

Success Factors for Offshore Information Systems Development

Success Factors for Offshore Information System Development

Murray E. Jennex
San Diego State University

Olayele Adelakun
DePaul University

ABSTRACT

This paper investigates key factors affecting the success of small to medium organizations providing offshore software development, usually to companies in the United States. Five success factor groups (people factors, technical infrastructure, client interface, business infrastructure, and regulatory interface) with a total of 31 critical success factors were identified through a literature review. The critical success factors were assessed for importance by surveying individuals in organizations that outsource system development or that provide system development services. The survey found that the critical success factors of workers' skills, client knowledge, trust in the client-outsourcer relationship, telecommunications, and intellectual property protection are the most critical to the success of offshore software development outsourcers. Somewhat surprising was that cost was not the most critical success factor. The paper concludes with a discussion on the implications of these findings to outsourcers and outsourcing clients.

Keywords: Outsourcing, Success Factors, Information Systems Development, Offshore, Global

INTRODUCTION

Offshore outsourcing is the transference of an Information Technology (IT) function, from a client company to a supplier organization located outside the borders of the client company's country. It is a commonly used strategy among leading companies in the United States, US, and Western Europe. Companies typically invest in offshore outsourcing with the expectation of lower costs, economies of scale, access to specialized resources, and/or new business ventures (McFarland and Nolan, 1995, and Aubert, et. al., 1998). Contributing to the rise of offshore outsourcing was the shortage of IT professionals in the United States in the late 1990s.

The late 1990s saw an increase in the outsourcing of software development, and in particular, offshore software development. Rajkumar and Mani (2001) point out that Year 2000, Y2K, and converting systems to accommodate the European change in currency to the Euro have stressed organizations' ability to keep up with necessary development leading to outsourcing more development projects to offshore developers. Contributing to the increase in offshore development are advances in telecommunications technology and personal computers that have increased the ability of companies outside of the United States to provide development services. Currently, the high demand for e-business and Internet based solutions is continuing the drive for offshore development.

Traditional offshore software development is primarily application development. These applications tend to be highly structured requiring little or no changes to the requirement specifications. These projects require less interaction and project management from the client. They are ideal for outsourcing as deliverables and bids are understandable and predictable and risks are better understood. Current offshore development includes e-business and web application development, and “follow-the-sun” or “round the clock” application development. These projects tend to be less structured in nature and need more client contact and project management than traditional offshore development projects. They are less ideal for outsourcing as deliverables, costs, and risks are less predictable.

Offshore software development offers an opportunity to significantly reduce the cost of application development. However, given the change in the types of projects being outsourced, there is a need for client organizations to assess the likelihood of outsource companies to successfully complete the project. Conversely, given the ease of starting a company that supplies development services, it is important for startups to understand what it takes to be a successful outsource developer. Rajkumar and Mani, (2001) found that the major player in offshore software development outsourcing is India (with approximately \$6 billion in software and services in 2000, Smetannikov, 2001). Some research has been done with respect to what has made Indian companies successful. This paper expands this research by looking at companies located in Western and Eastern Europe.

This paper identifies a set of critical success factors that outsourcing participants need to meet to be successful and performs an exploratory study to determine what are the most critical. The goal is to identify a small set of key factors that small to medium sized enterprises (SMEs) should concentrate on. Tetteh and Burn (2002) define SMEs as firms with less than 500 employees. This is further broken down into micro companies, less than 5 employees, small companies, from 5 to 20 employees, and medium companies, between 20 and 500 employees. The paper is primarily concerned with new or startup enterprises located outside the United States but uses companies from the United States as well as the rest of the world as the source for data. These organizations, startup SMEs outside the United States, are expected to have the fewest resources and least amount of knowledge and experience and will benefit the most from this study. Additionally, this study is expected to assist potential client organizations in how to look at and assess startup, offshore, SME outsourcers. Many potential client organizations do not have processes for looking at these potential sources of system development and the critical success factors presented in this paper should provide a basis for them to analyze potential providers. To do this we propose three research questions:

1. What are the critical success factors for startup SME outsourcers?
2. What are the key critical success factors that SMEs should focus on?
3. Do outsourcers and outsourcing clients agree on the importance of the critical success factors?

The next section describes how each of these hypotheses are determined and tested.

METHODOLOGY

This is an exploratory study for identifying key critical success factors. A literature review was done to identify critical success factors and their attributes for outsourced, offshore system development. A survey was generated based on the literature review and administered to United States and Non-United States located outsourcers and outsourcing clients to determine

the importance of the critical success factors and to determine if there was a difference in perception of importance between each of these three groups.

The literature was reviewed to determine a list of critical success factors. Additionally, a critical success factor model (figure 1) and a survey (Appendix A) were generated based on the identified list of critical success factors. The survey used a scale of 5-Critical, 4-Very Important, 3-Important, 2-Useful, and 1-Not Important. The survey was piloted using students from the graduate system analysis and design classes of one of the authors. These students were familiar with software development, most had business experience, and their origin was mixed international and United States. Nineteen of the 22 students completing the survey had experience with outsourcing. Results of this survey were used to create the final form of the survey. The survey was then administered to personnel from outsource and client companies. United States outsourcers were included in the survey population as a check on the results as it is interesting to know if there are differences between United States and Non- United States outsourcers. Distribution of the survey was through meetings, personal contacts, and email. A total of 210 surveys were completed of which 201 were usable. Of the 201 usable surveys, 68 were from United States outsourcers, 59 from Non-United States outsourcers (5 from Eastern Europe, 3 from the former Soviet Union, 5 from Western Europe, 26 from Asia excluding Australia, New Zealand, and Japan, 10 from Australia, New Zealand, or Japan, 4 from the Middle East, 2 from Africa, 1 from South America, and 3 from North America excluding the United States), and 74 were from client organizations. Of the respondents, 33 were from senior management, 53 were from middle management, 45 from lower management, 3 were procurement officers, and 67 were other (engineers, technicians, developers, consultants, etc.). Surveys were analyzed with respect to the origin of the respondent and as an outsourcer or a client. Means and standard deviations were calculated. Two analyses were conducted. The first analysis was a one-sample hypothesis test on the mean value of each item separately for United States Outsourcers, Non-United States Outsourcers, and Clients. The test was used to determine if the sample mean exceeded 4.0. The threshold of 4.0 was selected to identify the key critical success factors. The second analysis was an ANOVA test to examine differences between the three sets of respondents for each item. Pair wise Tukey comparisons were included for those items with significant ANOVA results.

LITERATURE REVIEW

This literature review summarizes the literature with respect to offshore development success factors and e-commerce success factors. E-Commerce success factor literature was reviewed since e-commerce is an enabler of offshore system development as it provides a communication and business infrastructure that small, offshore startup companies can use to do business with the United States or the world.

Offshore Development Success Factors

As the market for offshore IT outsourcing grows and companies are formed to meet the demand, it is critical to understand what factors will contribute to their success. Studies that identify these factors are few and are summarized below. Table 1 at the end of this section provides a summary of identified critical success factors.

Rajkumar and Mani (2001) discuss why India's software developers are successful. Reasons for this success are an abundant supply of highly educated but low paid software engineers, English is the language of education and business in India, and the Indian government's development of infrastructure and tax and financial incentives. They further discuss the need

for the business to be organized to support the client through interfacing, project management, and contract management. Ultimately they list four categories of success factors: Management, Customer, Project, and Staff. The management factor focuses on the leadership of an organization. Managers are expected to guide the organization and ensure adequate resources are allocated through business plans and strategies. Also, management must ensure that facilities and staff are developed to support the target market. The customer factor focuses on developing a relationship with the client. It includes setting up communications with the client, visiting the client, learning from the client, and integrating practices when feasible with the client. The key is to understand the client so that the developer can add value and develop a long-term relationship. The project factor focuses on project management. The software developer must be able to estimate and manage the project. Care has to be taken to ensure project scope is clearly understood as well as who is authorized to change it. Two key concerns are avoiding research and development projects and ensuring that functional test requirements are clearly communicated by the client. The staff factor focuses on hiring and retaining technical talent. Career paths must be established and care taken to ensure that management is meeting the needs of their staff. Support for travel to client sites in the form of funds and visa support. Finally, flexibility in hiring needs to be established to allow for clients who wish to hire developers of their systems.

Smetannikov (2001) discusses problems facing Russian software developers rather than success factors. Chief among these problems are travel difficulties, cultural differences, real and perceived, between Russian and American programmers, and an unstable Russian business climate. Russian companies are impatient to get business, they feel it is only a matter of time before they will be credible competitors with India.

Raval (1999) discusses his secrets of successful offshore software development from the viewpoint of the client. These secrets or factors are having a strategy for offshore development, understanding the countries you are outsourcing too and the risk associated with outsourcing, preparing the organization and the offshore developer to work with each other, delegating offshore administration to local expertise, and not letting cultural and language issues affect the project.

Kumar and Palvia (2002) discuss the key influence factors and issues affecting the management of global IT outsourcing based on a survey of outsource managers from client organizations. Some of their key findings are that the longevity of the outsource relationship directly impacts the scope of work given to the outsource provider; competitive pricing and similarities in corporate culture were the most common reasons for selecting an outsourcer; outsourcers normally had better technical skills than the client; and strategic outsourcing normally had formal communication channels.

Jain and Song (2002) reviewed the literature and generated a conceptual model that addressed reasons for selecting a offshore development location. Some key attributes include IT managers having cross cultural communication skills, size of the outsourcer, skills and wages of outsourcer personnel, ability of the outsourcer country to train and educate workers, intellectual property protection, governmental regulations, exchange rates, tax rates, political stability, and telecommunications infrastructure.

Jennex, Amoroso, and Adalakun (2003), performed case studies on two micro-sized startup, offshore software development organizations. One organization was in Italy and the other was in Ukraine. Key attributes identified as contributing to success or failure include pricing of

services, telecommunications infrastructure, availability of current hardware and software, technical skills of workers, project management and controls, business organization and processes, client interface, time difference and travel issues, legal representation, tax and other regulations, and payment processes.

E-Commerce Success Factors

Several studies have been done looking at success factors, issues, and requirements for E-commerce that can be applied as success factors for offshore system development (the assumption is that the system development will be accomplished using some form of electronic communication). These studies are summarized with respect to their impact on outsourcing system development below.

Palvia and Vemuri (2002) discuss obstacles and critical success factors for global E-commerce. Obstacles include overseas shipping problems due to complexities and issues with customs, tariffs, currency exchange, and shipping. Other key obstacles include a lack of trust between transacting parties, lack of access to computers and the Internet, and limited electronic payment capability. Factors that can be applied to offshore outsourcers are maintaining a personal touch; recognizing culture, local regulations, pricing constraints, and language; minimizing connection times due to less reliable connections in developing countries; and fostering trusting relationships between clients and outsourcers.

Gattiker, et. al. (2000) discusses the importance of economic and cultural factors. Global economic factors include the cost of connecting. Global cultural factors include differences in work habits and language. It has been found that simply translating documents does not ensure the translation will contain the same cultural meaning as the original. Factors that can be applied to offshore outsourcers are telecommunication infrastructure and cost, cultural understanding, and language issues.

Sairamesh (2002) discusses the importance of contracts. Freeman (2001) discusses contract and other legal risks including intellectual property protection, conflict and dispute resolution, fulfillment of contracts, use of patented business processes, and trademark and copyright issues. The success factor from these risks is having legal consultation available for review of documents, processes, and contracts.

Castelluccio (2000) lists fourteen critical success factors of which having adequate business processes and maintaining account information and a relationship profile are relevant to offshore outsourcers.

Turban, et. al. (2002) discuss critical success factors for SMEs. SME critical success factors relevant to offshore outsourcers are: providing niche or specialty information development, having a low capital investment, using secure electronic payments (when using electronic payments), and flexible payment methods. Also, the business should follow basic good business principles such as marketing properly, pricing correctly, anticipating cash flow, monitoring competition/technology/marketplace changes, and developing good internal communications.

Several studies have been done looking at basic infrastructure requirements in developing countries that are relevant to offshore outsourcers. Mukti (2000) identified issues in Malaysia with security concerns, payment, Internet access, and technical skills of workers. Cloete and Courtney (2002) discussed SMEs in South Africa. They found issues associated with factors

within the organization such as a lack of access to computers, software, other hardware, and telecommunications at a reasonable cost; concerns with security and legal issues; and low knowledge level of management and employees as inhibitors to Internet based business. Dedrick and Kraemer (2001) looked at China and found that although there is considerable interest there are also significant barriers to establishing Internet based ventures. These include limited diffusion of computers, high cost of Internet access, lack of online payment processes, limited availability of banking services, and uncertain taxation rules. Government policies promoting IT and E-commerce and attacking software and intellectual property piracy were noted as encouraging Internet based ventures while regulation in the areas of international contracts, foreign participation, and digital signatures and encryption is needed to continue this trend.

Chepaitis (2002) looked at the information environment in Russia and found that the information environment can be an impediment to the development of e-commerce in emerging economies. Many developing countries do not have a culture of sharing data. The ability to pool data for statistical analyses is necessary for many business processes and organizations. The absence of shared data can result in a lack of effective information systems due to the lack of reliable and consolidated marketing, customer, and economic data. This also usually results in low data quality and trust in the data that is available. Twelve factors were identified that affect the information environment in an emerging economy. The factors focus on the business culture of the economy and will limit the emergence and scope of e-commerce in these economies. The factors include unsuccessful/ intrusive government planning and regulation; formal barriers to entry and dictated pricing in distribution and supply; informal entrepreneurship such as black markets and barter; ineffective methods for managerial accounting; political fear and widespread avoidance of information sharing; unstable currency, immature financial regulations, and a lack of financial services; a reluctance to divulge information without compensation or reciprocity; proprietary attitudes towards data ownership; rigid, hierarchical management styles with a reluctance to share information or empower employees; communication behaviors that rely on oral tradition or more than one language; and an emphasis on price and availability to the exclusion of quality.

Sukovskis (2002) describes the IT sector in Latvia. Factors supporting the development of outsource ventures in Latvia include government support for regulation encouraging E-commerce, a fairly well developed telecommunications infrastructure available for a price, and a growing cadre of IT professionals. Inhibitors to outsourcers are modern hardware and software being available but expensive; limited availability of investment capital; and the small number of available IT professionals (the demand for IT professionals is greater than the supply).

CRITICAL SUCCESS FACTORS AND THE OUTSOURCE SUCCESS FACTOR MODEL

The first research question asks if a set of critical success factors for offshore outsourcers could be identified from previous outsourcing research. This question was answered by the identification of a list of critical success factor groups with specific critical success factors generated from the literature review. Table 1 lists the critical success factor groups: People factors, Technical Infrastructure, Client Interface, Business Infrastructure, and Regulatory Interface; with their component critical success factors and their citation sources. Two critical success factors listed in the literature are not used. Kumar and Palavia (2002) discuss the importance of longevity as a factor influencing the scope and quantity of work given to an

outsourcer. This critical success factor is not used in the business infrastructure or client interface groups as it is not relevant to a startup company, which is the focus of this paper. Additionally, Jain and Song (2002) identified size as a critical success factor in the selection of an outsourcer. This was not used in the business infrastructure group, as it also is not really relevant to the small and medium sized companies this paper focuses on. It is recommended that existing companies consider these two critical success factors although this paper presents no data with regard to their importance.

The critical success factors are grouped into five naturally coherent groups for two reasons. The first is that assessing 31 critical success factors as a whole is difficult. It was determined that segmenting them into naturally coherent groups would make it easier for potential survey respondents to assess them for completeness as instead of determining if any should be added to the total list they will be asked to determine if any should be added to each group's list. The second reason is that the influence of the critical success factors on the participants of an outsourcing relationship can more readily be expressed and understood in model form when expressed as groups. Using groups reduces the numbers of factors that must be modeled and makes the model simpler to visualize. The resulting model is discussed in the following paragraphs.

Table 1, Reference Sources for Critical Success Factors

Group	ID	Critical Success Factor	Source Citing Critical Success Factor
People Factors	PF1	Worker General Knowledge Skills	Cloete and Courtney (2002); Jain and Song (2002), Rajkumar and Mani (2001), Sukovskis (2002)
	PF2	Worker Language Skills	Chepaitis (2002); Gattiker (2000); Jain and Song (2002), Palvia and Vemuri (2002); Rajkumar and Mani (2001), Raval (1999)
	PF3	Worker Cultural Awareness	Chepaitis (2002); Gattiker (2000), Palvia and Vemuri (2002), Raval (1999), Smetannikov (2001)
	PF4	Project Management People Skills	Chepaitis (2002); Cloete and Courtney (2002); Gattiker (2000); Palvia and Vemuri (2002), Rajkumar and Mani (2001),
	PF5	Worker Cost	Jain and Song (2002), Jennex, Amoroso, and Adalakun (2003), Kumar and Palavia (2002), Rajkumar and Mani (2001),
Technical Infra-structure	TI1	Telecommunications infrastructure	Cloete and Courtney (2002); Dedrick and Kraemer (2001); Gattiker (2000); Jain and Song (2002), Jennex, Amoroso, and Adalakun (2003), Palvia and Vemuri (2002); Mukti (2000); Sukovskis (2002)
	TI2	Up to date PCs, other computer HW/SW	Cloete and Courtney (2002); Dedrick and Kraemer (2001); Jennex, Amoroso, and Adalakun (2003), Palvia and Vemuri (2002); Sukovskis (2002)
	TI3	Worker technical skills	Cloete and Courtney (2002); Dedrick and Kraemer (2001); Jain and Song (2002), Jennex, Amoroso, and Adalakun (2003), Kumar and Palavia (2002), Mukti (2000), Palvia and Vemuri (2002), Sairamesh (2002); Sukovskis (2002); Turban et. al. (2002).
	TI4	SW project management	Jennex, Amoroso, and Adalakun (2003), Rajkumar and Mani (2001),
	TI5	SW control processes	Jennex, Amoroso, and Adalakun (2003), Rajkumar and Mani (2001),

Table 1, (Continued) Reference Sources for Critical Success Factors

Group	ID	Critical Success Factor	Source Citing Critical Success Factor
Client Interface	CI1	Client knowledgeable	Jain and Song (2002), Jennex, Amoroso, and Adalakun (2003), Kumar and Palavia (2002),
	CI2	Trust	Kumar and Palavia (2002), Palvia and Vemuri (2002)
	CI3	Client language skills	Chepaitis (2002); Gattiker (2000); Jain and Song (2002), Palvia and Vemuri (2002)
	CI4	Problem resolution process	Jennex, Amoroso, and Adalakun (2003), Kumar and Palavia (2002), Rajkumar and Mani (2001)
	CI5	Time differences	Jennex, Amoroso, and Adalakun (2003)
	CI6	Client/outsourcer travel	Jennex, Amoroso, and Adalakun (2003), Rajkumar and Mani (2001), Smetannikov (2001)
Business Infra-structure	BI1	Business Plan	Jennex, Amoroso, and Adalakun (2003), Rajkumar and Mani (2001), Raval (1999)
	BI2	Business Organization	Jennex, Amoroso, and Adalakun (2003), Rajkumar and Mani (2001)
	BI3	Business Processes	Castelluccio (2000); Jennex, Amoroso, and Adalakun (2003), Palvia and Vemuri (2002),
	BI4	Cost/Cash Control Process	Castelluccio (2000); Dedrick and Kraemer (2001); Turban et. al. (2002)
	BI5	Advertising	Palvia and Vemuri (2002); Turban, et. al. (2002)
	BI6	Client contact methods	Castelluccio (2000); Jennex, Amoroso, and Adalakun (2003)
	BI7	Payment Processes	Dedrick and Kraemer (2001); Jennex, Amoroso, and Adalakun (2003), Mukti (2000), Palvia and Vemuri (2002); Turban et. al. (2002)
	BI8	Legal Representation	Cloete and Courtney (2002); Dedrick and Kraemer (2001); Jain and Song (2002), Jennex, Amoroso, and Adalakun (2003), Sairamesh (2002);
Regulatory Interface	RI1	Intellectual Property Protection	Jain and Song (2002), Palvia and Vemuri (2002); Rajkumar and Mani (2001), Turban et. al. (2002)
	RI2	Tax laws	Dedrick and Kraemer (2001); Jain and Song (2002), Rajkumar and Mani (2001),
	RI3	Banking/Wire Transfer laws	Dedrick and Kraemer (2001); Jain and Song (2002), Jennex, Amoroso, and Adalakun (2003), Palvia and Vemuri; Rajkumar and Mani (2001), Sukovskis (2002)
	RI4	Customs/Import/Export Laws	Dedrick and Kraemer (2001); Jain and Song (2002), Jennex, Amoroso, and Adalakun (2003), Rajkumar and Mani (2001),
	RI5	Exchange Rules/Rates	Dedrick and Kraemer (2001); Jain and Song (2002), Jennex, Amoroso, and Adalakun (2003), Palvia and Vemuri (2002); Sukovskis (2002)
	RI6	Travel/Visa Restrictions	Jennex, Amoroso, and Adalakun (2003), Rajkumar and Mani (2001), Smetannikov (2001)
	RI7	Telecom Regulations	Jennex, Amoroso, and Adalakun (2003), Palvia and Vemuri (2002), Rajkumar and Mani (2001),

Figure 1, The Outsourcer Success Factor Model, illustrates how the critical success factor groups support the relationship between client and provider. The model shows that both

participants operate within a regulatory environment. This environment provides the legal framework in which both entities must operate. The environment can hinder the ability of the participants to perform the project, or it may encourage it. India is an example of a regulatory environment that encourages outsourcing while Ukraine is an example of one that does not. Participants also operate within an external technical infrastructure comprised of each country's telecommunications and electrical systems, technical education systems, and availability of modern software and hardware. The reliability and availability of these infrastructure components directly impact the ability of the participants to perform the system development project.

Internal to the participants are the client interface, internal technical infrastructure, business infrastructure, and people factors. The client interface is the defined communications process between the participants. This directly impacts the transference of requirements and project/process knowledge and guides the participants in the resolution of conflicts. The business processes of the outsourcer determine the likelihood that the outsourcer will remain viable for an extended partnership. The internal technical infrastructure ensures the outsourcer has the ability to develop systems. Finally, people factors ensure the outsourcer has the ability to understand the context in which the client operates.

Overall, the Outsourcer Success Factor Model shows that outsourcers can directly influence and/or control internal critical success factors such as people factors, business infrastructure, and internal technical infrastructure. It also shows that SME outsourcers are impacted by external factors such as the regulatory environment and the external technical infrastructure but it is expected that these organizations will have little to no control or influence on these factors. Finally, the client interface factor group is shown to have direct impact on the way the outsourcer and client organizations interact but which neither organization has direct control over. However, both organizations influence the effectiveness of the client interface factors. It is expected that organizations will consider those critical success factors they can control or influence to be most important as they can actually do something about those factors.

SURVEY RESULTS

This section presents and analyzes the results of the exploratory survey. Two analyses were conducted on the survey data. The first analysis was a one-sample hypothesis test on the mean value of each critical success factor separately for United States Outsourcers, Non-United States Outsourcers, and Clients. The test was used to determine if the sample mean exceeded 4.0 on the five-point scale used for the survey. The threshold of 4.0 was selected to identify only the most critical of the thirty-one critical success factors examined; only six of the critical success factors satisfied this criteria and are referred to as key critical success factors. The second analysis was an ANOVA test to examine differences between the three sets of respondents for each critical success factor. Pair wise Tukey comparisons were included for those critical success factors with significant ANOVA results. Eight of the thirty-one critical success factors had significant ANOVA results.

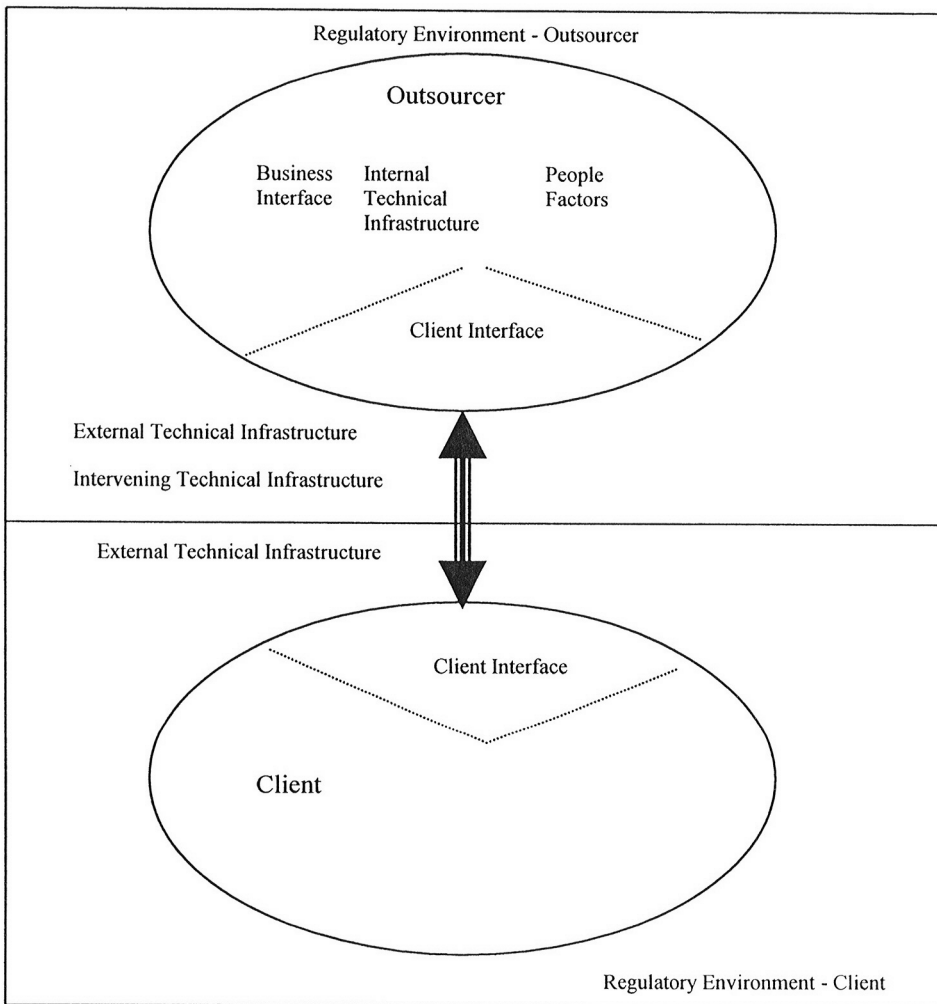


Figure 1. Outsourcer Success Factor Model

People Factors

The results of the analysis on the people factor critical success factors are presented in Table 2. Critical success factor PF1, general knowledge skills of outsource workers, was identified as a key critical success factor with mean values greater than 4.0 for all three categories of respondents. PF1 was one of only two critical success factors to satisfy the threshold criteria for all three sets of respondents. There were no significant ANOVA effects for any of the people factors critical success factors. What is most interesting is that PF5, cost of outsource workers, was not the most critical success factor for this group of success factors. This is interpreted as meaning that outsourcers and clients realize that cost is not the most significant aspect of a successful outsourcing project or relationship.

Table 2. Summary Data and ANOVA Results for People Factor Attributes

Item	U.S. Outsourcers (n=68)		Non-U.S. Outsourcers (n=59)		Clients (n=74)		ANOVA Results
	Mean	S.D.	Mean	S.D.	Mean	S.D.	
PF1	4.41***	0.72	4.36***	0.66	4.19**	0.73	F=1.90
PF2	3.84	0.99	3.71	0.91	3.86	0.94	F=0.47
PF3	3.37	1.04	3.59	0.97	3.38	1.08	F=0.95
PF4	4.00	0.83	4.05	0.86	3.86	0.97	F=0.79
PF5	3.49	0.98	3.41	0.83	3.45	0.83	F=0.12

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, Mean values are tested for $\mu > 4$, pair wise Tukey comparisons are significant at $\alpha = 0.05$, U=U.S. Outsourcers, N=Non-U.S. Outsourcers, C=Clients.

Technical Infrastructure

The results of the analysis on the technical infrastructure critical success factors are presented in Table 3. Critical success factors TI1, reliable telecommunications infrastructure, and TI3, Outsourcers have up-to-date technical skills, were identified as key critical success factors with mean values greater than 4.0 by United States outsourcers and TI3 was also identified as such by clients.

There were significant ANOVA results as well. TI1, TI2 (outsource country has access to computer hardware), and TI5 (use of technical control processes) had unequal means across the respondent groups. Tukey tests revealed that United States Outsourcers reported higher critical ratings than non-U.S. outsourcers for each of these three attributes and that United States outsourcers reported higher critical ratings than clients for TI2. The difference for TI1 is attributed to United States telecommunications infrastructure being of high quality and low cost with United States outsourcers perceiving this as competitive advantage over their offshore counterparts. The same argument is also applied to TI2 in that United States outsourcers have access to more current hardware and software at a reasonable cost when compared to their offshore counterparts and also perceive this as competitive advantage. That clients did not perceive TI2 to be as important as United States outsourcers shows that the clients do not perceive this factor to be as important to competitive advantage. The difference in TI5 is attributed to United States outsourcers perceiving technical control processes as being necessary to becoming certified as suppliers of development services and to the types of projects they are being awarded. Offshore developers are getting less complex projects that can be described in requirements documents and do not perceive the need for technical control processes to be as important.

Table 3. Summary Data and ANOVA Results for Technical Infrastructure Attributes

Item	U.S. Outsourcers (n=68)		Non-U.S. Outsourcers (n=59)		Clients (n=74)		ANOVA Results
	Mean	S.D.	Mean	S.D.	Mean	S.D.	
TI1	4.32***	0.76	3.88	0.91	4.11	0.84	F=3.43*, U>N
TI2	4.09	0.88	3.59	0.87	3.70	0.92	F=5.59**, U>N, U>C
TI3	4.31***	0.74	4.02	0.82	4.27**	0.80	F=2.54
TI4	3.82	0.98	3.73	0.87	3.69	0.96	F=0.38
TI5	4.09	0.88	3.53	1.01	3.89	0.93	F=5.83**, U>N

Note: *p<0.05, **p<0.01, ***p<0.001, Mean values are tested for $\mu > 4$, pair wise Tukey comparisons are significant at $\alpha = 0.05$, U=U.S. Outsourcers, N=Non-U.S. Outsourcers, C=Clients.

Client Interface

The results of the analysis on the client interface critical success factors are presented in Table 4. Critical success factors CI1, client contact point, and CI2, trust between client and outsourcer, were identified as a key critical success factors with mean values greater than 4.0 by United States outsourcers and clients. CI2 was also identified as a key critical success factor by non-United States outsourcers, making it, along with PF1, one of the two critical success factors to be identified as such across all three respondent groups.

There were significant ANOVA results as well. CI4 (problem resolution processes) had unequal means across respondent groups. Tukey tests revealed that United States Outsourcers reported higher critical rating of this attributed than clients. This difference is attributed to United States outsourcers perceiving the United States to be an expensively litigious society and having problem resolution processes is a means of controlling this cost. Clients also perceive this but have the ability to withhold payment in order to force problem resolution.

Table 4. Summary Data and ANOVA Results for Client Interface Attributes Items

Item	U.S. Outsourcers (n=68)		Non-U.S. Outsourcers (n=59)		Clients (n=74)		ANOVA Results
	Mean	S.D.	Mean	S.D.	Mean	S.D.	
CI1	4.49***	0.68	4.17	0.91	4.22*	0.86	F=2.85
CI2	4.44***	0.74	4.36***	0.78	4.22*	0.90	F=1.39
CI3	4.09	0.81	3.80	1.05	4.12	0.92	F=2.36
CI4	4.09	0.79	3.85	0.74	3.69	0.89	F=4.30*, U>C
CI5	3.04	1.06	2.71	1.15	2.73	0.98	F=2.09
CI6	2.82	1.05	2.53	1.02	2.66	0.97	F=1.38

Note: *p<0.05, **p<0.01, ***p<0.001, Mean values are tested for $\mu > 4$, pair wise Tukey comparisons are significant at $\alpha = 0.05$, U=U.S. Outsourcers, N=Non-U.S. Outsourcers, C=Clients.

Business Infrastructure

The results of the analysis on the business infrastructure critical success factors are presented in Table 5. Although none of the critical success factors had mean critical ratings significantly greater than 4.0 for any of the respondent groups, there were three significant ANOVA tests. Critical success factors BI2 (Business organization in place), BI3 (Cost/Cash control processes), and BI4 (Advertising) had unequal means across respondent groups. Tukey tests revealed that U.S. outsourcers reported higher critical ratings than clients for all three attributes and U.S. outsourcers reported higher critical ratings than non-U.S. outsourcers for attributes BI3 and BI4 as well. The differences between United States outsourcers and clients for all three factors are understandable. All three factors contribute directly to the success and longevity of the outsourcer organization but have little impact on the quality of product or service provided to the client. That clients would consider them less important is expected. The differences between United States and Non-United States outsourcers are not readily understandable. No data was collected that would explain this difference and this is left as an area for further study. However, Jennex (2003) may provide one possible explanation as it was observed that business education was lacking in several former Soviet countries that may lead to a lower perception on the importance of business processes.

Table 5. Summary Data and ANOVA Results for Business Infrastructure Attributes

Item	U.S. Outsourcers (n=68)		Non-U.S. Outsourcers (n=59)		Clients (n=74)		ANOVA Results
	Mean	S.D.	Mean	S.D.	Mean	S.D.	
BI1	3.93	0.90	3.58	0.86	3.70	0.92	F=2.53
BI2	3.85	1.04	3.49	0.77	3.43	0.97	F=4.01*, U>C
BI3	4.00	0.90	3.41	0.89	3.58	0.92	F=7.37***, U>N, U>C
BI4	3.93	0.95	3.44	1.04	3.45	0.95	F=5.48**, U>N, U>C
BI5	3.12	0.94	3.03	0.96	2.82	1.05	F=1.66
BI6	3.94	0.83	3.9	0.82	3.78	1.01	F=0.58
BI7	3.76	1.09	3.68	0.82	3.55	0.95	F=0.85
BI8	3.60	1.07	3.51	0.9	3.43	1.09	F=0.49

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, Mean values are tested for $\mu > 4$, pair wise Tukey comparisons are significant at $\alpha = 0.05$, U=U.S. Outsourcers, N=Non-U.S. Outsourcers, C=Clients.

Regulatory Interface

The results of the analysis on the regulatory infrastructure attributes are presented in Table 6. Attribute RI1 (intellectual property rights) was identified as a key critical success factor with a mean value greater than 4.0 for the U.S. outsourcers. RI1 also had significant ANOVA results and Tukey comparisons revealed that United States outsourcers reported higher critical ratings than Non-United States outsourcers. This difference is attributed to the United States putting a

greater legal value on intellectual property and having the ability to pay for it. This has not been a global concept and is one that the United States and Western Europe has been pioneering. It is postulated that intellectual property rights are more important in the United States and Western Europe as these areas have migrated from being manufacturing to service based economies where there is more value in ideas and creative products than in physical goods. It is expected that as developing countries become developed the importance of intellectual property rights will increase. Jennex, Amoroso, and Adalakun (2003) observed less importance on intellectual property in Ukraine. Jain and Song (2002) observed that developed economies have less software piracy and found a relationship between a high Gross Domestic Product and a relatively low software piracy rate.

Table 6. Summary Data and ANOVA Results for Regulatory Interface Attributes

Item	U.S. Outsourcers (n=68)		Non-U.S. Outsourcers (n=59)		Clients (n=74)		ANOVA Results
	Mean	S.D.	Mean	S.D.	Mean	S.D.	
RI1	4.25*	0.94	3.75	1.12	3.93	1.00	F=4.04*, U>N
RI2	3.59	1.11	3.71	0.91	3.45	1.01	F=1.13
RI3	3.56	1.11	3.73	0.85	3.45	0.98	F=1.34
RI4	3.51	1.13	3.73	0.89	3.47	1.11	F=1.07
RI5	3.28	1.18	3.51	0.95	3.11	1.03	F=2.33
RI6	3.25	1.14	3.37	0.91	3.07	0.98	F=1.52
RI7	3.53	1.04	3.68	0.92	3.30	0.98	F=2.56

Note: *p<0.05, **p<0.01, ***p<0.001, Mean values are tested for $\mu > 4$, pair wise Tukey comparisons are significant at $\alpha = 0.05$, U=U.S. Outsourcers, N=Non-U.S. Outsourcers, C=Clients.

Key Critical Success Factors

A summary of the six key critical success factors is presented in Table 7. All three groups rated two critical success factors as key factors: general knowledge skills of outsource workers and trust. Additionally, United States outsourcers and Clients rated technical skills of outsource workers and client knowledge as key critical success factors. Combined, this says that startup, outsourcing companies’ need to focus on getting good people with good technical and general knowledge skills. Client companies need to focus on establishing the outsourcing relationship, ensuring they have a good, knowledgeable point contact and that a trust based relationship, where trust is established through fair contracts, reasonable performance expectations, and clear and secure channels of communication, exists.

The other two key critical success factors are telecommunications infrastructure and intellectual property rights. These two key factors impact SME startup companies but it is hard for these companies to influence or control them. SMEs need to ensure they have good internal technical infrastructure including having the best telecommunications possible, but

they can not create external infrastructure. The same can be argued for intellectual property rights, SMEs need to ensure they respect client intellectual property and that their intellectual property is protected. However, SMEs cannot create regulations protecting intellectual property if those regulations do not exist in their countries. SMEs need to lobby their governments to ensure intellectual property protection regulations are enacted and enforced.

Table 7. Most Critical Success Factors

Item	Attribute	U.S. Outsourcers	Non-U.S. Outsourcers	Clients
P11	General Knowledge Skills of outsource workers	√	√	√
T11	Telecommunications infrastructure	√		
T13	Technical skills of outsource workers	√		√
CI1	Client knowledgeable	√		√
CI2	Trust exists in the relationship	√	√	√
RI1	Intellectual Property Rights	√		

Note: √ indicates that the item had a mean value significantly greater than 4.0 on a five point scale: 1=Not Important, 2=Useful, 3=Important, 4=Very Important, 5=Critical.

CONCLUSIONS

This paper proposed to establish a set of critical success factors for SME startup, offshore, outsourcing companies. Three research questions were posed:

1. What are the critical success factors for startup SME outsourcers?
2. What are the key critical success factors that SMEs should focus on?
3. Do outsourcers and outsourcing clients agree on the importance of the critical success factors?

The first question, what are the critical success factors for startup SME outsourcers, was initially answered through a literature survey. The resulting set of critical success factors was validated for completeness by allowing survey respondents to add critical success factors. None were added so the resulting list provided in Table 1 is considered complete. The second question, what are the key critical success factors, was answered by surveying outsourcing clients and United States and non-United States outsourcers with respect to rating the importance of the critical success factors generated by the first research question. Using a threshold value of four out of a five-point scale and a one-sample hypothesis test on the mean value, six critical success factors were identified as being key (see Table 7). The third research question, do outsourcers and outsourcing clients agree on critical success factor importance, was answered by analyzing survey respondents using ANOVA to determine significant differences between groups with Pair wise Tukey comparisons being included for those items with significant ANOVA results. Eight of the 31 critical success factors had significant differences between groups so this research question has no as an answer as all three groups do not agree on the importance of all the critical success factors. However, reviewing the

differences finds that they do not affect the answers to the first two research questions and that the observed differences are reasonable. The conclusion reached is that a list of critical success factors for SME startup outsourcers can be generated and that a smaller subset of key critical success factors can be identified with some agreement between outsourcing clients and United States and non-United States outsourcers.

Six key critical success factors were identified. Two of these, technical skills and general knowledge skills of outsource workers can be directly controlled by SME startup outsourcers. These two key critical success factors directly affect the ability of the outsource company to understand what the client company needs, to produce a good system to meet those needs, and to create and communicate the resulting system's documentation. SME startup outsourcers need to ensure they get technically qualified people with good general business knowledge. This is not an unexpected finding.

Two other of the key critical success factors, a knowledgeable client contact and trust, are mutually controlled and influenced by the outsourcer and the client. Establishing a good, working relationship between the outsourcer and the client is key to successful outsourcing. While both participants make the relationship, these two key critical success factors are influenced more by the client than the outsourcer. This also was not an unexpected finding.

The last two key critical success factors are mostly out of the control or influence of the outsourcer and the client. Intellectual property right protection and the telecommunications infrastructure tend to be controlled by the governments and countries of the outsourcing participants. However, this does not mean that clients or outsourcers should ignore these key critical success factors. Both participants need to ensure that they have processes in place that recognizes and respects the intellectual property of the other. Additionally, both participants need to have adequate internal telecommunications infrastructure for facilitating work.

What was unexpected was that cost was not the most important critical success factor given that the premise of this paper was that cost drivers are the primary reason for offshore outsourcing. It indicates that awareness is growing that it takes more than low cost programmers to ensure successful projects, which is ultimately the finding of this paper.

Ultimately, the value of these critical success factors is to startup companies as it provides insight into what it will take to be successful. There is also value to companies that outsource development as it provides a listing of criteria that can be used to help select an outsourcer.

Limitations

As with any empirical study, there are a number of limitations to this work that may influence the degree to which the findings can be generalized. First, single items were used to measure the critical success factors. Ideally, a minimum of three items would be used per factor, but that would have resulted in at least 93 items to measure the thirty-one critical success factors that were identified in our literature review. Because only real-world executives, managers, and workers participated in the survey, we opted to keep the survey short so as not to discourage responses and yet maintain the necessary breadth to obtain a measurement of each critical success factor. Second, because of the high number of one-sample mean tests and ANOVAs conducted, the study Type I error rate is inflated bringing some of the significant findings into question. Nevertheless, the results do provide guidance to future research in that they identify the key critical success factors and potential areas of disagreement among the respondent groups. Third, respondents were solicited from meetings, conferences, or email

solicitations based on a web search. There is a selection threat but it is considered acceptable since the only selection criteria were availability of the respondent to receive and complete a survey and this was the only methods found by the authors for obtaining a cross sectional sample (based on region and outsourcing role). Overall these limitations are considered acceptable given the difficulty of obtaining global responses from SME organizations.

Areas for Future Research

There are two major areas for future research. The first is collecting more data so that analysis of regional differences can occur. The second is analyzing the data with respect to position of the respondent. It would be interesting to determine if senior management perceives the importance of the critical success factors differently than lower management or software developers.

An additional area for research is to use these factors and attributes in an action research environment to test if they really work in an actual company and as a guide to government regulations.

Acknowledgements

The authors wish to acknowledge and thank Dr. Bruce Reinig of San Diego State University for his time, efforts, guidance, and support in performing the statistical analysis used in this paper.

REFERENCES

1. Aubert, B. A., Patry, M., and Rivard, S., (1998). Assessing the Risk of IT Outsourcing, *31st Hawaii International Conference on System Sciences*, IEEE Computer Society.
2. Castelluccio, M., (2000). So, How'm I Doin'?, *Strategic Finance*, Vol. 82(4), pp. 85-86.
3. Chipaitis, E.V., (2002). E-Commerce and the Information Environment in an Emerging Economy: Russia at the Turn of the Century, *Global Information Technology and Electronic Commerce: Issues for the New Millennium*, editors: Palvia, P.C., Palvia, S.C.J., and Roche, E.M., Ivy League Publishing, Limited, pp. 53-72.
4. Cloete, E., Courtney, S., and Fintz, J., (2002). Small Businesses' Acceptance and Adoption of e-Commerce in the Western-Cape Province of South-Africa, *Electronic Journal on Information Systems in Developing Countries*, <http://www.ejisd.org>, Vol. 10(4), pp. 1-13.
5. Dedrick, J. and Kraemer, K.L., (2001). China IT Report, *Electronic Journal on Information Systems in Developing Countries*, <http://www.ejisd.org>, Vol. 6(2), pp. 1-10.
6. Gattiker, U.E., Perlusz, S. and Bohmann, K., (2000). Using the Internet for B2B Activities: A Review and Future Directions for Research, *Internet Research*, Vol. 10(2), pp. 126-140.
7. Jain, H.K. and Song, J., (2002). Location Economics and Global Software Development Centers, *Global Information Technology and Electronic Commerce: Issues for the New Millennium*, editors: Palvia, P.C., Palvia, S.C.J., and Roche, E.M., Ivy League Publishing, Limited, pp. 447-462.
8. Jennex, M.E., (2003). IT In The Energy Sectors Of Ukraine, Armenia, And Georgia, *Communications of the AIS*, Vol. 11, pp. 413-437.
9. Jennex, M.E. and Amoroso, D.L. (2002). e-Business and Technology Issues for Developing Economies: A Ukraine Case Study, *Electronic Journal on Information Systems in Developing Countries*, Vol. 10(5), pp.1-14.
10. Jennex, M.E., Amoroso, D., and Adelakun, O., (2003). E-Commerce Infrastructure Success Factors For Small Companies In Developing Economies, forthcoming in *Electronic Commerce Research*, Volume 4(3/4).
11. Kumar, N. and Palvia, P., (2002). A Framework for Global IT Outsourcing Management: Key Influence Factors and Strategies, *Journal of Information Technology Cases and Applications, JITCA*, Volume 4(1), pp. 56-75.

12. McFarlan, W.F. and Nolan, R.L. (1995). How To Manage An IT Outsourcing Alliance, *Sloan Management Review*, Volume 36(2), pp. 9-23.
13. Mukti, N.A., (2000). Barriers to Putting Businesses on the Internet in Malaysia, *Electronic Journal of IS in Developing Countries*, <http://www.ejisdc.org>, Vol. 2(6), pp. 1-6.
14. Palvia, S.C.J. and Vemuri, V.K., (2002). Global e-Commerce: An Examination of Issues Related to Advertising and Intermediation, *Global Information Technology and Electronic Commerce: Issues for the New Millennium*, editors: Palvia, P.C., Palvia, S.C.J., and Roche, E.M., Ivy League Publishing, Limited, pp. 215-254.
15. Rajkumar, T. M. and Mani, R. V. S., (2001). Offshore Software Development, the View from Indian Suppliers, *Information Systems Management*, Volume 18(2), pp. 63-73.
16. Raval, V., (1999). Seven Secrets of Successful Offshore Software Development, *Information Strategy: The Executive's Journal*, Volume 15(4), pp. 34-39.
17. Sairamesh, J., Mohan, R., Kumar, M., Hasson, T., and Bender, C., (2002). A Platform for Business-to-Business Sell-Side, Private Exchanges and Marketplaces, *IBM Systems Journal*, Volume 41(2), pp. 242-252.
18. Smetannikov, M., (2001), The New Russian Revolution, *Inter@ctive Week*, June 4, Volume 8(22), pp. 54-56.
19. Sukovskis, U., (2002). IT Sector Development in Latvia, presented at the IS Development Conference 2002, Riga, Latvia, September 12, 2002.
20. Tetteh, E.O. and Burn, J.M., (2002). A Framework for the Management of Global e-Business in Small and Medium-Sized Enterprises, *Global Information Technology and Electronic Commerce: Issues for the New Millennium*, editors: Palvia, P.C., Palvia, S.C.J., and Roche, E.M., Ivy League Publishing, Limited, pp. 215-254.
21. Turban, E., King, D., Lee, J., Warkentin, M., and Chung, H.M., (2002). *Electronic Commerce 2002, A Managerial Perspective*, Prentice Hall.

Murray E. Jennex is an assistant professor at San Diego State University and president of the Foundation for Knowledge Management (LLC). Dr. Jennex specializes in knowledge management, system analysis and design, IS security, outsourcing, and organizational effectiveness. He has managed projects in applied engineering and business and information systems development and implementation. His industrial and consulting experience includes nuclear generation, electrical utilities, communications, health services, and governmental agencies. Dr. Jennex has published over thirty-five articles in conferences, books, and journals. He holds a B.A. in chemistry and physics from William Jewell College, an M.B.A. and an M.S. in Software Engineering from National University, and an M.S. in Telecommunications Management and Ph.D. in Information Systems from the Claremont Graduate University. Dr. Jennex is also a registered professional mechanical engineer in the state of California.

Olayele Adalakun is an Assistant professor of MIS at DePaul University Chicago, Illinois, School of Computer Science, Telecommunication and Information Systems. His research focuses on IT Outsourcing, ERP systems implementation, and Information systems quality and Evaluation. He has conducted case studies in both medium size companies and multinational companies in Finland and the United States. He was the chairman of the 2001 and 2002 IT outsourcing conference and the moderator of the 2003 offshore outsourcing panel discussion at DePaul University. He has also given several executives presentation. He has published over thirty articles in conferences, books and journals. He holds an M.S. in Information Processing Science from University of Oulu, Oulu, Finland and Ph.D. in Information Systems from the Turku School of Economics and Business Administration, Turku, Finland.

Appendix A: Global Outsource Success Factors Survey

Thank you for completing this survey. The purpose of the survey is to determine factors that influence the success of companies offering information services to companies in the United States. The results will primarily aid small, start up companies by providing a list of success factors. It will also aid companies seeking outsourcing partners by providing a list of criteria to evaluate potential partners against. All respondents will be kept confidential and care will be taken to ensure no one can identify respondents. The survey is in two parts. The first part collects information about your company so that responses to the second part can be categorized. The second part collects importance data on a list of success factors and allows you to add or comment on the list. Again, thank you for completing this survey.

Thanks...Murray E. Jennex, Assistant Professor, San Diego State University, mjennex@mail.sdsu.edu

My responses reflect a company that (pick the option that best fits):

	Yes
Is located in the United States and outsources IS functions or activities to companies outside the United States	
Is located outside the United States and provides IS functions or activities to companies located in the United States	
Provides consulting services to either of the above types of companies	
Other (explain):	

I, or my company, are from (indicate where your office is):

	Yes
Europe (Eastern Europe)	
Europe (former Soviet Union)	
Europe (western Europe)	
Asia (not Australia, Japan, or New Zealand)	
Asia (Australia, Japan, New Zealand)	
Middle East	
Africa	
South America	
North America (outside the US)	
North America (the US)	

I am:

	Yes
Senior Management	
Middle Management	
Lower Management	
Procurement Officer	
Other (explain):	

Can we contact you for follow-up or send you the results? If yes please provide the following:

Follow-up Okay? _____ Send Results? _____

Name: _____

Company: _____

Email: _____

Success Factors for Offshore Information Systems Development

Please complete the below survey by placing an X in the column that indicates the importance of the factor.
 C-Critical, VI-Very Important, I-Important, U-Useful, NI-Not Important

Success Factors for Outsourcing Companies						
Main Factor	Sub Factors	C	VI	I	U	NI
People Factors	Knowledge Skills of outsource workers (read, write well, good overall knowledge of processes and work) support ability of company to do work					
	Language Skills of outsource workers (know the language of the client) support ability of company to do work with other nations					
	Cultural Awareness of outsource workers (understand the culture of the client and how it differs from yours)					
	Project Management People Skills (managers know how to manage workers and users)					
	Cost of outsource workers is low enough to give cost benefits for competing with other outsource companies					
	Other:					
Technical Infrastructure	Telecommunications infrastructure is reliable and supports large file transfers at reasonable speeds					
	Outsource country location has availability of up to date PCs, other computer hardware, and software					
	Outsource workers have up to date technical skills					
	Outsource Managers have software development Project Management skills and tools					
	Technical control processes such as version control, configuration control, etc. are in place					
	Other:					
Client Interface	Client contact point is knowledgeable of client needs and knows technology well enough to communicate the requirements					
	Trust exists between client and outsource company					
	Client contact can communicate in a language the outsource company understands					
	Problem resolution process is in place with the client					
	Time difference between client and outsource locations allows for overlap of work day					
	Travel between client and outsource locations is relatively easy, fast, and inexpensive					
Other:						
Business Infrastructure	Business Plan in place and guiding company					
	Business Organization (corporation, LLC, etc.) in place					
	Business Process such as accounting, billing, etc. are in place					
	Cost/Cash Control Processes in place with sufficient cash flow/reserves to allow for delayed payments					
	Advertising such as a web site, brochures, etc. is in place and effective in communicating company abilities					
	Potential client contact methods such as web site, email, phone, fax, etc. are in place and effective for potential clients trying to contact the company					
	Payment Process (Bank Accounts, credit card processing accounts, etc.) are in place and support client payments to company					
	Legal Representation/Support is available for contract review/other					
Other:						
Regulatory Interface	Intellectual Property Right Protection Laws in place					
	Tax laws allow/favor export/overseas work					
	Banking/Wire Transfer laws support overseas payments					
	Customs/Import/Export Laws support overseas work					
	Exchange Rules/Rates favorable					
	Travel Restrictions (Visa rules) favor business travel					
	Telecom Regulations favor business					
Other:						