

ANALYZING VARIOUS ASPECTS CONSIDERING RISK IN IT OUTSOURCING

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Paper Received: 05.07.2020 / **Paper Accepted:** 06.08.2020 / **Paper Published:** 07.08.2020

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Abstract

For more than ten years, experts in the field and academia have discussed the dangers of outsourcing IT. These can have both immediate, local implications (such as failing to implement a scheduled desktop upgrade, for example), as well as future, longer-term adverse impacts on organisational performance. Their size and influence on the organisation will vary. Service degradation, which has an impact on how well an organisation performs; Organisational disruption as well as additional costs associated with poor transition; risks related to the vendor, such as the vendor overstating its capabilities, the vendor heading towards of business or leaving that market, the vendor not safeguarding records, the vendor being unresponsive; and "lock in" (in which the purchaser possesses no choice). Inflexibility (caused by contractual restrictions or prohibitively expensive amendment costs); Diversion of managerial focus and funds (keep away from core business); Downstream organisational declines (loss of skills as well as tacit knowledge - and the ability to exploit IT as a business advantage; diminished innovative capacity; lack of intellectual property); Impacts on competitive edge.

Keywords: Risk, Uncertainty, IT, Outsourcing.

Introduction

These findings prompted us to shift the focus from efficiency to risk minimization when deciding which services to outsource. The advantages of IT outsourcing, including organisational agility and adaptability, cost savings, and the ability to focus attention and resources on core strengths, are often advertised by vendors and consultants who frequently make significant amounts of money from outsourcing. Researchers and academics are typically the ones who discuss dangers and drawbacks. But the interaction between benefits and dangers determines which tasks to outsource as well as which to keep in-house. The numerous risks must be compared to the expected outsourcing advantages for each possible outsourcing contract.

Both possible rewards and hazards are probabilistic, and this is where there is a problem: if decision-makers are given inaccurate information about the likelihood of either positive outcomes or negative ones, their balancing of the pros and cons will be flawed. A key component of risk management is estimating probabilities including the adverse effects of a choice, but it is less typical to take into account the probabilities of attaining benefits (or, conversely, for failing to do so). Since most outsourcing study has been conducted using statistically unrepresentative case studies, the literature on outsourcing is characterised by a paucity of probabilistic study on the scope of hazards. Although a lot of these cases had subpar results from outsourcing, due to their singularity they cannot be used to estimate the scope of dangers in the larger community.

The same applies to the amount of promised gains that do not materialise; nonetheless, the recent crop of studies documenting widespread discontent regarding IT outsourcing provide proof that this failure is frequent. The failure to obtain promised advantages is significant given the significant work needed to analyse and properly prepare for IT outsourcing, as the resources allocated to outsourcing entail a significant opportunity cost. Consequently, a substantial risk linked with the undertaking is the degree to which anticipated benefits do not materialise.

Review of Literature

Chang & other (2012)[1] Despite the fact that there have been numerous studies on the outsourcing process, none have specifically addressed the issue of how SMEs should evaluate and choose their outsourcer. Outsourcing is crucial in highly diversified company environments. If SMEs could properly choose their IT/IS outsourcer with the use of evaluation models, they may reap a variety of benefits. By avoiding biases brought on by selection through objective analysis, a more precise and impartial choice might be achieved. We looked into the Taiwanese IT/IS outsourcing provider selection procedure for a business. The AHP is used in our suggested procedure to quantitatively sort the criteria. Based on the demands of the SME, an evaluation model was created. The SME should use it to find an improved outsourcing provider thanks to increased information necessary to sustain outsourcing efficiency. The adoption of our methodology should lower the costs and potential hazards associated with implementing innovative

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IT/IS applications and encourage the use of a neutral yardstick for assessing IT/IS outsourcing companies.

Reyes (2006) [2] One of the tactics used by organisations to handle their IS is outsourcing. The amount of literature dedicated to outsourcing has increased over the past few decades as a result of its adoption. Therefore, we made the decision to conduct a literature review in order to identify the key themes, the methodologies that were most frequently used, as well as the authors and nations that had made the most contributions to the field of IS outsourcing. We also sought to make recommendations for enhancing this field of research. This review of papers regarding IS outsourcing from the most esteemed journals in the IS field and from journals like management or business is included in the paper.

Mary (2009) [14] This study evaluates research papers on the practise of information technology outsourcing (ITO) and offers convincing evidence that researchers have substantively and significantly responded to the need for academics to create knowledge useful to practitioners. We extract the practice-relevant findings for six important ITO problems from an analysis over 191 IT outsourcing articles. The first three issues, which date back to the early 1990s, centre on managing IT outsourcing risks, IT outsourcing tactics, and determining factors that influence IT outsourcing. Relationship management has been shown to have been a persistent and difficult issue over the course of the nearly 20 years under investigation, while an emphasis on best practises and client & supplier skills emerged beginning in the mid-1990s & was tracked up to the late 2000s. Recent research has focused on business process outsourcing, offshore outsourcing, and the emergence, demise, and resurgence of application service provision. The report ends by outlining upcoming difficulties and advancements.

Risk Components

Our focus group interviews' analysis revealed that three crucial factors either made it more likely that bad things would happen or less likely that outsourcing would produce the benefits anticipated. These resemble the attributes listed in the 1970s and 1980s Transaction Cost literature.

1. Uncertainty level
2. Complexity
3. Possibility of acting opportunistically

1. Uncertainty level

Managers must examine various cost streams for services that may be provided in the future while making sourcing decisions, which inherently include a great deal of uncertainty. In order to

come to an agreement on an exchange that will satisfy both parties, the vendor and the customer must attempt to forecast what will happen over the course of the contract (and beyond). Our research, however, show that the levels of uncertainty associated with the outsourcing of IT services are significantly higher than for other services presented as examples of successful outsourcing, such as cleaning, catering, or garbage collection. However, benefit/cost calculations hardly ever take this uncertainty into account.

The economic justifications for outsourcing IT make the assumption that both the buyer and the provider can predict, codify, and estimate the cost of the services that the buyer will need during the course of the agreement. Assuming that these forecasts are reasonably accurate, "best practise" counsel necessitates a specific contract that outlines the services, costs, and penalties that will apply over the next few years. To the extent that this idealised scenario can be roughly approximated, choosing a course of action involves contrasting the cash flows over time of various service delivery options. However, according to our research, even in a situation of relative predictability, these comparisons are difficult since they require a high degree of uncertainty when taking into account concerns with expected quantities, timing, and even taxation treatment. Our review of the Federal Government's outsourcing experiences showed that business case estimates of the savings obtained by outsourcing IT might be 100% overestimated, even when thorough financial analysis is done. Projects involving benefits and costs may be further hampered by problems with legal and tax interpretation.

Our case studies also show that a complicated, detailed contract reduced organisational flexibility and significantly raised the level of managerial oversight required to manage the outsourcing relationship in circumstances with only modest uncertainty. Many line managers in Federal Government agencies discovered that outsourcing was a major distraction that forced them to pay attention to problems that were previously handled without difficulty thanks to common understandings with their internal delivery function, rather than allowing them to focus on their core business. They are not alone; less than 40% of the 240 Australian companies we studied said that outsourcing allowed them to focus more on their core competencies, despite the fact that this benefit is marketed as the most alluring for outsourcing.

The success of outsourcing services depends on how well decision-makers are able to predict and articulate the necessary services, volumes, and

delivery costs. However, our informants admitted that they often struggled to predict these factors with any degree of accuracy.

2. Complexity

Complex activities are challenging to understand due to the sheer amount of components involved, which can lead to errors if techniques for managing complexity are ineffective. This finding serves as the foundation for processes that increase systems development performance via project oversight and oversight of details, as well as tactics like breaking down outsourcing agreements into compact, manageable subprojects that are simpler to assess and manage. But even with intricate, highly organised outsourcing projects, we saw mistakes and issues. The combinatorial expansion of these possible relationships can swiftly transform minor individual risks into massive compound risks in complicated scenarios. Instead of simply accruing, risk is amplified.

3. Possibility of acting opportunistically

Self-seeking combined with dishonesty (or guile) has been described as opportunistic behaviour. When one party uses information that the other party does not possess, or the other party's rigidity or fragility, for its own purposes, it is known as outsourcing. The likelihood of such behaviour is a crucial aspect of outsourcing risk and has attracted a lot of attention in previous research.

Conclusion

Opportunism, ambiguity, and complexity are three major risk factors that we have identified as drivers. Decision-makers can more correctly decide those IT services to maintain in-house and which ones to outsource by taking these drivers into account.

1. Motives Behind Opportunism

Making arrangements with a third party for the partial or full management & operation with an organization's information technology (IT) resources or activities falls under the umbrella of outsourcing in the world of information systems (IS). These agreements usually take the shape of contracts that outline the terms of the understanding between the outsourcing service customer and the provider(s) of such services.

Any organization's ability to carry out a series of tasks that produce the supply of a worthwhile good or service for consumers is important to its ability to thrive. Organisations utilize a variety of technology & managerial solutions to help their business processes in an effort to improve their value chain. These solutions can be created within the company or acquired from outside sources, combining the two primary methods of acquiring

any kind of resources: insourcing and outsourcing. Companies seek for increased efficiency and lower costs while also trying to improve their specialisation in a small number of critical areas as they face intense competition in the setting of the worldwide economic and financial crisis. This situation may cause organisations to lean towards the outsourcing part of the procurement binomial, making the choice to outsource a crucial strategic choice.

An organisation should consider the anticipated expenses and advantages of the outsourced choice before starting an IS outsourcing project. If the organisation chooses to move forward with outsourcing, the cost-benefit analysis should continue in order to account for the advantages actually realised and the expenditures incurred.

The costs and benefits of beginning an outsourcing transaction involving a potential client and monitoring the changes in the costs and benefits of an existing outsourcing contract must both be taken into account by the outsourcing provider. An outsourcing agreement entails a number of risks in addition to its advantages and disadvantages. If the transaction among an outsourced customer and a single or more outsourcing vendors is to be effective, these risks must be addressed. Risks associated with IS outsourcing have been the subject of numerous studies, including topics like risk sources, risk assessment and prioritisation, and risk mitigation strategies.

That group of works functions in part as a disjointed yet incredibly useful set of contributions. We sought a comprehensive understanding of IS outsourcing risks as a result of this interpretation. A theory of IS outsourcing risk, in our opinion, may be particularly helpful to practitioners assessing the viability of a potential IS outsourcing project or managing existing IS outsourcing transactions, as well as to scholars increasing their comprehension about the IS outsourcing risk management method.

2. Market Size

Opportunism on behalf of the vendor tends to happen in outsourcing when the client becomes reliant, either due to switching costs, a significant knowledge and information gap (information asymmetry), or a lack of sufficient competitors in the market (lack of market depth). Such situations are common in IT sector, and a shallow market exacerbates other kinds of dependency. Our respondents described numerous situations in which they were maintaining poor contracts because the company could not bear the financial or organisational burden of switching vendors.

The original contract had to be extended three times in one government agency because the buyer was unable to pay for the organisational upheaval caused by switching providers, not because management was happy. The contract rates charged by this purchaser at renewal were significantly higher than market pricing since the vendor was not subject to any competitive pressure. Although not all of our respondents indicated this degree of "lock in," many were part of unsatisfactory arrangements that made it challenging to leave. Several (purchaser) sources stated that they were unable to secure bids from substitute vendors at the conclusion of the contract.

While traditionally technology advancements have resulted in cost reductions, several also stated that existing incumbent vendors were asserting that because of early underbidding, they intended to hike prices between thirty and forty percent when the contract comes up for renegotiation. These buyers reported feeling forced captive by their vendor after disbanding their own delivery capabilities since it would take too much time and money to re-establish it. It is interesting to note that a lot of the current significant government IT outsourcing agreements are switching from a single vendor to a multiple vendor, multiple contract strategy, particularly the South Australian Government & many Federal Agencies. Despite the fact that such a plan will almost surely result in significant increases in transaction as well as coordination costs, it is now necessary due to the lack of competitiveness in the market for Tier 1 vendors.

3. Standardisation Level

Cost of Transaction Our analysis confirmed the theory that outsourcing is economically undesirable for customised services due to the potential of opportunism. The levels of fulfilment and perceived control among informants who participated in outsourcing common service components (such as network connections, hardware assistance, including technical assistance of simple desktop applications) were generally higher. In Australia, there is a rather healthy and trustworthy vendor market for these services, and there is a pool of qualified workers available on the job market. On the opposite hand, buyers of intricate infrastructure agreements that were made to meet the buyer's requirements as:-

Particularly in cases involving multi-tier architectures, the integration of older technologies with desktop settings, or where security was crucial, customers frequently complained about the unsatisfactory and expensive nature of the services offered by suppliers. There was also a sizable pool of knowledgeable consultants from which buyers

may seek guidance and information about standardised, developed services.

This assisted buyers in avoiding knowledge asymmetry issues, which can also result in opportunism. In an environment where technology was developing quickly, sellers had a significant advantage over most buyers in terms of cost and technical understanding. Many customers believed their providers took advantage of the informational imbalance.

Other buyers employed outside consultants to help them in these scenarios, but this resulted in significant cost overruns that nullified their initial benefit/cost business case. Despite the dangers of opportunism brought on by knowledge asymmetry, the vast majority of our informants (and 72% of survey respondents) outsourced to gain the skills and experience they lacked in-house, a practise that was nearly likely to result in asymmetry.

Benchmarking was a frequent tactic employed by informants to reduce knowledge asymmetry. According to our research, companies that invested in benchmarking saw statistically significant improvements in vendor service, as well as strategic and technological advantages and lower costs. But although benchmarking was essential, our qualitative research found that it had considerable costs and restrictions.

High-level industry standards were too vague to provide accurate comparisons, and buyers frequently found it impossible to accurately determine what "market prices" were for the services they needed until they were actually tested in the market. Benchmarking is only really feasible for services that are already widely used and standardised in the community, yet a thorough market testing exercise takes significant organisational resources (including managerial attention). Decision-making guidelines that depended on relative efficiency turned out to be less useful than anticipated because it was impossible to assess with accuracy how effective the internal delivery group actually was.

Conflict of Interest

There is no conflict of interest between the authors in this manuscript.

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