

A TENTATIVE MODEL FOR IT OUTSOURCING

JEAN-PAUL MUKA

University of Johannesburg, Applied Information Systems, South Africa
mukajp@hotmail.com

CARL MARNEWICK

University of Johannesburg, Applied Information Systems, South Africa
cmarnewick@uj.ac.za (Corresponding)

ABSTRACT

Outsourcing projects involve many stakeholders, including clients who transfer the operational responsibility of their business processes, and a vendor who accepts that responsibility. IT outsourcing applies when the transferred responsibilities are limited to IT-related processes. Outsourcing clients seek to leverage on potential efficiency provided by the vendor, whereby the vendor delivers the same intended business results at a cheaper cost. Vendors potentially achieve these efficiencies through better subject matter expertise and economies of scale. Clients outsource processes considered non-strategic while strategic processes are managed in-house. Once a client decides to outsource IT-related processes, the outsourcing strategy takes the form of one or more of five delivery models. This article portrays a proposed model for successful IT outsourcing. This model assists the outsourcing professional in navigating through the various steps of the outsourcing life span with a clearer awareness of likely causes and potential remedies applicable to the outsourcing strategy on any given outsourcing project.

INTRODUCTION

In ancient history, it was not unusual for the Egyptians to ask their neighbours to help them build irrigation canals in exchange for a share of the harvest. By so doing, the Egyptian people acquired a combination of tools, skills, knowledge or sheer muscle power offered by the neighbouring civilisations for a limited amount of time, to achieve a specific objective in return for some compensation. The Egyptian people may or may not have possessed the qualities brought in by their neighbours, but they made a conscious decision that associating some outside help was better than building the canals on their own (Sparrow, 2003; Enaohwo, 2010). In the eighteenth and nineteenth centuries, the Industrial Revolution witnessed profitable growth in the production of goods. As a result, organisations entrusted activities such as accounting, insurance, engineering and legal services to others that specialized in those specific areas (Rose India, n.d.). These examples of outsourcing projects are evident that the business practice known today as outsourcing has existed in some or other form for centuries. Simply put, outsourcing is about “outside resource using” (Arnold, 2000; O’Riordan & Sweeney, 2006, Emmanuel, 2010).

While these early examples may imply that outsourcing entails an indiscriminate effort to source some outside help on a given task, more recent experiences suggest that organisations give more thought to outsourcing (Corbett, 2004). In the mid-twentieth century, the tendency for businesses to diversify and benefit from economies of scale resulted in the need to compete globally (Handfield, 2006; Oshri, Kotlarsky & Willcocks, 2011). It became necessary for companies to make a deeper analysis of their critical business processes in order to set apart processes which should be handled internally from processes which needed to be offloaded to external service providers.

The relatively narrow definition of outsourcing as merely “outside resource using” can be expanded as a business practice whereby an organisation transfers business activities to a third-party, in pursuit of specific objectives (Schniederjans, 2007:271; Wijers & Verhoef, 2009:1). Typical objectives sought by clients include pursuing cost savings, accessing better skills from the vendor, handling overflowing work when there is insufficient internal capacity, improving productivity and gaining the ability to focus on strategic core business processes (Bragg, 2006:1; Dhar & Balakrishnan, 2006:1). Outsourcing has become a catalyst for organizational transformation and global competitiveness (KPMG, 2001:4; Donaldson & O’Toole, 2007; Elsafadi, 2016).

The outsourcing of IT-related functions, otherwise known as IT outsourcing, was first documented in 1963, when Electronic Data Systems (EDS) signed a contract with Blue Cross Blue Shield of Pennsylvania for the management of data processing services (Leimeister, 2010:15). However, it was not until 1989 that IT Outsourcing caught the world’s attention, following the \$1 Billion contract between Eastman Kodak and IBM. Many outsourcing deals have been signed thereafter, but outsourcing literature is littered with cases of failed outsourcing projects where clients become disillusioned with the initial promises of outsourcing (Schwartz, 2008; Mclvor, 2010; Garland, 2015; Niccolls, 2016). Instead of focusing on service delivery and gaining competitive advantage, clients eventually tend to spend excessive amounts of time and money trying to resolve issues with the outsourcing vendor.

While acknowledging that responsibilities for failed outsourced projects are often shared by the clients and vendors, this research aims to present a tentative model for successful IT outsourcing.

LITERATURE REVIEW

IT outsourcing entails contracting out any service by the IT department, such as hardware, software, and application management services (Liao & Reategui, 2002: 11; Goo, Kishore, Rao & Nam, 2009). The scope of outsourced services can range from the basic development of a narrowly scoped program, to a wider scope involving the management by a third party of all software development, maintenance and operations on behalf of the IT department.

The layers of the IT architecture are presented in various ways (Pirkola, 2005; Morrison, Balasubramaniam & Falkner, 2008: 348; Meier, Homer, Hill, Taylor, Bansode, Wall, Boucher & Bogawat, 2010; Schuler, 2011; ADSIC, 2012). This article explores the components of ITO, based on the IT architecture components presented by ADSIC (2012) which depicts the following layers: Infrastructure, integration, data, application, access and presentation, operations, and security. Refer to Figure 1.



Figure 1: IT Architecture Components (Source: ADSIC, 2012)

Seeing that the IT architecture is made of several inter-related layers, it seems conceivable that ITO should apply to any single layer, or combination of layers. This research therefore infers that ITO is the outsourcing of services related to each, or a combination of any of the IT architecture layers.

The conceptual ITO model only focuses on the following IT architecture layers: infrastructure, integration, data, and application.

Infrastructure outsourcing

The infrastructure layer refers to the underlying platforms hosting all other layers of the IT architecture stack, including the system, hardware and operating systems (Nyrhinen, Kaupparkeakoulou, 2007; ADSIC, 2012). Due to technological advances, features from infrastructure vendors have standardised substantially, resulting in the commoditisation of the IT infrastructure layer (Gottschalk, 2006; Mahmood, 2011: 48; Keahey, Armstrong, Bresnahan, LaBissoniere, Riteau, 2012). IT infrastructure is therefore no longer a strategic differentiator. The motivation to focus on core business is stronger when referring to the infrastructure layer. Since infrastructure is becoming so standardised, the outsourcing of infrastructure also tends to require no more than a standard service level agreement (SLA). Seeing that cost reduction is an important reason why companies outsource, it then appears that one of the most straight-forward ways to achieve cost reduction is through infrastructure outsourcing. However, experts warn that over-emphasizing on cost savings, at the expense of service quality, flexibility, and other long-term needs, is bound to result in disappointments (Sayer, 2009). The next aspect of IT Outsourcing is integration outsourcing.

Integration outsourcing

The integration layer addresses the interconnection and interoperability among all layers of the IT architecture stack (ADSIC, 2012). Integration outsourcing seems most relevant in a multi-vendor environment, where there is a need to integrate the work performed by different vendors on different layers of the IT architecture. Research shows that multi-vendor IT outsourcing is on the increase, as outsourcing buyers seek to access best-in-class vendor capability, while improving their negotiating position (Deloitte Consulting, 2008:18; Vromant, 2010; Fridgen & Mueller, 2011). Research also shows that as solutions from multiple suppliers become increasingly sophisticated, Chief Information Officers (CIOs) find that they have less control. Control is therefore a relevant issue in a multi-vendor environment. Integration outsourcing therefore presents an interesting dilemma: On the one hand, IT decision-makers perceive multi-vendor outsourcing as a threat to their own power and control, but on the other hand, they are attracted to multi-vendor outsourcing.

It therefore appears that multi-sourcing, which calls for integration outsourcing, makes sense at least conceptually, and presents advantages such as cost savings and a better negotiating position for the IT decision-makers. However, the practical implications of multi-sourcing present a governance and control challenge (Olowu, 2003; Vromant, 2010). Outsourcing to multiple suppliers, sometimes spread across multiple geographies, increases complexity, and therefore the risk of IT failure.

Data outsourcing

Data outsourcing entails using the services of an outsourcing service provider to address the need for data-driven business insights. Most organisations have big volumes of structured and unstructured

data. The outsourced data service provider enables data analytics, which entails analysing all types of data in order to derive insights and facilitate decision-making for the outsourcing client (Rouse, 2010; Eddy, 2012; Demirkan & Delen, 2013). Beyond deriving insights, data analytics has become an integral way for companies to develop a closer relationship with their customers. Companies have identified unprecedented potential for competitive advantage through analysing the huge volumes of data at their disposal to optimise the customer's experience and get closer to their customers. By applying analytics in the customer care organisation, companies can not only learn more about their customers, but also predict future trends or react instantly to changing behaviours (English, 2011: 2; Shireesha & Bhutada, 2016). The final aspect of IT outsourcing is application outsourcing.

Application outsourcing

Application outsourcing entails a multi-year or annuity contract, involving the purchase of ongoing application services for managing, enhancing and maintaining custom or packaged software in server/host or desktop/client platforms (Anderson, Pring & Young, 2008: 25; OECD, 2010). The value proposition of application outsourcing includes reliable delivery, value for money, and meeting the evolving needs of the client (Paraskevas & Buhalis, 2002; Accenture, 2012). While the first two elements of the value proposition appear to be equally applicable to any type of outsourcing, meeting the evolving need of the client seems particularly relevant in application outsourcing. This is because application outsourcing focuses on the day-to-day operations, support, and maintenance of the client's front-end applications, such as a bank's internet banking portal, or an online store. These are complex, mission critical, and transactional applications, which are core to business processes (Unisys, 2012).

A qualitative research approach was used to develop the 5-Step Outsourcing Model. This approach assists researchers in discovering and understanding more about a topic or phenomenon, people's experiences and the expression of their perspectives (Johnson & Onwuegbuzie 2004; Mouton 2011; Morgan 2014). It further examines the set of people or situations being studied in greater detail and depth, on a small chosen scale (Mouton 2011; Morgan 2014). The purpose of content analysis is to explore the research to understand, in this case, the concept of IT outsourcing and to summarise the findings of the literature reviewed. The following process was used:

- i. Create a list of key search terms. Key terms are derived from the research topic and include synonyms.
- ii. Identify the source for primary searches. The identification of relevant articles was carried out using online databases such as ACM Digital Library (ACMDL), IEEE Xplore and ScienceDirect.
- iii. Inclusion and exclusion criteria were developed to narrow the amount of research articles.

A coding frame was used to categorise and analyse the results. The model demonstrates an understanding of theories and concepts that are relevant to this research (Asher 2013) and provides the simplicity and clarity of the research problem (Olivier 2009). It also allows the researcher to understand and view certain aspects being studied and to ignore other aspects (Anfara & Mertz 2006).

The model in this research is developed in alignment with the life span of an outsourcing project. The outsourcing strategy adopted by the client mainly leads to a dominant delivery model or combination of delivery models. Outsourcing services are delivered according to the outsourcing process, which

generally follows specific phases. While following the outsourcing process, the client and vendor encounter issues which may constitute threats to the successful completion of the outsourcing project. These issues, if not appropriately handled can cause the failure of the outsourcing project. But appropriately addressing issues is a definite remedy to ensuring successful IT outsourcing.

THE 5-STEP OUTSOURCING MODEL

The outsourcing project is represented as a unique endeavour with a specific life span comprising of steps, whereby the client's choices at a particular step has implications on the next steps.

The outsourcing life span involves the following steps:

Step 1: Define the outsourcing strategy

Outsourcing offers potential benefits, ranging from cost savings to higher productivity, to quicker time to market (Bragg, 2006:1; Dhar & Balakrishnan, 2006:1). However, the decision to outsource is generally motivated by:

- i. A business problem, which the client and vendor agree to resolve outside the client's environment – usually in an environment controlled by the vendor;
- ii. A business opportunity, which the client is unable and/or unwilling to pursue without involving the expertise and resources of an outside vendor;

If the client company decides to resolve a business problem or pursue a business opportunity with its own internal resources and expertise, without involving any external vendor, outsourcing cannot apply. The success of an outsourcing project relies heavily on the client's commitment to not only let the vendor take a degree of control over the outsourced processes, but also to actively manage the day-to-day relationship with the vendor. This ensures that senior leadership teams from both sides remain involved until the vendor has delivered the agreed objectives (Nichols, 2010). The next step in the outsourcing life span focuses on determining the appropriate delivery model.

Step 2: Determine the appropriate delivery model

Outsourcing delivery models include traditional outsourcing, multi-sourcing, shared services, build-operate-transfer, and cloud outsourcing. Each delivery model has specific characteristics and addresses unique need. The client should therefore determine the delivery model most aligned with their main outsourcing strategy.

When the client's main outsourcing strategy is to work with a single outsourcing vendor in an effort to save cost, the applicable delivery model is called traditional outsourcing. The client is said to use the multi-sourcing delivery model when the main strategy is to work with multiple vendors, aiming to spread risk and improve service quality by employing best-of-breed vendors. A client company mainly aiming to host some or all of the infrastructure outside their physical premises in order to access and manage the outsourced infrastructure mainly via the internet is said to adopt the cloud outsourcing delivery model. When the client's strategy is to transfer not only certain processes, but also the full ownership of operations and risks related those processes to the vendor, then the appropriate delivery model is Build-Operate-Transfer. Finally, shared services apply when the client outsources particular processes to an entity within the same company. This can be a separate department within

the same company, for example when a multinational company decides to centralize all IT Helpdesk support processes in one of its multiple IT operations or countries.

Step 3: Follow the phases of the outsourcing process

After the client has determined the most appropriate outsourcing delivery model, the next step is to follow the phases of the outsourcing process.

- i. The main purpose of the preparation phase is for the client to screen potential vendors, set the outsourcing objectives, and translate these objectives into day-to-day outsourcing operations (Sople, 2009; Varadarajan, 2009).
- ii. The vendor selection phase entails determining the vendor to be awarded the outsourcing contract, and the actual contract negotiation (Fink & Shoeib, 2003; Perunovic & Pedersen, 2007:2; Hansen, 2011:12). Depending on the outsourcing delivery model selected by the client, the contract can be awarded to a single or to multiple vendors. The vendor may also be an external company or another entity within the same company as the client.
- iii. After the client awards the outsourcing contract to one or more vendors, ownership of the outsourced processes is handed over to the vendor. The transfer of ownership of processes from the client to the vendor is called transition management (Ganesh & Deependra, 2004; IBM, 2011). The transition phase entails communicating and transferring assets between the client and the vendor (Perunovic & Pedersen, 2007:2).
- iv. In the “manage relationship” phase of the outsourcing process, the client and vendor handle the day-to-day operational issues pertaining to the outsourcing relationship. It is in this phase that agreed-upon outsourcing objectives are tracked and identified discrepancies highlighted as potential threats to a successful outsourcing project.
- v. Depending on the nature of the discrepancies identified and the contingency plans put in place, the outsourcing process proceeds to the reconsideration phase. In the reconsideration phase, the client revisits their overall outsourcing strategy. This entails questioning the initial decision to outsource, the number of vendors selected, the relevance of the selected delivery model, and the appropriateness of keeping the same vendor(s) (Whitten & Leidner, 2006:606; Vaxeianou & Konstantinopoulos, 2015). At the conclusion of the reconsideration phase, the client may need to return to the vendor selection phase and follow the relevant steps of the outsourcing process over again.

Step 4: Identify causes of outsourcing failure

Throughout the outsourcing process, the client faces issues which, if not handled appropriately, can lead to failure of the project. Causes of outsourcing failure are diverse and grouped into four distinct categories.

- i. Causes influenced by both client and vendor;
- ii. Causes mainly influenced by the client;
- iii. Causes mainly influenced by the vendor;
- iv. Causes influenced by external factors independently from the client or the vendor.

This categorisation is intended to narrow down the scope of potential action when the client investigates ways to handle the causes of outsourcing failure. Consequently, most of the remedial action should be applied to the entity most responsible for causing the threats in the first place. For example, this research identifies that a client losing control over outsourced processes constitutes a cause of failure for the outsourcing project. Given that the client is also identified in this research as directly responsible for this cause, the responsibility is therefore upon the client to positively influence the activities related to increasing the level of client control around the processes functions being outsourced. The client should also bear in mind that the choice of delivery model has a strong bearing on the level of control the client can maintain on outsourced processes.

Step5: Apply remedies to identified causes of outsourcing failure

The conceptual model proposes the following remedies:

- i. Reducing labour and technology costs is proposed as a remedy against the failure to achieve cost saving. Ways to reducing labour costs include labour arbitrage, business process standardization, transition management, and outsourcing governance. Technology cost can be reduced by increasing the visibility and predictability of the cost of technology acquisition, integration and support.
- ii. The first step towards achieving innovation is to define innovation objectives in line with the appropriate outsourcing model. In traditional outsourcing, the client should seek for the vendor's ability to demonstrate process transformation expertise, as well as technology integration expertise over the entire scope of the outsourcing project. In multi-sourcing, it is less critical that a single vendor demonstrates transformation expertise across the scope of the outsourcing project. It is more important that each vendor demonstrates expertise in the specific subject matters related to the scope of the outsourcing project allocated to them.
- iii. In cloud outsourcing, it is essential to re-engineer business processes, including those which were previously hosted on-premise, before they are outsourced into the cloud. Technology transformation through cloud outsourcing should not overlook the basic necessity for a secure and redundant cloud environment.
- iv. To achieve transformation through the build-operate-transfer model, the client should emphasise on the complete transfer and ownership of processes and technology to the vendor. Transforming the organisation through shared services outsourcing requires that all processes applicable to the shared services be standardised and aligned to global standards. While local requirements must be taken into account, local customisations of the processes must be kept to a strict minimum, in order to minimise exceptions to the standardised processes.
- v. When the causes of outsourcing failure are associated with lack of flexibility, Cloud Outsourcing seems best suited as a remedy. The flexibility offered by cloud outsourcing applies to cost as well as the management of the infrastructure. From a cost perspective, cloud outsourcing affords the client the flexibility to subscribe and pay for resources on a per use basis. From an infrastructure management perspective, the client does not need to invest upfront in building and maintaining physical data center infrastructure. Instead, the client uses existing infrastructure maintained by the vendor.

- vi. When the causes of outsourcing failure are associated with the fact that wrong functions were outsourced, the proposed remedy is to outsource only strategic functions. Functions which are not identified as strategic should be further evaluated in terms of strategic and operational impact. As a result, these functions should be outsourced to a vendor under a strategic partnership, eliminated, or kept in-house.
- vii. When lack of access to expertise seems to be the cause for outsourcing failure, the client should encourage mutual trust with the vendor, as well as a culture of skills transfer and shared incentives. Without mutual trust, outsourcing stakeholders have no choice but to rigidly adhere to the legal contract ties between them. As a result, creativity is bound to be stifled. Much as incentives should be shared for successful outsourcing, risks also should be shared. The client should identify the risks related to the outsourcing project, and make the vendor responsible and accountable for some of them.

The steps of the outsourcing life span are consolidated below, into a conceptual model for outsourcing, depicted in Figure 2.

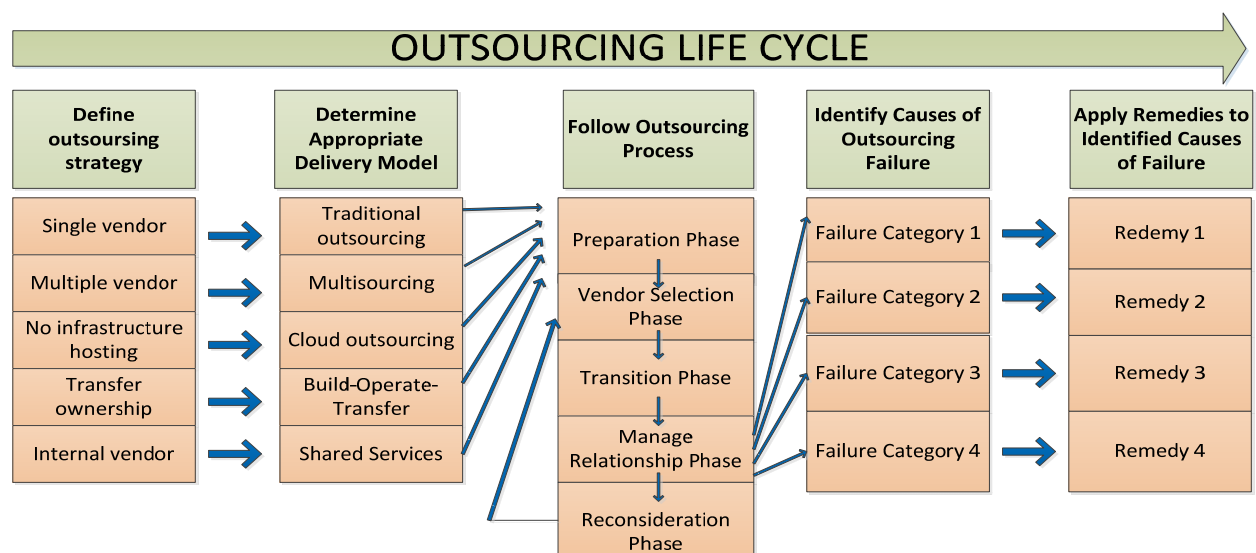


Figure 2: Conceptual Model for Successful Outsourcing

This conceptual model is proposed as a guideline for outsourcing professionals and researchers on the experiences, challenges and decision making options of the outsourcing client.

This model is validated by comparing the data collected from outsourcing professionals with the theoretical basis upon which the model is built. Potential discrepancies identified while validating this model constitute the new, unique knowledge created through this research.

Being designed primarily from the point of view of the outsourcing client, this model provides outsourcing clients with a predictable and repeatable blueprint of alternative options on the journey towards successful IT outsourcing. The role and perspectives of vendors in the outcome of the outsourcing project constitute a worthwhile subject for a separate additional research.

RESEARCH METHODOLOGY

Modelling refers to studying a small segment of a bigger phenomenon in a controlled environment (Egger & Carpi, 2008). The results obtained from modelling can be extrapolated for a better

understanding of the phenomenon being studied. Modelling entails three main steps: firstly, the researcher defines what needs to be modelled; secondly, the model is developed and thirdly the model is validated (Egger & Carpi, 2008; Olivier, 2009; Jordaan & Lategan, 2010).

Data to validate the model proposed in this research is collected through a questionnaire. Collecting data through a questionnaire entails asking each respondent the same set of questions in a pre-determined order (De Vaus, 2002; McBurney & White, 2009; Saunders et al., 2009). In this research, the questionnaire was shared with respondents via email and responses were submitted to the researcher mainly via email.

DATA ANALYSIS

The first theme of the questionnaire focused on the demographical information of the respondents. The data on the profile of respondents can be summarised as follows:

- i. Forty percent of the respondents were last involved in IT outsourcing 2 to 5 years ago whereas 30% were last involved less than 2 years ago and 30% were last involved in IT outsourcing more than 5 years ago. The results indicate that the results are reliable as the majority of the respondents were fairly recently involved in IT outsourcing.
- ii. Fifty percent of the respondents have solid outsourcing experience of more than 5 years, whereas 40% have experience between 2 to 5 years and only 10% have less than 2 years' experience.

The results are summarised in figure 3.

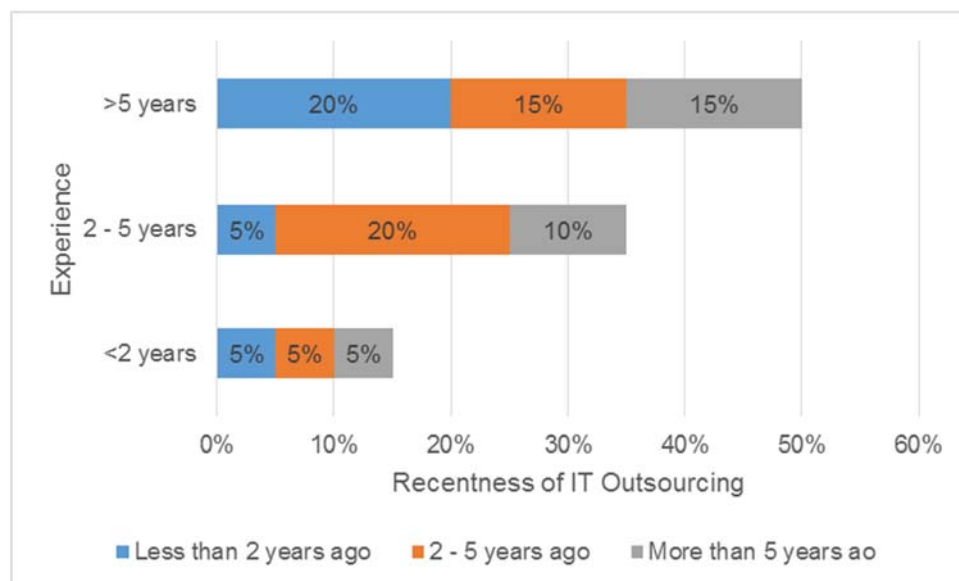


Figure 3: Cross-tabulation between experience and recentness of IT outsourcing

The second theme addresses the outsourcing strategy. As per the outsourcing model, the outsourcing strategy can consist of five strategies. From an outsourcing strategy perspective 55% companies contracted with a single outsourcing vendor whereas 45% contracted with two or more vendors. Sixty percent of the companies hosted part of their outsourced IT infrastructure at the vendor premises. While outsourcing their IT infrastructure to the vendor, 70% of companies only retained partial ownership of the day-to-day operations related to the outsourced processes, while 30% of clients

retained full ownership of day-to-day operations. No client transferred full ownership of day-to-day operations to the vendor.

Thirty percent had their entire IT infrastructure hosted at the vendor premise with only 10% of the companies hosting their entire IT infrastructure in-house at their own premises. Furthermore, 90% of companies contracted with an external outsourcing vendor, while 10% of clients used a vendor who was an internal entity within the client organisation.

All projects where the IT infrastructure was hosted on vendor premises involved a single vendor, whereas projects with some or no infrastructure hosted on vendor premises involved a mix of single and multiple vendors (Refer to figure 4). This implies that clients who outsource their entire infrastructure are more likely to do so through a single vendor, as opposed to spreading the infrastructure across multiple vendors.

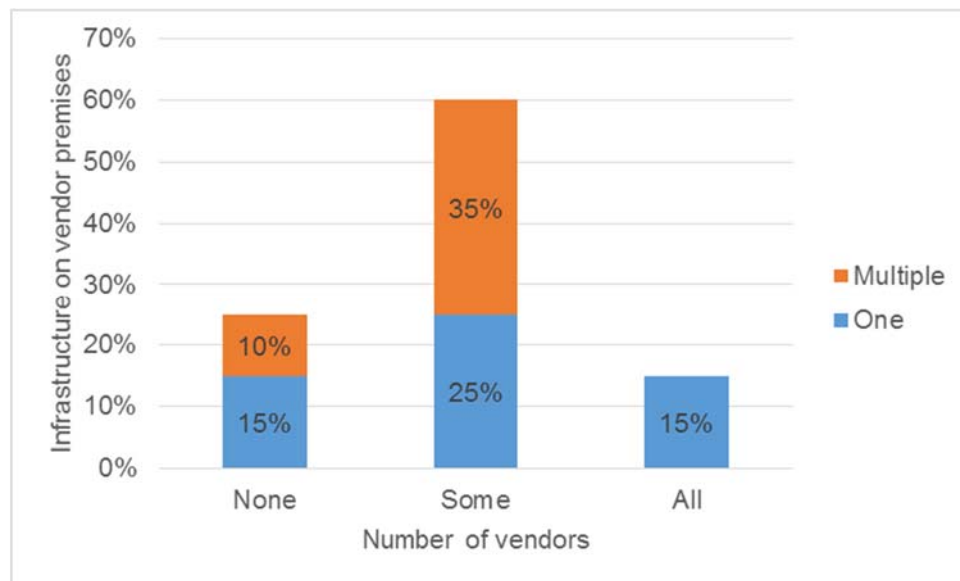


Figure 4: Proportion of Infrastructure on Vendor Premises versus the number of vendors

In all outsourcing projects involving internal vendors, the vendor only takes partial responsibility of operations. This implies that in shared services, companies generally do not entrust full operational responsibility to vendors as per figure 5.

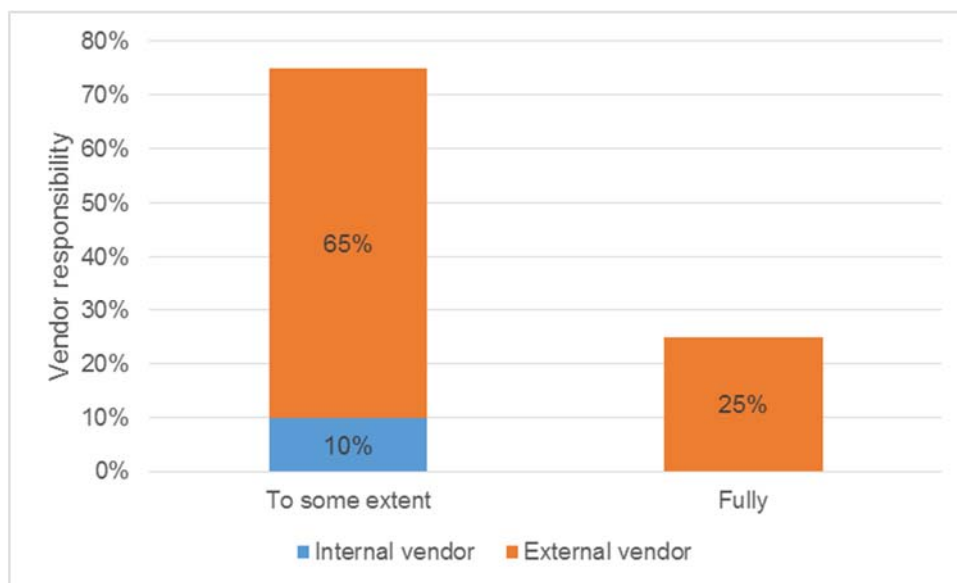


Figure 5: Type of Vendor vs. Extent of Vendor Responsibility on Operations

The outsourcing strategy is cross-analysed against the respondents’ profiles. The recentness of ITO is analysed in comparison with all four aspects of the outsourcing strategy i.e. (i) the number of vendors, (ii) the proportion of IT infrastructure hosted at vendor premises, (iii) the extent of vendor responsibility on outsourced processes and (iv) the type of vendor involved. The following can be noted from the cross-analysis as per figure 6:

- i. Regardless of the recentness, the majority of outsourcing projects involved part of the infrastructure being hosted at vendor premises (60%). Only 15% of all ITO’s are hosting all the infrastructure on the vendor’s premises whereas 25% are hosting all the infrastructure at the client’s premises. This indicates that clients prefer hosting only part of their IT infrastructure at vendor premises, as opposed to hosting the full IT infrastructure in-house or at vendor premises.

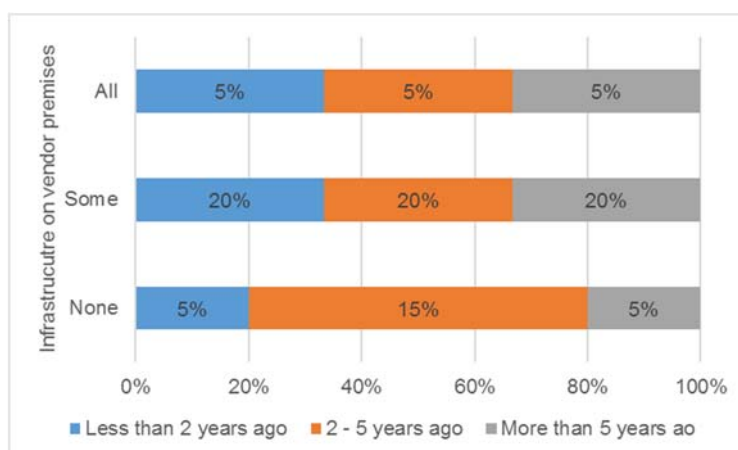


Figure 6: Cross-tabulation of project recentness and proportion of infrastructure on vendor premises

Among the least recent ITO projects (conducted more than five years ago), none involved an internal vendor. The proportion of internal vendors increases among the more recent ITO projects. This implies that the Shared Services model is relatively recent and therefore potentially immature, as it was not part of client’s outsourcing strategies until very recently.

The length of outsourcing experience is analysed against all four of the afore-mentioned aspects of the outsourcing strategy. Some of the cross-tabulations do not seem to reveal any significant insight but the following can be noted:

- ii. The proportion of single-vendor outsourcing projects has been on a steady increase from the least experienced to the most experienced clients. This implies that experienced clients are more likely to build their outsourcing strategy around one outsourcing vendor than their less experienced counterparts. The results are portrayed in figure 7.

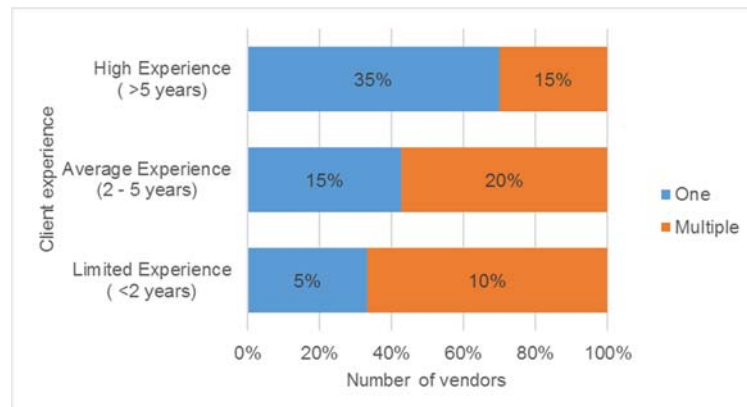


Figure 7: Cross-tabulation of client experience and number of vendors

The results also indicated that the more experienced outsourcing clients are more likely to delegate the full operational responsibility over to a vendor. All the respondents that have extensive experience in ITO, allow the vendor to take full responsibility of IT operations and not just the physical hosting of the infrastructure. The results also indicate that all the respondents with less than 2 years' experience worked exclusively with external vendors, whereas the more experienced clients worked with a mix of internal and external vendors. This indicates that the least experienced outsourcing clients tend to trust external vendors, whereas their more experienced counterparts tend to be more balanced between internal and external vendors.

The second section of the questionnaire focuses on potential factors that influence the decision to outsource. Each of the potential 11 factors is given a weighted average score. Only factors scoring higher than the total average which is 57, are further analysed. Table 1 lists the factors that motivate clients to outsource.

Table 1: Factors motivating the decision to outsource

Factors	Weighted Score
Focus on core business while vendor handles IT	81
Reduce dependency on client's internal operational capabilities	72
Vendor takes full responsibility of operations until processes stabilise	72
Reduce headcount to save cost	66
Outsource each process to the best vendor	62
Reduce dependency on internal resources	53
Adjust usage of outsourced resources to requirements	53
Consolidate disparate processes for more efficiency	52

Reduce dependency on external vendors	47
Spread cost over multi-vendors	38
Reduce client's dependency on single vendor	34

The breakdown in Table 1 shows that the single biggest factor motivating clients to outsource is the ability to focus on core business while the vendor handles IT. The second and third factors also hint to the notion of core business as the vendor takes ownership of the full operational aspects. The fourth most important factor focuses on reducing the IT headcount. Through outsourcing, organisations can reduce the workforce and ultimately improve profits.

The fourth theme focused on the organisation who is outsourcing and the aim is to determine whether organisations follow due diligence when it comes to choosing an IT outsourcing vendor. As with the previous section, a weighted score was calculated for each of the due diligence activities and weighted average score is 61.

Table 2: Due diligence activities

Activities	Weighted Score
Formalise mutual expectations in binding contract	71
Monitor performance to ensure agreed expectations are met	71
Encourage trust in the client-vendor relationship	69
Assess project before it starts	69
Obtain buy-in from all stakeholders	67
Verify stakeholder competence	66
SWOT analysis	65
Consider regulatory constraints during planning	64
Clarify strategic implications	63
Involve vendor in transition planning	60
Examine extent of outsourcing	60
Flexible outsourcing contract	59
Consider all outsourcing phases in vendor selection criteria	58
Contingency plan for back-sourcing	55
Contingency plan for replacing vendor(s)	55
Define key factors for successful transition	53
Define key measurements for successful transition	50
Consider exceptional force majeure	48

The results in table 2 highlights that organisations are actually following due diligence before they outsource and emphasis is placed in trust and how they transition from insourcing to outsourcing will occur. The transition needs to happen in a seamless way and manner to minimise disruption to the organisation at large.

The next section focused on the success of IT outsourcing. Organisations followed due process and selected the best vendor but organisations are still experiencing problems. The main causes of outsourcing failure identified in this research are considered as the main barriers to outsourcing success. For each of these barriers, the responsibility is often shared between client and vendor. In

some instances, one party bears a bigger responsibility in the failure than the other. It could also be that neither party is held responsible due to external circumstances which neither can control.

To determine the most important barriers to successful outsourcing, the main causes for outsourcing failure listed in the questionnaire are ranked by weighted average according to the level of negative impact they cause on the project. The average score was calculated as 55. Table 3 lists the main barriers to successful outsourcing success and nine barriers have been identified.

Table 3: Barriers to successful outsourcing

Barriers	Weighted Average
Poor communication with vendor(s)	65
Unforeseen changes in business environment	62
Mismatch between vendor expertise and client expectations	61
Poor service quality from vendor(s)	60
Lack of strategic objectives	60
Unclear expectations	60
Overlooked hidden outsourcing costs	60
Higher costs than expected	59
Poor transition management	57
Changes in client IT strategy	53
Select wrong vendor	53
Lack of exit strategy	50
Loss of control over outsourced processes	49
Changes in executive management	49
Outsource wrong processes	47
Overlooked HR related issues	45
Micro-management of vendor(s)	39

The barriers can be grouped into two major themes i.e. communication and cost. Poor communication with vendors will definitely lead to unclear expectations and poor service quality which will then lead to the lack of strategic objectives. The second theme addresses the notion of costing as barrier to successful outsourcing. Additional costing comes in various forms as per table 3 including hidden costs as well as higher costs than what was originally anticipated. The other barriers invariably also contribute to the rising cost of outsourcing.

The obvious question that arises from the results, is who is to blame for this situation. The results indicate that there is an almost equal distribution of blame with 19.3% vendor, 18.3% client, 45% both the vendor and client, 16.7% that it is neither's fault and 16.1% that it does not apply. Further analysis is portrayed in figure 8.



Figure 8: Responsible for success barriers

The 100% stacked bar incorporates only the vendor, client and both categories. It is evident that for most of the barriers, both the vendor and the client plays a contributing role. The results also indicate that where a barrier is the sole responsibility of either the vendor or the client, the respondents were quick to point at who is to blame and there is not sharing in the blame.

CONCLUSION

This research shows that clients are prepared to give full operational responsibility to external vendors but only partial operational responsibility to internal vendors. Arnold (2000), O’Riordan & Sweeney (2006a:1) emphasise on outsourcing being mainly about clients acquiring skills from external as opposed to internal sources. A learning point for successful outsourcing is that the source of skills in outsourcing (whether internal or external) play a secondary role to the extent of responsibility assigned to the vendor.

This research also establishes that rather than working with internal outsourcing vendors, clients seem more comfortable working with external vendors on a shared responsibility basis. Literature emphasises on outsourcing success relying mainly on specific, pre-defined objectives unlike ongoing maintenance work (Cohen & Young, 2008:8). A learning point for successful outsourcing is that shared responsibility between client and vendor more important than finger-pointing.

It appears from this research that less experienced clients are more likely to retain operational responsibility, but paradoxically this category of clients also tends to engage with multiple external vendors. Meanwhile, literature emphasises that skills should be sourced from vendors outside the client organisation. A learning point is that besides the general inclination from clients to source skills from an external vendor, the client’s level of outsourcing experience plays a distinct influence in how much responsibility is outsourced and how many vendors are contracted at the same time.

This research highlights that the main reason motivating clients to outsource IT is the opportunity to focus on core business while vendors manage the other IT related processes and infrastructure. A learning point is that the outsourcing decision is not to be taken for granted. Regardless of how advanced or complex the outsourcing process, ensuring success in outsourcing depends a lot on identifying why the client decided to outsource in the first place.

This research shows that clients perform best in activities related to formalising their and the vendors mutual outsourcing expectations into a binding contract. On the other hand, the knowledge based view of outsourcing theory, backed by Perunovic & Pedersen (2007), advocates the creation of a climate of trust between client and vendor as a key condition for outsourcing success. A lesson learned is that over and above trust, the mutual expectations in the outsourcing relationship must be documented and enforced to ensure outsourcing success.

This research shows that outsourcing failures result mainly from poor communication and that the responsibility for failure is most likely shared between client and vendor. To ensure outsourcing success, it is important to identify specific factors causing outsourcing failure. Many factors can cause outsourcing failure, but none more so than poor communication between the client and vendor.

The results highlighted that the responsibility in outsourcing failure is more often shared between client and vendor, as opposed to lying with either party. The resource-based view of outsourcing theory emphasises this view (Pralhad & Hamel, 1990; Johansson, 2006:2) by depicting an inside-out view which assumes that an outside vendor is recruited to bring in the success ingredients that the client would otherwise lack. The implication is that the vendor is directly and exclusively responsible for the ultimate success or failure of the outsourcing project. A lesson learned is that responsibility for outsourcing failure is much more nuanced, less clear-cut and often shared between client and vendor.

Furthermore, this research identifies quality communication as the most satisfying aspect of the relationship between outsourcing clients and vendors is a quality communication. The social exchange theory, on the other hand, depicts successful outsourcing as a win-win, outcome-based relationship between client and vendor (Gottschalk & Sollis, 2005; Perunovic & Pedersen, 2007; Huntley, 2008:20). A learning point is that more than the win-win aspect of the outsourcing relationship, clients expect a quality communication with the vendor(s).

Clients according to this research are not inclined to outsourcing all strategic processes at once, but many do outsource a considerable portion of processes deemed as strategic. The resource based view of outsourcing advocates on the other hand that strategic processes should be handled internally rather than outsourced (Perunovic & Peder, 2007; Hansen, 2011:15). A lesson learned is that strategic processes should not be automatically outsourced or kept in-house. Each process identified as strategic should be examined carefully regarding its relevance for outsourcing.

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