EDITORIAL PREFACE

Offshoring and Outsourcing: The Innovation and its Impact on Electronic Commerce in Organizations

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ABSTRACT

Outsourcing refers to the phenomenon of having someone else do the work for you. Offshoring refers to the situation when such work is performed in a different country. With the advent of high bandwidth telecommunications links and the diminishing costs of computers and telecommunications infrastructure, a growing number of companies are opting to perform increasing types of professional services in foreign countries. To some, this represents an unprecedented opportunity to reduce costs and to nucleate new strategic relationships. To others, the new phenomenon represents a major threat to current prosperity. These issues are discussed using examples from diverse industries and organizations.

INTRODUCTION

If you go out to a restaurant, this is outsourcing: somebody else spent the time and energy to provide the meal to you. If you call a company for a loan and get connected to an operator in a call center owned by another company and located in another country, then this is a case of both outsourcing and offshoring.

Outsourcing, especially offshoring, of professional services is receiving increasing attention at all levels: business, technical, political, strategic, and economic. Some executives believe that companies can reap major benefits by rendering these services at the most economic prices without the traditional barriers of national and corporate boundaries. At the other extreme, trade unions and unemployed individuals blame many economic woes to offshoring.

Offshoring raises many interesting issues from an academic viewpoint. At the strategic level, companies need to delineate alternative models of operation, and to decide on the optimal model for adapting to the changing business environments in which their suppliers, their customers, and their partners operate in geographically dispersed environments. At the organizational level, one needs to research new relationships between suppliers and buyers. At the technical level, one needs to analyze new paradigms for effective collaboration that can mitigate the current overheads involved in geographically dispersed work centers. At the economic level, one needs to do objective analysis of costs and benefits that accrue to the individual worker, to the host environment, to the sponsoring company, to the operating company, and to the concerned states and countries.
Offshoring has come a long way indeed! Not only has it become a thread in the tapestry of modern culture, it has also changed significantly in how and why it is done. Initially, offshoring was an option motivated solely by considerations of lowering costs. Advances in networking technology and infrastructure upgrades in developing countries have made it feasible to transfer work without the transfer of labor, from developed environments to developing ones. The lower wages in developing countries were at first a boon to “body shop” operations such as call centers, and subsequently to intricate endeavors relating to programming and systems development. Offshoring operations have evolved from short-term “tactical” relationships into more mature, long-term, “strategic” partnerships. Long-term partnerships that are globally distributed may evolve to become “24-hour knowledge factories” that involve three or more centers around the world collaborating closely in a continuous cyclic manner. As the sun sets on one center, that center turns off. As the sun rises on the next center, the latter center turns on and continues the work of the previous center. As such, in this paradigm, work becomes a relay race chasing the sun. Just as the Industrial Revolution of the 18th and 19th century led to many major innovations, the 24-hour knowledge factory—a new multinational organization that better exploits geographic distribution for mutual benefit of the participating parties. A case study provides insights into the operations of a globally distributed work environment.

Job loss is a pivotal issue facing organizations that are engaged in offshoring. Many people view jobs sent abroad as detrimental to the domestic economy—a programmer in India replaces a programmer in the U.S. However, these assumptions may not be true according to experts in the field. In the second article, Bullen, Abraham, Gallagher, Kaiser, and Simon present an analysis of a 2005 survey of IT executives. The authors find that domestic jobs will not be lost but will experience a movement further up the value chain. The authors stress the perceived growing importance of client-facing skills and effective project management. From this analysis, the authors recommend a course of action for mid-level workers, as well as a reform of domestic IT education policies and curriculum.

Following the broad overview on offshoring provided in the first two articles, the specific industry of teleradiology is presented in the third article. The success of outsourced and offshored IT is inspiring other disciplines to find ways to profit from comparative advantage in the global market. Of these new disciplines, the offshoring of medical knowledge work is among the most promising. Kalyanpur, Latif, Saini, and Sarnikar share their thoughts on teleradiology in terms of the motivations for teleradiology, the growing
business environment, and the technical and legal issues that impact such work. The field of teleradiology possesses the potential to validate the concept of the global workforce delivery model in an industry that is significantly different in structure and organization from the IT related industries. Overall, this article illustrates the spillover effect of learnings from offshoring in the IT industry.

The potential for health care delivery to occur across national boundaries exposes many open issues in the broader context of outsourcing and offshoring, not least of which is the difficulty of maintaining trust and security between multinational entities. Patki and Patki challenge the notion that legislative actions and multinational courts will provide an effective solution. Rather, they profess that technical solutions should be sought for integration with current systems and practices. They present a broad collection of problems that they frame in the context of fuzzy logic and rough set theory. Based on the theoretical framework, they present insights into how these methods of reasoning can be utilized to make outsourcing more reliable and secure.

Theories that present insights into outsourcing and offshoring seem to be following, rather than leading, the overall movement. In the final article of this special issue, Lai makes a novel contribution by introducing a semantic modeling language that can describe the structure, commitments, and behavior of multiple collaborating parties. She describes this modeling language by references to speech act theory, and includes an interesting example of how it can be applied within a business, as it gradually outsources some of its functions.

**CONCLUSION**

The articles in this special issue of the *Journal of Electronic Commerce in Organizations* were selected to provide a balance between a broad overview and detailed analysis of offshore outsourcing. We began with two lead articles that highlighted the key issues and emerging models, then focused on an example industry, discussed the impact of these models with respect to job loss, and then concluded with two theoretical articles. The goal was to provide a lasting contribution to the area of electronic commerce and organizations through the lens of the current relevant topic of offshore outsourcing.

The complementary set of articles, focusing on technical issues, will appear in the August 2007 issue of ACM Transactions on Internet Technology; it is a special issue on “The Internet and Outsourcing.” Further, a second set of articles, both technical and non-technical, will appear in a special issue of the *Information Resources Management Journal (IRMJ)* scheduled to be published at the beginning of 2008.

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