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Outsourcing in Smes

Rekha Gulle
Student, Sheffield Hallam University, Sheffield, England Santhosh Bejjanki, University of Bedfordshire, Luton, England
Corresponding Author: Rekha Gulle

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ABSTRACT: The purpose of this paper is to guide the SMEs who are willing to outsource their IT services to the outsourcing vendors offshore. This report gives a clear idea of the benefits and the risks involved in the outsourcing of IT services.
Design and Methodology: This paper is designed with an intellectual literature review along with the practical implementations of the literature review, which consists of examples.
Key Findings: This paper mainly focuses on the benefits and risks involved in outsourcing IT services to the IT outsourcing vendors. In thispaper it can be noticed that there are high risks involved in outsourcing IT services than benefits. This paper is also aimed at providing the solutions to these risks and the process of proper risk management and the stages involved in the process of outsourcing. This paper is also aimed to address the issues whether it is beneficial for the small and medium sized enterprises or not.
KEYWORDS: IT, outsourcing, SMEs.

I. INTRODUCTION:

In this era of globalized business environment where organizations are racing towards the top and increasing global organizations, the organizations must function effectively and efficiently to gain a competitive advantage over the competitors. An organization to become a leading operate in that sector, it must concentrate on its core activities and outsource its non-core activities to the organization which are specialized in those activities, respectively. With the political issues surrounding the business, Outsourcing became one of the most controversial issues of the world in the 21st century. According to some authors it is a vital component in the strategy of a business to have a competitive edge over the competitors. According to few others outsourcing creates abundant opportunities for the organizations to enter new markets and global economy, advancing its economy. Few authors say outsourcing as a bogeyman concept through which jobs are relocated and local businesses are closed.

Outsourcing:

[3].Barthelemy (2003), Weimer and Seuring (2008) defined outsourcing as a concept in which the responsibilities of a person or an organization are transferred to another person or organization. In an outsourcing affiliation, the client is a party whose responsibilities are transferred, and the vendor is a party to which the responsibilities are transferred. Under the guidelines and the requirement of the client, the outsourcing vendor accomplishes the responsibility of task completion. Solli - Sather and Gottschalk (2008) said that no individual or enterprise have expertise in all cores of life or business; there are definite tasks in which some business firms are experts. Expertise and time factors are very important reasons for the organizations or individual to participate in the act of outsourcing.

[2].According to Barthelemy (2003), Hosseini (2006) and Namasivayam (2004) every organization has the responsibilities of operations which are not the core activities of that organization, in which the organization is not an expert. The organizations do not will or tend to spend time in those activities in which they are not expert, and which is not its core business. Despite spending such time on the secondary activities, the organizations may concentrate on the core business.

[4].Chandrashekar (2005); Duarte, Sackett & Evans (2005) said that each activity of the organization is vital for its economic growth and brand management. Each activity is to be performed perfectly and the organizations should have specialists or experts in each activity of the organization. If these responsibilities are been transferred to another organization which is a specialist in that core, then the organizations have abundant time and dedication towards its core activities or business. As the organizations spend more time on its core activities, the more is the

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opportunity for that organization to develop its core activities.

According to Micheal et al. (2005); Temponi and Platz (2007); Hosseini (2006), by outsourcing of part of business, the organizations are benefited with cost savings in two dimesions – Direct and Indirect cost savings. The outsourcing vendor has the ability of performing the tasks efficiently which are transferred by the clients than the client, which will in turn decrease the relative costs. These are called as direct cost savings. As the experts can perform a task quickly and efficiently, he does not feel the task as a difficult task, can charge at fewer amounts. There are certain costs that the organizations mustbear if they do not outsource secondary activities – Indirect Costs (maintenance costs of in-house employees) which are

- Privileges that the employees in an organization enjoy such as pension, health insurance, life insurance, etc...
- Training costs of the current employees and new employees
- Resources required for the performance of non-core tasks
- The costs incurred by allocating office space and the relevant costs for performing non-core tasks
- The costs occurred for the recruitment process of the employees for these non-core tasks.

These direct and indirect costs of operating non-core activities of the organization will drain up the budget allocated to the business, resulting in less budget allocation for the core business which in not sufficient.

From the above sentence outsourcing in organisations can be defined as the process by which the organizations transfer the non-core activities of the organization to another organization which is a specialist in that activity and finally saving costs which are occurred when operated in-house.

II. HISTORY OF OUTSOURCING

1.1. Origins

Although outsourcing is often marketed as thelatest strategic management tool, it is in factthe renaissance of a practice that has existed fordecades. There are conflicting accounts of whenoutsourcing first begun, but the first documentedpractice of outsourcing appeared to be in the area ofinformation systems when General Electric Corp.contracted with Arthur Andersen and Univac in 1954 (Klepper& Jones, 1998).

1.2. The 1960s

In the 1960s, outsourcing took the form primarilyas a facilities management service (Kelter &Walstrom, 1993; Teng, Cheong, & Grover, 1995).During this time period, computing usually involvedthe mainframe in a centralized computing model under which numerous users shared thesame computer (Currie, Desai, Khan, Wang, &Weerakkody, 2003). As computing capability was very expensive, only the larger companies couldafford such mainframes. Smaller companies oftenhad to "piggy-back" their computing needs ontothat of larger companies in return for a monetary fee. This arrangement, which involved sharing ofthe computer process time of the mainframes, wasthen known as "time-sharing."

1.3. The 1970s

Prior to the 1970s, companies who were clients ofmajor hardware (e.g., mainframes) manufacturershad access to a library of software that was bundledin the cost of the hardware (Software HistoryCenter, 2002), which ranged from the computer'soperating systems to various utility programs. Inthe 1970s, generic software from such bundledsources was deemed unable to meet specific needsunique to individual companies, and hence, theneed for customized software arose.Development of such customized software in-housewas inherently expensive, particularly forsmaller companies, due to the skill sets requiredand the additional personnel that would have tobe hired to provide the required expertise. Giventhe high costs associated with such software development,it was often contracted out, and hence, outsourcing in the form of contract of programmingwas prevalent in the 1970s.

1.4. The 1980s

[5].By the 1980s, the cost of computing capability hadbegun to plummet, due to the arrival of low-costversions of mini-computers and then PersonalComputers (Lee, Huynh, Chi-wai, & Pi, 2000).With reference to the market-standard measurementsof Million Instructions Per Second (MIPS),the cost for 1 MIPS has fallen sharply from $1,000in 1975 to $250 in 1980—a steep 75% drop.Consequently, the cost of maintaining in-housecomputing facilities became more financiallyfeasible and, as a result, companies began tobring previously outsourced services in-house.Retaining services in-house continued in themid-1980s on the grounds of the supposedly betterinternal control and reservations of "opening up"the company to outsiders.However, the large-scale outsourcing contractbetween Kodak Eastman

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and IBM in 1989 (Currieet al., 2003) sparked off a massive bandwagoneffect (Lacity&Hirschheim, 1993). In retrospect,this trigger is possibly the ground-breaking dealthat brought outsourcing into the limelight andis often quoted as the first instance in which outsourcingwas defined as a formal strategy.

1.5. The 1990s

The early 1990s were characterized by renewedinterest in outsourcing (Lee et al., 2000) andstrategic use of outsourcing was the focus. Withinthis time period, outsourcing was utilized for twomain purposes.First, outsourcing was utilized to force downsizingwithin companies in order to keep them"lean and mean" for competitive advantage. Second,outsourcing was utilized to upgrade legacysystems operating on 3rd Generation Language(3GL) to 4th Generation Language (4GL). Due tolimited in-house resources, companies often encounteredchallenges while attempting to upgradethe existing applications themselves. As such,many companies had to resort to outsourcing theupgrade to a third party, which was consideredto be better equipped in terms of technical skillsets and human resources, in order to ensure asmooth transition.In 1999, there was an increased uptake of onsitefacilities management and selective outsourcing,primarily in areas associated with the Y2K problem (i.e., millennium bug). This took formin the use of contracting staff and involved earlyapplications of Offshore Outsourcing, primarilyto India.

1.6. The 2000s

Transformational use has been the focusof outsourcing in recent years, particularly inthe areas of Business Process Outsourcing andOffshore Outsourcing.Business Process Outsourcing has been utilizedto redefine the company's operating modeland structure. Administrative, transactional andsimilar work have been shifted to third partieswith the aim of reaping benefits such as cost savings,better access to emerging technology andthe freeing of internal staff from administrativetrivia to focus on strategic issues more vital to thecompany. It is now seen as a service where total,defined business processes are given to expertservice providers who manage the process andensure the total integration between outsourcedbusiness processes and in-house processes (Kruse& Berry, 2004).

Globalization, driven by agreements suchas the North American Free Trade AgreementThe organizations in these days outsource many different activities such IT, customer support, Help desk services, E-commerce, web services, Multimedia services, Human resource management services are few to mention. Out of all the services which are being outsourced, IT is one of the major services which is being outsourced globally.

III. SMES CONTRIBUTION OVER THE GLOBE

Previously IT was been outsourced by high profile large size organizations which are established in industrialized economies. With the fast globalization and with the major aim of having a competitive advantage and save costs this trend has been axed with many small and medium sized enterprises outsourcing their IT services to many IT service vendors. With a contribution of 60 to 70 percent of every nation's economy SMEs play a vital role in the development of economies in every country. According to OECD – Organization for Economic Cooperation and Development (1997) SMEs constitute of 85 to 95 percent of the organizations of a country. With the innovative ideas and inventions SMEs proved their importance in globalization.

IV. WHY DO FIRMS OUTSOURCE?

[6].Companies outsource functions for reasons thatare organizationally driven, improvement driven,financially driven, revenue driven, or cost driven(Outsourcing Index, 2003). Moreover, outsourcingcan be viewed as a component of corporate andindustry international expansion and restructuring.A recent McKinsey Global Institute Report(Farrell, 2003) identifies five horizons of the globalindustry value chain:

•Market entry: Entering a country for purposesof market expansion.

• Product specialization: Specializationtakes place in different locations. Each
locationmay engage in final goods trade witheach other.

• Value chain disaggregation: Productcomponents are manufactured in a certain
location and assembled elsewhere.

- Value chain reengineering: Reengineering processes to capture additional advantagesfrom production cost differentials.
- New market creation: New market segmentsare penetrated as a matter of capturingthe full value of the company's globalactivities.

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V. CRITICAL ISSUES IN IT OUTSOURCING

One crucial issue in IT outsourcing is the changing nature of intellectual property (IP). IP generallycovers information-based products or processes developed by an organization. In most cases, such productsrepresent the original application of an idea to create a new item or to develop a new procedure.

Traditionally, the concept of IP has involved notions of copyright, patents, and trade secrets (Sakthivel,2007). In such situations, information becomes an important commodity, for it is the information usedto produce a product or perform a service that is valuable (provides an organization with a competitiveadvantage). Recent developments in off shoring, however, indicate current perceptions of IP need to beexpanded to a range of data organizations collect and process. For these reasons, organizations need tounderstand various IP nuances to make effective decisions related to off shoring.

[1]. From an IP perspective, copyright and patent disputes are one of the main problem areas in almost anyoutsourcing situation. Essentially, the moment an organization allows any information-based product orprocess to move beyond its prevue, the organization has relinquished its ability to direct the modification,replication, or distribution of the related knowledge. In the case of onshore outsourcing, the organizationcan rely on common national and cultural traditions of contract law and IP law to establish guidelinesfor vendors to follow (Rosenthal, 2005; St.Amant, 2008a). These same commonalities provide the clientwith a legal mechanism to address misuses of its IP. Such mechanisms also act as a deterrent, for bothclient and vendor know the penalties that can result from the misuse of a client's IP.The rise and widespread adoption of offshoring, however, creates new legal dilemmas for outsourcingclients. The crux of these problems is jurisdiction—or the geopolitical limits to various legal traditions.In onshoring, client and vendor often exist in the same jurisdiction and operate according to the samelegal framework (Lesk, Stytz, & Trope, 2005). Conversely, in offshoring, client and vendor are situatedin different nations that could have vague—if not contradictory—legal mechanisms for identifying andaddressing IP violations (Swire &Litan, 1998; Rosenthal, 2005; St.Amant, 2008a). In some cases, thelaws related to IP protection might be weaker in the vendor's nation. In other instances, the regulatoryand oversight agencies in the vendor's nation might simply not enforce such laws. At present, such differenceshave led to conflict involving a range of offshoring areas including pharmaceutical products,medical transcription, and software programming (Lakshman, 2008).

VI. WHEN TO OUTSOURCE:FACTORS THAT SUPPORTOUTSOURCING

Characteristics of today's outsourcing environmentare many and varied. The strategic changeto outsourcing is highly evident in the softwareindustry. Frequent changes to software especiallyoften result in an organization turning to outsourcing as a solution. Reasons studied forthis (Agrawal, Haleem & Sushil, 2001; Agrawal,2005a) can be generalized to all outsourcing, andinclude:

- The turbulent market will need corporationsto be customer focused.
- There are pressures on corporations to continuouslydevelop new product at reducedcost.
- Extensive customization is enabled by ITthrough mass customization.
- The market need can be fulfilled by flexibleand adaptable organizational structure whichis possible with IT-enabled processes.

Previously identified factors include time compression, short product life cycles, strategic discontinuity, increase in knowledge intensity, and customer-focused approach (El Sawy, Malhotra, & Young, 1999). These changes and others willbe discussed in subsequent paragraphs.

1.7. customer Focus

In a traditional sellers' market, products andservices provided by producers and suppliers areconsumed. Today, most products and services existin a buyers' market, in which there is extremecompetition with customers as a focal point.

Moreover, customers have become much moresophisticated and knowledgeable, especially withthe huge amount of product and service informationavailable to them on the World Wide Web(Turban et al., 2006, p. 14). In many instances,customers can customize products or servicesand even name their own price. This providescustomers with a huge amount of power (Pitt et.al., 2002). Companies need to be able to respondto that power. A company with no experience indoing so might be wise to turn to outsourcing asa solution to create and operate their customer relationship management (CRM) functions andrelated information systems Greenberg, 2002).

1.8. shrinkage in product/systems lifecycle

Intense competition tends to decrease in thelength of product or service life cycles. As

newproducts or services are brought to market, thepower of the modern consumer comes into playwith demands for customization. Such continualcustomization is labor-intensive. Outsourcing especially off shoring provides a solution to contain those costs. This impact is particularly evident in the softwareindustry. In a survey of 118 senior financialexecutives, 73% of the respondents expected tohave shorter replacement cycles for software overthe next five years (Hoffman, 2005a). Shrinkage insystems life cycle is unfavorable for developmentof proprietary software and leads to extensive usageof off-the-shelf enterprise-wide software solutions (Agrawal et al., 2001; Agrawal, 2005a).

1.9. global Economy

Many factors have led to the development of aglobal economy in which the boundaries of nationaland regional economic systems have becomeblurred. A reasonably more stable world politicalenvironment has fostered trade between formerCold War opponents, especially those, like Russiaand China that have moved into market orientedeconomic systems (Naisbitt, 1994). Regionalagreements such as the North American Free TradeAgreement (United States, Canada, and Mexico)and the creation of a unified European market witha single currency, the euro, have contributed to increased world trade. Further reduction of tradebarriers has allowed production and services toflow more freely around the globe (Turban et al.,2006, pp. 13-14).The existence of a global economy makesit much easier for companies to shift resourcesfrom firm to firm internationally. It especiallyallows them to take advantage of the differencein labor costs. Labor that costs, say, $25 per hour in the U.S. might only cost $1 per hour in manydeveloping countries.

The technologies have made human lives easier. Lot of developments in the networks like the internet and World Wide Web (www) has helped in the economic development of the world. It also made people communicate each other in a nearer way. (Clinton & Gore, 1997; Kanter, 1995; Negroponte, 1995).

1.10. Competition and real-Time Operations

Strong competition is one of the hallmarks of today's business environment. The advent of the global economy logically has led to global competition. Rapid communications systems and improved transportation systems foster such international competition. When governments become involved to modify the competitive arena, challenges to businesses increase. Such government involvement might take the form of subsidies, tax policies, import/export regulations, and other incentives (Turban et al., 2006, p. 14). For companies not accustomed to dealing in such an intensely competitive environment, outsourcing of business functions that deal directly with competition or government regulations can provide the solution. As the world economy moves ever faster, decisions must be made and actions must be taken more quickly in order for firms to remain competitive (Gates, 1999; Davis, 2001; Huber, 2004). Some companies, for example, Cisco Systems, have chosen to respond by closing their accounting books in one day, rather than the ten days previously required (McCleanahen, 2002). Developing systems to handle that might be beyond the capacity of a firm and that firm might turn to outsourcing to fill that need.

1.11. Changing workforce and Job loss

[7].The workforce in both developed and developing countries is changing rapidly and becoming more diversified with more women, single parents, minorities, persons with disabilities, and employees who have deferred retirement in the workforce than ever before work in all types of positions (Turban, et al., 2006, p. 4). Additionally,more workers are becoming knowledge workers (Drucker, 2002) and telecommuters. As much as half the U.S. workforce will spend two or more days per week working away from the office by the year 2010 (Cole et al., 2003). Those factors, plus the aging population and declining birth rates in developed countries will foster off-shoring (Robinson &Kalakota, 2006, pp. 12-13). World demographics are changing. Developed countries have older average populations than developing countries. According to Business Week, 53% of India's population is considered to be the MTV generation (under the age of 25), vs. 45% in China.

By 2020, 47% of Indians are going to be between 15 and 59 years old, compared with 35% now (Kriplani &Engardio, 2003). A recent survey predicts that an aging U.S. population and slower population growth will lead to a shortfall in the domestic labor supply of 5.6 million jobs by 2010. Of these, immigrant workers will fill nearly 3.2 million jobs and another 1.3 million jobs will be filled by off-shoring (Arora & Arora, 2004, p. 23). Another survey indicates that 3,322,138 U.S. jobs will move off-shore by 2015, with the following breakdown by job category: management, 288,281; business, 348,028; computer, 472,632; architecture, 184,347; life sciences, 36,770; legal, 76,642; art/design, 29,564; sales, 226,564; and office,

1,659,310 (Forrester, 2002). In the IT field, that could translate to as many as 35% to 45% of U.S. and Canadian IT workers being replaced by contractors, consultants, offshore technicians and part-time workers (Hoffman, 2003).

While the most alarming predictions point to the potential negative impacts of off-shoring on the U.S. economy and workforce, as well as those of other developed nations, there is evidence to suggest that off-shoring can lead to domestic job growth rather than reduction (Nakatsu&Iacovou, 2004). The logic supposes that U.S. companies that use offshoring will keep their product and service prices lower, thereby sustaining competitiveness and maintaining or even increasing market share. As a result, U.S. companies will be able to expand their labor pools. Furthermore, jobs lost by off shoring in one industry are offset by growth in other industries (Times of India, 2004). The saving created by outsourcing to India alone, could create $30 billion per year in new investments for U.S. companies by fostering 12,000 new strategic projects at an average of $2.5 million per year per project (Press Trust of India, 2004).

1.12. Technological innovations and Obsolescence

Technology has played a critical role in creating an environment for global economy that fosters trans-border outsourcing, especially in the area of Web-based information technology (Carr, 2001; Evans &Motiwalla&Hashimi, 2003; Wurster, 2000). Technology also provides for other key factors in the outsourcing arena, such as creating and supporting substitutes for products and alternative service options, as well as providing products and services of a high quality (Turban et al., 2006, p. 15). Another contribution of technology stems from its tendency to become obsolete quite rapidly. Such obsolescence, whether planned or not, thereby spawns competition to develop replacements, whether it is in the IT field itself or in medicine, biotechnology or any other technology dependent field. Other impacts of technology on the outsourcing game exist. Technology allows businesses to be more competitive by allowing them to provide their products and services on a 24/7/365 basis. Higher degrees of automation reduce the dependency on specialists, possibly allowing for easier outsourcing. Conversely, the lack of need for specialists might eliminate the need for outsourcing (Agrawal et al., 2001; Agrawal & Haleem, 2003).

1.13. Societal, political, and Ethical Factors

The increase in outsourcing and offshoring, in particular, in turn gives rise to many societal, political and ethical issues. The interface between businesses and consumers becomes more trans-parent as consumers become more powerful and businesses focus on customer relationship management. That transparency results in a tendency for consumers to place demands on businesses. A case in point is the New Jersey state social services department which hired a company named eFund to provide electronics processing of food stamp and welfare benefits. In 2002, eFund moved its customer call center to Mumbai, India. The resulting public outcry that the move was inconsistent with the agency's intent to get people off welfare and into jobs caused eFund to move the call center back to the U.S. at an additional cost of $900,000 per year. The irony was that eFund's U.S. call center was in Wisconsin, which did nothing to create jobs for New Jersey citizens (Hopkins, 2003). A similar situation existed in Indiana, where the public demanded the state cancel a $15 million IT contract with India's Tata Consultancy Services (Robinson &Kalakota, 2005, p. 15). Despite such consumer involvement in business affairs, offshoring is an unstoppable megatrend. That will not stop politicians, however, to shape offshore outsourcing via regulations to appease their constituents. However, government regulations cost money and make it more difficult to compete with countries that lack such regulations (Turban et al., 2006, p. 16).

In general, deregulation fosters competition and lower prices to consumers. That concept is sometimes lost on the general public and politicians in today's fierce political environment. Several national elements that encourage or discourage outsourcing have been identified (Koveos& Tang, 2004). They are:

- Countries' attitudes toward international business: Openness breeds openness!
- Economic conditions: Certain forms of outsourcing generate a great deal of resistance at home, especially when the domestic economy is struggling.
- Wage rate and productivity differentials between the home country and the provider country can also be a significant factor in the decision.
- Labor market: Regulations that make it harder to shift operations obviously addto the cost of engaging in an outsourcing activity offshore.
- Labor inflexibility: Companies operating in many European countries, including France, Germany, and Scandinavian region find it very

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costly to lay off workers and restructure effectively.

- The tax environment: Higher taxes for domestic companies and for providers may serve as an obstacle.
- Government intervention: The freer the country is from government interference, the greater the ability to engage in offshore transactions. On the other hand, incentives designed to keep business at home may discourage offshore activity.
- Culture, including language: Similarities in the cultural attributes of the two countries can facilitate transactions.
- Quality of labor force: The greater the level of education and training of a country's workforce, the lower the costs of adjustment.
- Technological sophistication: The higher technological sophistication of the home economy, the greater opportunity to benefit significantly from outsourcing activities.
- Infrastructure: Outsourcing companies tend to materialize within the countries that have a supporting national infrastructure.
- The information and communications technology environment:
- Adequate technologies are critical to support outsourcing of services related to or supported by IT.
- The legal system, including protection of property and intellectual rights:
- Lack of a well formulated legal system causes outsourcers to look elsewhere, especially if their intellectual property is not protected.
- Local market characteristics, such as competition and suppliers:
- A competitive market promotes outsourcing for cost advantages.
- Experience with international market:

A history of success encourages future outsourcing endeavors. Unfortunately, mention must also be made about the impact of terrorist attacks. Since September 11, 2001, there is ever increasing attention paid by organizations to protect them against terrorism.

Geographically diversifying is one solution and offshore outsourcing plays a large role in that. Another countermeasure is intensified security systems, and even intelligent systems that identify possible behavioral patterns to prevent cyber-terrorist attacks. The host company might not have the in-house expertise to handle such systems, thereby creating more opportunity for outsourcing (Turban et al., 2006, p. 16).

Other outsourcing issues relate to culture and ethics. Just as each country has its own culture, so does each country have its own norms for ethics? The same can be said of corporations and individuals. What is culturally acceptable and ethical to one country, company, or individual might not be culturally acceptable or ethical to the next. That provides challenges on both sides of the outsourcing equation to ensure culture and ethical norms of the other party are not compromised or violated.

VII. TYPES OF OUTSOURCING

Willcocks, Feeny and Islei (1997) distinguished between four main types of outsourcing, namely Total Outsourcing, Total Insourcing, Selective Outsourcing and De Facto Outsourcing. Ho, Atkins, and Eardley (2004) extended the distinction to six types, with the inclusion of Offshore Outsourcing and Business Process Outsourcing. This has been further extended to nine types, taking into account Business Transformational Outsourcing, Retro-sourcing and Rural-sourcing from literature reviews, all of which are outlined as follows:

Total Outsourcing refers to the decision to transfer the provision and management of at least 80% of services to the external service providers.

• Total Insourcing refers to the decision to retain the provision and management of at least 80% of services internally after a reasoned evaluation of the external service provider market.

• Selective Outsourcing refers to the decision to source selected services from external service providers while still providing between 20-80% (typically 24%) of services internally.

• De Facto Outsourcing (Insourcing) refers to the exclusive use of internal resources
to provide services, which arises from historical precedent rather than a reasoned evaluation of the external service provider market.

• Offshore Outsourcing refers to the decision to transfer the provision and management of services to external service providers outside of the client organization's home country and also on cruise ships off territorial waters.

• Business Process Outsourcing refers to the decision to transfer selected areas of the client organization's repeated core and noncore business processes to external service providers, for example, financial statement analysis and statutory reporting.

• Business Transformational Outsourcing refers to a type of relationship that involves both Information Technology Outsourcing and Business Process Outsourcing. While traditional use of outsourcing is to offload non-core activities and leverage economies of scale, Business Transformational

Outsourcing is instead utilized to gain strategic competitive advantage on an enterprise-wide basis and share risks in innovating to enhance business performance.

• Retro sourcingrefers to a cyclic relationship where an offshore service provider outsources some degree of services back to the client organization's home country, typically by the creation of a business division sometimes misclassified as "Insourcing."

Protagonists of Retro-sourcing claim that it is a positive trend that results in job creation, while antagonists claim that it is merely "outsourcing in sheep's clothing" (Reisman, 2004).

• Rural sourcingrefers to an obscure form of Outsourcing in which the provision andmanagement of services are transferred to rural regions of the client organization's home country. The concept of retaining jobs onshore while benefiting rural communities in the process presents opportunities for companies to project a positive public image; hence, Rural sourcing is expected to be an increasingly viable alternative to Offshore Outsourcing.

VIII. ADVANTAGES OFOUTSOURCING

1.14. Cost Reduction

Companies that maintain all services in-house may incur vastly higher research, development, making and deployment costs, which can severely reduce their overall competitive advantage. Outsourcing can be utilized to exploit the lower cost base of external service providers, which allows for reduction in operating costs (Namasivayam,2004) and capitalization (Kruse & Berry, 2004), allowing additional finances to be freed for use in other areas of strategic importance. Typical cost reductions are in the region of 20% to 40% (Davison, 2004; Namasivayam, 2004), primarily by labor cost arbitrage, although some literature have indicated cost reductions of up to 70% (Synergy Infotech, 2004).

1.15. Access to Specialist Resources

World-class service providers amalgamate expertise by working with multiple clients facing similar challenges and make extensive investments in both technological and human resources. Consequently, the careful selection of a service provider with cutting-edge technologies and skills can provide access to world-class capabilities and specialist resources (Kruse & Berry, 2004; Namasivayam, 2004), which can aid in areas such as reducing the risks of technology obsolescence and overtaking competitors on the technological front.

1.16. Improved Focus

Outsourcing allows a company to focus on its core business by offloading operational aspects to service providers with expertise in their respective fields. The ability to "cherry-pick" a variety of services from leading service providers enables the company to optimize its value chain (Sloper, 2004), focus its resources on meeting client needs and improve contribution towards overall business objectives.

1.17. Subcontracting of Workload

Each company has limits on the resources available to it; thus, outsourcing can be a particularly viable option in situations where a company's internal human resources are stretched. By diverting certain components of the existing workload out to external service providers, internal resources can be allocated to business objectives of strategic importance with the aim of achieving higher efficiency and competitive advantage.

1.18. Better Risk Management

Risks are inherent to almost any business decision (Aubert, Dussault, Patry, &Rivard, 1999) due to ever-changing market competition, government legislations, financial conditions and technologies. It can be both taxing and costly to be fully market-aware of all risk resulting from such economic, political, financial and technical issues. Outsourcing allows companies to exploit the resources and expertise of specialists, thus resulting in better risk management compared to internal handling.

IX. RISKS OF OUTSOURCING

Despite the purported benefits of outsourcing and the wide range of success stories that have stimulated an unprecedented growth rate, there are potential risks as well. An outsourcing project might fail because of poor selection of the vendor, mismanagement of the outsourcing contract, inferior performance by the vendor, lack of acceptance by the end consumer, or other reasons (Quinn &Hilmer, 1995). It might also be that outsourcing may have higher costs than insourcing the same function (King, 2005; Mears &Bednarz, 2005; Thibodeau, 2005a). A survey of 25 large firms with a combined$50 billion in outsourcing contracts found 70% have had negative experiences with outsourcing projects and are now taking a more cautious approach. A quarter of the companies brought outsourced functions back in-

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house and nearly half have failed to see the cost savings of outsourcing they had anticipated (Mears, 2005). In a time of lower revenues, outsourcing provides a tool to manage costs. However, there are other factors to consider that might cause increased costs. Disgruntled employees, ones who did not lose their jobs due to outsourcing, can cause problems and increase costs. When some business functions are outsourced, employees might not have an opportunity to apply as much skill variety, which can lead to lower productivity. Public perception can cause for a more negative corporate image within the community and can result in lower sales.

1.19. Risk Identification

Several risks such as cultural, political, financial, technological, commercial, and legal have been linked to the failure of IT/IS offshore collaborations. Adverse risk is heightened because of the geographical distance between the client firm and the vendor firm (Beiling, 2006). Geographical distance, costs, time, and resources prevent the client firm from exercising appropriate control over the vendor. Common risks include operational, strategic, cultural, and financial risks. Operational Risk Operational risk is identified as the increased chance of poor quality and output due to limitations of the communications and transmission systems, complexity of operations, and geographic separation between the two firms (Patterson, 2006). Loss of control is a significant threat to the ongoing operations because it decreases the manageability and power of value chains and inhibits client firms to give accurate performance evaluation. Performance evaluation and monitoring is often overlooked due to increased pressures of keeping costs down. An agent's lack of experience for a specific activity also increases the risk of poor quality of services, and the client's inability to measure the performance causes the client firm to become vulnerable to the agent's results and services.

1.19.1. Strategic Risk

Strategic risks result from opportunistic behavior of the vendor client. Shirking is an example of strategic risk. Shirking is defined as deliberate underperformance while claiming full payment (Patterson, 2006). As globalization changes the basis of competition, strategic sourcing is moving from the periphery of corporate functions to the core, and research indicates that service providers are tempted to fail to perform their best work when they know the performance is difficult for their client to measure (Gottfredson, Puryear, & Phillips, 2005; Willcocks &Feeny, 2006). Performance pressures cause a number of offshore companies to cut corners to make certain the product is delivered despite product reliability or product completion (Beiling, 2006). Software development integrity is often violated as a result of the competitive position of providing ISs at the lowest possible cost for the highest achievable quality at the quickest time (Gottschalk, 2006). Opportunistic recognition is another form of strategic risk. It derives from one party changing the terms of a contract after its inception. Opportunistic recognition occurs when the client discovers that it has no alternative source of support, goods, or services and, as result, must pay the supplier whatever price the supplier demands in the future (Arbore &Ordanini, 2006; Willcocks &Feeny, 2006).

1.19.2. Security Risks

Offshore outsourcing increases the risks on intellectual property violation and loss of confidentiality because it allows vendors access to private business information (Patterson, 2006). In many countries there is a lack of adherence to security and quality standards. Integrity is often violated because of the pressures of performance standards. Many vendor companies have multiple clients and there is no guarantee that a contracting organization's data, programs, and applications will not be duplicated for other clients (Arbore &Ordanini, 2006). Intellectual property theft is steadily increasing and protecting rights in foreign countries can be difficult. Countries like China have copyright laws, but they tend to favor Chinese companies. Privacy campaigners argue that the processing of sensitive financial and data records in foreign countries do not meet the high privacy standards of the United States (Chan, 2005; Lyons, 2006). Their argument is supported by a particular instance when a woman from Pakistan threatenedto post sensitive United States medical records on the Internet (McLean, 2006). As a result, other medical organizations have returned their data processing back to the United States. Other financial companies that offshore ISs are worried they will be open to lawsuits if they cannot guarantee acceptable standards of privacy. In a recent study by Booz Allen Hamilton, information security has become a top concern among companies evaluating offshore outsourcing (Dunlop & Smith, 2005). The respondents also felt there was a significantly higher security risk in working with offshore providers over those in the United States, due to a lack of trust in legal and regulatory environments in developing countries. Protection of corporate and

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personal data in anyoffshore outsourcing venture is critical in order to protect the business from cyber-crime and theft of customer data. Information security ranked as one of the top three factors when selecting an outsourcing partner. It was rated ahead of financial strength, business stability, and reputation. At the February 20, 2006 Outsourcing World Summit,the International Association of Outsourcing Professionals announced an increasing concern over data security while considering offshore outsourcing (Hunt, 2006). More than 90% of the respondents stated that data security breaches would be "catastrophic "to their business. A key factor is not being able to verify vendor's claims of security capabilities. More companies are concerned with theft or misuse of outsourced data than they are about the threat of terrorism.

1.19.3. Cultural Challenges

Culture is the "totality of socially transmitted behavior patterns, arts, beliefs, institutions, and all other products of human work and thought" (dictionary.com, n.d.). Cultural differences and communication difficulties have numerous effects on business operations including no information sharing, poor communications of decisions, and no interaction between team members. Breakdown in communication often results in inadequate task priority and lack of overall business comprehension. Differences in culture often lead to miscommunication, which can result in considerable chaff. Memories of war and religious animosities make it difficult to build and maintain trust. Another concern is the simulation of a nonforeign facade to the clients who call these centers. Studies show that employees feel alienated from their own culture because of the shrinkage of local traditions to meet client expectations (Beiling, 2006). Workers become exhausted from working in a foreign language and tend to have growing resentments for the American people because of the decreased identity and cultural differences (Willcocks &Feeny, 2006). Although these overseas positions train the employees on the specifics of job expectations, there is little transferable job experience and no preparation for future career growth (Seabrook, 2004).

1.19.4. Financial Risks

As illustrated in Figure 3.4, despite increased cash flow and cost effectiveness, there are many hidden costs associated with IT/IS offshore outsourcing. Tailored contracts, lack of transparency, and bundling of services result in costly unexpected spending. There can be extensive, unpredictable costs due to a lack of due diligence. Vendor firms' unclear pricing and cost structure make it very difficult to understand cost savings. Bundling or grouping of services is a frequent dilemma and causes confusion in unit costs (Dolan, 2006). Hidden costs are most likely the result of broad and ambiguous contracts that fail to define present and future IT requirements (McLean, 2006). Hidden costs can derive from dismissing or transferring staff, transfer of licenses by software vendors, travel costs, investigation costs, and the cost of developing infrastructure to support off-site operations.

Offshore Outsourcing's success Factor analysisGlobal giant, Dupont, has developed a framework for its ISs offshore outsourcing operations. The company's IS frame consist of nine core capabilities including: (1) leadership, (2) business systems thinking, (3) relationship building, (4) architecture planning, (5) making technology work, (6) informed buying, (7) contrast facilitation, (8) contract monitoring, and (9) vendor development (Willcocks &Feeny, 2006; Willcocks, Feeny, & Olson, 2006). IBM has been noted for its exceptional globaloffshore outsourcing and credits its success to their IBM Relationship Alignment Process (Petershack, 2005). Their model is centered on relationship determinants including commitment, predisposition, mutual benefits, linkage, unique resources, and shared knowledge. Success factors of IT/IS offshore outsourcing consists of precise risk analysis; detailed cost benefit analysis; relationship management and cultural understanding; understanding legal issues and contracts; and implementing risk controls.

1.20. Loss of Organizational Competencies (Tacit Knowledge Loss)

One commonly cited risk associated with the use of outsourcing is the loss of organizational competencies, which increases the level of dependence on external service providers. As outsourcing deals often involve transfer of human resources, the internal expertise available in a company may be significantly reduced, hence hampering its ability to maintain competitive advantage and to innovate (Earl, 1996). To reduce the loss of internal expertise, which in turn impacts organizational competencies, companies should conduct a thorough evaluation of all staff, prior to any transition, to identify those that need to be retained for required skill sets.

1.21. Reduction in Quality of Service (Service Debasement)

Service debasement refers to any reduction in the quality of services received by a

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client (Aubert,Patry, &Rivard, 1998). Service quality may decline through the contract or may just fall below agreed-upon levels (Bahli&Rivard, 2003). This can be curtailed by the effective use of Service Level Agreements. For successful implementation, companies will need to have the ability to evaluate the performance of outsourced services, and hence, require some technical knowledge of the respective fields.

1.22. Cost Escalation

Cost escalation can sometimes occur from unforeseen expenses that result in an overrun of originally contracted estimates (Bahli&Rivard, 2003). This covers a broad range of costs, including the development and maintenance of an exchange relationship (i.e., outsourcing relationship), monitoring exchange behavior (i.e., service level monitoring) and guarding against opportunism (Williamson, 1985). This can be mitigated by a comprehensive financial analysis prior to outsourcing and the use of definitive Service Level Agreements that clearly indicate the financial basis and conditions of the outsourcing arrangement.

1.23. Lock-In

Lock-in is a risk that often results as an extension of the loss of organizational competencies. A lock-in situation may occur in instances where a company has not retained sufficient in-house expertise or when there are relatively few service providers capable of offering the breadth and depth of services required (Bahli&Rivard, 2003). Contractual and practical safeguards are necessary to militate against lock-in (Sloper, 2004), which include strategic partnerships, based on risk sharing and mutual goals, and dual sourcing strategies involving the use of multiple service providers (Kern, Willcocks, & Van Heck, 2002). Some companies, such as British Aerospace, have deliberately maintained control of strategic IT functions to safeguard against the risk of lock-in.

X. RISK ANALYSIS

Risk analysis enables client firms to determine the financial consequences of risk. As illustrated in Figure 3.5, a risk breakdown structure in risk analysis involves discovering and prioritizing of important risks that need protection and analyzing threats to assets to estimate potential losses. Successful companies determine the relative importance of each risk and then verify the level of impact it will have on their company in terms of costs, schedule, and quality. Successful firms identify the priority of each risk and determine the goals of the project accordingly (Bardhan, Whitaker, &Mithas, 2006; Patterson, 2006).

1.24. Cost Benefit Analysis

Potential customers need to do a cost-benefit analysis to determine whether database or application server outsourcing is right for them. Cost benefit analysis indicates whether offshore outsourcing is financially sound for companies. As illustrated in Table 3.2, when determining IT/ IS offshore outsourcing, a cost benefit analysis should include a review of potential gains, costs, and possible risk(s) of each alternative; appropriate contract period; intangibles and hidden costs; contracting and legal costs; vendor's fee; conversion costs; IS salaries and severance payments; cash; contract cancellations; staff morale; and share price.

Relationship Management and Cultural Understanding Research indicates that the level of partnership between a client firm and a vendor firm will increase when high levels of cultural similarityexist between them as evidenced by the insurance company USAA (Arbore &Ordanini, 2006; Chakrabarty, Gandhi, & Kaka, 2006). Identification-based trust is associated with successful offshore outsourcing because a mutual understanding allows for both parties to recognize and appreciate the other's wants. Identificationbased trust has been linked to information sharing behavior and the overall quality of communication between the two firms (Bardhan et al., 2006). The parties involved in an offshore outsourcing relationship belong to distinct cultures and it is vital that these differences are accepted. A recent study by Gartner (Heib, 2006) pointed to culture as a key differentiator to IT success and discussed the need for the IT organization to establish trust, commitment, two-way communication, clarity of purpose, and agility as vital components of the IT organization. Healthy communication is a crucial element to a working relationship. The effectiveness of the relationship between management personnel of both teams is dependent on the understanding and strong working relationships among the firms. Studies of offshore outsourcing success stories have demonstrated that working chemistry in management and peer friendships among employees have proved to be important determinants in forming long-term relationshipsthat yield real value (Patterson, 2006). Industrial relatedness has also been a significantindication of successful offshore outsourcing. IT/IS offshore outsourcing between firms in related industries outperformed firms in

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unrelated industries (Kripalani et al., 2006). Firms from different industries have more difficulties understanding and collaborating with each other. Firms in related industries communicate their needs more effectively because they share a common language, socialization, institutional history, and organizational practices. Flexibility, modularity, and process knowledge are important business culture elements to study when determining a vendor firm. The client firm needs to determine the adaptability of the vendor to adjust to the changing demands of business and IT environment. The client firm must also know the vendor's ability or willingness to add, delete, or modify services. Lastly, the vendor firm must know enough about the client firm's industry to successfully deliver needed services.

1.25. Understanding Legal Issues and Contracts

Legal issues regarding offshore outsourcing of IT/IS functions into emerging economies can be broken down into two parts: (1) the need for laws to govern international business operations, and (2) the ability to enforce international laws. Hall and Liedtka (2007) discussed the implications of the Sarbanes Oxley Act for large-scale IT outsourcing. First, companies and nations realize that international laws and agreements are needed in order to ensure that physical and intellectual properties are protected. Second, countries have different laws and policies regarding ownership and control of physical and intellectual properties, and the ability to enforce the international laws and agreements that have been established is critical. In 1883, the Paris Convention for the Protection of Industrial Property was established (WIPO Treaties, 2006). This became the first international treaty to help people of one country obtain protection in other countries for intellectual properties in the form of industrial property rights (inventions, patents, trademarks, and industrial designs). As the volume and different types of intellectual property grew, there grew new requirements to protect intellectual property. In 1970, the World Intellectual Property Organization (WIPO) cameinto existence (WIPO Treaties, 2006). The WIPO was established to promote the protection of intellectual property throughout the world through cooperation between nations and, where appropriate, in collaboration with any other international organization. In 1974, the WIPO became a specialized agency of the United Nations system of organizations. At present the organization has 181 member nations and the need to expand the scope of laws to protect intellectual property continues to grow as global business grows. The World Trade Organization (WTO) plays in important part in the establishment of intellectual property rules. The WTO's Agreement on trade-related aspects of intellectual property rights (TRIPS), negotiated in the 1986-1994 Uruguay Round, (Understanding the WTO, n.d.) introduced intellectual property rules into the global trading market for the first time. The agreement is supposed to narrow the gaps in how these rights are protected and bring common international rules into play. Although there has been extensive cooperation between many of the nations of the world, there still exist many nations that do not adhere to the international laws that have been established to provide protection to companies. As we look at emerging nations the risk of doing business with these nations increases depending on their acceptance and enforcement of established international laws. The majority of subjects who participated in the Booz Allen survey felt that the regulatory and legal infrastructure in Asia and South America is not adequate (Dunlop & Smith, 2005). The survey revealed that only 5% of companies surveyed believed that China has a strong and legal infrastructure, South America was 5%, and Southeast Asia was 11%. The 27% of the respondents indicated that India, which is a major country for offshore outsourcing, had a good legal infrastructure. There is a feeling that there is a high potential risk for loss of customer or corporate data in these countries. Companies have to weigh the savings of lower costs that could be realized by offshore outsourcing in these countries to the potential impact to their companies from data loss. International laws continue to change as outsourcing companies and potential countries to outsource realize the importance of having legally binding contracts. Many countries have worked to improve their legal systems to work with the companies that want to outsource to their country. Russia, for example, has established laws to offer some protection to offshore outsourcing companies (, 2005). Companies must still do due diligence in advance of any potential outsourcing contract.

XI. RISK MANAGEMENT

First, it is critical to understand the laws and legal infrastructure of the country that the potential vendor is located. Does the company belong to trade groups or industry associations that have established standards for security of company and customer data? A company should have legal counsel that is experienced in the laws of the offshore country and may want to hire local counsel in the country to assist in legal matters.

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Companies must invest the time to research trade laws of the countries they are looking to outsource in. In addition, a company should research the legal performance history of potential vendors. The company may want to have a third-party security audit or an independent security evaluation be completed before any agreements are formalized. The terms of the contract are an important part of any potential offshore outsourcing agreement. Time should be taken to agree in detail exactly what each party is responsible for. This will lessen the potential of trying to identify which party is to blame when things are not done correctly or on time. The initial development of detailed requirements will make the working relationship operate smoother. If your requirements are not clearly documented in the contract, a company will find it very difficult for any international legal system to rule in their favor. Another area that needs to be agreed upon is the metrics that will be used to measure progressand success or failure. Service level agreements are necessary and can be an outstanding tool to have if legal issues should arise regarding performance at a future date. The service level agreements should be agreed to and fully understood by both organizations prior to implementing any offshore outsourcing relationship.

1.26. Risk Controls

Best practices indicate performing risk controls decrease chances of offshore outsourcing risks (Willcocks &Feeny, 2006). Preventive, detective, and corrective controls are common tools that are implemented for risk reduction. Preventive controls lessen the impact of risk or prevent it before having an impact. Preventive controls include clarifying assumptions, involvement planning, establishment of standards, and hiring translators. Detective controls reveal the existence of a risk and expose future impact under similar conditions. Detective controls include collecting metrics on project performance and conducting frequent audits of offshore vendor sites. Corrective controls involve determining the impact of risk and require establishing measures to prohibit future impacts. Examples of corrective controls are rescheduling of tasks on a critical path, alternate offshore vendor sites, and hiring more translators (Ramanujan & Jane, 2006; Sakthivel, 2007).

1.27. What TO do and not do to Outsource core competencies and critical success Factors

Decisions as to what and whether to outsource should be tied to an identification and understanding of an organization's core competencies and its critical success factors (Luftman, Bullen, Liao, Nash, & Neumann, 2004, p. 320). Such an identification and understanding can be a lengthy process. However, it is the one true way to determinewhether a project should be or should not be outsourced. While that recommendation was first applied to IT projects, it can be generalized to all business functions. If a task is a both a core competency and a critical success factor, it should not be considered for outsourcing. Such tasks are at the heart of the company. Success or failure of such functions is directly tied to success or failure of the company as a whole. In general, such functions are critical to an organization's day-to-day operations, ability to competitively differentiate itself, ability to deliver value to customers and partners, and ability to innovate (Luftman et al., 2004, p. 320). Tasks that are core competencies, but not critical success factors should be reassessed. Why engage in such tasks if they are not critical? Often the answer to that is "because we can." It is typically not a good business decision to continue to engage in such tasks. Those tasks which are not core competencies are the most likely candidates for outsourcing. The question is how to go about it. If such as task is a critical success factor, it might be wise to establish a strategic alliance; otherwise, a transaction partnership might suffice. The former is a more tightly coupled arrangement than the latter. Strategic partnerships might even establish some form of mutual ownership or revenue sharing, whereas transaction partnerships are more typical outsourcing arrangements where a company simply contracts with a vendor to provide the service or product. There is another consideration that lies outside the core competency-critical success factor matrix. If an organization intends to bring an outsourced task back in-house at some future time, managers should be cautious. There is overwhelming evidence that certain outsourced activities cannot be reversed, particularly in the IT arena (Luftman et al., 2004, p. 323). Once theexpertise has been released to the outsourcer, it is difficult — if not impossible — to regain such expertise in-house.

1.28. Strategic Frameworks

The increasing complexity of outsourcing, as shown from a number of high-profile failures (Bagby, 2003; Cullen, 2003), highlights the need for strategic implications to be considered; consequently, tools to support this strategy have to be formulated and utilized. The study surveyed 100 organizations, comprised of approximately 25%

from the public sector and 75% from various elements of the private sector, regarding their view and opinions on the use of outsourcing (Mills, 2004).

The two main reasons identified are to reduce operational costs and to improve service levels, both of which are tactical (i.e., short-term) in nature, which hints at the potential lack of strategic considerations in some instances of outsourcing decision-making.

Although there are several advantages associated with outsourcing, like any other business move, there is a degree of risk involved: for example, loss of control and privacy issues in the case of Offshore Outsourcing. This underscores the need for a strategic perspective to outsourcing decision-making, rather than a tactical perspective that focuses primarily on short-term benefits.

1.29. Generic Framework

A generic framework for outsourcing decision-making, which allows for analysis of strategic value of the evaluated function against internal expertise (i.e., in-house) available in the company. The framework provides for classification into one of four possible quadrants, namely: Best/Smart-Sourcing Candidates Functions classified under this quadrant are high in strategic value but low in internal expertise. These functions should be subject to a reasoned capability evaluation from both internal departments and external service providers to determine its viability for outsourcing. This selection process, which determines the "best" service provider, interms of cost effectiveness and process efficiency, is known as "best/smart-sourcing." Examples of such functions include technical helpdesk (e.g., troubleshooting and end user support) and security management (e.g., anti-virus updates and network security).

1.30. Strategic Retention Candidates

Functions classified under this quadrant are high in both strategic value and internal expertise.These functions should be retained in-house, as it protects the company's ability for rapid innovation along with its expertise in the domain. However, in some instances, companies are known to utilize consultants or expert advisors from external service providers to boost or enhance the existing internal capabilities. Examples of such functions are research and development fields, and applications that have been identified as Strategic Information Systems (SIS); that is, they are aligned with business objectives and have significant impact on organizational performance. Some of the classic examples could be American Airlines' (AA) SABRE System, Baxter Healthcare International's "stockless inventory" system, and Wal-Mart's "continuous replenishment" Customer Relationship Management (CRM) system (Laudon & Laudon, 2000).

1.31. Strong Outsourcing Candidates

Functions classified under this quadrant are low in both strategic value and internal expertise. These functions are considered to contribute little value to the core business and are limited in terms of internal expertise, hence are strong potentials for outsourcing. Traditional examples of such functions are payroll systems and hardware maintenance. However, it is important to note the assessment of value contributed to core business may differ for individual companies; thus, each function should be examined in the appropriate business context instead of a generalization. For example, a security company may establish that their staff's work attitude is linked to being paid efficiently, and thus view payroll as a vital component that should be retained in-house, hence contradicting the traditional concept of payroll as a strong candidate for outsourcing.

1.32. Change Candidates

Functions classified under this quadrant are low in strategic value but high in internal expertise. In an ideal business setting, such functions are not supposed to exist, but they sometimes do exist in real-world business settings due to the isolation of IT functions from business functions that leads to separate agendas; that is, the lack of strategic alignment of IT with business objectives. These functions could be specialist-developed products looking for a business purpose or products that are well in advance of current business needs. These functions should be mitigated within the portfolio, either by elimination (possibly by means of outsourcing) or process re-engineering (possibly for development into strategic applications to be retained in-house). An example of such functions is predictive analysis tools, often developed by internal staff with high skill levels, which apply sophisticated analysis techniques to enterprise data. Although these tools are technically advanced, they produce predictive analysis modelsthat have a low strategic value when utilized alone. However, when such predictive analysis models are combined with organizational business knowledge, they can provide insight into critical issues, such as fraud detection, customer retention and cross-selling

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strategies. In these instances, the predictive analysis tools are "change candidates" ideal for process re-engineering to develop them into "strategic retention candidates."

1.33. Other Frameworks

In addition to the generic framework presented, Ho et al. (2004) identified a number of strategic frameworks for outsourcing decision-making, which are briefly outlined in Table 1. Analysis of the identified frameworks indicates that majority are based on the use of the Strategic Grid/Boston Matrix (SG/BM) positioning grid, which is a well-established technique (Earl, 1989; Ward &Peppard, 2002). There is clear consensus in literature of its use in generic business decision-making (Laudon & Laudon, 2000; Pearlson, 2001; Ward &Peppard, 2002) as SG/ BM-based frameworks are intuitive to use for business users. A review of the outsourcing literature emphasizes the need for strategic frameworks to incorporate quantitative measures to help practitioners set priorities and provide the most benefits from outsourcing (Yang & Huang, 2000). The failure to address this aspect is one of the main inadequacies of the majority of the frameworks reviewed, only three of which incorporate quantitative measures. The analysis highlights a lack of financial costing and benchmarking in most of the reviewedframeworks, which is contradictory, as cost savings and service level improvements arecommonly identified as the top drivers behind the use of outsourcing. Financial costing is considered to be particularly important within a framework approach, as it facilitates the ability of the business to benchmark its cost position relative to external service providers and provides a comprehensive financial justification in the decision-making process.

XII. MANAGEMENTOF OUTSOURCING

Like all management operations, a consensus of advantages and associated risks of using third-party contractors (i.e., outsourcing service providers) has to be considered and evaluated. A summary of the factors in terms of outsourcing have been compiled and detailed in the following sections.

1.34. Factors for successes and Failures

Although the business context in which outsourcing is utilized may vary widely, resulting in a vast combination of variables that influence outcomes, it has been noted that there are some common characteristics and traits in outsourcing moves that indicate its inclination towards success or failure. These commonalities, termed key factors, are briefly outlined as follows: Factors for Successful Outsourcing

- Understanding of company goals and objectives: that is, there is a clear understanding of what the company hopes to achieve via the use of outsourcing; for example, access to advanced technology and specialist skills.
- Strategic vision and plan: that is, a defined roadmap details how outsourcing will aid the company in progressing towards its strategic objectives and long-term goals.
- Executive and management level buy-in: that is, there is senior executive supportand involvement through the outsourcing lifecycle, from the decision process to the implementation process.
- Comprehensive financial justification in decision process: that is, the outsourcingdecision is justified by a detailed financial analysis, which benchmarks the company'sinternal cost position against that of external service providers.
- Use of external expertise in decision process: that is, lawyers, independent consultants and financial advisors are utilized to provide expert insight and advice on the legal, financial, economic, technological, political and organizational aspects.
- Open communication with affected individuals and groups: that is, employees and trade unions are informed and consulted about the potential outsourcing and its corresponding implications.
- Careful selection of right service provider: that is, there is an objective decision process in which the service provider with the best technical capabilities, financial feasibility and cultural fit is selected.
- Ongoing management of outsourcing relationship: that is, there is constant monitoring and management of various aspects of the outsourcing lifecycle, from the selection process to the implementation process.
- Quantifiable performance monitoring: that is, the company has established an objective and measurable method of ascertaining the compliance of performance standards in the service provision.

1.35. Factors for Unsuccessful Outsourcing

- Short-term benefits dominate as the motivation: that is, the outsourcing deal

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ishandled as a purchasing decision rather than a strategic investment opportunity.

- Service providers are not "pre-qualified" on their total capabilities: that is, serviceproviders are not short-listed by a comprehensive evaluation prior to selection.
- Service provider literature dominates the decision process: that is, case studiesprovided by the service provider, which are biased towards reporting only positiveresults, are used as the basis for deciding to outsource.
- Management team lacks decisional authority and experience: that is, the lack ofexperienced staff who have the incentives (personal, professional and economic) andauthority to ensure the outsourcing deal succeeds.
- Lack of defined processes for incident resolution and change management: thatis, the lack of defined processes for escalating problems, negotiating change requests and periodically reviewing the service provision contract.

1.36. Selecting and managing service providers

Prior to the selection of service providers, companies need to have identified two important aspects of information: namely, well-defined service expectations and an understanding of their internal cost metrics. Service expectations serve as a guide by which contractual needs can be assembled and then negotiated with potential service providers, while the internal cost metrics can be used to establish a "base case" for use in financial analysis. By using the "base case" as an estimate for current costs, a comprehensive financial analysis can then be conducted to benchmark the company's cost position relative to that of external service providers. This would, in turn, provide for the financial justification on whether to retain the evaluated services in-house or to outsource them. Companies then need to articulate a clear mission statement for the type of outsourcing relationship to be established between themselves and their potential service providers. There needs to be well-defined objectives and performance metrics by which the services to be provided can be measured on a continuous basis, and companies should ensure that short-listed service providers already have an effective tracking and reporting system in place for that purpose. It is beneficial for companies to have direct access to the service providers' tracking and reporting software for data capture about the performance of technology within the company, thus allowing technology use to be evaluated and areas for exploitation to be identified. Overall, an outsourcing relationship with the ideal service provider will involve committed and supportive management, which includes continuous service management and performance monitoring on an ongoing basis. In the selection of such service providers, companies have indicated the following to be the most important factors (Sparrow, 2005; 2004 Global IT Outsourcing Study, 2004):

Reputation and proven track record: that is, the service provider has achieved results
for similar companies that are willing to serve as references.

- Cultural fit: that is, senior executives and company staff are likely to be able to work well with that of the potential service provider and are agreeable with its practices and processes.
- Financial stability: that is, the service provider is profitable, with good long-term growth potential and development prospects.
- Functional area expertise: that is, the depth and breadth of the service provider's expertise adequately cater for the needs of the outsourced services.
- Vertical industry expertise: that is, the service provider has an understanding of the client company's industry and, hence, is able to customize an outsourcing solution specific to the client's organizational needs. In addition to the above, other factors that should be considered include the flexibility of the contract terms, the scope of resources (both personnel and equipment) required for implementation and the service provider's ability to value-add to the client's internal capabilities. There needs to be due diligence in documentation procedures; that is, documents should be reviewed periodically and kept up to date. Present and proposed hardware/software configurations should be documented, along with the methods utilized to evaluate submitted bids. A summary checklist, which includes service provider name, contact person and bid submission date, should be also compiled for quick reference. In addition to facilitating objective decision-making based on accurate information, the documentation process can aid in the establishment of a formal method for the selection of service providers in future outsourcing processes.

Service Level Agreements (SLAs) are consideredto be integral to the outsourcing process, particularly with regards to service management. SLAs are negotiated agreements of common understanding between clients and service providers that define the services provided along with their expected levels of performance, and

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corresponding penalties and consequences for non-compliance. They explicitly define the relationship between customers and service providers (Leff, Rayfield, & Dias, 2003) and can be used in the context of any industry (Verma, 2004). For effective and efficient implementation in an outsourcing relationship, companies will need to ensure that the SLAs encompass a good degree of legal adherence, quantitative metrics for performance monitoring and an established exit clause in the event that contract termination is deemed necessary.

XIII. STAGES IN OUTSOURCING IMPLEMENTATION

Companies should utilize a systematic approach to outsourcing implementation in order to facilitate an objective perspective in the decision process. Figure 4 illustrates such an approach, involving six suggested stages, outlined as follows:

1.37. Stage 1

Prepare IT Strategy In the initial stage, companies should clearly articulate defined business objectives and develop an IT strategy that will enable them to progress and align with the business goals. Framework techniques, such as the generic framework or one of the other strategic frameworks earlier outlined, can be utilized to determine what aspects of the existing IT functions (e.g., partial or total) are outsourcing candidates. A thorough evaluation is needed to identify the mission-critical applications for strategic retention, and the level of internal expertise required to prevent loss of organizational competencies, and hence safeguard against lock-in risks. A rigorous review of legislative implications is also needed to determine the legal feasibility of outsourcing.

1.38. Stage 2: Resource Planning

The next stage in the process is resource planning, in which the resources (both personnel and equipment) currently required for maintaining the functions in-house are identified. The identification facilitates the creation of a resource utilization table (e.g., breakdown into volume of data transmission, processor capacity required, etc.) in which the resource commitment for the various functions can be detailed, thus allowing resourceintensive functions to be flagged. Subsequently, these resource-intensive functions can then be evaluated for suitability for streamlining (e.g., Business Process Re-engineering) or elimination (e.g., outsourcing to external service providers). An understanding of the internal cost metrics is required, in order to establish a "base case," commonly formulated via the Activity-Based Costing (ABC) method, by which submitted tenders can be evaluated against later (Massy, 1999). It is important to ensure that human resource issues are not overlooked at this stage, as outsourcing has a definite impact on staff morale; hence, companies may have to commit more resources (possibly financial) to make corresponding adjustments to restore internal work efficiency. In some instances, it may be appropriate to utilize consultants to help identify the company's strategic intention at this stage.

1.39. Stage 3: Requirements Analysis

Requirements definition is a vital part of the outsourcing implementation process, as inaccurate definition of requirements can result in implementation delays, resource waste and client dissatisfaction. The requirements analysis should begin with business requirements and translate those into performance requirements of the functions to be outsourced. The requirements analysis method will be specific to the context of individual companies; some may prefer the use of formal project methods, while others may prefer the use of informal brainstorming sessions as the basis. Typically, companies have found it helpful to utilize Service Level Specifications to set measurable requirements and performance criteria. Sometimes companies may inevitably omit the required clarity and details, which results in an ambiguous definition; hence, it is recommended that the completed requirements analysis be reviewed by a select management committee before progressing further.

1.40. Stage 4: Issue Invitation to Tender (ITT)/Request for Proposal (RFP)

The ITT stage, also known as RFP stage, is a procurement procedure where clients invite service providers to tender for the functions to be outsourced. The key component of this stage is the ITT/RFP document, which should comprise the following sections:

- Introduction: for example, industrial context, goals and objectives of the outsourcingmove, and the procurement timetable.
- Background: for example, background information about the company, details of the technical environment and the current business systems in place.
- Scope and scale of functions: for example, detail and scope of the functions to be outsourced, such as number of users, number of transactions and data transmission volume.

- Key requirements: for example, the most important requirements, such as legal adherence to data protection legislations.
- General requirements: for example, a description of service provision and type of outsourcing relationship to be established, such as strategic partnership.
- Detailed functional requirements: for example, a full description of what is specifically required from the service provider.
- Technical requirements: for example, details on technological direction, software and hardware.
- Cost information required: for example, details of costs for various activities, such as licensing, training, consultancy, development, customization and implementation.
- Service provider information required: for example, contact details, parent company name, financial backing details, company audits and evidence of ability to deliver.
- Implementation requirements: for example, timescales, preferred project methodology and resource utilization.
- Instructions to service provider: for example, format and content of tender responses, selection criteria and submission deadlines.
- Appendices: for example, organizational charts, glossary of terms and business process diagrams.

It is important to state that service providers must maintain the strict numbering used in the ITT/RFP document, which makes it easier to check whether the service provider has replied to each defined requirement. Companies often also opt to include a compliance grid that service providers have to complete, and which facilitates a quick review of requirements fulfilled. It is also important to emphasize the clear cut-off date for tender submission and clarify that tenders delivered after that date will be rejected outright.

1.41. Stage 5: Contract Negotiation

The contract negotiation stage involves negotiating with the selected service provider to reach a suitable contractual agreement. There is a natural tendency for companies to desire a speedy negotiation after a potentially time-consuming selection process, but it should be noted that a haphazard contract may lead to later complications, which can be costly in terms of both time and finance. In this stage, the service provision issues that should be discussed are performance standards, compliance monitoring, change management procedures, technological review periods and penalties for non-compliance. Typically, these issues are addressed by the establishment of Service Level Agreements. Companies should include acceptance testing into the contract as a means of ascertaining whether the client requirements have been adequately met. Ideally, various safeguards should be worked into the contract, such as the following:

- Non-disclosure clause for information identified as confidential or company secret.
- Unambiguous definition of Intellectual Property (IP) rights.
- Requirement for implementing a recognized code of practice on information security.
- Ability to veto the use of sub-contractors (i.e., further outsourcing of functions).
- Exit clause in the event contract termination is deemed necessary.
- Procedures to account for business changes where both parties share any potentialsavings from new technology or process streamlining (i.e., mutual goal sharing).

There should be a clear escalation hierarchy and dispute resolution procedures in terms of problem resolution. In instances where traditional pricing arrangements are deemed inadequate, companies can opt to utilize escrow arrangements, where a third-party intermediary act as a security buffer between the client and service provider. During this stage, contract negotiation should be built on trust and not developed in an adversarial way. Overall, companies should have a good understanding of the market, and thus have a grasp of their bargaining power in the contract negotiation with service providers.

1.42. Stage 6: Implementation

The implementation stage involves the establishment of monitoring procedures and ascertaining the compliance of performance standards in the service provision. For the client-provider relationship to be truly effective, constant communication is a vital key, and thus it is important that communication channels and feedback procedures are established to facilitate constant and open communication. It is also important that formal procedures are developed to resolve issues in a convivial rather than an adversarial way. As outsourcing is a potentially long-term commitment, companies need to build up a working strategic client-provider relationship based on trust, and work towards designing contracts that account for the speed of business changes. It is recommended that companies establish a feedback loop by means of review sessions,typically carried out 4 to 6 weeks after implementation, to identify any best practices and

isolate problem areas. This is important, as it provides review information that can be utilized in future implementations to preempt potential problems and can facilitate knowledge transfer, through documented practices, from experienced staff to those in training. Companies should note that the implementation of outsourcing requires considerable time commitment, as illustrated in Figure 5, and hence should be integrated into the organizational strategy. Noticeably, as companies extend the practice of best/smart sourcing, they accrue knowledge from experience, and the resultant conversance with the process aids in reducing the time cycles of outsourcing implementation.

XIV. CONCLUSION

From the above discussion the SME organizations which outsource their non-core responsibilities to outsourcing vendor will benefit both the organizations. However, there are risks involved in these operations. If the risks are properly managed then there will be no issues in outsourcing IT, which will benefit the client company to enjoy the benefits of cost savings and many other discussed above. There are many political issues surrounding outsourcing. The main problem is that the outsourcing of these services is resulting in the reduction of job opportunities for the local employees.

With the risks involved in outsourcing and the political issues which offer tax benefit which offer their organizations to operate in house operations, the organizations are now tending to make in-house operations.

If there is a problem of reduction of jobs which occurred due to outsourcing, is not a big problem if the organizations properly manage the risks involved. As the costs of production are reduced by outsourcing, the organizations have the opportunity to invest in their core activities, which in turn increase the job opportunities for the local employees. As the organizations improve their core activities, the business also increases in the core activities. As far as SMEs are concerned the risks involved are high. Moreover, the IT operations of SMEs will be very less. If they operate their IT service in-house, then it will be a burden for the organizations to employ the IT employees and train them for whatever the little work they have. The cost of licensing of the software will also become a burden for the SMEs. Whereas, in case of large MNCs the IT operations will be high. The organisations also have the ability to license the software and train the employees for their IT operations. It is better for the large MNCs to operate in-house.

XV. REFERENCES

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