The impact of switching costs on the decision to retain or replace IT outsourcing vendors

Sean van Deventer
Business Information Systems
Auckland University of Technology
Auckland, New Zealand
Email: MSP5981@AUT.ac.nz

Harminder Singh
Business Information Systems
Auckland University of Technology
Auckland, New Zealand
Email: harminder.singh@aut.ac.nz

ABSTRACT

While the IT outsourcing market is growing, outsourcing vendors are being replaced more frequently by firms. Since replacing vendors can affect the stability and quality of the IT services a firm receives, it is important to understand the drivers behind the decision to replace/retain vendors. This paper examines the impact of switching costs on this decision. We classify the various examples of switching costs into three categories (relational, financial and procedural) and develop a model to explain their role in the decision to replace or retain a vendor. The model also includes possible moderators of the relationship between switching costs and the vendor replacement decision. This model will be evaluated through a series of case studies of firms who have made this decision, and the refined model will be tested with a survey of IT outsourcing managers.

KEYWORDS
Switching Costs, Switching Decision, Outsourcing, Backsourcing, Vendor

INTRODUCTION

The information technology (IT) outsourcing market has grown tremendously in the past three decades, from an estimated $100 billion in revenue in 1998 to $152 billion in 2005 and $313 billion in 2011, an annual growth rate of 12.2% (Dibbern et al, 2004; Britz et al, 2012). However, up to 50% of these IT outsourcing contracts are discontinued and the vendors replaced, either with other vendors or by internal staff (“backsourcing”) (Lacity and Willcocks, 2001; Whitten & Leidner, 2006). Vendor replacement usually occurs when vendors fail to deliver the expected savings or perform below the required standard (Peukert, 2010). Vendor replacement is becoming more common in IT outsourcing (Chua et al, 2008), even though it can be an expensive exercise, since IT outsourcing contracts constitute more than 80% of the IT budget (Whitten & Leidner, 2006). Replacing a vendor can be a potentially expensive exercise (Suang et al, 2009), and the table below provides examples of the costs that firms incurred when they terminated outsourcing contracts.

<table>
<thead>
<tr>
<th>Company</th>
<th>Value</th>
<th>Vendor</th>
<th>Termination Fee</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essex Council</td>
<td>$200mil</td>
<td>BT</td>
<td>10s of mil of dollars</td>
<td>Simons, 2009</td>
</tr>
<tr>
<td>Sears</td>
<td>$1.6bil</td>
<td>CSC</td>
<td>$90mil +</td>
<td>Sliwa, 2005</td>
</tr>
<tr>
<td>Diebold</td>
<td>10s of mil of $</td>
<td>Deloitte</td>
<td>$7mil +</td>
<td>Cooney, 2006</td>
</tr>
<tr>
<td>Bank of Scotland</td>
<td>$700mil</td>
<td>IBM</td>
<td>$50mil +</td>
<td>Computerweekly, Aug 2002</td>
</tr>
<tr>
<td>Oxford Health</td>
<td>$330mil</td>
<td>CSC</td>
<td>$10mil +</td>
<td>Computerweekly, May 2002</td>
</tr>
<tr>
<td>Sainsbury</td>
<td>$1.7bil</td>
<td>Accenture</td>
<td>$260mil +</td>
<td>Rohde, 2004</td>
</tr>
<tr>
<td>Cable &amp; Wireless</td>
<td>£1.7bil</td>
<td>IBM</td>
<td>10s of mil of pounds</td>
<td>Adshead, 2003</td>
</tr>
<tr>
<td>Bedfordshire council</td>
<td>£270mil</td>
<td>HBS</td>
<td>£7.7</td>
<td>Computerweekly, Sep 2005</td>
</tr>
</tbody>
</table>

Customers replace their IT vendors for a number of reasons, such as: a) a need for additional services or an increase in their scale of operations, which their vendor is unable to support; b) discovering alternative vendors
(i.e. competitors of their current vendor); c) the failure of the vendor to meet their performance expectations; and d) a desire to rationalise the number of vendors they use to minimise management overhead (Whitten et al., 2010). At the same time, replacing vendors also introduces certain risks, such as business disruption, difficulties with knowledge transfer from the previous to the new vendor, extracting tacit knowledge from the previous vendor’s staff, and realigning organisational processes that have been structured to meet the previous vendor’s requirements (Thomas & Nandakumar, 2006).

These costs can be framed under the concept of switching costs (Whitten & Wakefield, 2006). In the outsourcing context, switching costs are the costs incurred when firms change their vendors (Whitten & Wakefield, 2006; Whitten et al, 2010). They are a disutility that customers would rather avoid (Molina-Castillo et al, 2012). Despite the frequency of vendor replacement (Lacity and Willcocks, 2001; Whitten & Leidner, 2006), few studies have investigated the size and nature of the switching costs that firms incur when they replace their vendors. This may be due to the difficulty in identifying switching costs (Carlsson & Lofgren, 2006). Chen and Forman (2006) suggest that research on the switching decision and the barriers to switching vendors is too limited to help practitioners make informed switching decisions.

More broadly, little information is available on the issues that lead to the termination of IT outsourcing agreements (Chandrasekaran et al, 2007) and the IT vendor replacement decision (Whitten, 2009). This study proposes to provide some insight on the issues in this domain by examining the costs involved in replacing a vendor, and the impact of these costs on the decision to replace/retain a vendor. Switching vendors can take anywhere from eight to 18 months in large organisations (Barthelemy, 2004), and a better understanding of the barriers organisations face in this process will help to alleviate the uncertainty they face (Molina-Castillo, 2012).

The next section provides an overview of the context and describes the conceptual model. This is followed by a review of the literature on switching costs and a description of the costs that are relevant in IT outsourcing. The paper concludes with the details of the planned methodology and an enumeration of the study’s contributions and limitations.

THEORETICAL DEVELOPMENT

When firms outsource their IT operations and commit to a certain vendor, they will incur a variety of costs if they decide to change their vendor/s (Molina-Castillo, 2012). Examples of these costs include search costs, uncertainty costs, setup costs, and post-switching behavioural and cognitive costs (Molina-Castillo, 2012; Whitten, 2009). Most of these costs, such as the costs of knowledge transition and business disruption, are one-off losses, incurred when the organisation switches from one supplier to another (Burnham et al, 2003). Tangibility is another dimension on which these costs differ, with some of them being fairly easily measurable and apparent, such as set-up costs, while others, such as knowledge loss, are much harder to ascertain.

High switching costs make customers more inclined to stay in a relationship with a vendor, even if they are dissatisfied (Monilla-Castillo et al, 2012), rather than change to other vendors (Bell et al., 2005). When these costs are absent, customers are more likely to switch vendors (Jones et al, 2007). Being aware of this has led to vendors building exit barriers into their contracts and managing their customers’ perception of value so as to strategically bind their customers into the engagement (Lui, 2006). Enhancing a customer’s perception of high switching costs has proven to be a beneficial strategy to retain customers.

Vendors utilise certain tactics to create switching costs. For example, they can install propriety hardware and software on their customers’ systems that would be useless if the relationship is terminated. However, many vendors lack the knowledge and skill to lock their customers in with such “hard assets”. As a consequence, they often rely on other tactics such as their relationships to create switching costs. “Soft assets” such as relationships can be used to heighten the perception of switching costs by emphasising the procedural and relational investments incurred in building these assets. These costs are based on the customer’s reluctance to learn new procedures and build new relationships, and can prevent a customer from looking for a new vendor. (Lui, 2006)

Switching costs have been studied in various contexts, such as banking (Lodge, 2011; Tesform & Birch, 2011) airlines (Carlsson and Lofgren, 2006), electricity generation (Salies, 2005), and credit markets (Barone et al, 2011). However, most of this work has focused on individual-level switching costs, and relatively little work has examined these costs from the organisational perspective. This is true even in the context of IT outsourcing (Whitten et al, 2010), where there is high potential for vendor lock-in (Thomas & Nandakumar, 2006).
Research Framework

Switching costs can be categorised in different ways: transactional, learning and pecuniary costs (Klemperer, 2005); economic, relational or psychological costs (Whitten & Wakefield, 2006); or procedural, financial and relational costs (Burnham et al, 2003). These categories point to the sources of switching costs: organisational governance arrangements, social relationships, and the process of switching itself. We draw on transaction cost theory (TCT) and social exchange theory (SET) to explore these sources in more detail.

Transaction costs theory (TCT)

Transaction costs are all of the costs related to the search, creation, negotiation, monitoring and enforcement activities surrounding contracts (Alagheband et al, 2008; Subhankar & Balakrishnan, 2006). TCT is relevant for intra-organisational and inter-organisational transactions (i.e. transacting between customer and vendor) and provides one theoretical platform for understanding the switching costs which are incurred when an organisation replaces its vendor (Whitten et al, 2010). It also focuses on the management of operational costs associated with the exchange of services and suggests that IT operation costs are a string of transaction costs (Whitten et al, 2010).

TCT rests on two basic assumptions (Williamson, 1985). The first is bounded rationality, which refers to the inability of the human mind to completely evaluate all of the consequences for all decisions, and to fully grasp the entire range of possibilities. In the context of IT outsourcing, this issue comes into play in terms of an organisation’s knowledge and skills in identifying its outsourcing requirements, selecting vendors, and managing relationships. The second is opportunism, which posits that individuals act in self-interest and act with slyness. This is particularly critical in situations of vulnerability, such as the willingness of IT vendors to lie about or overstate their capabilities, knowledge, and staff competence (Bahli & Rivard, 2003).

Thus, transaction costs are an integral issue in outsourcing arrangements and influence the governance structure of such contracts. For example, the higher the transaction costs of outsourcing a particular process, the more likely it will be that a firm will seek a long-term relationship with a vendor to manage it. This will enable the firm to lock in the vendor and lower the costs it will incur when looking for a new vendor. Such long-term relationships in turn provide vendors with an opportunity to manipulate their customers’ perception of the level of switching costs, so as to increase their relative value compared to their rivals. In this way and others, transaction costs drive the existence and persistence of switching costs.

Social exchange theory (SET)

SET aims to understand human behaviour during economic interactions. It suggests that social interaction is an exchange of intangible or tangible acts, particularly in the form of benefits or costs. It incorporates unspecified personal obligations, intrinsic rewards, and is the middle ground between pure calculation and pure love. Furthermore, SET suggests that social relationships revolve around intimacy, self-interest, cost-benefit calculations and disinterest (Lee et al, 2010).

It relies on two assumptions. The first is that both parties aim to receive mutual benefit from their relationship, which they will not be able to obtain on their own. The second assumption is that relationship evaluation is based on relationship growth and maintenance. Both of these assumptions are relevant in IT outsourcing relationships (Lee et al, 2010), which are ideally built on the basis of mutual benefit and require continued attention on enhancing their quality. The exchange in question is usually something that neither party can accomplish by itself, and if the initial act is discontinued, the benefits from the exchange will also cease (Lee et al, 2010).

SET suggests that successful long-term relationships rely heavily on social exchange behaviours, such as commitment, equity, trust, and conflict (Ural, 2007). At the same time, these behaviours are the basis of the relational switching costs that arise when inter-organisational relationships are formed. Even though an outsourcing arrangement with a particular vendor may feature successful interpersonal relationships, an organisation may still need to re-contract with other vendors for other reasons, such as a skill mismatch, an inability to provide qualified resources, or a change in firm requirements. The challenge in such situations is that the existing relationships between the staff of the vendor and client may act as an impediment when the client is looking for a new service provider. Understanding such scenarios may require the unpacking of the arrangement to clarify the different levels (organisational vs. individual, client vs. vendor) at which benefits and costs are being obtained or borne.

Review of Switching Costs

Next, the literature on switching costs and vendor replacement/retention was reviewed to identify specific examples of switching costs that would be relevant in the context of IT outsourcing. The studies that were found
took place in various industries and at both individual and organizational levels. The switching costs that were identified were derived from two categories of studies:

1. Studies that specifically identified switching costs, and
2. Studies that did not specifically identify switching costs but described other types of costs that met the definition of switching costs, based on the discussion of TCT and SET in the previous section.

The synthesis of existing literature suggested that extensive research on switching costs within the context of IT outsourcing is required in order to facilitate a better understanding of switching barriers and by doing so, alleviate the uncertainty associated with vendor switching, possibly reducing future switching costs (Molina-Catillo, 2012). Furthermore, insight from the literature review identifies the difficulty of identifying switching costs as a core reason for the lack of research into this phenomenon (Carlsson & Lofgren, 2006).

Aggregating these costs provides an opportunity to contribute to the academic literature on IT outsourcing, since the literature does not include such a list currently. This list is also helpful for IS practitioners responsible for managing outsourcing relationships and contracts (Whitten & Wakefield, 2006). Table 1 (below) summarises the findings and classifies them into three categories, based on the work of Burnham, Frels, and Mahajan (2003). They suggested that switching costs can be divided into: procedural (psychological), financial (monetary) and relational (relationship) costs (Burnham et al, 2003; Barroso et al, 2012). Financial and relational costs drive value in service relationships (Jones et al, 2002) and are associated with value improvement (Reynolds & Beatty, 1999), while procedural switching costs are viewed as compulsory and can cause customers to feel like prisoners in their relationships (Sharma & Patterson, 2000).

Table 2. Categories of switching costs

<table>
<thead>
<tr>
<th>Procedural Switching Costs</th>
<th>Financial Switching Costs</th>
<th>Relational Switching Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frustration cost</td>
<td>Loss of financial benefit</td>
<td>Loss of identify cost</td>
</tr>
<tr>
<td>Dissatisfaction cost</td>
<td>Contract termination cost</td>
<td>Brand name cost</td>
</tr>
<tr>
<td>Risk cost</td>
<td>Search and Evaluation cost</td>
<td>Brand name specificity</td>
</tr>
<tr>
<td>Uncertainty cost</td>
<td>Negotiation and enforcement cost</td>
<td>Reputation cost</td>
</tr>
<tr>
<td>Inconvenience cost</td>
<td>Site specificity cost</td>
<td>Lost performance cost</td>
</tr>
<tr>
<td>Anxiety cost</td>
<td>Setup cost</td>
<td>Continuity cost</td>
</tr>
<tr>
<td>Learning cost</td>
<td>Learning cost</td>
<td>Relatedness cost</td>
</tr>
<tr>
<td>Setup learning cost</td>
<td>Strategic realignment cost</td>
<td>Indirect relationship cost</td>
</tr>
<tr>
<td>Strategic realignment cost</td>
<td>Reconfiguration cost</td>
<td>Stakeholder cost</td>
</tr>
<tr>
<td>Reconfiguration cost</td>
<td>Search and Evaluation cost</td>
<td>Clan mechanism</td>
</tr>
<tr>
<td>Search and Evaluation cost</td>
<td>Negotiation and enforcement cost</td>
<td>Trust cost</td>
</tr>
<tr>
<td>Relationship establishment cost</td>
<td>Relationship establishment cost</td>
<td>Commitment cost</td>
</tr>
<tr>
<td>Adjustment cost</td>
<td>Adjustment cost</td>
<td>Dependence cost</td>
</tr>
<tr>
<td>Knowledge transfer cost</td>
<td>Knowledge transfer cost</td>
<td>Alliance cost</td>
</tr>
<tr>
<td>Transition cost</td>
<td>Transition cost</td>
<td>Organisation alignment cost</td>
</tr>
<tr>
<td>Business disruption cost</td>
<td>Business disruption cost</td>
<td>Loss of control</td>
</tr>
<tr>
<td>Organisational alignment cost</td>
<td>Organisational alignment cost</td>
<td>Relationship establishment</td>
</tr>
<tr>
<td>Intangible asset specificity</td>
<td>Intangible asset specificity</td>
<td>Expectation cost</td>
</tr>
<tr>
<td>Sunk cost</td>
<td>Sunk cost</td>
<td>Equity cost</td>
</tr>
</tbody>
</table>

Procedural Switching Costs

Procedural costs are the most conventional way of looking at switching costs (Jones et al, 2002). They are mainly the perception of future expenditures in the form of time, psychical and mental effort, and hassle (Jones et al, 2007; Burnham et al, 2003) and are also known as information costs (Barroso et al, 2012). These are the psychological costs associated with replacing a vendor and can include perceived feelings of frustration, dissatisfaction, risk, uncertainty, inconvenience, and anxiety (Barroso et al, 2012). These costs include learning costs (Aydin et al, 2005), search and evaluation costs (Lee et al, 2001), adaptation costs (Kim et al, 2004; Whitten & Wakefield, 2006), economic risk costs (Jones et al, 2002), and set-up costs (Guiltinan, 1989). A list of 20 procedural switching costs was identified, but due to the space restriction, we can only discuss frustration costs in this paper.

Switching vendors can be a very difficult task and the amount of effort associated with these activities is large. The perceived frustration could stem from the imagination of possible future scenarios and can be amplified by past vendor switching experiences. Frustration can be experienced by both the management and employees of client firms (Barroso et al, 2012). Frustration costs can be a mirror of past experience when the current vendor was introduced or a perception of possible frustration that could occur when the current vendor is replaced.
Financial Switching Costs

These are the tangible, financially-quantifiable costs (Burnham et al, 2003), which can influence the replace/retain decision (Barroso et al, 2012). The literature lists eighteen financial switching costs (Table 2) but due to limitations on the length of this paper, only one example will be discussed here.

One example of a financial switching cost is the loss of financial benefit. A contractual relationship between a customer and their vendor often yield financial benefits for the customer. When this relationship is terminated, the customer loses these benefits (Barroso et al, 2012). Examples of such financial benefits include discounts, special rates, foregone commissions, and benefits from loyalty schemes (Barroso et al, 2012; Patterson & Smith, 2003; Kim et al, 2004; Guiltinan, 1989). These benefits are related to the services the vendor is contracted to deliver and this increases the customer’s desire to continue with the relationship. (Beatty et al, 1996)

Relational Switching Costs

These costs are derived from personal relationships. Customers enter into long-term relationships with their vendors through a psychological contract in addition to the explicit contract (Booker & Sixsmith, 2010). When this relationship is terminated, psychological or emotional discomfort can occur due to a change in identity, discontinuation of a relationship, and breaking of affectionate bonds between customer and vendor employees (Burnham et al, 2003; Patterson & Smith, 2003). 19 relational switching costs have been identified in the literature (Table 1), with one example being the loss of identity. When a business relationship is discontinued, the bonds between vendor and customer co-workers, who may possibly be friends, are broken. When these bonds are broken, unfamiliar territory is entered into and a loss of identity is experienced (Guiltinan, 1989). This cannot be immediately rectified by the new vendor. During the time it takes the new relationships to form, emotional and psychological discomfort will be felt (Burnham et al, 2003). These personal relationships between the client’s employees and the vendor’s staff can also affect the cost of transferring knowledge from the current to the new vendor (Burnham et al, 2003).

CONCEPTUAL MODEL

Figure 1 depicts the conceptual model for this study. It shows that while firms may be motivated to replace their IT vendors because of a range of factors, they may be held back by the switching costs that they may face. The diagram also highlights possible factors that may moderate the impact of these costs on the decision, such as personal relationships, cultural preferences, and strategic goals. Once a firm decides that it wants to replace its vendor, it has to make a further decision as to whether it should switch to a different vendor or backsource its IT services. This study focuses on the initial replace/retain decision, not the secondary decision, leaving the latter for future extensions of this research.

The literature has examined closely the factors that motivate organisations to change their vendors, as listed in Figure 1. In contrast to these “push factors”, less work has been done on examining the impact of the switching costs described in the previous section, and the relative influence of the three categories of switching costs. We posit that the impact of these costs on an organisation’s eventual decision may be moderated by various factors, such as:

a) Cultural fit: The initiation, improvement and maintenance of relationships is valued differently across cultures. Thus, it is possible that cultures that value relationships more highly would heighten the influence of switching costs on the decision to replace/retain the vendor (Lee et al, 2010).
b) **Strategic Mismatch**: Replacing a vendor has strategic implications and can require changes to an organization’s strategy. For example, its strategy might be built around a proprietary technology that the current vendor uses to manage operations, which cannot be reused if the relationship is terminated. The strategy might also rely on future technical improvements which are already in development. It could include a 5- or 10-year strategic roadmap to innovatively enhance the IT landscape to better suit the needs of customers, as well as lower costs and improve operational performance (Whitten & Wakefield, 2006). The implication of these issues is that switching costs may be seen to be significantly more important because of the amount of effort that had been spent on the planning and implementation of the firm’s strategy. Furthermore, vendors may create switching costs to highlight their association with a customer’s strategy and ability to create value, especially in relation to other vendors. Economic value is of strategic importance to the customer, and higher perceived economic value makes switching costs more prominent (Liu, 2006).

**PROPOSED METHODOLOGY**

This study employs a positivist approach and uses a multi-method data gathering technique. Both qualitative (case study) and quantitative (survey) approaches are used. The case for combining qualitative and quantitative research methods is strong and it focuses on how the qualitative method can complement the quantitative method (Gable, 1994).

**Case Study**

Case studies are useful when trying to understand a complex issue and are robust enough to be used across a number of industries and disciplines (Zainal, 2007). This report will use an explanatory method which is regarded as excellent method for in-depth investigation (Yin, 2003) of IT organisations (Darke et al, 1998). An explanatory case study investigates data from a holistic and in-depth level would facilitate the process of understanding the phenomenon at hand (Zainal, 2007). The case studies will be conducted by utilizing narrative inquiry based on McCracken’s Long Interview technique and will be in a semi-structured fashion. This technique allows participants to reflect upon discussion in a comfortable and holistic manner. The narrative inquiry allows the participants to tell their own story and has been used in IS research previously (Tan & Hunter, 2002). The case studies will be conducted with organisations which have switched IT vendors, back-sourced or continued with their current vendor. They will be asked about the switching costs they considered and the impact of these costs on their decision to retain or replace their IT vendors. Each case study will include multiple interviews with IT managers, IT department heads, and chief information officers.

**Survey**

The results from the case studies will be used to evaluate the conceptual model, and after it has been refined, it will be tested with a wider sample of organisations via a survey. This survey will be made up of both existing instruments as well as new or adapted constructs.

**CONCLUSION**

This study aims to contribute to the literature in the following ways:

1. Clarify the switching costs that are relevant to organisations engaged in IT outsourcing;
2. Identify the impact of these switching costs on the decision to retain or replace IT vendors, and
3. Specify the cultural and strategic factors that may moderate the impact of switching costs on the decision to retain or replace IT vendors.

This study will benefit IT practitioners by:

1. Detailing the switching costs they will face if they decide to change their IT outsourcing vendor;
2. Producing a model to clarify the IT vendor management process for managers, and
3. Demonstrating how learning can expedite their IT vendor management function.

Although the study focuses on information technology outsourcing, the findings may be relevant for the outsourcing of other knowledge-centric functions, business process outsourcing, payroll outsourcing, project outsourcing, legal services, and project management. The study’s findings may also be useful for longer term IT planning, as they will clarify the intangible costs that should be taken into account when firms consider future business relationships. A possible avenue for extending the study would be align it with research on the decisions of IT managers to escalate or de-escalate their commitment to vendors when their projects are not doing well (Keil, 1995; Pan, Pan & Flynn, 2004; Staw, 1976). Research in this field provides a variety of
individual-level explanations for the phenomenon, such as loss aversion, self-justification, and impression management, and it is worth examining the extent to which such individual attributes interact with various combinations of switching costs to influence vendor replacement/retention decisions.

REFERENCES


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