Studying China’s IT services Industry: Generalizations, Particularities, and the Competitive Outlook

Introduction

In recent years, especially since the 2007-2010 global financial crisis, China’s IT service sector has been increasingly recognized by the Chinese government as a key to the country’s strategic transformation from a manufacturing-based economy to a knowledge- and service-driven economy. By providing services to a diverse set of clients, including domestic, Japanese, and Western enterprises, leading Chinese IT service firms have grown significantly in both scale and capability. However, IS researchers have not yet paid significant attention to China’s IT services industry, especially as compared to the attention received by American, European, or Indian IT services vendors.

While this lack of attention may be justified if researchers believe that there is nothing unique or interesting about China’s IT services industry, in this panel we will argue that China’s IT services industry should not be ignored. At the same time, it is not clear how best to approach studies of China’s IT services. In fact, one can study China’s IT services firms as representative examples of IT services firms in general, providing opportunities to answer typical research questions that IS scholars ask but with the advantage of looking at an early stages of industry development (e.g., Wang et al., 2007, Lee et al. 2008, Ren et al. 2010). Alternatively, one can study these firms by focusing on the specifics of Chinese culture and institutions with unique implications for IT service delivery within and outside China. Because China is the world’s second largest and fastest-growing economy, studying China’s IT services sector for its own sake with its own idiosyncrasies may be sufficiently important to warrant research attention (Arora and Gambardella, 2006).

The panel is designed to present this different positions and early insights from specific research projects supporting these positions. First, the panelists will argue that IS researchers can use China as a research setting to explore more general phenomena, for example, development of capabilities in entrepreneurial firms. Second, the panelists will discuss how China’s cultural and institutional environment needs to be accounted for separately, for example, by focusing on Chinese management style. Finally, the panelist will invite the audience to discuss the future of China’s IT services industry. By addressing these important and controversial issue the panel will directly speak to the ICIS theme of “East Meets West: Connectivity and Collaboration through Effective Information Systems.”

Controversial Issues and Panelists’ Positions

The panel will treat each issue posed above separately focusing on opportunities for research, existing research examples, and controversial issues involved.

Issue 1: Can learning from China on key IS research topics be generalized beyond China

Position For: China represents a great opportunity to learn about general topics of interests to IS researchers with insights generalizable to other settings.

Mike Gallivan will draw on examples of his own and others’ research that applies well-established theories of organizations such as Agency Theory, Social Exchange Theory, Transaction Cost Economics, Relational Governance, and others to issues concerning IT outsourcing in China. He will argue that the application of these theories to the Chinese context is justified and that using these theories yields results that are similar to prior work outside of China. For example, a quantitative study conducted by Ren et al. (forthcoming) on outsourcing relationship management among small to medium-size Chinese firms has
shown results that are similar to findings in prior IS literature. Similarly, Mike’s ongoing qualitative research (in collaboration with colleagues from Huazhong University of Science & Technology in Wuhan, China) studying senior client managers in Chinese government organizations has used the theoretical lenses of Agency Theory and Social Exchange theory to yield generalizable insights. Both of these studies show that we can learn more from China about understudied research areas such as IT outsourcing in SMEs and in government organizations. While, Mike will note that it is important to understand and document institutional, political, and cultural issues involved, he will argue that these issues can be analyzed through traditional management theories. Going beyond these examples, Mike will also elaborate on other theories that can be usefully applied and tested in the Chinese context.

**Ji-Ye Mao** will argue that China represents an understudied setting for generalized learning for how small entrepreneurial software services firms develop dynamic capabilities in highly turbulent environments. He will draw on his studies of Chinese software SMEs (Jarvenpaa and Mao 2008; Jarvenpaa and Mao 2010) conducted in collaboration with Sirkka Jarvenpaa (University of Texas, Austin) since 2004. Before 2008, entrepreneurial Chinese software firms faced unprecedented growth. The global financial crisis was largely unanticipated by these firms. Unlike large Chinese legacy firms (e.g., Neusoft), the entrepreneurial firms did not have a captive domestic client base and hence operational capabilities development was critical for their survival in the competitive offshore software services industry. At the same time, these firms tended to use a mediated offshore business model, whereby a Chinese vendor delivers offshore software services to a larger Japanese based contractor (vendor) that interfaces with the end client. At the end of the crisis, the vendors had little control over clients and often lost business to their Japanese “intermediary”. Overall, these firms found themselves highly unprepared to deal with shrinking offshore business and managing staff layoffs for the first time in their history. The aftermath of the global financial crisis has brought changing labor regulations, ever-growing talent war, currency appreciation, etc. Ji-Ye will argue that insights gained from China can have both theoretical and practical relevance for the world economies that are still initiating or in early stages of developing their IT services industry. This setting also gives an opportunity to build generalizable theories about the differences in how firms respond to turbulence in their business environment as different vendor firms responded differently. Beyond his own research focus, Ji-Ye will also elaborate on other theory development opportunities that can take advantage of Chinese data.

**Position Against: China involves many cultural and institutional particularities and IS theories need to expand to account for these particularities.**

**Ning Su** will discuss the importance of understanding specific issues involved in the globalization of China’s IT service industry. He will focus on Chinese vendors’ capability development and strategic decision-making in their internationalization process. The research is based on a multi-year interview-based field study that encompassed almost all of China’s leading IT service vendors (Su 2008, 2009, Su and Levina 2010). He will argue that China’s unique characteristics, including its role as Japan’s largest IT offshoring destination, its large and dynamic domestic market, and its importance for Western multinational firms, have unique implications for both the IT vendors and their client firms. For example, it would be difficult to understand the trajectory of China’s IT service industry development in the same way as the development of the Indian industry because the Indian IT industry has received strong government incentives to focus on foreign clients in the early days and faced fewer language barriers. While the findings of studies that are focused China’s IT services industry are also relevant for other entrepreneurial IT vendors entering global markets, before generalizing to other contexts, particularities of Chinese context have to be understood.

**Shan Lin Pan** will raise some critical issues facing IS community in studying China’s IT services. Specifically, he will challenge IS community members by asking whether we are really ready to conduct and accept studies that take into consideration China’s unique socio-political environment that is part-and-parcel of Chinese organizations. For example, do we have enough expertise to describe the particularities of dealing with not only government clients but clients governed by the Communist party? Are we ready to address the issues of censorship? How do we deal with seemingly private firms that in reality have majority government ownership? What are the critical elements of Chinese culture that influence business relationships beyond the well-known concept of guanxi? Beyond researchers’ expertise
on these issues, would our colleagues and journal gatekeepers be interested in the differences between applying our management theories to Chinese context and developing theories specific to Chinese management? Would they appreciate the effort in developing knowledge on these topics? These questions are critical to understand if we are to focus on China.

**Issue 2: What is the future of Chinese IT services industry?**

Chinese IT services industry is growing very rapidly, yet its future is uncertain. While cultural, special, temporal, and institutional differences may impede the growth of foreign demand, the booming domestic economy will keep attracting business for IT services firms. Moreover, foreign clients may be cautious in sourcing innovation work to China even if they can overcome these problems, because of the IP risks in sourcing to China. Should Chinese IT industry focus on the domestic market rather than continue expanding rapidly into the international space? Which mode (collaborative or arms-length) should the projects take? Our speaker from the industry will respond to some of these initial questions, followed by the discussion with the audience.

**Panel Structure**

- Panel moderator (Natalia Levina) will overview the state of China’s IT services industry, the motivation for the panel and the two general issues guiding the panel. She will then introduce the presenters (7 min).
- The panel discussion will be broken into three segments:
  - Views supporting the position that China’s IT services industry can be used for generalizable insights (30 minutes)
    - Mike Gallivan and Ji-Ye Mao (20 minutes)
    - Audience questions, opinions, and sharing of own research (10 minutes)
  - Views supporting the position that China’s IT services industry is best studied by focusing on issues specific to China (30 minutes)
    - Ning Su and San Lin Pan (20 minutes)
    - Audience questions, opinions, and sharing of own research (10 minutes)
  - What is the future of China’s IT services industry in global IT services marketplace? (20 minutes)
    - Panel moderator will briefly describe the issues impeding the competitiveness of the China’s IT services industry today (3 min)
    - Practitioner response (7 minutes)
    - Audience participation (10 minutes)
- Panel moderator will conclude with the key highlights of the discussion (3 min)

Overall, we seek to engage the audience in sharing what they are working on or what they are thinking about doing relating to China’s IT services industry. We also expect a lot of opinions coming from people who have studied Indian and Western industries about the topics of our debate.

**Participation Statement**

All the participants have accepted our invitation to serve on the panel if the proposal is accepted. In case of unforeseen circumstances that prevent the participation of any of the above panelists, an equivalent substitute will be provided.
Biographies

**Natalia Levina** is Associate Professor at the New York University, Stern School of Business. She studies how diverse actors span organizational, professional, and cultural boundaries in the process of developing and using technology. She is an expert on global sourcing of professional services and has studied extensively American, Indian, Russian, and Eastern European providers. She has made major contributions to understanding providers’ capability development, collaborative practices on outsourced IS projects, power and status issues in global sourcing, and multisourcing strategies. Together with Ning Su she has been involved in studying China’s IT services industry in the last four years. She has published widely in top IS and organizational journals. She currently serves on the editorial board of Organization Science and Information and Organizations as well as a Senior Editor at ISR and guest editor for special issues of EJIS and MIS Quarterly.

**Mike Gallivan** is Associate Professor in the CIS Department, Robinson College of Business at Georgia State University. Mike’s research on IT outsourcing focuses on domestic IT outsourcing within China, as well as the long-term prospects for client firms in western countries conducting offshoring or offshore outsourcing to China. In addition, he is interested in how client firms’ shareholders respond to announcements about their firms outsourcing to vendors in low-cost countries (such as China, India, Philippines) vs. to IT vendors with their headquarters in the U.S. Other research interests include inter-organizational alliances and how such alliances affect firm performance, as well innovative methods for IS research, including event study analysis, meta-analysis, social network analysis, cocitation analysis, and other scientometric methods. Mike also conducts research on human resource practices for managing IT personnel, IT innovation and use, and scientometrics issues in IS research. Mike has published widely on these topics in top IS journals. He also recently completed his terms as an Associate Editor for MIS Quarterly and Journal of MIS. He presently serves as a Guest Senior Editor on several manuscripts for MIS Quarterly as well as on the Editorial Boards of Journal of Information Technology and Information Technology & People.

**Ji-Ye Mao** is an Associate Dean at the School of Business and Professor of Management Science and Engineering at the Renmin University in China. He received his Ph.D. in MIS from the University of British Columbia, and taught at the University of Waterloo from 1995 and 2001. Before returning to his Alma Mater, he visited the City University of Hong Kong from 2002-2004. His area of interest include human-computer interaction, IT project management, enterprise resource planning systems, e-commerce, and offshoring/outsourcing arrangements. He has published extensively on this topics in premier IS and Human-Computer Interaction journals. He has been collecting data on Chinese software industry for the last seven years focusing on how vendors in this industry develop operational capabilities and how they deal with the global financial services crises that impacted their demand.

**Ning Su** is an Assistant Professor at the Richard Ivey School of Business of University of Western Ontario, Canada. He holds a Ph.D. from New York University's Stern School of Business. His research investigates global sourcing of knowledge-intensive services from both the client’s and vendor’s perspectives. His research typically relies on in-depth qualitative studies of multiple firms and grounded theory methodology. From the client’s perspective, he studies innovative sourcing models, such as “multisourcing” and “shared services”. From the vendor's perspective, he studies emerging management practices in Chinese IT service industry, in areas including capability development, internationalization strategy, and cultural intelligence.

**Shan Ling Pan** is an Associate Professor and the coordinator of the Asian IT Case Series in the Department of Information Systems, National University of Singapore (NUS). As a qualitative researcher, he is interested in understanding the strategic issues of implementation and use of IT in organizations. He is particularly interested in studying the relationship between people and technology in Chinese organizations, with emphasis on capabilities, resources and ambidexterity issues among users and the changes in the nature of work practices. Last year his paper on boundary spanning in China’s IT services firm has won a best paper award at ICIS 2010. He has published extensively in top IS journals. Over the last five years, he has conducted in-depth studies on some of the well-known Chinese organizations such as Neusoft, China Mobile, Haier, Alibaba, SuNing, Beijing International Airport and others. He also currently serves as an associate editor of MIS Quarterly and ISR.
References


