vol. 5, 4, pp. 181–192.
- Ross, J., Vitale, M. and Beath, C. (1999), "The Untapped potential of Chargeback," *MIS Quarterly*, Vol. 23, 2, pp. 215–237.
- Rottman, J. (2006), "Successfully Outsourcing Embedded Software Development," *IEEE Computer*, Vol. 39, 1, pp. 55–61.
- Rottman, J. (2008), "Successful Knowledge Transfer Within Offshore Supplier Networks: A Case Study Exploring Social Capital in Strategic Alliances," *Journal of Information Technology*, Vol. 23, pp. 31–43.
- Rottman, J. and Hao, L. (2008), "Can China Compete with India in the Global ITO/BPO Market?" In *Offshore Outsourcing of IT Work*, M. Lacity and J. Rottman (Eds.), Palgrave Macmillan, London, pp. 180–208.
- Rottman, J. and Lacity, M. (2004), "Twenty Practices for Offshore Sourcing," *MIS Quarterly Executive*, Vol. 3, 3, pp. 117–130.
- Rottman, J. and Lacity, M. (2006), "Proven Practices for Effectively Offshoring IT Work," *Sloan Management Review*, Vol. 47, 3, pp. 56–63.
- Rottman, J. and Lacity, M. (2008), "A US Client's Learning from Outsourcing IT work Offshore," *Information Systems Frontiers*, Vol. 10, 2, pp. 259–275.
- Sabherwal, R. (1999), "The Role of Trust in Outsourced IS Development Projects," *Communications of the ACM*, Vol. 42, 2, pp. 80–86.
- Sakthivel, S. (2007), "Managing Risk in Offshore Systems Development," *Communications* of the ACM, Vol. 50, 4, pp. 69–75.
- Salimath, M., Cullen, J. and Umesh, U. (2008), "Outsourcing and Performance in Entrepreneurial Firms: Contingent Relationships with Entrepreneurial Configurations," *Decision Sciences*, Vol. 39, 3, pp. 359–381.
- Sanders, N., Locke, A., Moore, C. and Autry, C. (2007), "A Multidimensional Framework for Understanding Outsourcing Arrangements," *Journal of Supply Chain Management*, Vol. 43, 4, pp. 3–15.
- Sankaranarayanan, R. and Sundararajan, A. (2010), "Electronic Markets, Search Costs, and Firm Boundaries," *Information Systems Research*, Vol. 21, 1, pp. 154–169.
- Saunders, C., Gebelt, M. and Hu, Q. (1997), "Achieving Success in Information Systems Outsourcing," *California Management Review*, Vol. 39, 2, pp. 63–80.
- Saxena, K. and Bharadwaj, S. (2009), "Managing Business Processes through Outsourcing: A Strategic Partnership Perspective," *Business Process Management Journal*, Vol. 15, 5, pp. 687–155.
- Schulz, V. and Brenner, W. (2010), "Characteristics of Shared Service Centers," Transforming Government: People, Process, and Policy, Vol. 4, 3, pp. 210–219.
- Seddon, P. B. (2001), "The Australian Federal Government's Clustered-Agency IT Outsourcing Experiment," *Communications of the AIS*, Vol. 5, pp. 1–33.
- Seddon, P., Cullen, S. and Willcocks, L. (2007), "Does Domberger's Theory of Contracting Explain Why Organizations Outsource IT, and the Levels of Satisfaction Achieved?" *European Journal of Information Systems*, Vol. 16, 3, pp. 237–254.
- Segantini, L. (2005), "Shared Service, Outsourcing, Technology as Options to F&A Transformation," *The Outsourcing Institute's Outsourcing Essentials*, Vol. 3, 4, available on http://www.outsourcing.com. Accessed October 2011.

- Sen, F. and Sheil, M. (2006), "From Business Process Outsourcing to Knowledge Process Outsourcing: Some Issues," *Human Systems Management*, Vol. 25, pp. 145–155.
- Sharma, A. (2008), Challenges with Multi-Sourcing, IDC, New York.
- Shih, H. and Chiang, Y. (2011), "Exploring the Effectiveness of Outsourcing Recruiting and Training Activities and the Prospector Strategy's Moderating Effect," *International Journal of Human Resource Management*, Vol. 22, 1, pp. 163–180.
- Shih, H., Chiang, Y. and Hsu, C. (2005), "Exploring HR Outsourcing and Its Perceived Effectiveness," *International Journal of Business Performance Management*, Vol. 7, 4. pp. 464–482.
- Sia, S., Koh, C. and Tan, C. (2008), "Strategic Maneuvers for Outsourcing Flexibility: An Empirical Assessment," *Decision Sciences*, Vol. 39, 3, pp. 407–443.
- Simonson, E. (2008), *Managing Multiple Outsourcing Relationships*, Everest Research Institute, New York.
- Slaughter, S. A. and Ang, S. (1996), "Employment Outsourcing in Information Systems," *Communications of the ACM*, Vol. 39, 7, pp. 47–54.
- Smith, D. (2010), Exploring Innovation, McGraw Hill, London.
- Smith, I. (2011), "Public Sector Reform Conference: Shared Services Success Compels Collaboration," *PensionWeek*, April 4.
- Smith, H. A. and McKeen, J. D. (2004), "Developments in Practice XIV: IT Outsourcing How Far Can You Go?" Communications of the AIS, Vol. 14, pp. 508–520.
- Smith, M., Mitra, S. and Narasimhan, S. (1998), "Information Systems Outsourcing: A Study of Pre-Event Firm Characteristics," *Journal of Management Information Systems*, Vol. 15, 2, pp. 61–93.
- Sobol, M. and Apte, U. (1995), "Domestic and Global Outsourcing Practices of America's Most Effective Is Users," *Journal of Information Technology*, Vol. 10, pp. 269–280.
- Strassmann, P. (1995) "Outsourcing: A Game for Losers," Computerworld, August 21.
- Strassmann, P. (2004) "Most Outsourcing Is Still for Losers," Computerworld, February 2.
- Straub, D., Weill, P. and Schwaig, K. (2008), "Strategic Dependence on the IT Resource and Outsourcing: A Test of the Strategic Control Model," *Information Systems Frontiers*, Vol. 10, 2, pp. 195–211.
- Strauss, A. and Corbin, J. (Eds.) (1997), *Grounded Theory in Practice*, Sage, Thousand Oakes, California.
- Susarla, A., Barua, A. and Whinston, A. B. (2003), "Understanding the Service Component of Application Service Provision: An Empirical Analysis of Satisfaction with ASP Services," *Management Information Systems Quarterly*, Vol. 27, 1, pp. 91–123.
- Tanriverdi, H., Konana, P. and Ge, L. (2007), "The Choice of Sourcing Mechanisms for Business Processes," *Information Systems Research*, Vol. 18, 3, pp. 280–302.
- Tate, W. and Ellram, L. (2009), "Offshore Outsourcing: A Managerial Framework," *Journal* of Business and Industrial Management, Vol. 24, 3/4, pp. 256–268.
- Tate, W., Ellram, L. and Brown, S. (2009), "Offshore Outsourcing of Services: A Stakeholder Perspective," *Journal of Service Research*, Vol. 12, 1, pp. 56–72.
- Taylor, H. (2006), "Critical Risks in Outsourced IT Projects; the Intractable and the Unforeseen," *Communications of the ACM*, Vol. 49, 11, pp. 74–79.
- Taylor, H. (2007), "Outsourced IT Projects from the Vendor Perspective: Different Goals, Different Risks," *Journal of Global Information Management*, Vol. 15, 2, pp. 1–28.
- Teng, J., Cheon, M. and Grover, V. (1995), "Decisions to Outsource Information Systems Functions: Testing a Strategy-Theoretic Discrepancy Model," *Decision Sciences*, Vol. 26, 1, pp. 75–103.

- Timlon, J. and Åkerman, N. (2010), "Barriers and Enablers when Transferring R&D Practices from West to China," In *China's Emerging Outsourcing Capabilities*, M. Lacity, L. Willcocks and Y. Zheng (Eds.), Palgrave Macmillan, London, pp. 236–263.
- Tisnovsky, R. (2006), "IT Outsourcing in SME Businesses," Everest Research Institute White Paper, See http://www.everestresearchinstitute.com. Accessed October 2011.
- Tractinsky, N. and Jarvenpaa, S. (1995), "Information Systems Design Decisions in a Global versus Domestic Context," *MIS Quarterly*, December, pp. 507–534.
- Traweek, S. (1988), *Beamtimes and Lifetimes: The World of High Energy Physics*, Harvard University Press, Cambridge MA.

Tribune Business News (2011), "Shared Services: Time for Action," June 23.

- Van den Berghe, L. P. (1981), The Ethnic Phenomenon, Elsevier, New York.
- Van Gorp, D., Jagersma, P. and Livshits, A. (2007), "Offshore Behavior of Service Firms: Policy Implications for Firms and Nations," *Journal of Information Technology Cases and Application Research*, Vol. 9, 1, pp. 7–19.
- Ventovuori, T. and Lehtonen, T. (2006), "Alternative Models for the Management of FM Services," *Journal of Corporate Real Estate*, Vol. 8, 2, pp. 73–90.
- Vitharana, P. and Dharwadkar, R. (2007), "Information Systems Outsourcing: Linking Transaction Cost and Institutional Theories," *Communications of the AIS*, Vol. 20, pp. 346–370.
- Vivek, S., Banwet, D. and Shankar, R. (2008), "Analysis of Interactions Among Core, Transaction, and Relationship-Specific Investments: The Case of Offshoring," *Journal* of Operations Management, Vol. 26, pp. 180–197.
- Vlaar, P., van Fenema, P. and Tiwari, V. (2008), "Cocreating Understanding and Value in Distributed Work: How Members of Onsite and Offshore Vendor Teams Give, Make, Demand, and Break Senses," *MIS Quarterly*, Vol. 32, 2, pp. 227–255.
- Wahrenburg, M., Hackethal, A., Friedrich, L. and Gellrich, T. (2006), "Strategic Decisions Regarding the Vertical Integration of Human Resource Organizations," *International Journal of Human Resource Management*, Vol. 17, 10, pp. 1726–1771.
- Walden, E. (2005), "Intellectual Property Rights and Cannibalization in Information Technology Outsourcing Contracts," *MIS Quarterly*, Vol. 29, 4, pp. 699–721.
- Wang, L., Gwebu, K. L., Wang, J. and Zhu, D. X. (2008), "The Aftermath of Information Technology Outsourcing: An Empirical Study of Firm Performance Following Outsourcing Decisions," *Journal of Information Systems*, Vol. 22, 1, pp. 125–159.
- Watjatrakul, B. (2005), "Determinants of IS Sourcing Decisions: A Comparative Study of Transaction Cost Theory and the Resource-Based View," *Journal of Strategic Information Systems*, Vol. 14, pp. 389–415.
- Webster, D. (2007), "Financial Management and Shared Services," *The Journal of Government Financial Management*, Vol. 56, 2, pp. 39–42.
- Weerakkody, V. and Irani, Z. (2010), "A Value and Risk Analysis of Offshore Outsourcing Business Models: An Exploratory Study," *International Journal of Production Research*, Vol. 48, 2, pp. 613–634.
- Westfall, R. (1999), "An IS Research Relevance Manifesto," *Communications of the AIS*, Vol. 2, 14, http://cais.asinet.org/articles/2-14/article.htm. Accessed October 2011.
- Whitley, E. and Willcocks, L. (2011), "Achieving Step-Change in Outsourcing Maturity: Towards Collaborative Innovation," *MISQ Executive*, Vol. 10, 3, pp. 1–13.
- Whitten, D. and Leidner, D. (2006), "Bringing IT Back: An Analysis of the Decision to Backsource or Switch Vendors," *Decision Sciences*, Vol. 37, 4, pp. 605–621.
- Whitten, D. and Wakefield, R. (2006), "Measuring Switching Costs in IT Outsourcing Services," *Journal of Strategic Information Systems*, Vol. 15, 3, pp. 219–248.

- Wickramasinghe, V. and Kumara, S. (2010), "Work-related Attitudes of Employees in the Emerging ITES-BPO Sector of Sri Lanka," *Strategic Outsourcing: An International Journal*, Vol. 3, 1, pp. 20–32.
- Willcocks, L. (2010), "The Next Step for the CEO; Moving IT-Enabled Services Outsourcing to the Strategic Agenda," *Strategic Outsourcing: An International Journal*, Vol. 3, 1, pp. 62–66.
- Willcocks, L., Cullen, S. and Craig, A. (2010a), *The Outsourcing Enterprise: From Cost Management to Collaborative Innovation*, Palgrave Macmillan, London.
- Willcocks, L., Cullen, S. and Craig, A. (2011a), *The Outsourcing Enterprise: From Cost to Collaborative Innovation*, Palgrave Macmillan, London.
- Willcocks, L. and Feeny, D. (2006a), "IT Outsourcing and Core IS Capabilities: Challenges at Lessons at DuPont," *Information Systems Management*, Vol. 23, 1, pp. 49–56.
- Willcocks, L. and Feeny, D. (2006b), "The Core Capabilities Framework for Achieving High Performing Back Offices," In *Global Sourcing of Business and IT Services*, L. Willcocks and M. Lacity (Eds.), Palgrave Macmillan, United Kingdom, pp. 97–113.
- Willcocks, L. and Fitzgerald, G. (1993), "Market as Opportunity? Case Studies in Outsourcing Information Technology and Services," *Journal of Strategic Information Systems*, Vol. 2, 3, pp. 223–242.
- Willcocks, L. and Griffiths, C. (2010), "Middle Management in Outsourcing and Offshoring: Cost to be Minimized or Critical Resource?" *Cutter IT Journal*, http://www.cutter.com/content/sourcing/fulltext/advisor/2011/src110601.html. Accessed October 2011.
- Willcocks, L., Hindle, J., Feeny, D. and Lacity, M. (2004), "Information Technology and Business Process Outsourcing: The Knowledge Potential," *Journal of Information Systems Management*, Vol. 21, 3, pp. 7–15.
- Willcocks, L. and Lacity, M. (1999), "IT Outsourcing in Insurance Services: Risk, Creative Contracting, and Business Advantage," *Information Systems Journal*, Vol. 9, 61, pp. 1–18.
- Willcocks, L. and Lacity, M. (2006), *Global Sourcing of Business and IT Services*, Palgrave Macmillan, United Kingdom.
- Willcocks, L. and Lacity, M. (2009), *The Practice of Outsourcing: From Information Systems* to BPO and Offshoring, Palgrave Macmillan, United Kingdom.
- Willcocks, L. and Lacity, M. (2012), *The New IT Outsourcing Landscape: From Innovation to Cloud Services*, Palgrave Macmillan, London.
- Willcocks, L., Lacity, M. and Kern, T. (1999), "Risk Mitigation in IT Outsourcing Strategy Revisited: Longitudinal Research at LISA," *Journal of Strategic Information Systems*, Vol. 8, 3, pp. 285–314.
- Willcocks, L., Oshri, I. and Hindle, J. (2010b), *To Bundle or Not to Bundle? Effective Decision-Making for Business and IT Services*, OU/Accenture, London.
- Willcocks, L., Petherbridge, P. and Olson, N. (2003), *Making IT Count*. Butterworth, Oxford.
- Willcocks, L. and Plant, R. (2003), "How Corporations E-Source: From Business Technology Projects to Value Networks," *Information Systems Frontiers*, Vol. 5, 2, pp. 175–193.
- Willcocks, L. and Reynolds, P. (2007), "IT Outsourcing and Rebuilding Core Capabilities at Commonwealth Bank Australia: Case Research 1997–2007," in 3rd, International Conference on Outsourcing of Information Services (ICOIS) (May 2007: Heidelberg, Germany).
- Willcocks, L., Reynolds, P. and Feeny, D. (2007), "Evolving IS Capabilities to Leverage the External IT Services Market," *MIS Quarterly Executive*, Vol. 6, 3, pp. 127–145.

- Willcocks, L., Venters, W. and Whitley, E. (2011b), *Cloud and the Future of Business 1 The Promise*, Accenture/LSE Outsourcing Unit, London.
- Willcocks, L., Venters, W. and Whitley, E. (2010c), "The Coming of the Cloud Corporation," Accenture Outlook Point of View. Accenture, London.
- Williamson, O. (1976), "Franchise Bidding for Natural Monopolies in General and with Respect to CAVT," *Bell Journal of Economics*, Vol. XXVI, 3, pp. 497–540.
- Williamson, O. (1991a), "Strategizing, Economizing, and Economic Organization," *Strategic Management Journal*, Vol. 12, pp. 75–94.
- Williamson, O. (1991b), "Comparative Economic Organization: The Analysis of Discrete Structural Alternatives," *Administrative Science Quarterly*, Vol. 36, 2, pp. 269–296.
- Williamson, O. (2005), "The Economics of Governance," *The American Economic Review*, Vol. 95, 2, pp. 1–18.
- Winkler, J. K., Dibbern, J. and Heinzl, A. (2008), "The Impact of Cultural Differences in Offshore Outsourcing – Case Study Results from German-Indian Application Development Projects," *Information Systems Frontiers*, Vol. 10, pp. 243–258.
- Wüllenweber, K., Beimborn, D., Weitzel, T. and Kőnig, W. (2008a), "The Impact of Process Standardization on Business Process Outsourcing Success," *Information Systems Frontiers*, Vol. 10, 2, pp. 210–224.
- Wüllenweber, K., Jahner, S. and Krcmar, H. (2008b), "Relational Risk Mitigation: The Relationship Approach to Mitigating Risks in Business Process Outsourcing," Proceedings of the 41st Hawaii International Conference on System Sciences.
- Yakhelf, A. (2009), "Outsourcing as a Mode of Organizational Learning," *Strategic Outsourcing: An International Journal*, Vol. 2, 1, pp. 37–53.
- Yin, R. (2003), Case Study Research: Design and Methods, 3rd edition, Sage, Thousand Oaks.
- Zheng, Y., Venters, W. and Cornford, T. (2011), "Agility, Paradox and Organizational Improvisation: The Development of a Particle Physics Grid," *Information Systems Journal*, Vol. 21, 4, pp. 303–333.
- Zouhali-Worrall, M. (2009), "An Internet for Rural India," available on http://Cnnmoney. com. Accessed October 2011.
- Zviran, M., Ahituv, N. and Armoni, A. (2001), "Building Outsourcing Relationships Across the Global Community: The UPS-Motorola Experience," *Journal of Strategic Information Systems*, Vol. 10, 4, pp. 313–333.
- Zwieg, P., Kaiser, K., Beath, C., Bullen, C., Gallagher, K., Goles, T., Howland, J., Simon, J., Abbott, P., Abraham, T., Carmel, E., Evaristo, R., Hawk, S., Lacity, M., Gallivan, M., Kelly, S., Mooney, J., Ranganathan, C., Rottman, J., Ryan, T. and Wion, R. (2006), "The Information Technology Workforce Trends and Implications 2005–2008," *MIS Quarterly Executive*, Vol. 5, 2, pp. 47–54.

Index

Note: The letters 'f' and 't' following the locators refer to figures and tables

AAR, see Average Abnormal Returns (AAR) ABAP (programming language in SAP), 148, 152 absorptive capacity, 17t, 18, 20, 20t, 181, 185 abstraction, cloud "desires framework," 171 Accenture, 69, 71, 149, 153, 159, 166 access to expertise/skills, 6, 7t, 30, 198 access to global markets, 7t, 30 "add-on" strategy, 138 "adversary" type manager, 52 advisor, qualities of, 39-41 see also contract negotiations alternative payment/subscription model, 186 Amazon EC2 IaaS service, 183 Amazon (Elastic Computing Cloud), 181 American Productivity and Quality Center (APQC), 110 analysts, 158-9, 162, 181 application service provision, 10, 11, 59 see also netsourcing architectural innovation, 191 architecture design, 53t, 180 "arms-length," 23 artificial intelligence, 58 asset specificity, 4, 160 attitude, risk, 127, 132 authentication, 182 automatic code generators, 58 automation accounts receivable cash application, 78 cloud "desires framework," 171 IaaS (Infrastructure as a Service), 172 marketplaces, 188 PaaS (Platform as a Service), 172 SaaS (Software as a Service), 78, 172 Average Abnormal Returns (AAR), 4 Avon, 180, 191-2

back office capabilities, 53t bandwagon effect, 128, 134 baseline service levels, 38 best-of-breed vs. bundled services bundling/unbundling, see bundled services client profiles, 137-40 decision matrix, 126t-8t insights for client organizations, 124-8 market analysis: bundled ITO/BPO (2003-2008), 122-4 optimal decision making, 135 sourcing factor analysis, 136f trade-offs, 128-30; advantages with bundling, 130; common concerns, 129; increased control, 129; incremental bundling, 129 using the decision matrix, 135-7 see also bundled services 'Big Four' cloud metrics, 179 BPaas, see Business Process as a Service (BPaas) BPO, see business process outsourcing (BPO) breach of contract, 10t bundled services business profile, 132 client capabilities, 140-1, 140f client factors, 131-2 client market forces and characteristics, 133; geography, 133; influence, 133; level of innovation, 133; regulatory compliance, 133 client propensity to buy, 131f clients likely to buy, 122 contracts (2003-2008), 123t cost effectiveness characteristics, 134 - 5culture, 132 heavy users and high spenders, 132

bundled services - continued incumbent provider, 132 management and integrated services efficiencies, 134 organizational and technological factors, 132 provider and market characteristics, 133-4; bandwagon effect, 134; interdependent services, 134; provider capabilities, 133 relational factors, 132 risk attitude, 132 business creation, 185 business development opportunities, 185 business intelligence, 58, 157t Business Process as a Service (BPaas), 183 - 4business process management, 16, 16t, 17, 19, 19t, 22, 23, 53 business process outsourcing (BPO), 1, passim business/process performance improvements, 30 business profile, 132 business systems thinking, 53t

calculus-based trust, 15 Capability Maturity Model (CMM), 111 Capability Maturity Model Integrated (CMMI), 111 captive center, 57, 73, 78-82, 84-6, 159 career development of employees, 9t, 21 carefully worded contract, 61-2 cash, need to generate, see outsourcing Cayuse Technologies, 149 CTUIR, operating agreement with, 149 delivery methodology, 153 developing human capital, 151t partnered with Eastern Oregon University, 153 subcontracting engagements, 159 tribal member recruitment, 153 tribal-owned Coyote Business Park, 149 "unified career model," 153 value proposition/services/clients, 157t, 158-9 CEI survey, 177 centralization, 43, 58, 61

Centre for Economics and Business Research (CERS), 185 CERS, see Centre for Economics and **Business Research (CERS)** change catalyst, 7t, 30 change management capability, 17t, 18 chargeback structure, 69 chief information officer (CIO), 49 city/county populations/cost of living index, 165f city size, 5 clear authority structures, 107 client bargaining power, 36f client capabilities and management, 48 - 54"comfort seeker" type manager, 52 "managed services," 51 man-to-man marking, 50-1 need of good managers, 48-9 nine core back office capabilities, 53t over-staffing, 50 research findings, 53-5 "the adversary" type manager, 52 wrong staff numbers, 51 client decision-making frameworks, 25 client experience with outsourcing, 29 client firm attributes financial, 4-5 industry, 6 size, 5-6 client management capability, 19t, 20, 22f, 23, 25, 48 client opportunism, 34 client organizations decision matrix, 126-8 insight 1 manage innovation and providers, 124 insight 2 evaluate getting value, 124-5 insight 3 political approach to decision-making, 125 insight 4 innovation, 125 insight 5 emphasize on relationship, 125 insight 6 bundle as start-ups, 125 insight 7 reasons for occurrence, 126 insight 8 talking to clients, 126 insight 9 notion of a tipping point, 126 client outsourcing readiness, 16t, 18, 39

client profiles bundled services, 137-40; conservative type, 138; experimenter type, 139-40; multi-sourcer type, 139; operational exploiter type, 138-9; strategic explorer type, 137 business model. 27 client firm characteristics, 28-9 "institutionalized" outsourcing, 29 novice customers, 28 outsourcing learning curve, phases, 29-30, 29f reasons for not wanting business, 27-8 client project management company pseudonyms, 98f knowledge transfer effects, 107-10 managing people effects, 115-7 managing work effects, 113-5 offshore outsourcing effects, 99t-100t organizational support effects, 101-3 project managers, effect on, 101-3 senior executive practices, 117-20 client-provider relationship, 14-5, 185 client size, 5 client-specific knowledge, 36 client's retained capabilities, 15-8, 16t-17t client switching costs, 36 cloud-based innovation, 184-93, 191f antecedent factors, 184-6 and cloud corporation, collaboration towards, 190-3 and executive support, 188-90 through infrastructure and service, 186-8 cloud-bursting, 172 cloud computing, 2, 25, 58 and business services, 179-80 challenges, 172-5 and innovation, 184-93 longer term shift, 177 near-term development, 175-6 revenue potential, 185-6 and service performance, 177-9 and supply industry, 181-4 technologies-"desires framework," 170 - 2cloud corporation, 186, 192 cloud ecosystem, 172 cloud power stations, 182-3

cloud service component, 183 CMM, see Capability Maturity Model (CMM) CMMI, see Capability Maturity Model Integrated (CMMI) coalition, dominant, 126, 132, 138-9 collaboration, 45, 171, 183-5, 191-3 "comfort seeker" type manager, 52 commercial exploitation, 8, 31 commitment, 22-4, 32 provider's, 112, 119 top management, 13 Commonwealth Bank, 18 communication, 10t, 14, 15, 34, 57, 61, 64, 72, 84, 110-1, 119, 153, 169, 181, 185 compliance and regulatory risk, 34 Computer Information Systems (CIS) program, 152 Confederated Tribes of the Umatilla Indian Reservation (CTUIR), 147t, 149 confidentiality risk, 34 configurational approach, 175, 184 conflict resolution, 15, 22, 34, 63 conservative type client, 138 consolidation IT, 89-90, 92, 93, 94, 190, 191f provider, 138 server, 93 virtual, 72, 87, 88, 91, 91t consultants, 95, 118, 181, 201t consumerization, 182, 189, 191 Container Data Center, 172 contract carefully worded, 61-2 cloud computing, 173-4 detail, 13, 22t, 38 duration, 13-4, 44t facilitation, 53t guidelines for managers, 45-6 ideal, 43-4 long-term, 46 monitoring, 50, 53t negotiation capability, 16t, 17-8, 53 short-term, 44 size, 14 successful contract, 13-4; detail, 13; duration, 13-4; size, 14 transformation capabilities, 43 type, 23

contract negotiations advisor, help from, 39-41 baseline service levels, transparent in, 38 client bargaining power, 36f "contractual governance," 35 decision-making process, 39 evaluation phase, 39 "fixed price" mechanism, 42 ideal contract, 43-4; see also contract issue of "faux" bids, 35-6 outsourcing evaluation exercise, 35 paid-for consultancy assignment, 35 provider switching costs, 35 range of pricing options request for proposal (RFP), 34 service-level agreements (SLAs), 39 vendor opportunism, 42-3 contractual complexity, 13, 22 contractual governance, 25, 35 and relational governance, 64-5 control mechanisms, 11 cooperation, 14, 34, 48, 61, 86, 92, 93, 102 core capabilities, 6, 7t, 30, 53 corporate firewalls, 173 corporate social responsibility (CSR) capability, 20, 20t, 60 cost advantage, 12, 138, 177 cost-benefit modeling, 172 cost efficiency, 23, 71 cost monitoring, 38 cost predictability, 8t, 30 cost reduction, 6, 7t, 8, 28, 30, 62, 69, 87, 132, 193 cost savings, 185 CrossUSA, 143, 146-7 developing human capital, 151t investment in recruiting, 150 "trailing house or trailing spouse," 150 value proposition/services/clients, 155-7, 156t CTUIR, see Confederated Tribes of the Umatilla Indian Reservation (CTUIR) cultural awareness training, 101-2 cultural distance management capability, 17-8, 22f, 53 culture, 60t, 76, 77, 86, 93, 102, 116, 127, 132, 136, 148, 153, 163, 165-6 CxO level, 175

data anonymization, 173 databases. 182 data centers, 172 "data-deluge," 182 "Data Manager," 90 decision-making process, 39, 126t, 131, 135 decision matrix, 135-7 decisions, successful, 11-3 degree of outsourcing, 11-2 evaluation process, 13 multi-sourcing, 12 top management commitment, 13 degree of outsourcing, 11–2, 22f, 23 Dell/Perot Systems, 144 department size, 5 detailed contracts, 13, 34, 45 digital age, 155, 169 Digital Divide Data, 145 domain understanding, 19t, 20, 22f, 23, 24, 59 domestic outsourcing, 98, 105 DuPont, 18 eBay, 169 e-business, 58, 181 e-business bubble, 169 economic benefits, cloud computing, 185 - 6economies of scale, 12, 61, 85, 171 Economist, the, 182 eGramIT, 145 elasticity, 182, 191f e-mail consolidation, 91, 93 encryption, 173 end-to-end delivery, 80, 84 end user applications, 175 end user support, 12, 87 enterprise partnerships, 25, 95 enterprise systems, 58 environmental capability, 20 equivalence, cloud "desires framework," 171 evaluation process, 13, 22f, 24, 35 exchange, 51, 119 experimenter type client, 139-40 expert systems, 58

Facebook, 169, 191–2 false security, challenge of, 175

external and internal influences, 74

FAMOUS, see Financial Aid for Missouri Undergraduate Students (FAMOUS) "faux" bids, 35-6 fear of losing control, 8-9 Financial Aid for Missouri Undergraduate Students (FAMOUS), 91 financial crisis of 2008–2010. 56 "financial losers," 5 First Law of Technology, 169 "fixed price" mechanism, 26-7, 41-2, 46 fixed-price project work, 27 flexibility, 7t, 30, 32-3, 68, 185, 194 collaboration involving mutual, 185 infrastructural flexibility of cloud, 185 focus on core capabilities, 6, 7t, 30 4G technology, 184 Frequent Flyer program, 180 "front office" cultures, 60t, 69 geopolitical risk, 34 "get the deal, at any cost" mentality, 28 global delivery centers, 71 finance policies for, 74 Global Initiative-America, 148, 167

Google (App Engine), 181 government spending cutbacks, 56 "gray zone" processes, 82 Grid Computing Infrastructure, 192 gross value added (GVA), 185 guidelines for managers, 66–8

hacking, 173 Hamilton, Monty, 148, 167 *see also* Rural Sourcing, Inc.(RSI) head count reduction, 8t hidden costs, 10, 28, 42, 46, 105 high-speed data transmission, 169 hosted services, 172 human resource (HR) management capability, 17t, 18, 19t, 20, 22f, 59 hybrid clouds, 173, 181–2, 191

IaaS–Infrastructure as a Service, 172, 191 IBM, 70, 95, 144 Iceland, cloud services in, 190 Idaho, 144

ideal contract, 43-4 contract duration, 44t guidelines for managers, 45–6 short-term contracts, 44 transformation capabilities, 43 see also contract identification-based trust, 15 impact sourcing, 2 definition, 143 marginalized populations, 155 social responsibility strategy, 145-6; case studies (Rockefeller report), 145; "Job Creation Through Building the Field of Impact Sourcing," 145 see also rural and impact sourcing incremental bundling, 129 incremental innovation, 191 incumbent provider, 132 industry attributes, 6, 29, 156t, 167 information technology outsourcing (ITO), 1, passim Information Technology Services Division (ITSD), 91 informed buying, 53t in-house labor (insourcing), 159 in-house service measurement, 38 innovation cloud-based, 184-93, 191f; antecedent factors, 184-6; and cloud corporation, collaboration toward, 190-3; and executive support, 188–90; through infrastructure and service, 186-8 collaborative behaviors, 32 debate on, 31-2 incremental, 191 lack of, 31 leadership, 32 modes of contracting and incentives, 32 multi-functional teaming, 32 provider-initiated, 56 radical, 191-2, 194 Institutional Lock-Ins., 174 integration client-provider, 36 S2S integration, 184 technological integration, 132, 138, 139 intellectual property risk, 34

"intensive CMM training," 112 interdependence, 132, 138, 139 International Quality and Productivity Center. 71 International Standards Organization (ISO), 110 Internet, 74, 169-71, 175, 180-1, 184, 188, 193, 194 investment in the relationship, 162-3 iPads, 188-9 ISO, see International Standards Organization (ISO) ITO, see information technology outsourcing (ITO) ITO and BPO research, robust practices client capabilities, 15-8 client firm attributes, 4-6 client-provider relationships, 14-5 contractual governance, 13-4 decision process, 11-3 good relationships, characteristics, 14–5; communication, 15; effective knowledge sharing, 14-5; partnership view, 15; trust, 15 interaction effects, 21-3 outcomes, 2-4 outsourcing barriers, 9t outsourcing drivers, 7t-8t provider's capabilities, 18-21, 19t-20t research topics, 2t retained capabilities of clients, 15-8, 16t-17t risks and mitigation, 9-11 strategic intent, 6-9 successful contracts, 13-4; detail, 13; duration, 13-4; size, 14 successful decisions, 11-3; degree of outsourcing, 11-2; evaluation process, 13; multi-sourcing, 12; top management commitment, 13 ITO/BPO bundled services 2003-2008, market analysis, 122-4 ITSD, see Information Technology Services Division (ITSD) iTune, 179

job creation, 145, 186 "Job Creation Through Building the Field of Impact Sourcing," 105

J.P. Morgan, 8-9 Jumpbox.com, 183 knowledge-based trust, 15 knowledge sharing, 14-5, 22f, 63-4 knowledge transfer effects, 107-10 applications or technologies, 110 renewal, 109-10 testing/verifying provider employee's knowledge, 108-9 transfer upfront, 107-8 Large Hadron Collider (LHC), 192 layoff, 4, 105 leadership, 31, 32, 53t, 59, 61t, 72, 97, 108, 115, 168 learning curve effects, 11 liaisons onshore, 160 onsite, 28, 154 outgoing, 109 lock-ins, cloud services, 174 long-term contracts, 46 "managed services," 51 management, cloud services, 174-5 management practices, 61 managers, need of, 48-9 managing client expectations, 19t, 20 managing outsourced services client capabilities and management, 48 - 54guidelines, 66-8 nine core back office capabilities, 53t outsourcing outcomes, 65-6 provider capabilities and management, 54-61, 60t-1t relational governance, 61-5 see also individual entries man-to-man marking, 50-1, 67, 162 MapReduce (Google), 182 market analysis: ITO/BPO (2003-2008), 122 - 4bundled services contracts, 123 types of bundled services, 122-3 "master-slave" relationship, 64 measurement, 121, 129, 130 in-house service, 38-9 regimes, 59 of risks, 10

Medicare, 154 Microsoft, 148, 152, 179, 181, 182 middle manager/management, 35, 55, 95, 117 Missouri, organizational redesign, 87-94 agency-level service levels, 89-90 IT consolidation, 90 Master Service Level Agreement, 90 organizational redesign, 88-9; programs, 88f restructuring IT department, 90-4 virtual consolidation, 87; savings generated, 91t mobilisation, 191f Moore's Law, 172 multiple providers, 11, 12, 24, 42, 121, 124, 139 multi-sourcer type client, 139 multi-sourcing, 1, 11, 12, 22f, 40, 121-2, 129, 135, 139 see also best-of-breed vs. bundled services "mum effect," 115 mutual dependency, 14, 61 "the mythical man month," 106, 147 National Association of Software and Services Companies (NASSCOM), 167 nearshore providers, 159-60 netsourcing, 25, 59 new/transformational IT products and services, 58 non-core capabilities, 30, 32, 53 offshore outsourcing and career, 103 effects, 99t-100t of information technology (IT), 97-8 mentor for, 102 research on. 1 and rural outsourcing, comparison of, 154 - 5training, 102 offshore providers, 40, 100t, 101, 103-5, 107, 110-1, 113, 114, 116-7, 120, 154, 159, 160 Onshore Technology Services (OTS), 148 boot camp curriculum, 152 data matching, 158

organic workforce development strategy, 152 training on.net and Microsoft certifications, 148 value proposition/services/clients, 156t-7t, 158 OpenSource, 183 operational capability, 17 Operational Exploiter, 122, 136f, 137-41 operational exploiter type client, 138-9 operational risk, 34, 141 opportunism client, 34 vendor, 42 Oracle, 59, 71, 78, 179, 180, 183 Oracle On Demand, 179 organizational age, 146 see also provider organizations organizational capability, 15-8 organizational redesign, 43, 72, 73f, 75f, 76-81, 84, 87-8, 88f, 94 organizational support effects, 101-3 characteristics of mentor for offshore outsourcing, 102 mentor for offshore outsourcing, 102 more project delays, 105-6 offshore outsourcing/career, 103 perform the role of PMO, 101-2 project managers, effect on, 101-3 specialized training, 102 time zone differences, 106 OTS, see Onshore Technology Services (OTS) outsourcing alliance. 64 barriers, 9t client profiles, see client profiles contract, see contract negotiations degree of, 11-2, 22f, 23 drivers, 7t-8t evaluation exercise, 35 life cycle, 36 outcomes, 65-6; from client and provider perspective, 66f; "winner's curse" deals, 65 strategy, see strategy, outsourcing systems operations, 12 things providers say, 26t "Outsourcing: A Game for Losers," 4 over-staffing, 50

PaaS-Platform as a Service, 172, 191 paid-for consultancy assignment, 35 partnership view, 15, 22f partner, 12 specific capabilities, 59-60 payment alternative payment/subscription model, 186 "no purchase order, no payment" policy, 75 proper and timely, 63 schedules, 33 performance-based trust, 15 performance indicators, 178, 190 pilot tests, 11 political reasons, 7t, 35, 93 prior client experience, 11, 20, 21 prior client firm performance, 5 prior firm performance, 29 prior performance of the internal department, 29 prior relations between client and provider, 132 private clouds, 172 proactive sense making, 17t "problem child" reputation, 27-8 process complexity, 38-9, 39 process doing, 53t process interdependence, 132, 138, 139 process standardization, 34, 75, 78, 98, 100t, 119, 120, 130 CMM/CMMI, 111 effects, 110-3 provider process capability, 113 requirement definitions, 111-2 profiles of clients likely to buy conservative, 122 experimenter, 122 multi-sourcer, 122 operational exploiter, 122 strategic explorer, 122 profitability, 4, 43, 65, 73, 74, 163 Program Management Office (PMO), 101 project planning effects, 103-6 higher transaction costs, 105 provider's scarce IT skills, 104 quick staffing, 104 verifying offshore provider's work, 104 - 5

project status, 19, 102 provider capabilities and management, 54-61, 60t-1t client's help, 54 information about capabilities, 54 internal problems of providers, 55 management practices, 61 new/transformational IT products and services, 58 partner capabilities, 59-60 provider-initiated innovation, 56 "revolutions," 59 "strategic IT partnership," 58 provider -initiated innovation, 56 provider organizations, 17, 117, 147t, 185 provider-provider relationship, 185 provider's capabilities, 18-21, 19t-20t providers, internal problems of, 55 provider switching costs, 35 public sector agencies, 37 public wifi, 184

Qantas, 180

radical innovation, 191-2, 194 rapid delivery, 7t, 186 RAPP media agency, 171 reengineering, 57-9 regulatory requirements, concern for, 9t relational governance, 61-5 carefully worded contract, 61-2 contractual governance and, 64-5 "outsourcing alliance," 64 trust, 15, 63-4 relationship(s) building, 53t, 153 communication, 15 effective knowledge sharing, 14-5 partnership view, 15 quality, 3 -specific investments, 34 trust, 15 remote domestic locations (RDLs), 145 reputation advisor's, 36 client's, 36 "problem child," 27 risk, 34

request for proposal (RFP), 34-40, 45 clauses in the outsourcing contract, 38 "a five foot contract," 37 length of, 36-8 see also contract negotiations return on assets, 3, 4 Reuters, change programs, 73-87 lessons, 76 new finance operating model, 81f phase I: business process redesign, 74-5; change programs, 74; organizational redesign, 76-7; technology enablement, 77-9; transformation programs, 75f phase II: business process redesign, 84; change programs, 80; organizational redesign, 81-4; sourcing redesign, 84-7; transformation programs, 80f process analysis at activity level, 83f "revolutions," 59 risk(s) attitude, 132 cloud computing, security risks, 173 common risks, 10t compliance and regulatory, 34 confidentiality, 34 Earl, Michael (paper on ITO risks), 34 -escaping opportunity, 33 geopolitical, 34 intellectual property, 34 for knowledge process outsourcing, 34 management, 9-11, 17-8, 33 operational, 34 in outsourcing, 34 practices to reduce, 34 reputation, 34 sharing and strong partnering behaviors, 31 robust practices, definition, 1 Rockefeller Foundation, 145 "The Rural America Brain Drain," 147 ABAP (a programming language in SAP), 148 Clarkston Consulting, 148 Ruralshores, 145 rural sourcing, 2, 25 advocacy group, 166-7 definition, 143

and impact sourcing, relationship between, 144f location strategy, 143-5; low-cost areas, 143; US ITO "pure-play," 143 rural and impact sourcing Cayuse Technologies, 149 city/county populations/cost of living index, 165f client perspectives, 154-9; classification of clients, 154; high retention rates, 154; patriotism, 155; price-wise, 154 clients, lessons for; business criticality, 160; evolution of engagements, 161-2, 161f; global sourcing portfolio, 159-61; ideal sourcing model, 160; insourcing, use of, 160; investment in relationship, 162-3; planning ahead, 162; remote staff augmentation model, 161; sourcing options, 160f CrossUSA, 146-7 evolution of client engagements, 161f Onshore Technology Services (OTS), 148 providers, lessons for, 159-63; adapt or perish, 163; advocacy group, 166-7; city/county populations/cost of living index, 165f; culture, 165-6; location, 164-5 Rural Sourcing, Inc. (RSI), 147-8 Samasource, 149-50 Rural Sourcing, Inc. (RSI), 143, 147-8 ABAP (a programming language in SAP), 148 Clarkston Consulting, 148 combination of technical and behavioral interviews, 152 developing human capital, 151t local universities, reliance on, 152 offshore sourcing model, 158 retention strategy, 152 value proposition/services/clients, 156t-7t, 158 vibrant ERP business, 148

SaaS–Software as a Service, 172, 191 Salesforce.com, 174, 180, 184, 187, 192 Salesforce-to-Salesforce (S2S), 184

Samasource, 145, 149-50 developing human capital, 151t Ken-Tech Data, 153 low-level digital services, 149 micro-sourcing, 149 training by local partners, 153 Usha Martin Rural Services (Jharkhand, India), 153 value proposition/services/clients, 157t Woman's Digital League (Rawalpindi, Pakistan), 154 SAP, 148, 152, 183 SAP On Demand, 179 scalability, 7t, 30, 69, 91, 167, 181 S-curves, 170 security/intellectual property, concern for, 8, 9t security, privacy, and confidentiality capability, 19t, 20 security risks, cloud computing, 173 "sell then build," 167 senior leadership, 97 service-level agreement (SLA), 39, 56, 73f, 173 service quality, 12, 14, 32, 154, 159, 172-4, 179, 194 shared services approaches, 95 benefits, 69-70 best practices, 72 complex choices, 70-1 definition (Accenture's), 69 four change programs, 72-3, 73f global adoption, 71 organizational redesign at Missouri, see Missouri, organizational redesign public sector adoption, 71 Reuters, see Reuters, change programs survey by Oracle, 71 'Sherman's march to the sea' approach, 30 short-term contracts, 11, 43, 44 Siebel Loyalty, Oracle, 180 smart phones, 184, 188-9 social capital, 119 Software Engineering Institute (SEI), 110 software re-platforming, 97 sourcing factor analysis, 136f sourcing strategy effectiveness, assessment of, 119-20

Spotify, 179 staff augmentation, 27, 51, 115, 146, 156t, 159 model, 27, 161-2 Standard Industry Classification (SIC) codes, 6 standardization, 43 Start-up enterprises, 167 State of Information Technology, 90 "Steve's Jobs," 193 stock price outsourcing announcements, 3 performance, 3, 198 strategic explorer type client, 137 strategic intent, 6-9 strategic partnerships, 58, 70, 159, 160 strategic positioning, 175 strategic sourcing objectives client stakeholder involvement, 32 top management involvement, 32 strategy, outsourcing, 30-4, 97, 98, 117 clients benefits, 31-2 cost plus innovation, 31 cost reduction, 30-1 innovation: collaborative behaviors, 32; debate on, 31-2; lack of, 31; leadership, 32; modes of contracting and incentives, 32; multi-functional teaming, 32 practices to reduce a client's risk, 34 providers, help from, 33 reasons for outsourcing, 30 reduce internal headcount, 33 risk-escaping opportunity, 33 risk management, 33 risks for knowledge process, 34 risk sharing and strong partnering behaviors, 31 risks in outsourcing, 34 sourcing objectives, 32; client stakeholder involvement, 32; top management involvement, 32 supercomputing, 182 supplier development, 53t supplier employee performance, 19t, 20 supplier management capability, 16-7, 16t, 22t, 23, 25, 53 supplier's core competencies, 19t, 20 Supply Chain Council, 110

Swiss Bank, 8-9 switching costs, 10, 35, 36, 46, 55, 139, 174 Systems Integrators, 183 systems management, 12 Systems Network Architecture (SNA), 59 Tablets, 184 tailoring, cloud "desires framework," 171, 172 task complexity, 160 team building, 163 technical and methodological capability, 16t, 17-8, 19, 19t, 20, 22f, 59 technical reasons, 7t Technology Lock-In, 174 telecommunications, 4, 12, 89, 90, 93, 98t, 108, 169 time zone differences, 98, 99t, 106 see also organizational support effects top management commitment, 11, 13 trade-offs, 128-30 advantages with bundling, 130 common concerns, 129 increased control, 129 incremental bundling, 129 see also best-of-breed vs. bundled services training cultural awareness, 101 employees, 52 lack of in-depth, 57 project with offshore resources, 102 provider employee, 28 transaction costs, 10t, 12, 14, 42, 82, 95, 99t, 105, 121, 122, 125, 134, 135, 136, 139, 154, 158

transition management capability, 17t, 18 trust, 15, 22-4, 34, 48, 62-4, 63, 67, 114, 115, 117, 160, 185 Twin Falls, 144 txteagle, 145 uncertainty, 10, 17, 33, 44 urban-based domestic providers, 159, 160, 162 USA OnShoring and Outsourcing Group on LinkedIn, 167 US East Coast health-care company, 162, 163 Usha Martin Rural Services (Jharkhand), 153 US Midwestern Financial Services, 163 value-added services, 182 vendor opportunism, 42-3 video streaming services, 171 virtual consolidation, 72, 87, 88, 91 savings generated from, 91t virtualization, 59, 170-1, 191 virtual private clouds, 172 virtual telecommunications access method (VTAM), 68 wimax, 184 "winner's curse" deals, 65, 66 Woman's Digital League (Rawalpindi, Pakistan), 154 Xerox, 8-9 Yahoo (Y!OS), 181

Zoho, 181