

IT OFFSHORING SUCCESS: A SOCIAL EXCHANGE PERSPECTIVE

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Spending by U.S. companies in offshore IT services continues at unprecedented levels despite a high failure rate. This study fills a gap in the existing literature by examining the client-vendor offshoring relationship through the theoretical lens of social exchange theory at the organizational level of analysis from the client's perspective. Social exchange theory focuses on the exchange of activities between two parties, whether they are individuals or companies and was used as a basis for examining the client and vendor relationship. Variables were identified by a review of the literature primarily from IT outsourcing and offshoring but also from general IT, marketing, sociology and organizational science literature.

Data was collected using a field survey of Fortune 500 CIOs representing a population of organizations at the forefront of the offshoring phenomenon. The survey instrument was developed based on the adaptation of previously validated scales. Hypotheses regarding the correlations between social variables such as trust, communication, dependence, power, shared values and offshoring success were tested using Spearman's rho correlation. Seven of the hypotheses were supported, four hypotheses were not supported and one hypothesis was deemed not testable due to lack of information.

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CHAPTER 1

INTRODUCTION TO THE STUDY

This first chapter of the dissertation defines and discusses the terms *outsourcing* and *offshoring* as used in this research. It also presents the problem to be studied, the purpose of the study, and the significance of the study. Then, the chapter finishes with an overview of the subsequent chapters.

Definitions

In this study, the author defines IT outsourcing or simply outsourcing as turning over information technology services to an external vendor within the client's country of origin and within the context of software development. IT Offshoring or simply offshoring is similarly defined but in contrast refers to information technology services sent overseas to an external vendor located in a foreign country. Offshoring is usually done from a high wage country to a low wage country and the client firms studied in this paper were based in the United States. A more extensive discussion of outsourcing and offshoring follows.

Outsourcing and Offshoring

Outsourcing in general refers to the "make-or-buy" decision. Organizations choose outsourcing as a way of reducing in-house costs and investment while also focusing more on what they do well (Doig et al., 2001). Outsourcing IT is a more recent phenomenon simply because IT is new and has been defined as the practice of turning over an organization's IT functions, in whole or in part, to an external service provider (Grover et al., 1996).

Outsourcing and offshoring are terms that sometimes have been used interchangeably in the literature to refer to an arrangement by which a company turns over some IT functions to another company (Pfannenstein & Tsai, 2004). Here however, outsourcing and offshoring are two separate terms having two distinct meanings.

Palvia (2005) defines offshoring as a specific type of outsourcing based on relative location from the client. Outsourcing generally refers to information technology development that is turned over to an external vendor within the client's country of origin, while offshore outsourcing, or simply offshoring refers to work turned over to an external vendor located in a country other than the client's country. A simple definition that captures the essence of offshoring is moving all or part of your work to another country with cheaper labor (Dutta, 2005). This study follows the standard practice of referring to shore outsourcing as simply outsourcing and offshore outsourcing as offshoring. Figure 1 below illustrates the offshoring relationship between client companies located primarily in the U.S. and vendor companies located primarily in low-wage emerging markets.

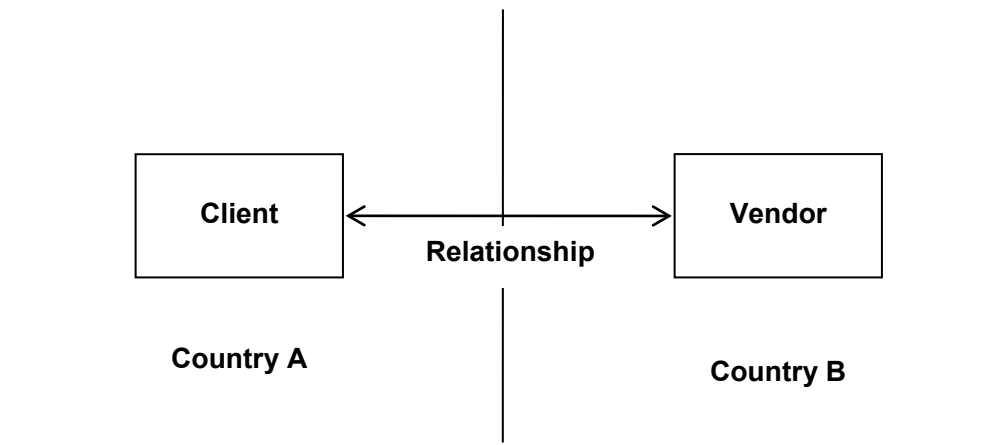


Figure 1: Offshoring Model

Outsourcing and offshoring are similar concepts but findings from outsourcing studies are not necessarily generalizable to offshoring. Rottman and Lacity (2004) identified the twenty best outsourcing practices and later repeated the study to identify the twenty best offshoring practices. They found that ten practices were more important for offshoring, five practices only applied to offshoring, and only five practices were considered best practices for both outsourcing and offshoring. In addition to distance, time, and cultural issues, one of the most obvious differences between outsourcing and offshoring is the disparity in labor costs, estimated to be a savings of around 30% after accounting for the costs and risks of offshoring (Palvia, 2005). Outsourcing vendors located in the same country as the client cannot gain from differential labor costs in the same way as an offshore vendor (Weber, 2004).

The definitions of outsourcing and offshoring identified at the start of this section capture the essential elements of how these terms are defined elsewhere

in the literature. The relative difference in distance between client and vendor is used to distinguish the two, also a standard practice in the literature on offshoring that captures distance, time, language, governmental, infrastructure, cultural and wage differences along with their effects on the offshoring arrangement.

Statement of the Problem

Unlike the offshoring of manufacturing tasks, offshoring of IT is a relatively new phenomenon only recently made possible by advances in telecommunications and other technologies. Several problems associated with offshoring are discussed below. They include:

- The magnitude of the offshoring phenomenon
- The changing nature of offshoring
- Failure to realize cost savings
- Failure of offshoring processes
- Failure of offshoring contracts
- The relationship problem
- A gap in the research

The Magnitude of the Offshoring Phenomenon

Based on their 2005 survey, Global Insight, a private consulting firm estimated that U.S. firms will spend about \$38.2 billion in offshore IT services in 2010, compared with about \$15.2 billion in 2005 primarily because the expected cost savings will grow by \$11.7 billion in the same time period. As staggering as these figures are, Binder writing in *Foreign Affairs* (2006) characterizes them as

barely the tip of the offshoring iceberg. He describes the upcoming changes that the offshoring phenomenon will bring as nothing less than the third industrial revolution that will transform society beyond recognition.

The Changing Nature of Offshoring

One problem associated with offshoring is the changing nature of offshoring. The type of IT work being offshored is expanding as more sophisticated vendors and technologies make it feasible for new and more complicated IT work to be offshored. Internet bandwidth continues to increase while costs continue to decrease, reducing barriers to offshoring and changing the nature of what can be offshored. Information Technology (IT) is continually improving, transforming formerly non-offshorable tasks of a personal nature into offshore friendly, impersonal tasks. Vendor countries such as India and China continue to modernize and gear their infrastructure and workforce towards offshoring. There has been an increase in the complexity, sensitivity and critical nature of the work being offshored partly because of the billions of dollars in potential cost savings in spite of a widespread failure of offshoring to deliver as promised (Hirschheim & Lacity, 2000; Scheier, 1997).

Failure to Realize Cost Savings

An additional problem that compels the study of offshoring is a failure of clients to realize cost savings. Cost savings is one of the primary reasons companies offshore (Farrell, 2004; Corbett, 2005; Ellram et al., 2008), yet according to several studies, half the organizations that have shifted processes

offshore have failed to generate the expected financial benefits (Aron & Singh, 2005). Hourly rates for IT workers in India, China and other offshore locations are reported to be from 30 to 75% lower than they are in the United States (Pfannenstein and Tsai, 2004). The opportunity for cost savings from wage differentials exists yet continues to be elusive. Contributing to the problem of elusive cost savings is that although wages are currently lower, they are increasing. The Hewitt Global Salary Planning Report (2006) (Hewitt Associates, 2006) estimated that the real wage increases in 2005 alone for the group of “Specialists, professional staff and junior management” rose across Asia with India enjoying an 11.4 percent increase. Another reason cost savings can be elusive is that managing the offshore effort can cost up to 69% of the value of the offshoring contract (Overby, 2007).

Problems with Process Perspectives

Another problem is how client companies view their processes when offshoring IT and how their perspective affects their relationships with vendor companies. The McKinsey Global Institute (MGI) has recommended “a total transformation of business processes to harness the new environment’s potential” (Farrell, 2007).

Metters and Verma (2008) agree that there is a problem but see the problem as one of how companies view their processes rather than a problem with the processes. They state that companies need to view their processes as commodities that can be offshored rather than processes specific to them and

owned by them as they do now. They see this change in view as changing the client-vendor relationship from a rigid relationship structure to a partnership. In the first view, the client–vendor relationship is one governed strictly by a contract where the client feels protective of their processes and because they are so possessive of their work, they dictate exactly how a vendor company should perform the work. However in the latter view, the client company views the work as a commodity that can be handled by a vendor company. Only then can the client company relinquish the work to a vendor and begin to focus on the relationship. Lacity and Rottman express a similar view, stating that “successful offshoring ultimately is not about processes or requirements. Rather it is the result of a continuous build up of “social capital” between customer and supplier.” (Overby, 2007). Lacity and Rottman are referring to the relationship between the customer and supplier, or client and vendor, as more important to offshoring success than the processes themselves.

Failure of Offshoring Contracts

Another problem with offshoring that results in failure is the use of poor offshoring contracts. Overly restrictive contracts are especially problematic with partnership type relationships. A 2005 survey by Deloitte Consulting LLP of 25 large companies in a range of industries found that 70% of the companies experienced negative outcomes in their outsourcing contracts. Also, according to McKinsey & Company, half of all outsourcing deals fail to achieve expected value (Craig & Willmott, 2005). Further, an industry report by Gartner Group in 2005

found that approximately 80% of all outsourcing contracts require re-negotiation. The negative outcomes associated with the outsourcing contracts suggest that the problem is more than just a cost savings problem. There is a problem with the way outsourcing contracts and outsourcing relationships are implemented and managed. Strict adherence to tightly controlling contracts (and thus maintaining power and control) are solutions often cited to help client companies reduce their risk of failure, and yet these are inflexible and problematic with close partnership relationships (Lee et al., 2004).

The Relationship Problem

The terms partnership, alliance and relationship are all used in the outsourcing and offshoring literature to refer to any business relationship between a client and vendor without acknowledging any different levels or types of relationships. Some researchers (Lacity & Hirscheim, 1993; Fitzgerald & Wilcocks, 1994) began distinguishing between client-vendor relationships, generally identifying a partnership as a specific type of relationship characterized as closer, more involved or truly sharing risks and rewards. Lee et al. (2004) distinguished between partnerships and other relationships based on the type of contract used, with looser more flexible contracts being an indicator of a partnership relationship. Grover et al. (1996) identified dimensions of partnership based on trust and comfort. The current study distinguishes between different types of relationships based on social exchange theory variables like trust, communication, shared values, power, and dependence.

Many companies that participate in offshoring have reported widespread failure. In evaluating the problems with offshoring, an overreaching yet understudied part of the problem is the type of offshoring relationship between client and vendor. As identified by Lee et al. (2004) the legal contractual relationship is an indicator of the overall client-vendor relationship. The contract needs to “fit” the relationship as do the processes implemented. A 2001 study of failed corporate partnerships traced half of the failures not to bad contracts or financial issues but to a destructive relationship between client and vendor (Ertel, 2001). The nature of the relationship affects not only the type of contracts but also the processes implemented.

Offshoring relationships are dynamic and evolve over time due to changes in the external environment and the client's internal requirements (Kishore et al., 2003). These changes include increasing wages for offshore employees and more competition between vendors for clients and clients for vendors (Rajkumar & Mani, 2001). Additionally, continuous technology improvements allow offshoring of more work and more types of work. Clients are requiring more complex, value-added work of a strategic rather than cost savings nature (King, 2005). These changes seem to require closer, more complex relationships between client and vendor (Pfannenstein & Tsai, 2004, Kaiser & Hawk, 2004).

A Gap in the Research

The final problem that has been identified by the author and other researchers is the relative gap in the research on offshoring. Because it was

such an exhaustive survey and analysis of the literature on information systems outsourcing, Dibbern et al. (2004) is a good place to begin identifying gaps in the literature pertaining to IT outsourcing and IT offshoring specifically. These gaps become more pronounced when the outsourcing relationship is restricted to only one type: the IT offshoring relationship.

First, Dibbern et al. (2004) note a “relative lack of research directed towards an examination of the relationship between the outsourcer and customer,” for outsourcing and especially pertaining to offshoring. Previous research on the offshoring client-vendor relationship has been primarily case studies, literature reviews, and opinion articles. Dibbern et al. note that although several studies comment on the importance of the relationship, there is a relative lack of positivist research examining and analyzing that relationship. The current study fits in this gap since it is survey research on the IT offshoring relationship between client and vendor.

Secondly regarding partnerships, Dibbern et al. note that the research of Lacity and Hirscheim (1993b) showed that what has been called a “partnership” in earlier offshoring research is much different than the new emerging offshoring partnerships. They recommend that like any new trend, the viability of these new offshoring partnerships needs to be tested. The current study focuses on a specific type of relationship, that is this new “partnership” and an effort is made to distinguish it from what had previously been researched and referred to as a partnership. Finally, Dibbern et al. (2004) recognize a need to better

understand, define and operationalize the dependent variable “outsourcing success” and additionally the link between the client vendor relationship and outsourcing success. They note that outsourcing success is often measured in terms of economically measurable things such as cost savings or production levels. This is problematic because there are other reasons companies cite when offshoring work. Particularly, IT offshoring is witnessing a trend to offshore for strategic reasons, a trend discussed in Chapter 2 of this study.

Problem Summary

Though the offshoring trend continues to grow, the success rate of offshoring ventures has not improved. Changes in both the complexity and nature of work being offshored, as well as the mixed results of offshoring ventures, justify a new and closer examination of the client-vendor relationship. A better understanding of the offshoring relationship and its components that relate to offshoring success is needed so changes to processes and contracts can be made intelligently.

Purpose of the Study

The purpose of this study was to examine the various social behaviors utilized in the client vendor relationship and to determine which approaches lead to success in the offshoring environment. This study captures the social relationship factors from social exchange theory (trust, power, dependence, communication and shared values) that underlay the client-vendor relationship

and presents empirical evidence for the effectiveness of a relational approach to offshoring.

Differences in offshoring outcomes require a study of the variables that form the offshoring relationship to determine the extent to which the client-vendor offshoring relationship affects offshoring success.

Given that research in the area of offshoring relationships is not prevalent in the general IT outsourcing literature and novel to the IT offshoring literature, three research questions that are pertinent to this exploratory study are presented. They are:

- What are the important relationship factors that lead to offshoring success?
- When building offshoring relationships, are these factors interconnected? If so, how?
- What is the impact of these relationship factors on IT offshoring success?

Significance of the Study

The offshoring relationship between client and vendor has been studied less than other offshoring topics (Yao and Murphy, 2005). Particularly the post-contract client-vendor relationship has been under-researched (Kern et al., 2001). In an extensive review of the outsourcing literature Dibbern et al. (2004) conclude that there is a lack of research, specifically positivist research, examining the relationship between client and vendor, particularly the link between the client-vendor relationship and outsourcing success.

Previous research on the offshoring client-vendor relationship has been primarily case studies (Hirscheim & Lacity, 2000; Kishore et al., 2003; Lacity & Willcocks, 1998; Walsham, 2002), literature reviews (Dibbern et al., 2004; Klepper, 1995b; Fjermestad & Saitta, 2005), and opinion articles (King, 2005). Although exploratory in nature, this study contributes to and compliments the recent stream of qualitative research by synthesizing and empirically testing findings. This study expands upon the Kern & Willcocks (2000) exploratory study and fills a gap in the existing literature by examining the client-vendor offshoring relationship through the theoretical lens of social exchange theory at the organizational level of analysis from the client's perspective.

The results of this study will help guide organizations with their IT offshoring arrangements, particularly offering guidance for implementing and managing the client-vendor relationship. The general results indicating the importance of communication, trust and shared values and their significant correlations with offshoring success are useful to the industry because they stress the importance of proper investment in the maintenance of these soft issues. These results should cause the costs of maintaining the client vendor relationship to be seen as vital rather than obstacles preventing a company from realizing cost savings based on wage differentials. This is especially important because cost reduction is the primary reason companies offshore in the first place (Duke CIBER/Archstone Consulting, 2005), yet the management costs

associated with an offshoring arrangement can run upwards of 50 percent of the total contract value (Overby, 2007).

Chapter Summary

This chapter defined and discussed the terms *outsourcing* and *offshoring* as used in this research. It also presented the problem to be studied, the purpose of the study, and the significance of the study. The subsequent chapters of this dissertation are organized as follows: Chapter 2 provides a literature review of offshoring and social exchange theory. Chapter 3 specifies the research framework used for the study. Constructs and hypotheses are discussed and scales used to measure each item are documented. The model for this study is also presented. Chapter 4 identifies the methodology applied to this study. Chapter 5 presents the data analysis and results. Finally, a discussion of the results and conclusion is presented in Chapter 6.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

This chapter describes the offshoring literature. The nature of offshoring has been changing over time, from simple offshoring to complex offshoring. The sheer volume of offshoring being undertaken has increased dramatically. The types of IT work being offshored are also increasing and changing. Additionally, the relationships between clients and their offshore vendors have been changing. There have also been changes in offshoring methods, technologies, offshoring destinations and the offshoring workforce since IT offshoring began. Critical success factors of complex offshoring identified in the literature and by industry are different today compared to simple offshoring. To gain an understanding of where offshoring is today and where it is going, it is important to look at where it has been and what caused it to change.

This chapter examines the literature on offshoring by grouping it into two broad categories-simple offshoring and complex offshoring. First, definitions of simple and complex offshoring are given. Changes in the way client companies view offshoring are also discussed. The last part of this chapter looks at the theories that have been used to study both simple and complex offshoring.

Additionally, the theory used in this study, social exchange theory, and the reasons for using it are addressed.

Simple and Complex Offshoring Defined

This study defines simple offshoring as the offshoring of simple, non-critical software development requiring less-sophisticated software developers. The simple nature of the work and the focus on cost savings are the primary characteristics of simple offshoring. A simple offshoring relationship is defined as one that is less involved, inflexible and controlled by a strict contract.

In contrast, complex offshoring involves more sophisticated work of a critical nature. The sophisticated nature of the work and close relationships, or partnerships, are characterized as being highly involved, flexible and characterized by a loose contract. Complex offshoring relationships are expensive to maintain than simple offshoring relationships.

Although offshoring relationships today can be classified as either simple or complex, early offshoring relationships were simple and modeled after the offshoring of manufacturing. Because simple offshoring focuses on cost savings and involves less sophisticated software development, the complex offshoring relationship model, or true partnership is rarely used for simple offshoring.

Simple IT Outsourcing

The “make or buy decision” or decision to outsource is familiar to business and refers to the decision to manufacture in-house or let someone else do it. Information Technology outsourcing began early in the information age. As early as the 1960s EDS began making arrangements with other companies to handle data processing needs. However, Kodak is generally credited with being the first large company to outsource IT on a grand scale in 1989 (Rajkumar & Mani, 2001, Sargent, 2006, Slaughter & Ang, 1996). Because other large companies followed the example set by Kodak, the term “Kodak effect” was coined to describe the phenomenon of modern IT outsourcing (Loh & Venkatraman, 1992).

Complex IT Offshoring

Smith et al. (1996) define offshoring as software development done in countries other than those that have traditionally dominated the software development industry. IT offshoring is a more recent phenomenon than IT outsourcing. IT offshoring could not be done to any extent before the late 1990s when bandwidth, internet and telecommunications technology made it possible. For example, consider that 1995 marked the first Internet service and first cellular service in India (Aronsson, 2008). Offshoring is now an important field within the information systems literature. Offshoring is more complex and riskier than other forms of outsourcing because of the need to manage resources in another country, usually with some loss of control and distinct cultural differences

between the client and vendor countries and workforces (Dutta & Roy, 2005). The complexity and cost of offshoring increase because of language, political, social, infrastructure and technology barriers as compared with in-house development and other types of outsourcing.

Simple Offshoring Relationships

Simple offshoring relationships where characterized by a focus on cost and the contract (Fjermestad & Saitta, 2005). Likewise, early industry and academic literature identify reducing costs as one of the most important reasons companies chose to offshore.

Reduced costs came primarily from wage differentials but also from things like tax incentives and lax government regulations (Rajkumar & Mani, 2001). As communication infrastructure naturally advanced and vendor countries such as India and China invested in communication infrastructures, offshoring became even more cost effective, less risky and more mainstream. Simple offshoring relationships are characterized by an imbalance of power, a sense of distrust, and a focus on control. In a simple offshoring relationship, closeness between the client and vendor is not necessary because the primary function of the vendor company is a call center, tech support or non-critical software development.

Simple Offshoring Critical Success Factors

Kern (1997) identified most early research on outsourcing as having used Williamson's (1979, 1981) transaction cost theory (TCT) as a theoretical basis. Early research on the success of the offshoring relationship focused on economic success factors, primarily cost savings. Cost control and cash infusion are two IT outsourcing factors identified by Lacity and Hirscheim (1993). However, the drivers of IT outsourcing have changed (Goo et al., 2000; Linder, 2004).

Summary of Simple Offshoring

Simple offshoring followed the model of offshore manufacturing, which was a well established practice at this time. It was characterized by a focus on cost reduction, cost control and the contract was seen as the primary means for managing the offshoring relationship.

Complex IT Offshoring

A new trend that has emerged is the offshoring of more complex, critical and value-added IT activities (King, 2005). Companies that started with the offshoring of simple services and simple software development are now increasing the complexity of activities offshored. For instance, GE started offshoring call center services to India and progressed to offshoring more sophisticated software development and data mining (King, 2005). While the progression of offshoring increasingly sophisticated value-added work can be

explained partly by the cheap labor offered by sophisticated workers in offshore locations (Rajkumar & Mani, 2001; Dutta, 2005), another part can be explained as a natural progression in the state of offshoring (King, 2005; Rajkumar & Mani, 2001; Grover et al., 1996; King, 2004). Offshoring more complex activities frees client companies to refocus their attention to their core competencies (Slaughter & Ang, 1996; Lee & Kim, 1999; Saunders et al., 1997). As the offshored activities increase in complexity, so does the complexity of the relationship between clients and vendors (Pfannenstein & Tsai, 2004).

Complex Offshoring Relationships

With less cost savings being realized from wage differentials, the new trend has been for client companies to send over more complex and critical work. Rather than offshoring for cost savings, the new strategy is offshoring for strategic reasons such as improving competitive advantage (Fjermestad and Saitta, 2005). Offshoring more complex and critical work is possible because of changes in technology, particularly increased bandwidth. Changes in the kind of work offshored change the nature of offshoring relationships between clients and vendors. These relationships are becoming more complex as offshoring increases and involve more sophisticated, strategic work. The high level of involvement required of the client also makes the relationship much more complex than a simple outsourcing relationship (Kaiser & Hawk, 2004).

Complex Offshoring Critical Success Factors

A survey by Jennex & Adalakun (2003) found that cost was no longer considered the most critical determinant for offshoring success. Cost control and cash infusion, identified by Lacity and Hirscheim (1993), are not as relevant as IT outsourcing drivers in the new Internet economy (Terdiman, 2000). IT outsourcing was once used primarily for downsizing and cost reduction by major corporations but is now becoming a strategic growth tool (Ozanne, 1997). The critical success variables of offshoring relationships have changed as offshoring has progressed from simple contracting with outside vendors to more long-term, complex relationships between client and vendor. Instead of performing simple, non-critical tasks these new relationships involve more complex, critical tasks requiring a strategic partnership rather than just a contract. A study by Aron & Singh (2005) found that cost is no longer the most critical offshoring success variable. Fjermestad & Saitta (2005) found that although cost savings still plays an important role in outsourcing, strategic goals are usually the motivating object today.

Despite being a billion dollar industry that has seen tremendous growth and is well accepted among the Fortune 500, IT offshoring is still in its infancy. This is shown by a 2008 nationwide survey by Wharton School & CareerBuilder.com which found that only thirteen percent of employers worked for a company that outsourced work outside of the U.S., and only seven percent

of these companies offshored job functions. Already in 2002 a survey put the number of Fortune 500 companies offshoring IT work at forty percent (Bjorhus, 2002) while an estimate for 2003 was fifty percent (Reich, 2003).

Offshoring Theories

Numerous theories have been used in the field of IT offshoring, many of which can be useful in determining how the offshoring arrangement should be coordinated and managed most efficiently. To better grasp the entire body of offshoring literature Dibbern et al. (2004) combined the theories used in the offshoring research into three groups, depending on whether the studies took an economic, social, or strategic management theoretical approach.

Economic Theories

Economic theories have been used to examine the outsourcing or offshoring decision, particularly the offshoring decision with its prominent differential labor cost factor. The economic downturn of the late 1990s highlighted the importance of cost savings and the appropriateness of using economic theories. Cost savings was recognized as one of the primary determinants for a company to choose an offshoring model along with economies of scale and access to specialized resources (McFarlan and Nolan, 1995; Aubert et al., 1998). Cost factors remain an important consideration, although not the most important consideration. As offshoring has grown and the number of

companies and countries providing offshoring vendor services has grown, competition between vendor companies and countries has increased (Rajkumar & Mani, 2001). Additionally, King (2005) recognizes that a model based on cost factors alone is no longer appropriate for making outsourcing decisions because of a new trend in offshoring higher-end activities, such as developing sophisticated software for analysis, data mining and process modeling.

Strategic Management Theories

Strategic management theories explain a company's approach to developing and implementing strategies, and their strategic activities in general. Resource based theories are related to strategic management theories and placed in the same category with them by Dibbern et al. (2004). Resource-based theory and the resource dependency theory are resource based theories that view a firm's resources as the reason for implementing strategic plans. Porter's (1985) theory of strategic advantage with his five forces model is an example of one of the more popular strategic management theories in the IT offshoring literature. Following the trend of moving away from using offshoring as a simple cost savings or downsizing approach towards using it as a strategic tool for strategic advantage, most of the recent research on offshoring has taken a strategic management theoretical outlook (Lee et al., 2000).

Social Theories

Relationship theories regard cooperation, interactions, as well as social and economic exchanges as central to interorganizational relationships.

Relationship theories are related to social theories and placed in the same category with them by Dibbern et al. (2004).

Social exchange theory focuses on the exchange of activities. Though most often applied at an individual level, it is also used at the organizational level to explain the exchange of activities between companies. Most social theoretical research into both offshoring and outsourcing has examined the politically charged social relations between offshoring clients and their employees, home countries, and the public; and the equally charged offshoring decision. Social exchange theory has not been used to examine the nature of the client vendor relationship with the exception of an exploratory study by Kern & Willcocks (2000), which combined social exchange theory with organization theory and relational contract theory. And yet, social theories would seem most appropriate for examining the more complex offshoring relationships.

Homans is generally credited as being the first to write about social behavior as an exchange of goods. In his 1958 article he clarified the relations between four bodies of theory, including behavioral psychology and economics. Although he stated that exchanges are concerned with both non-material and material goods, there developed two main views of the nature of social

exchange theory (SET). The first, sociological view of SET focuses on the exchange of non-tangible goods. The second view, the economic view of SET focuses on the exchange of tangible goods (Zafirovski, 2003). There are 20 articles in the information technology literature identified as using social exchange theory or another relationship-related theory. These articles are listed in Table 1 according to the method of analysis used.

Representative Work / Conceptual	
	Klepper (1992, 1995)
	Hall (2003)
Case Study / Other Qualitative Methods	
	Kern (1997)
	Kern & Willcocks (1996; 2000)
	Klepper (1995a)
	Lasher, Ives & Jarvenpaa (1991)
	Marcolin & McLellan (1998)
	McLellan, Marcolin & Beamish (1995)
	Sabherwal (1999)
	Willcocks & Choi (1995)
	Willcocks, Fitzgerald & Lacity (1996)
Survey Methods	
	Kern & Willcocks (1996)
	Lee (2001)
	Lee & Kim (1999)
	Wu, Lin & Lin (2006)
	Gefen & Keil (1998)
	Son et al., (2005)
	Kankanhalli and Wei, (2005)
Quasi-Experimental Methods	
	Gefen & Ridings (2002)

Table 1: IT Articles that Use SET or Other Relationship-Related Theories

Chapter Summary

Simple IT offshoring followed the offshoring model that was already well established for manufacturing. However, it is important to recognize that the

changing nature of IT offshoring means that early theories, models and research may no longer be the most appropriate or even apply. Several changes and trends caused complex offshoring to become very different from simple offshoring. There has been a tremendous growth in the number of foreign software engineers as well as their level of training and education. It is well known that India invested heavily in technology education and training as well as IT infrastructure. Most other offshoring vendor countries have also invested heavily in their workforces to make their countries attractive offshoring destinations. This has contributed to the growth of IT offshoring. Not only has a more skilled and educated workforce paved the way for growth in offshoring, but it also resulted in a trend to offshore more sophisticated software development of a strategic nature. The wages of offshore workers has increased with competition between vendors and the increased skills of workers. This means that cost savings as a result of wage differentials has become less of a benefit to complex offshoring than it was for simple offshoring. IT offshoring is a very recent phenomenon that has undergone many changes and will continue to change.

The next chapter gives the theoretical model used for this study. Constructs, hypotheses, and scales are discussed. Finally, the theoretical model is presented in Chapter 3.

CHAPTER 3

THEORETICAL FRAMEWORK

Introduction

Chapter 3 describes the theoretical framework that is the basis for this study. Research objectives and questions are presented first followed by a discussion of the constructs that relate to these questions and form the basis for this research. Within the discussion for each construct, the importance of the construct to this study is explained along with a definition and relevant previous research is given. Also, hypotheses and scales for each construct are presented. Finally, the chapter concludes with the theoretical model.

Research Objectives

The research objectives are to investigate the client vendor relationship and its impact on offshoring success. This is done through the theoretical lens of social exchange theory and conducted at the organizational level of analysis from the client's perspective.

The procedure used to meet the research objectives is to identify testable variables that capture the essence of these relationship issues, develop a model that can be used to empirically test these variables, collect data for the test, analyze the data and present the results.

Research Questions

- What are the important relationship factors that lead to offshoring success?
- How are these factors related to one another in terms of relationship building?
- What is the impact of these relationship factors on IT offshoring success?

Relationship Variables

Social exchange theory was used as a basis for examining the client and vendor relationship. Variables were identified by a review of the literature primarily from IT outsourcing and offshoring but also from general IT, marketing, sociology and organizational science literature. Client-vendor relationship variables identified and used included:

- Communication
- Trust
- Shared Values
- Dependence
- Power
- Partnership
- Offshoring success

Communication

A single definition for communication in offshoring literature does not exist. The definition of communication used by Anderson and Narus (1990) specified that information is shared both formally and informally. The kinds of information

shared should not be limited to strictly operational information, but should also include exchanging things such as desires and needs (Klepper, 1995a). In this study, communication is defined as either a formal or informal, two-way exchange of information, operational or otherwise, that occurs between the client and vendor. Communication is an especially important variable in offshoring relationships because of geographic distance and other barriers such as cultural, political, infrastructure and language barriers.

Utilizing a model derived from transaction cost economics and SET, Young-Ybarra and Wiersenna (1999) examined strategic flexibility in IT alliances. They found that the level and quality of communication between the partners in a strategic alliance is positively related to organizational level trust in the vendor. Morgan and Hunt (1994) also found that communication is positively related to trust and numerous studies have identified communication as being a necessary antecedent of trust (Kern, 1997; Anderson and Narus, 1990; Dwyer et al., 1987). In addition to being important to trust, communication has been linked to partnership quality (Lee and Kim, 1999). Ultimately, communication is an important determinant of outsourcing success (Grover et al., 1996). Two hypotheses that include communication are listed here. They are:

H₁: Communication and trust are positively correlated.

H₂: Communication is positively correlated with partnership.

Communication Scale

The four-item scale used to measure communication in this study was taken from Young-Ybarra & Wiersema (1999) who identified the associated Cronbach's alpha as 0.89. The scale does not measure the perceived importance of communication. Its importance is assumed by social exchange theory and supported in the literature. Rather, the scale measures the actual level of communication. See Appendix B for a copy of the original questionnaire.

The questions that measure communication are as follows (scale 1-7: strongly disagree – strongly agree):

1. We always keep each other informed about the events or changes that may affect the other party.
2. It is expected that any information that might help the other party will be provided to them.
3. It is expected that proprietary information will be shared if it can help the other party.
4. Exchange of information in this alliance takes place frequently and informally, not only according to a pre-specified agreement.

Trust

Confucius (551-479 BCE) considered trust to be a pre-condition and basis for all worthwhile social relations (Hann, 1968). Social exchange theory requires that as members of an exchange relationship receive benefit, they must return an equivalent amount of benefit to maintain relationship equilibrium (Homans, 1958).

Trust is an important element in exchange relationships because it helps to ensure equilibrium. Members of an exchange relationship are willing to give more benefit than they are currently receiving if they trust that they will see an increase of similar proportion. A good definition of trust is given by Bromiley and Cumming's (1993): "an individual's belief or a common belief among a group of individuals that another individual or group (i) makes good faith efforts to behave in accordance with any commitments both explicit or implicit, (ii) is honest in whatever negotiations preceded such commitments, and (iii) does not take excessive advantage of another even when the opportunity is available." This definition emphasizes good faith efforts, honesty in negotiations, and not taking advantage of situations. It also identifies the qualities being captured by the trust scales used in this study.

Grover et al. (1996) identified trust as a significant factor associated with laying a basis for building a relationship. Trust was also found to be a significant factor in managing an ongoing relationship (Kern, 1997; Willcocks and Kern, 1998). Many outsourcing failures attributed to the failure of relationships, specifically mention the lack of trust between vendor and client (Rajkumar & Mani, 2001). Trust in interorganizational exchanges (for example offshoring) is linked to performance and clearly matters (Zaheer et al., 1998).

In higher commitment relationships like the emerging client-vendor partnerships discussed in the previous chapter, trust rather than incentives and

penalties is the important mechanism ensuring that the vendor's interests coincide with the client's interests (Kishore et al., 2003).

Sargent (2006) found that trust is an important component of the quality of outsourcing partnership and determines outsourcing success. Sabherwal (1999) also concluded that trust characterizes successful outsourcing projects. Since offshoring is a specific type of outsourcing these findings support the hypotheses regarding trust which are based on social exchange theory. Since the main difference between offshoring and other types of outsourcing is the geographic distance and other barriers such as cultural, political, infrastructure and language barriers the expectation was the same as with communication, namely that its importance would be even greater than with traditional outsourcing. One hypothesis that deals with the issue of trust is included here. It is as follows:

H₃: Trust is positively correlated with partnership.

Corresponding to their definition of trust, the scale used to assess trust is Cummings and Bromiley's Organizational Trust Inventory (1996). Specifically, this study uses a 12-item condensed version of the 62-item Organizational Trust Inventory (OTI). The short form of the OTI (OTI-SF) is more succinct without sacrificing substantial measurement assets (Cummings and Bromiley, 1996). The term "vendor" was substituted to ensure applicability to the study of offshoring relationships but no substantial modifications were made. The OTI-SF measures trust along three dimensions – keeping commitments, honestly negotiating and not taking excessive advantage. Tung, Whye, and Tee (2001)

used a form of the OTI-SF to study business-to-business e-commerce with modifications quite similar to this study. They calculated Cronbach's alpha to be 0.91. See Appendix B for the original questionnaire. Questions from Tung et al. (2001) are as follows:

1. We think that our vendor tells the truth in dealings.
2. We feel that we can depend on our vendor to deal with us honestly.
3. We think that our vendor does not mislead us.
4. We think that our vendor negotiates fairly during transactions.
5. We think that our vendor tries to get the upper hand during negotiations.*
6. We think that our vendor interprets ambiguous information in their own favor.*
7. We feel that the vendor takes advantage of people who are vulnerable.*
8. We think that our vendor takes advantage of our weaknesses.*
9. We think that our vendor meets its negotiated obligations to our company.
10. We feel that the vendor will keep its word.
11. In our opinion, the vendor is reliable.

12. We feel that the vendor tries to get out of its commitments.*

* These items are reverse-coded.

Shared Values

Shared values refers to the “extent to which partners have beliefs in common about what behaviors, goals, and policies are important or unimportant, appropriate or inappropriate, and right or wrong” (Morgan & Hunt, 1994). Values are a reflection of organizational culture (Weiner, 1988). Social exchange theory describes this commonality of values as cohesion. The result of cohesion is conformity to norms (Homans, 1958). One aspect of norms is the notion of shared values. Organizational behavior literature suggests that exchange partners that share values or are cohesive (to use a term from social exchange theory), will be more committed to the relationship (Morgan & Hunt, 1994).

Young-Ybarra and Wiersenna (1999) found shared values between organizations to be positively related to organization-level trust. Morgan and Hunt (1994) found a positive relationship between shared values and relationship commitment and between shared values and trust. The term “shared values” was used because it was prevalent in IT outsourcing literature rather than terms such as “shared culture” and “cohesion.” One hypothesis that is relevant to shared values is included here. It is as follows:

H₄: Shared Values is positively correlated with partnership.

Shared Values Scale

Young-Ybarra & Wiersema, 1999: shared values scale Cronbach's alpha is .91. See Appendix B for the original questionnaire. Questions from Young-Ybarra & Wiersema (1999) are:

Shared Values (scale 1-7: strongly disagree – strongly agree):

1. Our goals and objectives for this alliance are shared by our partner company.
2. Our partner company had similar motives for forming this alliance.

Dependence

Dependence is the need for one party to perform so the other party can meet its goals (Ganesan, 1994). Most offshoring articles, especially industry articles, treat loss of control (dependence) as a problem to be avoided and a major drawback of offshoring (Dutta, 2005). However, some researchers, for example Kern and Wilcocks (2000) identified unbalanced dependence between the client and vendor as a concern in their case study to explore both process and management issues related to the contract and the outsourcing relationship. In studies by Anderson & Narus (1990) and Lee & Kim (1999), mutual dependence affects relationship development in a positive way. Social exchange theory also treats loss of control not as a bad thing but a good thing, a necessary step towards a closer, stronger and more effective relationship. The construct dependence has been linked to both power and trust. Based on SET, it is hypothesized that greater dependence (between the client and vendor) will result

in a stronger partnership and offshoring success. Because the study surveyed the clients, only their perceived dependence on the vendor could be measured. Social exchange theory holds that inter-dependence should be high. To fully measure this, the vendor would also need to be surveyed. This was beyond the scope of this study, so these hypotheses were less than ideal. However, there are two hypotheses that specifically relate to dependence and are within the scope of this study. They are as follows:

H₅: Dependence and power are inversely related.

H₆: Dependence and offshoring success are positively correlated.

The six item scale for measuring dependence on vendor is from Ganesan (1994). The associated Cronbach's alpha is 0.85. See Appendix B for the original questionnaire. Ganesan's questions are:

1. If our relationship was discontinued with this vendor, we would have difficulty making up the work.
2. This vendor is crucial to our future performance.
3. It would be difficult for us to replace this vendor.
4. We are dependent on this vendor for work.

5. We do not have a good alternative to this vendor.
6. This vendor generates high work volume for us.

Power

Power is defined as the degree of influence the client company has relative to the vendor company. The interpretivist study by Lacity and Hirschheim (1993) identified 14 specific “contract negotiation strategies” for customers (clients). Several of these “contract negotiation strategies” are geared towards equalizing the balance of power between customers and vendors. This study involved in-depth interviews at 14 Fortune 500 companies. Social exchange theory specifies power/dependence relations as inverse so that less dependence equals greater power and vice versa (Emerson, 1962). Similar to the measurement of dependence, power would ideally be measured both from the client and vendor’s perspectives but this is beyond the scope of this study. However, a hypothesis both relevant to power and pertinent to this study is included here. It is as follows:

H₇: Power and offshoring success are inversely related.

The Power/Dependence scale comes from the survey by Young-Ybarra & Wiersema, 1999. The associated Cronbach's alpha is .82. See Appendix B for the original questionnaire. Questions used to measure power-dependence are:

Power/Dependence: influence (scale 1-7: No influence – A great deal of influence):

1. How much influence does your company have, relative to that of your partner company, on the following decisions?
 - a. Alliance goals
 - b. Alliance operating decisions
 - c. Budget allocations
 - d. Selection of research projects

Power/Dependence: alternatives:

2. Does your company currently conduct the same activities conducted by this alliance in any of the following arrangements? (Yes/No)
 - Internally
 - Licensing
 - Joint venture
 - Other types of alliances

3. If no for any, please indicate your company's potential for using these arrangements for conducting the alliance's activities. (scale 1-7: Low Potential – High Potential).

Power/Dependence: importance (scale 1-7: similar – dissimilar):

4. The nature of the activities conducted by this alliance are similar/dissimilar to your company's primary focus?

Partnership

Partnership is defined as the collaborative efforts of both the client and vendor in the attainment of a mutually beneficial goal (Fjermestad & Saitta, 2005). Strategic partnership, which this study refers to as partnership, is a label attributed to client-vendor relationships characterized as highly involved. High involvement or collaboration is considered a partnership quality. On the other end of the spectrum are simple outsourcing relationships, which are relationships guided by strict contracts and characterized by minimal interaction between the client and vendor companies.

A review of the literature shows that in the realm of offshoring, many of the client-vendor relationships have been progressing from less involved relationship strategies to more collaborative strategic partnerships (Fjermestad & Saitta, 2005; Chen & Soliman, 2002; Kaiser & Hawk, 2004; Navarrete & Pick, 2002). It is also well established that the relationship between the vendor and client plays a critical role in the success or failure of the offshore outsourcing arrangement

(Kern, 1997; Lee & Kim, 1999; Lacity & Willcocks, 2000; Rajkumar & Mani, 2001). However, when it comes to identifying exactly what the ideal client-vendor relationship should look like the literature is not only vague but at times contradictory.

Indicator variables of the close collaborative relationship exemplified by partnerships were chosen using social exchange theory and a thorough review of the literature as a guide. These variables were previously mentioned and include communication, trust, shared values, power and dependence. Some variables considered important based on social exchange theory were not used because they were not supported by the literature. For example, length of relationship, an indicator of a strategic partnership-type relationship was excluded because of a lack of support in the literature on offshoring relationships. Length of relationship was also dropped as a partnership metric by Grover et al. (1996) because of a lack of support and Lee and Kim (1992) found no support for “age of relation” in their study. One possible explanation for the lack of support for the age of relation may be the newness of the strategic partnership type of offshoring relationship. Independent variables included in this study were communication, trust, shared values, dependence, and power.

The Mediating Role of Partnership

Grover et al. (1996) identified partnership as a mediating variable between the extent of outsourcing various IT functions and the success of outsourcing. A

mediating relationship is one in which the path relating A to C is mediated by a third variable (B).

A mediating variable may be introduced to explain why an antecedent variable affects a consequent variable. Baron and Kenny (1986) provide a clear explanation of the meaning of mediating variables. The figure referred to in their explanation is shown below in Figure 2:

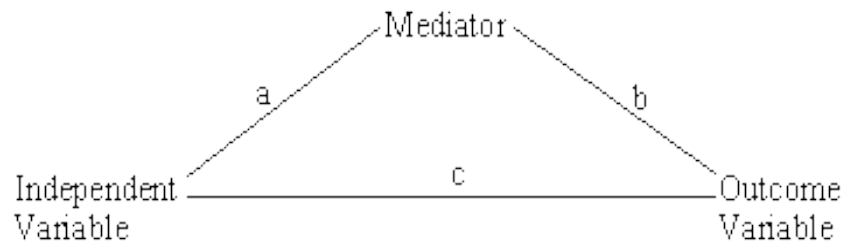


Figure 2: Mediating Variables

Because the extent of outsourcing is a decision influenced largely by the relationship factors of trust, dependence, power, communication and shared values, partnership is also identified as a mediating variable between relationship variables and IT offshoring success in the model.

Lee et al. (2000) concluded that outsourcing relationships between vendors and customers are evolving from a buyer-seller relationship to a partnership. In his later study examining outsourcing strategies, Lee et al. (2004) hypothesized that both buy-in and fee-for-service contracts would be more successful than partnerships which are more expensive to manage and this

hypothesis was not supported by the results of their study. These results are in line with social exchange theory which would expect the more intimate partnership relationship to be the more successful despite the increased overhead.

Partnership and Offshoring Success

Consistent with Lee et al. (2004), a 2005 study by *CIO* magazine and MIT's Center for Information Systems Research identified three categories of outsourcing arrangements differentiated by the complexity of the work and the associated, necessary complexity of the relationship. The first category, transactional outsourcing, deals with outsourcing simple processes that have well defined business rules. Transactional outsourcing arrangements were found to be successful 90 percent of the time. The second category, co-sourcing alliances, involve client and vendor jointly managing projects and were found to be successful only 63 percent of the time. The final category, strategic partnerships involved a single outsourcer taking responsibility for a large number of IT services. The study found that strategic partnerships, the most complicated type of outsourcing relationship, were successful only 50 percent of the time but had the most potential for benefit (Overby, 2007).

A higher level of partnership between the client and the vendor imply lower conflict of their individual goals, in other words more synergy (Lacity and Willcocks, 1998). Although it is the more difficult and costly relationship to maintain this resulting synergy would seem to be of great value with the newer

highly complex high value offshoring arrangements. In fact, as McFarlan and Nolan (1995) conclude what determines the success or failure of the offshoring arrangement is managing the relationship less as a contract and more as a strategic alliance.

In their organizational-level survey of service quality, level of outsourcing, partnership and outsourcing success, Grover et al. (1996) found a very high correlation between partnership (a mediating variable between level of outsourcing and outsourcing success in their model), and outsourcing success. This finding supports our hypothesis that partnership will be correlated with offshoring success and for the mediating role of partnership.

Further support for the mediating role of partnership between relationship variables and offshoring success comes from industry. Joe Hogan, a vice president of worldwide marketing, strategy and alliances for HP Managed Services within HP Services states that an outsourcing partnership takes trust, collaboration, communication and chemistry to be successful (Hogan, 2005). Three hypotheses that pertain to partnership are listed below. They are:

H₈: Partnership will display more dependence than fee-for-service or buy-in contract relationships.

H₉: Partnership and offshoring success are positively correlated.

H₁₀: Partnership will be more successful than either buy-in or fee-for-service control structures.

Measuring Partnership

DiRomualdo and Gurbaxani (1998) identified two types of outsourcing relationships: conventional contract which is associated with higher goal conflict and strategic alliance/joint venture which is associated with lower goal conflict and/or a higher level of partnership. In a later study Lee et al. (2004) identified three types of outsourcing strategies:

1. The first, based on transaction cost economics (TCE) focuses on the make or buy decision is the “buy-in” control structure (Lacity & Willcocks, 1998).
2. The second, based on residual rights theory which is concerned primarily with asset ownership is the “fee-for-service” control structure (Lee et al., 2004).
3. The third outsourcing strategy is the “partnership” control structure (Dyer & Singh, 1998). With the partnership control strategy authority is internalized within the relationship and resources are voluntarily allocated to benefit the partnership (Lee et al., 2004).

The ways in which these classifications are measured are very important. It would be ineffective to attempt to identify the type of offshoring arrangement used by a client and vendor by asking, “Is your offshoring arrangement a strategic partnership?” Lacity and Willcocks (1998) found that the term

“partnership” was commonly used when referring to fee-for-service contracts. Joe Hogan, a vice president of worldwide marketing, strategy and alliances for HP Managed Services within HP Services cautions that service providers all claim to take a collaborative approach and that the problem is identifying the few who truly do (Hogan, 2005).

Meaning of Partnership

The term “partnership,” like the term “teams” is currently en vogue and commonly misused and misunderstood in practice. In contrast to the aforementioned study by *CIO* magazine and MIT’s Center for Information Systems Research, Lee et al. (2004) found no support for the hypothesis that fee-for-service contracts would be more successful than partnerships. These conflicting results could occur if outsourcing arrangements were falsely identified or if an inappropriate outsourcing arrangement was applied. For example, work appropriately handled by a fee-for-service outsourcing arrangement attempting to implement a strategic partnership strategy would incur greater costs, be difficult to classify and also be more likely to fail. Even in the academic literature the definitions and uses vary widely making it difficult to compare results among studies.

Partnership Scales

The survey scale identifying the type of offshoring relationship between client and vendor in Lee et al. (2004) was used along with the four item scale measuring dimensions of Partnership from Grover et al. (1996) (Cronbach's alpha .969). See Appendix B for the original questionnaire. Grover et al.'s (1996) dimensions of partnership questions are:

1. The vendor lets our organization know as soon as possible of any unexpected problems.
2. Based upon your past and present experience, the level of trust your organization has in its working relationship with the vendor is very high.
3. Your organization and vendor help each other in whatever ways each asks.
4. Our organization's working relationship with the vendor has been a happy one.

The Lee et al. (2004) outsourcing relationship question including instructions for answering the question is as follows:

Definition – Type of contract between the service receiver and provider in an outsourcing relationship.

Instruction – What kind of relationship (or contract) did you set up with your service provider? Please check only one number considering the contract type with your main outsourcing provider.

Items:

1. *Standard contracts: Your firm signed the service provider's standard, off-the-shelf contract*
2. *Detailed contracts: The contract included special clauses for service scope, service levels, performance measures, and penalties.*
3. *Loose contracts: The contract did not provide comprehensive performance but specified the service providers' performance as "whatever the customer was doing in the baseline year" for the next 5 to 10 years at 10% to 30% less than the customer's baseline budget.*
4. *Mixed contracts: For the first few years, requirements of the contract were fully specified (detailed contract), but the technology and business requirements in the long run were not defined (loose contract).*
5. *Partnership: The relationship involved significant resources of you and your service provider(s) to create, add to, or maximize joint value. Also, the contract included an agreement to furnish a part of the capital and labor for a business enterprise, and each shares in benefits and risks.*
6. *Buy-in contracts: Your firm bought some resources to supplement in-house capabilities, but the resources were managed by in-house business and IT management.*
7. *Other (specify).*

Categories – Fee-for-service contract (1, 2, 3, and 4); partnership (5); buy-in contract (6).

Offshoring Success

Offshoring success is defined the degree of achieving the strategic, economic and technological benefits offered by offshoring (Grover, Cheon & Ten, 1996). Willcocks and Kern (1998) found that a necessary condition for a “strategic partnering outsourcing arrangement” to succeed is effective interaction at a cooperative level and that a properly constructed contract is just not enough. Management of the client-vendor relationship is critical for the success of the IT offshoring arrangement (Kern et al., 2001; Sabherwal, 1999). The importance of the cooperative interaction between client and vendor as partners is why this study examines the relationship using social exchange theory as a basis. The components of SET including trust, balanced power, balanced dependence and communication are all indicators of cooperation.

Measuring IT offshoring success based on performance and/or economics is problematic (Kern et al., 2002; Lacity et al., 2001). Offshoring success is defined here as the accomplishment of the objectives of offshoring which include strategic, financial, technical and relational objectives.

Looking at cost savings alone is not enough, especially with the new strategic focus of offshoring arrangements. Lee & Kim (1999) used the outsourcing success (OS) instrument developed by Grover, Cheon & Ten (1996) to assess the degree of achieving the strategic, economic and technological benefits of outsourcing (success). According to Rouse et al. (2001) this instrument is the only one developed specifically to measure IT outsourcing success despite more

than a decade of research into IT outsourcing. The hypothesis that examines offshoring success is as follows:

H₁₁: More successful partnerships, compared with less successful partnerships, exhibit higher levels of:

- a. communication
- b. trust
- c. interdependence
- d. shared values

Offshoring Success Scale

The scale used is the nine item outsourcing success scale developed by Grover et al. (1996) and also used by Lee et al. (2004) (Cronbach's alpha reported as between .908 and .93). See Appendix B for the original questionnaire.

Questions used to measure offshoring success are:

1. *We have been able to refocus on core business.*
2. *We have enhanced our IT competence.*
3. *We have increased access to skilled personnel.*
4. *We have enhanced economies of scale in human resources.*
5. *We have enhanced economies of scale in technological resources.*
6. *We have increased control of IT expenses.*
7. *We have reduced the risk of technological obsolescence.*
8. *We have increased access to key information technologies.*
9. *We are satisfied with our overall benefits from outsourcing.*

Hypotheses

The hypotheses were developed in an attempt to meet the following three objectives:

- Examine the client-vendor relationship issues in the context of offshoring
- Identify testable variables and their relationships
- Develop a model that can be used to empirically test these variables

Hypotheses for this study were developed from social exchange theory and a review of the literature. The hypotheses used in this study are listed below in Table 2 and shown graphically in Figure 3: SET Offshoring Model.

Hypothesis Number	<i>Specific Hypotheses</i>
H ₁	Communication and trust are positively correlated.
H ₂	Communication is positively correlated with partnership.
H ₃	Trust is positively correlated with partnership.
H ₄	Shared Values is positively correlated with partnership.
H ₅	Dependence and power are inversely related.
H ₆	Dependence and offshoring success are positively correlated.
H ₇	Power and offshoring success are inversely related.
H ₈	Partnership will display more dependence than fee-for-service or buy-in contract relationships.
H ₉	Partnership and offshoring success are positively correlated.
H ₁₀	Partnership will be more successful than buy-in or fee-for-service control structures.
H ₁₁	More successful partnerships, compared with less successful partnerships, exhibit higher levels of: a. communication b. trust c. interdependence d. shared values
H ₁₂	Shared Values and trust are positively correlated.

Table 2: Research Hypotheses

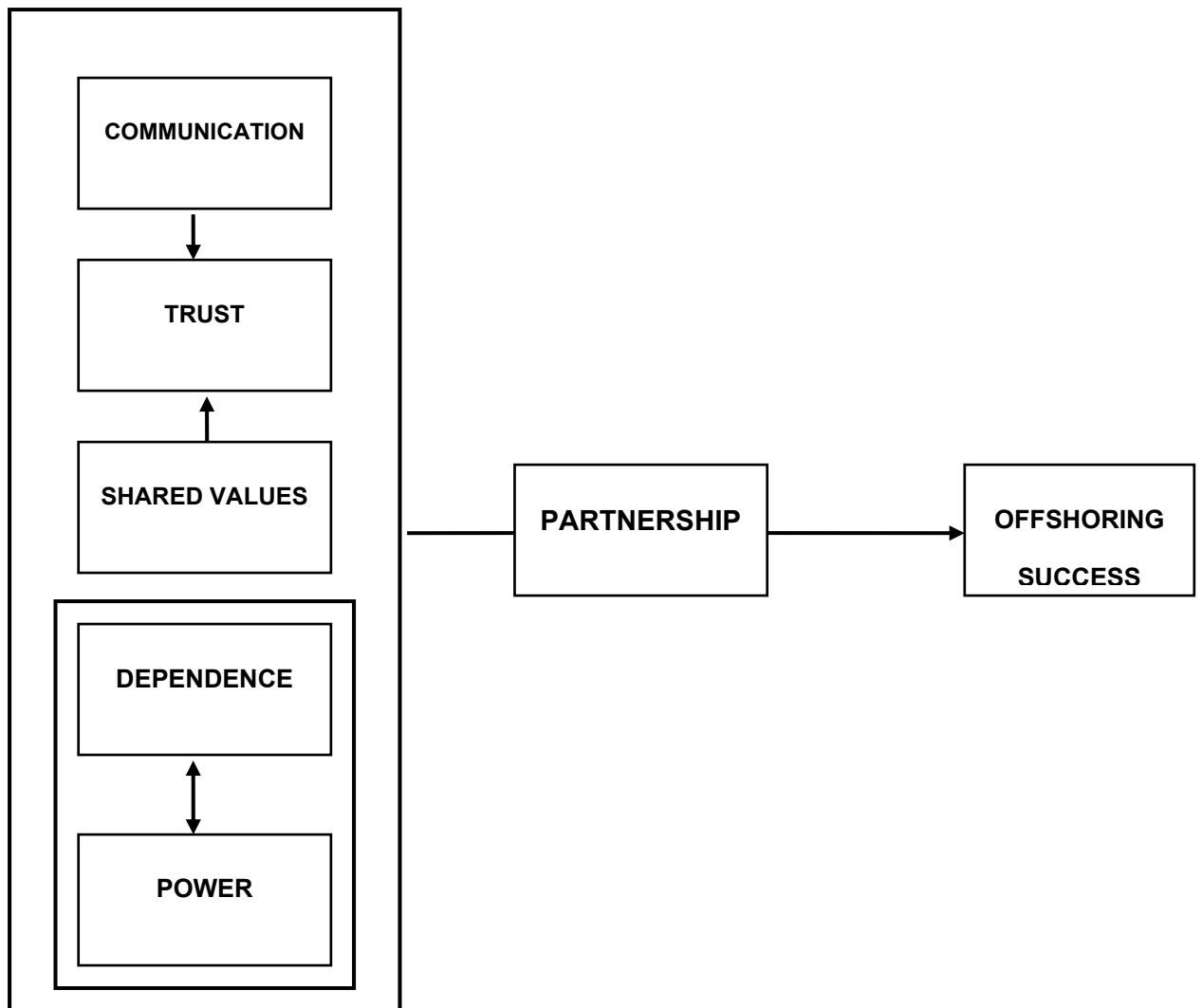


Figure 3: SET Offshoring Model

This chapter detailed the theoretical framework for the study. The next chapter describes the methodology.

CHAPTER 4

METHODOLOGY

Introduction

This chapter presents an overview of the methodology used in this study. The chapter is divided into four sections. The first section describes the research design of the survey instrument. The second section discusses the selection of participants in the study. The third section covers data collection. The last section is devoted to data analysis.

Research Design of the Survey Instrument

This exploratory study used a descriptive research design in the form of a survey. Surveys can be used to collect data about phenomena that cannot be directly observed or measured, such as perceptions or opinions.

Several advantages and disadvantages associated with survey designs have been identified. Advantages of using survey designs include the following:

- Easy to administer and score
- Responses are generalizable to similar populations
- Can be re-used

Disadvantages of survey designs include the following:

- Offer a snapshot of one specific period of time
- Cannot discern underlying meaning
- Cannot provide the richness of results, as can a case study

Kuhn (1961) described the way in which qualitative and quantitative research can be used together to gain a more complete understanding of phenomena. Qualitative research can be used to identify areas of study and form theories that can then be tested using quantitative research. Quantitative research then measures and describes in mathematical terms the relationships among phenomena and the strength or weakness of the relationships. It is especially appropriate to use a quantitative research design in this study because a large amount of qualitative research has previously been done in offshoring that identified several factors important in offshoring relationships. A quantitative research design will be useful to measure the importance of factors previously identified in qualitative studies and their effect on the perceived success of offshoring. This section of the methodology discusses the selection of questions for the survey, gives a review of the survey and selection of the study population.

Survey Question Selection

The questions used in this survey were gathered from a review of relevant outsourcing and offshoring literature to determine meaningful data to collect and analyze. The literature was reviewed for constructs identified by the authors as sufficiently significant to outsourcing and offshoring as to be included in their studies.

Because each construct has been previously investigated, pre-existing survey instruments which have already been tested were combined and used. Pre-existing scales have been previously validated and have specific measures

of validity and reliability associated with them; therefore, items used in the questionnaire will be derived from previously used survey instruments. When necessary, items were slightly modified to reflect the goals of this study. Table 3 lists constructs measured by the instrument, the articles from which they are taken, and their associated levels of internal consistency. Data analysis was done using the summated scales and not individual items.

<u>Construct</u>	<u>Article</u>	<u>Items in scale</u>	<u>Cronbach's Alpha</u>
Trust	Tung et al., 2001	12	0.91
Dependence	Ganesan, 1994	6	0.85
Power	Young-Ybarra & Wiersema, 1999	4	0.82
Communication	Young-Ybarra & Wiersema, 1999	4	0.89
Partnership	Grover et al., 1996	4	0.96
Shared Values	Young-Ybarra & Wiersema, 1999	2	0.91
Offshoring Success	Lee et al., 2004	9	0.93

Table 3: Construct Description and Measures of Construct Validity

The first section of the survey is composed of demographic questions. The second section of the survey is organized as follows: The first four questions are taken directly from the survey by Young-Ybarra & Wiersema, 1999 and measure the communication construct identified in the model. The next 12 questions

measure organizational trust and are from the survey by Tung et al. (2001) based on the short form of the Organizational Trust Inventory (OTI). Questions 17 and 18 are from the survey by Young-Ybarra & Wiersema, 1999 and measure shared values. Questions 19 through 24 are from the research by Ganesan (1994) and measure dependence. Questions 25 through 28 are from Grover et al. and are intended to measure the partnership construct identified in the model. The only change made to the partnership questions was to replace the term “service provider” with the term “vendor” to maintain consistency with the rest of the survey. Lee et al. (2004) provides the questions to determine offshoring success with Questions 29 through 37. The final seven power-dependence questions are from Young-Ybarra & Wiersema, 1999 with Questions 38 through 41 measuring power influence, Question 42 measuring power alternatives and Question 43 measuring other aspects of power.

An expert panel of IT researchers reviewed the proposed survey questionnaire for completeness, relevance, accuracy, and thoroughness. Based on their responses, all necessary revisions were made to the survey questionnaire.

The survey was printed front and back with an additional card provided for the respondent to request an executive summary of the study by completing and dropping in the mail. (See Appendix B for a copy of the survey.)

To encourage respondents to answer the questionnaire, the majority of responses were close-ended responses, requiring the respondent to mark a

number on a Likert scale. Only one question was fill-in-the-blank: Question 1 requested the job title of the person completing the questionnaire.

Expert Review

The initial survey instrument was examined by a panel of academic and industry experts. The academic experts were familiar with proper research techniques and qualified to assess the appropriateness and completeness of the survey instrument. Each expert was provided with a copy of the initial survey, an explanation of the research question, description of the underlying theory, the targeted population and method of selection, the purpose of the survey questions and intended purpose of results. The experts were asked to provide guidance on further refinement of the instrument. Specifically, they were asked if the questions included in the survey were the right questions (content validity), and if the questions were valid, accurate, relevant, and complete for the study (face validity). The information provided to the experts was kept to a minimum because the goal of the review was to present the experts with information comparable to the information given to survey recipients. Based on the expert review changes were made to the layout of the survey, some demographics questions were dropped and typographical errors were corrected but none of the summated scales used to measure the hypotheses were changed.

Reliability

An instrument or technique which is reliable gives the same result when applied repeatedly to the same subject. This does not mean that the result is

necessarily correct, but simply that it is reproducible. For example, a measure of user satisfaction would be considered reliable if it reported the same level of satisfaction from a user who was repeatedly queried. Using a reliable instrument, the user would report the same results on more than one occasion. Whether the results are “true” requires that the instrument also has validity. According to Vogt (1999), selected items are measuring the same thing if the alpha coefficient is above 0.70. Internal consistency estimates of reliability (Cronbach’s alpha, or coefficient alpha) have been taken from previous research for each of the constructs and are reported in Table 3. For each of the constructs, previously reported alpha scores are above 0.70 and satisfy the requirements of reliability.

Selecting the Study Participants

The target population for this study was American companies that employ offshoring. The parent population from which the subject companies were chosen was the list of all Fortune 500 companies. Fortune 500 companies were chosen because they are more likely to conduct a sufficient amount of business that might necessitate the use of offshoring. The 2006 list of Fortune 500 companies was used in this study.

The survey was sent directly to the CIO of Fortune 500 companies. They were asked either to complete the survey themselves or to pass the survey to the person most familiar with their company's offshoring activities. The rationale behind selecting the CIO to receive the survey is based on a review of the

literature in which multiple sources indicated that the role of the CIO is pivotal in successful offshoring relationships (Ranger, 2006; Overby, 2005).

Data Collection

This section describes the activities involved in collecting the data specifically the method of survey distribution and follow-up procedures for increasing the response rate.

Method of Survey Distribution

Data for this study was collected using a questionnaire mailed via U.S. mail followed by a postcard reminder also distributed via U.S. mail soliciting recipients to take a web version of the same survey. Benefits of a mailed questionnaire include low cost and the ability to collect “sensitive” company information due to the anonymity associated with completing a questionnaire. For this particular population getting past “gatekeepers” was another important benefit of the mailed survey.

Data collection included the following steps: creation of an address list, creation of the survey packages and mailing survey packages. A postcard mailing was done in the same way from the same address list with addresses of those that replied to the first mailer removed to avoid duplicate data.

Creation of an Address List

The 2006 Fortune 500 list was used to gather all pertinent information to create the address mailing list. Address information used from the Fortune 500

list included CIO name, company name, company street address, city, state and zip code.

Nine surveys were returned as undeliverable. By reviewing company websites it was found that seven of those returned were from companies that had new CIOs and two did not have a CIO position. The surveys were re-sent to the seven new CIOs and the remaining two were sent to the CEOs. None of the nine surveys were returned.

Survey Package Contents

The initial mailer of survey packets included a cover letter, instruction sheet, confidentiality letter, return envelope with pre-paid postage and survey. The follow-up reminder was printed on 8 ½" X 5 ½" brightly colored heavy card stock soliciting participation in a web survey equivalent of the mail survey.

Survey Package Distribution

After a list of CIO names and addresses for all companies listed in the Fortune 500 was purchased from www.fortunedatastore.com and a survey packet was mailed to each participant followed by a postcard reminder. See Appendix A for a copy of the Fortune 500 list. Table 4 shows the mailing dates and response deadlines for each mailing.

<u>Timeline</u>	<u>Mailing Date</u>	<u>Response Deadline</u>
Initial mailing	December, 2007	January 30, 2008
Follow-up postcard mailing	March, 2008	None – electronic response requested

Table 4: Timeline of Survey Mailings

Cover Letter

The cover letter briefly explained the purpose of the study, asked for participation in the study, provided contact information in case there were questions pertaining to the completion of the questionnaire, and expressed gratitude to each person who participated in the study. Additionally, the letter explained that the results will benefit Fortune 500 companies, described the risks and benefits of being in the study, assured confidentiality and reiterated the voluntary nature of participating in the study. A copy of the cover letter is included in Appendix C.

Instruction Sheet

Each survey packet included an instruction sheet with definitions so everyone could use the same terminology the same way. The instruction sheet also explained how to complete the questionnaire and reminded subjects that the answers were anonymous and would not be identified to any specific person or company. The instruction sheet also included a phone number and e-mail address of the researcher in case the subject wished to communicate with the researcher. A copy of the instruction sheet is included at the beginning of Appendix B.

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E-mail

Although it was the original intention to contact each nonresponding CIO via e-mail to remind each person to participate in the survey, the Fortune 500 list did not contain the e-mail addresses for each CIO and such a list was not to be found. E-mail is a terrible way to reach executive CIOs not only because their e-mail addresses are not freely given out but because of spam filters and human gatekeepers who review and filter incoming e-mails.

Telephone

It is important to note that telephone contact as a follow-up method was attempted but quickly abandoned. Phone calls were effectively filtered by human gate-keepers and persistence by the researcher was received with irritation and negativity. The most common response was that answering any questions via telephone was against company policy. Contacting CIOs by telephone is not effective because gatekeepers such as assistants or secretaries prevent such contact. Further investigation revealed using the telephone as a method to increase the response rate is notoriously ineffective (Lima, 2006) so this method was abandoned having obtained no survey responses.

Mail

Since the U.S.P.S. mailing was effective, it was decided that a postcard should be sent to each CIO that did not return a survey. The postcard included a message that asked each person interested in participating in the survey to send

an e-mail with the words “survey request” in the subject line to stjohnj@unt.edu. The plan was to send a link to the survey after receiving a request. This course of action would provide the e-mail addresses necessary to facilitate online communication.

Unfortunately, no follow-up responses were received. It was not necessary to perform t-tests to determine whether the initial responses could be included with the follow-up responses.

Data Analysis

This portion of the chapter details the types of statistical analysis that were performed on the survey data gathered from the survey. As this was an exploratory study, descriptive statistics including frequencies and correlations were used.

The instruments used in this study came from previous studies on similar populations. Cronbach’s alphas were obtained for each summated scale used in the previous studies. As shown in Table 6, Cronbach’s alphas were also calculated for this study and the two were compared for each scale to test internal consistency and reliability. Individual items were not tested separately as this was done when the instruments were created. Additionally, since summated scales rather than individual items were used to analyze each hypothesis it was deemed inappropriate to analyze individual items.

Primary data analysis to test the hypotheses was done using correlations, specifically Spearman’s rho. The hypotheses all involved hypotheses on the

degree of relationship, some positive and some negative, between the dependent variable and the independent variables, and between the independent variables. Spearman's rho correlation was chosen as the primary statistical method used because of the ordinal and interval nature of the Likert scales used in the survey. Both the nature of the hypotheses and the nature of the data led to Spearman's rho being chosen as the most appropriate statistic to use. Other considerations in choosing appropriate statistical procedures to analyze results were the response rate and the exploratory nature of the study. Causation was not hypothesized or tested.

Validity

Construct Validity

A study has construct validity if its survey instrument is shown to have both convergent validity and discriminant validity. Construct validity involves generalizing from the measures to the concept (construct) that the measures are supposed to be measuring. To ensure construct validity the researcher must select and state what constructs are being measured and then demonstrate that the measurements are indeed measuring the constructs they are supposed to measure (Yin, 1994).

An easy way to ensure construct validity is to use previously validated instruments. In this study, validated instruments were used to ensure construct validity. Cronbach's alpha was used to assess construct reliability (Cronbach,

1951). Nunnally (1978) suggested that a reliability of a construct above 0.7 is acceptable. As shown in Table 3 the reliabilities of all the constructs are well above 0.7 and pass the test of construct reliability.

The construct of Partnership was important to this study. To verify that Partnership was being measured a single survey item was not sufficient. Summated scales were used and in the case of identifying the type of offshoring relationship (Partnership or otherwise) two separate summated scales were used.

External Validity

External validity is also known as generalizability (Campbell and Stanley, 1963). External validity involves generalizing results from one population to another. So when surveying a random sample of a population, external validity would refer to the ability to make assumptions about a different population based on what was found by examining a sample from the original population. Any differences between the populations could threaten external validity while similarities would strengthen external validity. Threats to external validity include anything that threatens statistical generalizability. These threats are differences between the studies in terms of subjects, places and time (Campbell, 1966). External validity is strengthened by the replication of findings (Yin, 1994). However, the type of generalizability depends on the type of research being conducted. When conducting a sample survey, external validity refers to

statistical validity because the goal is to be able to replicate the statistical findings.

Convergent Validity

Convergent validity is the degree to which concepts that should be related theoretically are interrelated in reality (Campbell and Fiske, 1959). A study has convergent validity if measures of the same theoretical construct do indeed correlate highly with each other. In factor analysis, related items would load on each other.

Discriminant Validity

Discriminant validity is the degree to which concepts that should not be related theoretically are, in fact, not interrelated in reality (Campbell and Fiske, 1959). A study has discriminant validity if measures of theoretically different constructs do not correlate highly with each other.

Convergent validity and discriminant validity of the scales used in this study were tested in the original studies by their authors and no scales were created specifically for this study. Pre-existing scales have been previously validated.

Non-response Error and How it Was Addressed

Non-response error results from having a significant number of elements of the sample not responding to the survey. In other words, a low response rate results in the problem of non-response error. Response rate is defined as the

percentage of survey invitations that result in a response. The higher the response rate, the lower the non-response error.

Response rates vary greatly from survey to survey, affected by almost all aspects of the survey process and especially the specific characteristics of the population being studied. Because the effects vary so greatly from population to population and between different groups of respondents the most reliable indicator of having received a “good” or “bad” response rate is to examine past studies of the same population, same respondents using the same type survey methods and survey topics.

Surveys of executives typically have very low response rates, with response rates from executives of the Fortune 500 especially low. A survey of CIOs and senior IT executives can expect a response rate of approximately 3% (Ness, 2005). This survey’s response rate was over 7%, approximately double the expected response rate.

Time of Survey

Time can affect response rates in several ways. For instance, conducting a survey over a holiday, or earlier in the day, or earlier in the week may increase or decrease the response rate depending on the population being examined. The literature on research methodology has identified a decreasing trend in the response rates of survey studies over time (Boyer et al., 2002; Klassen & Jacobs, 2001; Sheehan, 2001) and this problem is greater for populations that have been inundated with surveys. Unfortunately CIOs and other executives,

particularly executives of Fortune 500 companies are very busy persons who receive many requests to fill out surveys so time is a particular problem. This sentiment was conveyed so strongly during the phone call solicitations that phone calls were abandoned by the researcher so as not to harass subjects.

Survey Data Collection Method Used

Survey data can be collected in several different ways. The initial survey was distributed via mail. In-person interviewing is another method that simply was not feasible since survey respondents are geographically dispersed across the country and not readily accessible even when geographically close. The e-mail survey is another data collection method. As mentioned earlier, e-mail lists of the Fortune 500 are unavailable; however, the follow-up mailer asked each person interested in participating in the survey to send an e-mail request for a link to an electronic form of the survey. A follow-up telephone survey was attempted but deemed unfeasible.

Nature of the Research Topic

The nature of the research topic can greatly affect response rate. It is well known that research topics considered invasive, for instance of a sexual or personal nature, can have greatly reduced response rates. Particularly regarding offshoring, the loss of American jobs due to offshoring means that this topic is in danger of asking sensitive politically charged questions that, if disclosed, could result in bad publicity for the company and possibly even cost the respondent his or her job. This was another reason (besides keeping the survey short) why

personal demographic questions standard to most surveys were pointedly avoided. Anonymity was closely guarded and conveyed. Before, during and after the survey this researcher reminded the respondents that the results of the survey would only be presented in aggregate form and all personal and company data was to be kept strictly confidential. Although it is difficult to judge exactly how much these precautions helped increase the response rate it is believed that they were very important.

The nature of the research topic did affect response rate in a different way. Two Fortune 500 CIOs responded via e-mail to say that they did not complete or return the survey because their company did not participate in the offshoring of IT work. The survey was kept short to maximize response rate but with hindsight adding questions for companies that did not participate in offshoring would have increased the response rate and helped further identify the number of companies who did not offshore IT work.

Another problem was identified by another response from a Fortune 500 CIO. This CIO indicated that he did not complete the survey because their business was offshoring. He felt that their company fit the profile of a vendor more than a client, and the survey was targeted at client companies. This raises another question. How many potential respondents did not respond because they outsource locally rather than offshore? They may never deal with a vendor and may not even know their work is being offshored by the local outsourcing vendor.

If the research topic is boring or the results uninteresting to the respondent this can also lead to a decreased response rate. If the results of the survey are considered valuable to the respondents or their company, industry or profession response rate may improve (Alreck & Settle, 1995). Valuable or interesting results can also be used as an incentive to increase the response rate. Respondents were instructed to fill out and return a card provided with the survey or include a business card to have the survey results sent to them. Only one respondent did not return a business card or the card provided with the survey. This incentive being well responded to suggests that the results of the survey are either interesting or valuable to the CIOs who filled out the surveys.

Because of the nature of the subjects responding, this researcher made every attempt to keep the survey short since it was being completed by busy executives of Fortune 500 companies. Also to keep the survey short and avoid personal or sensitive issues, demographics type questions were kept at a minimum. The focus of this study was directed at the organizational level and executive CIOs were asked to answer questions about their offshoring activities. Individual demographics questions were largely left out in favor of organizational demographics.

Pilot Testing the Survey

Extensive pilot testing was deemed unnecessary as the instrumentation used paralleled that of research previously cited. Still, the survey was presented to a panel of experts for pilot testing. Questions were asked including are the

questions repetitive or condescending? Poorly worded or laid out? Is the font too small? Are the questions invasive or unnecessary? The pilot study resulted in some minor design/layout changes and the discovery of some typographical errors which were corrected. Some demographic questions not part of the previously cited research were removed based on the pilot study.

Characteristics of Respondents

The response rate is described as relatively high because response rate is most dependent on the characteristics of respondents. Relative to other surveys of Fortune 500 CIOs and executives in general, this survey had a higher than normal response rate.

Statistical Conclusion Error

To reduce statistical conclusion error, a general heuristic for multivariate analysis is at least five times the number of variables in the model (Hair et al., 1992). This suggests a sample size of 35 would be acceptable since it is more than five times the seven variables in this study's model. The actual sample size achieved for this study was 37.

Sampling Error

Sampling error is the difference between information obtained from the sample and information obtained from the population. "Sample size and sample error are negatively correlated" (Schloss & Smith, 1999, p. 166) so the closer the sample size is to the population of Fortune 500 companies, the less likely sampling error will be a problem.

Sample Size Used

This study used the entire population of all 500 CIOs rather than choose a subset. The reason for this was to get as high a response rate as possible and thus reduce non-response error.

Chapter Summary

This study employs quantitative techniques to explore the nature of the [IT] client-vendor relationship and identify key factors affecting the success of the offshoring relationship. These relationship factors were identified by a review of the literature. The study surveyed the CIO or company executive in charge of information technology with a similar title of Fortune 500 companies knowledgeable about their companies' offshoring activities. The study includes the collection and analysis of survey data to test the proposed hypotheses. A discussion of validity was also included in this chapter.

CHAPTER 5

DATA ANALYSIS

Introduction

This chapter reports the analysis undertaken to examine the data and the project's results. First, demographic information taken from the survey is reported. Then, each variable is presented with a brief definition and appropriate descriptive statistics. Reliability analysis was performed using the SPSS reliability procedure and summarized in Table 7. The resulting Cronbach's alphas were reported along with the original Cronbach's alphas reported in the studies from which these pre-existing instruments were taken. Since all the data are ordinal and the distributions non-normal, the eleven hypothesis tests were conducted and are reported using Spearman's rank-order correlation tests (Diammantopoulos & Schlegelmilch, 1997; Greene & d'Oliveira, 1978). Finally, some overall interpretation of the results is given.

Demographics

Descriptive statistics were used to analyze the demographic questions and are presented below in graphical form. These are shown in Figures 4, 5, 6 and 7. Aside from the six demographic items, 50 items were included on the survey instrument to assess characteristics of client-vendor relationships in order to test the hypotheses. These results are presented following the analysis of the demographic information.

In response to the question: Are you associated with IT offshoring in your organization in the past or in the present? Eighty-nine percent answered that they were (see Figure 4 below). This is a large increase over the estimated forty percent in 2002 (Bjorhus, 2002) and 50 percent in 2003 (Reich, 2003) of Fortune 500 companies that offshored IT work. It is however, in agreement with recent estimates that most of the Fortune 500 offshore IT work and is reassuring since the 2008 nationwide survey by Wharton School & CareerBuilder.com found that only 7 percent of all companies, small and large, offshored job functions.

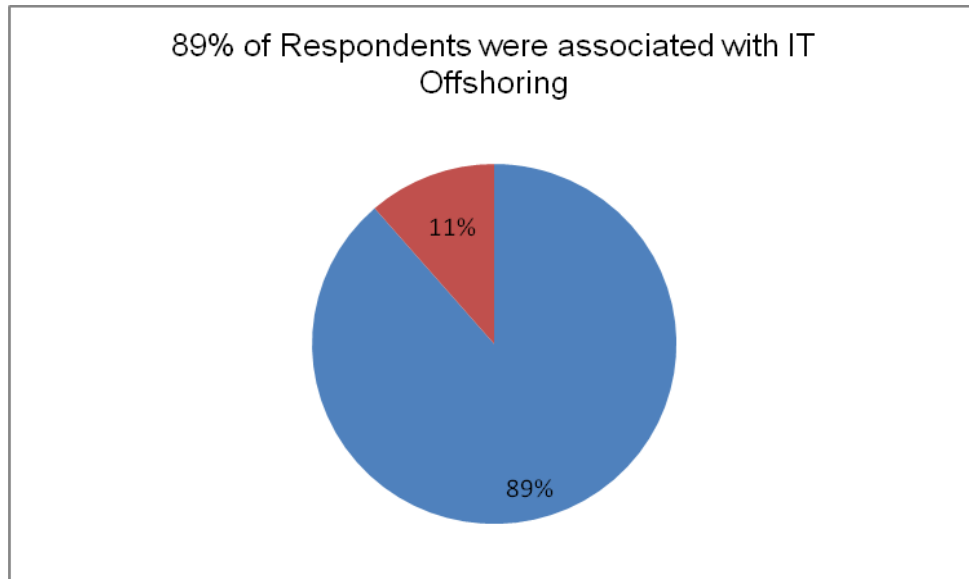


Figure 4: Respondents Associated with Offshoring

In response to the question: What percentage of your business operates outside the United States? Most of the respondents indicated they conducted

business overseas though they conducted most their business within the U.S. (see Figure 5 below). This shows that these Fortune 500 companies are primarily U.S. companies with global operations.

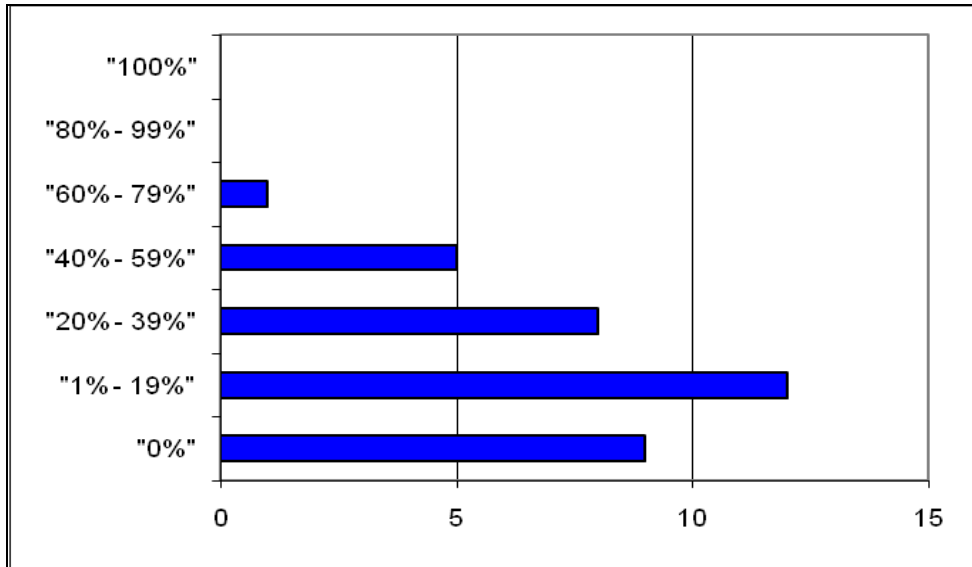


Figure 5: Percentage of Business Operating Outside the US

In response to the question: What percentage of your IT is offshored (done outside the United States)? The results are detailed in Figure 6 and show that most of the IT work is still done domestically. Even among the Fortune 500 who lead the way in offshoring, offshoring is still an emerging trend with plenty of potential growth. The results also shows that statements such as “95 percent of the Fortune 500 offshore their IT work” can be misleading, because it suggests that most of IT work is offshored by the Fortune 500. Not identifying the

actual percent of work that is offshored also suggests the practice is routine and well understood by the Fortune 500.

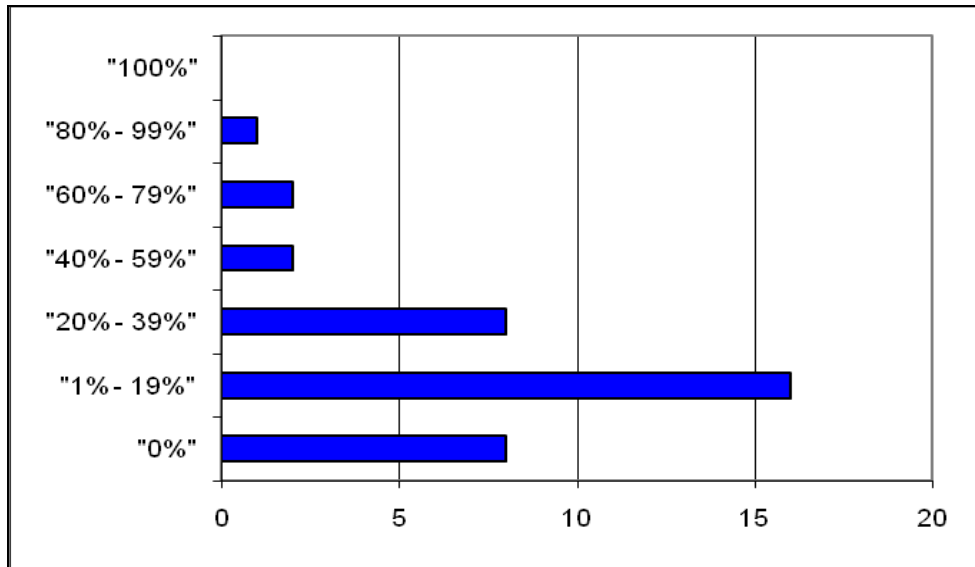


Figure 6: Percentage of IT Offshored

In response to the question: What percentage of your IT budget is devoted to offshoring? The results are listed in Figure 7 and support the results of the previous question (see Figure 6 above). Again, these results suggest that IT offshoring is still emerging with plenty of room to grow even among the Fortune 500. The results shown in Figure 7 are very interesting when compared with the results of the previous question (Figure 6). The comparison suggests first that for some companies, offshoring costs almost as much as it saves since the percent offshored (shown in Figure 6) is approximately the same as the percentage of the IT budgeted towards IT offshoring

shown in Figure 7. The second observation is on the difference between Figure 6 and Figure 7. There are several companies who offshore most of their work (see Figure 6), yet since none of the respondents spent as high a percentage of their IT budget on offshoring (see Figure 7), some companies must be realizing cost savings. It is worth mentioning that eight respondents reported their company did not participate in offshoring at all.

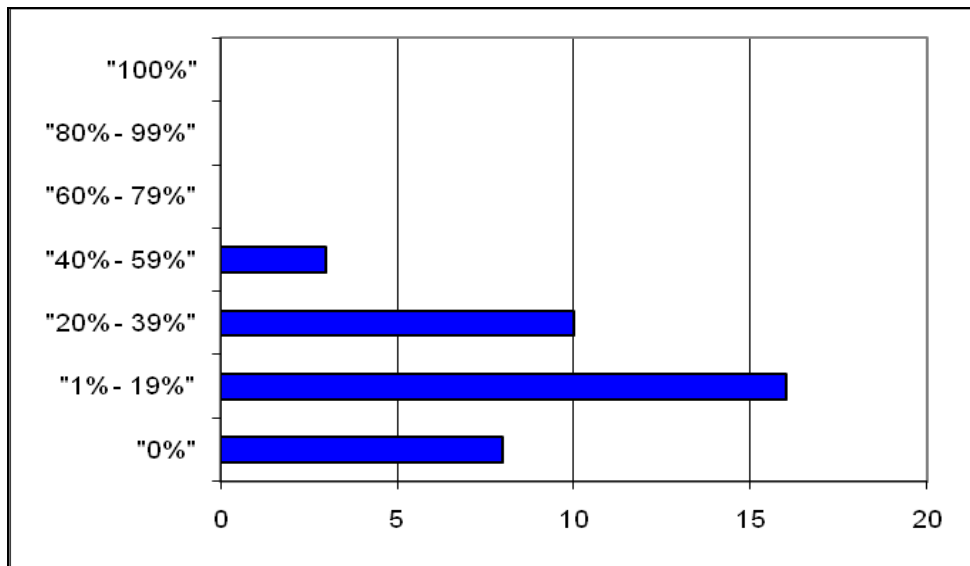


Figure 7: Percentage of IT Budget Used for IT Offshoring

Variables Measured

The statistical results of the measured variables and a discussion of the results are given next.

Communication

Communication is defined in this study as formal or informal two-way exchanges of information, operational or otherwise, that occur between the client and vendor. The value for the communication variable comes from four items using a seven-point Likert-type scale. For this variable, lower values indicate lower levels of communication and higher response values indicate higher levels of communication. The SPSS reliability statistics for communication are shown in Figure 8.

Case Processing Summary			
		N	%
Cases	Valid	29	85.3
	Excluded(a)	5	14.7
	Total	34	100.0

a Listwise deletion based on all variables in the procedure.

Reliability Statistics	
Cronbach's Alpha	N of Items
.778	4

Figure 8: SPSS Reliability Output for Communication

Trust

The definition of trust employed by this study emphasizes good faith efforts, honesty in negotiations, and not taking advantage of situations. The short form of the Organizational Trust Inventory (OTI-SF) was used to measure the trust variable in this study. Responses were answered using a seven point

Likert-type scale, where five of the twelve items were reverse-coded to ensure data reliability. The SPSS reliability statistics for trust are shown in Figure 9.

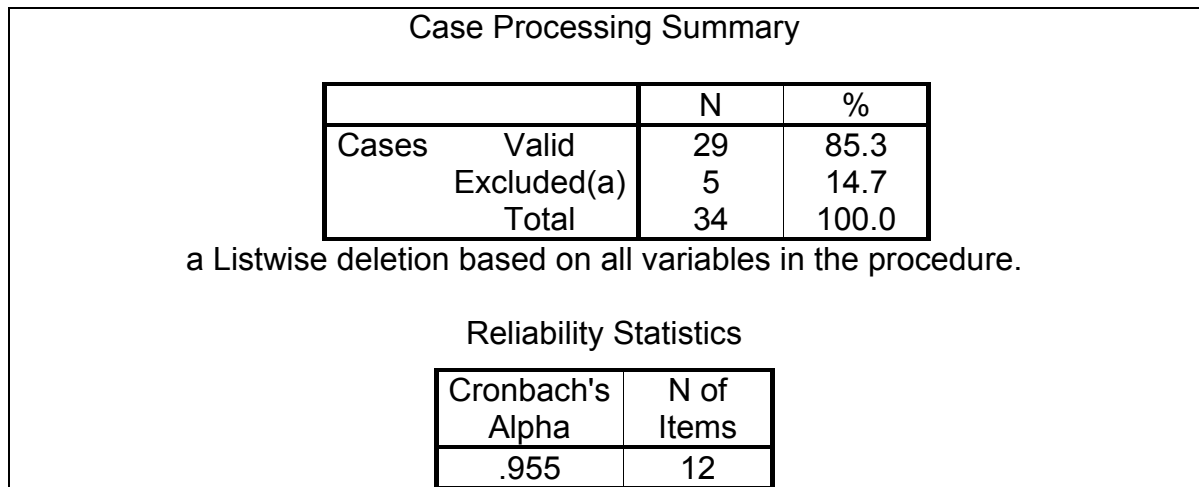


Figure 9: SPSS Reliability Output for Trust

Shared Values

Shared values are described as the extent to which partners have beliefs in common. The two items that measure shared values were answered using a seven point Likert-type scale, where low scores meant the client company did not agree that the vendor company shared their values. A high score meant that the client company shared values with the vendor company. The SPSS reliability statistics for shared values are shown in Figure 10.

Case Processing Summary			
		N	%
Cases	Valid	29	85.3
	Excluded(a)	5	14.7
	Total	34	100.0

a Listwise deletion based on all variables in the procedure.

Reliability Statistics	
Cronbach's Alpha	N of Items
.870	2

Figure 10: SPSS Reliability Output for Shared Values

Dependence

Dependence is the need for one party to perform so the other party can meet its goals (Ganesan, 1994). The value for the dependence variable is measured by six items scored using a seven-point Likert-type scale. With this variable, lower values indicate lower levels of dependence and higher response values indicate higher levels of dependence. The SPSS reliability statistics for dependence are shown in Figure 11.

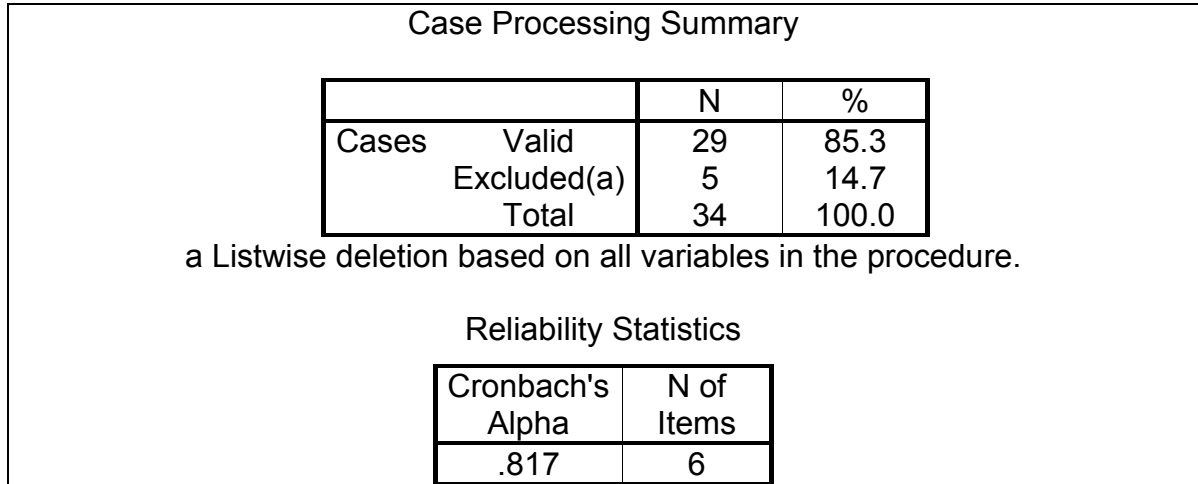


Figure 11: SPSS Reliability Output for Dependence

Power

Power is defined as the degree of influence the client company has relative to the vendor company. The four items used in this study ask the respondent to answer questions about the client company's power relative to the power held by the vendor company. The first item uses a seven point Likert-type scale that measures the influence the client company has over the vendor company. The second and third items identify whether the client company either uses or would use alternative arrangements to conduct the same activities conducted by the vendor company. The fourth item measures the importance of the client company's influence in regard to the vendor company. The SPSS reliability statistics for trust are shown in Figure 12.

Case Processing Summary			
		N	%
Cases	Valid	29	82.9
	Excluded(a)	6	17.1
	Total	35	100.0

a Listwise deletion based on all variables in the procedure.

Reliability Statistics	
Cronbach's Alpha	N of Items
.778	4

Figure 12: SPSS Reliability Output for Power

Partnership

Partnership is the collaboration of both the client and vendor to attain a mutually beneficial goal. Five items were used to measure the partnership variable. One item used to measure partnership simply determines the type of relationship the client company has with the vendor company. The remaining four items seek to measure the dimension of partnership using a seven point Likert-type scale. The SPSS reliability statistics for partnership are shown in Figure 13.

Case Processing Summary			
		N	%
Cases	Valid	29	85.3
	Excluded(a)	5	14.7
	Total	35	100.0

a Listwise deletion based on all variables in the procedure.

Reliability Statistics	
Cronbach's Alpha	N of Items
.956	4

Figure 13: SPSS Reliability Output for Partnership

Offshoring Success

Offshoring success is defined here as the accomplishment of the objectives of offshoring which include strategic, financial, technical and relational objectives. The nine items used to measure offshoring success use a seven point Likert-type scale, where lower responses indicate lower levels of offshoring success and higher responses indicate higher levels of offshoring success. The SPSS reliability statistics for offshoring success are shown in Figure 14.

Case Processing Summary			
		N	%
Cases	Valid	29	85.3
	Excluded(a)	5	14.7
	Total	35	100.0

a Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.939	9

Figure 14: SPSS Reliability Output for Offshoring Success

Reliability Scores

Table 5 shows the Cronbach's alpha score of each variable resulting from this study.

<u>Construct</u>	<u>Article</u>	<u>Items in scale</u>	<u>Article's Cronbach's Alpha</u>	<u>This study's Cronbach's Alpha</u>
Trust	Tung et al., 2001	12	0.91	.955
Dependence	Ganesan, 1994	6	0.85	.817
Power	Young-Ybarra & Wiersema, 1999	4	0.82	.778
Communication	Young-Ybarra & Wiersema, 1999	4	0.89	.778
Partnership	Grover et al., 1996	4	0.96	.956
Shared Values	Young-Ybarra & Wiersema, 1999	2	0.91	.870
Offshoring Success	Lee et al., 2004	9	0.93	0.939

Table 5: Reliability Scores

Excepting the six demographic questions included in the survey, 50 items on this survey were used to test the hypotheses and measure seven relationship variables that had been validated in previous studies. Although the items were not modified, the SPSS reliability procedure was used to check for any reliability issues caused by the unique environment of this study. Reliability scores are at .70 or higher, consistent with the works from which the instruments to measure these variables were taken. The Cronbach's alphas reported in the original works from which these instruments came are also reported in Table 5. The only noticeable difference is that the items measuring Communication showed a

poorer ability to measure Communication in this study than they did in the Young-Ybarra & Wiersema study(1999). Because these instruments were previously validated and because the constructs and their relationships were established in the theory discussed in Chapter 3, factor analysis aimed at determining which survey items loaded on the respective constructs was not warranted.

Hypotheses Testing

Correlations

Hypotheses testing was conducted using Spearman rank correlation coefficient. The Spearman rank correlation coefficient was chosen over other correlation techniques such as Pearson's because of the ordinal/interval nature of the items. More importantly, this study hypothesizes numerous links between variables. Causation is not being assumed or tested for, nor could it be properly examined without increasing the response rate by expanding the population to lower level employees or smaller companies. Any of these changes would result in a different type of study.

Spearman's rho was calculated with alpha set at .05. When looking up correlation coefficients, the critical values were large because of the small sample size. Siegel and Castellan's Table Q – Critical values of r , the Spearman rank-order correlation coefficient was used for correlation testing (1988).

Hypothesis 1

Hypothesis 1 considered the relationship between communication and trust.

H₁: Communication and trust are positively correlated.

Based on social exchange theory it was hypothesized that the two would be positively correlated. The correlation coefficient was .658 indicating a strong positive correlation ($n=29$, 1-tailed $p<.0005$). The null hypothesis was rejected and it was concluded that there is support for the hypothesis that communication and trust are positively correlated. Output from the SPSS correlation analysis is shown in Table 6 below.

			COMM	TRUST
Spearman's rho	COM M	Correlation Coefficient	1.000	.658(**)
		Sig. (1-tailed)	.	.000
		N	29	29
	TRUS T	Correlation Coefficient	.658(**)	1.000
		Sig. (1-tailed)	.000	.
		N	29	29

** Correlation is significant at the 0.01 level (1-tailed).

Table 6: SPSS Correlation Output for Hypothesis 1

Hypothesis 2

Hypothesis 2 considered the relationship between communication and partnership.

H₂: Communication is positively correlated with partnership.

Based on social exchange theory it was hypothesized that the two would be positively correlated. The correlation coefficient was .729 at indicating a

strong positive correlation ($n=29$, 1-tailed $p<.0005$). The null hypothesis was rejected and it was concluded that there is support for the hypothesis that communication and trust are positively correlated. Output from the SPSS correlation analysis is shown in Table 7 below.

			COMM	PARTNER
Spearman's rho	COMM	Correlation Coefficient	1.000	.729(**)
		Sig. (1-tailed)	.	.000
		N	29	29
	PARTNER	Correlation Coefficient	.729(**)	1.000
		Sig. (1-tailed)	.000	.
		N	29	29

** Correlation is significant at the 0.05 level (1-tailed).

Table 7: SPSS Correlation Output for Hypothesis 2

Hypothesis 3

Hypothesis 3 considered the relationship between trust and partnership.

H₃: Trust is positively correlated with partnership.

Based on social exchange theory it was hypothesized that the two would be positively correlated. The correlation coefficient was .883 at indicating a very strong positive correlation ($n=29$, 1-tailed $p<.0005$). The null hypothesis was rejected and it was concluded that there is strong support for the hypothesis that communication and trust are positively correlated. Output from the SPSS correlation analysis is shown in Table 8 below.

			TRUST	PARTNER
Spearman's rho	TRUST	Correlation Coefficient	1.000	.883(**)
		Sig. (1-tailed)	.	.000
		N	29	29
	PARTNER	Correlation Coefficient	.883(**)	1.000
		Sig. (1-tailed)	.000	.
		N	29	29

** Correlation is significant at the 0.05 level (1-tailed).

Table 8: SPSS Correlation Output for Hypothesis 3

Hypothesis 4

Hypothesis 4 considered the relationship between shared values and partnership.

H₄: Shared Values is positively correlated with partnership.

Based on social exchange theory it was hypothesized that the two would be positively correlated. The correlation coefficient was .741 indicating a strong positive correlation ($n=29$, 1-tailed $p<.0005$). The null hypothesis was rejected and it was concluded that there is support for the hypothesis that communication and trust are positively correlated. Output from the SPSS correlation analysis is shown in Table 9 below.

			SHARVALS	PARTNER
Spearman's rho	SHARVA LS	Correlation Coefficient	1.000	.741(**)
		Sig. (1-tailed)	.	.000
		N	29	29
	PARTNE R	Correlation Coefficient	.741(**)	1.000
		Sig. (1-tailed)	.000	.
		N	29	29

** Correlation is significant at the 0.05 level (1-tailed).

Table 9: SPSS Correlation Output for Hypothesis 4

Hypothesis 5

Hypothesis 5 considered the relationship between dependence and power.

H₅: Dependence and power are inversely related.

Based on social exchange theory it was hypothesized that the two would be inversely related so a negative correlation was expected. The correlation coefficient was indeed negative (-.128), indicating direction but not significant (p -value \approx .25). There is a failure to reject the null hypothesis. There is insufficient support for the hypothesis that dependence and power are negatively correlated (inversely related). Output from the SPSS correlation analysis is shown in Table 10 below.

			SDEPEND	SPOWER
Spearman's rho	SDEPE ND	Correlation Coefficient	1.000	-.128
		Sig. (1-tailed)	.	.253
		N	29	29
	SPOWE R	Correlation Coefficient	-.128	1.000
		Sig. (1-tailed)	.253	.
		N	29	29

Table 10: SPSS Correlation Output for Hypothesis 5

Hypothesis 6

Hypothesis 6 considered the relationship between dependence and offshoring success.

H₆: Dependence and offshoring success are positively correlated.

Dependence is often considered a “bad” thing, leaving one vulnerable. Social exchange theory takes a different view considering higher dependence a “good” thing. More successful relationships would be expected to display higher levels of symmetrical interdependence. Ideally data would be available from both the client and the vendor’s point of view but that was beyond the scope of this study. Instead only the client’s perceived dependence on the vendor was measured. To test this hypothesis, responses to Ganesan’s six item dependence scale were compared to offshoring success. The correlation coefficient was .202 showing no significant correlation between dependence and offshoring success ($n=29$, $.10 < p < .25$). There is a failure to reject the null hypothesis. There is insufficient support for the hypothesis that dependence and

offshoring success are positively correlated. Output from the SPSS correlation analysis is shown in Table 11.

			SDEPEND	OSUCCESS
Spearman's rho	SDEPEN D	Correlation Coefficient	1.000	.202
		Sig. (1-tailed)	.	.146
	OSUCCE SS	N	29	29
		Correlation Coefficient	.202	1.000
		Sig. (1-tailed)	.146	.
		N	29	29

Table 11: SPSS Correlation Output for Hypothesis 6

Hypothesis 7

Hypothesis 7 considered the relationship between power and offshoring success.

H₇: Power and offshoring success are inversely related.

Based on social exchange theory, a more successful relationship will have asymmetrical power or balance. If one has more power, the relationship will not be as successful therefore it was hypothesized that more power would be an indicator of a less successful relationship. When one company dominates with more power social exchange theory postulates that the dominated company would have less trust and communication and that the client company dominating the vendor would be less dependent on the vendor, all of which would lead to a less successful relationship. Unfortunately, this survey only reports the client's side of the power relationship making this hypothesis less than ideal but power and offshoring success can still be compared from the client's perspective.

Correlation analysis between power and offshoring success returned a Spearman rho value of 0.027 showing no significant correlation between power and success ($n=29$, 1-tailed $p > .25$). The null hypothesis was not rejected. Results show that there is insufficient support for the hypothesis that power and offshoring success are correlated. Output from the SPSS correlation analysis is shown in Table 12 below.

			SPOWER	OSuccess
Spearman's rho	SPOWER	Correlation Coefficient	1.000	.027
		Sig. (1-tailed)	.	.444
		N	29	29
	OSuccess	Correlation Coefficient	.027	1.000
		Sig. (1-tailed)	.444	.
		N	29	29

Table 12: SPSS Correlation Output for Hypothesis 7

Hypothesis 8

Hypothesis 8 considered the relationship between dependence and partnership.

H₈: Partnership and dependence are positively correlated.

Social exchange theory views dependence as a good thing and better relationships would be expected to display higher levels of symmetrical interdependence. Ideally data would be available from both the client and the vendor's point of view in this study involving data only from the client the level of symmetrical interdependence was estimated by examining dependence from the client's point of view. The correlation coefficient was .053 showing no significant

correlation between dependence and partnership ($n=29$ $p>.05$). The null hypothesis is rejected and it is concluded that there is support for the hypothesis that dependence and partnership are positively correlated. Output from the SPSS correlation analysis is shown in Table 13 below. The approximate p -value in Table 13 is .053 but based on the table of critical values for the Spearman test, the exact p -value is between .025 and .05.

			PARTNER	DEPEND
Spearman's rho	Partner	Correlation Coefficient	1.000	.306
		Sig. (1-tailed)	.	.053
		N	29	29
	Depend	Correlation Coefficient	.306	1.000
		Sig. (1-tailed)	.053	.
		N	29	29

Table 13: SPSS Correlation Output for Hypothesis 8

Hypothesis 9

Hypothesis 9 pertained to the relationship between partnership and offshoring success.

H₉: Partnership and offshoring success are positively correlated.

Based on social exchange theory it was hypothesized that the two would be positively correlated. The correlation coefficient was .723 indicating a strong positive correlation ($n=29$ $p<.0005$). The null hypothesis was rejected and it was concluded that there is support for the hypothesis that partnership and offshoring success are positively correlated. From the group of respondents, the CIOs of companies with a partnership relationship with their vendors were very likely to describe their offshoring endeavors as successful. This is a really amazing

finding when compared with Deloitte Consulting LLP's survey of large companies concluding that 70 percent of the companies experienced negative outcomes in their outsourcing contracts, the industry report by Gartner in 2005 concluding 80 percent of all outsourcing contracts are not successful or the conclusion that 50 percent of all offshoring endeavors fail completely due to relationship problems and not problems with the contract (Ertel et al., 2001). As exciting as these results are, it is difficult to generalize the findings to all Fortune 500 companies. It is possible and understandable that CIOs experiencing negative results with their offshoring projects may not be as eager to fill out a survey examining offshoring success. Output from the SPSS correlation analysis is shown in Table 14 below.

			PARTNER	OSUCCESS
Spearman's rho	PARTNER	Correlation Coefficient	1.000	.723(**)
		Sig. (1-tailed)	.	.000
		N	29	29
	OSUCCESS	Correlation Coefficient	.723(**)	1.000
		Sig. (1-tailed)	.000	.
		N	29	29

** Correlation is significant at the 0.05 level (1-tailed).

Table 14: SPSS Correlation Output for Hypothesis 9

Hypothesis 10

Hypothesis 10 compared the type of client-vendor relationship with the associated level of offshoring success.

H₁₀: Partnership will be more successful than buy-in or fee-for-service control structures.

Offshoring success was measured by nine 7-point Likert scales with 1 being strongly disagree, 4 neutral and 7 being strongly agree. Average responses were calculated to get “typical” values and compared based on type of offshoring relationship reported. Looking at the averages in Table 15 shows that Partnerships, on average reported higher levels of offshoring success (average = 5.422) compared with fee-for-service (average 4.566) and Buy-in (average 4.667).

<u>Offshoring success</u>	Type of Offshoring Relationship		
	<u>Partnership</u>	<u>Fee-for-service</u>	<u>Buy-in</u>
Average	5.422	4.566	4.667
Median	4.78	4.667	4.667
Count	5	23	1
SD	0.93	1.375	n/a

Table 15: Offshoring Success by Type of Relationship

The hypothesis that partnership type relationships are more successful than buy-in or fee-for-service control structures was tested using the Mann-Whitney test. The Mann-Whitney test is the non-parametric equivalent to the independent samples *t*-test and was used to compare the sample medians.

H₀: Partnership, fee-for-service and buy-in control structures are equally successful.

H₁: Partnerships are more successful than fee-for-service or buy-in control structures.

There was only one company with a buy-in control structure so buy-in control structure was combined with the fee-for-service structure to form the non-partnership group ($n=24$). These scores were compared with the scores of the partnership group ($n=5$). The nine respondents who indicated their companies did not offshore were not included in this analysis. A finding of no difference in the distributions of the scores for the populations represented by the partnership group and the non-partnership group would support the null hypothesis, while the research hypothesis would be supported if the scores for the partnership group were statistically larger than the non-partnership group. With the Mann-Whitney test “statistically larger” would mean that the median of the partnership group is larger than that of the non-partnership group. “Larger” in this case means more successful.

It is important to distinguish between two-tailed and one-tailed hypothesis tests. The research hypothesis above is a one-tailed test. If the hypothesis had said “the scores for the partnership group are statistically different from the scores for the non-partnership group populations” (i.e. their population medians are different) then this would have been a two-tailed hypothesis.

Table 16 shows the output from SPSS including “Exact Sig.” which is the p -value for a two-tailed hypothesis. Because the above hypothesis is a one-tailed hypothesis the value given must be divided by 2 giving 0.0645.

Since the exact p value ($p = 0.0645$) is greater than the specified α level (.05), the null hypothesis is accepted. At the specified α level of 0.05 there is

insufficient evidence to conclude that Partnerships are more successful than fee-for-service or buy-in control structures.

	OSuccess
Mann-Whitney U	33.000
Wilcoxon W	333.000
Z	-1.565
Asymp. Sig. (2-tailed)	.118
Exact Sig. [2*(1-tailed Sig.)]	.129(a)

a Not corrected for ties.

b Grouping Variable: PartnerType

Table 16: Mann-Whitney Partnership vs. Other Control Structures

Hypothesis 11

Hypothesis 11 compared four variables of more successful partnerships and less successful partnerships.

H₁₁: More successful partnerships, compared with less successful partnerships, exhibit higher levels of:

a. communication b. trust c. interdependence d. shared values

Based on social exchange theory it was hypothesized that more successful partnerships would report higher levels of all these variables, compared with less successful partnerships. This hypothesis was deemed untestable with the data in hand because all companies identified as having a partnership type relationship also identified their offshoring success as significantly high. No unsuccessful partnerships responded to the survey so they could not be compared with the successful partnerships that did respond.

Hypothesis 12

Hypothesis 12 considered the relationship between shared values and trust.

H₁₂: Shared Values and trust are positively correlated.

Based on social exchange theory it was hypothesized that the two would be positively correlated. The correlation coefficient was .602 indicating a strong positive correlation ($n=29, p<.0005$). The null hypothesis was rejected and it was concluded that there is support for the hypothesis that shared values and trust are positively correlated. Output from the SPSS correlation analysis is shown in Table 17 below.

			SHARVALS	TRUST
Spearman's rho	SHARVA LS	Correlation Coefficient	1.000	.602(**)
		Sig. (1-tailed)	.	.000
		N	29	29
	TRUST	Correlation Coefficient	.602(**)	1.000
		Sig. (1-tailed)	.000	.
		N	29	29

** Correlation is significant at the 0.05 level (1-tailed).

Table 17: SPSS Correlation Output for Hypothesis 12

<i>Hypothesis</i>	<i>Specific Hypotheses</i>	<i>Supported/unsupported</i>
H ₁	Communication and trust are positively correlated.	Supported
H ₂	Communication is positively correlated with partnership.	Supported
H ₃	Trust is positively correlated with partnership.	Supported
H ₄	Shared Values is positively correlated with partnership.	Supported
H ₅	Dependence and power are inversely related.	Not Supported
H ₆	Dependence and offshoring success are positively correlated.	Not Supported
H ₇	Power and offshoring success are inversely related.	Not Supported
H ₈	Partnership will display more dependence than fee-for-service or buy-in contract relationships.	Supported
H ₉	Partnership and offshoring success are positively correlated.	Supported
H ₁₀	Partnership will be more successful than buy-in or fee-for-service control structures.	Not Supported
H ₁₁	More successful partnerships, compared with less successful partnerships, exhibit higher levels of: a. communication b. trust c. interdependence d. shared values	Not Testable
H ₁₂	Shared Values and trust are positively correlated.	Supported

Table 18: Hypotheses Results

CHAPTER 6

RESULTS AND CONCLUSIONS

Introduction

This project finds its roots in social exchange theory concerning organizational relationships. This theory holds that the relationship should be a close but flexible one. This is not an intuitive approach, especially when offshoring. It is an especially difficult approach to take in a time when wide spread offshoring failures are encouraging client companies engaged in offshoring to try and keep control with strict contracts that stifle flexibility and to limit their vulnerability by maintaining other boundaries that restrict relationships.

Early offshoring consisted of simple outsourcing contracts involving straight-forward simple tasks along the lines of call centers, help desks and simple software maintenance. Gradually, simple software maintenance became ever more sophisticated software development. As the education and sophistication level of foreign software developers increased offshoring increased in volume and involved more sophisticated development. New technologies that increased bandwidth and the ability to offshore new and more complicated processes further increased the volume and sophistication of offshoring work. At the same time competition between client companies to obtain the services of vendor companies and increasing wages of foreign software developers has

switched the primary focus and benefit of offshoring from one of cost savings to one of strategic importance. Offshoring today is different than it was yesterday.

This project has proposed that this situation has changed the characteristics of and requirements for a successful offshoring relationship. Specifically, client-vendor relationships need to be closer and more flexible. The social aspects of the relationships have become more important than the contractual (written or unwritten) relationship.

Following this line of thinking, this project identified several variables for investigation. These social relationship variables included trust, dependency, power, shared values, communication and the type of relationship structure.

The guiding model (Figure 3: SET Offshoring Model) suggests that communication and shared values are related to trust as well as partnership. It suggests that trust affects partnership. Furthermore, dependence and power are related and affect partnership. Finally, the model suggests that partnership is related to offshoring success as a mediating variable. This exploratory study only tests the existence of the hypothesized relationships. The direction of the relationships are shown and are based on theory and past studies, not actually tested in this study.

These and other related variables were measured using responses from 37 CIOs from the 2007 Fortune 500 list as described in Chapter 4. The responses obtained were analyzed as described in Chapter 5. Several strong, significant, positive relationships were found as hypothesized.

Hypothesis 1 and 12 were supported by correlation analysis indicating that communication and shared values both correlate with trust as indicated in Figure 3: SET Offshoring model. Hypothesis 2, 3 and 4 were also supported which suggesting trust, shared values and communication are all important aspects of Partnership type relationships.

Hypotheses 5, 6, and 7 were all unsupported. For Hypothesis 5 the inverse relationship between power and independence was not significant though the direction (negative correlation) was indicated. Hypothesis 6 showed no support for the assumption that dependence would correlate with offshoring success. This suggests that it may not be beneficial for one partner to make themselves vulnerable in a dependent sort of way to the other. Though it has been shown to correlate with success in individual relationships such as marriages, the same did not seem to apply with offshoring relationships. Regarding Hypothesis 7, there was insufficient support for the hypothesized negative effect of high power. The assumption that one party in the relationship having high power would negatively affect the success of the relationship, presumably by dominating the other, did not hold with these offshoring relationships. With Hypothesis 8, that Partnerships would display more dependence than other relationship types there was support though the support was not as strong as for the other hypothesis. So, interestingly, partnerships display more dependence than the other types of offshoring relationships and are correlated with offshoring success more than the other relationship types yet

there is no support for a correlation between dependence and offshoring success. Scales for Dependence and Power should be further refined and would provide more conclusive information if they were applied to both the client and vendor. For now speculation but no conclusions can be made regarding the results of the hypotheses using Power and Dependence.

Ideally data on power and dependence would have been collected from the client and the vendor, and analyzed together. That may have changed results.

Hypotheses 9, 10 and 11 all addressed success and partnership. Hypothesis 9 found that Partnership was related to offshoring success. Hypothesis 10 found that Partnerships did indeed report a higher level of offshoring success than either buy-in or fee-for-service structures though not significant at the pre-chosen significance level of 0.05. Only five respondents indicated that their offshoring relationship was a partnership relationship. As more companies adopt this type of control structure and as companies become more savvy at implementing partnerships it will be interesting to see if these results change. Hypothesis 11 was to compare successful partnerships with unsuccessful ones but could not be determined because none of the respondents identifying their structure as a Partnership identified their offshoring relationship as less than successful.

Some Directions for Future Research

Social exchange theory considers the length of a relationship to be an important indicator variable of partnership. It was not used in this study because recent research did not support it as an indicator of partnership or offshoring success. This is likely because of the newness of highly collaborative offshoring partnerships. Future research should re-examine the importance of the length of a relationship. Relationship length may be an indicator of partnership and/or offshoring success. Social exchange theory would expect it.

The role of dependence needs further examination. Because it correlates with Partnerships but not offshoring success it may be something to reduce or avoid. Likewise, since Power over the other partner did not seem to reduce the success of the offshoring partnership Power should also be investigated further. Better scales for Power and Dependence should be developed and they should be applied to both client and vendor to better understand the role of these variables.

A study that surveys not only the client company but also the corresponding vendor company as to both parties' perceptions of the success of their offshoring relationship would further extend this research and gain a deeper understanding of the offshoring relationship . This kind of research would provide a wealth of information useful to both researchers and practitioners and extend the knowledge of offshoring relationships using SET.

Future research should examine the logistics of implementing a partnership type relationship and in managing a partnership type client vendor relationship in detail, especially considering it can cost up to 69% of the cost of the contract (Overby, 2007).

This project was an exploratory study investigating hypothesized relationships without attempting to reach conclusions about cause-and-effect. Future research should seek to identify cause and effect.

APPENDIX A
U.S. FORTUNE 500 COMPANY LISTING

source: Fortune April 17, 2006

Exxon Mobil (XOM)	3M (MMM)	Navistar International (NAV)	Land O'Lakes	Hormel Foods (HRL)
Wal-Mart Stores (WMT)	Liberty Mutual Ins. Group	Bear Stearns (BSC)	Campbell Soup (CPB)	Goodrich (GR)
General Motors (GM)	Halliburton (HAL)	Marriott International (MAR)	Jabil Circuit (JBL)	Hovnanian Enterprises (HOV)
Chevron (CVX)	Publix Super Markets	Colgate-Palmolive (CL)	Northeast Utilities (NU)	Leggett & Platt (LEG)
Ford Motor (F)	AMR (AMR)	Smithfield Foods (SFD)	Fortune Brands (FO)	Energy East (EAS)
ConocoPhillips (COP)	BellSouth (BLS)	General Mills (GIS)	Assurant (AIZ)	Omnicare (OCR)
General Electric (GE)	Tech Data (TECD)	Continental Airlines (CAL)	State St. Corp. (STT)	Kelly Services (KELYA)
Citigroup (C)	Electronic Data Systems (EDS)	Toys "R" Us (TOY)	Fifth Third Bancorp (FITB)	Liberty Global (LBTYA)
American Intl. Group (AIG)	McDonald's (MCD)	Arrow Electronics (ARW)	Harrah's Entertainment (HET)	Darden Restaurants (DRI)
Intl. Business Machines (IBM)	Bristol-Myers Squibb (BMJ)	Eaton (ETN)	Baker Hughes (BHI)	NVR (NVR)
Hewlett-Packard (HPQ)	Sara Lee (SLE)	Sun Microsystems (SUNW)	Sherwin-Williams (SHW)	CarMax (KMX)
Bank of America Corp. (BAC)	Goodyear Tire & Rubber (GT)	Avnet (AVT)	Owens-Illinois (OI)	Yahoo (YHOO)
Berkshire Hathaway (BRKA)	Supervalu (SVU)	National City Corp. (NCC)	IAC/InterActiveCorp (IACI)	Charter Communications (CHTR)
Home Depot (HD)	Cendant (CD)	United Auto Group (UAG)	Anadarko Petroleum (APC)	Cablevision Systems (CVC)
Valero Energy (VLO)	AutoNation (AN)	Aramark (RMK)	Eastman Chemical (EMN)	Lexmark International (LXK)
McKesson (MCK)	Northwestern Mutual	Dean Foods (DF)	Cox Communications	Mattel (MAT)
J.P. Morgan Chase & Co. (JPM)	Duke Energy (DUK)	SunTrust Banks (STI)	Applied Materials (AMAT)	Timken (TKR)
Verizon Communications (VZ)	J.C. Penney (JCP)	Entergy (ETR)	WPS Resources (WPS)	Charles Schwab (SCHW)

Cardinal Health (CAH)	Wyeth (WYE)	Devon Energy (DVN)	Agilent Technologies (A)	Bed Bath & Beyond (BBBY)
Altria Group (MO)	Coca-Cola Enterprises (CCE)	Reliant Energy (RRI)	Kerr-McGee (KMG)	USG (USG)
Kroger (KR)	Lyondell Chemical (LYO)	AES (AES)	Crown Holdings (CCK)	Erie Insurance Group
State Farm Insurance Cos	Countrywide Financial (CFC)	Progress Energy (PGN)	MeadWestvaco (MWV)	Barnes & Noble (BKS)
Marathon Oil (MRO)	Dominion Resources (D)	Genworth Financial (GNW)	American Family Ins. Grp.	RadioShack (RSH)
Procter & Gamble (PG)	UAL (UAUA)	First Data (FDC)	Ameren (AEE)	US Airways Group (LCC)
Dell (DELL)	Constellation Energy (CEG)	Omnicom Group (OMC)	KeyCorp (KEY)	Jones Apparel Group (JNY)
Boeing (BA)	Emerson Electric (EMR)	Circuit City Stores (CC)	Golden West Financial (GDW)	Auto-Owners Insurance
AmerisourceBergen (ABC)	Lear (LEA)	Solectron (SLR)	Mohawk Industries (MHK)	Rockwell Automation (ROK)
Costco Wholesale (COST)	Visteon (VC)	TXU (TXU)	Coventry Health Care (CVH)	W.R. Berkley (BER)
Target (TGT)	Rite Aid (RAD)	UnumProvident (UNM)	Commercial Metals (CMC)	Beazer Homes USA (BZH)
Morgan Stanley (MS)	Cigna (CI)	American Standard (ASD)	Black & Decker (BDK)	Atmos Energy (ATO)
Pfizer (PFE)	U.S. Bancorp (USB)	Winn-Dixie Stores (WNDXQ)	SLM (SLM)	Ross Stores (ROST)
Johnson & Johnson (JNJ)	Tesoro (TSO)	PPG Industries (PPG)	Newell Rubbermaid (NWL)	Triad Hospitals (TRI)
Sears Holdings (SHLD)	Occidental Petroleum (OXY)	Kellogg (K)	VF (VFC)	Temple-Inland (TIN)
Merrill Lynch (MER)	Express Scripts (ESRX)	Dana (DCNA)	MGM Mirage (MGM)	Avaya (AV)
MetLife (MET)	Delta Air Lines (DALRQ)	Medtronic (MDT)	Enbridge Energy Partners (EEP)	Maytag (MYG)
Dow Chemical (DOW)	Manpower (MAN)	Tenet Healthcare (THC)	Monsanto (MON)	UGI (UGI)
UnitedHealth Group (UNH)	Staples (SPLS)	Aon (AOC)	Dynegy (DYN)	MDC Holdings (MDC)
Wellpoint (WLP)	TJX (TJX)	Cummins (CMI)	Starbucks (SBUX)	Micron Technology

				(MU)
AT&T (T)	Gap (GPS)	Ashland (ASH)	Safeco (SAFC)	Stryker (SYK)
Time Warner (TWX)	Kimberly-Clark (KMB)	Baxter International (BAX)	Estee Lauder (EL)	Liz Claiborne (LIZ)
Goldman Sachs Group (GS)	Computer Sciences (CSC)	Viacom (VIAB)	Owens Corning (OWENQ)	Pacific Life
Lowe's (LOW)	Xerox (XRX)	ArvinMeritor (ARM)	Dover (DOV)	Hershey (HSY)
United Technologies (UTX)	ConAgra Foods (CAG)	Kinder Morgan Energy (KMP)	CDW (CDWC)	Owens & Minor (OMI)
United Parcel Service (UPS)	Exelon (EXC)	CenterPoint Energy (CNP)	CMS Energy (CMS)	Ryland Group (RYL)
Walgreen (WAG)	Loews (LTR)	Genuine Parts (GPC)	Federal-Mogul (FDMLQ)	Henry Schein (HSIC)
Wells Fargo (WFC)	Anheuser-Busch (BUD)	Limited Brands (LTD)	Boston Scientific (BSX)	SPX (SPW)
Albertson's (ABS)	Pulte Homes (PHM)	Xcel Energy (XEL)	Energy Transfer Partners (ETP)	SCANA (SCG)
Microsoft (MSFT)	Eli Lilly (LLY)	Fidelity National Financial (FNF)	Interpublic Group (IPG)	Emcor Group (EME)
Intel (INTC)	CBS (CBS)	EMC (EMC)	Performance Food Group (PFGC)	Whole Foods Market (WFMI)
Safeway (SWY)	Humana (HUM)	Schering-Plough (SGP)	PPL (PPL)	Longs Drug Stores (LDG)
Medco Health Solutions (MHS)	AFLAC (AFL)	Alltel (AT)	Autoliv (ALV)	Chesapeake Energy (CHK)
Lockheed Martin (LMT)	Whirlpool (WHR)	Clear Channel Communications (CCU)	Thrivent Financial for Lutherans	National Oilwell Varco (NOV)
CVS (CVS)	Progressive (PGR)	L-3 Communications (LLL)	Google (GOOG)	Peabody Energy (BTU)
Motorola (MOT)	Office Depot (ODP)	KB Home (KBH)	Regions Financial (RF)	Engelhard (EC)
Caterpillar (CAT)	Eastman Kodak (EK)	Lucent Technologies (LU)	Terex (TEX)	El Paso (EP)
Archer Daniels Midland (ADM)	Chubb (CB)	Guardian Life of America	Celanese (CE)	Corning (GLW)
Wachovia Corp. (WB)	Paccar (PCAR)	Yum Brands (YUM)	NCR (NCR)	Nash Finch (NAFC)

Allstate (ALL)	United States Steel (X)	OfficeMax (OMX)	OGE Energy (OGE)	eBay (EBAY)
Sprint Nextel (S)	Apple Computer (AAPL)	DTE Energy (DTE)	McGraw-Hill (MHP)	Ecolab (ECL)
Caremark Rx (CMX)	Qwest Communications (Q)	Phelps Dodge (PD)	Starwood Hotels & Rsrts. (HOT)	Clorox (CLX)
PepsiCo (PEP)	Lennar (LEN)	Principal Financial (PFG)	Group 1 Automotive (GPI)	Newmont Mining (NEM)
Lehman Brothers (LEH)	D.R. Horton (DHI)	H.J. Heinz (HNZ)	Saks (SKS)	Hexion Specialty Chemicals
Walt Disney (DIS)	Nike (NKE)	YRC Worldwide (YRCW)	Brunswick (BC)	Tenneco (TEN)
Prudential Financial (PRU)	Union Pacific (UNP)	World Fuel Services (INT)	Asbury Automotive Group (ABG)	Hilton Hotels (HLT)
Plains All Amer. Pipeline (PAA)	Southern (SO)	R.R. Donnelley & Sons (RRD)	Dole Food	Big Lots (BLI)
Sunoco (SUN)	Kohl's (KSS)	CSX (CSX)	Blockbuster (BBI)	Wesco International (WCC)
Northrop Grumman (NOC)	Texas Instruments (TXN)	TEPPCO Partners (TPP)	Advanced Micro Devices (AMD)	H&R Block (HRB)
Sysco (SYY)	DIRECTV Group (DTV)	Dollar General (DG)	Freescale Semiconductor (FSL)	United Stationers (USTR)
American Express (AXP)	Fluor (FLR)	TransMontaigne (TMG)	Family Dollar Stores (FDO)	Ikon Office Solutions (IKN)
FedEx (FDX)	Waste Management (WMI)	Norfolk Southern (NSC)	Toll Brothers (TOL)	Mosaic (MOS)
Honeywell Intl. (HON)	Burlington No. Santa Fe (BNI)	Automatic Data Proc. (ADP)	Ryerson (RYI)	Affiliated Computer Svcs. (ACS)
Ingram Micro (IM)	Huntsman (HUN)	Amazon.com (AMZN)	Unisys (UIS)	Conseco (CNO)
DuPont (DD)	Illinois Tool Works (ITW)	Echostar Communications (DISH)	Molson Coors Brewing (TAP)	Western & Southern Financial
New York Life Insurance	Masco (MAS)	Smurfit-Stone Container	Ball (BLL)	Franklin Resources

		(SSCC)		(BEN)
Johnson Controls (JCI)	Centex (CTX)	Calpine (CPNL)	Ryder System (R)	BorgWarner (BWA)
Best Buy (BBY)	ONEOK (OKE)	Sonic Automotive (SAH)	Allied Waste Industries (AW)	Graybar Electric
Delphi (DPHIQ)	Nucor (NUE)	Liberty Media (L)	Mellon Financial Corp. (MEL)	Advance Auto Parts (AAP)
Hartford Financial Services (HIG)	Public Service Enterprise Group (PEG)	Bank of New York Co. (BK)	AutoZone (AZO)	Jefferson-Pilot (JP)
Alcoa (AA)	TRW Automotive Holdings (TRW)	Parker Hannifin (PH)	C.H. Robinson Worldwide (CHRW)	Mirant (MIR)
Tyson Foods (TSN)	Williams (WMB)	Reynolds American (RAI)	Harley-Davidson (HDI)	Freeport-McMoRan Cpr. & Gld (FCX)
TIAA-CREF	Amgen (AMGN)	Avon Products (AVP)	Qualcomm (QCOM)	CNF (CNF)
International Paper (IP)	Northwest Airlines (NWACQ)	Air Products & Chem. (APD)	Pilgrim's Pride (PPC)	Wm. Wrigley Jr. (WWY)
Cisco Systems (CSCO)	Enterprise Products (EPD)	Pepco Holdings (POM)	Foot Locker (FL)	Peter Kiewit Sons'
HCA (HCA)	FirstEnergy (FE)	First American Corp. (FAF)	CIT Group (CIT)	Levi Strauss
St. Paul Travelers Cos. (STA)	American Electric Power (AEP)	Science Applications Intl.	AK Steel Holding (AKS)	Universal Health Svcs. (UHS)
News Corp. (NWS)	Marsh & McLennan (MMC)	Rohm & Haas (ROH)	Jacobs Engineering Grp. (JEC)	Lubrizol (LZ)
Federated Dept. Stores (FD)	Capital One Financial (COF)	Danaher (DHR)	BlueLinx Holdings (BXC)	Constellation Brands (STZ)
Amerada Hess (AHC)	CHS	BJ's Wholesale Club (BJ)	Tribune (TRB)	Fiserv (FISV)
Coca-Cola (KO)	USAA	NiSource (NI)	Fisher Scientific Intl. (FSH)	Sealed Air (SEE)
Weyerhaeuser (WY)	Textron (TXT)	PNC Financial Services Group (PNC)	Smith International (SII)	Borders Group (BGP)
Aetna (AET)	Health Net (HNT)	ITT Industries (ITT)	W.W. Grainger (GWW)	Mutual of Omaha Ins.
Mass. Mutual Life Ins.	Pepsi Bottling (PBG)	BB&T Corp. (BBT)	Quest Diagnostics (DGX)	American Financial Grp.

				(AFG)
Abbott Laboratories (ABT)	Murphy Oil (MUR)	Nordstrom (JWN)	Avery Dennison (AVY)	Standard Pacific (SPF)
Comcast (CMCSK)	Edison International (EIX)	Dillard's (DDS)	Pitney Bowes (PBI)	ServiceMaster (SVM)
Merck (MRK)	FPL Group (FPL)	KeySpan (KSE)	Brink's (BCO)	SunGard Data Systems
Deere (DE)	Oracle (ORCL)	Gannett (GCI)	Lincoln National (LNC)	Frontier Oil (FTO)
Raytheon (RTN)	Sempra Energy (SRE)	Praxair (PX)	Becton Dickinson (BDX)	Pathmark Stores (PTMK)
Nationwide	Sanmina-SCI (SANM)	Burlington Resources (BR)	Cinergy (CIN)	Kindred Healthcare (KND)
Washington Mutual (WM)	Consolidated Edison (ED)	Apache (APA)	AGCO (AG)	Marshall & Ilsley Corp. (MI)
General Dynamics (GD)	PG&E Corp. (PCG)	Southwest Airlines (LUV)	Hughes Supply (HUG)	LandAmerica Financial (LFG)

APPENDIX B
IT OFFSHORING SURVEY

Information Technology Offshoring Survey:

Purpose

The purpose of this survey is to help companies who participate in offshoring to understand which offshoring relationship factors affect offshoring success.

Offshoring definition:

For the purposes of this survey, offshoring is defined simply as moving all or part of your IT work to another country.

Who received this survey?

A copy of this survey is being sent to all companies included in the 2006 Fortune 500 list.

Survey structure

The survey is divided into the following sections:

1. Standard demographic info.
2. Offshoring relationship characteristics

Please complete and return no later than January 15, 2008

Participation

This Survey should be completed by the executive with responsibility for managing the offshoring partnership or by the Chief Information Officer (CIO).

Respondents should be able to complete the survey in fifteen minutes or less.

In return, participants who request one will receive a complimentary, executive report of the findings.

ALL responses will be held in the strictest confidence.

Completing the survey

Please return the completed survey in the pre-addressed, postage paid envelope provided.

OR

Fax the completed survey to (903)842-2787

Any questions? Please contact Jeremy St. John
Telephone: (903) 312-5379
e-mail: stjohnj@unt.edu

Thank you for your participation!

All individual company data will be kept strictly confidential.

Section One: Demographic information

Please list your title: _____

Are you associated with IT offshoring in your organization in the past or in the present?
Yes / No

If you are not associated with IT offshoring in your organization in the past or present , we would greatly appreciate if you could pass on this survey to a person who is associated with offshoring in your company.

Is your company multinational? (does it have operations in at least two countries.) Yes / No

What percentage of your business operates outside the United States? (circle one)

0%	1%-19%	20%-39%	40%-59%	60%-79%	80%-99%	100%
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Please reference ALL of your offshoring when responding to the following questions.

What percentage of your IT is offshored (done outside the United States)? (circle one)

0%	1%-19%	20%-39%	40%-59%	60%-79%	80%-99%	100%
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What types of IT services are offshored by your company (done outside the United States)? (mark all that apply)

<input type="checkbox"/> Data center management	<input type="checkbox"/> Existing software maintenance/ enhancement	<input type="checkbox"/> Networking/ Telecommunications
<input type="checkbox"/> Distributed systems /Desktop services	<input type="checkbox"/> Help desk / User support	<input type="checkbox"/> Business process outsourcing
<input type="checkbox"/> e-commerce/e-business services	<input type="checkbox"/> New software development and integration	<input type="checkbox"/> Other(please specify):

What percentage of your IT budget is devoted to offshoring? (circle one)

0%	1%-19%	20%-39%	40%-59%	60%-79%	80%-99%	100%
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All individual company data will be kept strictly confidential.

Instruction – What kind of relationship (or contract) did you set up with your service provider (vendor)? Please check only one number considering the contract type with your main offshoring provider.

Choose only one:	
	1. Standard contracts: Your firm signed the service provider’s standard, off-the-shelf contract.
	2. Detailed contracts: The contract included special clauses for service scope, service levels, performance measures, and penalties.
	3. Loose contracts: The contract did not provide comprehensive performance but specified the service providers’ performance as “whatever the customer was doing in the baseline year” for the next 5 to 10 years at 10% to 30% less than the customer’s baseline budget.
	4. Mixed contracts: For the first few years, requirements of the contract were fully specified (detailed contract), but the technology and business requirements in the long run were not defined (loose contract).
	5. Partnership: The relationship involved significant resources of your and your service provider(s) to create, add to, or maximize joint value. Also, the contract included an agreement to furnish a part of the capital and labor for a business enterprise, and each shares in benefits and risks
	6. Buy-in-contracts: Your firm bought some resources to supplement in-house capabilities, but the resources were managed by in-house business and IT management.
	7. Other (specify)

The following question should be answered on a scale of one to seven, where one means “similar” and seven “dissimilar”.

Question	Similar						Dissimilar
The nature of the activities conducted by this alliance are similar/dissimilar to your company’s primary focus?	1	2	3	4	5	6	7

Before you continue, we would like to point out that in the following sections of the survey, several questions seem to be worded similarly. Please understand that this is not to “trick” you, but rather is essential if we are to accurately measure the concept underlying the questions. There are no right or wrong answers to the questions we are asking you. Please respond to all parts of the survey. All individual company data will be kept strictly confidential.

Please answer the following questions on a scale of one to seven, where one means “no influence” and seven means a “great deal of influence”.

Question	No Influence						Great Deal of Influence
How much influence does your company have, relative to that of your partner company, on the following decisions?							
• Partnership goals	1	2	3	4	5	6	7
• Partnership operating decisions	1	2	3	4	5	6	7
• Budget allocations	1	2	3	4	5	6	7
• Selection of research projects	1	2	3	4	5	6	7

Please reference only one offshoring relationship when responding to the following questions.

Question	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
We always keep each other informed about the events or changes that may affect the other party.	1	2	3	4	5	6	7
It is expected that any information that might help the other party will be provided to them.	1	2	3	4	5	6	7
It is expected that proprietary information will be shared if it can help the other party.	1	2	3	4	5	6	7
Exchange of information in this relationship takes place frequently and informally, not only according to a pre-specified agreement.	1	2	3	4	5	6	7
We think that our vendor tells the truth in dealings.	1	2	3	4	5	6	7
We feel that we can depend on our vendor to deal with us honestly.	1	2	3	4	5	6	7
We think that our vendor does not mislead us.	1	2	3	4	5	6	7
We think that our vendor negotiates fairly during transactions.	1	2	3	4	5	6	7
We think that our vendor tries to get the upper hand during negotiations.	1	2	3	4	5	6	7

Question	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
We think that our vendor interprets ambiguous information in their own favor.	1	2	3	4	5	6	7
We feel that the vendor takes advantage of people who are vulnerable.	1	2	3	4	5	6	7
We think that our vendor takes advantage of our weaknesses.	1	2	3	4	5	6	7
We think that our vendor meets its negotiated obligations to our company.	1	2	3	4	5	6	7
We feel that the vendor will keep its word.	1	2	3	4	5	6	7
In our opinion, the vendor is reliable.	1	2	3	4	5	6	7
We feel that the vendor tries to get out of its commitments.	1	2	3	4	5	6	7
Our goals and objectives are shared by our partner company.	1	2	3	4	5	6	7
Our partner company had similar motives for forming this alliance.	1	2	3	4	5	6	7
If our relationship was discontinued with this vendor, we would have difficulty making up the work.	1	2	3	4	5	6	7
This vendor is crucial to our future performance.	1	2	3	4	5	6	7
It would be difficult for us to replace this vendor.	1	2	3	4	5	6	7
We are dependent on this vendor for work.	1	2	3	4	5	6	7
We do not have a good alternative to this vendor.	1	2	3	4	5	6	7
This vendor generated high work volume for us.	1	2	3	4	5	6	7
The vendor lets us know as soon as possible of any unexpected problems.	1	2	3	4	5	6	7
Based upon your past and present experience, the level of trust your organization has in its working relationship with the vendor is very high.	1	2	3	4	5	6	7
Your organization and vendor help each other in whatever way each asks.	1	2	3	4	5	6	7
Our organization's working relationship with the vendor has been a happy one.	1	2	3	4	5	6	7
We have been able to re-focus on core business.	1	2	3	4	5	6	7

Question	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
We have enhanced our IT competence.	1	2	3	4	5	6	7
We have increased access to skilled personnel.	1	2	3	4	5	6	7
We have enhanced economies of scale in human resources.	1	2	3	4	5	6	7
We have enhanced economies of scale in technological resources.	1	2	3	4	5	6	7
We have increased control of IT expenses.	1	2	3	4	5	6	7
We have reduced the risk of technological obsolescence.	1	2	3	4	5	6	7
We have increased access to key information technologies.	1	2	3	4	5	6	7
We are satisfied with our overall benefits from outsourcing.	1	2	3	4	5	6	7

Please answer “Yes” or “No” to the following question:

Question		
Does your company currently conduct the same activities conducted by this alliance in any of the following arrangements?		
• Internally	Yes	No
• Licensing	Yes	No
• Joint Venture	Yes	No
• Other types of alliances	Yes	No

Please answer the following question on a scale of one to seven, where one means “low potential” and seven means “high potential”.

Question	Low Potential						High Potential
If <u>no</u> for any, please indicate your company’s potential for using these arrangements for conducting the alliance’s activities.							
• Internally	1	2	3	4	5	6	7
• Licensing	1	2	3	4	5	6	7
• Joint Venture	1	2	3	4	5	6	7
• Other types of alliances	1	2	3	4	5	6	7

All individual company data will be kept strictly confidential.

APPENDIX C
COVER LETTER

<Company Name>
<Company Address>
<Company City, State Zip>

<Date>

Dear <Name of CIO>,

You are invited to participate in a research study on offshoring. The purpose of the study is to identify which offshoring relationship factors affect offshoring success. The enclosed survey questionnaire is being distributed to CIOs of companies included in the 2006 Fortune 500 list. It will take approximately 15 minutes or less of your time to complete this survey.

Your participation in this study is very important. The results will provide valuable information that will help identify important factors for offshoring success in the area of client-vendor relationships. In exchange for completing the survey, participants can request a complimentary executive report of the findings.

If you have any questions about this research project, please contact Jeremy St. John by telephone at [REDACTED] or by e-mail at [REDACTED]@unt.edu.

I would like to thank you in advance for your participation.

Sincerely,

Jeremy St. John
Ph.D. Student
University of North Texas

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