Offshoring Information Technology

Sourcing and Outsourcing to a Global Workforce

The decision to source software development to an overseas firm (offshoring) is frequently looked at in simple economic terms – it is cheaper. In practice, however, offshoring is fraught with difficulties. As well as the considerable challenge of controlling projects at a distance, there are differences in culture, language, business methods, politics, and many other issues to contend with. Nevertheless, as many firms have discovered, the benefits of getting it right are too great to ignore. This book explains everything you need to know to put offshoring into practice, avoid the pitfalls, develop effective offshore strategies and effective working relationships. Split into three parts: offshoring fundamentals; management competencies; and a section on broader issues including a unique look at the viewpoint of an outsourcing provider. Written for CTOs, CIOs, consultants and other IT executives, this book is also an excellent introduction to outsourcing for business and MIS students.

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Foreword

Offshoring Information Technology is an appealing book. Appealing not only because it deals with a topic of growing contemporary significance but also because it does so with lucidity, comprehensiveness, thoughtfulness and insightfulness. Over the last decade, offshoring of IT has become a mainstream business phenomenon and, as a result, managing offshoring has emerged as a critical business competence for firms. Erran Carmel and Paul Tjia in this book present a comprehensive treatment of IT offshoring and discuss the competencies required to successfully manage it. Dexterously guiding the readers through the offshore IT landscape and navigating through a range of pertinent topics, this book presents a well-crafted body of knowledge and guidelines to succeed with offshoring of IT. Recounting my experiences over the last 9 years or so, my immediate reaction to this book was: "Why the hell was this book not available a few years ago?" Had it been available, I thought, it would have positively influenced productivity and performance in offshore IT work – and saved sleepless nights for many people!

Circa 1995: The phenomenon of offshoring was starting to gain prominence. Attracted by its low cost structure and the ability to access a global resource pool, many multinational companies had begun leveraging the benefits of offshore IT either through their own subsidiaries or from third-party suppliers. Lured by its promise, I made the transition into the growing IT industry in 1996 to join a subsidiary of Siemens in Bangalore, engaged in communications software development. My job there was to help improve the performance of projects and the resultant quality of software – aspects crucial to establish credibility of an offshore IT organization. Being new to offshore work with no aid available to rely on, I was obviously overwhelmed by the complexities and challenges of the globally distributed work. I struggled hard to successfully deliver on my objectives amidst cultural and time zone differences, geographical separations, and diverse stakeholder expectations.

However, when I took up a new position in 1997 as a member of the management team that was responsible for setting up Lucent Technologies product software R&D center in Bangalore, I received my first full-blown exposure to the world of offshore development and its various nuances. The challenge at hand was to establish a best-inclass offshore software development organization while beating the barriers of time and distance and simultaneously balancing the various considerations (for instance, economic, technical, legal, cultural, organizational and managerial) involved in off-shore work. As a general manager, my job also required me to engage with third-party service providers. There were times when the work I managed spanned seven countries!

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With no account of proven practices available, I was forced to meet complexities headon, devising my own ways and learning through perpetual refinement the art of managing offshore work.

Circa 2005: Offshoring of IT is now an irreversible trend and is regarded as a business necessity. Companies across the globe are capitalizing on offshoring to achieve business competitiveness. In the last 3 years or so, offshore IT has assumed new forms to include offshoring of business processes and even R&D. Offshoring of IT is intensifying and firms are strategically leveraging offshore capability and the structural cost savings, while also focusing on deriving operational innovation. Robust models and quality and project management processes are employed to unleash the benefits of offshore IT, such as the *Global Delivery Model* of Infosys Technologies – the company where I currently work as an associate vice president. However, the same complexities and challenges still exist, some even growing in their magnitude and assuming new dimensions. Although many refined and proven managerial and organizational practices, and technological tools and infrastructures, are now available, the challenges and constraints involved in managing offshore IT are far from gone. The art of managing offshore IT work is still evolving.

I consider *Offshoring Information Technology* an important book in many ways. First of all, IT offshoring is part of the larger phenomenon of globally distributed work and while much is understood about globalization of work in general, the body of knowledge on IT offshoring is rather scarce. In this book, Carmel and Tjia provide a structured understanding of the phenomenon of IT offshoring, discuss its various nuances and offer effective practices to succeed with offshoring of IT. As a practitioner-scholar, I have been researching globalization of R&D and software development for about five years now and I am impressed with the systematic and pragmatic coverage of offshore IT Carmel and Tjia have crafted. To the best of my knowledge, this is also the first comprehensive source of knowledge on IT offshoring.

Secondly and very importantly, this book provides practical insights and guidance for managers to help them acquire or refine the competencies required for effectively leveraging IT offshoring. Even though my stints in different organizations in various capacities and settings have allowed me to gain some experience in managing offshore IT, I find this book containing pearls of wisdom. Carmel and Tjia discuss a range of important topics for embarking on and managing offshore IT work. Among other things, this book addresses economics and risks of IT offshoring, assessment and planning for offshoring IT, offshoring strategy, and transition management. It also offers advice on how to alleviate the issues arising out of distance, time zone differences, and cultural diversity in addition to discussing some typical contractual and legal considerations. Notably, the book also presents national policy-level implications for capitalizing on the offshoring wave in addition to offering perspectives on marketing of offshore IT services.

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Interestingly, there is also a chapter devoted to discussing the political dimension associated with offshoring.

Both as an executive operating in the midst of accelerating pace of offshoring and as a practitioner-scholar deeply interested in the area of globally distributed work, I believe this book greatly enhances our understanding of a jigsaw puzzle called IT offshoring and equips us well to deal with it. In recording my appreciation for this valuable book, I am also quite hopeful that it will significantly illuminate the people engaged in the business of offshoring IT.

Bangalore, India 21 January 2005 Deependra Moitra Associate Vice President Infosys Technologies Limited

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Preface

Why we wrote this book

Whether one is for it or afraid of it, we are convinced that managing offshoring is a competency that tomorrow's IT managers must learn. We wrote this book to help build that competency.

This book builds offshore competency in the breadth and depth of the material covered here: offshore economics, offshore strategy, offshore legal issues, how to get started in offshoring, and many other critical topics.

By teaming up across the Atlantic (Erran is in the United States, Paul is in The Netherlands), we bring different views and challenged each other's assumptions. We bring different views in other ways, we formed a business-academic alliance (Erran is a professor of business and Paul is a consultant on offshoring). We also invited other experts to contribute: there are eight additional authors and co-authors of some chapters and some cases. For example, we invited an attorney specializing in offshoring, Rebecca Eisner, to author the chapter on offshore legal issues.

We have also collected many real-life examples: nine in-depth cases, all of which are first published here, as well as countless stories and anecdotes sprinkled throughout the book.

This book is also a resource for students and teachers in business and technology programs. As we wrote this book the first offshore outsourcing classes were offered. Today, the topic of offshoring should be a component of any management curriculum.

Finally, we also wrote this book for policy makers and analysts in or around governments. Governments in dozens of nations have been devoting more attention to offshoring as path to increase their national wealth.

We, the authors, both live in countries where offshoring has become a controversial political topic. Thus, as we wrote this book, we were often asked by friends and colleagues: "So, what stance are you taking on this issue?" By this our interrogators meant: are we for or against offshoring? In this book we cover the advantages and disadvantages of offshoring openly and honestly. We did not write this book to take a political stance; this is a management book.

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Offshore jargon and the scope of this book

Why isn't this book called offshore information technology OUTsourcing?

The term *offshore information technology outsourcing* is replete with misleading usage. So, at the outset, we will define and parse some offshore jargon and explain what "they" mean – and what we mean in this book. This will also be a good place to explain what is in the scope of this book.

What is meant by offshore?

Strictly speaking, offshore can be any country outside the home country, similar to the word "foreign." Before everyone began using *offshore IT outsourcing*, the common usage of offshore in the business context was for offshore tax havens,¹ often on small islands offshore, such as the Cayman Islands off the coast of the US. Indeed, an Internet search will still present these items on occasion.

But, the word "offshore" has taken a new meaning. It is understood by many of its business users to mean the shifting of tasks to *low-cost* nations, rather than to any destination outside the country. Low-cost nations are those that fall into the economic grouping of "developing nations" or "emerging nations." Thus a British software firm does not usually refer to its US software research center as an "offshore site." Really, the broader theme of this book is the ascendancy of nations outside the most developed industrialized economies – and the true globalization of the software industry.

"Offshore" has spawned many derivative terms, the most important of which is the opposite: **onshore**. In this usage "onshore services" are those that are provided by foreign firms locally (onsite) often using lower-wage foreign employees. For example, the US special work visa, the H1-B, has been used to import labor in order to staff these "onshore" services. Amusingly, *offshore* has morphed in the hands of marketing departments as the list of terms in Exhibit 1 demonstrates.

What is meant by outsourcing?

Outsourcing has two implications. First, it means that tasks and processes are contracted to be performed outside the boundaries of the firm. Thus, some of GE's offshore development centers (ODCs) in India are, indeed, outsourcing, because they are performed by a third party, Tata Consultancy Services; while Siemens' software development center in India is owned by Siemens and its employees are Siemens' employees.

Many technology firms have globalized via acquisitions – acquiring smaller software firms around the world – and then molding them into their global operations. Other firms have expanded offshore by setting up greenfield subsidiaries – setting up a new, from-the-ground-up subsidiary or software center. When such an offshore center

х Р —	reface
Γ	• Onshore
	• Offshore
	• Nearshore
	• Best Shore (EDS)
	• Anyshore (BearingPoint)
	• Rightshore (Capgemini)
	• Farshore (CG&Y)
	• Dualshore (NIIT)
	Offsourcing (HCL Technologies)
	• Offshoring
	Nearsourcing
	• Nearshoring
	• Multishore



is owned by the client company, then in offshore-speak it is called a **captive center**. There are also hybrid collaborative arrangements, such as setting up a joint venture with a local partner.

So, really, a better term to use, instead of outsourcing, is **sourcing**. This book is about *offshore sourcing*. Where sourcing can be from outside the firm or inside the firm: whether it be outsourcing, or inside the company in captive centers.

Second, the traditional outsourcing industry sees outsourcing more narrowly: when an entire process is delegated to an outsider – a call center, network management, or application support – and sometimes where assets and staff are actually transferred to the outsourcing firm. But, these days, many offshore activities are one-off, single projects that are contracted on a one-by-one basis. Therefore, strictly speaking, this is not outsourcing in the traditional sense, but "project contracting," or **out-tasking**. While we use the term out-tasking in this book, we do not subscribe to the narrow definition of outsourcing.

What is meant by Information Technology – IT?

Some software engineers hear it as *information systems* type activities that are conducted across industries, by end-user organizations, such as a retail chain. We do not segregate IT from software. This book is about *any type of software*-related activity: IT services and IT applications, software products, and embedded software.

Figure 1 has a small appendage hanging from its right side. This is **IT-enabled** services (**ITES**). IT-enabled services includes the many services that are now being sliced away and offshored: from call centers, to medical transcription, architectural drafting, through financial securities research. These are not software activities. Nevertheless,



Figure 1 Scope of this book.

IT-enabled services offshoring and IT offshoring are closely tied together. Therefore, we mention IT-enabled services throughout the book, but in particular in Chapters 1 and 10.

The book roadmap

We structured this book so that it does not have to be read linearly. Skim, jump, or hunt for the chapters that are most pressing to you.

Part I, *The Fundamentals* covers the most important issues to the manager, especially in early offshore stages. Chapter 1, *The Offshore Landscape*, gives the reader a broad overview of offshoring past, present, and future, while introducing some of the topics that will be covered in later chapters. Chapter 2, *Offshore Economics and Offshore Risks*, examines the most critical business issue: Is there really a cost advantage? Or is this, perhaps, an illusion? It also includes the first of our nine practical cases: how a giant American company calculates the real costs of offshoring. This chapter also takes a close look at the other side of cost savings: the risks in offshoring.

Chapter 3, *Beginning the Offshore Journey* is written for the manager who, as the title suggests, is just beginning. It deals with the three major phases: laying a solid foundation, the identification of potential service providers, and then selecting the best one. Chapter 4, *The Offshore Country Menu*, gives the reader a foundation for understanding the many countries that are offshore destinations. Even if you are convinced ahead of time that you will offshore to India, this chapter will be useful. The chapter ends with small briefings on a cross section of 11 offshore destinations.

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Part II of the book is titled *Managerial Competency*. It takes the business reader through five building blocks of managing offshore activities. The chapters are: *Offshore Strategy*, on the cost strategy and beyond; *Offshore Legal Issues*, covering the contractual concerns and legal risks; *Managing the Offshore Transition*, covering the three difficult topics of knowledge transfer, change management, and governance; *Overcoming Distance and Time*, offering the many small formal and informal solutions to this difficult problem; and *Dealing with Cross-Cultural Issues*, which takes a lighthearted and practical perspective to differences between people around the world.

Finally, in Part III, *Other Stakeholders*, we introduce perspectives of interest to different readers. First, *Building Software Industries in Developing Countries* takes the view of policy makers interested in how their countries can gain from the growing global demand for offshore services. Then comes *Marketing of Offshore Services – the Provider Perspective*, which presents the view of offshore providers' marketing and sales staff seeking to enter new markets and target new clients. Finally, the last chapter examines the controversial political and social implications of offshoring.

Acknowledgments

Marty McCaffrey was the spiritual father of this book in two important ways. First, Marty began discussing the need to write a book on offshoring as far back as 2000. Second, Marty made many professional introductions to us – many of which benefited this book directly or indirectly.

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Erran adds: My most committed reader of many drafts and my most unrelenting critic has been my father, Eli, a global business manager and also a former professor. He persisted in demanding more and more. My thinking benefited immensely from his comments and it was rewarding to work together.

Paul adds: Dedicated to the memory of my father, Tian Seng Tjia. His business advice and moral support were of enormous value when starting an offshore consultancy in the middle of the 1990s. His motto "keep on fighting" also proved valuable on several occasions when writing this book.