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UNDERSTANDING THE OUTSOURCING DECISION

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Abstract

The outsourcing industry has grown rapidly. Many organizations choose outsourcing as a way to address skills shortages. This study synthesizes factors from prior outsourcing research and the Technology Acceptance Model (TAM) to develop a model of outsourcing acceptance.

TAM suggested that perceived usefulness and ease of use will mediate the effects of other variables on users' attitudes towards a technology. The model in this study suggests that perceived usefulness and risks of using outsourcing mediate the effects of the external environment and prior outsourcing relationships on outsourcing decision makers.

The study will test this model using both qualitative and quantitative approaches.

Keywords: Outsourcing, application development outsourcing, IT management

Introduction

Information technology (IT) outsourcing, the transferring of all or part of a company's IT functions to an outside party, plays an important role in the strategic arsenal of today's organization. Because it requires relinquishing control of very important functions to an external entity, choosing the appropriate functions and third party is very complicated.

One IT function outsourced is application development and maintenance (Hurley and Schaumann 1997; Saunders et al. 1997; Ketler and Willems 1999; Elmuti and Kathawala 2000). The majority of the code that companies use is no longer developed in house (McFarlan and Nolan 1995). This has been driven by the shortage and cost of necessary IT skills. Consultants, solution providers, and systems integrators (in vogue names for outsourcing vendors) offer a wide array of application development and maintenance services.

Previous Outsourcing Research

The decision to outsource is influenced by many factors. Much academic research and popular IT press has focused on what motivated companies to outsource. Many forces played motivating roles in the growth of IT outsourcing. Fundamentally the drivers are economic, technical, or strategic in nature (Lee et al. 2000).

Many agree that cost is a primary motivation (Ketler and Walstrom 1993; Borthick 1995; Hurley and Schaumann 1997; Saunders et al., 1997; Lacity and Willcocks 1998; Smith et al., 1998; Kelter and Willems 1999; Elmuti and Kathawala 2000). IT skills are in high demand and expensive. This problem is expected to amplify (Diederich 1998). Outsourcing is appealing because it is often thought less costly to hire an expert than develop one and non-permanent resources can also be more easily adjusted.

Another motivator is a renewed focus on core competencies (Hurley and Schaumann 1997; Lacity and Willcocks 1998). Others labeled this simplifying the management agenda (McFarlan and Nolan 1995; Smith, et al., 1998).

An inefficient IT organization can also motivate the use of outsourcing. Many companies outsource to address problems such as unavailable in-house skills (Borthick 1995; McFarlan and Nolan 1995; Smith et al., 1996; Hurley and Schaumann 1997;

Saunders, et al., 1997; Ketler and Willems 1999), poor quality or low productivity (Borthick 1995; McFarlan and Nolan 1995; Hurley and Schaumann 1997; Lacity and Willcocks 1998; Elmuti and Kathawala 2000), temporary shifts in demand for skills (Ketler and Walstrom 1993; Ketler and Willems 1999), or long development life cycles. (McFarlan and Nolan 1995; Elmuti and Kathawala 2000)

A more recent trend in outsourcing research is a focus on the importance of the client supplier relationship (Lee et al. 2000). The relationship between the firm and the vendor has become more tightly coupled (Lee et al. 2000). Relationships that are partnerships (Saunders et al. 1997; Yesulatitus 1997; Gupta and Raval 1999) and have long term possibilities (Rao and Chaudhury 1996; Shepard 1999) are more appropriate. Some outsourcing arrangements are formed as strategic alliances with deep levels of interdependence (Lacity and Willcocks 1998).

The purpose of this research is to understand decisions about outsourcing application development and maintenance. It has been suggested that prior research has overlooked the fact that many outsourcing decisions are based on prior outsourcing engagements (Rao and Chaudhury 1996; Lee et al. 2000) and not independent decisions. Also, little research has directly focused on how a firm's external environment influences decisions to outsource. Hence, this study will try and answer the following research questions

- How do prior outsourcing vendor relationships influence an organizations' decision to outsource application development?
- How does an organization's external environment influence the decision to outsource application development?

A Model of the Outsourcing Decision

Past research has overlooked is the perception of the decision maker. A decision maker positively inclined towards outsourcing is more likely to do it. The widely accepted Technology Acceptance Model (TAM) uses individual perception constructs to predict user acceptance of technology (Davis 1989; Davis et al. 1989). Studies suggest that TAM's usefulness dimension applies to more than end users and software. It is equally applicable to other professional users and the use of technologies as well as approaches such as object-oriented analysis (Agarwal et al. 2000).

It may also be applicable to decision makers and their acceptance of outsourcing. Figure 1 contains a model of outsourcing acceptance. The model is based on TAM and prior outsourcing research. It posits that attitudes towards outsourcing are mediated by the decision maker's perception of its usefulness and risk. The extent that the outsourcing decision maker perceives outsourcing as useful and low risk, will affect their attitude about and intention to use outsourcing.

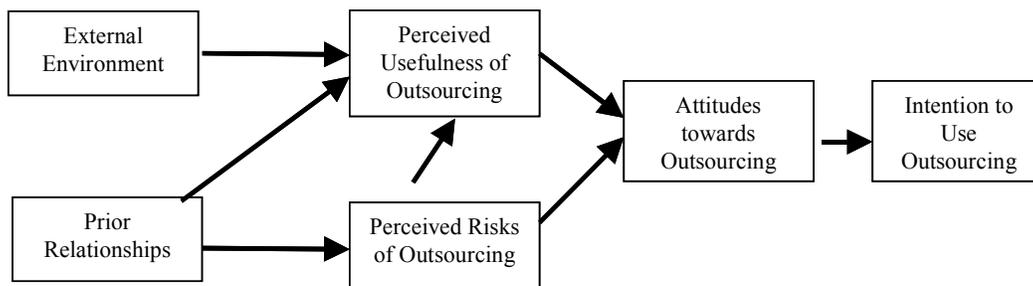


Figure 1: Model of Outsourcing Acceptance

TAM theorized that behavioral intention to use an IT is determined by beliefs about the perceived usefulness and perceived ease of use of that technology. Perceived usefulness mediates the effects of external variables on intention to use. Similarly, the perceived usefulness of outsourcing should mediate the effect of external variables on the decision maker's intention to use outsourcing.

TAM also posited that perceived ease of use influences perceived usefulness and the intention to use the technology. Within the context of outsourcing application development, ease of use can be thought of as the risks of using outsourcing.

Risk has been identified as an important factor in the outsourcing decision (Kettler and Willems, 1998). IS managers may think outsourcing reduces risk because they lack the necessary expertise in house. However, it also introduces risks because elements of control are relinquished to outside organizations. Decision makers perceive risks as more important when they lack control over them (Kyle et al. 1998). Hence, the perception of risk of outsourcing may affect the perceived usefulness of and attitudes toward outsourcing.

Factors in the firm's industry have been found to influence outsourcing decisions. For example, the decision maker may view outsourcing as an irreversible trend in their industry (Lacity and Willcocks 1998) and necessary remain competitive. Slaughter and Ang (1996) suggested that dynamic, competitive, or uncertain environments lead firms to focus on core competencies and outsource others. The model also posits that the external environment influences the perceived usefulness of outsourcing. Prior outsourcing engagements or other interactions with outsourcing vendors should affect both the perception of risk and the perception of usefulness of outsourcing. Hence, the model posits that prior relationships also affect perceptions of outsourcing.

Methodology

The model in this study is based on prior research. The study will employ both qualitative and quantitative methods to support or reject the model. Structured interviews are being conducted with senior IT executives from six to ten companies. These discussions focus initially on all issues that influenced application development outsourcing decisions made by these executives. This will identify any additional factors not covered in the model. Following and based on these initial discussions, questions will address the influence of the external environment, prior relationships, and perceived risk in these same decisions.

Additionally, a quantitative instrument based on prior research and the results of the structured interviews to test the model. The survey will be sent to a random sample of 1000 senior IT managers. Confirmatory factor analysis and structured equation modeling will be employed to verify the instrument and test the model.

Contributions

This research will potentially contribute in many ways, based on its findings. However, two contributions visible now are a new model based on a combination of factors from prior outsourcing research and the TAM model. This provides a new way of thinking about outsourcing decision-making and should provide a basis for further study.

Secondly, very little outsourcing research has been done with quantitative methods. Most studies have been qualitative case study research. This will be one of the first qualitative studies of the factors influencing outsourcing decisions.

References

Available from the authors upon request.