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December 2004

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ABSTRACT

Although the popularity of IT outsourcing has grown over the last two decades, approximately one third of outsourcing contracts are discontinued. These discontinued contracts have resulted in renegotiations with the original outsourcing vendor, switching to another vendor, and backsourcing, or the return of previously outsourced functions in-house. Four factors emerged in an investigation into the factors that may contribute to outsourcing contract discontinuations. These factors include service quality, relationship quality, satisfaction, and switching costs. Support has been found for each of these factors and a model is therefore developed to show the relationships. The resulting model should be beneficial to both outsourcing vendors and their clients. The research also answers a call from Lacity and Willcocks (2000) to investigate backsourcing.

Keywords

Outsourcing, contract discontinuations, service quality, satisfaction, relationship quality, switching costs.

INTRODUCTION

Outsourcing has become more popular in recent years due to organizations desiring to maintain more diverse and high-quality information systems. Although the popularity of IT outsourcing has grown over the last two decades, a number of outsourcing contracts have been ended. These contract discontinuations have resulted in renegotiations with the original outsourcing vendor, switching to another vendor, and backsourcing, or the return of previously outsourced functions in-house (Lacity & Willcocks, 2002).

The outsourcing literature is replete with research evaluating the determinants of information systems outsourcing, best practices, and more recently, research related to outsourcing relationships. Yet, gaps still exist in the literature. Lacity and Willcocks (2000) called for "a thorough evaluation of backsourcing." The basis for this suggestion rests in the fact that 34% of outsourcing is brought back in-house (Lacity & Willcocks, 2000) either at the end of a contract period or as a result of a cancellation of an outsourcing contract. Further, a literature review on backsourcing reveals little work has been completed in this area.

A further search for literature related to vendor switches was also proven near fruitless. These suggestions by Lacity and Willcocks (2000) and the literature gaps that exist support the need for research on contract discontinuations. The term "discontinuation" will be used in the current research to collectively describe backsourcing and vendor switches. Application development outsourcing will be defined in this context simply as the procurement of software development by a third party vendor.

CONTRIBUTIONS OF THIS RESEARCH

One important reason to pursue research in this area is based on the estimation that IT outsourcing is expected to grow to a $160 billion industry in the United States alone by 2005 (Vijayan, 2002). Given the conclusion that so many outsourcing arrangements end in discontinued contracts, it is apparent that a large amount of money is being needlessly wasted. By better understanding the factors that may lead to discontinuation, perhaps outsourcing vendors can increase the success rate of outsourcing agreements and companies can make better outsourcing decisions.

A second contribution will be the analysis of the backsourcing and switching situations. Very little has been done on backsourcing or switching; thus, this research can provide a starting point for future research in this area.

LITERATURE REVIEW AND RESEARCH HYPOTHESES

A review of the extant IT and marketing literatures was performed to find factors that may be associated with outsourcing contract discontinuations. In general, service quality, satisfaction, relationship quality, and switching costs were found and included in the research model, which proposes that the discontinuation of application development outsourcing contracts is negatively associated with these four factors.

Service Quality

Service quality can be defined as the conformance to customer requirements in the delivery of a service. It is a perceived judgment that results from comparing customer expectations with the perceived level of service customers received (Parasuraman, Zeithaml, & Berry, 1988).

A brief description of the five accepted dimensions follows.

Tangibles:	physical facilities, equipment, and appearance of personnel
Reliability:	ability to perform the promised service dependably and accurately
Responsiveness:	willingness to help customers and provide prompt service
Assurance:	knowledge and courtesy of employees and their ability to inspire trust and confidence
Empathy:	caring, individualized attention the firm provides its customers

Service quality has been shown to result in significant benefits, such as profit level increases, cost savings, and increased market share to firms (Zeithaml, Berry, & Parasuraman, 1988) as well as being considered a crucial strategy for success and survival in a competitive environment (Zeithaml, Berry, & Parasuraman, 1996). Service quality has also been shown to affect purchase intentions (Cronin & Taylor, 1992).

Research investigating the relationship of service quality to outsourcing success has been inconclusive. Grover, Cheon, and Teng (1996) concluded that service quality significantly and negatively interacted with application development outsourcing in its relationship with outsourcing success, although only two of the five constructs typically investigated were included in the instrument. McFarlan and Nolan (1995) suggest that service quality in an outsourcing relationship is positively associated with outsourcing success.

It seems that as service quality decreases, a firm is more likely to terminate an outsourcing contract. Agency theory and transaction cost theory (TCE) both provide support for this proposition as well. Agency theory predicts that as the relationship extends, the agent has the propensity to shirk responsibility and act opportunistically, which can ultimately lead to lower levels of service provided. TCE predicts that the principal will act in such a way as to minimize the costs associated with the relationship. Part of those costs to be minimized include management costs required to policing and enforcing the service quality levels. Agency theory and TCE both suggest that firms will select the governance method that will minimize costs. Thus, as service quality decreases due to shirking and opportunistic behavior, agents will be more likely to switch vendors or backsource. Hence, the following hypotheses are offered.

H_{1a}: Service quality is negatively associated with the decision to backsource an application development outsourcing contract.

H_{1b}: Service quality is negatively associated with the decision to switch vendors in an application development outsourcing contract.

Satisfaction

Information systems satisfaction has been defined as the sum of feelings resulting from users' beliefs about the extent to which an information system available to them allows them to meet their information requirements (Bailey and Pearson 1983; Ives, Olson, and Baroudi 1983). The IS outsourcing literature has yet to use satisfaction as an antecedent of consumer intent to switch vendors or backsource. User satisfaction research in the information systems environment is based on the works of Bailey and Pearson (1983) and Ives, Olson, and Baroudi (1983).

A short-form of the User Information Satisfaction (UIS) scale was developed which included three factors (Baroudi & Orlikowski, 1988).

> *EDP Staff and Services. R*espondents' assessment of the attitude and responsiveness of the EDP staff.

> *Information Product.* Respondents' assessment of the quality of output delivered.

> *Knowledge and Involvement.* Respondents' assessment of the quality of training, their understanding of the systems, and their participation in development.

Research has shown that satisfaction with a service provider has been linked to intent to repurchase or continue a relationship (Anderson & Sullivan, 1993; Ping, 1994). Results also indicate that satisfied channel members are less likely to exit a relationship (Hunt & Nevin, 1974; Ruekert & Churchill, Jr., 1984).

Agency theory and TCE can be used to assist in explaining the relationship between satisfaction and the application development outsourcing decision. Agency theory supposes that principals will shirk responsibility and act opportunistically. As this occurs, transaction costs increase and the agent is inclined to either switch vendors or backsource

It is posited that repurchase intentions can be seen as a proxy for the decision to continue with an outsourcing contract. Therefore, it is hypothesized that satisfaction will be negatively related to outsourcing customers' decisions to switch vendors or backsource applications development. Thus, the following hypotheses are offered.

H_{2a}: Satisfaction is negatively associated with the decision to backsource an application development outsourcing contract.

H_{2b}: Satisfaction is negatively associated with the decision to switch vendors in an application development outsourcing contract.

Relationship Quality

An outsourcing relationship is defined as "an ongoing linkage between an outsourcing vendor and customer that has a long-term orientation and a mutual recognition and understanding that the benefits attained by each firm are at least in part dependent on the other firm" (Goles & Chin, 2002, pg. 227). Information systems research has identified major dimensions of quality outsourcing relationships as well as a link between quality relationships and successful outsourcing arrangements (Grover, Cheon, & Teng, 1996; Kern, 1997). An investigation of the extant literature indicates trust, commitment, communication quality, cultural similarity, and balanced interdependence all positively impact the quality of the relationship (Dwyer, Schurr, & Oh, 1987; Kern, 1997).

A link between relationship quality and relationship success has been shown (Kern, 1997). Specifically related to IT outsourcing, higher quality relationships have been shown to lead to successful outsourcing, while lower quality relationships have been shown to end in discontinued contracts (Grover et al., 1996; Kern, 1997).

Agency theory and TCE can again be used to assist in the understanding of the relationship between relationship quality and the application development outsourcing decision. As transaction costs increase due to the agent behaving opportunistically and shirking responsibility, principals are more inclined to switch vendors or backsource. Lower transaction costs resulting from higher relationship quality should be associated with more successful application development outsourcing relationships. Hence, the following hypotheses are offered.

H_{3a}: Relationship quality is negatively associated with the decision to backsource an application development outsourcing contract.

H_{3b}: Relationship quality is negatively associated with the decision to switch vendors in an application development outsourcing contract.

Switching Costs

Weiss and Anderson (1992, pg. 104) define switching costs as "expenditures (more generally, disutility or difficulty) related to changing over, as opposed to the costs of operating a new system once it is established." The switching costs may deter terminating an outsourcing relationship. Research has shown that customers are even willing to stay in relationships in which they are dissatisfied due to the presence of high switching costs (Willcocks & Lacity, 1995). Dependency upon a service provider, which can be caused by many factors, can lead to relatively high switching costs and can "lock" a company into an outsourcing relationship.

As further support of the significance of switching costs, it has been shown that in environments where switching costs were not present, customers reacted by switching vendors (Heide & Weiss, 1995; Jones & Sasser, 1995). Hence, it follows that switching costs are negatively associated with the decision to switch vendors or backsource application development. The following hypotheses are thus provided.

An additional hypothesis (H_4) is offered for switching costs because it is posited that a significant difference exists between the effects of switching costs on backsourcing and switching vendors. The difference exists because backsourcing, relative to switching vendors, entails more costs due to the hiring of additional staff, infrastructure costs, and equipment.

H_4: Switching costs are negatively associated with the decision to discontinue an application development outsourcing contract.

H_{4a}: Switching costs are negatively associated with the decision to backsource an application development outsourcing contract.

H_{4b}: Switching costs are negatively associated with the decision to switch vendors in an application development outsourcing contract.

METHODOLOGY AND SCALE DEVELOPMENT

These hypotheses will be investigated with a survey-based methodology. The sample frame will include names of application development managers purchased from the Directory of Top Computer Executives. A random sample of this group will be surveyed to collect data related to relationship quality, satisfaction, service quality, and switching costs. The dependent variable will be the outsourcing decision to continue or discontinue. Logistic regression will be used in the analysis since it is designed for use with binary dependents.

Existing scales, which have previously been validated, will be utilized in the data collection. SERVQUAL will be used to measure service quality, while the UIS will be used to measure satisfaction. Relationship quality scales will be taken from Lee and Kim (1999). Finally, the switching costs scale will be derived from Jones, Mothersbaugh, and Beatty (Jones, Mothersbaugh, & Beatty, 2002).

PROPOSAL CONCLUSION

The literature review revealed that 1.) service quality in an outsourcing arrangement positively relates to outsourcing success, 2.) satisfaction with a relationship has been positively linked to repurchase intent and the continuation of a relationship, 3.) relationship quality directly affects the decision to remain in an outsourcing relationship, and 4.) firms are more likely to remain in a relationship as switching costs increase. Understanding the relationships between service quality, satisfaction, relationship quality, and switching costs as they relate to relationship duration is important in order to identify specific actions that can ultimately be used to increase customer retention and long term profitability (Bolton, 1998). Figure 1 provides the proposed research model.
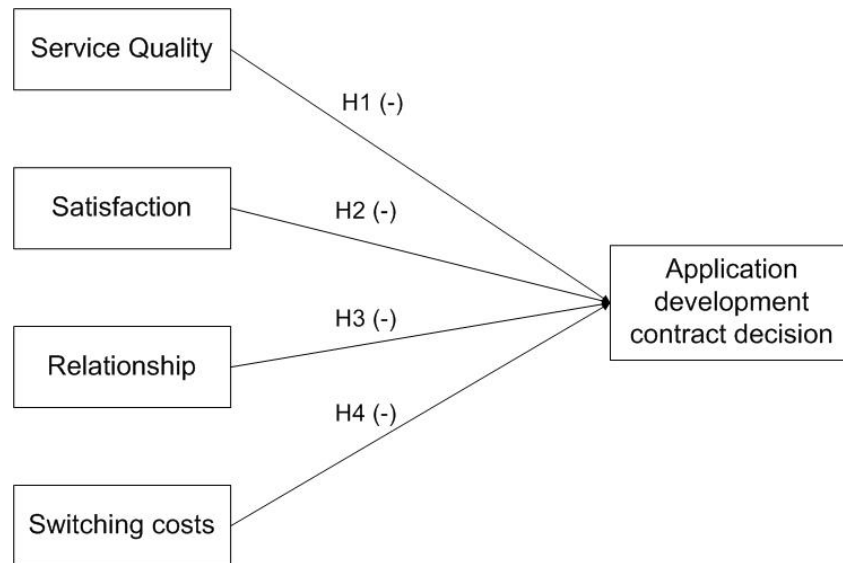
Figure 1. Proposed Research Model

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