MANAGING OUTSOURCE AGREEMENTS BETWEEN CLIENT ORGANISATIONS AND SUPPLIERS

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ABSTRACT

The outsourcing of non-core Information and Communication Technology services in the ICT industry has been successfully conducted for many years based on various models and frameworks. Client organisations embark on this for many reasons including cost savings, access to specialised skills and access to global resources to name but a few.

This study identified and evaluated the management of outsource agreements between client organisations and suppliers with specific focus on creating an understanding of those factors that has a direct impact on the success of outsource agreements. The primary objective of the research study was to provide a comprehensive management guideline for client organisations embarking on outsource initiatives or planning to renew existing agreements. The secondary objective was to assist service providers with guidance on pitfalls and issues experienced in the management of such agreements and to highlight the lessons learned from the industry at large.

The research was conducted by means of a literature study and empirical study. The literature study included background information on outsourcing, outsourcing theories as well as outsource management frameworks. Furthermore, it addressed lessons learned and issues and pitfalls to avoid by service providers. The literature review formed the basis for creating an understanding of those factors that has a direct impact on the success of outsource agreements.

Based on the evaluation of the empirical study, it was concluded that client organisations that are planning to embark on the outsourcing or renewal of services need to follow a management framework with a full lifecycle in order to ensure success. The top issues that suppliers need to address are to ensure that a climate of *trust* exists between them and the client; they need to be as *transparent* as possible and ensure that they carry extensive *business knowledge* of the client being serviced.

Keywords: Outsourcing, Drivers, Management guideline, Client, Supplier, Pitfalls, Lessons learned, Framework.

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LIST OF ABBREVIATIONS AND DEFINITIONS

CEO	Chief Executive Officer
CIO	Chief Information Officer
Demand side	The party that outsource services
FSI	Financial Services Industry
ICT	Information and Communication Technology
IT	Information Technology
ITIL	IT Infrastructure Library
ITO	Information Technology Outsourcing
OGC	UK Office of Government Commerce
SLA	Service Level Agreement
Supply side	The party providing services
Val IT	Information Technology Value Delivery
WWW	World Wide Web

CHAPTER 1: ORIENTATION AND PROBLEM STATEMENT

1.1 INTRODUCTION

The outsourcing of non-core Information and Communication Technology services (ICT) in the ICT industry has been successfully conducted for many years based on various models and frameworks. The broad principle for outsourcing implies that two organisations enters into a contractual agreement for specific services to be rendered at an agreed upon payment for those services. Companies that consider outsourcing do this for many reasons of which the most prominent are listed below:

- Organisational restructuring may lead to downsizing and possible outsourcing of certain non-core business functions.

- Organisations increasingly focus on what they do best and rely on partners or suppliers for the rest. They only want to focus on those aspects of the business that they are good or excellent at, in other words, they just want to *focus on their core business*.

- Capacity management of the demand for services. Companies operating in a cyclical market can offload the burden of managing the resource fluctuations or even total service fluctuations to the supplier.

- Reduction in total cost for the services contracted versus the services rendered in house due to the service provider or supplier's economy of scale regarding the services.

- They experience difficulty with the retention of highly skilled technical staff

- Cost base restructuring – delivering services in house add to fixed cost of a company. Contracting those services to a supplier shifts the cost to variable cost thus impacting positively on the operating leverage of the company with more control and predictability of the variable cost.
- Product development and subsequent production are regarded by many companies as key in order to gain competitive advantage. The Time to market for

those products is very important and suppliers can assist them with additional capability that is immediately available.

- Quality improvement of services by having agreed upon service level agreements (SLA's) in place with the supplier.

- Through outsourcing, the organisation can devote its scarce resources to developing its core competencies in a bid to sustain competitive advantage.

  (Cummings & Worley 2009:315; Tsang, 2002:12; Tapscott & Ticoll 2003:131; Baltzan, Phillips & Haag 2009:484).

Another compelling reason for the increased use of outsourcing is that ICT, and in particular the World Wide Web (WWW), has allowed data to be transmitted, regardless of distance, amongst organisations with high fidelity, high speed, and negligible marginal costs.

Internal departments running common business processes have lost their natural monopolies; external organisations can compete with them on near equal terms. Outsourcing has become an acceptable, even fashionable, management technique, especially amongst governments (Beaumont, 2006:383; Beaumont & Sohal, 2006:291).

Several challenges exist in outsourcing that should be taken into account when an organisation is considering outsourcing as part of their business model (Baltzan *et al*. 2009:491). Some of these challenges include:

- Contract length - Most of the outsource IT contracts are for a relatively long time period (several years). This is because of the high cost of transferring assets and employees as well as maintaining the technological investment.

- Competitive edge - The innovative use of IT can give an organisation a competitive edge over its rivals. A competitive business advantage provided by an internal ICT department that understands the organisation and is committed to its

goals can be lost in an outsourced arrangement. In an outsourced arrangement, IT staff is striving to achieve the goals and objectives of the outsourcing service provider, which may conflict with those of the organisation.

- Confidentiality of information – Organisations may be reluctant to go the outsource route in fear of classified information being accessible by the service provider.

- Scope definition – contractual misunderstandings may result in the two parties interpreting the agreement in a different manner, resulting in conflict between the parties.

In order to fully understand the complexities of setting up and managing an outsource agreement one need to have a model or reference that provide guidance, tied to best practices in the industry. Cullen, Seddon and Wilcocks (2006:6) describe an outsourcing lifecycle model consisting of four phases namely:

- The Architect Phase, where the foundation for outsourcing is laid. It consists of the first four building blocks - Investigate, Target, Strategize and Design. At the end of this phase, the organisation knows itself well enough to confidently publicise its needs.

- The Engage Phase, where one or more suppliers are selected and the deal is negotiated, consists of the fifth and sixth building blocks – Select and Negotiate.

- The Operate Phase where the deal is put together, operationalized and managed through its term. It consists of the seventh and eighth building blocks namely Transition and Manage.

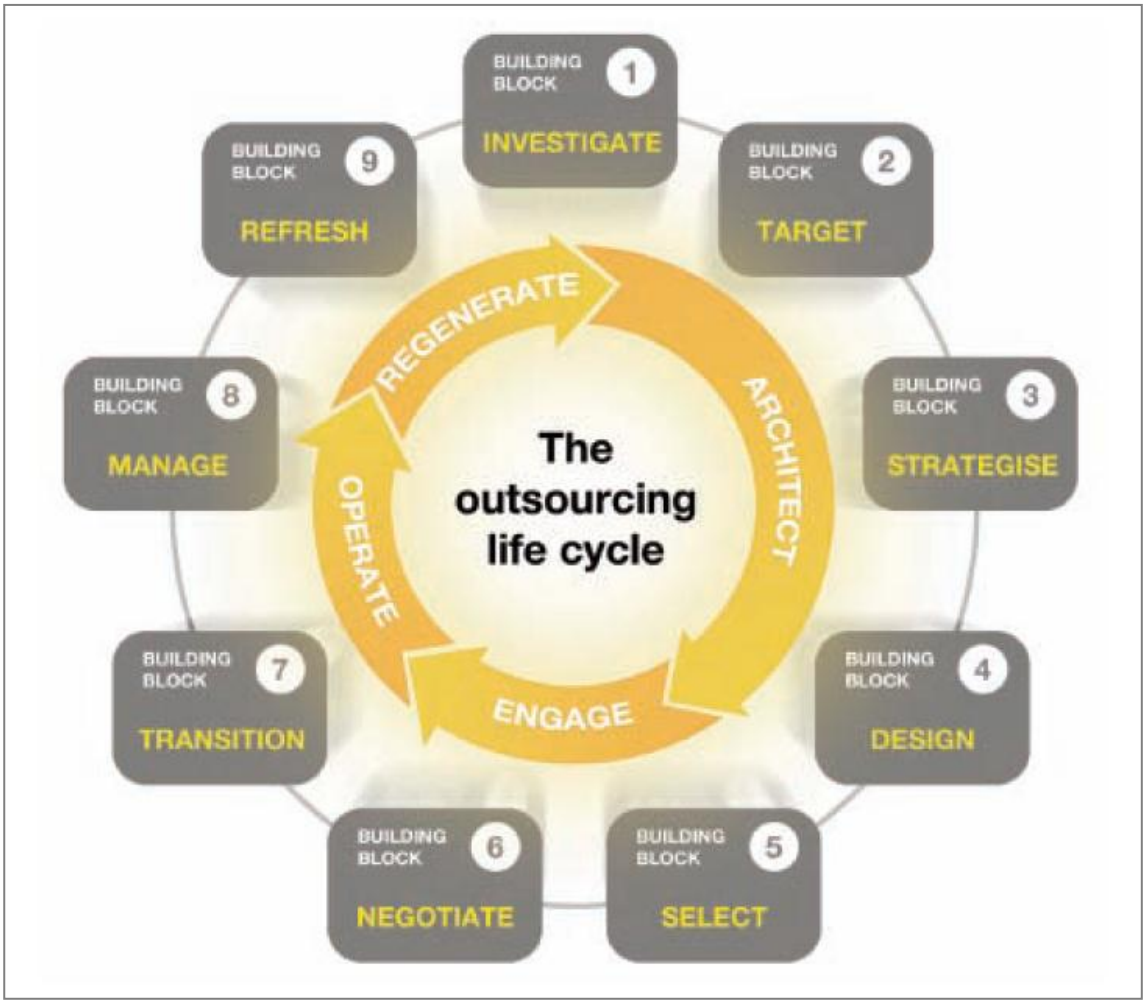
- The Regenerate Phase, where next generation options are assessed, consists only of one building block namely Refresh.

In total these phases are composed of nine building blocks containing 54 key activities required in order to successfully establish and manage an outsourcing agreement.

This study focused primarily on a subset of the management and refresh aspects, building block 8 and 9 in figure 1.1. This included the activities of relationship management, issues, continuous improvement, options, outcomes, lessons learned and knowledge refresh.

It should be noted that the inter-relationship between the different phases and building blocks is of such a nature that some of the key activities associated with the relevant building blocks has been researched as well in order to verify their impact on the management and refresh aspects of outsourcing.

Figure 1.1: Outsourcing Lifecycle Model



Source: Cullen *et al.* (2006:06)

1.2 IMPORTANCE OF THE STUDY

Although many models and frameworks exist to guide organisations planning to embark on an outsource strategy or organisations planning to refresh existing agreements, many of these do not address the inherent complexities that can be associated when dealing with these agreements. This study provides a management framework for the demand side on how to effectively and efficiently manage the delivery of services from the supply side.

Suppliers will benefit from the outcome as the lessons learned, issues and pitfalls addressed in this study may be utilised to enhance their strategic approach, operational processes and focus on the delivery of exceptional services to clients.

1.3 PROBLEM STATEMENT

One of the major drivers for outsource agreements is cost which lead to the problem of the demand side that want to drive down or minimise the cost base of services procured and the supply side who expects to maximise revenue and profit for services delivered.

The relationship usually starts off very well and this phase is often described as the honeymoon period. In many instances, the employees required to deliver the outsourced services were transferred to the outsource partner as part of the contractual agreement. This is inclusive of a wealth of intellectual capital nestled within. The relationship, even when the supplier meets all of the required SLA's, gradually deteriorates as a result of many factors that may include:

- Demand side expectations of innovation and continuous improvement that do not materialise.

- Human resources issues. Supply side resources are perceived to be better remunerated and a level of 'jealousy' may develop between them.

- Often, the management of the agreement via the contractual route that is based on SLA measurement is sub-optimal for both parties and to mitigate that, additional resources are required to be appointed on the demand side to manage the delivery of services. This leads to overall inefficiency and add unnecessary overhead cost, nullifying the cost optimisation intent of outsourcing.

This study specifically focused on evaluating those factors that ensure long term sustainability of outsourcing agreements between client organisations and suppliers.

The outcome of the study will assist client organisations in receiving the best possible services delivered by suppliers and suppliers will benefit as the outcome may be regarded as a reference in terms of those key factors to consider and implement to ensure a long standing relationship.

1.4 OBJECTIVES OF THE STUDY

1.4.1 Primary objective

The primary objective of the study was to develop a comprehensive management guideline that describes the typical pitfalls as well as lessons learned with respect to the management of outsource agreements. This was inclusive of the management effort required from both the outsourcer (demand side) and service supplier (supply side) in order to create the most effective and efficient climate to manage such an agreement.

1.4.2 Secondary objectives

To achieve this primary objective of the study, the secondary objectives to be realised were as follows:

Literature study:

- Perform a literature study in order to gain an understanding of the definition of outsourcing, the theories of outsourcing and models of outsourcing that exist.

- To understand the drivers for outsourcing and obstacles encountered with outsourcing.

- Provide an overview of outsourcing frameworks and models found in the literature with their applicability to ICT outsourcing.

- Understand the key supplier capabilities required by client organisations.

- Tap into the body of knowledge with respect to lessons learned in the outsourcing arena.

The literature study included readily available textbooks, technical journals, magazine articles as well as publications on the internet.

Empirical Research:

The field investigation consisted of the design and preparation of an appropriate questionnaire to measure and validate those factors that drive IT outsourcing and to assess the importance of specific supplier capabilities required by Client organisations. Furthermore the level of alignment with client organisation requirements was measured.

Common pitfalls and lessons learned by the study population were gathered and reflected in the guideline.

Data was gathered via a structured questionnaire that was presented to the participants as an online survey. Statistical analysis was conducted in order to validate and present the findings.

1.5 SCOPE AND DEMARCATION OF STUDY

The study population was limited to the financial services industry in South Africa and in particular one of the four largest banks in South Africa with an ICT turnover of approximately R2.8 billion per annum and a staff complement of 1100.

The following criteria were set in order to ensure a comparative analysis of the sample population:

- Employees with a direct management responsibility towards outsource vendors. This implied the middle to senior management team of the IT structure within the client organisation.

- Managers from related disciplines such as Sourcing and Procurement (external to the IT organisation) as they have management responsibility for all contracts and agreements with suppliers.

- Limited to literature readily available in South Africa.

1.6 RESEARCH METHODOLOGY

Both primary and secondary sources of information were used during the study. Secondary sources from publications and text books were used to study the different outsourcing models as well as the management thereof. Primary information was gathered by means of an empirical study. The methodology followed in this study consists of two parts namely:

- An extensive literature study on the various models of outsourcing, their advantages and disadvantages.

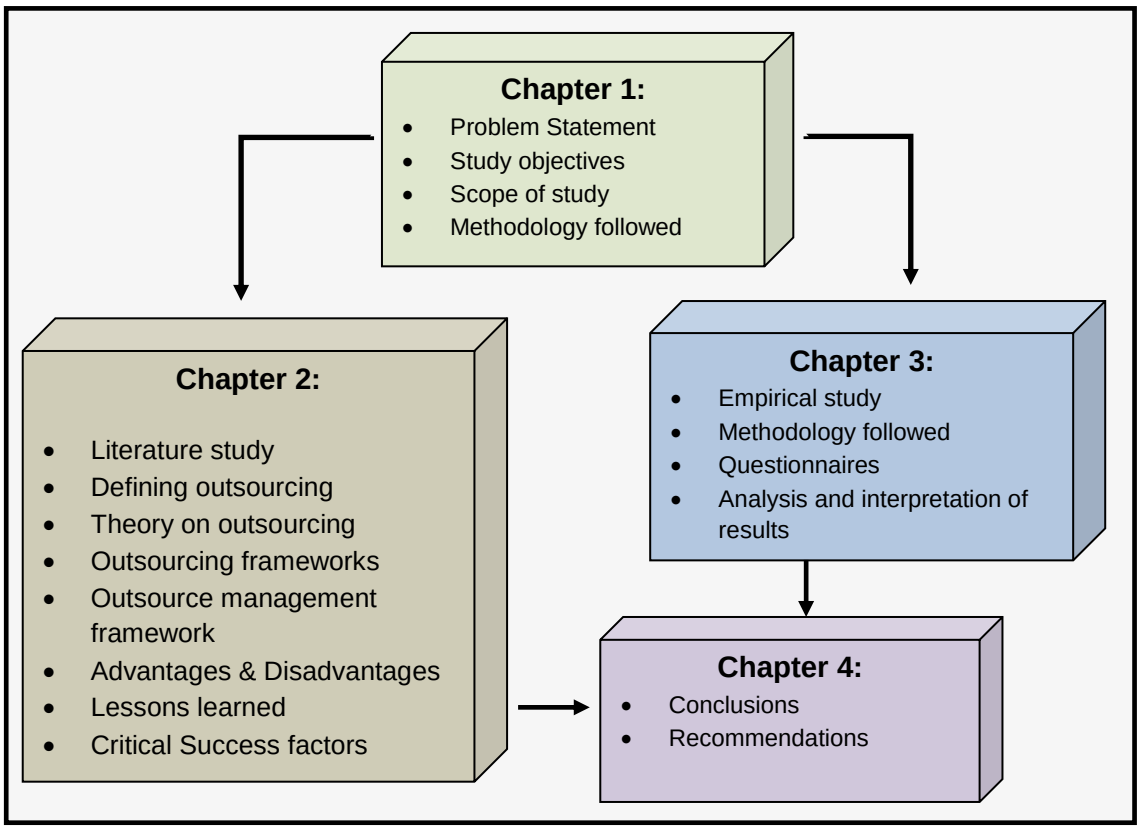
- An empirical study by means of a focused questionnaire completed by a representative sample population of identified candidates in the client organisation.

  A quantitative research approach was used in order to provide an objective view with respect to the research objectives. Specific criteria have been set for the target population in order to ensure a representative sample.

1.7 DIVISION OF CHAPTERS

This dissertation is divided into four chapters. Each chapter has different focus areas and will be discussed in the section below. Figure 1.7 represents the layout of the study in graphical form.

Figure 1.7: Schematic layout of the study



Chapter 1:

The aim of chapter one is to discuss the causal factors and to confirm the problem statement that forms the basis for conducting this study. A brief overview is given on outsourcing, the different models associated with outsourcing as well as the typical benefits and challenges experienced with outsourcing. Reference is made to a lifecycle management framework for outsourcing as well as the goals and key outputs expected within the lifecycle. The proposed research methodology as well as the target population is discussed.

Chapter 2:

Chapter two consists of a literature study on outsourcing and focuses on the definition and theories of outsourcing, prominent outsource models inclusive of their

advantages and disadvantages. The key drivers and obstacles of outsourcing are discussed along with prominent related frameworks. Best practices of how outsource agreements should be managed are discussed. The literature study included the identification of the lessons learned by organisations which have successfully outsourced.

Chapter 3:

Chapter three outlines the methodology used during the empirical study. A short overview of the research philosophy and methodology are provided. The design of the survey instrument is discussed as well as the sample design and process of analysis and evaluation of data. The detailed results from the survey questionnaires are presented in relation to the literature study.

Chapter 4:

Chapter four presents a summary of the findings and opinions from the respondents within the FSI. A list of practical management principles for the effective and efficient management of outsourced services is proposed. IT service providers are presented with a comprehensive guide on lessons learned as well as issues and pitfalls to avoid ensuring alignment and sustained partnerships with clients. The dissertation is concluded by identifying opportunities for future research.

1.8 CONCLUSION

Organisations considering the outsourcing of certain business functionality or services should understand that it is the beginning of a complex journey. Fortunately, many excellent frameworks exist to guide and teach organisations on this journey and this study will add value in shaping the way in which they architect, engage, operate and refresh the engagements to ensure a win – win situation for both parties.

A comprehensive list of lessons learned, issues and pitfalls will act as reference for service providers to take into consideration when they deliver services to client organisations.

1.9 SUMMARY

The aim of this study was to propose a framework for the management of outsource agreements between client organisations and suppliers. Subsequently a framework was put forward to outsource clients and service providers in order to efficiently and effectively manage such agreements.

This was complemented by an extensive list of supplier capabilities required by client organisations as well as lessons learned and pitfalls to avoid during the service delivery phase.

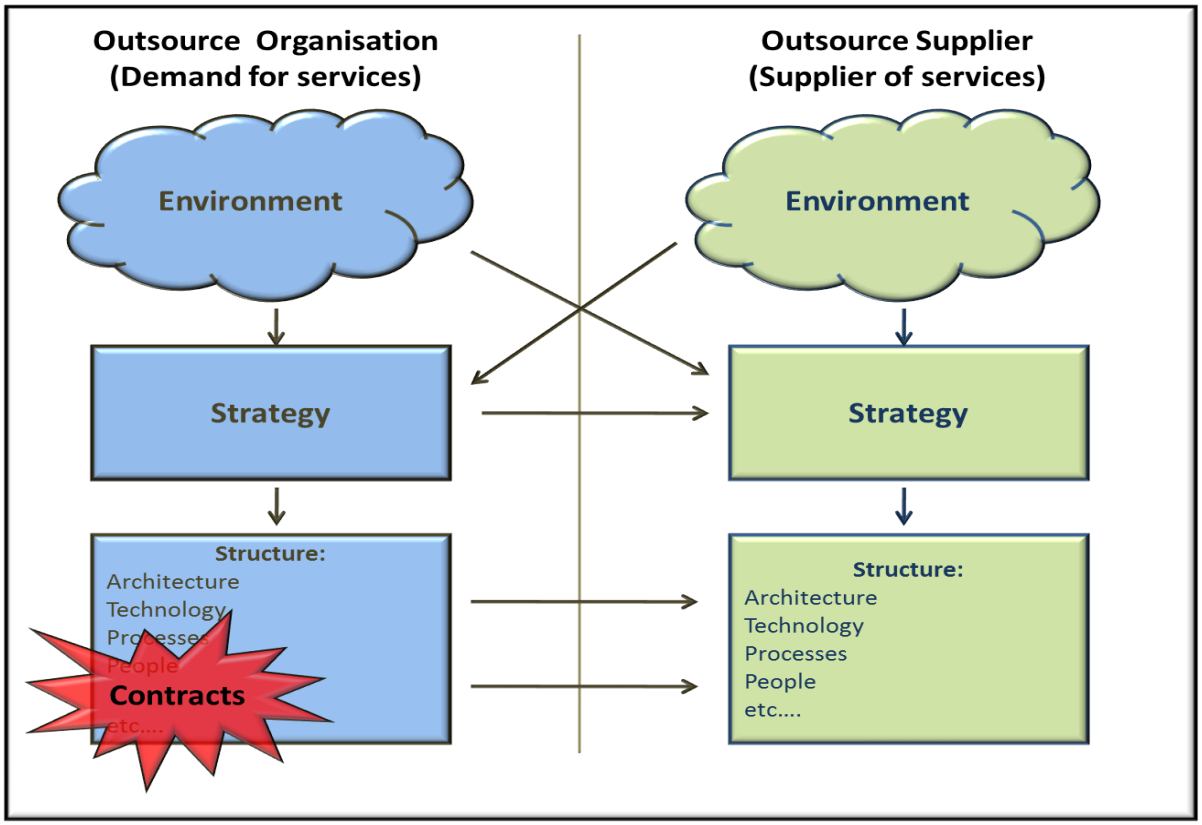
The literature study will be discussed in Chapter two.

CHAPTER 2: LITERATURE STUDY

2.1 INTRODUCTION

This chapter covered the definition of outsourcing, different theories of outsourcing, the drivers and obstacles thereof as well as IT management frameworks relating to outsourcing. Lastly, lessons learned and best practices by other companies were discussed in order to create successful outsource agreements with suppliers. In order to define and narrow the research problem even further, a conceptual reference model has been developed (Figure 2.1) to highlight the specific area of concern as the 'strategic trap' that may arise if not addressed properly in an outsource agreement (Information from Mr J.C. Coetzee, 2011).

Figure 2.1: 'Strategic trap'



This trap can be described as the contractual obligations that are usually fairly fixed within an agreement and that do not cater for major business or technology changes during the lifecycle of the agreement.

Any organisation has a strategic framework that defines the environment in which it operates, supported by its strategy, structure and technological requirements in order to fulfil its objectives. When an organisation embarks on outsourcing some functions within their structure they should be aware of this 'strategic trap'. This trap can be further described as the challenge of changing technology, culture and expectations in IT outsourcing agreements.

Failure by organisations to address this trap properly may lead to misalignment, bad perception and a trust breakdown between the client organisation and service provider. In many cases this will signal the end of the relationship between the two parties.

2.2 OUTSOURCING

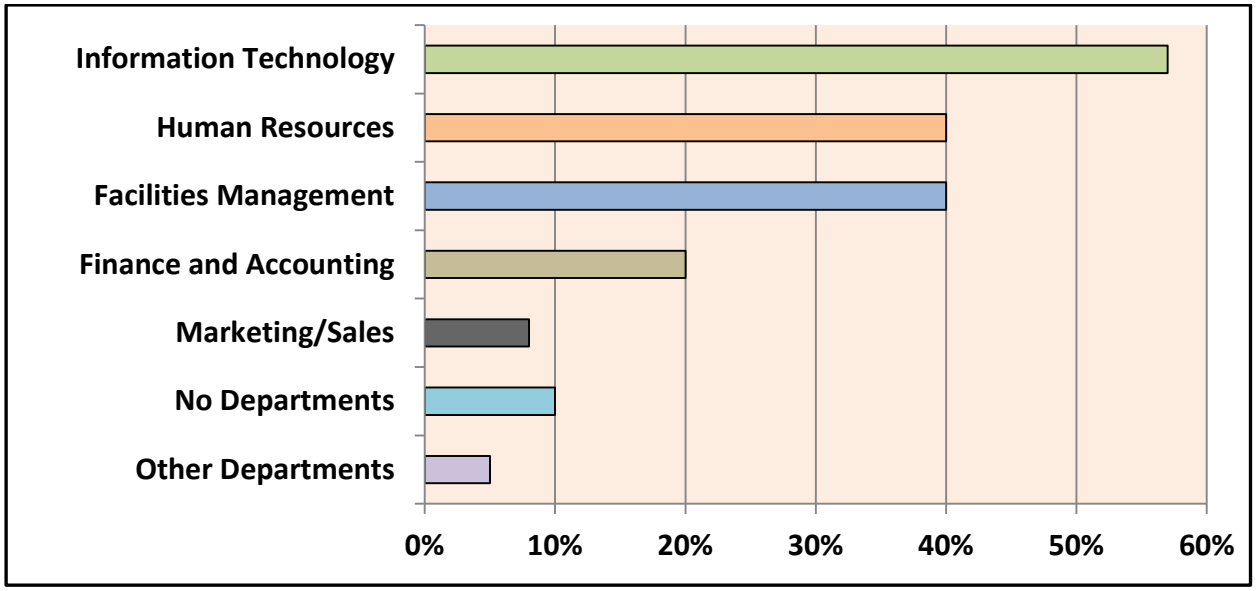
Outsourcing is an arrangement by which one organisation provides a service or services for another organisation that chooses not to perform the services in-house. Outsourcing can also be described as the procurement of products or services from sources that are external to the organisation (Baltzan *et al*., 2009:253; Thompson, Strickland & Gamble, 2010:178).

IT Outsourcing is a very fast growing aspect of economies all over the world with a worldwide market estimated to be $425 Billion in 2011 (Global Outsourcing: Opportunities and Risks. 2011:4).

Outsourcing forms part of any organisation's overall sourcing strategy by which they need to decide what the optimal sourcing mechanisms should be to fully support their business strategy. Different components of work can be sourced in different ways and they need to determine the best sourcing models for this.

Although the global IT outsourcing industry is growing very rapidly, it is important to understand that outsourcing is not limited to ICT functions only but span almost all known business disciplines. Figure 2.2 compares the functions companies have outsourced. Information Technology disciplines are by far the most attractive followed by Human Resources and Facilities Management.

Figure 2.2: Portion of Functions Outsourced



Source: Baltzan *et al*. (2009:253)

Outsourcing falls into four distinct models or generations;

1st generation outsourcing - Pure Local offering
2nd generation outsourcing - Pure Offshore offering
3rd generation outsourcing - Offshore company, with a local presence (Power base is offshore)
4th generation outsourcing - Dual shore, offshore with a local power base.

Outsourcing models can also include further variants or configurations where the outsource supplier in turn outsources some activities or functions of service delivery. This is generally referred to as 3rd party and 4th party outsourcing with the creation of a prime contractor or service aggregator who takes full responsibility for the agreement, supported by sub-agreements between them and 3rd party service providers to honour the contractual requirements.

Outsourcing is a strategic decision with long term impact on the organisation and is not to be taken lightly. Over the years, outsourcing has become synonymous with off-shoring which unfortunately may lead to less visibility and less control with the associated risks of poor performance and non-delivery. Cultural and communication issues are paramount and many organisations have failed to benefit

from outsourcing. Outsourcing can be hugely challenging especially when off-shoring is involved. Some of the main challenges are:

- Cultural differences
- Language and accent problems
- Inadequate communication
- Lack of offshore project management skills
- Lack of tight processes for specifying work
- Vendors lack business domain knowledge
- Lack of clear performance measurements
- Lack of quality control processes

Outsourcing is attractive in a tougher business cycle as businesses can use it to lower their total IT spending and in doing so, lower their fixed cost basis. "If you invest money in assets and hire people, you have created a significant fixed-cost base," says a Gartner analyst. "In general, external services tend to be more flexible." On the whole, businesses have been successful at using outsourcing to drive down the total costs of their IT operations.

According to the 2008 outsourcing report carried out by the management consultancy arm of Deloitte, 83% of companies achieved a return on investment of more than 25% (Deloitte Consulting Outsourcing Report, 2008:1).

It is clear that outsourcing gives cost and resource advantage to those organisations that have adopted it effectively. In the simplest of cases one might outsource part of the software development work to an offshore entity and in more complex cases whole departments might be outsourced to suppliers of those services. Many theories exist today in support of outsourcing and will be described in more detail in the next section.

2.3 THEORIES OF OUTSOURCING

Many theories exist to assist and understand practices and perceptions of IT outsourcing in different settings. Hancox and Hackney (2000:221) describes the four

most prominent theories to assist in gaining an understanding of outsource practices. They are the following:

- **Core competencies theory** - Core competencies theory suggests activities should be performed either in house or by suppliers. Activities, which are not core competencies, should be considered for outsourcing with best-in-class suppliers. Some non-core activities may have to be retained in house if they are part of a defensive posture to protect competitive advantage.

  Although some authors indicate characteristics of core competencies, most of the literature on this subject seems repetitive – 'core' equals 'key' or 'critical' or 'fundamental'. Employees in non-core functions (even if not facing outsourcing) may feel excluded by the organisation because they are a non-dominant discipline. In the public sector, there may be particular uncertainty about what is core; and it has been suggested that government may aim to discover its core competencies via a process where they keep on outsourcing until the shoe pinches, or a political backlash is triggered.

  An organisation may view IT itself as a core competence. It seems that most successful companies have a good understanding of IT's potential. However, some organisations outsource IT even though they see it as core and delivering competitive advantage. This may be because IT can be considered core at the corporate level, but some of its aspects, at lower levels, might be commodities. Thus, the complexity of IT, and it's (at least in part) core nature, may make the contracting out of IT a particularly challenging exercise.

  The ability to define IT requirements and to monitor their delivery by third parties may be some of the core IT competencies that any organisation must have if it is to outsource IT successfully. It can even be argued that the very acts of specifying and managing supply contracts can themselves give competitive advantage (Hancox & Hackney, 2000: 222-224).

- **Agency theory** – agency theory is concerned with the delegation of work by one party (the principal) to another (the agent) via a contract, whether or not they are

both within the same organisation (Hancox & Hackney, 2000:236; Havenga, Havenga, Kelbrick, Mcgregor, Schulze & Van der Linde 2008:309).

The technological and business complexity of IT means that there may be major problems for the principal in choosing a suitable agent and in monitoring the agent's work. Only the agent knows how hard he is working, and that can be especially important in multi-lateral contracting where one agent acts for several principals. This is often the case in IT outsourcing because of the market dominance of one large organisation.

Given the difficulties of behaviour-based contracts suggested by agency theory, it is reasonable to assume that the overwhelming majority of clients would insist on outcome-based contracts when acquiring IT products and services. Such a strategy can only succeed if the client can confidently specify current and future requirements. But accurate predictions by the client may not always be in the vendor's interests since the vendor account managers often are rewarded according to contract profitability, which is principally achieved through charging the client extra for anything which is not in the contract (Hancox & Hackney, 2000:237).

Agency theory may help to explain how a particular client and vendor may have divergent interests and how the relationship between them can be regulated in contractual terms.

- **Partnership Theory** - Partnership, often referred to as an alliance, has frequently been noted as a major feature of IT outsourcing. Partnership can reduce the risk of inadequate contractual provision, which may be comforting for clients about to outsource a complex and high-cost activity such as IT. However, in the relationship between vendor and client the latter may be over-dependent on the former, and goals are not necessarily shared.

  According to Lambe, Spekman and Hunt (2002:147), alliances are broadly defined as collaborative efforts between two or more organisations in which the organisations pool their resources in an effort to achieve mutually compatible goals that they could not easily achieve alone. Resources here are defined as any

tangible or intangible entity available for use by an organisation to compete in its marketplace.

When organisations' business relationships are collaborative, rather than adversarial in nature, a variety of types of these relationships may be classified as alliances, for example outsourcing. Hancox and Hackney (2000:229) interviewed IT managers to find support for the partnership theory in IT outsourcing.

Despite assurances found in vendors' marketing literature, most clients were sceptical about partnership. If partnership did exist, it was usually as a collection of some of the intangibles mentioned earlier, rather than as a formalised arrangement. Partnership was more likely to be claimed in the area of systems development, where vendors needed to have a greater understanding of the organisation, than in outsourcing of operations and IT infrastructure support.

- **Transaction cost theory** – The most commonly used is the transaction cost theory and the concept is that the costs of a transaction determine what structure is more effective – market or hierarchical. The company should choose the transactional mechanism which is most cost-effective. Basic factors causing transactional difficulties include bounded rationality, opportunistic behaviour, small numbers bargaining and information asymmetry. These transaction difficulties and associated costs increase when transactions are characterised by specific resources, uncertainty and infrequency.

  Drawing on transaction cost theory, the sourcing decision is often seen as a rational decision made by organisations that have considered transaction related factors such as asset specificity, environmental uncertainty and other types of transaction costs. Whenever an activity is conducted under conditions of high uncertainty, or whenever an activity requires specific assets, transaction costs, the costs of writing, monitoring and enforcing contracts are likely to be high. When transaction costs are high, outsourcing is deemed to be relatively inefficient compared with internal, hierarchical administration (McIvor, 2005:48).

These theories will be helpful to assist future decision makers in selecting the appropriate sourcing models as described in the next section.

2.4 SOURCING MODELS

Sourcing or a sourcing strategy is a holistic view of how a company plans to source units of work. The most predominant models found in the industry today are the following:

- **IT Department fully in-sourced:** This is the traditional IT department model. An IT department would hire staff as part of the company and all IT functions would be performed in-house within the company.

- **IT Department fully in-sourced with external staff augmentation:** This is a variation of the above where the IT department is predominantly comprised of internal employees but the staff complement is augmented by external contract (or agency) employees. This staff augmentation allows IT departments to acquire specific skills, downsize or terminate workers quickly if necessary and staff up rapidly on short-term projects. Many small- to medium-sized companies practice this today as they would prefer not to deal with the overhead of contract management or off-shoring.

- **IT Department Managed with External Services Contracts:** In this model, the IT department still retains the control around SLA's and services provided. But in this model, specific terms around the work delivered are defined and the service provider must meet the terms of the service in order to receive compensation. There may also be penalties or bonuses defined as part of the contract terms to provide incentive to the service provider. The service provider is responsible for hiring of staff, meeting the SLA and the management overhead for delivering the function. This model could be called outsourcing a function.

- **Partially Outsourced:** In this model, many areas in the IT department would still have a large presence of key IT personnel: service managers, architects,

business analysts, etc. But one or more service contracts would exist, outsourcing key functions to external service providers.

- **Fully Outsourced:** In this model, IT would be fully outsourced to service providers and the organisation would only retain a very small number of staff to manage the delivery of services according to contracts. Typically, this model is most effective for companies where IT does not strategically differentiate the business from another and the company can leverage economies of scale from an outsourcing arrangement to drive down costs.

- **Follow the sun:** This is a model for global support. It is not so much to whom the work is outsourced to, but really from where the work is sourced. Using a support desk example, “follow the sun” would be where staff across the globe (for example in North America, Europe and Asia) would support the help desk globally depending upon timed shifts. The benefit of “follow the sun” is that regional staff can be used to support a global operation, reducing the global TCO.

- **Global Centres of Excellence:** Global Centres of Excellence are organisational structures that are comprised of global IT employees who support a specific IT function. For example, a mainframe Centre of Excellence would consist of a set of global employees who would work together to deliver all services associated with the mainframe. The employees who were part of that Centre of Excellence could be located anywhere in the world and might perform specific functions as part of the Centre of Excellence based on expertise. All employees in that global Centre of Excellence would report to the Head of the Centre of Excellence in order to maintain global consistency.

- **Off-shoring:** This model is mainly used to outsource specific IT functions to lower-cost global regions. In recent years, it has been mainly associated with sourcing application development and maintenance work from India and China.

- **Near-shoring**: This model relates to sourcing work to another geographical locale that is lower in cost compared to your current location, either within your own country or on the same continent. The benefits of near-shoring are that the overhead of sourcing to India may not be present due to limited linguistic

differences, a higher telecommunications stability and same time zone. However, there may be higher costs of labour in near-shoring ventures.

The sourcing models as described above and the way they are employed in an organisation usually depends on the level or global footprint of the organisation. It will be very rare for a pure local company to offshore services to other countries like India or China but in multi-national companies it might make perfectly good sense to do so.

None of these models is perfect and the next section will deal with the drivers as well as some of the obstacles encountered in outsourcing.

2.5 DRIVERS AND OBSTACLES FOR OUTSOURCING

Although the primary drivers for outsourcing may be perceived to be economical in nature, more and more evidence from research indicates that strategic and environmental factors also play a significant role to motivate organisations to make outsource decisions. Lau and Zhang (2006:3) summarised the drivers for outsourcing in these three categories namely Economic, Strategic and Environmental factors. Table 2.5.1 describes these categories as well as the objectives or outcomes expected in association with these factors.

Table 2.5.1: Drivers for Outsourcing

Economic Factors	Objectives or anticipated outcomes	Authors
Cost reduction	– To improve profitability – To improve operating efficiency – To add value to product	Trunick (1989), Richardson (1990), Gonzales *et al*. (2005) Deloitte (2008)
Cost saving	– To improve cash flow – To increase efficiency	Embleton and Wright (1998), Claver *et al*. (2002) Deloitte (2008)
Capital investment reduction	– To make capital funds more available for core areas – To improve return on assets	Corbett (1998), Razzaque and Sheng (1998), Trunick (1998), Lynch (2004)

Strategic Factors	Objectives or anticipated outcomes	Authors
Acceleration of business process re-engineering	– To improve performance – To achieve competitive advantage	Corbett (1998), Embleton and Wright (1998), Clott (2004)
Focus on core competence	– To improve business focus – To increase competitiveness – To leverage the firm's skills and resources – To enhance customer satisfaction	Prahalad and Hamel (1990), Quinn and Hilmer (1994), Weerakkody *et al*. (2003)
Flexibility enhancement	– To reduce constraints of organisation's own production capacity – To convert fixed costs to variable costs – To increase responsiveness to market change – To reduce risks	Quinn and Hilmer (1994), Corbett (1998) Embleton and Wright (1998), Razzaque and Sheng (1998), Kakabadse and Kakabadse (2000), Jennings (2002), Lynch (2004) Deloitte (2008)
Environmental factors	**Objectives or anticipated outcomes**	**Authors**
IT development	– To meet increasing demand for new information systems and resources more efficiently and economically.	Lynch (2004) Deloitte, 2008
Globalisation	– To help companies gain global competitive advantage.	Clott (2004)
Capability of supplier	– To enable partnering to improve service quality and customer service and increase competitive advantage.	Jennings (2002) Deloitte (2008)

Adapted from: Lau & Zhang (2006:3)

By means of outsourcing, organisations can gain a competitive advantage through cost reduction and improved responsiveness to changing business environment and market demand.

A number of potential obstacles and problems associated with outsourcing are also recognised. There is evidence that outsourcing does not reduce costs as initially anticipated in some cases (Lau & Zhang, 2006:3). As summarised in Table 2.5.2, the loss of control, loss of critical skills, inadequate capabilities of service providers, loss of flexibility, failure to realise the hidden costs generated by the contract, difficulty in obtaining organisational support, indecisiveness on which activities to outsource,

inadequacy of cost and benefit analysis systems, fear of job loss and damage to morale of existing workers are among the commonly cited inhibitors to outsourcing.

Table 2.5.2: Main obstacles and problems of outsourcing.

Obstacles and problems	Impacts	Authors
Loss of control	– Loss of core competence – Risks of alienated customers	Blumberg (1998), Lonsdale & Cox (2000)
Loss of critical skills	– Loss of competitive advantage – Loss of market share	Quinn & Hilmer (1994), Jennings (2002), Beaumont & Sohal (2004)
Inadequate capabilities of service provider	– Loss of competitive advantage	Jennings (2002)
Loss of flexibility	– Reduces responsiveness – Risks of alienated customers	Embleton & Wright (1998), Beaumont & Sohal (2004)
Failure to realise hidden costs of contract	– Increased operating cost	Palvia (1995), Kakabadse & Kakabadse (2000), Gonzales *et al.* (2005)
Difficulty in obtaining organisational support	– Increased chances of failure	Razzaque & Sheng (1998)
Indecisiveness on which activities to outsource	– Increased chances of failure	Lankford & Parsa (1999)
Inadequate cost and benefit analysis systems	– Lower return on investment – Loss of competitive advantage	McIvor & Humphreys (2000)
Fear of job loss	– Increased resistance to change – Lower staff morale	Razzaque & Sheng (1998) Embleton & Wright (1998)

Source: Lau & Zhang (2006:4)

2.6 OUTSOURCING FRAMEWORKS

Many Information Technology service management frameworks exist today with the most popular being the Information Technology Infrastructure Library (ITIL) framework and Control Objectives for Information and related Technology (COBIT) framework.

Although not directly related to IT outsourcing, these frameworks describe a set of generic, well defined IT processes which is essential for organisations to have fully implemented before the outsourcing of IT services are considered.

2.6.1 Butler Cox Federal model

Butler Cox Consulting defined a federated organisational and IT management approach with respect to Information systems and requirements. They proposed that the IT management environment should be split into a demand side and supply side of IT services.

The demand side of the IS organisation operates close to business, articulating the business requirements into specific demands of IT services. The supply side are responsible to act on the requirements from the demand side in providing the predominantly technical expertise and services in fulfilling the demand.

Once an organisation has implemented an IS organisation with a split in the demand and supply of IT services, it is a relatively straight forward process to outsource certain elements or all of the supply side functions to capable IT service provider/s. Although this approach has been proposed almost twenty years ago, the concept still carries very valid design principles for organisations to follow should they consider outsourcing (Willcocks, 1994:244-248).

2.6.2 COBIT and Val IT Framework

Control Objectives for Information Technology (COBIT) is a proven set of standardised processes that businesses can use to ensure that information technology is effectively and securely integrated with business goals.

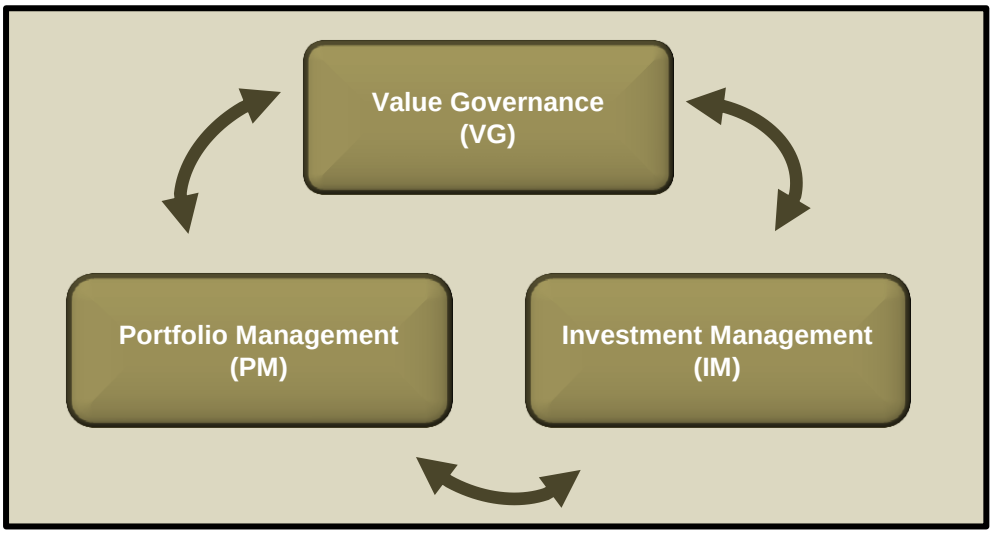
COBIT was developed by ITGI/ISACA in the early 1990's and has evolved into a global standard for control over IT processes. The Information Systems Audit and Control Association (ISACA) have more than 95,000 constituents in more than 160 countries in Asia, Latin America, Europe, Africa, North America and Oceania. Its members include internal and external auditors, CEOs, CFOs, CIOs, educators, information security and control professionals, business managers, students, and IT consultants (COBIT Framework for IT Governance and Control, 2006:1-17).

Figure 2.6.2: COBIT - Framework for IT Governance and Control

Source: COBIT Framework for IT Governance and Control

IT Value Delivery, (Val IT) is a new governance framework and supporting publications addressing the governance of IT-enabled business investments, Val IT consists of a set of guiding principles. A number of processes conforming to those principles are further defined as a set of key management practices (Val IT - Framework for Business Technology Management: 2006:3).

Figure 2.6.3: Val IT - Framework for Business Technology Management



Source: Adapted from Val IT - Framework for Business Technology Management (2003:2)

The Val IT framework is supported by publications and operational tools and provides guidance to:

- Defining the relationship between IT and the business and those functions in the organisation with governance responsibilities.

- Managing an organisation's portfolio of IT-enabled business investments.

- Maximising the quality of business cases for IT-enabled business investments with particular emphasis on the definition of key financial indicators, the quantification of "soft" benefits and the comprehensive appraisal of the downside risk.

Val IT addresses assumptions, costs, risks and outcomes related to a balanced portfolio of IT-enabled business investments. It also provides benchmarking capability and allows enterprises to exchange experiences on best practices for value management.

COBIT and Val IT provide good practices across domain and process frameworks and present activities in a manageable and logical structure. They help optimise IT-enabled investments, ensure service delivery and provide a measure against which to judge when things go wrong. COBIT and Val IT complement each other.

While COBIT is concerned with the 'Hows', Val IT is concerned with the 'Whats' and the 'Whys'.

Val IT addresses questions like, 'Are we doing the right things?' and 'Are we getting the doing them well?'. Val IT is a framework for business governance of information systems. It involves selecting and managing the right portfolio of IT-enabled investments that are focused on business strategy and provides measurements for close control on benefits realisation.

COBIT is concerned with IT governance of information systems. It is business oriented and process focused.

The whole of COBIT consists of linking business goals to IT Goals, providing measurements and maturity models to assess their achievement, and identifying the associated responsibilities of business and IT process owners. It has a process model with enterprise architecture concepts that help identify the resources essential for process success versus applications, information, infrastructure and people (COBIT Framework for IT Governance and Control, 2006:17).

2.6.4 ITIL Framework

The Information Technology Infrastructure Library (ITIL) is the most widely accepted approach to IT Service Management in the world providing a framework for managing IT services, IT development and IT operations.

First documented in the late 1980's by the UK Office of Government Commerce, ITIL provides a cohesive set of best practices, drawn from the international public and private sectors.

It is supported by a comprehensive qualifications scheme, accredited training organisations, and implementation and assessment tools. Figure 2.5.4 graphically represents the ITIL framework with its associated phases.

The ITIL V3 service lifecycle consists of five distinct phases:

1. **Service Strategy** - Designing, developing and implementing Service Management as a strategic resource and setting overall objectives for IT services.

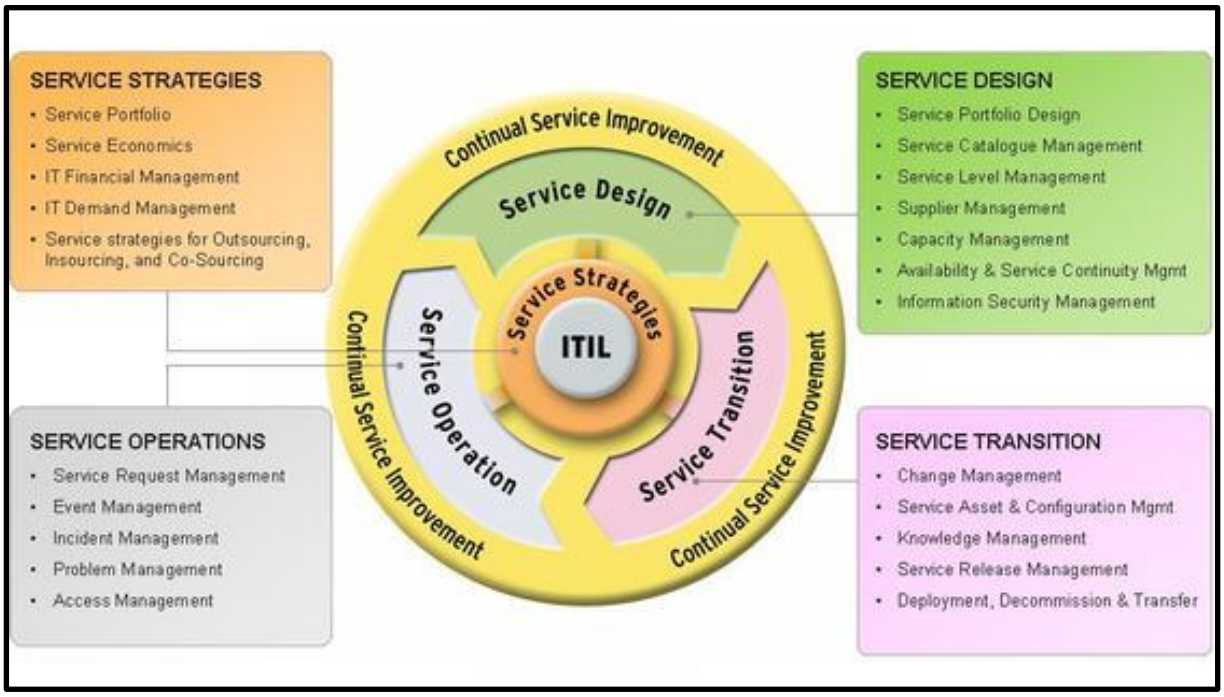
2. **Service Design** - Developing appropriate IT services, including architecture, processes and policy development.

3. **Service Transition** - Developing and improving capabilities for the transition of new, modified services to production.

4. **Service Operation** - Developing effective and efficient support services.

5. **Continual Service Improvement** - Creating and maintaining value for the customer by designing service improvements over time.

Figure 2.6.4: ITIL V3 Lifecycle



Source: Office of Government Commerce (2011)

Although the frameworks as described above are well known and respected in the industry for the value they add with respect to the operational management of IT services and the controls required within those services, they do not fully address the complexities involved with strategically outsourcing certain in-house activities. For this reason a much more comprehensive framework is required. The next section will describe such a framework.

2.7 OUTSOURCE MANAGEMENT FRAMEWORK

Information Technology Outsourcing (ITO) and more recently business process outsourcing (BPO) have received considerable practitioner and academic attention but no study has yet presented a rigorously developed, structured and detailed process for client organisations to follow to improve their likelihood of success while minimising their risk (Cullen *et al*., 2006:2). Annexure A represents such a framework that were developed for outsource management. The focus is on managing the process via a complete lifecycle as described in Table 2.7.

Table 2.7: Outsourcing lifecycle model – Building blocks and key activities

Phase	Building block	Key Activity	Goal
Architect	BB1: Investigate	1. Gather insight via experts and experienced organisations 2. Determine and test goals / expectations 3. Collect intelligence on market conditions and potential suppliers 4. Investigate similar decisions and peer organisations.	Veracity, not ideology
	BB2: Target	5. Match goals to appropriate outsource model 6. Identify, with objective criteria, suitable services to outsource 7. Prepare the 7 baseline and future state profiles: service, cost, asset, staff, stakeholder, current contracts and governance	Targeted and defined scope
	BB3: Strategize	8. Decide the rollout approach (big bang, phased, piecemeal) 9. Determine 'key' rules (e.g. governing docs, # of suppliers, asset ownership, risk/reward) 10. Design the detailed end-to-end lifecycle program/projects 11. Identify and source the lifecycle skills 12. Prepare the lifecycle communications strategy 13. Prepare the business case rules and the base case 14. Assess feasibility, risk and impact to the organisation	Informed, holistic strategies
	BB4: Design	15. Prepare the commercial and operating blueprint 16. Develop the 4 balanced score metrics - service, financial, relationship and strategic 17. Draft the service level agreement - scope, metrics/incentives, reporting, & governance 18. Draft the price framework (fixed, variable and cost plus items) 19. Draft the contract considering the standard 90+ issues 20. Design the inter-party relationship (structure, roles, authorities, etc) 21. Design the retained organisation (kept functions) 22. Design the contract management function (Governance)	Well designed future state
Engage	BB5: Select	23. Plan and detail the tender stages 24. Identify the right evaluation team — breadth and depth 25. Determine the right evaluation criteria and strategy for each tender stage. 26. Request the right, clear and comprehensive bid data for each tender stage 27. Facilitate the best responses (briefings, Q&A, data room, tours, etc) 28. Use interactive evaluation techniques (interviews, site visits, etc) 29. Select supplier based on value for money 30. Conduct the 5 due diligences on supplier company, price,	Best value for money, sustainable solution and provider

		solution, contract, and customer references	
	BB6: Negotiate	31. Prepare negotiation strategy and prioritise negotiation items 32. Conduct effective negotiations	Complete contract
Operate	BB7: Transition	33. Finalise and mobilise all plans (e.g. communications, risk, setup, acceptance) 34. Resource the transition project 35. Manage the impact on staff (retained, transferring and departing) 36. Manage the transfers (staff, asset, 3" party contracts, work-in-progress, etc) 37. Manage knowledge retention and transfer 38. Implement retained organisation and contract management 39. Engineer workflows, communication channels, authorities, etc. 40. Conduct acceptance, closeout and post-implementation review	Efficient and complete mobilisation
	BB8: Manage	41. Invest in the relationship (plan, assess and improve) 42. Meaningful reporting and analyses 43. Regular communication and meetings 44. Diligent documentation and administration 45. Manage risks and plan contingencies 46. Manage issues, variations and disputes 47. Effect continuous improvement and streamlining 48. Evaluate and audit supplier (controls, performance, compliance) 49. Evaluate organisation both as a customer and contract manager	Ongoing results
Regenerate	BB9: Refresh	50. Assess next generation options (backsource, retain, handover) 51. Assess contract outcomes and lessons 52. Knowledge refreshment (e.g. market, technology, price, metrics) 53. Reassess requirements — re-scope, re-bundle and re-design 54. Determine the strategy and business case for each option	Refreshed strategy and options

Source: Cullen *et al*. (2006:7)

In the lifecycle, each phase, and its building blocks, prepares the way for the following phases and building blocks. Likewise the success of each building block depends on the preceding ones, with the last one paving the way for the next-generation sourcing strategy and its lifecycle.

The four main phases of the life-cycle are summarised below (Cullen *et al*. 2006:8).

2.7.1 Architect

The Architect Phase, where the foundation for outsourcing is laid, consists of the first four building blocks — Investigate, Target, Strategize, Design. At the end of this phase, the organisation knows itself well enough to confidently publicise its needs.

2.7.2 Engage

The Engage Phase, where one or more suppliers are selected and the deal is negotiated, consists of the fifth and sixth building blocks — Select and Negotiate. The goal of both of these pre-contract phases is for the client organisation to collect and analyse information so that its decision makers can make rational and informed decisions in the phases when they have the greatest leverage with the prospective suppliers.

2.7.3 Operate

The Operate Phase, where the deal is put in place, operationalized, and managed through its term, is comprised of the seventh and eighth building blocks — Transition and Manage. At this point, the client organisation generally faces a monopoly provider. After this point, if the deal is not working, management rarely has economic or political options other than to continue with the supplier. Outsourcing deals can be prohibitively expensive to renegotiate, terminate and either back source (bring back in-house), or transfer to another supplier.

It is in this phase that the benefits of the previous work done become evident. The Operate phase either proceeds smoothly as a result of the strategies, processes, documents and relationship management designed in the earlier building blocks, or the phase suffers, due to misinterpretations, ambiguities, disagreements, and disputes. At this stage, such problems can only be corrected through huge and tedious remedial efforts.

2.7.4 Regenerate

The Regenerate Phase, where next-generation options are assessed, consists of one building block: refresh. Following this phase, the lifecycle begins anew, returning to the Architect Phase, where the organisation prepares for its next-generation deal(s).

Cullen, Lacity and Wilcocks (2007:8) found that organisations that followed the phases and building blocks in this sequence had more success and fewer problems than those that followed other sequences. However, the sequence of activities within each building block could be somewhat more fluid without impacting the results.

Furthermore, they found that organisations needed to “walk through” the lifecycle before embarking on it, to decide what they would need to know and what events or actions would need to take place for the outsourcing to succeed as a multi-generational program. For this reason, in the Architect Phase, organisations essentially need to work backwards from the last building block to the first to understand the entire lifecycle. They then need to execute from the first building block onward.

To further enhance the process of building block 5 which describes the selection of suitable suppliers and building block 6 relating to the negotiation of the deal with key suppliers, Client organisations should evaluate the suppliers on a set of key supplier capabilities. The next section will describe twelve key supplier capabilities to be taken into consideration for this purpose.

2.8 KEY SUPPLIER CAPABILITIES

Client organisations considering outsourcing need to develop a framework of key supplier capabilities required. Feeny, Lacity & Willcocks (2005:41-48) describe twelve such supplier capabilities. Depending on their specific needs and circumstances, they may utilise these capabilities in order to assess potential service providers or use this as a future measure when they want to renew existing agreements. The key capabilities may also be very helpful for service providers to assess their relative

strength versus their competition. Following below is a short summary of the twelve key capabilities:

- **Domain expertise** – this describes the supplier's capacity to apply and retain sufficient professional knowledge of the target process to meet the user requirements. Depending on their goals, clients will view domain expertise differently. A client seeking to build external capacity to handle periodic variations in service demand will want commitment from the supplier that it is prepared to build expertise specific to that context. Clients expect the suppliers to groom, reward and retain their subject matter experts.

- **Business Management -** The second requirement of any outsource arrangement is that the supplier consistently be able to meet both client service-level agreements and its own business plans. Clients must understand that failure on one front inevitably leads to failure on the other. In some adversarial client-supplier relationships, clients focus on the high-priced items within the supplier's bundle of services and threaten to erode the supplier's margin by scaling back on or eliminating these items. They frequently fail to give their suppliers credit for other items in the bundle that are priced quite favourably compared to external benchmarks of unit price.

- **Behaviour Management** - When considering outsourcing services, clients often seek qualitative as well as quantitative improvements. For example, some managers worry about whether morale will suffer if employees are transferred to the supplier's organisation or whether employees will find a new sense of purpose. Every major outsource supplier has employees with impressive experience, skill and knowledge. However, clients should also evaluate the supplier's track records in motivating and managing people to deliver superior service. This involves looking for signs that the supplier understands training, managing and motivating people (Feeny *et al.,* 2005:44).

  Sourcing - a potentially critical factor in meeting client goals is the supplier's capacity to tap the resources needed to meet service targets. Clearly, client needs will vary depending on the nature of the service and how much change the client is looking to generate. Some clients may want access to economies of

scale or lower labour costs; others may need specialised professional skills, improved infrastructure or help with supply management.

- **Technology Exploitation** - Many companies know that they are very out of date when it comes to investing in technology that could transform their services' cost, quality and functionality. At the same time, top management is increasingly wary about embarking on costly new technology initiatives they aren't able to manage closely. As they contemplate outsourcing, many clients want to know how swiftly and effectively suppliers will be able to deploy technology to support critical service improvement targets. This capability requires careful evaluation, looking beyond the purely technical skills that all major suppliers have and assessing the supplier's approach. Technology is expensive, and clients will want it to be the servant of the business, not the master. The role of a good technology supplier is to help client organisations find cost-effective business solutions.

- **Process Re-Engineering** - A powerful lever for service transformation is the ability to design and implement changes to the service process to meet improvement targets. Many clients are familiar with Six Sigma and the Capability Maturity Models but it is important to look beyond well-known tools and to consider the human and behavioural factors like inherent skills and measures of improvement.

- **Customer Development** - One of the fundamental challenges confronting both suppliers and clients in the ITO space is the referral to their customers as users. Suppliers should take three steps to achieve the re-orientation from user to customer. First, the supplier should have personal contact with a large number of end users in order to build a real understanding of how they want to use the service. This will help create a climate of trust. Second, the supplier should work with client managers to gain agreement on a detailed definition of the required service, which everyone involved with providing the service must understand. This will become the basis for regular reviews of performance and user satisfaction. And third, the supplier should work to create a business relationship in which the end user becomes a customer who feels fully informed of service options, potential enhancements and cost impacts; the customer then can make new choices to meet the changing needs of the business (Feeny *et.al*., 2005:45).

- **Planning and Contracting** - A supplier's relationship competency starts with its ability to develop and execute business plans that can deliver win-win results for both customers and suppliers over time. The planning component involves creating a vision of the potential prise and a coherent process for achieving it. The details of this vision and process should be shared openly with the client in order to build trust.

- **Organisation Design** - Business plans are executed through organisational structures and processes. Clients need to assess whether suppliers have the capability to deliver the necessary resources to achieve the stated business plan. Suppliers vary greatly in terms of their organisational approach, the choices they make and their flexibility. Some emphasise a "thin" front- end client team, interfacing with consolidated service units that have profit responsibility and ownership of most of the resources.

  Although such arrangements take advantage of economies of scale, they can constrain a supplier's ability to deliver the business plan for a specific client. By contrast, other suppliers allocate most of their resources to "enterprise partnership" units that are created for each major deal. The units have their own chief executives, full executive teams and dedicated core resources. They are responsible and accountable for delivery of the business plan.

  A critical issue in supplier organisational design is resource allocation. Clients seeking to achieve service transformation must evaluate this area with particular care. A potential supplier may have impressive capabilities in all of the important elements of transformation, such as sourcing, technology and process re-engineering, but the need for many of these capabilities will fluctuate dramatically during the life of the contract. Clients thus need to select suppliers who will be responsive to their needs as they change over time (Feeny *et.al.,* 2005:46).

- **Governance** - Every supplier points to some type of service review committee or board that define, track and evaluate how well they have performed over time. Large relationship oriented deals include a joint board of directors, which underscores the expectation that clients will be active partners in the enterprise.

- **Program Management** – An ITO supplier cannot survive without highly developed project management and change management capabilities. But clients interested in service transformation and a long-term relationship should look beyond the supplier's project management capabilities and evaluate its program management capability. Program management involves prioritising, coordinating, mobilising the organisation and promoting a series of interrelated change projects. Managing change at this level demands sophisticated methodologies, processes and professional skills.

- **Leadership** - Although governance provides a structural and procedural context for leadership, effective suppliers exercise leadership more directly. They know how to identify, communicate and deliver the balance of the activities required to achieve success, both for the client and the supplier. The main differentiator between success and failure for client relationships are the individual leading the supplier account teams (Feeny *et.al.,* 2005:47).

Although not highlighted in the capabilities above, the 'Strategic trap' as described in the beginning of this chapter should also be considered as a key ability required by outsource partners. They should be flexible enough to allow continuous amendment and re-negotiation of service levels in step with technology, business and environmental changes for the duration of the agreement. The following section will focus on the lessons learned in terms of supplier capabilities.

2.9 SUPPLIER CAPABILITIES LESSONS LEARNED

According to the Deloitte Consulting Outsourcing Report (2008:25), better alignment with business goals is key. When a group of 300 top executives all over the world were asked what they would do differently if they had to re-do their outsourcing initiatives the following emerged in order of importance:

- Define realistic service levels that align with business goals.
- Define and align business goals with outsourcing strategy.
- Develop, plan and staff for service contract management.
- Spend more time on vendor selection and evaluation.

- Use an experienced 3rd party advisor.
- They should have outsourced sooner.
- Compare costs of outsourcing against that of in-house delivery of services.

Willcocks (2007:02) describes and summarises eight key lessons regarding supplier capabilities that have emerged from fifteen years of research of over 1200 organisations. They are the following:

2.9.1 The supplier selection and negotiation phase is when the client enjoys most bargaining power. If this power is not used wisely at this point there can be very negative repercussions. The CEO's authority and influence is a key resource in this process.

2.9.2 Customers need to assess suppliers' capabilities and competencies rather than their resources. Twelve key capabilities can be leveraged into delivery, relationship and transformation competencies that are of overriding importance to clients.

2.9.3 Choosing the right supplier model or configuration of suppliers is the essential first step. This is part of a sourcing strategy and the CEO should be closely involved.

2.9.4 Customers should assess a supplier's capabilities and competencies for each new business context: not every business context requires suppliers to excel in all twelve capabilities and all three competencies. In assessing suppliers there are three different sets of criteria: mandatory, qualitative and price.

2.9.5 It is vital for CEOs to avoid the Winner's curse' - deals which excessively favour the client at the expense of the supplier, as these do not work to the client's advantage in the long run. The key for the CEO is getting the best value in return for a fair price.

2.9.6 Tendering is generally the most common and effective strategy to select suppliers. Joint decisions involving the CEO, business executives and IT are

the most effective. Direct negotiation without tendering and competition is only for highly experienced clients.

2.9.7 The more interaction and transparency between the client and potential supplier at bid and negotiation stage the better. A range of techniques have been developed to facilitate this on both sides.

2.9.8 Fundamentally, the client CEO has two key roles to play. The first is ensuring the right supplier is selected at the right price. The second is shaping the context and contract as well as staffing retained management such that the supplier will perform to the best of its capabilities.

It is clear that executive management involvement is imperative throughout the journey of embarking on an outsource initiative. Representation and involvement from CEO level is necessary in order to negotiate the best possible deal.

2.10 CONCLUSIONS

Although the frameworks like ITIL and COBIT as described may add value for client organisations as reference for their own internal service delivery processes and controls, the Outsource Management Framework as presented by Cullen *et al*. (2006:18) is by far the most comprehensive framework developed to date. Client organisations should utilise this framework to architect, engage, operate and regenerate their outsourcing initiatives.

Clients organisations and suppliers should understand that there is distinct stages related to the maturity of outsource relationships (Refer to Annexure B).

Over time, the relationship changes from a cost stage, where the focus is on economic benefits, transaction costs and the detail of the contracts. This will shift to a Resource stage focusing on the access to strategic resources and joint innovation. Lastly the partnership level can be reached where an alliance may be formed and full economic exchange may result (Gottschalk & Soli-Saether, 2006:205).

What are important for service providers to understand are the capabilities that are required by client organisations with respect to the delivery of services.

Strong leadership, domain expertise, business acumen and customer development capabilities are required while still demonstrating sound internal capabilities like program management, behaviour management and the ability to exploit technology to the benefit of both parties.

2.11 SUMMARY

The aim of this literature review was to determine the definition of outsourcing, the different theories of outsourcing, the drivers and obstacles thereof as well as IT management frameworks relating to outsourcing. Lastly, lessons learned and best practices by other companies were reviewed in order to create successful outsource agreements with suppliers.

In its simplest form, outsourcing can be described as the procurement of products or services from sources that are external to an organisation.

Client organisations need to be aware of the specific reason for outsourcing required in support of their overall business strategy. This may range from internal focus on core competency with best-in-class service providers providing non-core activities, to partnerships where they strategically pool resources to achieve mutually compatible goals. The particular sourcing model adopted by client organisations usually depends on the planned level of outsourcing as well as the global footprint of the organisation.

Drivers and obstacles of outsourcing were documented as well as industry frameworks to assist with the planning and implementation of agreements. Key supplier capabilities were discussed in detail as well as lessons learned by industry.

CHAPTER 3: EMPIRICAL STUDY

3.1 INTRODUCTION

This chapter details the empirical research that was conducted in one of South Africa's largest banks. Their Information Technology department has been identified in this study as they make extensive use of outsourcing and contracting of services in the ICT space. This includes a fully outsourced distributed computing support service, application development offshoring to companies in India, as well as network architecture and support.

The main objective was to determine the importance of the most common factors that drive IT outsourcing, the importance of key capabilities required of outsource partners and the current alignment with the client organisation's requirements in relation to the primary and secondary objectives as well as the literature study conducted in Chapter two.

3.2 THE PROCEDURE AND SCOPE OF THE QUANTITATIVE RESEARCH

The empirical study, which focuses on the management of outsource agreements between client organisations and suppliers, sets out to explore the factors that drives IT outsourcing within the client organisation and the importance of the major supplier capabilities as defined in the literature review.

There are two main approaches in conducting research namely qualitative and quantitative. In qualitative research, emphasis is placed on processes and meanings that are not rigorously examined in contrast to quantitative research which implies quantity, amount, intensity or frequency. Qualitative research deals with subjective data that is captured from the minds of respondents or interviewees while quantitative research deals with objective data consisting of numbers (Welman, Kruger & Mitchell, 2005:8).

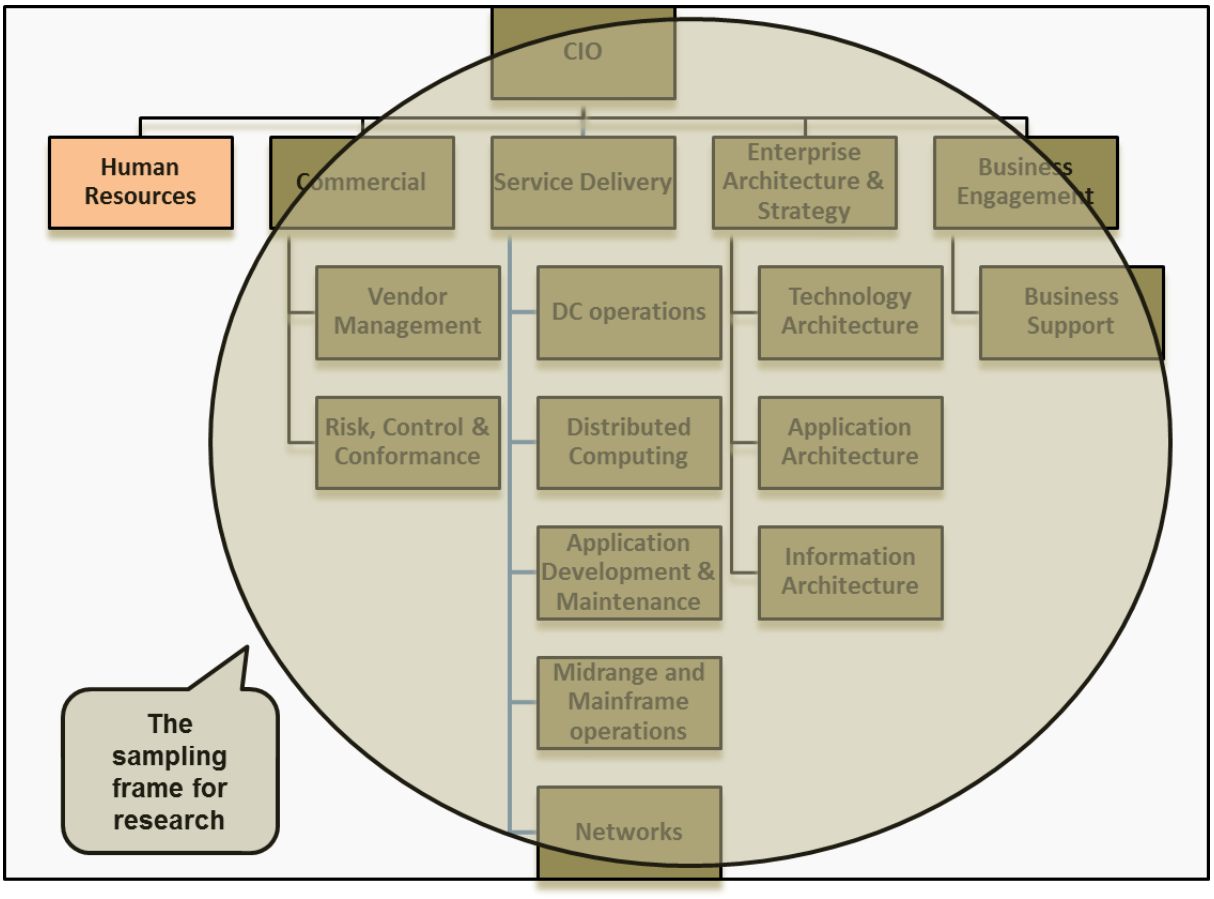
The author chose a quantitative approach for this research as the desire was to create an understanding of the facts from an outsider's perspective.

3.2.1 Sample group and size

The study population was identified as those individuals within the client organisation's Information Technology structure that has a *direct management responsibility* for the management and maintenance of ICT outsource agreements within the organisation. The target group consisted of employees within group technology, group sourcing and business. A total of ninety six (96) individuals were identified as the population that satisfy the above criteria.

Figure 3.1 provides a high level view of the structure and highlights the departments that were identified to be included in the sampling frame.

Figure 3.1: Sampling frame for the research study



A non-probability, purposive or 'stakeholder' sampling technique was used as the author, with his experience in the client organisation environment, deliberately identified individuals in the organisation that have a direct management responsibility

towards outsource vendors. This implies that the sample may be regarded as representative of the population.

The drawback of this method of sampling is that other researchers may choose different ways to obtain such a sample. It is therefore impossible to evaluate the extent to which such samples are representative of the relevant population (Welman *et al*., 2008:69).

Although the sample may be regarded as representative of the population as indicated above, the author decided to evaluate the sample size to ensure results that are scientifically and statistically relevant. Large sample sizes are generally preferred for statistical significance but this is very often constrained by limited time and budget. Equation 1 below can be used to determine the optimal sample size for an infinite population (Levine, Stephan, Krehbiel & Berenson, 2008:299-302).

Equation 1: Sample size (infinite population)

$$n = z^2 \, \pi \frac{(1 - \pi)}{e^2}$$

Where: n = sample size required
Z = the desired confidence level
π = population proportion
e = the acceptable sampling error or 'margin of error'

Source: Levine *et al.* (2008:302)

Equation 2: Sample size (finite population)

$$\text{nss} = \frac{\text{ss}}{1 + \frac{(\text{ss} - 1)}{\text{pop}}}$$

Where: nss = New sample size required
ss = sample size as calculated assuming infinite population
pop = Population of study

For finite populations we calculate the sample size with Equation 1 and then apply the obtained sample size in Equation 2.

Using Equation 1 and 2 above with a 95% confidence level and a 10% allowable error, a sample size of 48 is required for this study.

This following section presents the methodology followed in the construction of the questionnaire as well as the method of data collection and handling. The section consists of two parts with each part representing a different component of the data collection process. The first part contains information relating to the development and construction of the questionnaire and the second part contains information regarding the data collection.

3.2.2 The Survey Instrument

The survey instrument used in this study was a questionnaire developed by the author. The questionnaire was developed from a literature review done on the management of outsource agreements between client organisations and suppliers and contains questions and items relevant to the stated research problem. Questions were logically categorised so that questions of the same kind or that seek the same kind of answers were grouped together.

The questionnaire were developed in such a fashion that the respondents had to complete the questionnaire on the internet via a web link provided to them by means of an e-mail. This e-mail provided the necessary background and importance of the survey as well as the link to the web based survey. Individual responses were recorded and tracked by the survey website. Respondents were prevented from responding to the survey more than once. Respondents that returned to a survey were allowed to continue where they left off and could edit their original answers.

The layout of the categories relevant to the literature review and research problem was as follows:

- **Section A: Demographic information**
  - Age group
  - Gender
  - Ethnicity
  - Division of IT
  - Permanent or contractor
  - IT experience
  - Role level
  - Type of ICT services outsourced

- **Section B: Factors that drive IT Outsourcing**
  - Economic Factors – 4 questions
  - Strategic Factors – 3 questions
  - Flexibility Factors – 3 questions

- **Section C: Supplier Capabilities**
  - Business management capability – 8 questions
  - Relationship and context – 5 questions
  - Supplier market status – 4 questions
  - Transformation capability – 5 questions
  - Delivery management capability – 3 questions

- **Section D: Alignment with Client organisation requirements**
  - Business model and strategy
  - Adaptable and flexible
  - Innovative
  - Market leaders
  - Professionalism
  - Performance objectives

  - Two open ended questions were developed to seek further understanding of:
    a) Issues and/or pitfalls to be avoided by suppliers.
    b) Recommendations by the client for the success of outsource agreements.

In section A the data were presented with predefined fields of which the respondent had to select the applicable answer by clicking on the appropriate selection box. Where required, a respondent could select more than one option.

In section B, a four point Likert scale was used to measure responses to factors that drive IT outsourcing in the organisation. Four points was used to eliminate neutral responses from respondents. The responses could range from ‘strongly agree’ with a value of 4 to ‘strongly disagree’ with a value of 1. The final average score represents the overall level of accomplishment or attitude towards the subject matter. The reliability of the constructs and findings are discussed.

In section C, a five point Likert scale was used to measure the importance of specific Supplier Capabilities required by the client organisation’s Information Technology department. The responses may range from ‘Very Important’ with a value of 5 to Irrelevant with a value of 1. The reliability of the constructs and the findings are discussed.

The first part of section D made use of a four point Likert scale to obtain an understanding of specific qualities important to the client organisation. The responses range from ‘strongly agree’ with a value of 4 to ‘strongly disagree’ with a value of 1. The second part consisted of two open ended questions where respondents had to provide their view on the issues and pitfalls that suppliers should avoid as well as recommendations that they regard as important to the overall success of outsource agreements.

3.2.3 Data collection

The questionnaire was developed with the aid of a WEB survey tool named esurveypro. The names and e-mail address of the full population were entered on the website. The self-selection sampling method was used as the respondents were asked to participate in the study by means of a cover e-mail providing background and context to the survey.

The letter inviting the population group to take part in the study is presented in Annexure D.

The cover letter as well as a web link to the e-survey was e-mailed to the identified population and they were allowed a total of two weeks to respond. One of the benefits of collecting the data in this fashion is the amount of control that one has with respect to the responses received.

The survey tool allowed further requests to be sent via an e-mail, specifically targeted to those participants who have not responded at the specified date.

Twenty nine responses were received after the initial two week period where-after the survey was re-sent to those that did not respond. After a further week, the total valid responses received increased to forty five (45).

Substituting the obtained sample size of 45 into Equation 1, with a 95% confidence level, the sampling error for the study came to 14 %. This seems fairly high but as the method of sampling can already be regarded a representative (as indicated in 3.2.1) and the limited time that was available, it would be regarded as adequate for this study.

3.3 RELIABILITY AND VALIDITY

Any form of exploratory research involving a questionnaire should be tested for validity and reliability.

Reliability relates to the credibility or degree of consistency of a questionnaire and thus the extent to which the same results are obtained when administering the questionnaire to the same individuals or groups irrespective of when it is administered, which particular version is used and who is applying the questionnaire (Welman *et al.,* 2008:145).

For this research project the Cronbach's alpha coefficient method was utilised to estimate internal consistency and thus reliability.

Validity is the extent to which the research findings accurately represent what is really happening in the situation (Welman *et al*., 2008:142).

To measure the validity of the questionnaire used for this study, a method of construct validity was used. The construct validity of a measuring instrument refers to the degree to which it measures the intended construct rather than irrelevant constructs.

3.3.1 Cronbach's alpha coefficient

Cronbach's alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. The Cronbach's alpha reliability coefficient normally ranges between 0 and 1. The closer Cronbach's alpha coefficient is to 1.0 the greater the internal consistency of the items in the scale. A high value of alpha is used as evidence that the items measure an underlying construct (Gliem & Gliem, 2003:6).

Although limited guidance exists in the literature as to what constitutes an acceptable or sufficient value for alpha, most users of this particular statistic recommends that a value of .7 should be achieved (Kent, 2001:221).

According to Kent (2001:222), all the authors making recommendations about acceptable values of alpha, indicate that the desired degree of reliability is a function of the purpose of the research. He suggests that for preliminary research the alpha range may be as low as 0.5 to 0.7.

The basic equation to calculate the Cronbach's alpha coefficient is given in Equation 3 below.

Equation 3: Cronbach's alpha coefficient

$$\alpha = \frac{n}{n-1}\left[1 - \frac{\Sigma Vi}{Vtest}\right]$$

Where:

α = Cronbach's alpha coefficient

n = Number of questions

Vi = variance of scores on each question

Vtest = total variance of overall scores (not %'s) on the entire test

Source: Allen (2005:04)

The Cronbach's alpha coefficient was calculated for each of the 9 constructs in the questionnaire using SAS (2005) from Statistical Consulting Services at the North West University. The results are presented in Table 3.1.

Table 3.1: Cronbach's alpha coefficient

Descriptive name of construct	# of items	$\bar{x}$	s	*Cronbach's alpha*
Economic factors	4	2.82	0.477	0.713
Strategic factors	3	2.74	0.526	0.727
Flexibility factors	3	2.86	0.479	0.654
Management capability	8	4.42	0.426	0.799
Relationship and Context	5	4.33	0.457	0.732
Supplier market status	4	4.26	0.526	0.800
Transformation capability	5	4.43	0.367	0.657
Capability to deliver	3	2.80	0.478	0.210
Requirements Alignment	6	2.80	0.448	0.830

Three constructs yielded a result of less than 0.7:

- Flexibility factors (3 items) with α = 0.654
- Transformation capability (5 items) with α = 0.657
- Capability to deliver (3 Items) with α = 0.210

The majority of the coefficients calculated were found to be greater than 0.7 which indicates a fairly high degree of internal consistency for the specific questions used. The questionnaire can therefore be regarded as reliable.

3.4 RESULTS AND ANALYSIS OF SECTION A

The purpose of Section A of the questionnaire (refer to Appendix C) was to collect the biographical information of the respondents in the categories as indicated below:

- Age group
- Gender
- Ethnicity
- Division of IT
- Permanent or contractor
- IT experience in years
- Role level
- ICT Services being outsourced

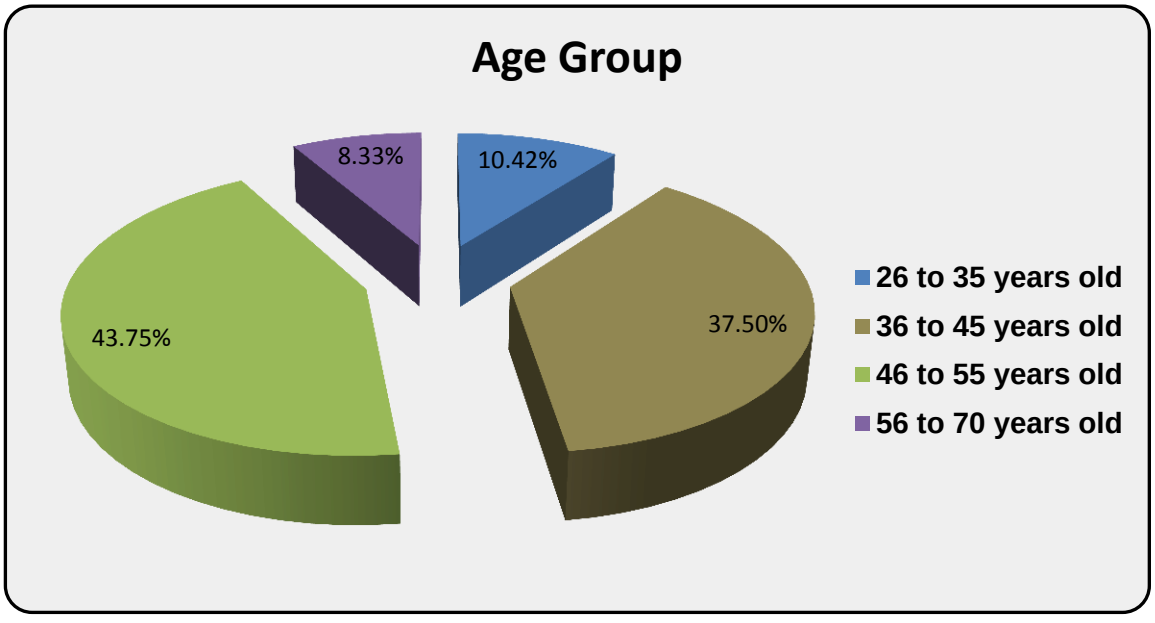
3.4.1 Classification of age group of respondents

The purpose of question 1 in section A for the questionnaire (refer to Appendix C) was to determine the age group categorisation of respondents.

3.4.1.1 Findings:

The age groups of all the persons that responded to the survey are presented in Figure 3.2 below.

Figure 3.2: Age group of respondents



3.4.1.2 Analysis of the findings

The two biggest categories in this analysis are represented by the 46 to 55 year age group with 43.75 % and the 36 to 45 year age group (refer to figure 3.1) together they account for 81.25% of the respondents. 10.42% of the respondents represent the 26 to 35 year old age group and 8.33% make up the remaining group of 56 to 70 years. No respondents under the age of 26 years or above the age of 70 participated in the survey.

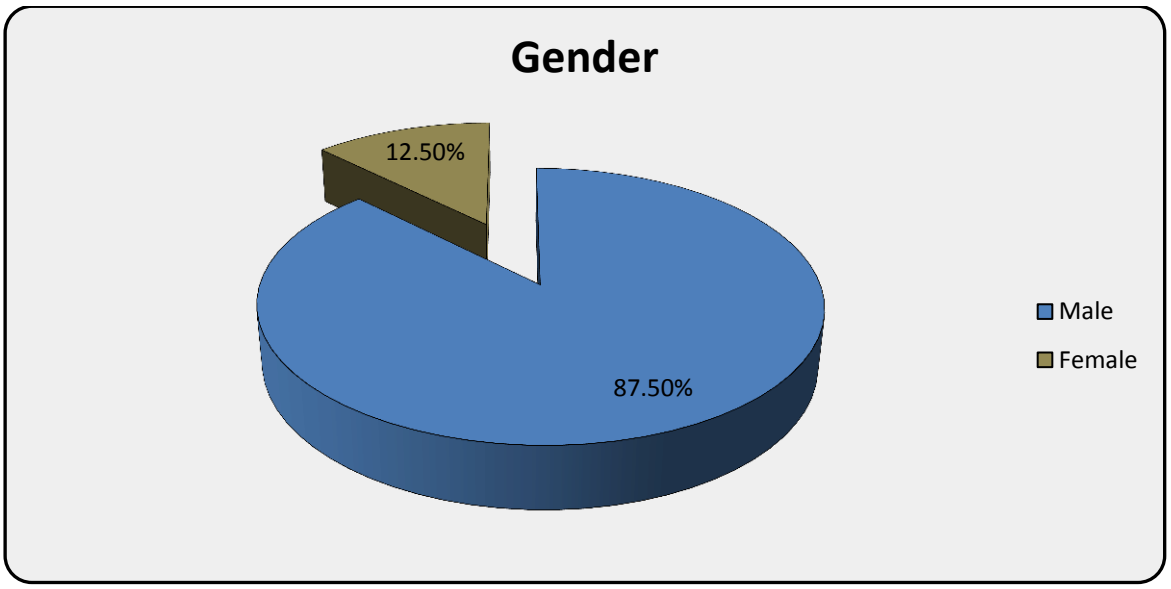
3.4.2 Gender of the respondents

The purpose of question 2 in section A for the questionnaire (refer to Appendix C) was to determine the gender of respondents. This will also be used to analyse if there is an effect size difference for the constructs.

3.4.2.1 Findings:

The gender distribution of all the persons that responded to the survey is presented in Figure 3.3 below.

Figure 3.3: Gender classification of respondents



3.4.2.2 Analysis of the findings

Figure 3.3 indicates that 87.5% of the respondents were male in comparison to only 12.5% of female respondents.

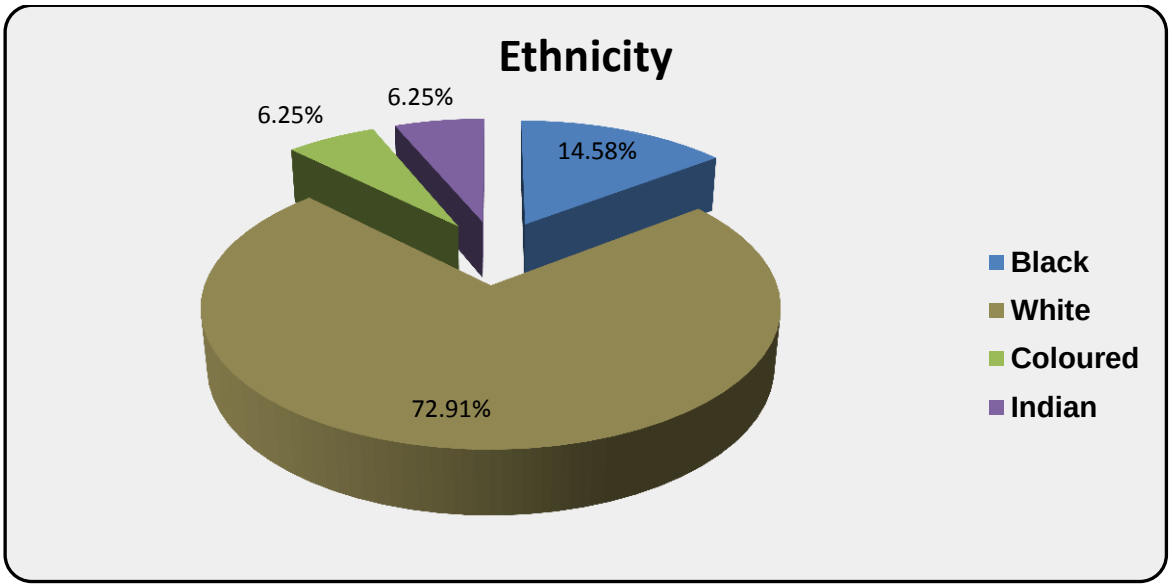
3.4.3 Ethnicity of the respondents

The purpose of question 3 in section A for the questionnaire (refer to Appendix C) was to determine the ethnicity of respondents.

3.4.3.1 Findings:

The ethnicity distribution of all the persons that responded to the survey is presented in Figure 3.4 below.

Figure 3.4: Ethnicity of respondents



3.4.3.2 Analysis of the findings

Figure 3.4 indicates that almost 73% of the respondents are White followed by 14.58% who are Black and the remainder evenly distributed as 6.25% Indian and 6.25% Coloured. This might be an indication that the client organisation has some way to go in terms of their demographic representation, especially on a senior level.

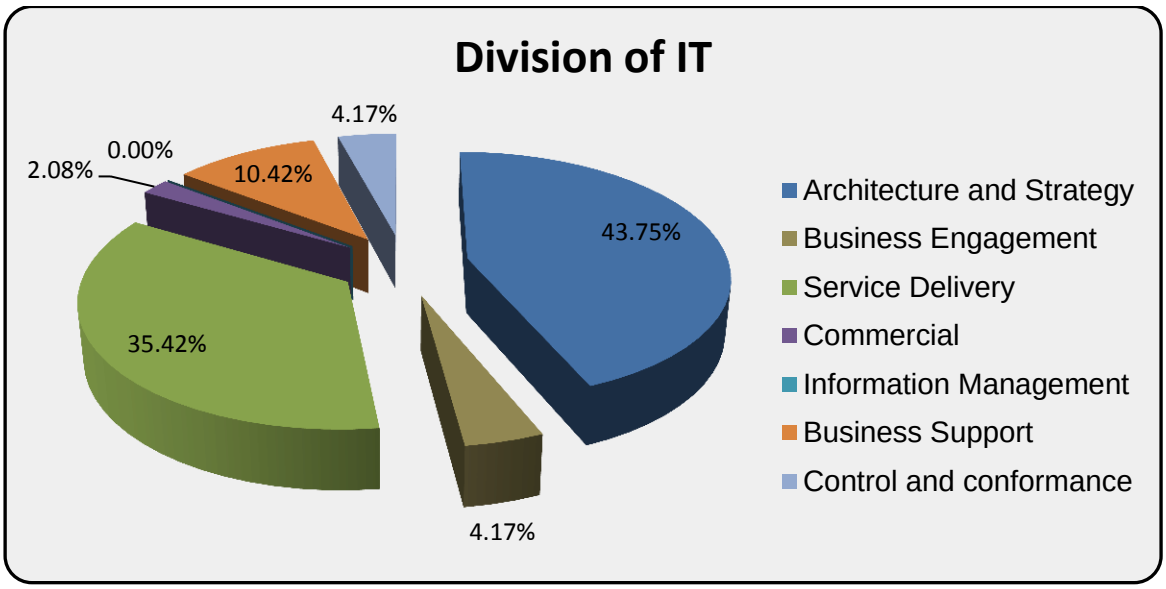
3.4.4 Division represented by the respondents

The purpose of question 4 in section A for the questionnaire (refer to Appendix C) was to determine in which Department of the client organisation's Information Technology Division the respondents are working.

3.4.4.1 Findings:

The respondent distribution per Department within the client organisation's IT Division is presented in Figure 3.5 below.

Figure 3.5: Division classification of respondents



3.4.4.2 Analysis of the findings

Figure 3.5 indicates that Architecture and Strategy constitutes the largest group of all responses, representing 43.75% of the respondents. This is followed by the Service Delivery group with 35.42% and Business Support on 10.42%.

A total of 2 persons each from Business Engagement and Control and Conformance participated with 1 person from the Commercial environment.

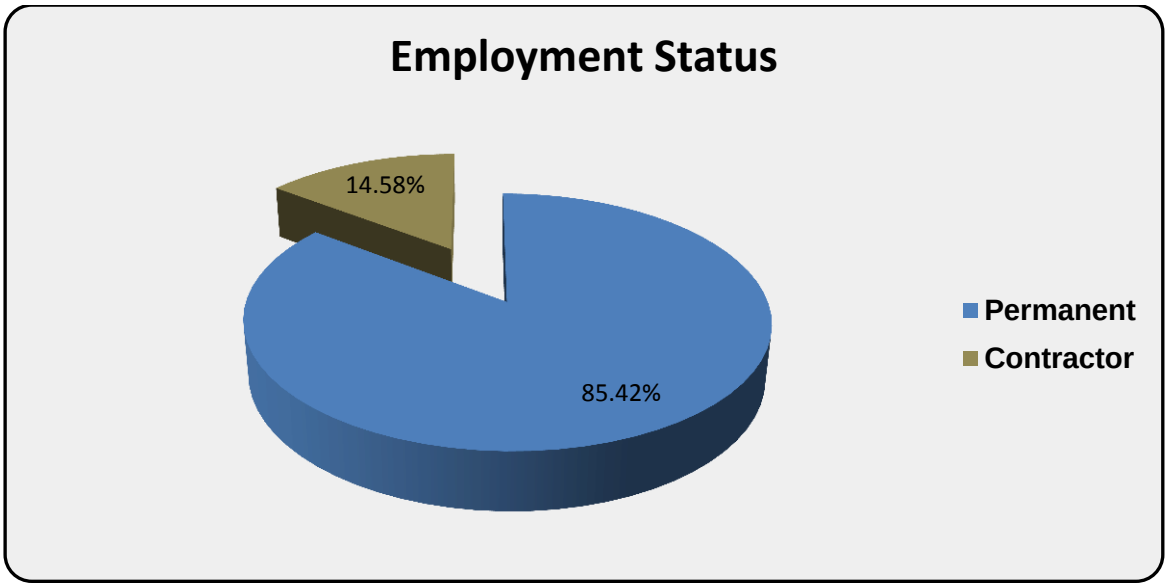
3.4.5 Permanent employment or contractor

The purpose of question 5 in section A for the questionnaire (refer to Appendix C) was to determine the employment status of the respondent in the context of having a permanent position or being a contractor.

3.4.5.1 Findings:

The employment status of the respondents is presented in Figure 3.6 below.

Figure 3.6: Employment status of respondents



3.4.5.2 Analysis of the findings

The majority of the respondents (85.42%) are permanently appointed employees of the client organisation. The remaining 14.58% or 7 respondents are contractors to them.

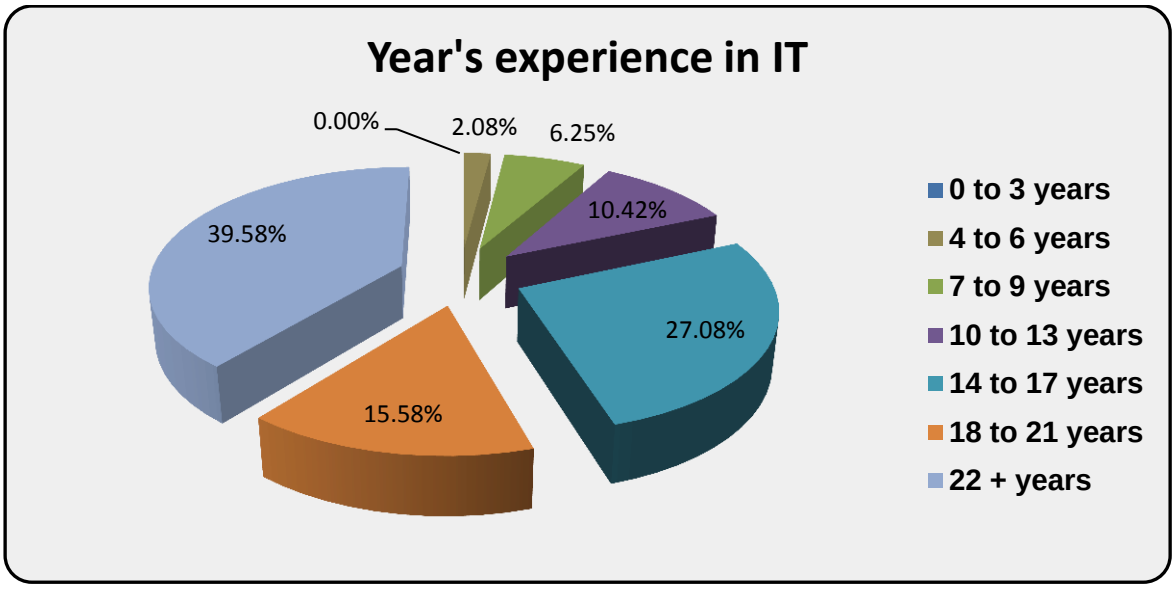
3.4.6 IT experience

The purpose of question 6 in section A of the questionnaire (refer to Appendix C) was to determine the IT experience of the respondents measured in years.

3.4.6.1 Findings:

The IT experience of the respondents is presented in Figure 3.7 below.

Figure 3.7: Total IT Experience in years



3.4.6.2 Analysis of findings

39.58% of the respondents have more than 22 years' experience in the ICT field with 15.58% being in the industry between 18 and 21 years. In total, more than 90% of the population has ICT experience of between 10 and 22+ years.

This is confirmation that the respondents who participated in this study have extensive experience in the Information and Communications Technology field.

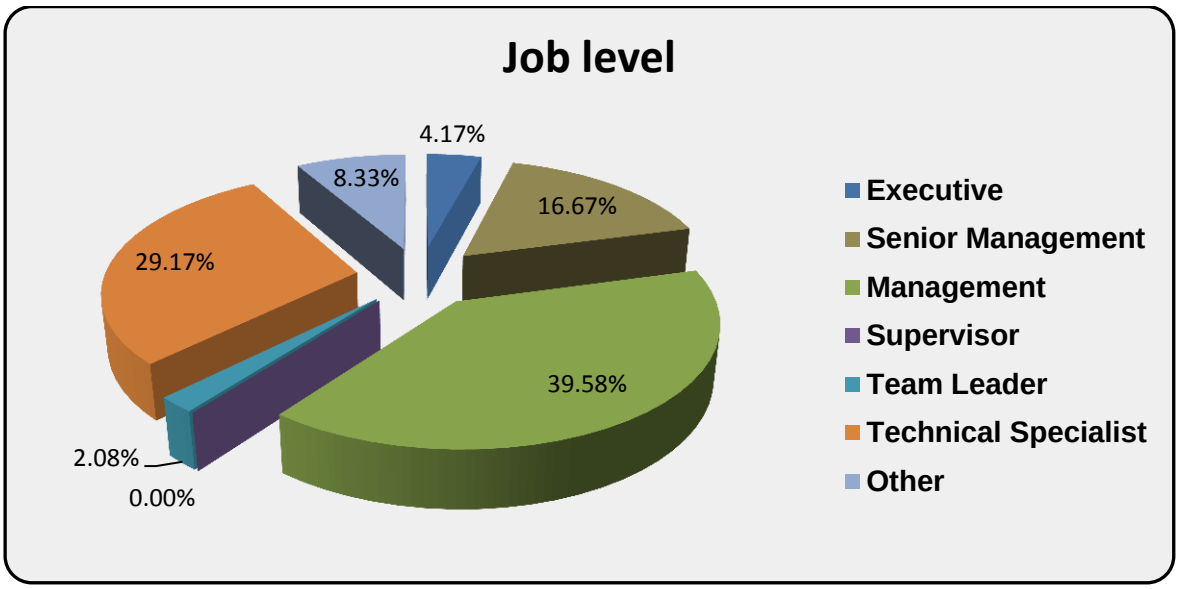
3.4.7 Job level in the organisation

The purpose of question 7 in section A of the questionnaire (refer to Appendix C) was to determine the Job level of the respondents.

3.4.7.1 Findings:

The job levels of the respondents are presented in Figure 3.8 below.

Figure 3.8: Job level of respondents



3.7.4.2 Analysis of the findings

Figure 3.8 indicates that the majority of the respondents or 39.58% were from a management level with 29.17% of respondents being Technical Specialists.
Senior management and Executives constituted 16.67% and 4.17% respectively of the sample. Only one team leader responded. Categories not listed in the survey (Other) were one individual each from Middle management, Risk Management, Architecture and Consultants.

3.4.8 The type of services being outsourced

The purpose of question 8 in section A of the questionnaire (refer to Appendix C) was to determine the type of Information and Technology services currently being outsourced by the organisation.

3.4.8.1 Findings:

The typical services being outsourced by the organisation are presented in Table 3.2 below.

Table 3.2: Services being outsourced by the organisation

Service being outsourced	
1) Solution Architecture	7) Network Support
2) Application Architecture	8) Network Architecture and Design
3) Application Support	9) IT Projects
4) Distributed Computing Services	10) Operations
5) Call Centre / Help desk	11) Audio visual and Telephony
6) Data Centre Operations	

3.4.8.2 Analysis of the findings

Table 3.2 provides an indication of the services currently being outsourced by the organisation. Since the respondents are all representative of the same company, the only useful deduction from this question is an indication of the category of services being outsourced. From the list provided by the respondents it is clear that the organisation makes extensive use of outsourcing key services to suppliers.

3.5 RESULTS AND ANALYSIS OF SECTION B

Factors that drive IT outsourcing

Section B of the questionnaire was developed to gain an understanding of those factors that drive organisations to outsource. The factors were categorised in three main groups namely Economic, Strategic and Flexibility.

The results may be utilised by service providers to gain insight into the strategic thinking of client organisations in order to position and align themselves with them.

3.5.1 Results obtained

The average or mean ($\bar{x}$) and the standard deviation (s) which describes the variation around the mean of each of the ten (10) factors that drives IT outsourcing

are indicated in Table 3.3 below. The factors are ranked from the highest to the lowest with respect to the mean score.

Table 3.3: Factors that drive IT Outsourcing

Factor (S=Strategic ; E = Economic ; T = Tactical)	***n***	$\bar{x}$	***s***
S: Focus on core competence	46	3.04	.595
T: Transfer fixed to variable cost	46	2.96	.595
T: Manage IT demand more granularly	46	2.91	.626
E: Increase control of IT expenses	46	2.87	.687
E: Adds value (Value = benefits – cost)	46	2.85	.595
E: Improve cash flow	46	2.80	.500
E: Increase efficiency	46	2.78	.786
T: Increase responsiveness to market changes	46	2.74	.648
S: Achieve competitive advantage	46	2.63	.711
S: Improve business performance	46	2.57	.655

3.5.2 Analysis of the findings

This question was based on a four point Likert scale where a 1 indicates that the respondents strongly disagree with the statement up to a 4 where the respondents strongly agree with the statement.

The respondents rated the fact that IT outsourcing enables them to focus on their core competence as the highest. Participants indicated a fairly high mean of $\bar{x}$ = 3.04 for this statement. The other statements that also received a fairly high level of agreement are the fact that they can transfer fixed cost to variable cost ($\bar{x}$ = 2.96), manage the IT demand on a more granular level ($\bar{x}$ = 2.91) and that they have increased control of IT expenses. ($\bar{x}$ = 2.87).

Respondents indicated that the outsourcing of IT functions assisted the least with factors like increased responsiveness to market changes ($\bar{x}$ = 2.74), Helping them to achieve a competitive advantage ($\bar{x}$ = 2.63) and assisting them to improve their business performance ($\bar{x}$ = 2.57).

What are of particular note with respect to the factors that drive IT outsourcing is that all the respondents indicated agreement or strong agreement with them. This aligns strongly with the literature study findings in Chapter two, describing the factors that contribute to an organisation's drivers for outsourcing.

3.6 RESULTS AND ANALYSIS OF SECTION C

Supplier Capabilities required by Client Organisations

Section C of the questionnaire was developed to gain an understanding of the supplier capabilities that is important for client organisation's when they embark on outsourcing IT functions or have to consider the renewal of existing agreements.

The results can be utilised by service providers to position and align their service offerings in order to be in harmony with the client's expectations. More focus should be given to those capabilities regarded as very important by the client organisation.

The capabilities were grouped into factors relating to business management capability, relationship and context, supplier market status, transformation capability and delivery management capability.

Standard deviation (*s*) and Cronbach alpha measurements were utilised to determine the variability and reliability of the empirical data.

Cronbach alpha is a measure of internal consistency to indicate how closely related a set of items are as a group. Table 3.4 provides a summary of the Factors examined in Section C indicating their mean ($\bar{x}$), standard deviation (*s*) and Cronbach alpha coefficient.

Table 3.4: Variability and Reliability

Descriptive name of factor	$\bar{x}$	*s*	*Cronbach alpha*
Management capability - (Q12)	4.42	0.426	0.793
Relationship and Context - (Q13)	4.33	0.457	0.732
Supplier market status - (Q14)	4.26	0.526	0.800
Transformation capability - (Q15)	4.43	0.367	0.657
Capability to deliver - (Q16)	2.80	0.478	0.210

All factors except the Capability to deliver indicated high reliability. All factors indicated a low standard deviation which implies a small variation around the mean. It should be noted that any deductions from the Capability to deliver group should be seen in the light of fairly low reliability and thus interpreted with the necessary caution.

In the section that follows the results obtained from the supplier capabilities are decomposed to a further level of detail. All the questions was based on a five point Likert scale where a 1 indicates that the respondents regarded the capability as totally irrelevant up to a 5 where the respondents regarded the capability as very important.

3.6.1 Supplier Business Management Capability

The purpose of question 12 in section C of the questionnaire (refer to Appendix C) was to determine how important client organisations regard the business management capability of suppliers.

3.6.1.1 Findings

The mean ($\bar{x}$) and the standard deviation (*s*) which describes the variation around the mean of each of the eight (8) specific capabilities rated by the respondents are indicated in Table 3.5 below.

Table 3.5: Supplier Business Management Capability

Capability	*n*	$\bar{x}$	*s*
Security & Compliance	45	4.64	0.645
Contract Management	45	4.62	0.576
Process and Quality Management	45	4.53	0.588
Management Reporting	45	4.53	0.625
Communications Management	45	4.51	0.626
Financial Management	45	4.44	0.586
Solution Coordination	45	4.29	0.661
HR Management	45	3.82	0.912

3 Analysis of the results

Almost all capabilities in the Client Business Management group were rated by the respondents as important to very important. Security and Compliance management were rated highest with a mean ($\bar{x}$ = 4.64). This indicates that client organisations are particularly interested and focused on the way suppliers manages their internal security and compliance to their policies. Within the client organisation context this makes perfect sense as all suppliers are subject to the same set of security and compliance policies as the Bank.

Contract management, Process and Quality management, Management reporting, Communications management and Solution Coordination were all rated as important to very important with their mean varying between ($\bar{x}$ = 4.62) to ($\bar{x}$ = 4.29) respectively.

Although HR Management was rated the lowest with ($\bar{x}$ = 3.82) it still indicates that most respondents regarded this as a moderately important to important capability that is required of suppliers.

3.6.2 Supplier Relationship Management

The purpose of question 13 in section C of the questionnaire (refer to Appendix C) was to determine how important client organisations regard Supplier relationship management.

3.6.2.1 Findings

The mean ($\bar{x}$) and the standard deviation (*s*) which describes the variation around the mean for each of the five (5) specific capabilities rated by the respondents are indicated in Table 3.6 below.

Table 3.6: Supplier Relationship Management

Capability	*n*	$\bar{x}$	*s*
Set a high level of trust	45	4.80	0.405
Support a shared vision with client	45	4.42	0.690
Organisational alignment	45	4.24	0.570
Mutual learning	45	4.13	0.625
Cultural fit to client organisation	45	4.07	0.915

3.6.2.2 Analysis of the findings

Table 3.6 indicates that the ability by suppliers to set a high level of trust within the relationship is regarded as the most important competence. The mean ($\bar{x}$ = 4.8) with a standard deviation of only .405 indicates that the respondents regard this as very important.

This is fully aligned with the literature study findings in Chapter 2 which also indicated that high levels of trust between outsource clients and suppliers is of utmost importance for the survival of such an engagement.

Respondents also indicated that the support of a shared vision with them, organisational alignment, mutual learning, and cultural fit is Important to very important for the relationship.

3.6.3 Supplier Market Status

The purpose of question 14 in section C of the questionnaire (refer to Appendix C) was to determine how important client organisations regard the Supplier market status.

3.6.3.1 Findings

The mean ($\bar{x}$) and the standard deviation (*s*) which describes the variation around the mean for each of the four (4) market status indicators as rated by the respondents are indicated in Table 3.7 below.

Table 3.7: Supplier Market Status

Capability	***n***	$\bar{x}$	***s***
Financial Strength	45	4.49	0.661
Organisation Strength	45	4.33	0.522
Industry Leadership	45	4.29	0.661
Market Share of services rendered	45	3.96	0.796

3.6.3.2 Analysis of the findings

From Table 3.7 it is clear that the Financial strength, Organisation strength and Industry leadership of a supplier has been rated as important to very important by the respondents. Market share of services rendered was regarded as important with a mean ($\bar{x}$) of 3.96.

3.6.4 Supplier Transformational Capability

The purpose of question 15 in section C of the questionnaire (refer to Appendix C) was to determine how important client organisations regard the supplier's transformational capability.

3.6.4.1 Findings

The mean ($\bar{x}$) and the standard deviation (*s*) which describes the variation around the mean for each of the five (5) specific transformation capabilities rated by the respondents are indicated in Table 3.8 below.

Table 3.8: Supplier Transformational Capability

Capability	*n*	$\bar{x}$	*s*
Service Implementation	45	4.58	0.499
Continuous improvement	45	4.56	0.546
Service Transformation	45	4.38	0.576
Innovation management	45	4.38	0.650
Process Maturity	45	4.29	0.549

3.6.4.2 Analysis of the findings

Overall, the supplier transformational capability has been rated as Important to very important by the respondents. There is little to choose with respect to the individual capabilities and relative importance as their means only varied between ($\bar{x}$ = 4.58) to ($\bar{x}$ = 4.29).

The 'strategic trap' as defined in chapter 1 of the study relates to a supplier's ability to adapt and transform in union with the ever changing client organisation's needs. These changing business requirements may be as a result of drivers such as strategic direction changes, changes in market conditions or rapid changes in the way they adopt and apply new technology. It is very clear that Client organisations expect their outsource suppliers to be in step with them and transform as they do.

3.6.5 Supplier capability to deliver

The purpose of question 16 in section C of the questionnaire (refer to Appendix C) was to determine how important client organisations regard the suppliers delivery management capability.

3.6.5.1 Findings

The mean ($\bar{x}$) and the standard deviation (s) which describes the variation around the mean for each of the three (3) service delivery management capabilities as rated by the respondents are indicated in Table 3.9 below.

Table 3.9: Supplier Service delivery capability

Capability	***n***	$\bar{x}$	***s***
Delivery Obligations (SLA Management)	45	4.84	0.367
Delivery Process Maturity	45	4.44	0.546
Project Management	45	4.44	0.624

3.6.5.2 Analysis of the findings

Table 3.9 indicates that service delivery obligations or SLA management are regarded as very important by the majority of respondents with a mean of ($\bar{x}$ = 4.84) and a very low standard deviation of 0.387.

Delivery process maturity and Project management were regarded as important to very important with a mean of ($\bar{x}$ = 4.44)

3.7 RESULTS AND ANALYSIS OF SECTION D

3.7.1 Supplier alignment with Client Organisation Requirements

The purpose of question 17 in section D of the questionnaire (Refer to Appendix C) was to gain an understanding of the alignment of specific qualities of the supplier to that of the Client organisation's requirements.

3.7.1.1 Findings

The mean ($\bar{x}$) and the standard deviation (*s*) which describes the variation around the mean for each of the six (6) specific requirements as rated by the respondents are indicated in Table 3.10 below. The question made use of a four point Likert scale to obtain an understanding of specific requirements important to the client organisation and the current measure of success of suppliers as a whole. The responses range from 'strongly agree' with a value of 4 to 'strongly disagree' with a value of 1.

Table 3.10: Supplier alignment with Client Organisation Requirements

Client Requirement	*n*	$\bar{x}$	*s*
They are willing to revise performance objectives during the contract term	45	3.00	.603
They fully understand our business model and strategy	45	2.93	.580
They are the market leaders for the specific services rendered	45	2.87	.661
They are adaptable and flexible given our ever changing requirements (ability to adapt to change)	45	2.78	.670
They are professional in every aspect of engagement with us	45	2.73	.654
They provide Innovative solutions to our business needs	45	2.51	.727

3.7.1.2 Analysis of the findings

Although every effort has been made to keep the responses as generic as possible this measure may contain a level of bias towards a specific supplier as the author are currently employed by one of the major outsource partners of the client organisation. Caution should be exercised with the interpretation and possible utilisation of the analysis.

Table 3.10 indicates that the respondents are in agreement that the suppliers are willing to revise performance objectives during the term of agreement. ($\overline{x}$ = 3.00) This finding were somewhat surprising as it stands in contrast to the defined strategic trap in chapter 2 where suppliers might be regarded as unwilling to change contractual terms within the duration of a period.

They regard the suppliers to be the market leaders for the specific services rendered ($\overline{x}$ = 2.93) and they agree that the suppliers understand their business strategy and model. ($\overline{x}$ = 2.87)

The second part of Section D of the questionnaire consisted of two open ended questions where respondents had to provide their view on the issues and pitfalls that suppliers should avoid as well as recommendations that they regard as important to the overall success of outsource agreements.

3.7.2 Issues and pitfalls to be avoided by suppliers

The purpose of question 18 in section D of the questionnaire was to determine the issues and/or pitfalls to be avoided in order to ensure the success of outsource agreements.

3.7.2.1 Findings

The qualitative data received from respondents was analysed, categorised and summarised in table 3.11 below. From the sample of 45 respondents, 35 chose to complete this question. Many of the issues and/or pitfalls have been responded to with a positive statement or desired outcome. The table reflects them in that fashion.

Table 3.11: Pitfalls and Issues to be avoided

Category	Pitfalls / Issues to be avoided
SLA Management	4 Chasing SLA's without considering quality of workmanship 5 Poorly defined services, they should be clear and unambiguous 6 Always achieve required level of service 7 Deliver on time and within budget 8 Be prepared to assist with out of scope services from time to time
Skills	• Ensure continuous training of staff – skilled workforce • Do not regard employees as a bodyshop; ensure that you have the right skills for the right job. • Complement skills with local and international expertise • Avoid high staff turnover rate – business knowledge lost
Communication	• Inadequate feedback – not communicating effectively • Ensure that open communication channels exist • Ensure awareness of positive achievements. • Timeous and detailed communication of problems • Avoid communications breakdown and poor reporting
Cost	• Demonstrate value add, not cost saving. Be cost competitive • Avoid abnormal escalations in service pricing or hidden costs • Do not confuse cost saving with Innovation • Cutting cost at the expense of service quality • Demonstrate continuous improvement • Implement value add services without amendment of agreement
Alignment	• Stay aligned with our business strategy and vision – adaptability • Avoid being over prescriptive to clients • Do not focus on areas that are not your responsibility, contract to your strengths. • Do not assume, collaborate and communicate
Relationship	• Do not become complacent in the role you fulfil. • Always maintain professionalism with engagement • Integrity and truthfulness • Ensure strong on-site leadership team • Avoid trust breakdown

3.7.3 Recommendations to the success of outsource agreements

The purpose of question 19 in section D of the questionnaire was to obtain additional recommendations that respondents regard as important to the success of outsource agreements.

3.7.3.1 Findings

The qualitative data received from respondents was analysed and summarised below. From 45 respondents, only 24 chose to complete this question.

- Engagement - Client organisations require suppliers to have a single point of entry to them. If your services business is segmented and it is always new faces being presented to the client it may lead to the client being confused and more so it probably indicated duplication of effort on your side.

- Engagement - Outsource models, depending on their financial value; need to be managed very tightly and engagement must be from CIO level to Operational support and from Strategy & Architecture to Project Management.

- Expectation management - It is critical to understand the clients business and business requirements.

- Flexibility - Suppliers should be flexible and agile coupled to an open and honest relationship

- Value add - Outsourcing is supposed to be a cost saving initiative. Ensure that cost are always contained, and provide value to the proposal. Never treat the customer as a cash cow, and never rely on the business - it may change overnight

- Credibility - Too often there are outsourcing companies that sell their services, especially when it is new technology being implemented in South Africa.

Although these technologies have been successfully deployed elsewhere in the world, it might be a first in Africa. The issues usually surface on deployment due to network regulations and limitations within the country that is not prevalent in 1st world countries. If it is a first for Africa, be upfront that it will be a learning curve as it sets a better understanding and expectation.

- Collaboration - Successful outsource agreements are maintained through constant engagement with the client ensuring alignment and agreement on services required, services delivered and improvement opportunities. The client needs to experience that suppliers are in collaboration with them to deliver the most cost effective and efficient services.

- Engagement - In an outsource agreement, the vendor must not be allowed to operate between the business client and group technology. Group Technology has to manage the client relationship and the SLA with the client.

- Trust – Always remember who delivers the service and who is the client. Ensure that your processes are auditable against an acceptable framework, e.g. ITIL, MOF, COBIT etc. Don't argue too much and do the job required.

- Respect - Do not take any relationship or agreement for granted, let the high quality of work earn the respect you deserve.

3.8 CONCLUSIONS

Executives, senior Management and Management made up the majority of the respondents to the empirical study. Most of them have more than 18 years' experience in the IT industry. The respondents rated the fact that IT outsourcing enables them to focus on their core competence as the highest.

The other factors that also received a fairly high level of agreement are their ability to transfer fixed cost to variable cost, the fact that they can manage the IT demand on a more fundamental level and that they have increased control of IT expenses.

What are of particular note with respect to the factors that drive IT outsourcing is that all the respondents indicated agreement or strong agreement with them. This aligns strongly with the literature study findings in Chapter two, describing the factors that contribute to an organisation's drivers for outsourcing.

Almost all capabilities in the Client Business Management group were rated by the respondents as important to very important. Security and Compliance management were rated highest. This is in line with what can be expected from a financial services firm where information security should be top priority for the safekeeping of client personal and financial information.

A comprehensive summary of issues and pitfalls was documented in conjunction with recommendations made by the client organisation for service providers of which trust, transparency and business knowledge stood out as he most important.

3.9 SUMMARY

The aim of the empirical study was to determine the importance of the most common factors that drive IT outsourcing, the importance of key capabilities required of outsource partners and the current alignment with the client organisation's requirements in relation to the primary and secondary objectives as well as the literature study conducted in Chapter two.

This has been achieved through a questionnaire that was completed by a representative sample of the study population. The questionnaire was found to be statistically reliable through the constructs that were created.

The key factors that drive IT outsourcing within the study population were captured, analysed and discussed followed by the key capabilities required from outsource partners. Issues and pitfalls to be avoided were documented in conjunction with client recommendations to ensure success of outsource agreements.

In Chapter 4 that follows, a detailed discussion on the conclusions and recommendations will be provided accompanied by suggestions for further research on the study problem.

CHAPTER 4: CONCLUSION AND RECOMMENDATIONS

4.1 INTRODUCTION

This chapter consists of recommendations and conclusions based on the literature study conducted in chapter 2 as well as the empirical study in chapter 3. The findings of the literature and empirical study are highlighted and discussed with conclusions and recommendations made with respect to the management of outsource agreements between client organisations and suppliers. Service providers will benefit from the documented recommendations with respect to lessons learned as well as issues and pitfalls described.

4.2 CONCLUSIONS

Outsourcing by client organisations will be most successful if it is viewed as a strategy with a life-cycle rather than a once-off transaction. They can have more successful outcomes with IT outsourcing deals that operate in a cost-effective manner when they manage the entire outsourcing life-cycle. The next section will deal with the most important conclusions derived from the literature and empirical study.

4.2.1 The Management Framework

Although the outsourcing frameworks as described in chapter two may add value for client organisations as reference for their own internal service delivery processes and controls, the Outsource Management framework as presented in chapter 2 by Cullen *et al*. (2006:8), is by far the most comprehensive framework developed to date.

4.2.2 Relationship Maturity

Clients organisations and suppliers should understand that there is distinct stages relating to the maturity of outsourced relationships (Refer to Annexure B).

These stages of maturity consist of:

- *Cost* stage – In this stage the client organisation will focus on getting the best services delivered for the most economical price. Focus will be on economic benefits, transaction costs and the detail of the contracts.

- *Resource* stage – This stage will focus on the access to strategic resources and joint innovation. Client organisations regard the supplier as a 'trusted advisor' for their business and consult on many aspects ranging from the adoption and implementation of new and innovative business enhancing technology to providing input to the client's business strategy. Client organisations and service providers need to establish joint innovation forums to optimally serve the business.

- The *Partnership* level can be reached where an alliance may be formed and full economic exchange may result. Reaching a partner stage indicates that full maturity has been achieved. This obviously requires a very high level of *trust* and *transparency* between the client organisation and supplier.

4.2.3. Supplier Capabilities

Service providers need to be aware of and align to those capabilities that are regarded as important by the client organisations. From the empirical study the following emerged as the most important requirements from clients:

- Management capability: Security, Compliance, Contract and Process management

- Relationship and context: Trust, Transparency and the support of a shared vision

- Supplier market status: Financial and organisational strength as well as Industry leadership

- Transformation capability – Innovation, Continuous improvement, Service implementation, Service transformation and process maturity.

- Delivery management capability – SLA Management.

Strong leadership, domain expertise, business acumen and customer development capabilities are required while still demonstrating sound internal capabilities like program management, behaviour management and the ability to exploit technology to the benefit of both parties.

4.3 RECOMMENDATIONS

The recommendations made in this section are grouped into two sections. The first part will deal with recommendations applicable to client organisations planning to outsource certain IT services, as well as those that are planning to refresh existing agreements. The second part will be targeted at outsource service providers to focus on the issues and lessons learned in order to provide services more effectively and efficiently to ensure future relevance in the industry.

4.3.1 Recommendations to Client organisations

The adoption of the Outsource Management Framework as described in chapter 2 of this study is probably the single most important recommendation. The framework consists of a four phased approach in terms of the outsource lifecycle namely:

- The **Architect** phase - this is where the foundation for outsourcing is laid. Client organisations need to investigate and identify the specific services to be outsourced, in harmony with their overall business strategy.

- The **Engage** phase - where the client organisation needs to select and negotiate the most appropriate service provider/s to deliver the services identified for outsourcing.

  During this phase the client organisation should pay particular attention to the *key supplier capabilities* as defined in the literature study and verified in the empirical

study. The due diligence process should not be rushed, as overlooking something at this stage may result in unnecessary additional work later in the process.

Furthermore, they should allow sufficient time for the proper planning of activities like responsibility matrices. Too often agreements are made on the premise of 'spirit of intent' for those activities not detailed enough, given limited time. This usually leads to conflict and disagreement later on in the process and should be avoided at all cost.

- The **Operate** phase – in this phase the deal is put together, implemented and managed through its term. It consists of the seventh and eighth building blocks namely Transition and Manage.

- The **Regenerate** phase, where next generation options are assessed, consists only of one building block namely Refresh.

Client organisations following this model can be assured that they will be in the best position with respect to the services being outsourced and that they have covered all the bases with respect to the management and control thereof.

Furthermore, the client organisation should pay particular attention to the following management aspects as they may become inhibitors to the successful implementation and management of an outsource agreement:

- **Building Trust** - The implementation of a formal governance structure is very important. At the onset of the relationship there will be a period where the client organisation will not know if they can trust the supplier. With the appropriate governance structure in place, it doesn't matter whether they trust them or not, they will have the structure to ensure that everything is validated. Over time, it will assist with developing trust as they see things run in the appropriate manner.

- **Communication** – Effective communication stood out as one of the important aspects to focus on. Communication breakdown was identified by the client organisation as one of the major obstacles in the successful management of agreements.

- **Transparency** – Always be open and honest in the relationship and day to day interaction with the client.

4.3.2 Recommendation to service providers

The following recommendations are specifically targeted at service providers. The study provided sound guidance on those regarded by client organisations as important. The empirical study highlighted the most important as follows:

- **Engagement with Client** – Segmented client service offerings sometimes lead to multiple interfaces to the client, which should be avoided. Clients may perceive this as inefficient and duplication of effort.

- **Flexibility** – Service providers should understand that they provide services to an ever changing client environment. Agreements are usually fixed for a period of 1 to 5 years but should include a level of change anticipated over the agreement period. Suppliers should be able to easily adapt during a contract term with respect to the scope of services rendered.

- **Transparency** – Service providers should ensure that they are always open and honest in the relationship and day-to-day interaction with the client.

- **Value-add** – Service providers need to explicitly demonstrate how they add value to the client. This should manifest itself in all service lines offered and delivered to the client.

- **Trust and commitment** – Throughout the study a common thread for success in any of these relationships has been trust and commitment. The leaders need to be the catalyst for building and maintaining a trusted relationship. This usually requires considerable time, effort and funding.

What is important for service providers to understand are the capabilities that are required by client organisations with respect to the delivery of services.

Strong leadership, domain expertise, business acumen and customer development capabilities are required while still demonstrating sound internal capabilities like program management, behaviour management and the ability to exploit technology to the benefit of both parties.

4.4 ACHIEVEMENT OF THE STUDY OBJECTIVES

Success of this study can be measured according to the objectives as defined in chapter one.

4.4.1 Success in terms of the primary objective

The primary objective of the study was to develop a comprehensive management guideline for client organisations planning to outsource services or to renew existing agreements. This was achieved through both the literature and empirical study by recommending the outsource management framework to be utilised as model from the architecting phase right through to re-generate phase.

4.4.2 Success in terms of the secondary objectives

The secondary objectives as formulated in chapter 1 were achieved by the literature study as well as the empirical study which highlighted the common pitfalls and lessons learned by the study population.

4.5 SUMMARY

The research conducted indicates that client organisations who are planning to embark on the outsourcing or the renewal of services need to follow a formal outsource management framework in order to ensure success.

In order to achieve this, a comprehensive management framework were recommended describing a full lifecycle management approach to embark on or renew outsource agreements.

The top issues that suppliers need to address are:

- Ensure that a climate of *trust* exists between them and the client.

- They need to be as *transparent* as possible

- Ensure that they carry *extensive business knowledge* of the client and industry being serviced.

The scope of the study was limited to one of the four largest FSI organisations in South Africa. Further opportunities for research exist by expanding the study to the FSI industry as a whole or alternatively to the industry at large.

This might highlight specific differences in the management approach between industries on outsourcing and may provide insightful lessons from past experiences on outsourcing.

REFERENCES

ALLEN, K. 2005. Explaining Cronbach's alpha. [PowerPoint presentation] https://engineering.purdue.edu. Date of access: 27 Sep. 2011.

BALTZAN, P. PHILLIPS, A & HAAG, S. 2009. Business Driven Technology. 3rd ed. New York, NY : McGraw Hill/Irwin. 604 p

BEAUMONT, N. 2006. Service Level Agreements: An Essential Aspect of Outsourcing. The service Industry journal, Vol. 26(4) : 381 - 395

BEAUMONT, N. & SOHAL, A. 2004. Outsourcing in Australia. *International Journal of Operations & Production Management*. 24(7) : 688 - 700.

COBIT Framework for IT Governance and Control. COBIT overview [PowerPoint Presentation]. http://www.isaca.org/Knowledge-Center/COBIT/Pages/Overview.aspx. p17. Date of access: 24 May 2011.

COETZEE, JC. 2011. Verbal communication to author. Potchefstroom.

CULLEN, S., SEDDON, P & WILCOCKS, L. 2006. Managing outsourcing: The Lifecycle Imperative. London School of Economics, working paper series. 25 p

CULLEN, S. LACITY, M, & WILCOCKS, L. 2007. The Outsourcing Enterprise. The CEO guide to selecting effective suppliers. London School of Economics, working paper series. 24 p.

CUMMINGS, T & WORLEY, C. 2009. Organisation Development & Change. South-Western Cengage Learning. 9th ed. 772 p

DELOITTE CONSULTING 2008 OUTSOURCING REPORT. http://www.corporate-leaders.com/sitescene/custom/userfiles/file/Deloitte%202008%20Outsourcing%20Report.pdf p32. Date of access: 29 May 2011.

EMBLETON, P & WRIGHT, P. 1998. *A practical guide to successful outsourcing. Empowerment in Organisations*. 6(3) : 94 - 106.

FEENY, D., LACITY,M. AND WILLCOCKS, L: 2005. Taking the measure of Outsourcing Providers. MIT Sloan Management review. Reprint number 46310. http://www.sloanreview.mit.edu Date of Access: 08 May 2011.

GLIEM, J & GLIEM, R. 2003. Calculating, Interpreting and Reporting Cronbach's Alpha Reliability Coefficient for Likert Type Scales. https://scholarworks.iupui.edu-/bitstream/handle/1805/344/Gliem%20&%20Gliem.pdf?sequence=1. p7. Date of Access: 23 Sep. 2011.

GLOBAL OUTSOURCING, International Business Times. Opportunities and Risks. http://www.scribd.com/doc/47942398/Special-Report-Global-Outsourcing-Opportunities-and-Risks-2011. p10. Date of access: 25 May 2011.

GOTTSCHALK, P. & SOLLI-SAETHER, H. 2006. *Maturity model for IT outsourcing relationships, Industrial Management & Data Systems*. 106(2) : 200 - 212

HANCOX, M. & HACKNEY, R. 2000. *IT outsourcing: frameworks for conceptualizing practice and perception. Information Systems Journal*. 10(3) : 217 - 37.

HAVENGA, P., HAVENGA, M., KELBRICK, R., MCGREGOR, R., SCHULZE, H. & VAN DER LINDE, K. 2008. General Principles of Commercial Law 7th ed. CT :Juta 525 p

KENT, R. 2001. Data Construction and Data Analysis for Survey Research. 1st ed. New York, NY: Palgrave. 253 p

LAMBE, C., SPEKMAN, R. & HUNT, S (2002). *Alliance competence, resources, and alliance success: conceptualization, measurement, and initial test. Journal of the Academy of Marketing Science*. 30(2) : 141 - 158.

LAU, K. & Zhang, J 2006. Drivers and obstacles of outsourcing practices in China.

International Journal of Physical distribution and Logistics Management. 36(10) : 776-792. http://researchbank.rmit.edu.au/eserv/rmit:1252/n2006000647.pdf Date of access: 22 May 2011.

LEVINE, M., STEPHAN, D., KREHBIEL, T & BERENSON, L. (2008). Statistics for Managers using Microsoft Excel. 5th ed. New Jersey: Pretence Hall. 858 p

MCLVOR, R. 2005. The influence of transaction cost economics and the resource-based view on the outsourcing process. Paper presented at the 16th Annual Conference of POMS, Chicago, pp 41-62.

OFFICE OF GOVERNMENT COMMERCE: INFORMATION TECHNOLOGY INFRASTRUCTURE LIBRARY. 2011. http://www.itil-officialsite.com/AboutITIL/-WhatisITIL.aspx. Date of Access: 24 May 2011.

TAPSCOTT, D. & TICOLL, D. 2003. The Naked Corporation: How the Age of Transparency will Revolutionise Business. 1st ed. New York, NY : Free Press. 348 p

THOMPSON, A., STRICLAND, A & GAMBLE, J. 2010. Crafting and Executing Strategy: The Quest for Competitive Advantage: Concepts and Cases. 17th ed. New York: McGraw-Hill. 413 p and 478 p

TSANG, A. (2002), "Strategic dimensions of maintenance management", *Journal of Quality in Maintenance Engineering*, 8(1) : 7 - 39

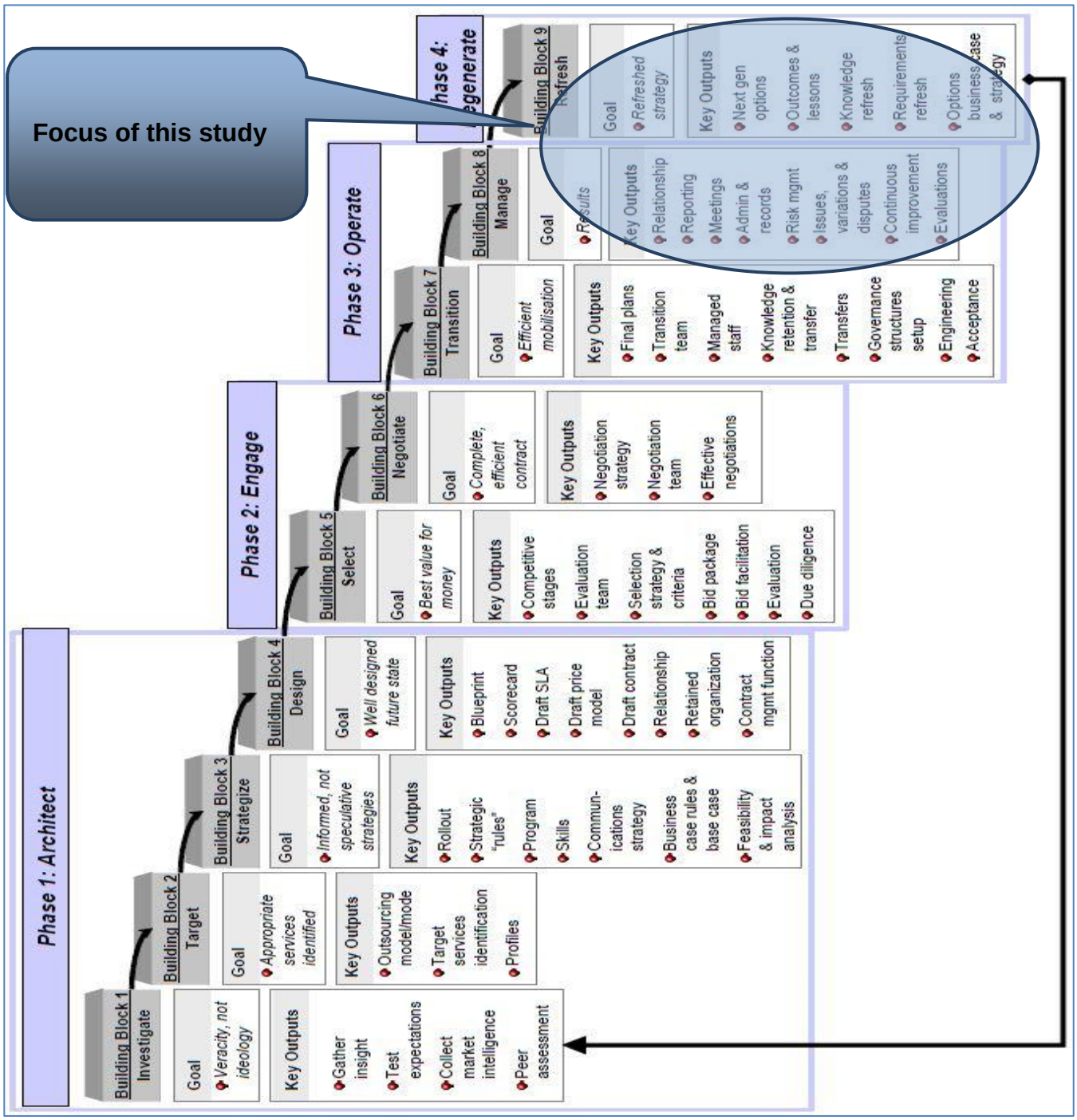
Val IT - FRAMEWORK FOR BUSINESS TECHNOLOGY MANAGEMENT http://www.isaca.org/Knowledge-Center/Val-IT-IT-Value-Delivery-/Pages/Val-IT1.aspx. Date of access: 04 Mar. 2011.

WELMAN, C., KRUGER, F & MITCHELL, B. 2010. Research Methodology. 3rd ed. Oxford University press; Southern Africa. 342 p

WILLCOCKS, L. 1994. INFORMATION MANAGEMENT: The evaluation of information system investments. 1st ed. Chapman & Hall: London. 279 p

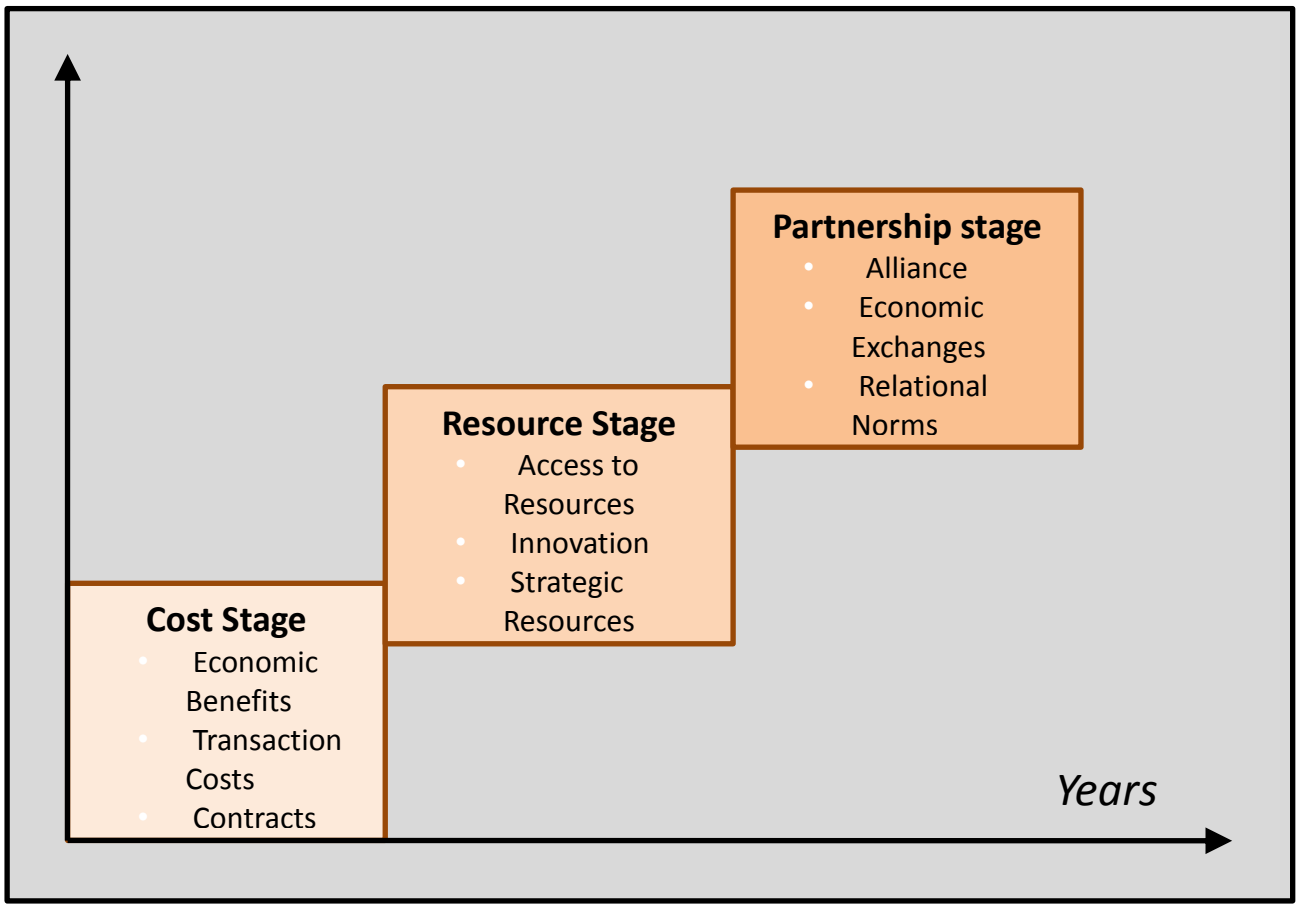
Annexures

Annexure A: The outsourcing lifecycle model: Goals and key outputs



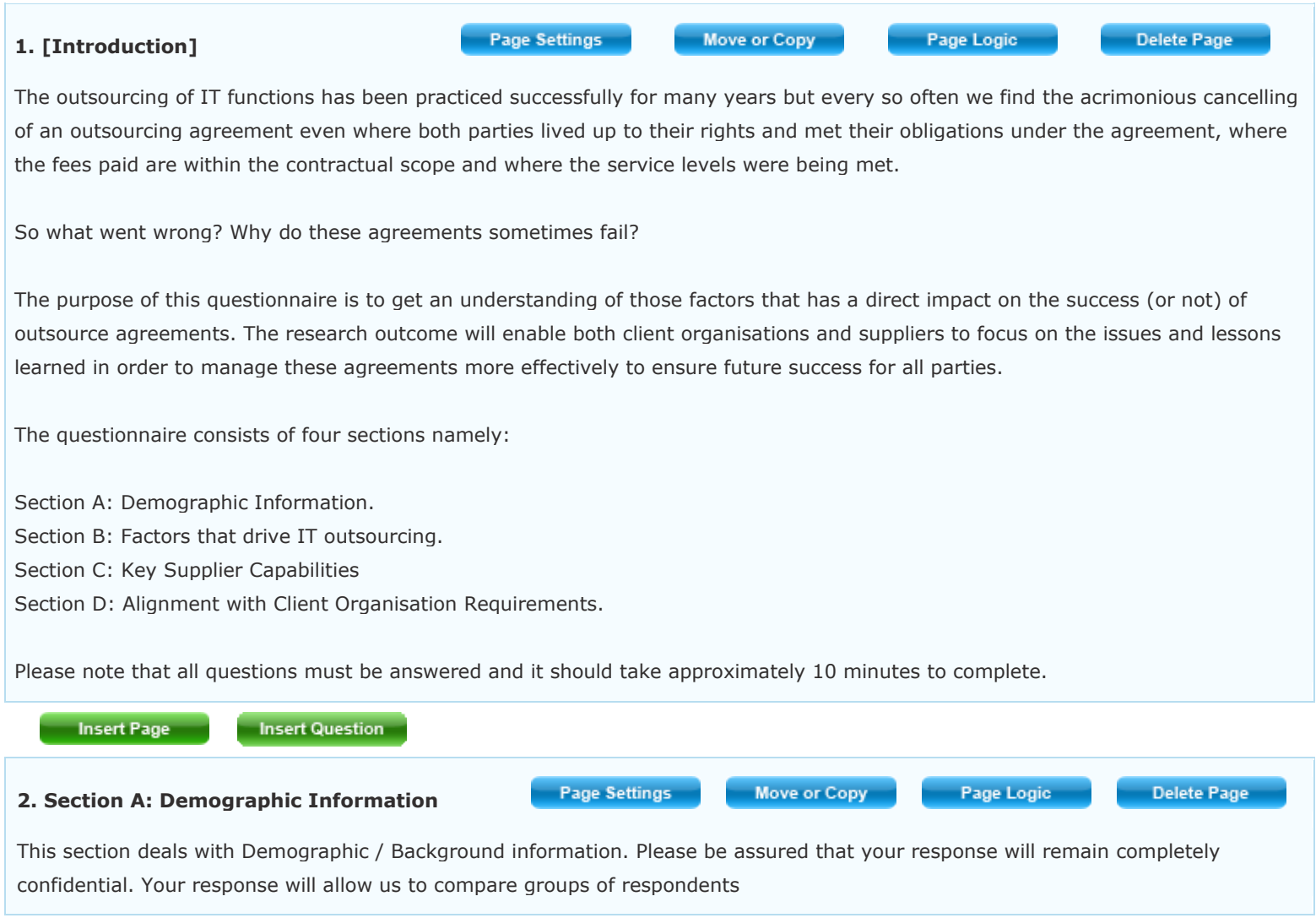
Source: Adapted from Cullen *et al.* (2006:06)

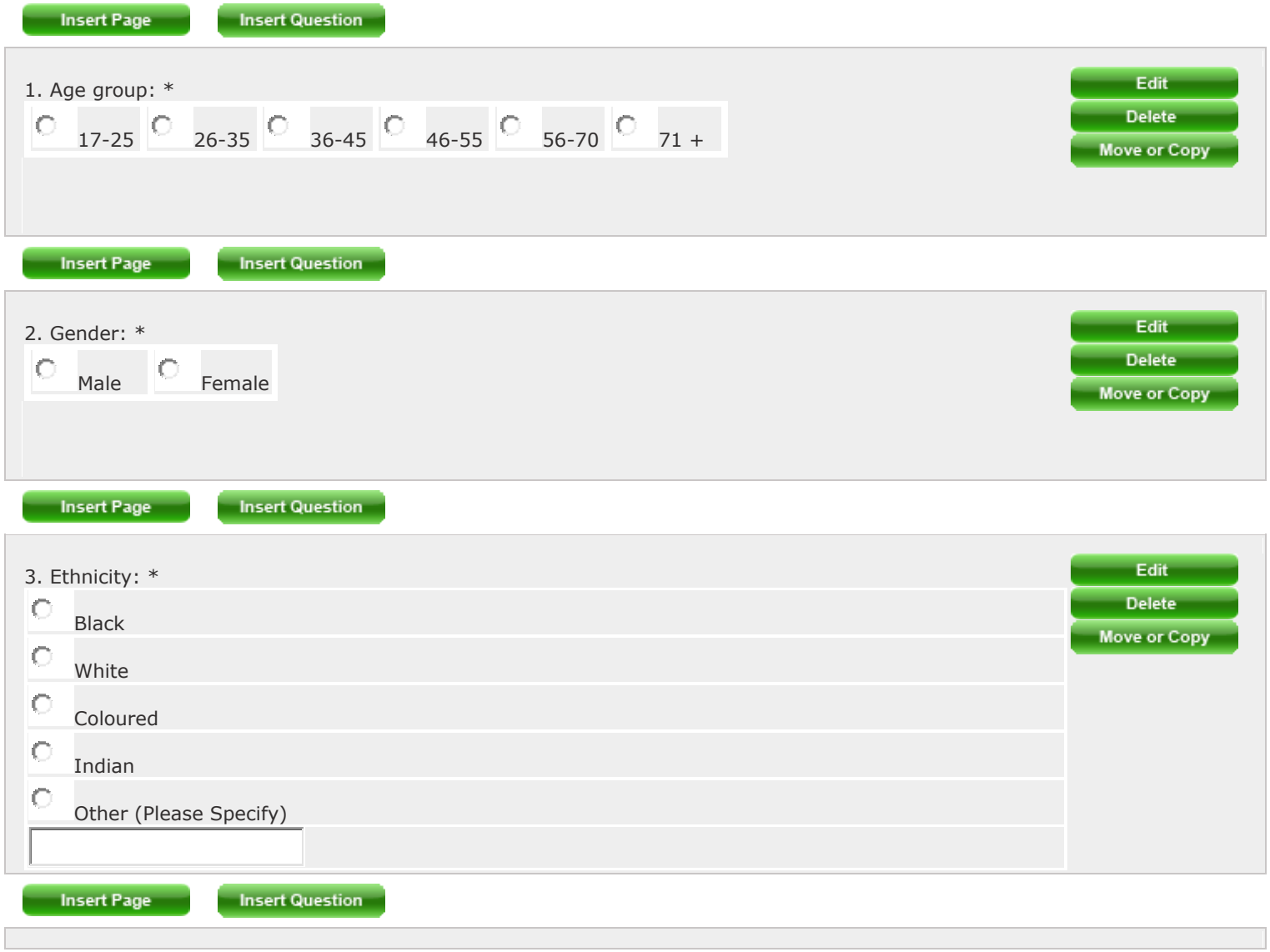
Annexure B: Stages of maturity in outsource relationships



Source: Gottschalk & Solli-Saether (2006:205)

Annexure C: Questionnaire

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Insert Question
1. Age group: *
17-25
26-35
36-45
46-55
56-70
71 +
Edit
Delete
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2. Gender: *
Male
Female
Edit
Delete
Move or Copy
Insert Page
Insert Question
3. Ethnicity: *
Black
White
Coloured
Indian
Other (Please Specify)
Edit
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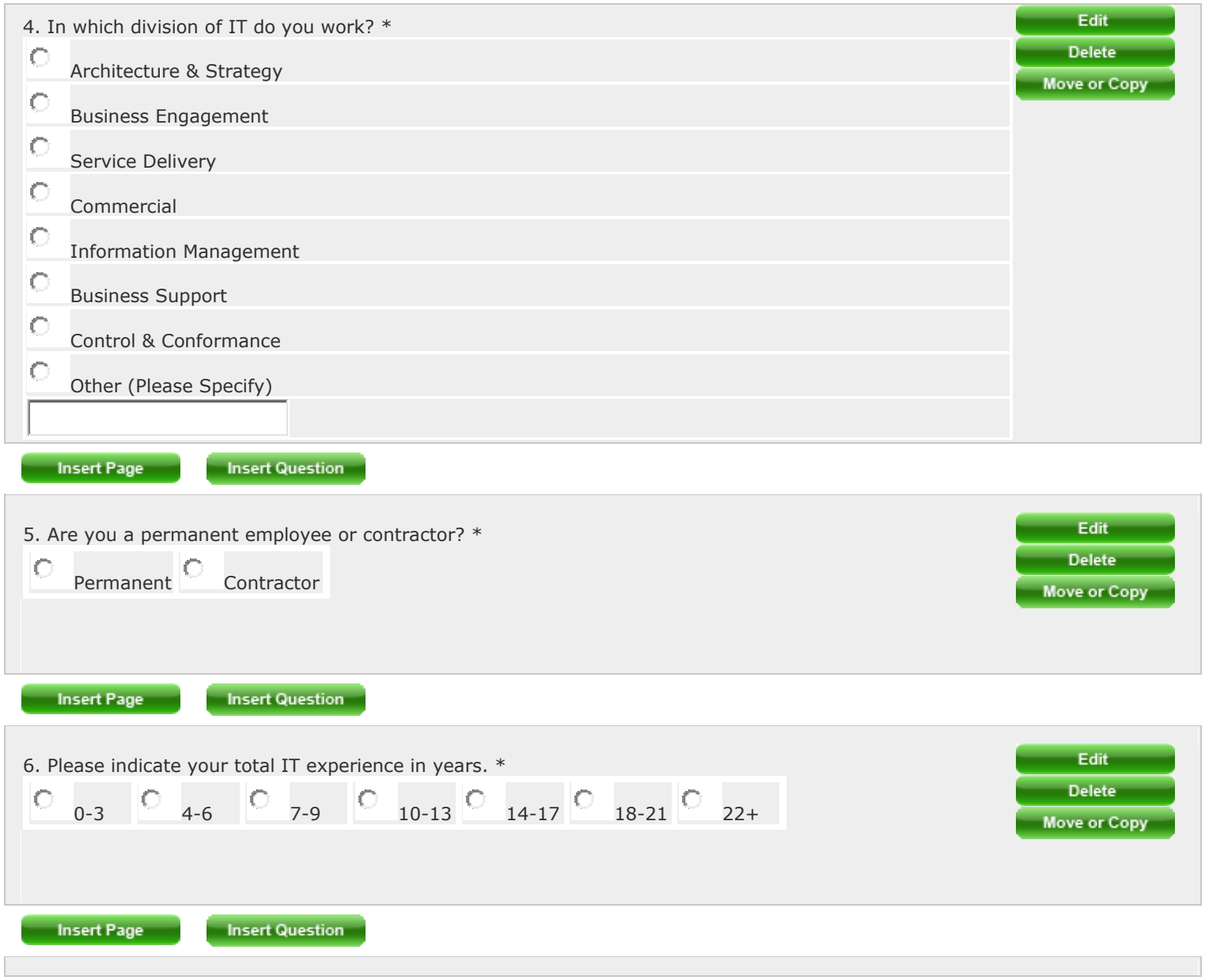
Insert Question


4. In which division of IT do you work? *
Architecture & Strategy
Business Engagement
Service Delivery
Commercial
Information Management
Business Support
Control & Conformance
Other (Please Specify)
Edit
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Move or Copy
Insert Page
Insert Question
5. Are you a permanent employee or contractor? *
Permanent
Contractor
Edit
Delete
Move or Copy
Insert Page
Insert Question
6. Please indicate your total IT experience in years. *
0-3
4-6
7-9
10-13
14-17
18-21
22+
Edit
Delete
Move or Copy
Insert Page
Insert Question


7. Please indicate your role level *
Executive
Senior Management
Management
Supervisor
Team Leader
Technical Specialist
Other (Please Specify)
Edit
Delete
Move or Copy
Insert Page
Insert Question
8. Please select the type of Information, Communication and Technology services currently being outsourced by your organisation. (You may choose more than one) *
Solution Architecture
Application Development
Application Support
Distributed Computing Services
Call Center / Help desk
Data Center Operations
Other (Please Specify)
Edit
Delete
Move or Copy
Insert Page
Insert Question
3. Section B: Factors that drive IT
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Outsourcing

The statements below relate to factors that drive Client Organisations to outsource certain IT functions. Please indicate your level of agreement with the statement made (From strongly agree to strongly disagree.)

Insert Page Insert Question

9. Economic Factors: *

Edit Delete Move or Copy

	Strongly Disagree	Disagree	Agree	Strongly Agree
IT Outsourcing enable our company to increase control of IT expenses				
IT Outsourcing enable our company to improve cash flow				
IT Outsourcing enable our company to increase efficiency				
IT Outsourcing adds value to our company (Value = benefits - cost)				

Insert Page Insert Question

10. Strategic Factors: *

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	Strongly Disagree	Disagree	Agree	Strongly Agree
IT outsourcing enables us to improve Business Performance				

(Acceleration of initiatives assisting business to perform better etc.)				
IT outsourcing allows our company to focus on our Core Competence (our core business).				
IT outsourcing enables our company to achieve a Competitive Advantage over our peers in the market.				

Insert Page Insert Question

11. Flexibility factors: *

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	Strongly Disagree	Disagree	Agree	Strongly Agree
IT outsourcing enables our company to transfer fixed cost to variable cost.				
IT outsourcing enables our company to increase responsiveness to market changes.				
IT outsourcing				

enables us to manage our demand for IT services on a much more granular level.					

Insert Page Insert Question

4. Section C: Supplier Capabilities

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The specific capabilities (what sets them apart) of suppliers are a very important factor to consider when Client Organisations embark on outsourcing IT functions or have to consider the renewal of existing agreements.

Please rate the importance of the following Supplier Capabilities on the scale provided.

Insert Page Insert Question

12. Business Management Capability: *

Edit Delete Move or Copy

	Irrelevant	Unimportant	Moderately Important	Important	Very Important
Financial Management	○	○	○	○	○
Contract Management	○	○	○	○	○
Communications Management	○	○	○	○	○
Reporting	○	○	○	○	○
Business Quality and Process Management	○	○	○	○	○
Security and	○	○	○	○	○

Compliance					
HR Management					
Solution Coordination					

Insert Page Insert Question

13. Relationship and Context *

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	Irrelevant	Unimportant	Moderately Important	Important	Very Important
Organisational Alignment					
Able to set a high level of trust					
Support a shared vision with our organisation					
Mutual Learning					
Cultural Fit to our organisation					

Insert Page Insert Question

14. Supplier Market Status *

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	Irrelevant	Unimportant	Moderately Important	Important	Very Important
Organisation Strength					
Financial					

Strength					
Market Share of Services Rendered					
Industry Leadership					

Insert Page Insert Question

15. Transformation Capability *

Edit Delete Move or Copy

	Irrelevant	Unimportant	Moderately Important	Important	Very Important
Process Maturity					
Service Implementation					
Service Transformation					
Continuous Improvement					
Innovation Management					

Insert Page Insert Question

16. Delivery Management Capability *

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	Irrelevant	Unimportant	Moderately Important	Important	Very Important
Delivery Process Maturity					
Project Management					

Capability					
Delivery Obligations (SLA Achievement)					

Insert Page Insert Question

5. Section D: Alignment with Client Organisation Requirements

Page Settings Move or Copy Page Logic Delete Page

Insert Page Insert Question

17. The following statements describe specific qualities that can be associated with your suppliers. Please indicate your level of agreement (or not) with respect to each of the statements below. The term 'They' refers to current service providers in your company. *

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	Strongly Disagree	Disagree	Agree	Strongly Agree
They fully understand our business model and strategy.				
They are adaptable and flexible given our ever changing requirements. (adapt to change)				
They provide innovative solutions to our business needs.				
They are the Market				

Leaders for the specific services rendered.				
They are professional in every aspect of engagement with us.				
They are willing to revise performance objectives during the contract term.				

Insert Page Insert Question

18. Please describe the top three issues/pitfalls that suppliers should avoid at all cost in order to ensure success of the agreement?

Edit Delete Move or Copy

1:	
2:	
3:	

Insert Page Insert Question

19. Please provide me with any additional comments or recommendations that you regard as important to the success of outsource agreements.

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Insert Page Insert Question

Annexure D: Questionnaire cover letter

Dear #FirstName#,

I am conducting a research project for the partial fulfilment of the requirements for the degree Masters of Business Administration at the North West University.

My research topic is ‘The Management of outsource agreements between Client Organisations and Suppliers’ with specific focus on creating an understanding of those factors that has a direct impact on the success (or not) of outsource agreements. The research outcome will enable both client organisations and suppliers to focus on the issues and lessons learned in order to manage these agreements more effectively to ensure future success for all parties.

I require your participation in this research by completing a short web based questionnaire as indicated below. It will take approximately 10 minutes to complete and your response will be kept fully confidential. The survey will be open till noon on the 27th of September 2011.

Please note that you will require internet access as the questionnaire is fully automated and accessible via the following link:

#SurveyLink#

I am really grateful and want to thank you for taking the time to assist me in my research.

Kind regards,

Koos Booyse

Annexure E: Statistical analysis of data

The prominent statistical analysis results are presented here. A full version of the analysis (35 pages) is available on request.

Descriptive statistics

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DESCRIPTIVES VARIABLES=Q9.1 Q9.2 Q9.3 Q9.4 Q10.1 Q10.2 Q10.3 Q11.1 Q11.2 Q11.3 Q12.1 Q12.2
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    Q17.5 Q17.6
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Descriptives

Notes

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[DataSet5] Q:\B\Booyse_Koos_Okt11\Koos data.sav

Descriptive Statistics

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Q9.3	46	1	4	2.78	.786
Q9.4	46	1	4	2.85	.595
Q10.1	46	1	4	2.57	.655
Q10.2	46	2	4	3.04	.595
Q10.3	46	1	4	2.63	.711
Q11.1	46	1	4	2.96	.595
Q11.2	46	2	4	2.74	.648
Q11.3	46	2	4	2.91	.626
Q12.1	45	3	5	4.44	.586
Q12.2	45	3	5	4.62	.576
Q12.3	45	3	5	4.51	.626
Q12.4	45	3	5	4.53	.625
Q12.5	45	3	5	4.53	.588
Q12.6	45	2	5	4.64	.645

Q12.7	45	2	5	3.82	.912	
Q12.8	45	3	5	4.29	.661	
Q13.1	45	3	5	4.24	.570	
Q13.2	45	4	5	4.80	.405	
Q13.3	45	3	5	4.42	.690	
Q13.4	45	3	5	4.13	.625	
Q13.5	45	1	5	4.07	.915	
Q14.1	45	3	5	4.33	.522	
Q14.2	45	3	5	4.49	.661	
Q14.3	45	2	5	3.96	.796	
Q14.4	45	3	5	4.29	.661	
Q15.1	45	3	5	4.29	.549	
Q15.2	45	4	5	4.58	.499	
Q15.3	45	3	5	4.38	.576	
Q15.4	45	3	5	4.56	.546	
Q15.5	45	3	5	4.38	.650	
Q16.1	45	3	5	4.44	.546	
Q16.2	45	3	5	4.44	.624	
Q16.3	45	4	5	4.84	.367	
Q17.1	45	2	4	2.93	.580	
Q17.2	45	2	4	2.78	.670	
Q17.3	45	1	4	2.51	.727	
Q17.4	45	1	4	2.87	.661	
Q17.5	45	2	4	2.73	.654	
Q17.6	45	2	4	3.00	.603	
Valid N (listwise)	45					

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COMPUTE Transformation=mean(Q15.1,Q15.2,Q15.3,Q15.4,Q15.5).
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Descriptives

Notes

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Descriptive Statistics

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Economic	46	1.50	4.00	2.8261	.47688
Strategic	46	1.33	4.00	2.7464	.52674
Flexibility	46	2.00	4.00	2.8696	.47908
Supplier	45	3.50	5.00	4.4250	.42590
Relationship	45	3.00	5.00	4.3333	.45726
MarkteStatus	45	3.00	5.00	4.2667	.52603
Transformation	45	3.80	5.00	4.4356	.36752
Alignment	45	1.83	4.00	2.8037	.47844
Valid N (listwise)	45				

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Reliability

Notes

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Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	45	91.8
	Excluded[a]	4	8.2
	Total	49	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.799	.793	8

Inter-Item Correlation Matrix

	Q12.1	Q12.2	Q12.3	Q12.4	Q12.5	Q12.6	Q12.7	Q12.8
Q12.1	1.000	.307	.172	-.227	.220	-.114	.279	.072
Q12.2	.307	1.000	.170	.383	.273	.242	.432	.353
Q12.3	.172	.170	1.000	.391	.539	.179	.402	.514
Q12.4	-.227	.383	.391	1.000	.445	.368	.649	.553
Q12.5	.220	.273	.539	.445	1.000	.332	.520	.355
Q12.6	-.114	.242	.179	.368	.332	1.000	.470	.246
Q12.7	.279	.432	.402	.649	.520	.470	1.000	.539
Q12.8	.072	.353	.514	.553	.355	.246	.539	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.324	-.227	.649	.876	-2.851	.038	8

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Q12.1	30.96	10.680	.153	.554	.823
Q12.2	30.78	9.586	.475	.352	.782
Q12.3	30.89	9.237	.520	.431	.776
Q12.4	30.87	8.982	.597	.705	.764
Q12.5	30.87	9.118	.604	.446	.765
Q12.6	30.76	9.643	.387	.333	.795
Q12.7	31.58	7.068	.765	.695	.728
Q12.8	31.11	8.828	.596	.458	.764

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RELIABILITY
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Reliability

Notes

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Scale: ALL VARIABLES

Case Processing Summary

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Cases	Valid	45	91.8
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a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.726	.732	5

Inter-Item Correlation Matrix

	Q13.1	Q13.2	Q13.3	Q13.4	Q13.5
Q13.1	1.000	.315	.425	.289	.404
Q13.2	.315	1.000	.391	.198	.160
Q13.3	.425	.391	1.000	.393	.458
Q13.4	.289	.198	.393	1.000	.501
Q13.5	.404	.160	.458	.501	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.353	.160	.501	.341	3.135	.012	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Q13.1	17.42	3.795	.498	.265	.677
Q13.2	16.87	4.482	.340	.187	.730
Q13.3	17.24	3.280	.588	.363	.636
Q13.4	17.53	3.618	.512	.289	.669
Q13.5	17.60	2.700	.563	.370	.663

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Reliability

Notes

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Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
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[DataSet5] Q:\B\Booyse_Koos_Okt11\Koos data.sav

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	45	91.8
	Excluded[a]	4	8.2
	Total	49	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.797	.800	4

Inter-Item Correlation Matrix

	Q14.1	Q14.2	Q14.3	Q14.4
Q14.1	1.000	.373	.583	.505
Q14.2	.373	1.000	.474	.397
Q14.3	.583	.474	1.000	.672
Q14.4	.505	.397	.672	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.501	.373	.672	.299	1.803	.012	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Q14.1	12.73	3.064	.597	.371	.761
Q14.2	12.58	2.886	.491	.246	.801
Q14.3	13.11	2.101	.733	.560	.681
Q14.4	12.78	2.586	.660	.476	.720

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Reliability

Notes

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Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	45	91.8
	Excluded[a]	4	8.2
	Total	49	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.657	.657	5

Inter-Item Correlation Matrix

	Q15.1	Q15.2	Q15.3	Q15.4	Q15.5
Q15.1	1.000	.289	.150	.059	.069
Q15.2	.289	1.000	.251	.380	.223
Q15.3	.150	.251	1.000	.402	.400
Q15.4	.059	.380	.402	1.000	.548
Q15.5	.069	.223	.400	.548	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.277	.059	.548	.489	9.288	.024	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Q15.1	17.89	2.737	.186	.098	.700
Q15.2	17.60	2.473	.417	.221	.604
Q15.3	17.80	2.255	.458	.226	.582
Q15.4	17.62	2.195	.546	.399	.541
Q15.5	17.80	2.073	.471	.339	.574

```
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Reliability

Notes

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```

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	45	91.8
	Excluded[a]	4	8.2
	Total	49	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.172	.210	3

Inter-Item Correlation Matrix

	Q16.1	Q16.2	Q16.3
Q16.1	1.000	.007	.126
Q16.2	.007	1.000	.110
Q16.3	.126	.110	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.081	.007	.126	.119	17.014	.003	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Q16.1	9.29	.574	.067	.016	.176
Q16.2	9.29	.483	.064	.012	.209
Q16.3	8.89	.692	.166	.028	.015

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Nonparametric Correlations

Notes

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a. Based on availability of workspace memory

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Correlations

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		Sig. (2-tailed)	.
		N	48
	Economic	Correlation Coefficient	.077
		Sig. (2-tailed)	.609
		N	46
	Strategic	Correlation Coefficient	.101
		Sig. (2-tailed)	.506
		N	46
	Flexibility	Correlation Coefficient	.038
		Sig. (2-tailed)	.803
		N	46
	Supplier	Correlation Coefficient	.002
		Sig. (2-tailed)	.990
		N	45
	Relationship	Correlation Coefficient	-.118
		Sig. (2-tailed)	.440
		N	45
	MarkteStatus	Correlation Coefficient	.046
		Sig. (2-tailed)	.764
		N	45
	Transformation	Correlation Coefficient	-.079
		Sig. (2-tailed)	.607
		N	45
	Alignment	Correlation Coefficient	-.022
		Sig. (2-tailed)	.886
		N	45
	Q16.1	Correlation Coefficient	-.214
		Sig. (2-tailed)	.158
		N	45
	Q16.2	Correlation Coefficient	-.356*
		Sig. (2-tailed)	.016
		N	45
	Q16.3	Correlation Coefficient	-.003
		Sig. (2-tailed)	.987
		N	45

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Dui die verband tussen Faktore asook effek grootte aan.
Riglyn waardes:
~0.1, klein verband, nie prakties betekenisvolle verband
~0.3, medium verband, prakties sigbare verband
~0.5, groot verband, prakties betekenisvolle verband

Dui aan of daar 'n statistiese betekenisvolle verband is of nie.
Riglyn waarde:
p< 0.05, statisties betekenisvolle verband.

```
NONPAR CORR
  /VARIABLES=Q6 Economic Strategic Flexibility Supplier Relationship MarkteStatus Transformation Alignment Q16.1 Q16.2 Q16
  /PRINT=SPEARMAN TWOTAIL NOSIG
  /MISSING=PAIRWISE.
```

Nonparametric Correlations

Notes

Output Created		07-Oct-2011 13:17:40
Comments		
Input	Data	Q:\B\Booyse_Koos_Okt11\Koos data.sav
	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	49
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each pair of variables are based on all the cases with valid data for that pair.
Syntax		NONPAR CORR /VARIABLES=Q6 Economic Strategic Flexibility Supplier Relationship MarkteStatus Transformation Alignment Q16.1 Q16.2 Q16.3 /PRINT=SPEARMAN TWOTAIL NOSIG /MISSING=PAIRWISE.
Resources	Processor Time	00:00:00.000
	Elapsed Time	00:00:00.000
	Number of Cases Allowed	54236 cases[a]

a. Based on availability of workspace memory

```
[DataSet5] Q:\B\Booyse_Koos_Okt11\Koos data.sav
```

Correlations

			Q6
Spearman's rho	Q6	Correlation Coefficient	1.000
		Sig. (2-tailed)	.
		N	48
	Economic	Correlation Coefficient	-.073
		Sig. (2-tailed)	.630
		N	46
	Strategic	Correlation Coefficient	.098
		Sig. (2-tailed)	.515
		N	46
	Flexibility	Correlation Coefficient	.181
		Sig. (2-tailed)	.230
		N	46
	Supplier	Correlation Coefficient	-.256
		Sig. (2-tailed)	.089
		N	45
	Relationship	Correlation Coefficient	-.075
		Sig. (2-tailed)	.623
		N	45
	MarkteStatus	Correlation Coefficient	.013
		Sig. (2-tailed)	.934
		N	45
	Transformation	Correlation Coefficient	-.186
		Sig. (2-tailed)	.221
		N	45
	Alignment	Correlation Coefficient	-.113
		Sig. (2-tailed)	.461
		N	45
	Q16.1	Correlation Coefficient	-.095
		Sig. (2-tailed)	.534
		N	45
	Q16.2	Correlation Coefficient	-.277
		Sig. (2-tailed)	.065
		N	45
	Q16.3	Correlation Coefficient	-.030
		Sig. (2-tailed)	.846
		N	45

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).