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# The Future of Outsourcing in the Asia-Pacific Region: Implications for Research and Practice—Panel Report from PACIS 2014

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# Communications of the Association for Information Systems

# The Future of Outsourcing in the Asia-Pacific Region: Implications for Research and Practice—Panel Report from PACIS 2014

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# Abstract:

This paper summarizes a panel discussion held at the 18th Pacific Asia Conference on Information Systems (PACIS) in Chengdu, China, 2014, with the same title. The panel discussed the future of outsourcing in the Asia-Pacific region (specifically the importance of outsourcing, new trends, and issues in outsourcing). This paper provides directions for future research that surpasses regional specificity (i.e., the Asia-Pacific region), and contributes to research interests on outsourcing in general.

**Keywords:** Outsourcing, Emerging Challenges in Offshoring, Outsourcing Large Packaged Applications, Rural IT Sourcing, Innovation in Outsourcing.

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# The Future of Outsourcing in the Asia-Pacific Region: Implications for Research and Practice—Panel Report from PACIS 2014

#### I. INTRODUCTION

The concept of outsourcing, or contracting non-core business activities to a third party, was established in the early 1980s. Outsourcing has now become one of the most commonly applied business strategies to reduce cost while gaining business value. A market survey by Information Services Group (ISG) showed the annual contract value of outsourcing accounted for US\$5.7 billion worldwide in the first quarter of 2014 (Information Services Group, 2014), with information technology (IT) outsourcing projects accounting for up to 80 percent of this value. Thus, IT outsourcing continues to remain important.

Scholars have been studying IT outsourcing for the past several decades (Cheon, Grover, & Teng, 1995; Lacity, Khan, Yan, & Willcocks, 2010; Levina & Ross, 2003; Teo & Bhattacherjee, 2014). Lacity, Willcocks, and Rottman (2008) explain that IT outsourcing allows firms to focus on their core business activities and reduce the cost of their non-core activities (considering IT as a non-core activity). Moreover, other scholars have researched how outsourcing facilitates (1) access to a pool of expertise (Gewald & Dibbern, 2009), (2) the achievement of economies of scale (Ketler & Walstrom, 1993), (3) the rapid development of IS (Dibbern, Goles, Hirschheim, & Jayatilaka, 2004), and (4) the achievement of innovation (Lai, Riezman, & Wang, 2009). Furthermore, a stream of academic research has studied the role of contracts in outsourcing (Gefen, Wyss, & Lichtenstein, 2008; Gopal & Koka, 2010), strategic partnerships (Grover, Cheon, & Teng, 1996; Lee & Kim, 1999), and how contracts foster innovation (Oshri & Kotlarsky, 2011).

In this paper, we summarize an interactive panel conducted at the Pacific Asia Conference on Information Systems 2014 (PACIS 2014) held in Chengdu, China, that highlighted the current and future trends of outsourcing in the Asia-Pacific region. Darshana Sedera of Queensland University of Technology chaired the panel, and the following members took part as its panelists: Helmut Krcmar of Technical University of Munich, Sachithra Lokuge of Queensland University. The first panelist, Helmut Krcmar (AIS President-Elect 2015), set the scene by presenting the past and current state of outsourcing. Next, Sachithra Lokuge outlined the significance of innovation in outsourcing. Darshana Sedera (panel chair) then explained how large applications are being outsourced to the Asia-Pacific region. Ravishankar discussed rural-sourcing, one of the growing areas of interest among scholars. Finally, Shirish C. Srivastava outlined the challenges of outsourcing in the region.

# **II. HELMUT KRCMAR—SETTING THE SCENE**

Over the past three decades, there has been a substantial growth in organizations outsourcing their internal activities to outside organizations, presumably expecting that they will save costs, simplify services, gain a competitive advantage, and, in some cases, innovate (Kakabadse & Kakabadse, 2002; Weeks & Feeny, 2008). The contemporary turbulent market forces organizations to concentrate on their core activities, which has paved the path for outsourcing. Indeed, outsourcing is moving away from functional outsourcing to whole-of-business process outsourcing (Crow & Muthuswamy, 2014; PricewaterhouseCoopers, 1999).

The Asia-Pacific region consists of different shades of economic potentials varying from countries such as Australia and Japan with developed economies to countries with developing economies (e.g., India, the Philippines). The Asia-Pacific region is gaining a reputation as a preferred destination for outsourcing, largely because of the cost efficiencies (Srividhya & Pandian, 2014). Countries in this region (e.g., China, India, Malaysia, Pakistan, the Philippines, Singapore, Sri Lanka, and Vietnam) have benefited substantially from the growing outsourcing trend. For example, the shared services and outsourcing sector in Malaysia recorded US\$3.22 billion revenue in 2012; outsourcing contributed 1 percent of the nation's GDP and created over 7,300 new jobs (Vella, 2013). Similarly, outsourcing makes substantial contributions to other national economies in the region (e.g., India—4.12% of GDP; the Philippines—10% of GDP; and China—0.57% of GDP). IT outsourcing in the Asia-Pacific region commenced with contracting for relatively simple business processes such as data management, software development, call centers, and IT helpdesks (Palugod & Palugod, 2011), but has now grown to areas such as research and development and to new fields including travel, transport, manufacturing, telecommunications, and media.

The primary reason for companies to outsource to the Asia-Pacific region is its low-cost labor whereby, in general, outsourcing to this region reduces the wage per person by 40–60 percent (Crow & Muthuswamy, 2014). However, as the regional market gains maturity and its focus on cost reduction shifts to innovation, outsourcing has become a

318

knowledge-intensive process. This too has favored the Asia-Pacific region, which has very high literacy rates (e.g., 96% literacy rate in Singapore, 92% in India, 92% in Sri Lanka, and 95% in China) and a higher education sector that offers strong engineering and technical foundations. Furthermore, many universities in the region have formed partnerships with industry and offer outsourcing in their curricula.

The availability of qualified youth is another advantage for the Asia-Pacific region. It is estimated that India alone produces 1.5 million new engineering and science graduates to join the workforce every year—10 times the number of graduates produced for the same disciplines in England (Chaturvedi & Sachitanand, 2013). Furthermore, the region is introducing favorable policies to further attract outsourcing. The enthusiasm of governments in the region for outsourcing can be seen in their introduction of tax-free zones, rebates for locating business process outsourcing centers in rural areas, and labor market deregulations (Lu, Goh, Garg, & De Souza, 2014). Finally, the Asia-Pacific region offers a "test-bed" for new technology testing because many of its citizens adopt new technology early on (Crow & Muthuswamy, 2014).

However, the region has seen changes in its number of contracts and their value. For instance, while number of awarded outsourcing contracts in the region increased by up to 13 percent, the annual contract value dropped by 12 percent (Information Services Group, 2014). This demonstrates a point of departure from the traditional outsourcing model of large contracts to more specific, smaller outsourcing projects with multiple sourcing partners. This too signposts a growth direction for the outsourcing companies in the region, whose strength lies in specificity rather than breadth. Thus, organizations will adopt a hybrid outsourcing approach in which they will seek the best talent and the most-cost effective IT solution through multiple partners.

Finally, the Asia-Pacific region is home to some of the largest outsourcing companies in the world, including Fujitsu, Tata Consultancy Services, Infosys, Tech Mahindra, and Wipro. These emerging outsourcing companies now compete in global outsourcing projects all around the world.

# **III. DARSHANA SEDERA—OUTSOURCING LARGE PACKAGED APPLICATIONS**

The Asia-Pacific region is less known for implementing, hosting, or managing enterprise systems, which are known for their complexity and size, and usually popular with medium- to large-sized organizations. These systems require substantial resources to implement and manage (Sedera, Gable, & Chan, 2003). The implementation times of large packaged applications spread over lengthy periods, and, once introduced, the applications are rarely replaced (Eden, Sedera, & Tan, 2012). Furthermore, such systems must be managed across their lifecycle, and regular upgrades and optimization at appropriate times are essential. The first wave of enterprise system outsourcing was contained to Europe, and North America, and was mainly led by year-2000 compliance as the salient catalyst. The second wave of enterprise system outsourcing, largely driven by business process optimization efforts, was also largely contained to the same regions. The traditional implementation partners of the first and second waves of enterprise system installations were mostly led by the big five consulting companies such as Accenture, IBM, Fujitsu, PricewaterhouseCoopers, and BCG. Almost a decade after the first wave of enterprise systems (in the mid-2000s), a substantial demand grew for enterprise system implementations in the Asia-Pacific region, especially in Japan, India, and Singapore. Today, together with China, the footprint of enterprise systems in the Asia-Pacific region is said to be driving the global enterprise systems market.

The enterprise system installation market in the Asia-Pacific region is estimated today (2014) to be US\$130 billion and growing at a 15 percent compound rate annually, which makes this the most vibrant geographical area for enterprise systems. The current situation provides interesting opportunities and challenges for the region. The sector is set to grow further, with a new wave of small- and medium-sized companies adopting packaged enterprise systems (Eden, Sedera, & Tan, 2014). The region has a different business ownership structure to the Western world, with a predominance of large family-owned or single-owner businesses. In general, these types of businesses focus squarely on the core business and rarely focus on IT as a strategic asset. Educating such companies on the value of IT and benefits management therefore becomes paramount for long-term growth. There is much potential to introduce new industry-related curricula on outsourcing packaged enterprise systems outsourcing in the region (Rosemann, Sedera, & Sedera, 2000).

Furthermore, unlike in Europe and North America, enterprise system investment in the public sector is low in the Asia-Pacific region. Resource inadequacy, cultural hesitation, and substantially different political landscapes hinder the growth of the region's public sector enterprise system investment. For the mostly Western-based enterprise system software vendors, it is therefore important to understand the unique, yet essential, cultural paradigms of the region that affect its public sector.

From the implementation partners' point of view, it is likely that knowledge drain is an issue for regional sustainability. As a study by IDC Asia/Pacific notes, some specific skills are already at an all-time low in the region (Lee, 2013). Thus, it is necessary to improve these skills in order to sustain in this business area. Furthermore, as Lee (2013) outline, the Asia-Pacific region in general lacks the soft skills that assist better communication and are purported to be essential in requirements gathering and long-term partnerships.

#### **The Outsourced Solutions**

The initial growth in the outsourcing of enterprise systems in the Asia-Pacific region commenced when IT consulting companies (e.g., Accenture) opened their own consulting and development practices in the region (in India and the Philippines in particular). Those development offices of the Western-established consulting companies focused on remote software configurations and modifications and on service/helpdesk support after go-live. The sizable population of highly educated, English-speaking youth in the region and the relatively low wages were major attractions to the Western IT consulting companies in this regard.

The Asia-Pacific region's economic growth and its maturity in developing and managing IT encouraged the growth of regional IT consulting firms such as Tata Consultancy Services and Infosys. These consulting firms are increasing their global presence by operating in European, American, and Australian enterprise system implementations. The involvement of Asian-Pacific IT consulting firms (especially India's) involvement on the global stage has been facilitated by two main factors: (1) the global financial crisis, and (2) cloud-based enterprise systems. First, the GFC made client organizations cost-sensitive and made them prioritize their IT investments. In most cases, client organizations were opting for relatively small, low-cost initiatives that focused on delivering specific benefits. This approach of smaller, low-cost tailored projects suited medium-sized regional consulting firms well. As a negative consequence to this, as the local economic pressures grow, governments tend to place restrictions on foreign workforce employment in order to facilitate national growth. For example, the Australian Government made several changes to its 456 Visa quota in order to prioritize Australian workforce employment. Second, cloud-based enterprise systems open a wealth of potential for remotely deploying, managing, and maintaining enterprise systems using a subscription model. These new technologies allow companies to maintain a lean IT infrastructure in-house and rely on IT companies to provide systems as a service. The growth potential for such initiatives is more significant in the Asia-Pacific region given the skill abundance, the growth of small- to medium-sized IT projects, and the cost-sensitivity of clients preferring subscription-type services. Yet, the region has several major barriers to reaping the benefits of cloud enterprise systems. The infrastructure in the region, although improving, is far from ideal for hosting interrupted software transaction platforms. Furthermore, data security, political stability and governmental regulations are such that trust among outsiders in Asian-Pacific region is relatively lower than in European and American counterparts.

On the other hand, knowledge requirements are vastly different in enterprise system outsourcing than in software development or business process outsourcing (BPO) (Sedera & Gable, 2010). As Davenport and Prusak (1998) suggest, enterprise system implementations are collective activities between vendors, consultants, and client organizations, and a fluid transition of knowledge between the three parties on business process knowledge, software knowledge, and organizational knowledge is essential. Although regional outsourcing partners are well equipped to handle software-related issues, they know much less about client organizations and their business processes. To successfully innovate and implement an enterprise system, implementation teams require members with all three knowledge types and collaboration between them (Lokuge & Sedera, 2014b; Sedera & Gable, 2010).

#### **The Economic and Social Implications**

Enterprise system outsourcing will have dynamic implications at both the micro and macro levels in the region. At the macro level, outsourcing is expected to contribute US\$0.9 billion to local economies. A range of ancillary industries (from construction to telecommunications) will be affected by the growth of outsourcing in general because the demand for better IT and logistics infrastructure will continue to grow in the region. In the future, formal long-term partnerships and/or acquisitions of traditional outsourcing companies and regional ones would be inevitable, emulating the shifts that took place in Europe and North America in the early days of IT consulting.

Furthermore, we have already seen an increase in the cost of outsourcing in the region. A report by ISG suggests that outsourcing costs in general have already gone up by 80 percent in the region compared to 2013 (Information Services Group, 2014). Thus, largely driven by cost efficiencies, we will see evidence of multi-tiered relationships between enterprise system outsourcing partners where one outsourcing partner will outsource parts of a project to another outsourcing partner—a phenomenon we already observe at preliminary levels.

As the outsourcing projects become complex and large, so should the governance of those projects. Currently, the national or regional level governance frameworks are loose, and further growth in the region on outsourcing has to entertain the heightening of governance frameworks for better transparency and sustainability.

Green IT would be another aspect related to the future of enterprise system outsourcing in the region. With two major polluters (India and China) and a large manufacturing push occurring in Japan, Vietnam, and Malaysia, the regional carbon footprint is likely to increase with enterprise system outsourcing. For example, application hosting, server farms, and large service desks will attract "carbon" from other nations to the region. As such, governments and regional councils (SAARC or ASEAN) would have to encourage greener IT solutions.

The societal changes are also interesting to monitor and improve. The current BPO environments are filled with significant social issues, where (1) working hours, (2) conditions of employment, and (3) terms of engagement do not favor the employees. Long and stressful working conditions are said to be a primary aspect of social unrest in the region, which is likely to increase with further growth in enterprise system outsourcing. As the region in general rests on closer family values, further deterioration in social values may introduce issues beyond individuals.

# IV. SHIRISH C. SRIVASTAVA—IT-ENABLED SERVICE OFFSHORING: EMERGING CHALLENGES FOR RESEARCH AND PRACTICE

Rapid developments in information and communication technologies (ICTs), especially during the past three decades, have facilitated the effective real-time transportation of digitized information across borders. This has enabled firms to route their everyday business processes and services to distant offshore locations (Lewin, 2005; Srivastava, Teo, & Mohapatra, 2007a; Srivastava, Teo, & Mohaptra, 2008). Offshore vendors and captive units are now routinely supplying the required administrative, technical, and business services to geographically distant firms in real-time. Thus, IT-enabled service offshoring refers to the migration of all or part of the development, maintenance, and delivery of business processes and/or services to a vendor (or captive unit) in a country different from that of the client (Hirschheim, Loebbeche, Newman, & Valor, 2005; Srivastava & Teo, 2012b). Although service offshoring has been in vogue for a few decades now, its nature has been undergoing significant metamorphosis. This has led to the emergence of new challenges that require fresh thinking from both researchers and practitioners. This section highlights five emergent challenges that warrant a resolution from both theoretical and practical standpoints. A discussion on these challenges can help chart the future research agenda in the field.

# Challenge # 1: Shifting Location Dynamics

Traditionally, the prime motivation for offshore sourcing has been the quest for cost arbitrage in the form of either cheaper labor or inimitable knowledge resources (Srivastava, 2011; Srivastava, Teo, & Mohaptra, 2007c). This business philosophy would work as long as the offshore locations are significantly cheaper than the location of the parent firm. With rising cost structures in the popular vendor nations such as India and China, the cost advantage argument may no longer be valid. This is especially true given the fact that handling the offshore sourcing of services requires an additional management layer and also carries the additional risk of operating in unfamiliar locations. So do we expect client firms to move out from the copybook vendor locations to new, less-expensive locations? For example, during 2000-2014, there has been a marginal decrease in the share of India's contribution to the quantum of supplied offshored services to U.S. firms, but it still continues to be over 60 percent. Going simply by the cost argument, client firms should now be exploring fresh cheaper locations in Asia and Africa. But such decisions are constrained by two considerations: first, the risk of moving to a new unfamiliar and less-mature location, and second, the capacity saturation of the required talent pool in the new locations, which is usually smaller than in the traditional offshore destinations. For example, many of the vendor locations in Eastern Europe that were initially exploited by early movers in Europe have been sold out and now have limited capacity for servicing clients in Western Europe. Capacity saturation may also lead to other associated problems such as high employee attrition rates in vendor nations and declining quality standards. Thus, the dilemma that many client firms are facing today is whether or not they should chase and move to cheaper locations or continue with the traditional vendor nations albeit at a higher cost. Of course, they also have the option of back-shoring or moving the outsourced operations back into the parent firm. This challenge certainly requires resolution from a theoretical perspective in order to better inform practitioners.

# Challenge # 2: Evolving Focus on Innovation

Another major shift that is being observed in the offshoring landscape is the change in the nature of jobs being offshored. Firms are increasingly offshoring for innovation rather than for cost reduction or as a response to a crisis (Srivastava, Teo, & Mohaptra, 2007b). Research and development centers for many of the IT and pharmaceutical giants are now located in developing countries. Notwithstanding the traditional cost argument, many firms are now moving to offshore locations to gain diverse knowledge and cultural perspectives so as to enable them to innovate better (Srivastava, Mithas, & Jha, 2013). However, following such a global innovation strategy has its own

challenges, especially those related to knowledge distribution and integration. Such innovative firms require state-ofthe-art knowledge management systems and innovative project management practices for not only leveraging the distributed knowledge resources, but also integrating the generated knowledge. Furthermore, such firms also need to develop systems for preventing knowledge leakage and spillovers, especially if they are operating in nations with relatively weaker IP regimes. In addition, in such scenarios, the way in which the client and vendor relationship is managed will also have a bearing on the project success (Nuwangi, Sedera, & Srivastava, 2013; Srivastava, 2009; Srivastava & Teo, 2012a). More research on the subject will certainly serve to better inform the field.

#### Challenge # 3: Fostering Bridging Capabilities

Many contemporary firms are not purely client or vendor companies. In fact, they straddle between the two. Firms often source some of their services from vendors and, at the same time, provide a different set of services to other clients. Often, the services provided to clients are subcontracted from other smaller vendors (Subasinghage, Sedera, Srivastava, & Murphy, 2014). Such practices force firms to develop bridging capabilities because they serve as conduits for the services provided. The traditionally demarcated roles of clients and vendors are becoming fuzzy. In addition to individual firms that are required to juggle between client and vendor roles, a group of nations that comprise both client and vendor firms is currently emerging. For example, Singapore serves as a bridge between the West and the Asia-Pacific region, and Ireland serves as a bridge to Europe. Both these nations have a fair number of both client and vendor firms. Again, the practical and theoretical challenges in such scenarios concern the integration of knowledge resources across value chain partners and the decision making on the portfolio of activities to be acquired or outsourced.

#### Challenge # 4: Flexible Sourcing and Home-Shoring

To save costs, many firms are now implementing flexible sourcing whereby they source services on demand. In addition, many firms are adopting home-shoring solutions whereby—leveraging ICTs and the Internet—employees and/or vendors work from their homes. For example, many of the reservation agents for JetBlue Airways in the US are currently working from home (BlueTales, 2013). This practice, on the one hand, helps companies save on infrastructure and real estate costs and, on the other hand, benefits employees who have flexible work hours without the need to commute, which, in turn, helps the environment in multifarious ways. Home-shoring also assists in using the services of population segments that perhaps could not have been tapped easily otherwise (e.g., young mothers or physically challenged persons). Although this ICT-enabled service solution looks attractive, it has its own challenges that need to be examined in greater detail. For example, it is difficult for home-shoring firms to inculcate a sense of organizational culture among its home-shored employees? What is the best way to foster a sense of association with the firm? Does home-shoring affect employee performance? This question became especially important after Yahoo CEO Marissa Mayer banned her 12,000 employees from working from home in 2013. Another challenge for workers operating from home relates to finding an optimal work-life balance to avoid the experience of technostress (Chandra, Shirish, & Srivastava, 2014).

# Challenge # 5: Orchestrating Multi-Sourcing

In the initial years of service offshoring, clients were sourcing from just a few vendors. Now, with the growing complexity of operations and increasing dependence on offshore services, client firms are contracting with multiple vendors simultaneously for the same or different services. Multi-sourcing from various locations is generally done for two reasons: first, to source a variety of services from different vendors, and second, to distribute risks across vendors and geographies. Although multi-sourcing appears to be a natural progression in the service offshoring landscape, the challenges associated with orchestrating the sourced services from different vendors from different countries are many. Usually, the number of vendors for large firms such as Nike can run into several hundreds of vendors from different locations across the globe. To manage this extensive coordination task across multiple vendors and the parent company, many firms now have a separate vendor management organization that has a unit dedicated to sourced services. Unlike the manufacturing scenario, most of the service operations are in real-time; therefore, orchestrating multi-sourcing with a view to achieving the desired results is a major challenge. Thus, multisourcing issues that need further academic attention relate to managing and coordinating multiple relationships, integrating different information system platforms across vendors and geographies, fostering strategic symbiotic partnerships wherein both client and vendors are equally dependent on each other rather than operating in a skewed power structure, and, developing systems for preserving knowledge across the multiple client-vendor networks without compromising efficiency. Theoretical research on these issues will help to enrich our understanding on the subject and thus facilitate the development of better management practices.

# V. SACHITHRA LOKUGE—INNOVATION IN OUTSOURCING

Outsourcing IT/IS commenced when Eastman Kodak outsourced its information system to IBM, DEC, and Businessland (Dibbern et al., 2004). Since then, IS outsourcing has evolved in three prominent phases. In the first phase, outsourcing's sole focus was on reducing costs. This phase emphasized "more for less". In this phase, ,

there were no collaborations between the client and the vendor beyond agreeing to the contract. In the second phase, companies outsourced with the same cost-reducing objectives. Therefore, similar to the first phase, the consultant and the vendor rarely collaborated beyond establishing the contract. The contracts in the first phase specified limited objectives; yet, in the second phase of outsourcing, small improvements such as changes in outsourcing volumes, service-level agreements, and prices were made. This cost-oriented focus of the first and second phases changed in the third phase, when the primary position of outsourcing changed from a cost focus to a "value addition" proposition. In this phase, adding value is sought through innovation. The main objectives of the third phase include (but are not limited to) revenue growth, increased customer loyalty, and competitive advantage. This is evident in the results of a survey of outsourcing professionals in which 80 percent of clients stated that they outsourced their IT activities in order to *improve* their business (Norton Rose Fulbright, 2013). Similarly, a survey by the Economist Intelligence Unit in the Asia-Pacific region shows that 47 percent of the respondents (vendors) strongly agreed with the client's central role in fostering innovation or in the value co-creation process. Furthermore, North American and European vendors agreed that the client's role was an important aspect in dictating the innovation process's pace and direction (Grant Thornton, 2009). As the Asia-Pacific region gains prominence in outsourcing, sourcing vendors will establish new foci of work practices and processes to join the third wave of outsourcing. Thus far, most outsourcing in the Asia-Pacific has occurred in the second phase.

# Innovation in Outsourcing

Gefen et al. (2008) state that the outsourcing of IS and business processes carries risks that may lead to the loss of innovative capabilities of the client organization. However, others consider innovation to be one of outsourcing's key objectives (Oshri, Kotlarsky, & Willcocks, 2011). At the same time, there is a wealth of literature that describes innovation's importance in outsourcing (Lewin & Peeters, 2006; Oshri & Kotlarsky, 2010; Weeks & Feeny, 2008). Most of these studies (e.g., Oshri et al., 2011) describe how client organizations seek innovation through outsourcing. A report by Norton Rose Fulbright (2013) found that innovation's concepts have penetrated to a large extent: over 66 percent of the vendors in their study stated that innovation and business transformation are at the heart of their outsourcing strategy. The inclination towards collaborative partnerships for innovation is not a new concept, yet it is rarely fully adopted by vendors in the Asia-Pacific region. Therefore, this region's outsourcing companies must emphasize the establishment of contracts that allow fresh thinking and client co-contributions in order to add value to the outsourcing clients.

Innovation by the vendor organization does not necessarily mean introducing totally new concepts. It can be defined as introducing new strategies, business processes, technologies, or even new software components to the client *beyond* the original requirements (Oshri & Kotlarsky, 2011). As such, although outsourcing and innovation seem to be diametrically opposing, some organizations go beyond the required limits to satisfy their customers. Innovative outsourcing on the vendor side is a growing phenomenon for both client and vendor organizations. On the other hand, client satisfaction in outsourcing is not just related to the delivery of the formal specifications, but entails delivering balue beyond that (Lokuge & Sedera, 2014a). The challenging part of innovative outsourcing is that vendors need to perform in a limited budget and time and need to innovate in given specifications. Similarly, Weeks and Feeny (2008) point out that innovation is difficult to attain in an outsourcing organization due to increased coordination complexities, lack of alignment of risks, and the incentives associated with contracts.

Weeks and Feeny (2008) further explain that there are three categories of innovation in software outsourcing organizations; namely, innovations that involve technology changes that do not have an impact on business processes (IT operational innovation), innovations that make an impact on the normal business processes (business process innovation), and innovations that enhance an organization's output to existing customers (strategic innovation). Weeks and Feeny (2008) also identify three key enablers for achieving innovation in an outsourcing company:

- 1. Client enablers: where the factors that matter are technology skills, selective sourcing mindset, IT organizational alignment, and IT leadership
- 2. Vendor enablers: where the factors that matter are business process skills and industry scope, and
- 3. Relationship enablers: where the factors that matter are innovation governance, trust, and measurement specificity.

Although clients expect innovation from vendors, there are many limitations, enabling factors, and conditions that need to be fulfilled in order to be innovative. Considering the research data collected from both vendors and clients in the Asia-Pacific region, it is evident that the above three enabling factors already exist in the region compared to counterpart regions such as America and Europe. Asia-Pacific countries are among the early adopters of IS innovations; thus, the region consists of an experienced population that supports the regional vendors to maintain mutual beneficial client-vendor partnerships. This is evident in countries such as Japan, whose culture of lifelong employment contracts has helped organizations to be more innovative. The Asia-Pacific region is also a very diverse

region because it includes Japan with a highly developed economy, India and China with massive and growing economies, and countries such as Indonesia, Thailand, and the Philippines with growing economies. This diverse nature of the region caters to many of the outsourcing market's needs. The availability of abundant and cheap labor in countries such as China and India has contributed to strengthening the innovative capabilities of organizations in these countries. Another factor contributing to innovation in this region is the tendency of the region's executives to invest more in new technologies compared to their counterparts in other regions. As a result, the region is known for adopting new technology early on. This has helped the region to differentiate itself from rivals and attract more clients.

An additional reason for the region to be optimistic about innovation in outsourcing is that it welcomes "open innovation". This new wave of open innovation occurs seamlessly in the Asia-Pacific region because it has an abundant and ready supply of labor compared to other regions. The existence of an educated, experienced workforce, together with an openness toward new technology, makes it easier for the region to embrace these changes.

# **Changes in Outsourcing Contracts**

Selecting the right outsourcing partner determines the success of the outsourcing engagement (Oshri & Kotlarsky, 2011). In current outsourcing projects, vendors selected through "hackathons" and innovation jams (Lee, 2014) where the client assesses the vendor's innovation capability and the ideas execution capability prior to signing contracts. This method enables clients and vendors to work collaboratively to identify the most efficient and applicable idea to implement, which usually requires technical and industry knowledge and an openness to new technology options. Because the Asia-Pacific region is known for being tech-savvy, these types of procurement methods are advantageous and enable companies in the region to retain and attract new clients. Moreover, in addition to experienced employees, younger, less-experienced individuals entering the workforce also hold the required technical and industry knowledge because the university curricula provides this knowledge. As a result, the future of outsourcing in this region should become a well-established and productive business area.

Innovation in outsourcing depends on not only the relational aspect, but also the contractual aspect of the outsourcing agreement because the contract determines the scope, benefits, and the level of freedom to which the vendor is legally entitled. In their study, Oshri and Kotlarsky (2013) found that 78 percent of organizations used fixed-price contracts, 42 percent used time and materials, and only 21 percent used joint ventures with a profit-sharing clause. Each of these types of contracts favors different innovation types. However, it is difficult to attain innovation through fixed-price contracts because the rigid and inflexible clauses in the contract do not capture or value when vendors go beyond their contract's stipulations. This hinders vendors' innovation capability. To overcome this issue, clients have added clauses to improve productivity each year. Research by Information Services Group (2014) highlights that the number of active IT outsourcing contracts rose by 10 percent in 2014], which clearly indicates the trend toward outsourcing to the Asia-Pacific region. The research also showed that the deal sizes had reduced, which positively impacted the Asia-Pacific region because it contains many small-sized organizations that gain advantages through outsourcing. While the reduction in deal sizes has a negative impact on large companies, its overall impact on the region is low compared to the impact on other regions.

#### **Changes in Client-Vendor Relationship**

Outsourcing needs are moving up the pyramid from the basic need of reducing costs to the need to gain competitive advantages and create innovations. Advancements in technology create a scarcity of the required in-house capabilities, which pressures organizations to outsource their non-core strategic business activities. To continuously innovate, organizations must develop long-term partnerships with vendors and solution providers. The innovations organizations seek sought cannot be considered as a one-time output, but must always be considered as a process that organizations need to continually follow. This need for continuous innovation has, therefore, paved the path for strategic long-term partnerships. Currently, outsourcing contracts have moved away from reducing costs as the primary focus. Instead, new contracts highlight value addition and differentiation (Kakabadse & Kakabadse, 2002; Weeks & Feeny, 2008).

As the technology landscape advances, and with the advent of cloud, mobile, and analytic technologies, executives must recognize that they need to innovate to survive. When organizations realize they lack key capabilities in-house, they invest more in outsourcing. Even though clients engage more with vendors in driving business outcomes (via structuring the contracts and managing the relationship), this engagement is not enough and does not reflect the client's higher motivations. In fact, the changing dynamics in business have led clients and vendors to become partners in business because they see more financial benefits in deeper collaboration. The two key emerging motivations for partnering are: (1) efficiency and effectiveness, and (2) innovation. Considering why client organizations outsource and the extent to which they do it, IBM (2013) identified four possible partnering strategies:

324

Volume 35

- 1. Enterprise innovation: where the extent of business processes outsourcing is high and the motivation is to drive innovation.
- 2. Enterprise optimization: where the extent of business processes outsourcing is high yet the objective of outsourcing the business processes is primarily to drive greater efficiency and effectiveness.
- 3. Focused innovation: where the extent of business processes outsourcing is low and only the areas that need innovation are outsourced.
- 4. Focused optimization: where, similar to the traditional outsourcing strategy, the focus is on increasing efficiency and effectiveness, and only a very narrow business area is outsourced.

The IBM (2013) study concludes that enterprise innovation is the most favored partnering strategy because it is the best strategy for agile business environments. Enterprise innovation's prevalence supports the region's ability to attract clients because it is known for its tech-savvy, low-cost, yet innovation-friendly vendors. Furthermore, a report by Grant Thornton (2009) shows that joint ventures and partnerships were among the means used to foster innovation in the Asia-Pacific region. The region's vendors look outside their limits for new markets, and this paves the path for a new wave of cross-border trading links.

By identifying clients' requirements, vendors and/or implementation partners are able to better cater to clients' needs. In turn, the enhanced relationship between these two parties changes the governance structure and the nature of contracts, and thereby changes the whole outsourcing landscape.

# VI. RAVISHANKAR M. N.: RURAL IT SOURCING

Outsourcing to India has long conjured up images of vibrant Tier-I and Tier-II cities and the gleaming offshore campuses of companies, rather than the modest centers along the dusty roads of the country's rural hinterlands. But that could be set to change. As the term suggests, rural sourcing is the emerging practice of outsourcing IT-enabled business processes to firms that locate their delivery centers away from urban areas. Over the last few years, over 50 such rural BPO firms have emerged in India. Each could be said to have a hybrid socio-economic identity: these are profit-seeking ventures but with an explicit social purpose. That is, these companies promise an alternative global delivery model, which aims to address the widening economic disparity and the migration into urban areas. As yet, the figures do not suggest a booming market for the model. The total market for rural sourcing in India was valued at an estimated US\$5.3 million as opposed to urban outsourcers who, in 2012, did business worth US\$17 billion. Clearly, rural sourcing is not yet in a position to displace the offshoring of IT and IT-enabled services work in major cities. However, rural firms may offer a significant cost and value proposition to clients who are considering outsourcing their IT-enabled business processes.

#### **Macro-Foundations**

To encourage growth in the nascent sector, the foundation arm of the National Association of Software Services Companies (NASSCOM), which represents vendors in India, is playing a key role in lobbying central government for policy action. Despite this, there is currently no national policy for the rural BPO sector in India and it has yet to receive the kind of government support that IT outsourcing enjoyed in its infancy, such as tax incentives, dedicated technology parks, and special economic zones. So far, only two out of India's 29 states have formulated policies to support entrepreneurs in rural BPO. Significantly, the local government in Karnataka—whose capital is the IT hub Bangalore—provides initial seed capital and operation grants for entrepreneurs to set up and run rural BPO firms. The firms themselves, however, are yet to establish an industry-level body to promote their interests, and knowledge sharing has mainly been through informal interactions with each other.

# **Business Model Innovation**

Rural BPO companies are on the verge of some interesting business models. Some large IT outsourcing providers that operate from the cities are looking to collaborate with their rural counterparts. For example, Infosys has engaged rural provider DesiCrew Solutions to set up a center in a Tier-IV town to which it hopes to subcontract its back office work. Other large companies such as Wipro and Tata Consultancy Services have also set up centers in small rural towns. In each case, the logic is the same: to extend arbitrage by outsourcing the back office work of urban delivery centers to rural areas. On the surface, the value proposition to both overseas clients and Indian-based vendors looking to subcontract is straightforward: they can push cost arbitrage without (so the vendors claim) compromising quality because the operational costs of running a rural center are much lower than those of their urban counterparts. Office spaces are modest and power consumption is not excessive. However, as smaller enterprises are acquired or work is subcontracted to them, costs will inevitably rise.

The human resources potential of rural India is also attractive to clients: around seven million students graduate from colleges in small towns and rural areas every year. Rural sourcing organizations spend anywhere between four to six months developing their trainees' English language skills, computer skills, and their ability to handle work-

related processes. The recruitment and training process is less expensive in these locations. In comparison to their urban counterparts, rural BPO firms offer cost savings of up to 40 percent according to NASSCOM figures (NASSCOM, 2013). These savings are typically transferred to the clients. Average wages in rural locations range from US\$100 to \$150 a month for the lowest level of executive, compared with US\$300 to \$600 for comparable employees in urban locations. Much of the work done in India's rural and small-town delivery centers tends to be basic rather than high-end work. However, many industry experts, venture capital firms, and HR managers are convinced that the demographic dividends and economies of scale enjoyed by India and other emerging markets have the potential to shape rural sourcing into a force to be reckoned with. This is particularly true as the labor arbitrage advantages of offshoring work to India are perceived to be waning as urban wages rise, attrition rates surge, and larger providers move towards "high-value creating" activities.

# The Future of Rural Sourcing

Changes are already underway in terms of what the rural market can offer. For example, Mahendra NextWealth, a small-town IT-enabled service/BPO provider and part of the NextWealth network, provides engineering designs using CAD/CAM technology. Sai Seva Business Solutions, one of the pioneers of rural sourcing in India, handles loan processing for microfinance institutions. DesiCrew Solutions employees in rural Tamil Nadu carry out beta testing for Web products. Accounting, financial service offerings, 3D visualization, document management, public sector services, and data mining are among the other types of work undertaken in rural sourcing models.

That said, rural sourcing firms have a tough task to convince clients that work can be delivered from their centers at good standards of quality and reliability. Some firms have stopped openly projecting their rural status and have rebranded themselves as Impact Sourcing Service Providers—a proud reference to the positive impact they have on the development of local communities. But there is more to it than just rebranding. Most rural vendors now have quality compliance certifications, such as ISO-9001 and ISO-25000:2005. The few that do not are aligning their organizational processes to the requirements of those standards.

Many rural firms are also now actively targeting companies in the West, while some already cater to international clients. For example, iMerit Technology Services, RuralShores Business Services and DesiCrew Solutions have already established relationships with clients in North America. These enterprises have also been able to garner the support of venture capital investors. For example, DesiCrew Solutions raised US\$1.12 million in funding from responsAbility Ventures. iMerit Technology Services has the backing of Omidyar Network, the philanthropic investment firm started by Pierre Omidyar, the French-born American Iranian who founded eBay.

While the future of these ventures will depend on their capability to match urban suppliers on quality while operating at significantly lower cost, it is important to not take a purely transactional view of rural sourcing. With inequality between rural and urban areas increasing in most emerging markets—and growing disparity between rich and poor in the West—the logic of trickle-down economics has been challenged, and disillusionment with free market or market-liberalization regimes is rife. Against this background, rural sourcing firms can provide a modest but important opportunity for rural communities to tap into the global outsourcing market and derive tangible economic benefits from it. In this way, global outsourcing models have the potential to kick-start growth, generate disposable incomes and create wealth, not only in urban areas but also in towns and villages that have remained on the periphery. Both Indian and global clients are watching the growth of rural outsourcing in India with interest. Rural sourcing—or its euphemism "impact sourcing"—is poised to change current thinking about where and how outsourced IT-enabled work can be accomplished.

# **VII. CONCLUSIONS**

In conclusion, the panel recognized the importance of the Asia-Pacific region as an important contributor to the outsourcing world. Initially driven by labor market economics through the availability of cheap resources, the region is now attracting and harboring novel outsourcing facets. Specifically, individuals' dynamic IT skills and proficient English ability are proving to be a key driver for the growing global recognition of the region as an IT knowledge hub. These changes have provided the space and breadth for IT consulting companies such as Tata Consultancy Services and Infosys to compete with the traditional service providers for global IT projects. Furthermore, the current diversification of the global IT platform through cloud, mobile, and social media technologies means that companies are embarking on smaller, yet more-specialized IT projects that can be outsourced to small development entities in the region.

However, we are yet to witness the region's expected phenomenal growth via the small application development of cloud, social media, and mobile platforms. At the same time, many IT activities are taking place in the Asia-Pacific region itself, which is leading to a growth of internal (onshore) outsourcing. This growth in the region is led particularly by India's, China's, Singapore's, Malaysia's, and Indonesia's substantial year-to-year economic growth in

the past decade or so. As such, the demand for corporate IT and outsourcing in the region remains steadily high. With the increasing volume of activities, the economic rationality of cheap resources is slowly disappearing. As such, a new phenomenon of multi-level outsourcing is growing in the region, where one outsourcing partner re-outsources for cost and price efficiencies. This has led to new complexities associated with contracts, incentives, and partnerships. Given its diverse socio-economic attributes, the region has benefited through some unique aspects of outsourcing. For example, inimitable rural sourcing demonstrates that networks of outsourcing could rely on trust and broader social values, rather than simply relying on economic rationalities.

The panel's discussion alluded to those challenges that are specific to the region and to those applicable to outsourcing in general. Specifically, the region is fraught with political instability, corruption, and, in some cases, arbitrary and unstable governance structures. Addressing these challenges would be essential for value-adding partnerships that thrive in long-term associations between the outsourcing vendors and client organizations.

This backdrop provides an interesting phenomenon for research observations. Although topics related to outsourcing have been researched for several decades and a wealth of literature has been formed, much scope is still available for insightful research contributions. While there may be myriad topics of interest that could be suggested for future research, the panel highlighted three topics that would be of particular interest to the IS community.

First, the panel noted the growth of micro-outsourcing, with the new innovations of cloud and mobile applications paving the way for a wave of changes in the Asia-Pacific region. Cloud and mobile platforms have created an environment for the rapid and agile development of applications with minimal effort by using software development templates. This demand for cloud-based applications and smart-mobile applications is expected to create an ecosystem of micro-developers (in some cases, individuals) and micro-software hosting companies that support local demands. They will be highly dynamic and opportunistic and will seek short-term value propositions. Similarly, clients too will engage with their micro-providers through ad-hoc or subscription-based arrangements, leading to a highly dynamic and volatile environment.

Second, outsourcing resources (e.g., infrastructure, and socio-economic, uncalculated, and additional costs) will be tested for their reliability and efficiency with the growth of new technologies and economies in the region. Although there is anecdotal evidence highlighting the risk of failure and non-compliance of IT infrastructure and software, few academic studies have addressed this issue. Similarly, outsourcing is said to carry a huge socio-economic cost to the region, in which youth are moving from regional areas to cities for better lifestyles and employment. Political and governance stability is another facet of the resources related to outsourcing. The Asia-Pacific region, compared to all other geographical areas, has the highest diversity in terms of language, religion, political views, and economic prosperity. As such, the region (with the exception of a few countries) regularly faces unscheduled work outages, riots, political coups, and demonstrations of many types. The uncalculated (or additional) cost of such factors to outsourcing is substantial. As such, the panel recommended a stream of research at the macro-level to assess the impact of (and cost to) outsourcing.

Third, the panel drew attention to possible new brokerage models, including multi-level outsourcing (Nuwangi, Sedera, & Murphy, 2012). With the advent of social media in particular, there is a clear opportunity for outsourcing models to incorporate non-employees to directly contribute to business or service delivery. For the first time in history, outsourcing has been presented with a global platform for citizen sourcing and crowdsourcing through social media. Although the uptake of this sourcing method has been growing steadily, academic studies have rarely addressed the in-depth nuances of such an approach. Furthermore, the panel discussion pointed out that innovation in outsourcing has become a necessity rather than an exception. Such facets demand changes to fixed-price contracts and incentives for outsourcing employees. Finally, the panel recommended further studies on multi-level outsourcing as an emerging phenomenon wherein the sourcing partner re-outsources for cost and efficiency gains.

The panel discussion thus highlighted the future complex, yet dynamic, facets of outsourcing that would be of interest to all IS scholars.

327

Article 17

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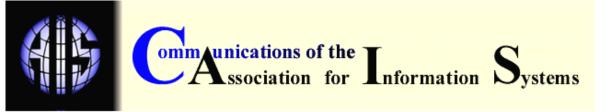
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