An analysis of rightsourcing in the electricity supply industry

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Mini-Dissertation submitted in partial fulfilment of the requirements for the degree *Master of Business Administration* at the Potchefstroom Campus of the North-West University

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November 2011

Abstract

The country is currently experiencing a tight electricity schedule. The demand for greater capacity than the country can supply is a reality. Raising unemployment and poverty levels are a situation we contend with daily.

The aim of the study is to create a generic framework for right-sourcing in the electricity supply industry. The various phases of strategy creation were analysed to achieve this target. The process of identifying core business processes was discussed. Strategic alignment is important for the success of the Information Technology strategy; this study discussed how this could be accomplished.

The various Information Technology sourcing strategies were examined. The probability of a process being outsourced, stemmed from the simplicity and repetitiveness of a transaction or process, and costs involved.

An empirical study was done with both quantitative and qualitative analysis. The study looked at Contract Management, Information Technology Strategy and Benchmarking.

A comprehensive right-sourcing framework was developed to assist in making the correct decisions. This framework could guide new entrants to the ESI in helping them shape their strategy and formulate a distinct competitive advantage. It could assist them in meeting the growing capacity demands faster and making a significant positive contribution to the economy.

Key terms: economic growth, electricity supply industry, new entrants, capacity requirements, framework, right-source, competitive advantage, benchmarking

Acknowledgements

It is a pleasure to thank those who helped to make this mini-dissertation possible:

- To a family who showed support by giving me space and understanding when scheduling clashes meant less time spent together;

- To friends and relatives who understood quiet time, and forgave missed appointments but still ceaselessly provided encouragement.

- To those who loaned books and provided sage advice, I listened.

- To those librarians who offered their expertise and time patiently when searching for books in such a lesser known topic.

- To lecturers who opened gateways to understanding and perspectives, blissfully unaware of the extent of the impact on impressionable minds.

- And finally to Johan, who guided and cajoled until a blink of an idea become a firm reality.

Thank you all for inspiring me in your own ways, for guiding me when I needed it and helping to unlock hidden potential. I hope this study manages to open doors for someone you know.

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Abbreviations

AMI	Advanced Metering Infrastructure
BPO	Business Process Outsource
COBIT	Control Objectives for Information and related Technology
ESI	Electricity Supply Industry
GDP	Gross Domestic Product
IEA	International Energy Agency
IPP	Independent Power Producers
LED	Light-emitting diode
NERSA	National Energy Regulator of South Africa
OLA	Operations Level Agreement
RFP	Request for Proposal
SAPP	South African Power Pool
SLA	Service Level Agreement
SOE	State Owned Entity
SP	Service Provider

CHAPTER 1: ORIENTATION AND PROBLEM STATEMENT

1.1 INTRODUCTION

Most businesses continuously undergo business process re-engineering to optimise their activity-based costing, and thereby strive to either increase profits or increase shareholder value. Business studies constantly use terms such as 'lean operations' (operations management (OM)), 'streamlined processes' (OM), 'efficiency and effectiveness' Information management (IM), 'benefits of renting versus buying' and Financial Management (FM). How does a business determine what is 'core'? Outsourcing is seen as the 'magic bullet' that could remove all support functions, and help a business to concentrate on its core functions only.

The Outsourcing Institute (O'Brien & Marakas, 2008:47) lists the top ten reasons why companies outsource. This study looked at the relevance of these reasons in the electricity supply context.

Various literature studies have shown that it may be detrimental to outsource all support functions. This study looked at what can be outsourced. When should a company in-source? When equilibrium is reached (i.e. right-sourcing, while allowing the company to operate optimally). Organisations should consider outsourcing in order to achieve financial savings, increased technical abilities and market abilities (Baltzan, Phillips & Haag, 2009:253).

1.2 IMPORTANCE OF THE STUDY

This study is aimed at showing that implementing right-sourcing correctly is the best way to help companies avoid costly long-term strategic mistakes. It is

essential to know one's business strengths, weaknesses and long-term strategic focus, before entrusting any part of it to outsiders.

The South African economy is forecasted to post GDP rates of 3.4 percent in 2012 and 4.1 percent in 2013 as reported by the Minister of Finance (Department of Treasury, 2011:10) during the budget speech. The rapid growth and demand for additional power have cast doubts on the country's ability to meet the increased demand. A State Owned Entity (SOE) provides 95 percent of the electricity while the remaining 5 percent is supplied by Independent Power Producers (IPP) and municipalities. The Energy Sector makes up approximately 15 percent of the GDP of South Africa (Department of Energy Synopsis, 2010:65). The electricity industry is scrambling to generate the additional capacity required to secure the growth of the economy in the shortest time frame possible, after the 2008 blackouts which left the country in shock. Speculation was rife that the demand for electricity was boosted by strong economic growth, increased industrialisation and an accelerated electrification programme which saw the demand surpass the supply.

In recent years the Electricity Supply Industry (ESI) in South Africa has attracted many new entrants called Independent Power Producers (IPP), to help alleviate the Electricity shortage that the Industry could be facing, in the short term. The National Electricity Regulator of South Africa (NERSA) has encouraged IPPs to participate in the Industry (SA, 2009:51).

Information Technology can play a vital role in accomplishing this goal. The limited time frame for new electricity generation makes the correct right-sourcing decisions invaluable at this time. Incorrect outsourcing, in-sourcing or multi-sourcing decisions could lead to inefficient utilisation of resources that could, at worst-case scenario, plunge the country into rolling blackouts again. This would have devastating consequences for growth and investment in the economy.

Insufficient research exists currently for right-sourcing in the electricity supply industry. This study aims to address that.

1.3 BACKGROUND TO THE STUDY (MOTIVATION)

Companies are forced to cut costs, and seem to be under the somewhat misguided impression that outsourcing saves costs and absolves accountability.

A firm that spends $10 million on offshore outsourcing contracts could actually spend 15.2 percent extra on costs under a best-case scenario, and 57 percent extra on costs in a worst-case scenario, according to Laudon, Laudon & Dass (2010:509).

In 2010 Staten (2010:2) wrote about strategic right-sourcing. He equated outsourcing as an antiquated practice of handing over the keys to the data centre to another party. He suggested exploring strategic right-sourcing which entails examining what has been outsourced to date, and how those relationships are being managed.

The correct right-sourcing could contribute to significant bottom-line savings over time. Incorrect right-sourcing could lead to erosion in savings, which could end up costing the company dearly, both financially and timeously. It is a long process to rectify any outsourcing blunders.

1.4 PROBLEM STATEMENT

Globalisation has driven the competitive nature of corporations to new heights. Organisations are no longer confined to traditional business models, but are constantly adapting their operations in pursuit of increased profits. Many organisations needed to refocus on their core business in order to survive the recession.

Outsourcing non-core functions was perceived as a cost-effective way for businesses to reduce expenditure (Cowan & Brubaker, 2000:1). This is still a common perception today. Following this perception, if an entire Information Technology department was outsourced, it should save the company money. This study will aim to prove or disprove this statement.

There seems to be little doubt that outsourcing, when applied correctly, can yield positive results. This study will examine different frameworks and their effectiveness when implemented.

1.5 OBJECTIVES OF THE STUDY

1.5.1 Primary objective

The primary objective of this study was to develop a generic Information Technology (IT) framework for right-sourcing in the Electricity Supply industry.

1.5.2 Secondary objectives

In order to achieve the primary objective, it is necessary to determine the factors that influence right-sourcing:

- To determine whether business dynamics have an influence on right-sourcing in the electricity industry;
- To determine how a business defines its core capabilities;.
- To determine which options are available for right-sourcing;
- To determine which role players/stakeholders should be involved in the process;

- To determine the impact of change management on effective right-sourcing;

- What type of managerial techniques would be required for successful right-sourcing: multiculturalist, e-facilitator, recognition promoter, internationalist or traveller? (Martinet al., 2005:408);

- What are the risks involved in right-sourcing?

1.6 SCOPE OF THE STUDY

The study focused on the optimal use of Information Technology in the energy supply industry.

The entire local energy supply community will form part of the study. Wind, solar, coal and nuclear generators in Southern Africa were included as part of the study.

Risk management, various managerial techniques and resource models were studied to develop an appropriate industry-specific framework.

1.7 RESEARCH METHODOLOGY

Both primary and secondary sources were used in the study.
Literature on the public domain was studied to garner knowledge on the Information Technology industries in the energy industry.

The empirical study focused on the Information Technology divisions of the energy suppliers in Southern Africa, and was benchmarked against industry standards. Both quantitative and qualitative methods were used to gather information relevant to the study.

1.8 LIMITATIONS OF THE STUDY

The study concentrated on right-sourcing the Information Technology functionality within the boundaries of Southern Africa. The impact of outsourcing on any other support function (e.g. Human Resources, Finance) would have to be investigated separately for an accurate impact analysis.

Commonly found literature, books, internet sources, journals and surveys were consulted to form a broad spectrum on which to base the Empirical study.

1.9 LAYOUT OF THE STUDY

Chapter 1:
This chapter provides an orientation to the problem statement and the causal factors that led to the primary and secondary objectives. Right-sourcing can be seen as the 'silver bullet' to elevate company performance from 'fair' to 'great'. This study determines a framework to assist in making this possible.

Chapter 2:
This chapter provides an overview of the literature study – published journals, information management, organisational behaviour and change management books and legislation governing the electricity industry. Special focus is on existing frameworks, management models, various types of contracts and service level agreements. The study looked at the most common reasons for outsourcing, hardware and software standards, and the environmental impact of technological innovations, outsourcing risks, and available sourcing options in the energy supply industry.

The study determined whether business dynamics have an influence on right-sourcing and how a business defines its core in the electricity industry.

Chapter 3:

This chapter contains:

- a discussion of the current Information Technology state in the electricity supply industry;
- the statistical process and findings of the quantitative and qualitative research;
- a definition of ‘survey scope’ and ‘instrument’;
- the findings of the survey;
- comparisons between the findings and existing frameworks;
- comparative benchmarking;
- a discussion of the results.

Chapter 4:

This chapter contains:

- a discussion of the state of right-sourcing in the industry;
- recommendations for a practical right-sourcing framework;
- recommendations for further research;
- conclusions.

1.10 CONCLUSION

The need for an industry-specific framework is critical to assist power suppliers to meet the sustainable energy growth targets required to grow the economy.

Managers need to make informed decisions when considering in-sourcing, multi-sourcing or outsourcing. There is a definite need for a local framework that can guide existing and upcoming industry players.

1.11 CHAPTER 1 – SUMMARY

The aim of the study was to create a generic framework for right-sourcing in the electricity supply industry. The development of this tool will help to guide managers in making far-reaching, long-term decisions that can lead to Information Technology resource optimisation.

Right-sourcing can be instrumental in turning a good company into a high performing company. It is therefore essential for the South African economy that companies contribute positively to the growth of the economy, thereby expanding the playing field for higher company turnover.

Table 1.1 Glossary

Terminology	Explanation
Backsourcing	This is when a function that has been outsourced is brought back in after the expiry date of the outsource contract.
Balanced Score Card	This is a tool that can assist in benefit tracking of a supplier service or a service provider. It assesses four quadrants from different perspectives of the business. Financial measures, Customer's business: Learning and Growth; Internal Business Processes; and Customer satisfaction.
Benchmark	This is a measure of performance which can be used to compare operations across organisation.
Business process outsourcing	A form of outsourcing that examines the processes that make up the business. Next it re-engineers and outsources the processes simultaneously.
Core competence	These are Capabilities that a business believes are essential to it gaining competitive advantage.
Co-sourcing	This is when a business's function is performed both by internal and external resources.
Due diligence	A detailed analysis that must be done when contracting with another partner in a service relationship.
Governance	An oversight function that entails monitoring and adherence to policies and procedures.
In-sourcing	Contracting out a complete area of your operations to an external service provider.
Invitation to Tender (ITT)	A formal document inviting a select supplier list to competitively tender for the provision of an outsourced service delivering a bundle of processes to the customer.
Managed services	This is an agreement with a third party that assumes responsibility for the management of a service, but where the hardware remains under the user ownership.
Near- shoring:	A type of sourcing whereby a company's workforce is restructured by moving jobs to a nearby foreign country.
Offshore outsourcing (off-shoring):	The outsourcing of any operation to a firm with a principal base of operation outside the country
Outsourcing:	An agreement whereby an external party is contracted to do the daily operations, management of a business process for an extended period of time.
Service level agreement	A document that details the expected level of service.
Service provider:	A party that renders an outsourcing process.
Multi-sourcing	Using several service partners within a single contract, to extract value or to ensure each can offer their key strengths.
Near-shoring	A type of sourcing whereby the transfer of business functions to a different country takes place. The country being relatively close to the company's home country
Request for Proposal (RFP)	A formal document inviting a select supplier list to competitively tender for the provision of an outsourced service delivering a bundle of processes to the customer.
Service Level Agreement	A contract or part of a contract that defines the type, value and conditions of services to be provided. The SLA is a key element to an outsourcing contract and provides the basis for measuring the performance of all parties to the contract.
Value chain	The process chain that links all the services in your company from one department to the next. It has logical links.

CHAPTER 2: LITERATURE STUDY

2.1 INTRODUCTION

The literature study will focus primarily on research done on the state of Information Technology sourcing in the Electricity Supply Industry (ESI) in South Africa.

Both primary and secondary literature sources will be used to examine any recent developments that may have had an influence on this environment.

The company structure and strategy will be examined to determine to what extent they inform the Information Technology Strategy.

Existing Information Technology sourcing frameworks will be studied and discussed.

A quantitative study will be conducted targeting the existing companies in the ESI with an emphasis on:

- Determining the state of Information Technology sourcing;
- The framework that was utilised to embark on the particular sourcing strategy;
- The focus of the Information Technology section;
- Factors that have the greatest influence on the Information Technology Strategy.

A qualitative study will be conducted to garner greater insights into the extent of sourcing in the ESI.

The correct sourcing strategy can enhance the value of Information Technology which could be successfully translated into a significant competitive advantage.

This chapter focuses on organisational structures and the various types of sourcing requirements available to support the business strategy. It studies Information Technology sourcing to a deeper level. Human Resources and Finance sourcing can be investigated separately.

This chapter assesses the role of Information Technology in assisting the company to reach its objectives. The following issues were examined:

- What are the different types of organisational models?
- Does the size or organisation type have an impact on Information Technology Strategy?
- What are the roles of Information Technology?
- Can Information Technology be considered a business enabler or simply a processing function that can be outsourced? What are the various types of sourcing?
- How does a company differentiate between them, and what is the correct mix?
- The literature study will identify and analyse the current risks involved in outsourcing.

Key success factors for right-sourcing are discussed, as well as some right-sourcing models.

The chapter examines the current state of outsourcing in the electricity supply industry and the secondary objectives as stated above.

The first phase of research is based on organisation types.

2.2 ORGANISATION TYPES

The type of organisation can define the levels of strategy to be formulated. This is essential in ensuring that the strategy is seen as a consultative, not dictatorial process. Porter (1980:563) suggested that strategy is formulated on three levels: Corporate, Business Unit and Functional or Departmental.

In a **single business** organisation, the business strategy can flow from the business strategy to the management planning and control level, then down to the operational control level.

In a **diversified organisation** there are three levels of strategic planning. They flow from the corporate strategy, business strategy, functional strategy, and management planning and control level, then down to the operational control level. Each management level must be aligned to the strategy, so that it can be driven at all levels of the organisation.

2.2.1 Organisational structures

There are various business models available for any type of company, depending on factors such as size, staff complement, geographic location, functional type, product type, business type, and so forth.

An organisational chart is a graphic representation of the formal authority and division of labour relationships (Kreitner & Kinicki, 2008:499). According to these authors, there are four basic dimensions to an organisational structure:

- The hierarchy of authority that shows the reporting structure from top to bottom; The division of labour shows the separation of business units or divisions;
- The spans of control show the number of people reporting directly to a specific manager;
- Line and staff positions differentiate between the strategic decision makers; the line staff who executes the daily operations of the company.

This is the structure that guides the organisation in arranging their staff in logical order, so that tasks can be performed and objectives can be met.

The author further states that it is important to adopt a balanced structure. This enables the company to achieve maximum benefit from the intellectual capital expertise that it employs.

Reporting relationships must be clearly defined, hierarchies must be logical and, most importantly, all divisions must be represented at strategic level. Any omissions may result in that a seemingly insignificant oversight at strategic level manifests itself as a costly reality further down the line.
For example, awarding a tender to one stationery vendor that does not have a footprint where all the company's sites are located - the company then needs to pay courier costs in excess of what was delivered. The knock-on effect could be that a site has no paper (cost or delivery delays), resulting in the staff being unable to print quotes or contracts for customer's signature. That would not be professional at all.

2.2.2 Basic decisions to develop an organisational structure

There are four basic decisions to develop an organisational structure: (Distelzweig & Droege, 2006:635).

1. Work must be divided into specific jobs – division of labour.
2. Jobs must be grouped in some way – departmentalisation.
3. The number of people and jobs must be specified. This will define how the span of control will be managed - could be by one or more managers.
4. Define how decision making authority is distributed.

2.2.3 Structures

- **Traditional structures** which were pyramid shaped proved to be too slow, and inflexible. These were typically Customer/Market or Matrix Structures.

A smaller organisation may favour a traditional structure where duties are assigned in a systematic manner. Here the distinction between line and functional duties will be clear.

- A **matrix structure** can be a combination of both. It is a flatter structure that allows multiple uses of resources. Dual reporting lines may occur in this structure. Clear communication is crucial to avoiding conflict management.

  An organisation could choose to arrange itself according to the type of customers they serve – i.e. specialist versus general clients. This allows specialised skills development. Strategic business units (SBU) are often used in large distributed (decentralised) companies which may be based on product lines, geographic areas, etc.

According to Kreitner and Kinicki (2008:525), future organisations could be either:

- **Horizontal,** and built around core processes aimed at satisfying customers. Cross-functional teams and empowerment are central to horizontal organisations.
- **Hourglass** which has a small executive level; short narrow middle management level and broad base of operational staff; it relies heavily on Information Technology by enabling a small executive group to co-ordinate the outputs of numerous staff at lower operational levels. The pinched layer makes it more difficult for staff to move up in the organisation, thus encouraging fierce competition.
- **Virtual** organisations are interdependent companies; they are contractual and flexible by nature (Kreitner & Kinicki, 2008:525).

In order for the final organisational structure to be effective, the following must be adhered to:

- The organisation must be able to accomplish the goals set by the company;

- It must ensure that its internal processes allow the company functions to run smoothly;
- It must have the optimum resources required, or acquire them; and finally
- It must address strategic constituents – i.e. the demands/expectations of key interest groups must be at least minimally satisfied (Kreitner & Kinicki, 2008: 509).

Adherence to these guidelines will ensure that the company operates as an effective organisation.

Once an organisational analysis has been conducted an informed decision regarding the role of Information Technology can be taken.

The organisational structure should be a result of the organisational strategy in accordance to the Principle of Designing Structure to Fit Strategy, according Donaldson as quoted by Locke (2009: 407). The structure should be designed to assist the organisation in attaining its goals.

2.3 STRATEGY

According to Chandler, as quoted by Locke (2009:407), Strategy is crucial to determining the levels of four contingency factors:

- organisational size;
- organisational innovation;
- diversification;
- geographical diversity.

The meta-principle of effective organisational structure, where the principle of designing structure to fit strategy, according to Chandler (as quoted by Locke, 2009:407) is appropriate as a departure point for effective decision making.

At this stage it is pertinent to note the existence of the Strategic Alignment Trap (Shpilberg, 2007:51-58).

Companies that seek to deliver higher business performance by harnessing Information Technology, focus on alignment to the degree to which the Information Technology group understands business priorities and then expends its resources in keeping with the priorities. Conversely some companies that were focused on alignment and business performance dependent on Information Technology sometimes went array or even declined. The reasons could be misalignment, system complexity, underperforming capabilities or it could be rooted in applications or other infrastructure. This is re-visited later in the chapter.

2.3.1 Five phases to effective strategic management

There are five phases to effective strategic management, starting with - where do you want to see the company in the future?

- Task 1 – Developing a strategic vision and business mission;
- Task 2 – Setting objectives - How do you move from here to there?
- Task 3 – Crafting a strategy to achieve the objectives;
- Task 4 – Implementing and executing strategy;
- Task 5 – Evaluating performance, monitoring new developments, and initiating corrective actions.

The above are subject to revision, amendments or improvements, when deemed necessary (Thompson, Strickland & Gamble, 2010:24).

A company needs to conduct a wide-ranging and in-depth analysis of the company and its surroundings, before it can begin to fathom a meaningful strategy.

There are various strategies that can be used to aid an organisation in achieving its intended goal. A study of leadership and management will show numerous business and management models that can be used as a framework.

The study thus far has observed organisation structure and briefly touched on strategy. The environment in which the organisation operates plays a role in shaping the type of strategy. An overview of the macro and micro environment must be studied.

2.4 EXTERNAL ENVIRONMENT – MACRO ENVIRONMENT

An external analysis of the environment that a company operates in is called the macro environment.

There are numerous factors that have an influence on the day-to-day operations of any environment. The key is to confine the macroeconomic factors to those that are outside the company boundaries, but have a relevant impact on the company. Any factor that has a major influence on the company must be considered. Major changes in the external environment could have an influence on the strategic direction of the company.

The local Electricity Supply Industry is vertically integrated with the State Owned Electricity supplier providing 95 percent (Adamson, 2011) of the current requirements.

It is a well-known fact that in 2008 the country was plunged into a period of rolling blackouts that caused major anxiety across the local economy.

One of the responses to the crises was the establishment of the National Energy Bill (SA, 2008:21).

The aim was to ensure that diverse energy resources were available in sustainable quantities and at affordable prices to the local economy. The bill supported the Government's growth plan of economic growth and poverty alleviation. It aimed among others to promote the uptake of renewable energy technologies that could be optimised as renewable energy to the national supply grid. This in turn would contribute to sustainable development.

Adamson (2011) further reports that the Government plans to develop 42GW in new electricity capacity by 2030. It is estimated that 42 percent of this should be generated from green sources.

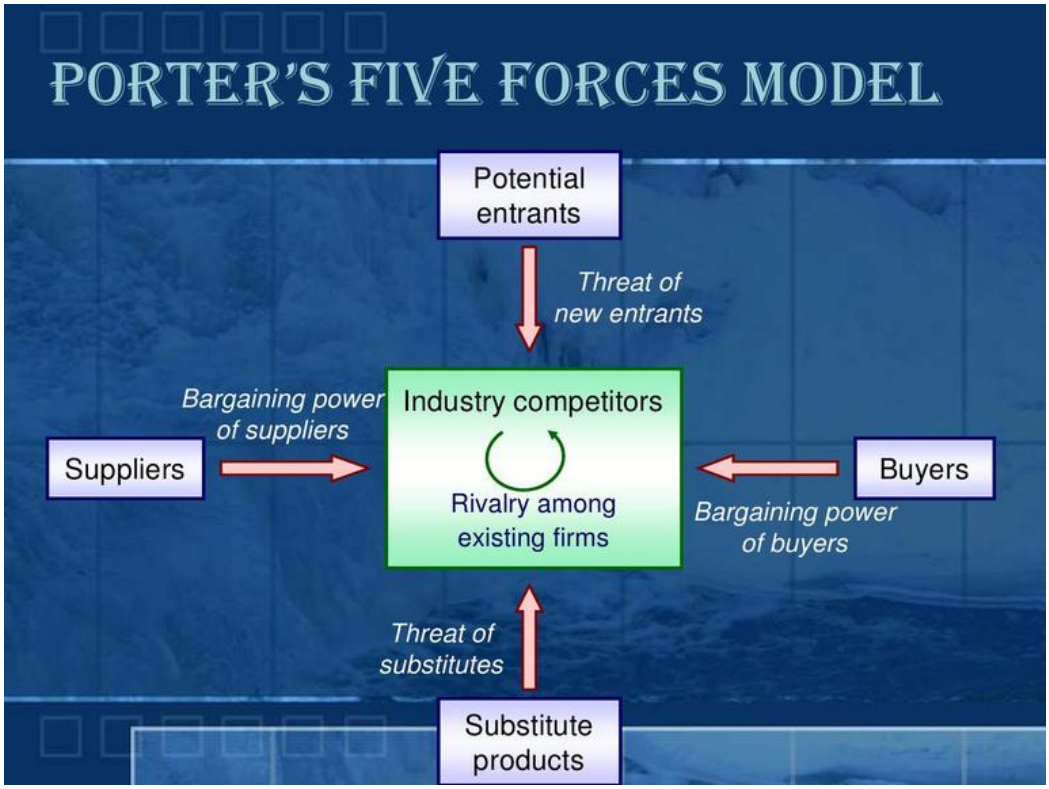
The South African Power Pool (SAPP) aims to facilitate the development of a competitive electricity market across the 11 member sub-Saharan nations. This according to Adamson could open the market to new businesses locally and across the continent.

2.4.1 Types of macroeconomic factors

There are various models geared towards evaluating the external and internal environments of a company. The results can be used to formulate the strategic vision of the company. The models can identify strategic options for the company and assist in selecting the best strategy or business model to fit the future of the company.

In 1980, Porter developed a model of the Five Competitive Forces, Figure 2.4.1.1 (Thompson *et al*., 2010:61).

Figure 2.4.1.1 Porter's Five Forces Model



Source: Adopted from Porter (1980).

This tool has since been reviewed many times to include other competitive forces; however, Porter concluded that they could be addressed by the existing forces. Schilling (2006) suggests advances in technology as a separate force, but Porter combines it with the Substitutes force.

The models, if applied correctly, could yield key information relevant to the decision-making process.

Porter designed the model in a manner that would enable the design of corporate strategy to be able to address the opportunities and threats that exist in the firm's external environment.

2.4.2 The Five Forces model concentrates on five key areas:

- **New Entrants** – *the ease with which new entrants can enter the market – the company needs to evaluate whether this could be considered a threat?*
- Some common characteristics that the company may analyse: Are there high capital costs? Does legislation restrict entrants to this market segment? Is patent protection applicable? And scarcity of resources, etc.?
- **Suppliers** – H*ow many suppliers are there? Are there sufficient for them to have bargaining powers? How big are they?*
- Some common characteristics for the company to analyse: Few suppliers of specialised products; no substitute products available; product is essential to the buyer, etc.
- **Industry competitiveness and extent of rivalry** – *How many players are there? How competitive are the major industry players? Is there a monopoly?*
- Some common characteristics to analyse: Number of competitors; exit barriers; industry growth rate; company growth is dependent on poaching customers from competing firms, etc.
- **Substitutes** – *Is there a product/service that can easily replace the company's? Is there a cheaper alternative available?*
- Some common characteristics for the company to analyse: Is a new product part of a fashion trend? Are the switching costs to a substitute product high? Can the other product be perceived as superior, etc.?
- **Buyers** – *How strong is their position?*
- Some common characteristics for the company to analyse: How many buyers are there? Can the volume they buy give them power? Are they sensitive to price? How easy is it to substitute another product, etc.?
- Additional forces to consider could be: Rivalry from within, or advances in technology.
- There may be other driving forces, beside those described above, dependent on the industry in which the company operates.

The competitive analysis could help determine the competitive landscape of a specific industry. The analysis could determine the competitive pressures of the five forces. It could aid the company in formulating the correct competitive strategy given the current competitor analysis. Porter suggests that the strategy should address the opportunity and threats that exist in the external environment.

More popular tools to help in formulating strategy are PESTLE and SWOT analysis.

2.4.3 PESTLE ANALYSIS MODEL

This model can be used to gain an overarching view of some of the key factors that can influence the environment in which the company operates. This can assist in formulation of its **future strategy.**

The PESTLE model examines the expected Political, Economic, Socio-demographical, Technological, Legal and Environmental changes which can influence the five competitive forces. This in turn could have an impact on the industry. The Five Forces Analysis can reveal insights about the potential future attractiveness of the industry. The PESTLE model examines the following factors in detail, thereby giving the decision makers a clearer picture of these factors:

- **Political Factors** – The Company must pay attention to any changes in domestic or foreign policies that can influence strategy. The change could take the form of Global industry change that government commits to, new government initiatives (e.g. free basic electricity for the poor (SA, 2008:51), job creation (SA, 2010:109), and others), or opening or closing of domestic markets to foreign markets, can all influence protectionism or free trade. The New Energy Bill (SA 2008:21) is a political response to help address the looming electricity shortage facing South Africa.

- **Economic factors** – The Company must pay attention to the market share, emerging markets, exchange rates, etc.; anything that can influence the company sales (e.g. effects of the recession on sales and supplies to be purchased). According to the transaction cost theory, companies try to economise on transaction cost just as they do on production costs (Laudon, Laudon, & Dass, 2010:89).

- **Social factors** – The Company must pay attention to any changes in customer preference, corporate citizenship, or change in customer demographic. For example, an increase in middle-class consumers may lead to higher demand for product or service. Higher fuel costs have led to consumers looking at alternative transportation methods. According to the International Energy Agency (IEA) the increasing costs of conventional electricity may bring the consumer closer to the price paid per any other developed nation (Adamson, 2011). This does not make it easier to bear when unemployment levels are at double digits.

- **Technological factors** – Rapid technological improvements, new or upgraded customer interfaces, real time customer updates, e.g. customers can view their bills and pay online, or place orders online. All of these factors could change the service offerings to the customers. It could revolutionise the manner in which the company interacts with its customers. Cell phone Banking and Smart phones are some of the newer technologies changing consumer behaviour.

- **Legislation** – Changes from the governing body that influence future company strategy. For example, restrictions on new capacity expansion projects, licence restrictions to limited number of industry players, and penalties for non-delivery of services, could have a detrimental effect on the company profits. The National Energy Act, 34 of 2008 (SA, 2008:51), is the framework legislation that ensures energy security in this sector. Electricity Regulation Act, 4 of 2006 (SA,

2008:51) is applicable to this industry. The National Electricity Regulator of South Africa is the body that governs the licenses and Industry conditions for the ESI.

- **Environmental** – Environmental policies with set reduction targets adopted by the Government and therefore the company; global warming promoting a change in the use of recyclable, environmentally friendly material. The company needs to take cognisance of a greener more environmentally inclined environment that it is operating in and adopt its goods and services accordingly.
  The Electricity Pricing Policy (SA, 2008:51) specifically mentions the sustainable short- and long-term usage of natural resources.

The above are practical relevant factors which may have a tremendous impact on the business. Careful consideration must be given to all factors to ensure that the relevance of the strategy is appropriate for the industry in which it operates.

2.4.4 Other Driving Forces

The company could consider these additional forces when determining their strategy (Thompson *et al*. 2010:83):

- Changes in the long-term industry growth – this could affect the customer supply and demand equation;
- Increasing globalisation – consumer base can grow to include international customers. Certain processes can be moved to different countries where production or labour costs are lower;
- Reductions in risk and uncertainty – emerging markets need more time and money to operate in them, and tend to attract high risk takers once the market has established itself, it may be an attractive new business option;

- Changes in cost and efficiency – fluctuating differences in costs amount to key competitors either reducing or increasing. This has an influence on the state of competition. Advances in fluorescent light bulb technology have the latest manufacturing of energy-efficient light-emitting diode (LED) bulbs.

There are other factors to be considered, but the key is relevance to the company.

Consider all factors, weigh them up, and focus on at least three to four of the forces that have the biggest influence on the company, when formulating the strategy. Focusing on too many factors could dilute the effectiveness of the strategy.

Once the external environment has been analysed, the focus can turn to the microeconomic environment.

2.5 INTERNAL ENVIRONMENT - MICROECONOMIC ENVIRONMENT

This is an analysis of the internal company environment. This is where the company needs to evaluate its current strategy and how well it is currently performing.
The strategy needs to be analysed in terms of its competitive approach. Will it pursue a low cost differentiation, market leader, product differentiation or other strategy?

Stronger performance indicates sound strategy; weaker performance indicates possibly weak strategy.

Some common tools to utilise when analysing the internal company environment are: SWOT analysis, value chain analysis, benchmarking and competitive strength analysis. (Thompson *et al*., 2010:133).

This study will briefly look into what is meant by these tools.

2.6 SWOT ANALYSIS

A SWOT analysis could be used to determine the company's strengths, weaknesses, opportunities and threats.
The findings of the SWOT analysis could be used to identify areas of concern and competitive advantages. They can also help determine what opportunities are available. The threats may alert the company to change direction, or improve service delivery, etc. Conducting a SWOT analysis is only useful if it results in actions for improving the company's strategy.

The top two quadrants (Thompson *et al.*, 2010:112) should have highlighted where competitive capabilities need to be strengthened, newly established, or if the firm can focus elsewhere if it is well established. This analysis could be used to determine potential actions that could be taken to reduce any of the competitive liabilities or weaknesses identified.

The bottom two quadrants should have identified which key market opportunities to pursue in the strategy, and which are not worth the effort. Most importantly, the SWOT analysis should have identified potential threats to the company. The strategy must address how to minimise it.

2.7 VALUE CHAIN

The next tool is the Value Chain. This tool identifies the primary activities that create customer value and the related support activities (Thompson *et al.,* 2010:116).

The primary activities include supply chain management, operations, distribution, sales and marketing, and service (Thompson *et al.,* 2010:118).

Support activities include product research and development, technology and systems development, human resources management, and general administration.

This analysis provides a closer look into the costs of internally performed activities. To make this relevant to the industry where costs originated from, supplier related value chains as well as forward value chains (allies, strategic partners, buyer or end-user) must be taken into consideration.

This could allow the company to perform proper cost allocations for the major activities in its value chain. This enables it to compare costs of different activities with rival firms – this is referred to as benchmarking.

2.8 BENCHMARKING

Benchmarking is the standard set by the best performer in a particular activity or industry. It is a measure of the best performing entity using streamlined processes. (Thompson *et al.,* 2010:122). The objective here is to benchmark the company's performance, processes, and value chain activities against the industry standards.

The comparative company listing will influence what strategy the company needs to embark on. The company must decide if they want to emulate the best, beat the best or try to undercut the best. Depending on the company decision, they could either opt to pursue a proficiency or low-cost value chain strategy.

2.9 BALANCED SCORECARD

The Balanced Scorecard (BS) can be an aid to organisational performance management. (Thompson *et al.,* 2010:34). It helps to focus, not only on the financial targets, but also on the internal processes, customers, and learning and growth issues. The following is an example of a strategic BS.

An example of a BS developed by Kaplan and Norton (2006) clearly separating the four quadrants of measurement from the strategic perspective, is illustrated in Figure 2.9.1.1.

Figure 2.9.1.1 Balanced Scorecard

Balance Scorecard: Summary of strategy perspectives		
Strategy Perspective	**Example**	**Example of scorecard measure**
Financial perspective	Shareholders views of	• Return on capital
	Performance	• Economic value added
		• Sales growth
		• Cost reduction
Customer perspective	Customer satisfaction	• Customer satisfaction
		• Customer retention
		• Acquisition of new customers
Internal perspective	Asses quality of people and	• Training and development
	Processes	• Job turnover
		• Product quality
		• Stock turnover
Future perspective	Examine how an organisation	• Employee satisfaction
	learns and grows	• Employee retention
		• Employee profitability

Source: Kaplan & Norton (2006**).**

An analysis of tools discussed above – i.e. the Five Forces model, PESTLE, SWOT, value chain and benchmarking analysis, are only some of the many management tools available to assist when conducting an analysis of the company. A combination of tools should provide a comprehensive view of both the external and internal environment in which the company operates. Armed with this knowledge, the company could make sound decisions on

what strategy to embark on to increase its competitive position in the industry. A well-researched and well-defined strategy could potentially take the company from a stagnant position to one of high performance.

2.10 SIX ELEMENTS IN DEFINING A COMPETITIVE STRATEGY.

In defining a competitive strategy, there are six basic elements to keep in mind (Thompson *et al.,* 2010:161):

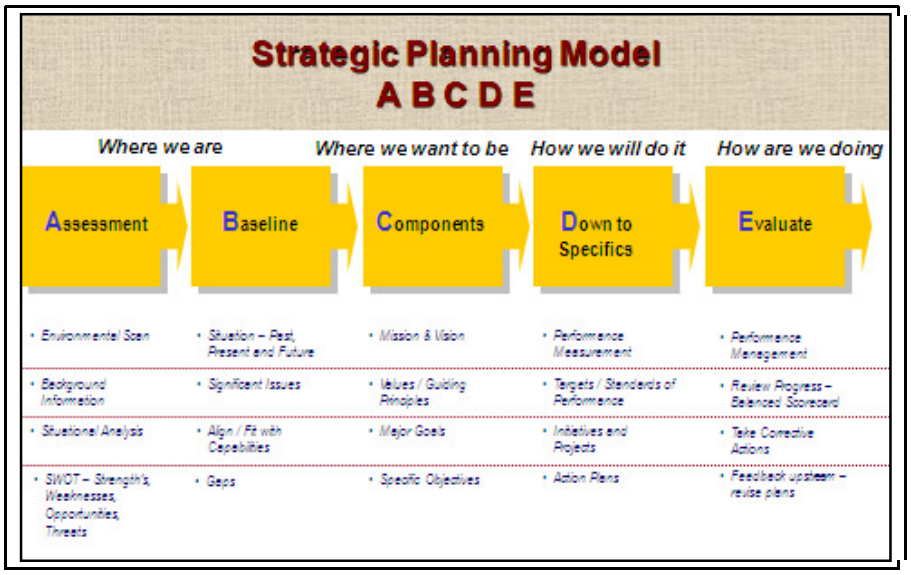
- Strategic target – identifies who are the company's target market will be;
- Basis of competitive advantage – defines the basis of the strategy which the company could embark on: lower costs, better products, specialised features that appeal to niche (specific group, normally the extravagant) consumers;
- Product line – defines a product range. The company could produce a few good products, a wide variety of products or specialised products or services;
- Production emphasis – the company needs to focus on product superiority, no matter the cost, reduced costs, not quality or special features;

- Marketing emphasis – the company needs to deliver the best value, distinguishing features, specially made for niche buyers which are essential to sustaining a strategy. The company must strive for improved innovation and commit to serve niche at overall lowest cost;
- Answers to the above may help define the competitive strategy of the company. The profit potential of the industry is largely dependent on the five forces framework. The strategy to enhance or grow the company profit margin must be thoroughly researched. Errors could be costly both financially and reputational. It could take the company a long time to recover lost ground; therefore the company needs to weigh its options carefully.

The company can adapt one or two of Porters (Thompson *et al*., 2010:161) generic strategies to suite its objectives. Low cost, broad differentiation, best cost, focused low cost or focused differentiation.

Figure 2.10.1 is an example of a framework for a strategic planning model. It guides the company from assessment and analysis and current company state, to where the company needs to go. It helps define how to get there and evaluates the progress of the company after the new strategies and actions have been implemented. This model includes some of the analysis tools described above, e.g. SWOT and PEST which is a variation of PESTLE.

Figure 2.10.1: Example of a Strategic Planning model



Source: Evans and Neu (2008:139).

Each leg of this model requires in-depth research to provide sufficient information for it to be meaningful.

For example, the Component leg (Figure 2.10.2) of the model defines where the company would like to be. This leg examines the strategic plan of the company, and its mission, vision and goals – why the company exists, what it wants to be and what it needs to achieve in order to be successful.

The next phase is the objectives and initiatives that form the action plan. This comprises of specific outcomes that can be measured. It defines what actions will be taken to reach the defined objectives.

The last phase is more specific. It is the evaluation phase that defines how success will be measured, and defines the targets.

Figure 2.10.2: Model of Strategic plan down to activity level

Source: Evans and Neu (2008:142).

Strategic models can take the form of basic planning, alignment planning, goal-based, self-organising or scenario planning models.

Once the competitive strategy has been defined, and both long- and short-term goals have been clearly described, it is time to review the organisational structure.

When embarking on organisational strategies, focus must be kept on target markets, capital sources, human resources, technology, and total quality management.

2.11 SUPPORT ACTIVITIES

After identifying its cash-generating units, the focus shifts to the other business units. It is at this stage that the company value chain support activity analyses are revised. These include: Product Research and Development, Technology and Systems Development, Human Resources Management and General Administration.

Some of the findings may show that labour costs need to be reduced: the company needs to grow market share, or that the business needs to embark on rapid transformation. Outsourcing could be considered as one of the business strategies the company can embark on, to meet the above requirements.

The recent recession is another example of the macro environment influencing the strategic change in a company. The resultant capital constraint could force some companies to turn towards managed services (allowing someone else to run in-house Information Technology systems). This allows them to limit capital investment, but still enjoy a flexible Information Technology infrastructure.

Managed services allow businesses to concentrate on business decisions, not Information Technology management. Increased revenue, reduced costs and improved efficiency will drive the interest in this market (Dewing, 2008:1).

Which activities could be outsourced? Which should be outsourced? Would outsourcing Information Technology accelerate the need to accommodate technological change, or increase competition? This study will seek to answer

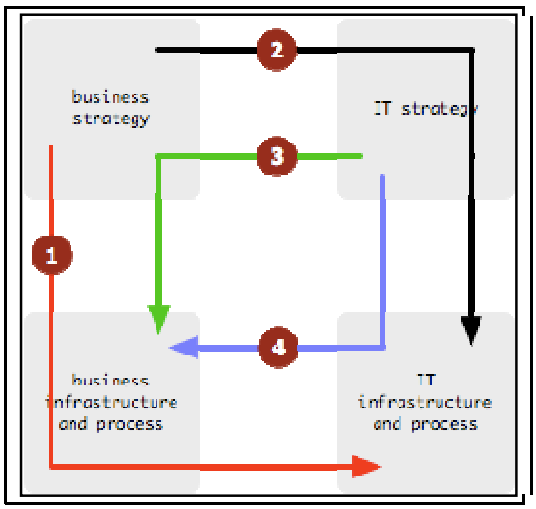
Information Technology-sourcing questions. Human Resources and General Administration are not addressed in this study.

2.12 INFORMATION TECHNOLOGY AND STRATEGY

Evans & Neu (2008:137) recommends that strategies should follow a logical sequence as demonstrated in figure 2.12.1 - business strategy, information strategy, systems strategy, and then technology strategy. This way the business strategy influences the Information Technology strategy.

The potential influence of technologies within Porter's competitive model can provide the foundation for the Information Technology strategy (Evans & Neu, 2008:140).

Figure 2.12.1: Henderson & Venkatramen Strategic Alignment Model



Source: Adapted from Evans and Neu (2008:145).

2.13 STRATEGIC ALIGNMENT MODEL (SAM) Figure 2.12.1.

In the model a clear distinction is made between the Information Technology externally focused strategy (IT Strategy) and internally focused systems (IT infrastructure and process). The model was developed by Henderson and Venkatramen in 1989 (Evans & Neu, 2008:145).

The integration of Information Technology with the business strategy results in the strategic alignment. This could lead to the competitive advantage mentioned above.

The model illustrates four perspectives. A business strategy is subject to changes in the macro-environment. The advent of a competitor product that swiftly gains market share could prompt a change in the company strategy.

Should the company choose to duplicate the competitor product, develop its own product with more features or request an upgrade of its products to minimise loss of market share to the new product, the Information Technology strategy should be flexible enough to accommodate the changes.

The analogy of to cut off Information Technology branches to see if it will grow, stems from the perception that Information Technology does not add value to the business. Sward (2006:17) describes this as systematic of a breakdown between Information Technology and the business relationship. It is also symptomatic of a failure to engage executives in the Information Technology investment process. Sward adds that Information Technology often over-promises and under-delivers.

Information Technology promises improved supply chain and accelerated product development on the back of enterprise resource planning (ERP), customer relation management (CRM), or connectivity based programmes, which it sometimes fails to deliver.

According to Evans and Neu (2008:146-147) Strategic alignment occurs when Information Technology can integrate with business strategy and operations. The success of this integration could develop into a competitive advantage.

2.14 SELECTING THE CORRECT INFORMATION TECHNOLOGY SOURCING STRATEGY

Sourcing in this context can be defined as seeking or finding a specific function. There are numerous types of sourcing that organisations can utilise. This study will discuss the more common types.

There must be a clear, common understanding of the business expectations before the company ventures into outsourcing. This helps map the business requirements to the nature and extent of the sourcing contract.

The sourcing strategy must be aligned to the business strategy to ensure that business goals are attained.

What is outsourced is dependent on the nature of the company, its core business, and its competencies. How does the company determine what or how much to outsource?

Based on the company SWOT analysis, they can choose to drill down and do a similar exercise per business unit. This result should separate the performers from the non-performers.

The company could put in place a sourcing management team that will look at developing integrated management processes with vendors and selecting appropriate performance measurements.

2.15 TYPES OF SOURCING

The business need determines what could be outsourced, how it gets sourced and by whom it gets sourced.

2.15.1 Outsourcing

Outsourcing is the contracting of a third party to manage a business process more effectively than can be performed in-house. For example: Company A decides to contract the desktop services to company B. Company B uses company C to do repairs on the desktops. In other words, outsourcing refers to any business process that has been given to an outside party to handle.

Outsourcing of non-core, transaction based processes has gained significant momentum over the last few years (Baltzan, *et al*., 2009:253). Companies have had time to acclimatise to an outsourcing presence in the industry.

Core competence, economies of scale or strategic competitive advantage can all be precursors to outsourcing. Once the decision has been made, how does a company go about selecting the correct sourcing method?

2.15.2 Challenges of outsourcing

According to Baltazan, *et al*. (2009:491), there are various categories to outsource in Information technology:

- The entire business unit;
- Desktop support;
- Call centre;
- Information Technology infrastructure;
- Network services;
- Applications;
- What should the contract duration be?

Young *et al.,* (2008:60) advocates contracts on average no longer than five years. As new entrants in the market compete with existing service providers, better alternatives could become available – e.g. cloud computing or using software as a service. Cloud computing costs reduce over time when using the utility model. They could already have invested in service delivery for other clients – thus the need for a longer-term contract to make profits is eliminated.

Carlson (2006:1), the former head of HSBC, warns that **core competence** should not be outsourced. Carlson states that Information Technology automates processes; therefore, you need to look at the entire process and see where it adds value.

Streamline the processes: Process re-engineering can cut stages, time and cost. These should be kept in-house.

Zinnov Offshoring (2011:1) advises companies to look at **currency trends** of the destination country. Understanding that the macroeconomic factors can help the company evaluate how key industries will feel the impact of changes in the exchange rate. A steady lower currency value of the destination country generally ensures a higher return on investment.

Is the company able to monitor the service that has been outsourced? Technology is used to run the day-to-day operations in a business, to effect changes in the business and to innovate.

Correct outsourcing (Bucki, 2011:1) can bring about cost reduction; it converts fixed costs into variable costs, thus releasing capital for use elsewhere in the business.

2.15.3 Knowledge Process Outsourcing

Information Technology Outsourcing (ITO) and Business Process Outsourcing (BPO) have an emphasis on cost efficiencies. Knowledge Process Outsourcing (KPO) encourages companies to unlock their top-line growth by outsourcing their core work to locations that have a highly skilled and relatively cheap talent pool (KPMG, 2008:48).

KPO is characterised by niche offerings, highly skilled staff and a relatively small scale. Some typical issues plaguing the financial industry, remain the protection of intellectual property and the management of conflicts of interest. This makes KPO an attractive sourcing method.

According to KPMG, hybrid multi-sourcing (using more than one sourcing method) models will emerge in the near future. They could consist of captive units managing relationships with third-party KPO providers.

2.15.4 In-sourcing

Services are sourced from within the business functions – i.e. Human Resources, Information Technology and finance. All Information Technology support rendered within the company, such as providing computers and providing support, is done by full-time company staff.

2.15.5 Back sourcing

This occurs when a process or function which has been previously outsourced is brought back within the organisation. There are cases where companies that have chosen outsourcing have had a change of strategy and moved their operations back in-house. Sainsbury (Munro, 2010:1) cancelled its ten-year Information Technology contract five years before it was due to end, and JP Morgan, Prudential Hamlets, have shown a trend towards in-sourcing.

2.15.6 Multi-sourcing

This process can be described as an integration of in-house service delivery with outsourced solutions. A typical example could be business process outsourcing. It is a combination of professional services, mission critical support, remote management and hosting services. Multi-sourcing helps companies achieve a 'best of breed' strategy (Balthazan, *et al.*, 2009:493).

Multi-sourcing allows companies to gain a diversity of knowledge which enables them to raise their bargaining power and flexibility.

Cohen (Rust 2008:1) says CIOs need to multi-source and look beyond quick-fix cost-cutting measures, and, instead, enable capability building, global expansion, increased agility and profitability.

According to Cohen as reported by Rust (2008:1), chaotic and compulsive outsourcing creates as many challenges as it resolves.

2.15.7 Open Sourcing

Open sourcing is a form of in-sourcing. Depending on the type of Information Technology strategy the company embarks on, open source technology can be used as the core of the strategy. The cost advantages and change management ease make them attractive options.

Types of common open source tools are Linux, MySQL, Hybernate and Apache, and they can be used to run infrastructure on a global scale (Moore, 2009:1).

Open-source tools are often standard compliant, or effectively comprise a cross-platform standard. They can be considered as robust tools that are subject to peer reviews, which is an advantage when issues are rapidly identified and resolved.

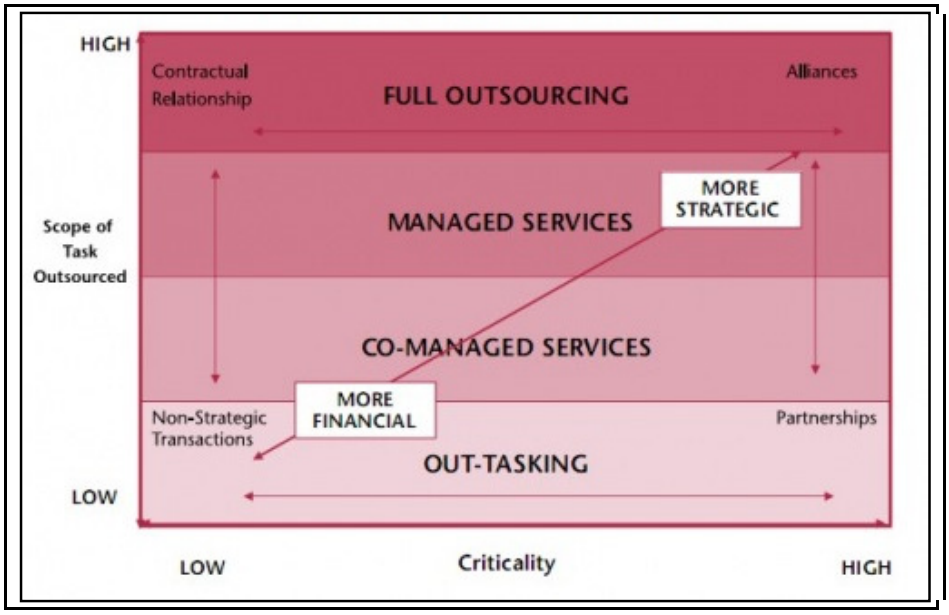
2.15.8 Onshore, Near- shore or Offshore

Onshore, or domestic, sourcing refers to service providers that are physically close, speak the same language, and share the same culture and time zone.

Near-shore sourcing relates to service providers that are physically close, share language similarities – e.g. business English, similar culture, and some overlap in time zones.

Offshore sourcing relates to service providers that are physically remote, have different cultural values, speak different languages but can speak the native language of the vendor, with no overlap in time zones (McIvor, 2010:86). There are various sourcing models available. The following are some typical frameworks:

Figure 2.15.1.1 Primary Objectives of Outsourcing Model



Source: Anon (2009).

The Outsourcing Model, Figure 2.15.1.1, is based on the assumption that the primary reasons for outsourcing are financial, resource based, and strategic.

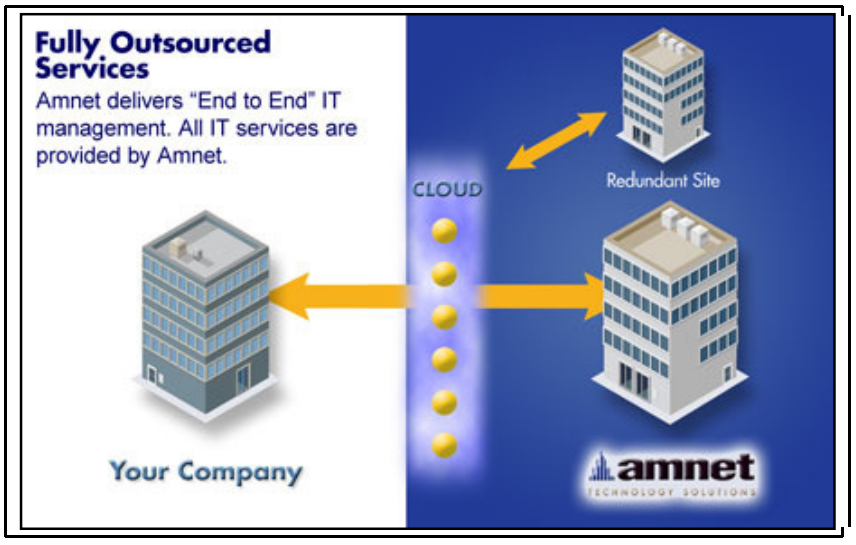
The company is encouraged to make a clear decision on the reason for outsourcing, whether it is technological advancement, strategic partnership, cost reduction or capital outlays.

Once the correct decision has been made, it makes the selection of an appropriate service provider easier.

The scale of the model is based on criticality and the envisioned scope of the outsourced contract. The criticality increases, depending on the nature of the task to be outsourced. Lower criticality can be given when accompanied by a standard contractual relationship, whereas more strategic issues must be handled by partnerships or strategic alliances (Simoeni, 2011:1).

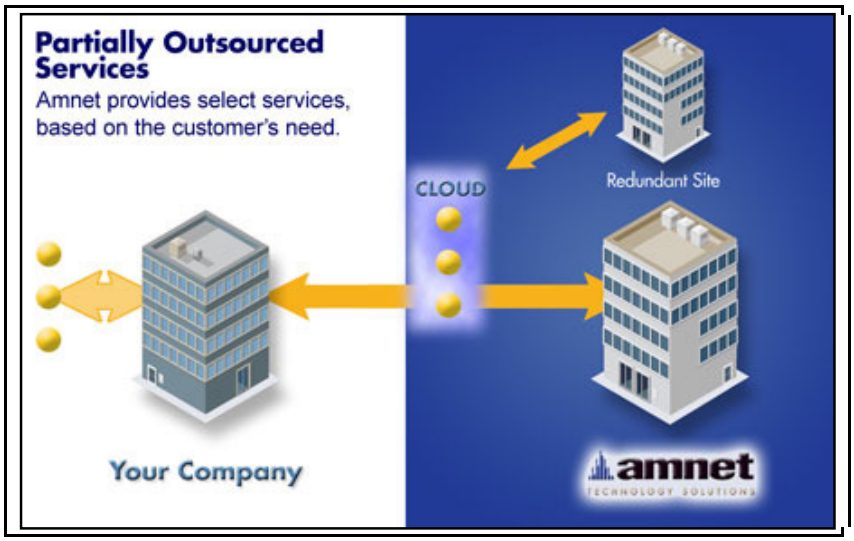
The Information Technology Outsourcing Model, Figure 2.15.1.2, is a **fully outsourced** model where the Data Centre, Network, Servers, Data Storage, Applications and Compliance have been outsourced.

Figure 2.15.1.2 Information Technology Outsourcing Model



Source: Amnet (2010).

Figure 2.15.1.3 Partially Outsourced Service Model



Source: Amnet (2010).

This is a **partially outsourced** model, figure 2.15.2.3, where only the Data Storage, Applications and Compliance have been outsourced.

2.15.9 Techniques for outsourcing.

The top 10 techniques (Burnsington, 2010:1) for navigating the entire outsourcing processes:

- Clearly define the scope and the outsourcing agenda in detail, upfront;
- Carefully evaluate the response from the Service Providers (SP), and request clarity where necessary;
- Evaluate the SPs track record for the services requested;
- Do not use cost as the only selection criteria for appointing a SP – also examine stability, balance and excellent results;
- Assess the SP portfolios – was their work of an acceptable standard?
- Use a sliding scale approach: first request a small project and see how they perform before you increase the scale to larger projects;

- Have transparent work plans, with project milestones clearly defined and costing attached per milestone;
- Have a clear ownership matrix in place for existing, new and upcoming projects. Who owns the end products? Who provides the components?
- Ensure that post-project support is included after each venture;
- Ensure that each interaction during the engagement process is recorded and agreed to by both parties. This includes scope definitions, payments, any amendments, and service agreements.

From the above it is clear that depending on the type of sourcing strategy, if the company finally decides to adopt, the business needs to determine the correct framework for measuring the performance of the sourcing.

2.15.10 Sourcing performance measurements (McCord, 2003:59).

Sourcing performance measurements:

- **In-housing** – adhere to outputs as specified in company compacts;
- **Outsourcing** – can be measured by the use of Service Level Agreements (SLA) or Operating Level Agreements (OLA). These can be characterised by the following principles: set objectives, characterise, quantify, supervise, review and improve.

2.15.11 Service Level Agreement

A Service Level Agreement is a cornerstone to outsourcing, as it defines the scope of the work to be performed. An example could be outsourcing desktop support for the company.

The company uses external resources to fix incidents that are hardware or software related on their desktops instead of making use of internal resources. They have agreed measurement metrics that define the duration

and level of work to be performed by the external resources. The SLA will specify how long, in terms of hours, it should take for the desktop to be repaired or replaced, depending on the nature of the incident.

An SLA specifies corrective actions and any penalty clauses deemed necessary to deal with non-delivery of service. It can be used as a guide whereby both parties are in alignment regarding the outsourced services.

An SLA specifies the detail of the scope agreed to between the company and the service provider, as well as the duration and costs of the service.

2.16 RIGHT-SOURCING

In essence, it is selecting the right resources to do the job, as stated by Woodruff, Sanders and Marinko (2010: 27). It is a combination of the best of outsourcing and in-sourcing where types of right-sourcing could be consolidating and virtualising data centres, blending traditional deployments with a range of cloud services.

Information Technology is generally expected to deliver more services with less money, it is therefore imperative for companies to make use of right-sourcing to meet this objective.

Clear boundaries between the various groups involved in right-sourcing must be clearly defined. Ownership, responsibility limitations and clear communication channels must be established.

Berger (2009:1) advocates that by individually assessing the service bundles from a risk and market perspective, the future degree of vertical integration can be determined.

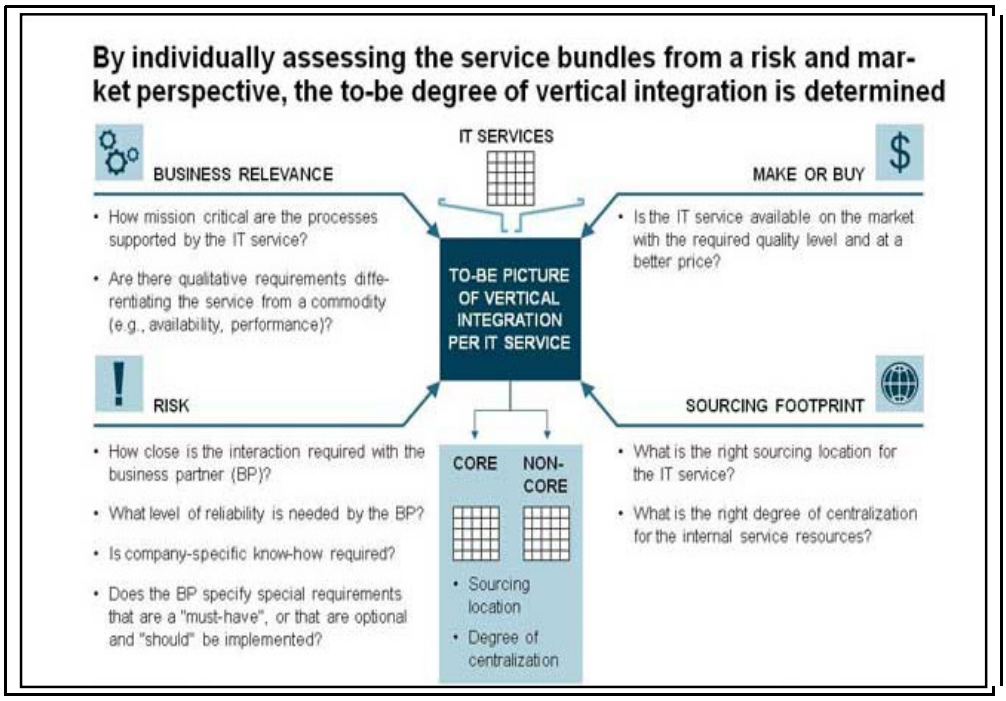
Berger then suggests that the company must have a view of its total Information Technology cost structures. This internal inherent knowledge

could potentially be lost if entire functions are outsourced. They advocate spreading the outsourcing risk over a number of service providers thus limiting company exposure.

Key success factors include ensuring that internal Information Technology costs are fully transparent before outsourcing begins, and clearly defining the core competencies that must remain in the business.

Figure 2.16.1 discusses a framework for Information Technology Right-sourcing.

Figure 2.16.1: Framework for Information Technology Right-sourcing



Source: Berger (2009).

2.16.1 Three phases of Right-sourcing frame work, Figure 8 above:

- A thorough cost analysis of a service would indicate what type of costs would be involved. Internal or external costs. A clearer picture of what resources would be required and the geographical location where they

exist; Match the Information Technology sourcing portfolio with the sourcing strategy next.

- Make a decision based on the decision trees – i.e. internal or external, core or non-core competence, and centralised or decentralised service delivery using onshore or offshore locations.

Business, financial, geographic and risk factors must be thoroughly considered before making a decision.

Successful outsourcing is based on a contract with clearly a defined set of requirements.

Right-sourcing is using the correct resources for the correct processes, whereas multi-sourcing is using different types of sourcing for the different processes. The key difference between the two is that whereas multi-sourcing uses different types of sourcing, it may not necessarily be the correct sourcing method for a particular process. Right-sourcing applies the correct resource to the correct process.

2.17 SELECTING THE CORRECT SOURCING STRATEGY

According to Westdijk, Adriaans & Meijborg (2009:1) the correct sourcing strategy should follow a continuous cyclic process where changes from the business need to be catered for:

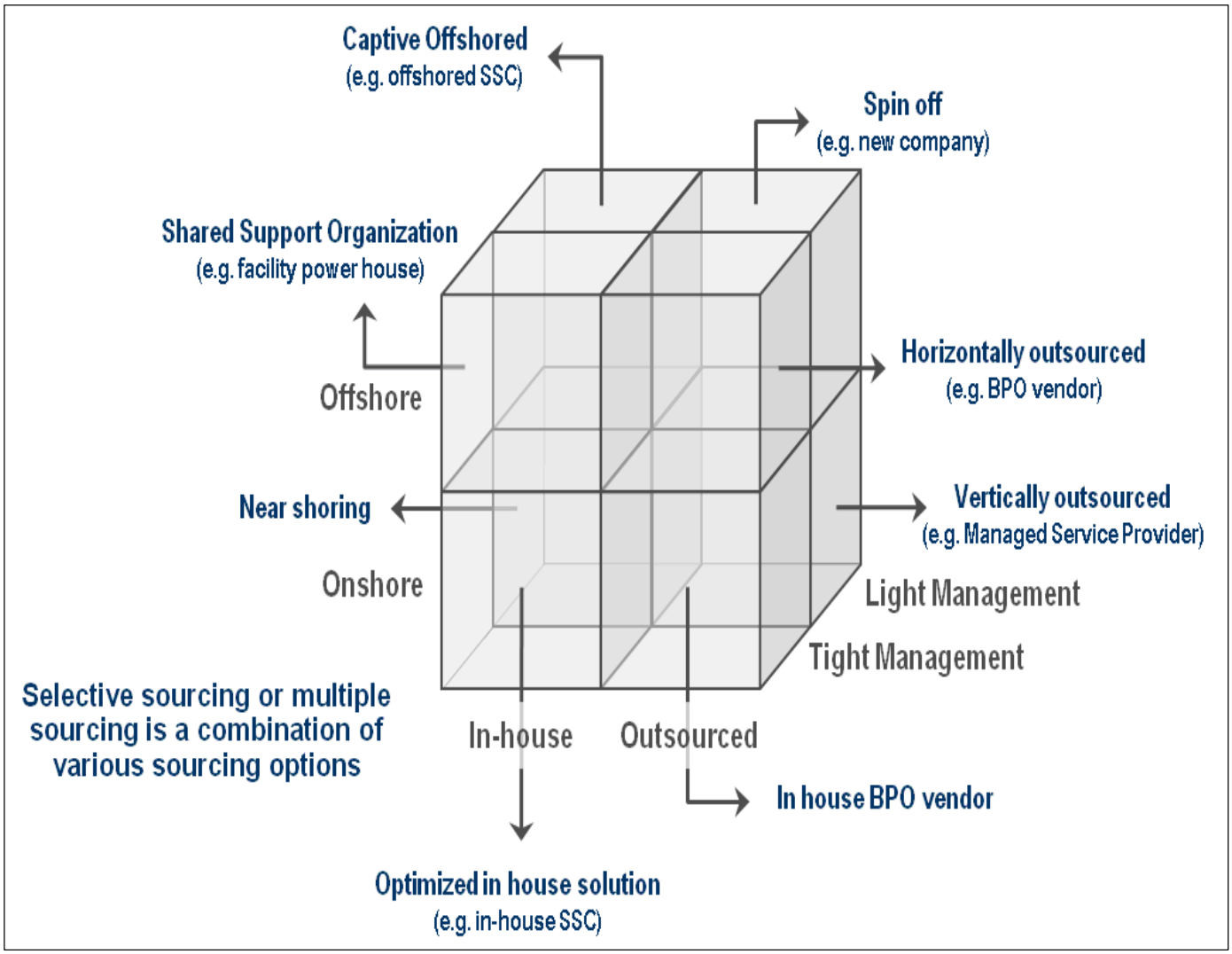
1. Analysis and definition – What are the various sourcing models for?
2. Scenario planning and business case – where would you use each scenario? Develop a business case for each.
3. Selection and preparation – Who would be able to provide this service? Is it better to in-source or outsource? One supplier or multiple?
4. Transition – Processes to move from ‘as is’ state to ‘want to be’ state; development of governance complaint SLAs, training, process to roll-out new change.

5. Delivery of operation – Implementation of agreed SLA, monitoring service, monitor success of final service change as experienced by both the client and the SP.

Repeat the process for any changes to the sourcing requirements. The Global Sourcing of Services (GSS) Cube ® is a model designed to assist a company in finding the correct combination of ownership, right-shore, and management or governance model.

Figure 2.20.1 follows on next page

Figure 2.17.1 Global Sourcing of Services (GSS) Cube ®



Source: SSON (2009).

2.18 SUCCESSFUL RIGHT-SOURCING

A successful sourcing strategy can enhance the value of Information Technology as a strategic partner.

Woodruff, *et al.,* (2010:27), in their "Right-sourcing 101" presentation, recommend the following **10 Steps to Successful Right-sourcing:**

1. Perform thorough needs analysis;
2. Set goals for project;
3. Perform sourcing analysis;
4. Create project definition;
5. Create/distribute request for information (RFI);
6. Establish pool of potential suppliers;
7. Create/distribute request for proposal (RFP);
8. Decide on finalists among potential suppliers;
9. Invite finalists to present to stakeholders;
10. Negotiate with selected bidder(s) and finalise details.

A cursory glance at the 10 steps for outsourcing by Burnsington (2010:1), seems indicative of a more thorough approach than the above 10 steps to successful right-sourcing. A comparison of the two could result in an enhanced guideline for successful right-sourcing. The level of detail required could be instrumental as a Key Success Factor for successful right-sourcing.

2.19 HOW TO SELECT A SERVICE PROVIDER

Certain service providers may employ an "undercutting cost" strategy that allows them to attract more business by significantly undercutting costs to

secure a contract. These service providers should be approached with caution. They may be unable to fulfil the contractual requirements for the contracted period.

There are various questions to consider before selecting a service provider**:**

- Have the project goal, scope, deliverables, resources, variables, risks and project management been clearly defined as yet?
- Have the potential service provider's services been utilised before?
- What does their current client database look like?

Once the above have been clearly defined, the Request for Proposal Process (RFP) needs to be completed. The contents of this document should be as unambiguous as possible. This is the process whereby prospective Service Providers will be applying for an opportunity to render the requested service/product.

The RFP should contain sufficient information to enable the Service Provider to fully envision the scope of the work required, and therefore submit realistic figures in their response.

Choose a Service Provider that you can build a professional relationship with. They may have the potential to develop into a strategic partner at a later stage.

2.20 CHANGE MANAGEMENT (CM)

Organisational culture is an important dynamic in effecting organisational change. Business support for the strategic direction of the company is essential (Warrilow, 2009:1).

The company should have trained change agents to address any staff concerns. Failure to address this dynamic sufficiently could potentially jeopardise any project.

Processes may be defined as 'best of breed', and the latest technological enhancements may be available for staff to use, but if the company does not have a CM culture to drive the change, it may experience limited success or even possible outright rejection.

Kotter (1995:67) speaks about how it sometimes seems that change comes too slowly. He mentions "raising urgency" as the first step in the eight-step framework for change. Kotter recognises that change is continuous, and therefore he advocates that urgency should become a core sustained capability.

The eight main reasons (Kotter, 2008:3) why transformations succeed, are described in Figure 2.20.1.

Figure 2.20.1: Steps to transformation success.

1. Creating a sense of urgency
2. Forming a guiding coalition
3. Creating a vision
4. Communicating the vision
5. 'Empowering' to act on the vision
6. Planning for, and creating, quick wins
7. Consolidating improvements and producing more change
8. Institutionalising the change

Source: Kotter (2008).

Change agents must be passionate about embracing the change they are selling. They hold the key to turning tide from uncertainty and insecurity to

successful implementation of the change. They have the potential to turn naysayers into firm advocates of change.

2.21 OUTSOURCING RISKS

It is logical to expect that the more the company outsources, the greater its risk exposure will be.
Processes not directly under company control increase the risks involved. The risks can materialise in different ways, depending on the sensitivity of the outsourced activity, business criticality, degree of customisation that limits substituting suppliers, and others (Gartner Risks of outsourcing as quoted by BSSOCA 2010:1).

Some typical risks when using local (on-shore) and international (offshore) resources are:

- Cultural;
- Language; Zone differences; Lack of established processes; Excessive travel costs;
- Poor quality control, etc. (Software Development Technologies).

There is abundant material on various kinds of risk exposure when the company outsources. Here are a few more examples:

- Getting too involved with/being dependent on a supplier **manifests itself in losing control** – a common perception may be that once the service is outsourced, so too is the responsibility - this is incorrect. The service may be outsourced, but the responsibility remains in-house. Keep communication with the SP open, and have regular reports to monitor service delivery.

- **Service Provider Liability** – security failure at the supplier. Use SPs that can deliver on the RFP. Interrupted service delivery due to non-

compliance is a serious matter however the business still requires a service. Litigation is timeous and costly. Keep the business requirements in mind, and incorporate a risk management clause to mitigate this.

- **Viability of Service Providers** – the possibility that the Service Provider could fail, thereby failing to deliver a service and leaving the company exposed. The opposing views between the outsourcer and the customer can lead to negative experiences. A thorough due diligence can be done to minimise this risk, e.g. the Gijima Absa deal gone wrong. Select a SP that will be viable for the duration of the contract.

- **Mergers and Acquisition** – the acquired SP could have a parent company which provides services to rivals, or which chooses to close down the type of services currently provided, e.g. your current SP gets taken over by the SP of your closest competitor, your web support gets inadvertently mixed with your rivals' and their adverts feature on your sites.

- **Customer size** – loss of flexibility; the SP stable may have many large customers which could mean that your account gets neglected at times due to limited resources. Your SP constantly prioritises other clients before attending to your requests.

- **Quality of Service** – distance and time – outsourcing brings the expectation of improved service delivered by professionals, if this fails to materialise, the company can use the penalty clause specified in the contract, to guard against non-performance. A measurable performance matrix should help in assessing quality of service.

- **Fraud** – legal and regulatory differences. There could be fraud and corruption involved in delivering the product/service. The SP could inflate their invoices or bill for services not provided.

- **Intellectual Property Theft** – violations could cause damage to the company reputation – and a subsequent loss of revenue. The leaking of sensitive customer financial information could lead to a breach of trust and loss of the customer business.

Evaluate a potential SP carefully - it can be a potentially strategic partner or a costly encumbrance. Manage them professionally and create a strong working relationship. This will go a long way in reducing potential risks.

2.21.1 Risks in Outsourcing failures

One of the possible consequences of not adequately managing an outsourcing contract, is failure. The risk of outsourcing failure may leave the company detrimentally exposed. Here are some examples on how outsourcing can go wrong:

- Some companies are unable to tell whether their outsourcing was successful, as they **failed to establish a formal strategic management framework**. It is futile to try and measure if the contract was met, if the signed off objectives were vague.

- **Insufficient vendor management** due to no clear deliverables or reporting requirements stated upfront. The failure to detail expected deliverables and the content of the reports that should be measured upfront, leaves the contract open to various interpretations. This could mean that the company may expect weekly reports but the vendor only provides monthly reports.

- **Ambiguous SLA**s that leave room for both parties to claim maximum expectations. The company claims maximum service delivery and the service provider claims the maximum price for services incurred.

- The company may experience the following **negative perceptions** from remaining staff once they have outsourced a service, according to Mogg (2009:1):
    - display a lack of organisational learning;
    - reduction in innovation;
    - anxiety;
    - low performance;,
    - unclear role clarity that leads to potential misunderstandings.

In May 2004 a study was conducted to record experiences about outsourcing failures (Goolsby & Whitlow 2004:1).

The top three most frequent causes of relationship failure were listed as:

- 16% Buyers have unclear expectations upfront;
- 16% There is a poor cultural fit;
- 13% Providers provide poor performance.

The study listed the most frequent causes of outsourcing failures which has been corroborated by Morgan and Ramanathan (2008:69). Both listed the top three as follows:

- The buyers' unclear expectations upfront;
- The misalignment of interests over time;
- The providers' poor performance against service-level agreements.

2.21.2 Seven lessons from state information technology outsourcing disasters (Overby, 2010:1).

Figure 2.21.2.1: Lessons from State Technology Disasters

1. You get what you pay for – this can be interpreted as the Governments are supposed to be careful when spending the public's money; they are therefore obliged to go for the lowest tender. This may prove costly in the long run.
2. You get what you SLA for – if the SLA is ambiguous, that is the type of service to expect.
3. When the going gets tough, the tough goes public – if a vendor fails to deliver, the Government goes public with it - Gijima and the Department of Home Affairs.
4. You can't sue your way to a better relationship – after litigation through the courts for one aspect of the contract, the SP still needs to provide a service on the remaining aspects. Manage the relationship in a manner that is professional.
5. Outsourcing means never having to say you are sorry – the company can always blame the service provider when things go wrong.
6. Outsourcing will not cure internal inertia - if a project meets internal resistance, the company should not expect that outsourcing it will make it more acceptable.
7. If at first you do not succeed, try again – when the relationship fails, the company simply appoints someone else, and try to improve the relationship once more.

2.22 GOVERNANCE AND LEGISLATION

There are various guidelines that can be adhered to in order to comply with governance in Information Technology. Control Objectives for Information and related Technology **(**COBIT) was created as a framework to assist with the adherence to Information Technology governance.

2.22.1 Control Objectives for Information and related Technology - COBIT

COBIT (Holmes, 2006:1) is an Information Technology framework which defines definite control objectives that enable the business to have sufficient control over Information Technology decisions. It assists in optimising Information Technology investments, ensures that service delivery is maintained, and provides a benchmark for comparison when things go wrong.

COBIT consists of five key areas:

1. Strategic alignment – which ensures that Information Technology plans are related to business plans.
1. Value delivery – which ensures that value, is extracted through the entire delivery cycle via cost optimisation.
2. Resource management – which ensures that the correct resources, knowledge and infrastructure are utilised effectively.
3. Risk management – which ensures that the proper risk awareness, appetite for risk and compliance requirements are raised at the proper level and addressed accordingly.
4. Performance measurement – which ensures that strategy implementation is always tracked and monitored via credible measurement tolls, e.g. the Balanced Scorecard.

COBIT is an Information Technology framework that guides business in their various processes and helps with benchmarking maturity levels of processes against the 'best of breed' in the industry.

2.22.2 KING III

King III (Wentzel; 2009:1) was developed in line with an Information Technology Government charter to guide Information Technology governance in South Africa.

The goals of KING III are as follows: to manage business risks; ensure the delivery of high service availability; agility in responding to changing business requirements; automating and integrating the enterprise value chain and complying with internal policies and selected industry standards, external laws and regulations.

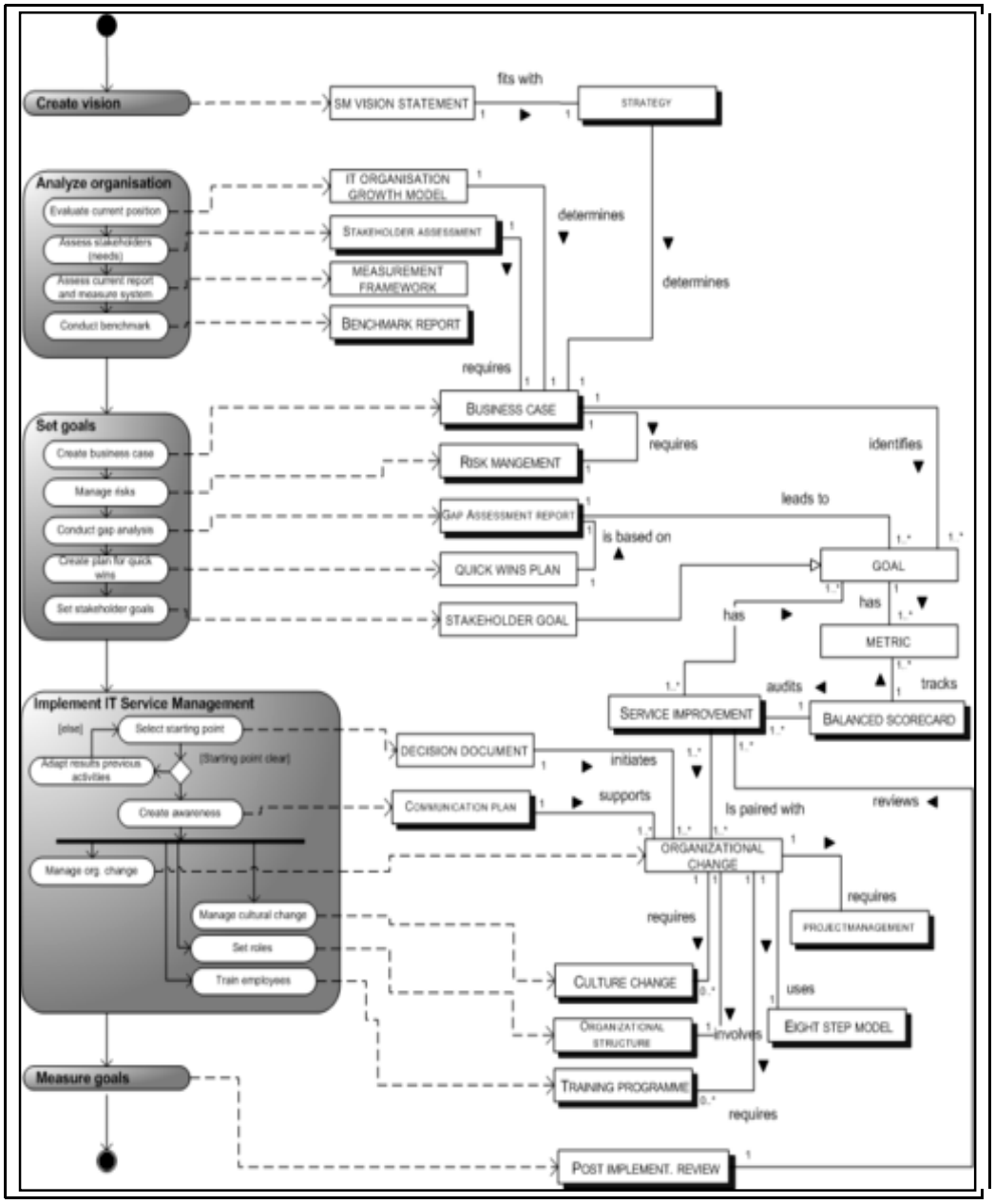
It advocates that the Board should obtain independent assurance on the Information Technology governance and controls. It states that Information Technology should form an integral part of the company's risk.

2.22.3 The Information Technology Infrastructure Library (ITIL)

ITIL is an Information Technology framework, Figure 11, which guides each unit of a process to adhere to acceptable Information Technology standards.

ITIL has a framework for service management implementation. Dunn (2006: 4) confirms that they have successfully used the ITIL framework as the basis for their Service Management improvement campaigns. The steps from vision, goal setting, Implementation of Information Technology service management and measurement goals are defined to activity level. This exercise is useful in aligning Information Technology service to the business requirements.

Figure2.22.3.1 Illustration of a data process for ITIL



Source: Dunn (2006).

2.23 OUTSOURCING IN THE ENERGY SUPPLY INDUSTRY

In the Chartwell's outsourcing report (2007:36) the predictions that most utilities would outsource all their BPO by the mid-2000s did not materialise. Although many have entered into some variation of outsourcing, less than 1 percent made an end-to-end commitment to a BPO.

The outsourcing growth activity trend has moved from six percent in 1996 to 72 percent in 2006 - this translates to a 64 percent positive growth in 10 years.
Utilities are challenged to improve customer satisfaction with a reduced operating budget. Utilities are clinging to their in-house call centres, Customer Information Systems (CIS) and some Information Technology operations.

Chartwell (2007:36) furthermore lists the functions outsourced thus far as:

- Information Technology and project management;
- BPO;
- Billing and CIS;
- CIS hosting, maintenance and billing, and call centre processes.

Investor-owned utilities are currently outsourcing 36 percent of their credit and collections function, municipalities 23 percent, and co-operatives 8 percent. Utilities prefer to outsource onshore, as they are under political pressure. They quote cost and lack of resources as the prime reason for outsourcing.

Bills printed by utilities are 83 percent and 75 percent for bills sent by utilities, compared to 17 percent and 25 percent respectively. The primary reason provided for not outsourcing, was ownership and control issues. Vendors quote regulatory issues as reasons for not outsourcing more.

2.24 CURRENT STATE OF INFORMATION TECHNOLOGY SERVICE OFFERINGS

In order for Information Technology services to deliver a high standard of service, the company needs to ensure that their service offerings are maintained and upgraded as required.

- Facilities – in what condition are the company's data centres?

- Networks – is the infrastructure capacity sufficient to handle new company growth? Is the network stable?

- Platforms – is the current server platform sufficient, or is virtualisation an option? Are the latest virus and patch management tools deployed successfully?

- Databases – are they sufficient to cater for new company growth? Have old databases been retired? Reduce databases and increase cost efficiency.

- Web development – management of internal and external website needs to be catered for.

- Security – are firewalls robust enough to protect the company from attacks? Is the company data secured?

These are a few of the possible service offerings that Information Technology must manage in order to operate efficiently.

Infosys (Chartwell, 2007:70) is a typical example of a Service Provider in this industry. In 2008 they proposed a data mining service offering, aimed at the Advanced Metering Infrastructure (AMI). A typical outcome of data mining would be faster and more informed decision making.

The Energy Trading and Risk Management (ETRM) industry is subject to price volatility, complex market dynamics and huge financial risks. Grid computing can be used to mitigate the huge financial risks that are typical of the ETRM industry. Grid architecture can result in performance and utilisation-related benefits.

Web-based services are another option open to the utility industry for improved customer self-service.

Disaster management for utilities advocates the use of the Geographical Information System based application framework. GIS updated web maps can help the utility plan for the number of resources required for restoration, and also forecast the time required to restore services fully.

2.25 CHAPTER 2 – CONCLUSION

This chapter examined the environment that the organisation would operate in. It described various organisation types, structures of organisations and strategies.

It provided guidelines for developing an Information Technology strategy once the business strategy has been formulated. The organisational structure influences the decision making capabilities of the various divisions. It is important to involve all divisions when working on a strategy. The Strategic Alignment Model was discussed in detail.

Guidance was provided in selecting the correct Information Technology Sourcing Strategy. Two different frameworks were used for guidance. The various sourcing types were discussed and explored. Different types of outsourcing models were analysed.

Outsourcing risks were explained. Service Level Agreements were discussed as a tool to assist in managing the outsourced contract.

All of the above translate into how Information Technology departments can be business enablers, with the potential to enable the company to develop a distinctive competitive advantage.

The pace of strategic sourcing in the utility industry does not seem to be as rapid as in other industries. Porter's Five Forces model, where the threat of substitutes seemed a remote possibility, is now a slow reality, with alternative power sources becoming available.

2.27 CHAPTER 2 SUMMARY

Strategic alignment is important for the success of the Information Technology strategy. The probability of a process being outsourced stems from the simplicity and repetitiveness of a transaction or process, and costs involved.

Right-sourcing, if done for the right reason, follows due process and has clear expectations, can be successful.

The primary key success factors seem to be meaningful stakeholder involvement and support, good governance, followed by a clear cut SLAs.

The alignment of the structure to the strategy for maximum optimisation forms the foundation level of the structure. The correct mix of skills, organisation structure and leadership integration is a cornerstone of strategic alignment. Information Technology must be considered when performing risk evaluations for the company. The correct framework, provided all the requirements are met, can provide the company with a strategic competitive advantage over its industry peers.

CHAPTER 3: EMPIRICAL STUDY

3.1 INTRODUCTION

The empirical study involves the collection of primary data which will be assimilated through the Moonstats (Welman, Kruger & Mitchell, and 2005:319) application. A Likert (Welman *et al*., 2005:156) scale will be used to indicate the degree to which the respondents agree or disagree to questions posed in the survey.

Each set of Univariate data will be analysed individually so as to determine the strength of that variable. Bivariate analysis will be used to determine if any correlation exists between type of sourcing strategy utilised and the factors that influence Information Technology Strategy.

In chapter 2 it has been established that the total ESI is comprised of a SOE that provides 95 percent of the electricity requirements and 5 percent of other role players, IPPS and renewable energy suppliers. The aim of the study was to include all participants to establish the extent and type of Information Technology sourcing prevalent in the industry.

3.2 QUANTITATIVE STUDY

The quantitative study was conducted using surveys, Addendum B, distributed to more than 51 companies in the local ESI industry.

The sampling technique utilised was a Systematic Method, as all companies had to be identified in order to distribute the survey to the correct audience.

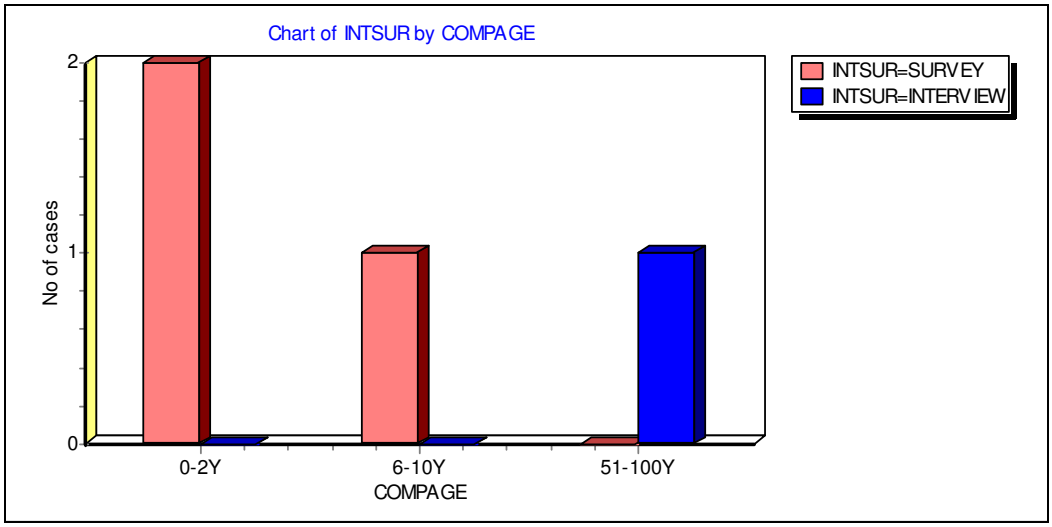
Returned survey data for online distributed surveys where N represents the number of responses, totalled 3 - refer to Table 3.1.1.

Table 3.2.1 Number of Survey Response Results Received

Value	N	%	Cum. %
SURVEY	**3**	100.00	100.00
TOTAL	3	100.00	

The following is a graphical depiction, Figure 3.2.1a, of the company age of the respondents using the survey instrument.

Figure 3.2.1a Chart of Company Age on Response Surveys



The company age for two of the respondents was less than 2 years and between 6 to 10 years for the third respondent.

The responses had comments to the effect that the one company only had 3 computers and the other had less than 5 staff members. Most of the questions in the survey were aimed at the Information Technology section. The majority

of the responses were 'Don't Know' or 'Not Applicable'. The company with 3 computers were all bought by the owner and the "All-in-one" device refers to a multi-functional device. They do not have an Information Technology section.

It appears that certain members of this Industry are still in its early infancy stage. This study could be considered a pilot study in this industry at this stage.

This is an actual quotation from the statistical programme used to evaluate the results of the survey.

Moonstats "Too few cases, you need at least six cases (six rows of data) to perform this calculation."

The total population size was: N = 51
The sample size of completed returns were only n = 3.

$$\text{The total response rate} = \frac{\text{Total number of respondents}}{\text{total number of sample}}$$

$$= \frac{51}{3}$$

$$= \mathbf{0,0588}$$

Welman, e*t al.,* (2005:71), advocates not using a sample size of less than 15 units. They advise that a smaller population should have a larger sample size to ensure satisfactory results. At 0.0588 responses rate proper analysis was not possible.

Based on the literature study in chapter 2 the main objective of the research was to determine the following:

- the state of Information Technology sourcing;

- The framework that was utilised to embark on the particular sourcing strategy;
- The focus of the Information Technology section;
- Factors that have the greatest influence on Information Technology Strategy.

The results of the survey for all the companies were inconclusive due to the poor response. A random study of the profile for some of these companies show a staff complement of less than 10 and a company age of less than 3 years. This could be a possible explanation for the poor response rate as the targeted population group was to gather data from their Information Technology sections. In the absence of this section most of the questions may not have been applicable to them as yet. The majority of the targeted population group may therefore not have been in a position to meet the objectives of the study.

The results from the quantitative analysis were too few to conduct a meaningful research. The focus will therefore move to the qualitative study.

The literature study has earlier confirmed the current industry demographic. The State Owned Enterprise (SOE) that supplies 95 percent of the country's electricity requirements was identified as a possible candidate for the qualitative study.

3.3 QUALITATIVE STUDY

A tentative study of the SOE confirmed that it was well established and that it had an Information Technology Department.

A qualitative study was undertaken with members of the SOE to gain additional insight from an organisation in existence for longer than 80 years.

Research was done on the SOE to gather background information from various sources. Seven interviews were conducted with staff members at different levels of the organisation.

3.3.1 SOE Profile

The 2011 Eskom Annual Report (2011:343) published earlier this year, provided the following insights:

The company was established in 1923. It is one of the top 20 utilities in the world by generation capacity. The company provides electricity directly to approximately 45 percent of all end-users. The rest is re-sold by re-distributors such as municipalities and other entities.

The company has a vertically integrated organisational structure.
The Information Technology Section is located under the Corporate Section.
According to the report the management structure in the section is currently undergoing major transformation. Changes are established to ensure that Information Technology resources are aligned to new business priorities while maximising the value from Information Technology.

The report states that the changes have had a significant impact on the company. Greater flexibility, standardisation and optimised business processes across the organisation are allowing executives to make informed decisions.

Increased Information Security Governance has been extended in response to threats that emerged internationally in 2011.

Various members of the SOE were approached to try and obtain a fair sample size and remove any possible bias from the responses.

Seven staff members agreed to be interviewed. The data was captured in the format of a survey (Addendum A) to enable easier correlation and structured reporting of all the responses. The format of the interview survey was compiled to resemble a similar format as the online survey. These were structured interviews.

The population size for this qualitative study was seven interviews.

Population size N = 7
Sample size n = 7

Total number of respondents = The= the total response rate
Total number of sample

= **100%**

A 100 percent response rate was achieved by using interviews to conduct research as shown in table 3.2.1 of the analysis. The frequency is an indication of the values and how frequently they occur. The value is the number of cases obtained. The percentage column shows the number of cases as a percentage. All seven respondents' data have been taken into account – the researcher therefore has a 100 percent response rate on the interviews. N – Refers to the number of respondents in the tables of data that follow:

Table 3.3.1 Frequency table for Interview Responses

Frequency table for INTSUR

Value	N	%	Cum. %
INTERVIEW	7	100.00	100.00
TOTAL	7	100.00	

A Likert scale was used to convert responses into data suitable for statistical analysis. Due to the different organisational roles occupied by the respondents, the Comparisons and Contrast method was used to identify why certain responses differed from the rest.

3.4 INTERVIEW RESPONSE AND ANALYSIS

3.4.1 Section A – Background and historical information

Section A of the interview was designed to gather background of the company and staff members. Due to ethical considerations, all respondents interviewed were assured of their right to privacy. The analysis will therefore start at question A7. As the respondents were from the same company, the company age was not deemed to be of statistical value at this stage.

Question A 3. Number of Years employed at the company?

The respondents (Table 3.4.1) differed in the number of years that they were employed at the company; this should vary some of the perspectives for the responses.

Table 3.4.1 Frequency Table for Years Employed

Value	N	%	Cum. %
6-10Y	1	14.29	14.29
11-50Y	5	71.43	85.71
51-100Y	1	14.29	100.00
TOTAL	7	100.00	

The value scale had five categories starting at 0-2 Years, then 3-5 Years and the rest listed under the value column in Table 3.4.1

'N' represents the number of respondents per category.

Findings:
The majority of the respondents have been with the company for more than 11 years - they should therefore have the background experience to respond meaningfully to the survey.

The difference in years' experience should make a difference to the responses. Five of the respondents contributed to the more than 71 percent of years employed in the company between 11-50 years. The SOE financial report (2011:134) shows a demographic of 72.96 percent of staff aged between 20 – 49 years. This could be inferred to be a typical representation of a larger population sample.

Question A 4. Number of Years IT Experience?

This should be an indication of their exposure to the Information Technology environment (Table 3.4.2). It could be an indicator of knowledge gained with experience.

Table 3.4.2. Frequency Table for IT Experience

Value	N	%	Cum. %
6-10Y	1	14.29	14.29
11-50Y	5	71.43	85.71
51-100Y	1	14.29	100.00
TOTAL	7	100.00	

The Value column had 5 options - the same as the previous question. 'N' represents the number of responses per category.

Findings:

It should be noted that although the respondent backgrounds were all in Information Technology, they had other experience as well. This question was only an indicator of their Information Technology experience and not total work experience. The intention was to reduce the number of "unknown" responses as this is an Information Technology survey.

Question A 5. Respondent Background Experience

Some of the respondents (Table 3.4.3) indicated that they had Finance and Sales expertise as well as Information Technology experience.

Table 3.4.3 Background Experience.

Value	N	%	Cum. %
IT	7	100.00	100.00
TOTAL	7	100.00	

The categories given for Value were, Information Technology, Engineering, Finance, Human Resources and Other. 'N' represents the number of responses per category.

Findings:

All of those interviewed are currently employed in the Information Technology section. The difference between the respondents is the reporting levels (Table 3.4.5) of positions that they currently occupy. Interviews were

conducted with junior staff, supervisory level staff, middle and senior management.

Question A 6. Current position Responsibilities.

This question was an indicator of how closely the respondent (Table 3.4.4) can relate to strategic and operational questions.

Table 3.4.4 Position Responsibilities

Value	N	%	Cum. %
IT	7	100.00	100.00
TOTAL	7	100.00	

The categories given for Value were, Information Technology, Sales & Marketing, Management and Other. 'N' represents the number of responses per category.

Findings:

Even though all of those interviewed are currently employed in the Information Technology section, only two were not part of management.

The managers interviewed chose to associate more with the Information Technology category than the management category.

Question A 7. Define types of Sourcing used by company

This question was to determine exactly what type of sourcing strategy (Table 3.4.5) was used. The categories given for value were Outsourcing, In-sourcing, Near-sourcing, Far-sourcing and other.

Table 3.4.5 Sourcing Strategy

Value	N	%	Cum. %
OUT	7	100.00	100.00
TOTAL	7	100.00	

Findings:

There was a 100 percent response rate for using outsourcing and in-sourcing as the different types of sourcing strategy (Table 3.4.5). From the various responses it appears to be a multi-sourcing strategy. This was not always the case. The various sourcing options were considered and it took years of experience before the current strategy was put in place. From the financial report as stated in the background information, it could be inferred that the changes in Information Technology could still affect the current sourcing strategy.

Q A 8. What was the main motivator for the selected sourcing strategy?

This question was supposed to determine the main reason why the type of strategy used in the previous question, was selected. The options given for Value were Financial Savings, Specialised Skills, Non-core function, Industry Trend and Other (Specify).

Table 3.4.6 Main Motivator

Value	N	%	Cum. %
NONCORE	1	14.29	14.29
OTHER	6	85.71	100.00
TOTAL	7	100.00	

Finding:

The main motivation (Table 343.6) for using this strategy was primarily based on other factors, and not Financial Savings or Specialised Skills as proposed in the questionnaire. It was a response to the company's strategy of focusing on its core business. The non-core functions were outsourced. The respondents indicated that this was an executive decision.

3.5 SECTION B – EXTENT OF TYPICAL OUTSOURCED FUNCTIONS

The study next looked at some typical functions that were outsourced.

This section had to determine what was outsourced and the extent to which the outsourced function has been delivered successfully, as well.

During the interview respondents were given a list of possible functions that could be outsourced. They were requested to respond by indicating firstly whether the function was outsourced and next to rate how well the function, if outsourced, has been managed.

The question posed was “The Company successfully outsources the following function?”.

Possible options were presented on a rating scale from Strongly Agree, Agree, Don't Know, Disagree and Strongly Disagree.

The category of service of listed with the same rating scale applicable to all service.

Question B 1. Laptops

Findings:

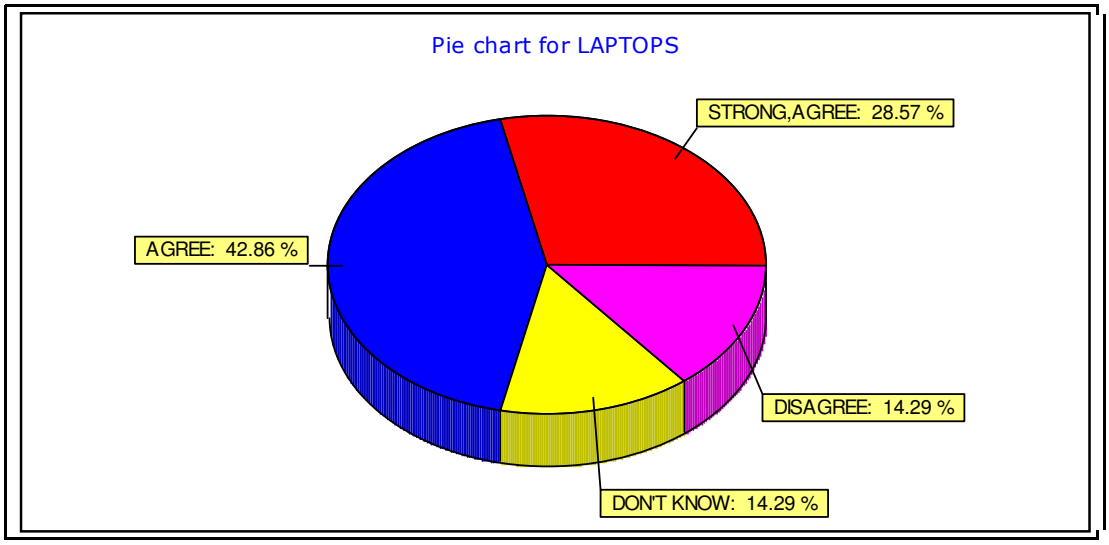
The majority of the respondents felt that this service was successfully outsourced as 71.43 percent responded with Agree or Strongly Agree responses for this service as shown in Table 3.5.1 and Figure 3.5.1 - 71.43 percent of those interviewed were fairly happy with this service.

Table 3.5.1 Outsource data for Laptops

Value	N	%	Cum. %
STRONG, AGREE	2	28.57	28.57
AGREE	3	42.86	71.43
DON'T KNOW	1	14.29	85.71
DISAGREE	1	14.29	100.00
TOTAL	7	100.00	

The "agree" and "strongly agree" slices, as depicted in Figure 3.5.1a; show the positive percentage affirmation for outsourced laptops.

Figure 3.5.1a Outsourced Notebooks



Question B 2. Desktops

Finding:

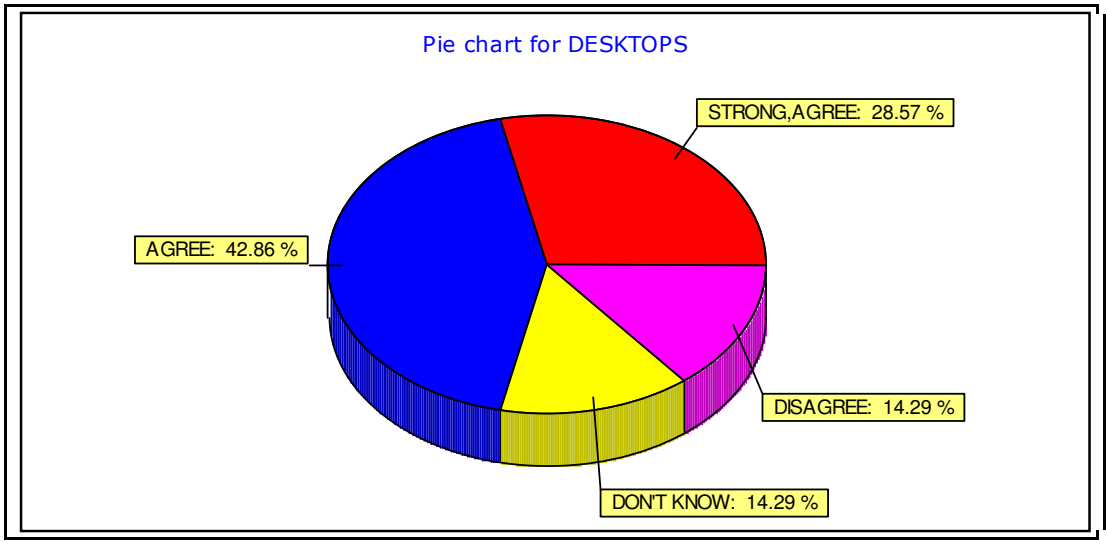
The majority of the respondents (Table 3.5.2) felt that this service was successfully outsourced as 71.43 percent responded with Agree or Strongly agree responses for this service as shown in Table 3.5.2 and Figure 3.5.2a.

Table 3.5.2 Outsourced Desktops

Value	N	%	Cum. %
STRONG, AGREE	2	28.57	28.57
AGREE	3	42.86	71.43
DON'T KNOW	1	14.29	85.71
DISAGREE	1	14.29	100.00
TOTAL	7	100.00	

The “Agree” and “Strongly agree” slices, as depicted in Figure 3.5.2a, shows the positive percentage affirmation for outsourced desktops.

Figure 3.5.2a Outsourced Desktops



Question B 3. Servers and Cabinets

Findings:

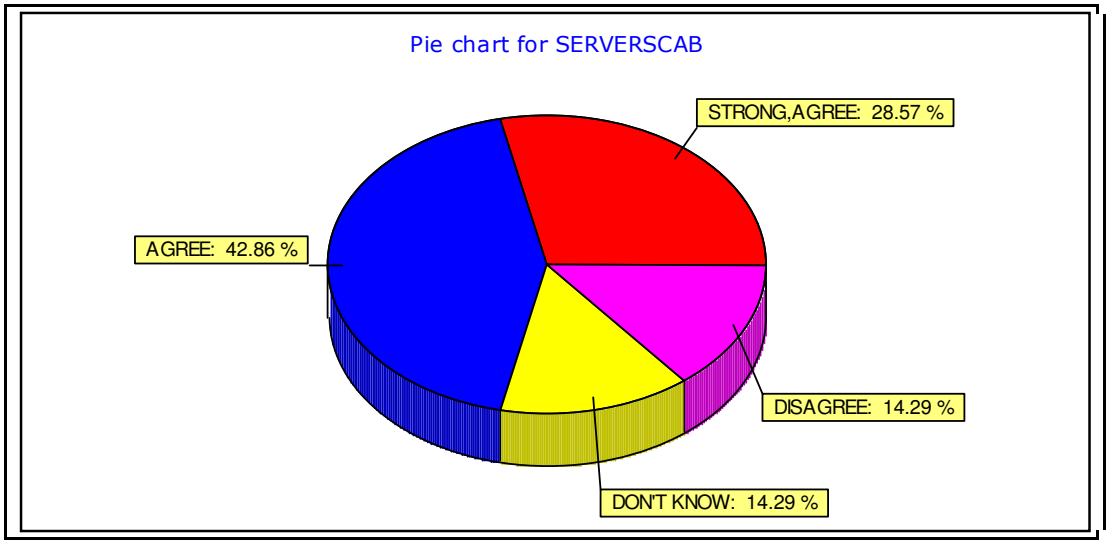
The majority of the respondents felt that this service was successfully outsourced as 71.43 percent responded with Agree or Strongly Agree responses for this service as shown in Table 3.5.3 and Figure 3.5.3a.

Table 3.5.3 Servers and Cabinets

Value	N	%	Cum. %
STRONG, AGREE	2	28.57	28.57
AGREE	3	42.86	71.43
DON'T KNOW	1	14.29	85.71
DISAGREE	1	14.29	100.00
TOTAL	7	100.00	

The “Agree” and “Strongly agree” slices, as depicted in Figure 3.4.3a, shows the positive percentage affirmation for outsourced servers and cabinets.

Figure 3.5.3a Outsourced Servers and Cabinets



Question B 4 Printers

Findings

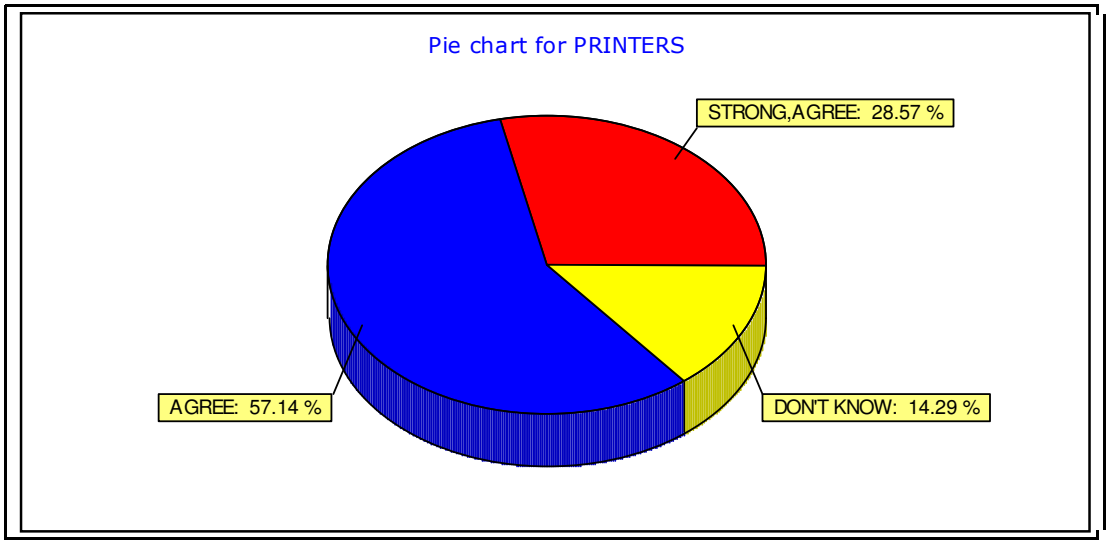
Majority of the respondents, Table 3.5.4, felt that this service was successfully outsourced as 85.71 percent responded with Agree or Strongly agree responses for this service as shown in the table and Figure 3.4.4a.

Table 3.5.4 Outsourced Printers

Value	N	%	Cum. %
STRONG, AGREE	2	28.57	28.57
AGREE	4	57.14	85.71
DON'T KNOW	1	14.29	100.00
TOTAL	7	100.00	

The “Agree” and “Strongly agree “slices, as depicted in Figure 3.4.4a, show the positive percentage affirmation for outsourced printers.

Figure 3.5.4.a Outsourced Printers



Question B 5 Network Security Systems.

Finding:

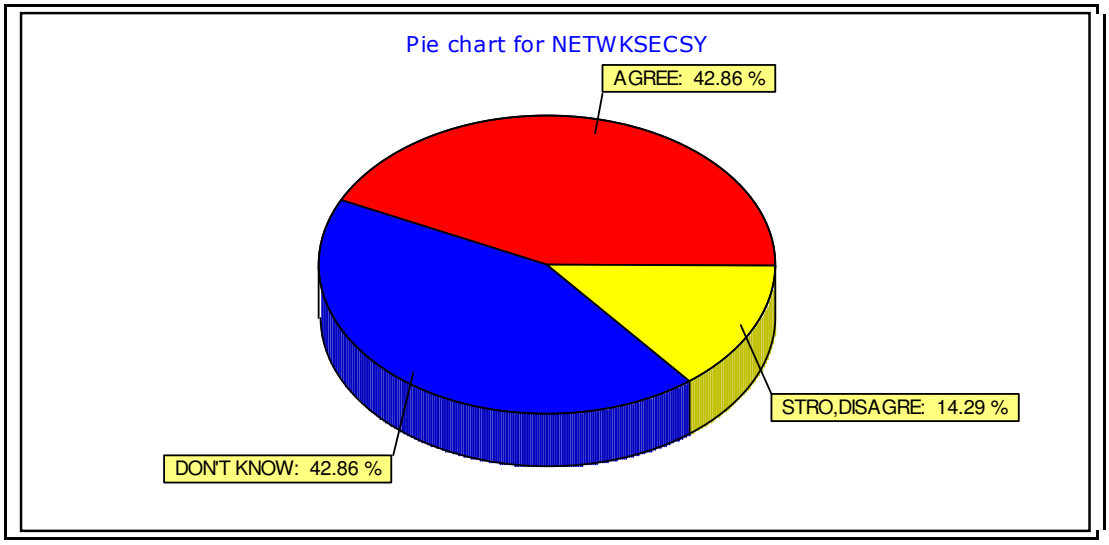
The responses to this question could indicate that due to the nature of this function, the management of this function is not well publicized -42.86 percent of respondents agreed that it was well managed, 42.86 percent did not know if it was outsourced and 14.29 percent strongly disagreed (Table 3.5.5 and Figure 3.5.5). The results for this question are therefore inconclusive.

Table 3.5.5 Outsourced Network Security Systems

Value	N	%	Cum. %
AGREE	3	42.86	42.86
DON'T KNOW	3	42.86	85.71
STRO, DISAGRE	1	14.29	100.00
TOTAL	7	100.00	

The slices of the Figure are so similar in this instance that it seems to support the inconclusive finding for this function.

Figure 3.5.5a Outsourced Network Security Systems



Question B 6 Asset Management

Findings:

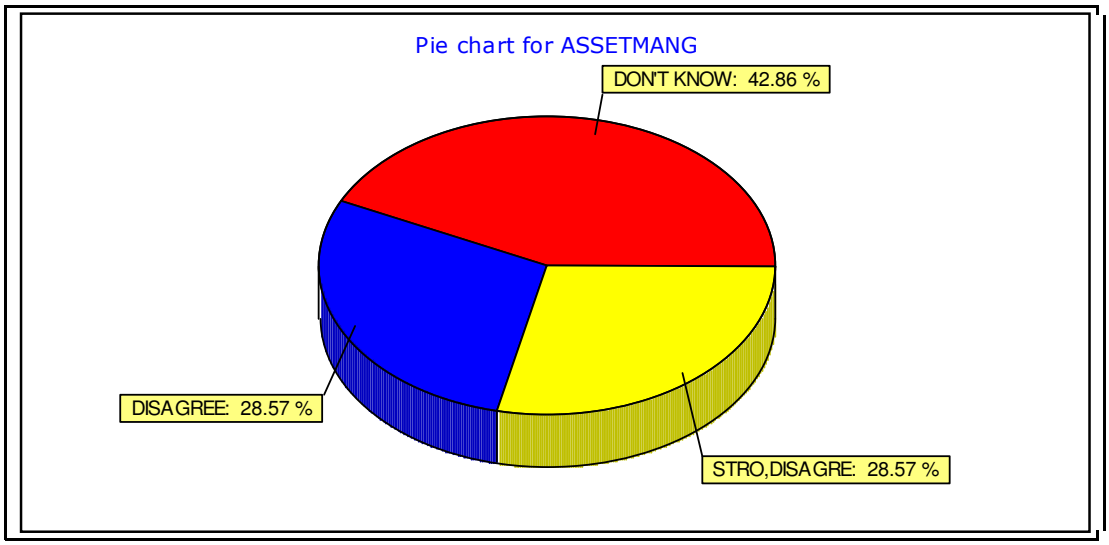
It became apparent from the responses to this item that this function is kept in-house and is performed within the company (Table 3.5.6 and Figure 3.4.6a). This explains the negative response for this service as it cannot be measured as an outsource function.

Table 3.5.6 Outsourced Asset Management

Value	N	%	Cum. %
DON'T KNOW	3	42.86	42.86
DISAGREE	2	28.57	71.43
STRO, DISAGRE	2	28.57	100.00
TOTAL	7	100.00	

The slices of the figure indicate are all negative. This function could not be measured as an outsourced function as it is kept in-house.

Figure 3.5.6a Outsourced Asset Management



Question B 7 Enterprise Software Solutions

Finding:

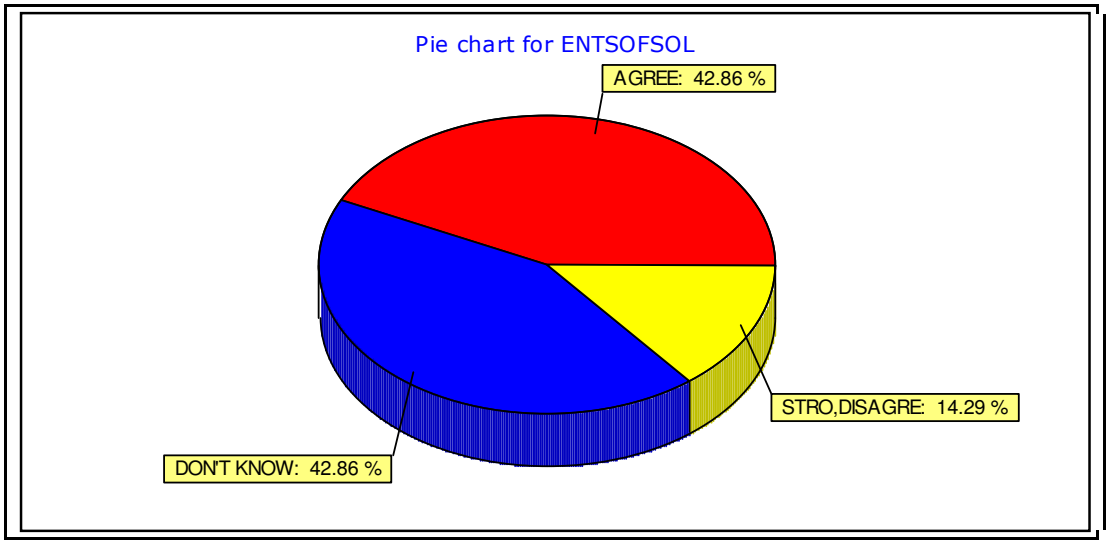
There was a mixed response to this question as respondents agreed that this function has both in-house and outsource streams to it depending on which Software Solutions were analysed (Table 3.5.7 and Figure 3.5.7a).

Table 3.5.7 Outsourced Enterprise Software Solutions

Value	N	%	Cum. %
AGREE	3	42.86	42.86
DON'T KNOW	3	42.86	85.71
STRO, DISAGRE	1	14.29	100.00
TOTAL	7	100.00	

The slices of the figure as reflected in Figure 3.5.7a, reflects the mixed responses for a function that is managed using multi-sourcing.

Figure 3.5.7a Outsourced Enterprise Software Solutions



Question B 8 Remote Access

Finding:

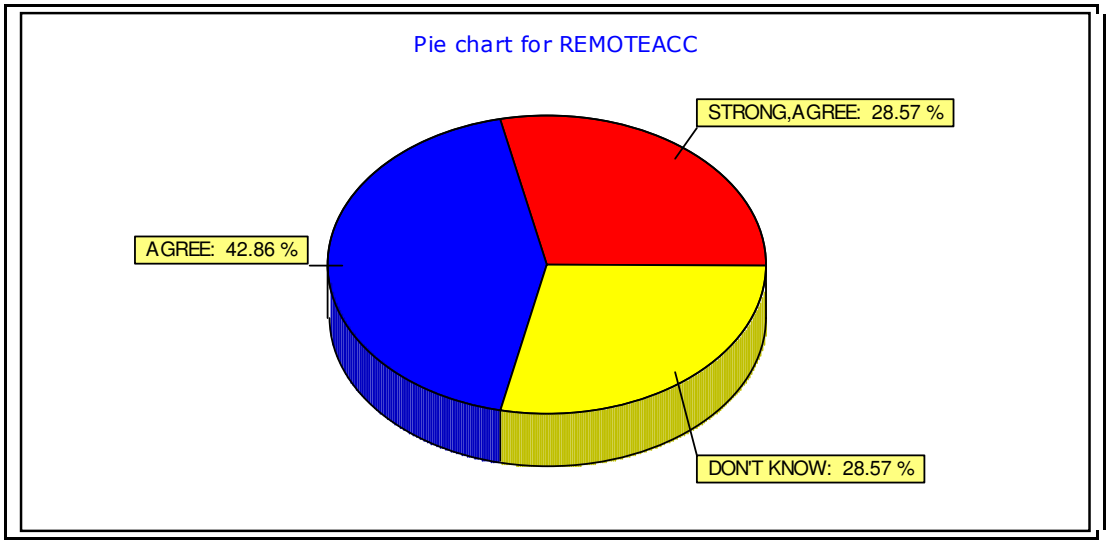
Majority of the respondents felt that this service was successfully outsourced as 71.43 percent responded with Agree or Strongly Agree responses for this service as shown in the Table 3.4.8 and Figure 3.5.8a.

Table 3.5.8 Outsourced Remote Access Solutions

Value	N	%	Cum. %
STRONG, AGREE	2	28.57	28.57
AGREE	3	42.86	71.43
DON'T KNOW	2	28.57	100.00
TOTAL	7	100.00	

The “Agree” and “Strongly agree” slices, as depicted in Figure 3.5.8a, shows the positive percentage affirmation for outsourced desktops.

Figure 3.5.8a Outsourced Remote Access Solutions



Question B 9 Unified Communication Solutions

Findings:

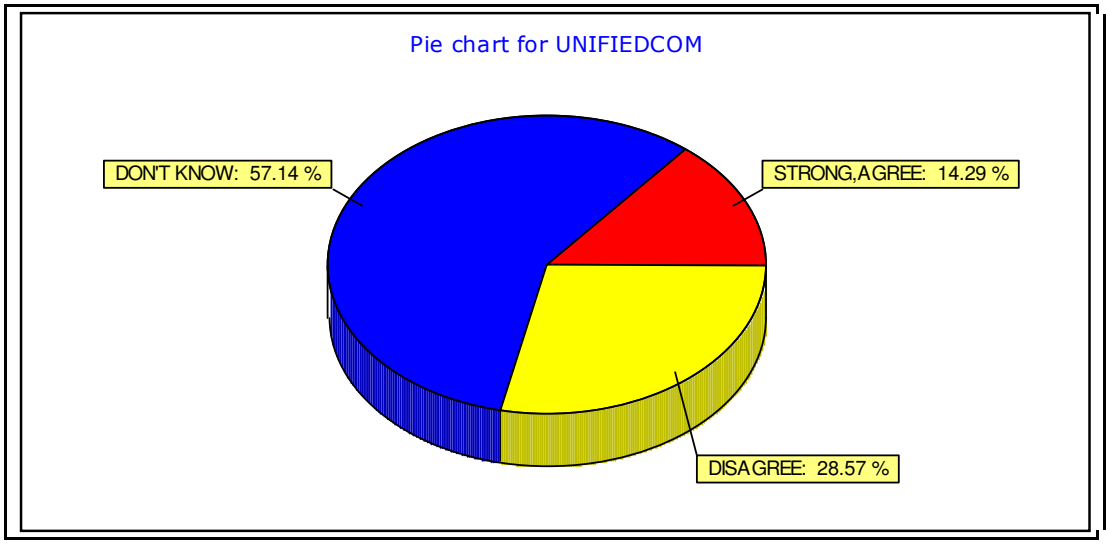
This feedback from the respondents indicates that this service is not widely utilised as yet - the respondents were not really aware of it and the majority were therefore unable to rate it (Table 3.5.9 and Figure 3.5.9a).

Table 3.5.9 Outsourced Unified Communications

Value	N	%	Cum. %
STRONG, AGREE	1	14.29	14.29
DON'T KNOW	4	57.14	71.43
DISAGREE	2	28.57	100.00
TOTAL	7	100.00	

The two larger slices on Figure 3.5.9a reflect the majority's negative response to a widely unknown function.

Figure 3.5.9a Outsourced Unified Communications



Question B 10. Voice over IP

Findings:

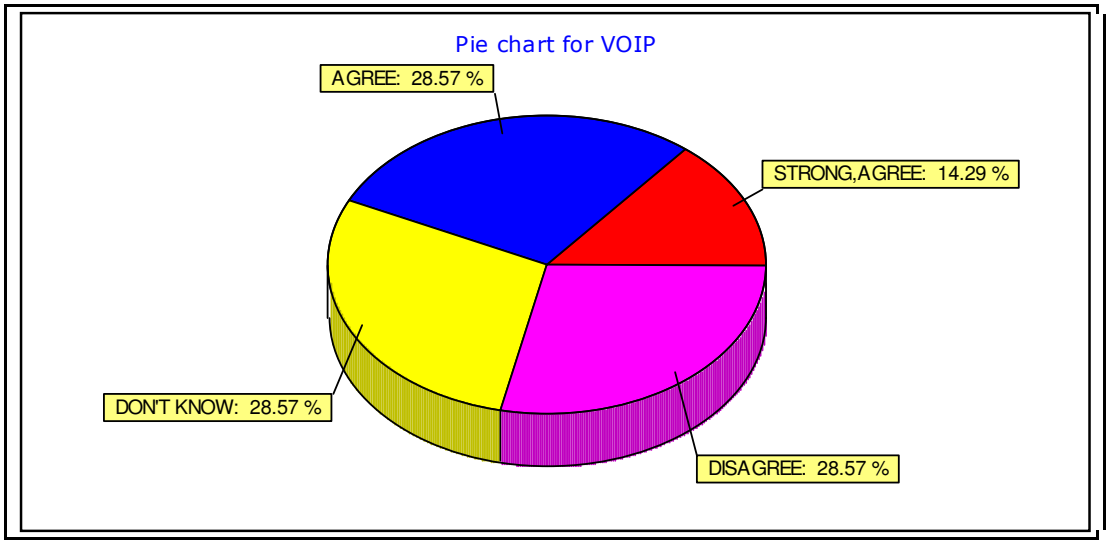
This service was relatively unknown to some of the respondents. This could explain the scattered responses reflected in Table 3.5.10 and Figure 3.5.10a. The results are inconclusive for this function.

Table 3.5.10 Outsourced VOIP

Value	N	%	Cum. %
STRONG, AGREE	1	14.29	14.29
AGREE	2	28.57	42.86
DON'T KNOW	2	28.57	71.43
DISAGREE	2	28.57	100.00
TOTAL	7	100.00	

The equal distribution of the slices in Figure 3.5.10a, is reflective of the uncertainty in confirming this service as an outsourced service.

Figure 3.5.10a Outsourced VOIP



Question B 11. Helpdesk

Findings:

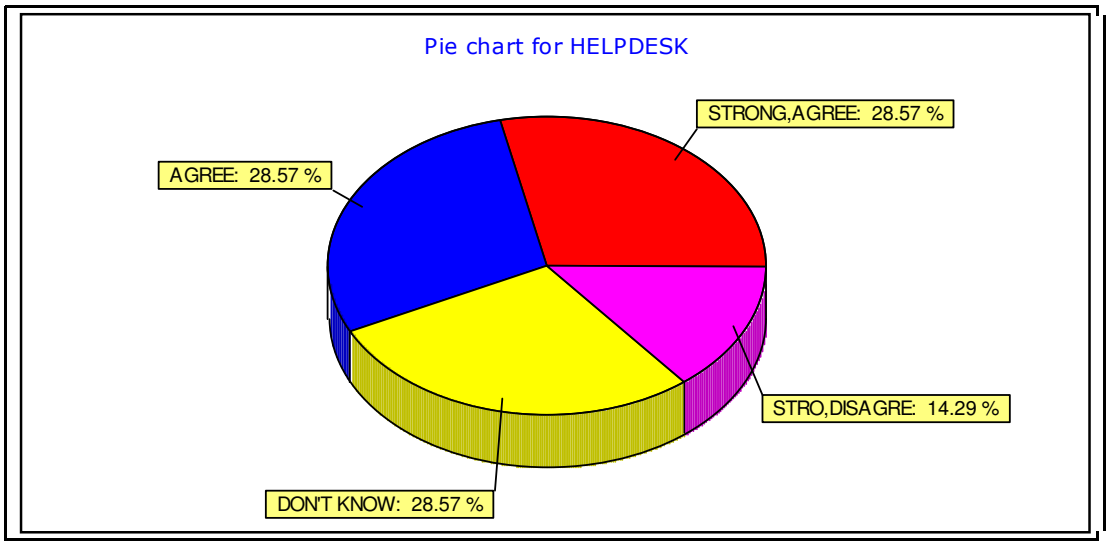
Only 57.14 percent of respondents felt that this function has been outsourced successfully (Table 3.5.1 and Figure 3.5.11a). During the interviews, some respondents indicated that even though they knew that this service has been outsourced, they rarely utilised it and they were therefore unable to rate it.

Table 3.5.11 Outsourced Helpdesk

Value	N	%	Cum. %
STRONG AGREE	2	28.57	28.57
AGREE	2	28.57	57.14
DON'T KNOW	2	28.57	85.71
STRONG DISAGREE	1	14.29	100.00
TOTAL	7	100.00	

The slices of the figure may be similar, but the respondents' input leans towards semi-successful outsourcing.

Figure 3.5.11a Outsourced Helpdesk



3.6 SECTION C – BENCHMARK AGAINST INFORMATION TECHNOLOGY DISCIPLINES

The study for this section was based on the benchmark of the Twelve Core Disciplines of Information Technology Management. The intention was to get an overview of how the organisation performed in these functions.

Mahoney & Roberts (2008:15) deemed the disciplines necessary for the effective management delivery of business technology.

The disciplines were discussed during the interview. The respondents were requested to rate each discipline in accordance with the focus that the Information Technology section puts on each discipline.

The questions were posed as “The Information Technology section has a strong focus on:”

Each discipline was then listed with a possible answer rating scale ranging from Strongly Agree, Agree, Don’t Know, Disagree and Strongly Disagree.

Question C 1. Service Management

This discipline referred to the entire set of disciplines offered under the Information Technology umbrella. It refers to getting the correct mix of price, services, quality levels and time lines to meet business requirements.

Findings:

The respondents had mixed responses to the strength of this discipline (Table 3.6.1). A combined positive rating of 57.14 percent is not a clear confidence indicator that sufficient focus is placed on this discipline. This rating may vary with a bigger sample size.

Table 3.6.1 Focus on Service Management

Value	N	%	Cum. %
STRONG, AGREE	2	28.57	28.57
AGREE	2	28.57	57.14
DON'T KNOW	1	14.29	71.43
DISAGREE	2	28.57	100.00
TOTAL	7	100.00	

Question C 2. Enterprise Architecture

This discipline encompasses analysing the current architecture and how it could best be linked with the future strategy of the business. This GAP analysis encompasses all processes, documentation and road maps that should be taken to evolve from current to future state.

Findings:

The respondents felt that there was a strong focus on this discipline - 71.43 percent felt strongly about this while 28.57 percent agreed that it was a focus area for the section (table 3.6.2).

Table 3.6.2 Focus on Enterprise Architecture

Value	N	%	Cum. %
STRONG AGREE	5	71.43	71.43
AGREE	2	28.57	100.00
TOTAL	7	100.00	

Question C 3. Strategy and Leadership

These are two separate disciplines that have been combined in this question. Leadership is about setting expectations and identifying what is valued. Leading staff members to deliver on agreed business deliverables.

Strategy on the other hand is about alignment with business drivers and crafting a solid Information Technology Strategic business plan which contains good governance. It contains clear links to business strategies and resource planning, among others.

These two disciplines are closely intertwined in this context.

Findings:

The response to this discipline was 71.43 percent positive (Table 3.6.3). Respondents felt that this was a focus area for the Information Technology section.

Table 3.6.3 Focus on Strategy and Leadership

Value	N	%	Cum. %
STRONG AGREE	2	28.57	28.57
AGREE	3	42.86	71.43
DON'T KNOW	2	28.57	100.00
TOTAL	7	100.00	

Question C 4. Change Management

Various projects or programmes are implemented throughout the year. This discipline is concerned with how the activities surrounding the projects or new programmes are managed. Future investment decisions are affected by business results after the change has been implemented. It is also affected by budgeting and time lines adhered to during the project mode.

Findings:

The response to this discipline was positive at 71.43 percent (Table 3.6.4). The comments made during the interview were that this environment is really focused to try and improve on this discipline.

Table 3.6.4 Focus on Change Management

Value	N	%	Cum. %
STRONG AGREE	2	28.57	28.57
AGREE	3	42.86	71.43
DON'T KNOW	1	14.29	85.71
DISAGREE	1	14.29	100.00
TOTAL	7	100.00	

Question C 5 . Financial Management

This discipline revolves around how Information Technology costs are managed. It is here that the business expects the value of their investments.

Financial accountability should be to the extent where Information Technology can define exactly how much is charged for any specific service.

Finding:

A majority of 71.43 percent of the respondents strongly agreed that a strong focus is put on this discipline (Table 3.6.5). This was supported by the rest of the respondents at 28.57 percent that equates to 100 percentage positive rating for this discipline in the section.

Table 3.6.5 Focus on Financial Management

Value	N	%	Cum. %
STRONG AGREE	5	71.43	71.43
AGREE	2	28.57	100.00
TOTAL	7	100.00	

Question C 6 . Sourcing Performance Management

*Co*mpanies have resorted to outsourcing to save costs and improve efficiency.

This environment needs to be controlled if the business wants to see savings and improved efficiency. The manner in which functions are outsourced, the number of companies that are outsourced to and the type of sourcing all need to be controlled in order to achieve greater efficiency.

Findings:

The positive 57.15 percentage combination of strongly agree and agree responses here is not a high confidence indicator that sufficient focus is put into the environment (Table 3.6.6). The risks and the failures highlighted in the literature study should be of concern here.

Table 3.6.6 Focus on Source Performance Management

Value	N	%	Cum. %
STRONG AGREE	2	28.57	28.57
AGREE	2	28.57	57.14
DON'T KNOW	2	28.57	85.71
DISAGREE	1	14.29	100.00
TOTAL	7	100.00	

Question C 7. Security and Risk Management

This discipline revolves around how the section manages their risk appetite. After identifying current and potential risks, they prioritise them according to a risk level defined on the type of risk identified. These risks include security risks, governance and compliance risks and business operational risks, among others. This discipline examines how effectively known and potential risks are managed.

Findings:

71.43 percent of respondents agree that this is a strong focus area for the Information Technology section (Table 3.6.7). The Annual Report in the SOE profile emphasised that this is a focus area for the section.

Table 3.6.7 Focus on Security and Risk Management

Value	N	%	Cum. %
STRONG AGREE	2	28.57	28.57
AGREE	3	42.86	71.43
DON'T KNOW	2	28.57	100.00
TOTAL	7	100.00	

Question C 8. Asset Management

Tracking Information Technology assets and efficient life cycle management forms the basis for this discipline.

Findings:

Only 57.14 percent of respondents agreed that this discipline is not a focus area for the Information Technology section (Table 3.6.8). This environment can lead to substantial savings and greater efficiencies if proper governance and effective life cycle scheduling are put in place.

Inadequate controls could lead to abuse of company equipment.

Table 3.6.8 Focus on Asset Management

Value	N	%	Cum. %
STRONG AGREE	1	14.29	14.29
AGREE	2	28.57	42.86
DISAGREE	4	57.14	100.00
TOTAL	7	100.00	

Question C 9 . Governance

Organisations need to have a governance framework in place that will guide them with a clearly defined RACI through any process. A RACI defines who is responsible, accountable, who must be consulted and who should be kept informed. The role clarity assists in possible conflicting situations. Policies to guide the execution of certain tasks need to be implemented - for example, does the company policy allow the use of FaceBook on work computers?

Findings:

A strong positive combined percentage of 85.71 was a clear message from respondents that this is a very strong focus for Information Technology (Table 3.6.9). The responses in the interviews revealed that sound governance framework works are in place. These are subjected to regular audits.

Table 3.6.9 Frequency table for GOVERNANCE

Value	N	%	Cum. %
STRONG AGREE	1	14.29	14.29
AGREE	5	71.43	85.71
DISAGREE	1	14.29	100.00
TOTAL	7	100.00	

Question C 10. Organisation and People Management

The organisational structure can influence the organisation of where staff is situated. It could have an impact on the disbursement of specialised skills (Information Technology skills) throughout the organisation.

Organisational structures change occasionally. A strong leader must ensure that roles and responsibilities are well defined so that they are in a position to align seamlessly with the new structure. Team work is essential. Staff members must be motivated to provide an efficient service. Clear communication and expected service levels must be defined to ensure that the service delivery target can be met.

Findings:

At 57.14 percent, the respondents have rated this discipline as a weak focus area (Table 3.6.10). It was noted during the interviews that the company is currently undergoing a structural change. This is supported by the information provided against the background of the SOE earlier in this chapter.

Table 3.6.10 Focus Organisation and People Management

Value	N	%	Cum. %
STRONG, AGREE	1	14.29	14.29
AGREE	3	42.86	57.14
DON'T KNOW	3	42.86	100.00
TOTAL	7	100.00	

Question C 11. Shifting the focus from system to service

Finally, the question arises: Are the Information Technology sections still viewed as the provider of systems or have they evolved to where they are seen as a Service Provider?

To what extent is the Information Technology section shifting its focus to provide a service to the business?

These are the basis for the question to highlight what was meant by this statement.

Findings:

The respondents' mixed reaction to this question seemed to indicate that this was a very weak focus area (Table 3.6.11).

Table 3.6.11 Focus from Systems to Service

Value	N	%	Cum. %
STRONG AGREE	1	14.29	14.29
DON'T KNOW	3	42.86	57.14
DISAGREE	3	42.86	100.00
TOTAL	7	100.00	

A senior manager mentioned that the formation of the new structures is still at the initial stage. A number of these functions have been repossessed from the outside business and re-allocated to the Information Technology section.

3.7. SECTION D – FACTORS THAT HAVE AN IMPACT ON INFORMATION TECHNOLOGY STRATEGY

The focus of this section was to determine which factors have the greatest influence on Information Technology Strategy.

The respondents were asked to respond to the phrase “The following factors have the greatest influence on Information Technology Strategy”.

The factors were listed individually and the respondents had to respond with possible answers from a rating scale that ranged from Strongly Agree, Agree, Don’t Know, and Disagree to Strongly Disagree.

Question D1. Executive Mandate

Findings:

At 85.71 percent combination of positive response, Executive Mandate does have a strong influence on Information Technology Strategy (Table 3.7.1).

Table 3.7.1 Executive Mandate Influence

Value	N	%	Cum. %
STRONG AGREE	4	57.14	57.14
AGREE	2	28.57	85.71
DON'T KNOW	1	14.29	100.00
TOTAL	7	100.00	

Question D2. Change in Leadership

Findings:

At 85.71 percent combination of positive response, Change in Leadership does have a strong influence on Information Technology Strategy (Table 3.7.2).

Table 3.7.2 Change in Leadership Influence

Value	N	%	Cum. %
STRONG, AGREE	2	28.57	28.57
AGREE	4	57.14	85.71
DON'T KNOW	1	14.29	100.00
TOTAL	7	100.00	

Question D3. Financial Pressure

Findings:

At 85.71 percent combination of positive response, Financial Pressure does have a strong influence on Information Technology Strategy (Table 3.7.3).

Table 3.7.3 Financial Pressure Influence

Value	N	%	Cum. %
STRONG AGREE	4	57.14	57.14
AGREE	2	28.57	85.71
DON'T KNOW	1	14.29	100.00
TOTAL	7	100.00	

Question D4. New Roll outs

Findings:

This factor elicited a mixed response; with a combined negative rating of 71.43 percent this was not a significant influence (Table 3.7.4).

Table 3.7.4 New Roll out Influence

Value	N	%	Cum. %
AGREE	2	28.57	28.57
DON'T KNOW	2	28.57	57.14
DISAGREE	3	42.86	100.00
TOTAL	7	100.00	

Question D5. Technology Shift

Findings:

Mostly 71.43 percent of respondents agreed that this could be an influence on Information Technology Strategy (Table 3.7.5).

Table 3.7.5 Technology Shift Influence

Value	N	%	Cum. %
AGREE	5	71.43	71.43
DON'T KNOW	1	14.29	85.71
DISAGREE	1	14.29	100.00
TOTAL	7	100.00	

Question D6. Regulatory and Compliance

Finding:

At 85.71 percent the majority of the respondents agreed that this could be a strong influence on Information Technology Strategy (Table 3.7.6).

Table 3.7.6 Regulation and Compliance influence

Value	N	%	Cum. %
AGREE	6	85.71	85.71
DISAGREE	1	14.29	100.00
TOTAL	7	100.00	

Question D. Industry Consolidation

Findings:

The mixed response to this factor has resulted in an inconclusive finding for this factor (Table 3.7.7).

Table 3.7.7 Industry Consolidation influence

Value	N	%	Cum. %
AGREE	3	42.86	42.86
DON'T KNOW	3	42.86	85.71
DISAGREE	1	14.29	100.00
TOTAL	7	100.00	

Question D8 Emerging Markets

Findings:

A negative combined majority of “don’t know” and “disagree” resulted in an 85.72 percent of respondents who believe that this factor has very little influence on Information Technology strategy (Table 3.7.8.).

Table 3.7.8 Emerging Markets influence

Value	N	%	Cum. %
AGREE	1	14.29	14.29
DON'T KNOW	3	42.86	57.14
DISAGREE	3	42.86	100.00
TOTAL	7	100.00	

An Interview response to this question elicited the following comment: Possibly the biggest change on Information Technology Strategy will be the requirements of the business, i.e. Enterprise and Risk Management, Strategy and Business Development and Management of Information Technology Services and Business Systems.

This is a direct result of structural changes in the organisation, where Information Technology is expected to align to expected business requirements.

3.8 SECTION E – PREFERRED SOURCING STRATEGY

There were two sourcing strategies in chapter 2 (Point 2.19) Selecting the correct Sourcing Strategy (process X) and the Ten Steps to successful right-sourcing, point 2.20 (process Y), both had theories on the recommended sourcing method to use.

The respondents were provided with both options and had to choose option X or Y as the option most closely resembling the process used by the company to outsource.

Findings:

Table 3.8.1 and 3.8.2 are indicators of the frequency with which the selected process was chosen. Process Y had a positive return rate of 57.14 percent in comparison with process X which had a 42.86 percentage negative return.

Table 3.8.1 Process X

Value	N	%	Cum. %
NO	3	42.86	42.86
DON'T, KNOW	4	57.14	100.00
TOTAL	7	100.00	

Table 3.8.2 Process Y

Value	N	%	Cum. %
YES	4	57.14	57.14
DON'T KNOW	3	42.86	100.00
TOTAL		100.00	

The organization process followed more closely resembled the Ten Steps to successful right-sourcing (Process Y).

1. Clearly define the scope and the outsourcing agenda in detail, upfront;

2. Carefully evaluate the response from the Service Providers (SP), and request clarity where necessary;

3. Evaluate the SPs track record for the services requested;

4. Do not use cost as the only selection criteria for appointing a SP – look at stability, balance and excellent results;

5. Assess the SP portfolios – Has their work been of an acceptable standard?

6. Use a sliding scale approach: first request a small project and see how they perform before you increase the scale to larger projects;

7. Have a transparent work-plan, with project milestones clearly defined and costing per milestone attached;

8. Have a clear ownership matrix in place for existing, new and upcoming projects. Who owns the end products? Who provides the components?

9. Ensure that post-project support is included after each venture;

10. Ensure that each interaction during the engagement process is recorded and agreed to by both parties. This includes scope definitions, payments, any amendments, and service agreements;

Except for point number six, (use a sliding scale approach), the above process was the closer match to the process followed by the company.

Number 10 was agreed upon but not as enthusiastically as the other eight.

A different interview response was that what is often not included in the scope , namely a list of what is excluded from the scope. Without clear exclusions, scope creep can happen easily.

3.9 SECTION F - GENERAL CONTRACT MANAGEMENT QUESTIONS

These were concluding questions based on the outsourced contract. Possible responses were “No”, “Don’t Know” or “Yes”. Some questions were open ended due to their nature. A summary of the responses has been captured.

Question F 1 Have you had any significant service delivery failures?

Findings:

71.43 percent of the respondents confirmed having experienced significant service delivery failures (Table 3.9.1).

Table 3.9.1 Service Delivery Failures.

Value	N	%	Cum. %
NO	2	28.57	28.57
YES	5	71.43	100.00
TOTAL	7	100.00	

Question F2. Could this be rectified within the terms of the contract?

Findings:

The mixed response could render this inconclusive even though there is a 42.86 percent positive affirmation (Table 3.9.2). A Senior Contract Manager confirmed that failures could be rectified under the terms of the current contract. See response to Question F3 for more detail.

Table 3.9.2 Rectifiable within Contract Terms

Value	N	%	Cum. %
NO	2	28.57	28.57
DON'T KNOW	2	28.57	57.14
YES	3	42.86	100.00
TOTAL	7	100.00	

Question E3. Have any enforceable clauses been included?

Finding:

The respondents agreed at 57.14 percent that there were enforceable penalty clauses (Table 3.9.3).

Table 3.8.3 Enforceable Penalty Clause

Value	N	%	Cum. %
NO	2	28.57	28.57
DON'T, KNOW	1	14.29	42.86
YES	4	57.14	100.00
TOTAL	7	100.00	

During the interview one of the managers indicated that “Credit Methodology” is applied. The aim is for it to be an appropriate and adequate remedy for non-compliance by the Service Provider with the agreed Primary Service Levels. The philosophy of this methodology is that it should drive positive behaviour, therefore encouraging compliance with the agreed Service Levels and consistency with the outcomes required by the Service Recipient.

This is a mature manner to ensure contract compliance.

***Question F4. Would you consider making use of the same Service Provider again*?**

Finding:

Interview response: 'Will consider it but the Outsource Service Provider underestimated the size of the service recipients company; could possibly consider multi-sourcing at a later stage'.

A different interview response: 'No. Rather a pool of Service Providers in order to have competition - this may prompt service improvements'.

Question F5. Do you consider the Service Provider a strategic partner?

Findings:

Table 3.9.4 shows that 57.14 percent of respondents responded positively to this question. This could be interpreted as aligning the Service Provider outputs with business requirements. Basically, if the Service Provider fails to render a service, it reflects as a failure on the Information Technology section to render that service. Good Relationship management is therefore essential to deliver a successful service.

Table 3.9.4 Strategic Partner

Value	N	%	Cum. %
NO	3	42.86	42.86
YES	4	57.14	100.00
TOTAL	7	100.00	

Question F6. What is the greatest benefit derived from outsourcing?

Possible options provided for selection included: Cost Saving, Staff reduction, Greater Efficiency or Other.

Findings:

The majority had opted for “other” at 42,86 percent (Table 3.9.5). During the interviews the response was that this was a shareholder's decision that was implemented. Some of the other benefits raised during the interviews were improved service delivery, more cost effective approach, access to skills and new technologies as well as the service recipient who can focus on its own core competencies.

Table 3.9.5 Greatest Outsource benefit

Value	N	%	Cum. %
FIN, SAVING	2	28.57	28.57
STAFF, REDC	1	14.29	42.86
GREAT, EFFIC	1	14.29	57.14
OTHER	3	42.86	100.00
TOTAL	7	100.00	

Question F7. How do you overcome obstacles posed by the strategic trap? 80/20?

Findings:

More focus management of the Information Technology section outputs. Ensure that all activities within the section are aligned with Strategic

objectives. Regular strategic reviews are required with correction action being managed on a continual basis.

Question F8. What would you do differently if you had an opportunity to redo the sourcing strategy?

Findings:
Interview response 1: Get a more in-depth understanding of the business before making any decisions.

Interview response 2: Consider multi-source and not pure outsource.

Interview response 3: Service provider must prove themselves first; they will not automatically get the contract.

3.10 CHAPTER 3 CONCLUSION

The online surveys, though insignificant in number, provided some insight into the state of sourcing in these companies. Even though they were not big enough to have an Information Technology section, they did provide some indication of how they handle their basic Information Technology service. Company A's respondent had an engineering background and stated that the server was provided and supported by the same company. This company made use of an outsourcing relationship. In the absence of an Information Technology section, most of the questions were marked “Not applicable”.

Company B’s respondent had a Sales and Marketing background and stated that the company only had 5 staff members, 3 computers and an all-in-one printer. They ticked outsourcing as their sourcing strategy. In the absence of an Information Technology section, most of the questions were marked “Not applicable”.

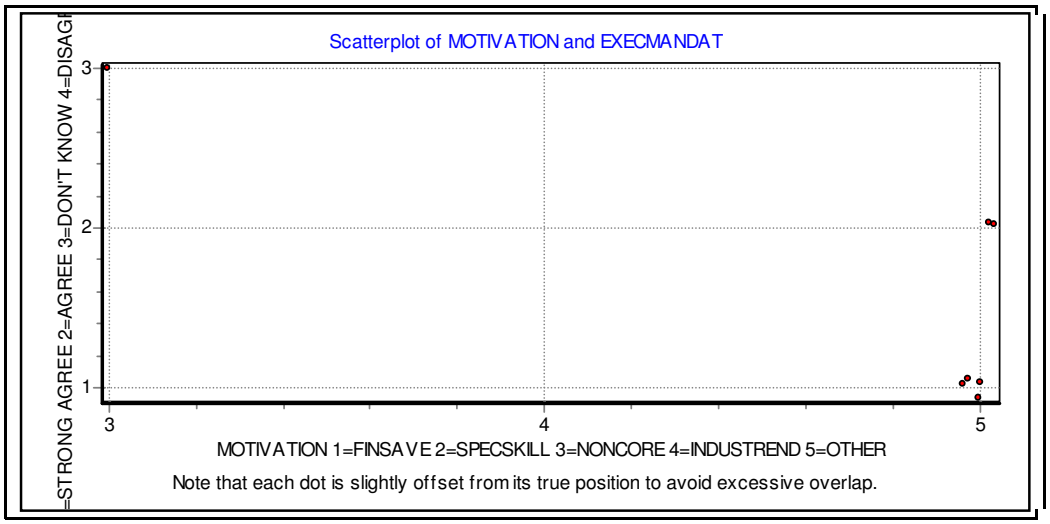
Company C had a combination Information Technology and Management role as a respondent. The company stated that they use both Outsourcing and In-sourcing Strategies.

The motivation for the sourcing strategy differs among the online survey respondents from financial savings, non-core function and other categories.

A statistical analysis was performed to try and determine if any correlation exists between factors that have the greatest influence on the chosen Information Technology Strategy and the Motivation for the type of Sourcing used by the organisation.

Only one set of variables indicated a significant **correlation** between Executive Mandate and Motivation (Reason for Sourcing), as depicted in Figure 3.10.1.

Figure 3.10.1 Correlation between Motivation and Executive Mandate



Pearson product moment correlation for MOTIVATION and EXECMANDAT

r(x,y)= -0.80

n = 7

p = 0.031

In this case the value of 'r' is -0.80 which can be considered a very strong correlation.

The p-value is 0.031 which means that the correlation is statistically significant.

"MOTIVATION and EXECMANDAT are statistically significantly correlated at the 5 percent level (r=-0.80; p=0.031).

These two variables appear to be indirectly or inversely related. This could mean that an increase in one is associated with a decrease in the other.

This does not mean that the one is necessarily dependent on the other variable. However the theory from the responses seems to indicate that there is a strong relationship between the two variables. Bear in mind that correlational relationships cannot be considered causal (Welman, *et al.,* 2005:235)

The SOE seems to have a more mature outsourcing process at 95 percent of the ESI - their findings could thus be considered significant as the basis for the extent of Information Technology sourcing in the industry, however, cognisance must be taken of the fact that 95 percent represents one company only. A balanced view must be understood when considering the remaining 5 percent are more than 50 companies.

3.11 CHAPTER 3 SUMMARY

The respondents all work for Information Technology, but are not necessarily all directly linked to the contract management leg of the service delivery. Their responses were therefore appropriate as service recipient responses. This accounts for the “Don’t Know” response to some of the questions.

The SOE has to follow instructions from its largest and only shareholder, the state. Outsourcing was unveiled as a strategic decision to focus on core outputs.

The study determined which services were currently outsourced and whether they were successfully outsourced.
It examined the 12 core disciplines and whether the organisation was prioritising them.

The study investigated factors that have the greatest influence on the Information Management Technology Strategy; the process that was followed to embark on outsources strategy.

Finally concluding questions were asked regarding the contract management and service provider relationship management.

CHAPTER 4: CONCLUSIONS AND RECOMMENDATIONS

4.1 INTRODUCTION

The study has ascertained that the Electricity Supply Industry contributes 15 percent to the Gross Domestic Product of the country. Job creation is one of the main focus areas for the Government to reduce growing poverty in the country. The stabilisation and security of available energy would help to stimulate new business growth and attract foreign investment. This in turn could boost a reduction in unemployment and contribute to the positive growth of the economy. New and potential entrants to the ESI could make worthwhile, sustainable contributions to meet the energy capacity requirements of the country.

4.2 SECTION A - ANALYSIS OF THE OBJECTIVES

Chapter one listed seven secondary objectives that had to be met before the primary objective could be met.

4.2.1 Objective one – Right-sourcing and business dynamics.

Business dynamics does play a role in Information Technology Right-sourcing. The study of the SOE showed that it was pursuing a massive growth plan to cater for some of the country's future capacity requirements.

The Eskom Annual Report (2011:343) states that it is restructuring its Information Technology Department to align with its business priorities and maximise the value of the department. The vertically integrated organisation claims significant impact has been felt in having greater flexibility, standardisation and optimised business processes across the organisation, which allows executives to make informed decisions.

Recommendation:

The Strategic Alignment Model emphasised the importance of the synchronisation between Business and Information Technology Strategy. Follow the steps to avoid costly mistakes. Although it is an important dynamic, it is only a portion of a successful strategy.

4.2.2 Options available for right-sourcing.

The various options have been explained in detail in chapter two of the literature study. The **state of outsourcing** has been determined by the study. The study examined the type of functions that were outsourced. Of the 11 services listed in section B of the interview, almost all of them are subject to a sourcing strategy. It is therefore safe to say that at least 63 percent of the listed functions are outsourced at this stage. Asset Management and some Enterprise Software Solutions were exceptions. The rest were in the process of being outsourced.

Recommendation:

Determine the Information Technology requirements in keeping with the business objectives. Invest some time in re-engineering business processes. Apply the correct sourcing strategy/s to the correct service and invest in good contract management skills.

It is worth noting that outsourcing, if implemented correctly, can reduce capital expenditure on Information Technology infrastructure, reduce costs through economies of scale and provide access to highly skilled resources.

Right-sourcing refers to matching the source type to the source need. It is a strategy that aligns the business requirements with Information Technology deliverables.

4.2.3 Determine how a business determines IT core capabilities

What is outsourced is dependent on the nature of the company, its core business and its competencies. The study mentioned that the SOE had some of its non-core functions outsourced. **Outsourcing of non-core**, transaction based processes has gained significant momentum over the last few years (Baltzan, *et al*., 2009:253).

Recommendation:
In order to determine its core capabilities, the company can perform a SWOT analysis. This can be drilled down to business unit level. Chapter two provides more detail on how to conduct a SWOT analysis. These results will highlight the company's strengths. The nature of the business should be where its major strength and therefore core capabilities are.

To refine this analysis, the company could put in place a sourcing management team that will look at developing integrated management processes with vendors and selecting appropriate performance measurements. This will identify the non-core transaction based processes that can be outsourced.

4.2.4 Role players/stakeholders to be involved in the process.

The correct **role players or stakeholders** would be dependent on the structure and type of organisation.

The research in chapter 2 emphasised the need to have the correct resources at the correct level involved throughout all levels of the organisation. The interview study was conducted with various staff members at different levels of the organisation, including some involved with contract management.

Recommendation:

In chapter two, from the 10 steps to successful right sourcing, number 9 mentions potential service providers presenting to the relevant stakeholders.

Also in chapter two, one of the focus areas recommended by COBIT is Resource Management. This is a governance framework that the company can utilise to ensure that the correct resources, knowledge and infrastructure are utilised effectively. Contract management is included in this scope.

The sourcing strategy will result in a contract to be managed. It is advisable to have the contract reviewed or drafted by the finance, legal and commercial sections, before it is signed.

4.2.5 Impact of change management on effective right-sourcing.

Organisational culture is important in determining how effective change management can be. It can determine the success or failure of a change, depending on how it is perceived in the organisation. The eight steps framework by Kotter (1995:67) was discussed in chapter two. It described "raising urgency" as the first step in the process. His recognition of change as continuous, led him to recommend that urgency should become a core, sustained capability.

Recommendation:

Identify change agents in the organisation. Train them and provide them with the necessary skills to facilitate changes in the organisation. Section C of the study looked at whether Change Management was a focus area in the company. The response was favourable. The only thing certain about change is that change will occur. Utilise the change management framework so that the company's changes can be integrated seamlessly into normal operations of the organisation.

4.2.6 Managerial techniques for right-sourcing.

in section C of the interviews, the study looked at a combination of strategy and leadership. The strategy should determine the sourcing type and the leadership have to ensure that it is implemented.

Strategy is where alignment with business drivers occurs. It is the creation of a sound Information Technology Strategic business plan, good governance, resource planning and where integration to business strategies are mapped.

Leaders set expectations and identify what is valued. They lead staff members to deliver on agreed business deliverables.

The SOE vertical structure makes decision making easier and much more efficient and effective. This was according to the Information Technology Divisional executive (Eskom Annual Report 2011:343).

Recommendation:
A leader must be a decisive person who understands the business and supports the attainment of business objectives. The leader must be a recognition promoter.

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4.2.7 Right-sourcing risks

Most risks analysed in the literature were applicable to all types of sourcing and are interchangeable. The study identified service delivery failures. Sourcing Performance Management in section C, dealt with risks as well as the Security and Risk management that dealt with **identifying risks and managing the risk** appetite of the company.

Recommendation:
Identify the risks and put processes in place to help reduce or minimise the likelihood that the risk materialises if the risk cannot be eliminated.

Conclusion:

The study has met its secondary objectives.

4.3 SECTION B - STRATEGY

In Chapter 2, Porter highlighted the fact that strategy should address the opportunity and threats that exists in the external environment (Figure 4.3.1). The SWOT analysis highlights the opportunities that exist in the industry.

Figure 4.3.1 SWOT Analysis of Current Electricity Supply Industry

Strength	**Weakness**
• Engineering Expertise • Good Climate conditions for renewable energy • Legislation to support more IPPs	• Unstable power supply hampering economic growth • Costly start-up costs • Escalating price of electricity
Opportunity	**Threats**
• Wealth of coal reserves • Current Demand outstripping supply • Globalisation	• Carbon Footprint • Global Warming • Long Lead Times • High unemployment coupled with FBE

Recommendation

Select an opportunity or a Threat and do a thorough industry analysis using the tools mentioned in chapter 2, namely Craft a strategy, and identify what type of strategy it will be.

Locke (2009:407) stated that structure follows strategy. The SOE seems to be following this principle. Information Technology Strategic Alignment can be turned into a distinctive competitive advantage.

Figure 4.3.2: SWOT Analysis of new entrant.

Strength	**Weakness**
• Engineering skills • Renewable product environmentally friendly • Favourable user products • Government support for product	• Relatively unknown product • Relatively unknown company • Small company, limited resources and skills set • Limited customer base • High transfer costs to switch to new product
Opportunity	**Threat**
• Strengthen brand recognition • Suppliers market as demand outstrips supply • Finances available	• Fierce competition for the same customers • Limited resources available geographically

Recommendation

The company in Figure 4.3.2 could pursue a product differentiation strategy combined with brand recognition as it is their product that distinguishes them from their competitors.

Alternatively they can pursue an aggressive growth strategy to grow their customer base.

Either strategy will require an Information Technology strategy to support it. The literature and Empirical study have provided guidance in terms of the factors that could influence the chosen strategy and how this can be turned into a strategic competitive advantage.

4.4 SECTION C – PRIMARY OBJECTIVE

The **primary objective** of this study was to develop a generic Information Technology framework for right-sourcing in the Electricity Supply industry.

The **framework used for outsourcing was defined** and **Options have been determined for right-sourcing.** Section E of the Study defined two processes. One for outsourcing and the other for right-sourcing. The SOE chose the Right-sourcing process. The literature study has focused on the different types of sourcing and provided recommended models for right-sourcing.

Considering best practices and benchmarking, the following could be a precursor to right-sourcing.

Phase 1.

1. Conduct an internal SWOT analysis to identify key focus areas for designing a strategy;
2. Embark on a business process re-engineering exercise to identify integrated processes across the organisation;
3. Distinguish between core and routine transaction based processes;
4. Define the company's long and short term goals;
5. Define the company's chosen strategy;
6. Re-define the company's structure required to support the strategy;
7. Align the Information Technology strategy to the organisational strategy;
8. Conduct an Information Technology SWOT analysis to define internal capabilities and required resources;
9. Perform a cost analysis of the required services;
10. Consider which sourcing strategy best fits the requirements.

Only once the above has been completed, the company can embark on the next phase of right-sourcing.

Phase II.

Alternative right-sourcing framework:

1. The goals identified in goals, phase one, must be defined as long- or short-term;
2. Identify a potential pilot project using the correct sourcing strategy;
3. Evaluate potential Service Providers by accessing the market;
4. Clarify the project definition and scope of the project;
5. Create and distribute a Request for Information;
6. Evaluate the pool of potential Service Providers with analysis conducted in point 3 above;
7. Create and distribute a Request For Proposal;
8. Evaluate and select responses from the list of responses;
9. Invite finalists to present to relevant stakeholders;
10. Evaluate presentations based on strict criteria provided beforehand;
11. Observe history and an existing client base of potential suppliers; what were the major milestones i.e. successes and failures;
12. Enter into negotiations with the successfully bidder/s with consultation from the company's legal, finance and commercial representatives.

Phase III.

Once the selected bidder has been successful:

1. Have regular defined meetings as specified in the SLA in phase two;
2. Evaluate the performance based on the agreed metrics;
3. Record all interactions with the Service Provider;
4. Ensure that sound governance is part of the management of the SLA.
5. Use best practices to benchmark Supplier Performance and interactions.

If the project is delivered successfully on time and within budget, this could be a potential Service Provider for greater outsourcing requirements. This project would have provided a practical outsourcing experience. This would have provided an opportunity to identify potential risks, and observed the

relationship dynamics required in getting the Service Provider to meet the stated objectives.

The level of detail on the RFI, RFP and finally the Service Level Agreement is crucial for ensuring the services delivered are the services requested.

4.5 FUTURE TRENDS

Cooney (2011:1) reported on the top Strategic Technology Trends for 2012. Media tablets are brought to the office. This can have a major impact on companies. If staff was allowed to use their own tablet at work, as an incentive, it would reduce the need to outsource the desktop/notebook requirements.

Standage (2010:299) reports on the increase on environmentally friendly, energy efficient buildings.

Energy visionaries imagine a grid with real-time sensors and “plug and play” software that can allow scattered generators or energy-storage devices to attach to it. This can lead to the creation of an energy Internet.

According to Spiegel, McArthur and Norton (2010: 173), the time is ripe for technological innovation in the energy environment. Small technological changes could trigger major station wide innovations.

Mobile interfaces could change the way we interact with our Service Providers.

Advanced Internet technology and applications popularly referred to as Web2.0 is currently changing the way we interact with technology, both in a professional and social manner (O’Riely and Batelle, 2009:1).

Technology changes will influence future outsourcing trends.

Peter Weil, Director of the Center for Information Research (2011), MIT "Firms with superior Information Technology governance had 20 percent higher profits than firms with poor governance, given the same strategic objectives.

Recommendation

Future changes will affect the traditional way of doing business. A study needs to be conducted on how the new entrants to the market can use new technologies to help them shape their business models and interact with customers. The face of contract management will change significantly and the additional security risks will have to be managed carefully.

4.6 CHAPTER 4 CONCLUSION

Different management tools can be used to craft a strategy. Use the appropriate tools to craft a relevant strategy. Use the Strategic Alignment Model to align the Information Technology Strategy with the business strategy.

Start small and use a sourcing strategy for a project. This will highlight the people and system dynamics involved in dealing with a Service Provider. Ensure that the Service Level Agreement is clearly defined and understood by all. Make use of a measurement metrics to ensure that set targets and service levels are met. Don't take implied assumptions as a given. Put it in the SLA. Avoid vague and ambiguous terminology.

A Right-sourcing strategy can assist in making Information Technology a distinct Strategic Advantage for the company.

4.7 CHAPTER 4 SUMMARY

The objectives of the study were met. Business dynamics plays an important role in selecting the correct sourcing strategy. The Strategic Alignment model provides guidance on aligning the Information Technology strategy with the business strategy.

Various Information Technology sourcing options have been discussed. Align the correct strategy/ies with the business objective to meet business objectives.

The selection of the correct Strategy based on sound business principles by means of a SWOT analysis and other management models, is essential for a successful business. Effective resource management is a cornerstone of an efficient organisation. The continuous use of passionate of change agents, leads to a healthy organisational culture.

Use the Right-sourcing framework to make the correct decisions. Right-source - it is practical, it works and it can lead to a strategic advantage.

BIBLIOGRAPHY

ADAMSON, K.A. 2011. Smart energy country profile - South Africa. [Web:] http://www.pikeresearch.com. Date of access: 30 Oct. 2011.

AMNET. 2010. Amnet Technology Solutions [Web:] http://www.amnet.com.au/Home.aspx Date of access: 25 Oct. 2011.

ANON. 2009. Energy in South Africa at a glance. 25 degrees in Africa. *Energy in Industry*, 2(4):1-2, June. [Web:] http://www.southafrica.info Date of access: 7 Oct. 2011.

BALTZAN, P., PHILLIPS, A. & HAAG, S. 2009. Business driven technology. New York, NY: McGrawHill/Irwin.

BERGER, R. 2009. Everything must go? – Strategies for successful IT rightsourcing. [Web:] http://www.rolandberger.com/media/news/2009-10-28-rbsc-news-Strategies_for_successful_IT_rightsourcing.html. Date of access: 3 April 2011.

BSSOCA, M. 2010. Gartner: The security risks of outsourcing. [Web:] http://www.bssoca.com/en/info/article/?i=3659. Date of access: 10 Aug. 2011.

BUCKI, J. 2011. Top 7 Outsourcing advantages outsourcing Advantages: A back-office operations illustration. [Web:] http://operationstech.about.com/od/officestaffingandmanagem/a/OutSrcAdvantg.htm. Date of access: 25 Oct. 2011.

BURNSINGTON, A.P. 2010. Techniques for outsourcing. [Web:] http://www.buzzle.com. Date of access: 28 Mar. 2011.

CARLSON, B. 2006. Identifying the correct IT strategy. 2006. [Web:] http://www.computer.weekly.com. Date of Access: 4 Apr. 2011

CHARTWELL. 2007. Outsourcing report: customer care, contact and support. [Web:] http://www.chartwellinc.com; www.energylibrary.com. March 2007. Date of access: 3 Apr. 2011.

COONEY, M. 2011. Gartner: The Top 10 strategic technology trends for 2012. [Web:] http://www.cio.com 18 Oct 2011. Date of access: 25 Oct. 2011.

COWAN, S.T & BRUBAKER, M. 2000. Fundamentals of energy outsourcing. *The Electricity Journal*, 13(1):57-60.

DEPARTMENT OF ENERGY **See** SOUTH AFRICA.

DEPARTMENT OF TREASURY ***See*** SOUTH AFRICA.

DEWING, H. 2008. Outsourcing is poised for growth despite economic recession. [Web:] http://www.CIO.com Date of access: 28 Mar. 2011.

DISTELZWEIG, H. & DROEGE, J. 2006. Encyclopaedia of business, 2nd ed. Organisational Structure. [Web:] http://law-journals-books.vlex.com/vid/organizational-structure-51758780 Date of access: 13 Feb. 2011.

DUNN, C. 2006. ITIL/Service management roadmap. [Web:] http://www.scc.cc.voice/ITIL%20Service%20Management%20Roadmap.pdf Dates of access: 29 Mar. 2011.

ESCOM ANNUAL REPORT. 2011. ESCOM. [Web:] http://www.eskom.co.za/c/84/annual-report/ Date of access: 15 Nov. 2011

EVANS, E.G. & NEU, C. 2008. The use of strategic forces to understand competitive advantages. *Journal of International Technology and Information Management,* 17(2):137-152.

GOOLSBY, K. & WHITLOW, K. F. 2004. What causes outsourcing failures? [Web:] http://www.outsourcing-center.com/2004-08-what-causes-outsourcing-failures-article-37826.html. Date of access: 3 Apr. 2011.

HOLMES, A. 2006. COBIT IT Governance framework recommended for Business-IT alignment. [Web:] http://www.cio.com/article/22411/Cobit_IT_ Governance_Framework_Recommended_for_Business_IT_Alignment Date of access: 3 April 2011.

KAPLAN, R.S. & NORTON, D. 2006. Balanced Scorecard Institute. [Web:] http://www.balancedscorecard.org/basics/definitions.html Date of access: 8 Mar. 2011.

KOTTER, J.P. 1995. Why transformation efforts fail. *Journal of Product Innovation Management*. 13(2):170-184, March.

KOTTER, J.P. 2008. Why transformation efforts fail. [Web:] http://www.power-projects.com/LeadingChange.pdf 2008. Date of access: 3 Apr. 2011.

KPMG. 2011. IT advisory: knowledge process outsourcing. [Web:] http://www.kpmg.com/CN/en/IssuesAndInsights/ArticlesPublications/Documents/knowledge_process_outsourcing_O_0802.pdf Feb. 2008. Date of access: 3 Apr 2011.

KREITNER, R. & KINICKI, A. 2008. Organizational behaviour. 8th ed. New York, NY: Macgraw-Hill. 564p.

LAUDON, K., LAUDON, J. & DASS, R. 2010. Management information System: managing the digital firm. 11th ed. India: Kindersley. 581p.

LOCKE, E.A. 2009. Handbook of principles of organisational behaviour: indispensible knowledge for evidence-based management. 2nd ed. London: Wiley. 651p.

MAHONEY, J. & ROBERTS, P.J. 2008. Twelve core IT management disciplines build it organization performance. Date of access: 29 Jun 2011.

MARTIN, W.E., BROWN, V.C., DEHAYES, D.D., HOFFER, A.J. & PERKINS C.P. 2005. Managing Information Technology 5th ed. Upper saddle River, NJ: Pearson. 794p.

MCCORD, A. 2003. Sourcing information technology services. [Web:] http://net.educause.edu/ir/library/pdf/pub7007g.pdf Date of access: 3 Apr. 2011.

MCIVOR, R. 2010. Global service outsourcing. Boston, MA: Cambridge. 284p.

MOGG, R. 2009. Outsourcing failures often not published but it is so easy to make it right. [Web:] http://www.bizfaceworld.com/wordpress. Date of access: 3 Apr. 2011.

MOORE, D. 2009. In-source, out-source, open-source, right-source. [Web:] http://www.cnx.org. Date of access: 3 Apr. 2011.

MORGAN, B & RAMANATHAN, V. 2008. Outsourcing, globalizing economics, and shifting language policies: issues in managing Indian call centres. *Language policy*, 8(1):69-80

MUNRO, P. 2010. Multisourcing: managing a portfolio of deals. [Web:] http://www.atkearney.com/index.php/Publications/multisourcing-managing-a-portfolio-of-deals.html Date of access: 25 Oct 2011.

O'BRIEN, J.A. & MARAKAS, G.M. 2008. Introduction to information systems 14th ed. New York, NY: McGraw-Hill Irwin. 557p.

O'RIELY, T. & BATELLE, J. 2009. Web Squared: Web 2.0 five years on. [Web:] http://www.web2summit.com/web2009/public/schedule/detail/10194. Date of access: 3 Nov. 2011.

OVERBY, S. 2010. 7 Lessons from outsourcing failures. [Web:] http://www.CIO.com. Date of access: 3 Apr. 2011.

PORTER, M.E. 1980. Competitive Strategy: Techniques for Analysing Industries and Competitors. New York, NY: Free Press.

RUST, L. 2008. Shifting the outsourcing experience up a notch. [Web:] http://www.mediag8way.com. Date of access: 25 Oct. 2011.

SA see SOUTH AFRICA.

SCHILLING, M.A. 2006. Strategic management of technological innovation. 2nd ed. New York, NY: McGraw Hill.

SHPILBERG, D., BEREZ, S., PURYEAR, R. & SACHIN, S. 2007. Avoiding the alignment trap in information technology. *Sloan Management Review*, 49(1):51-58.

SIMEONI, R. 2011. Supply chain management. [Web:] http://www.inspiringscm.wordpress.com. Date of access: 25 Aug 2011.

SOUTH AFRICA. 2010. Department of Energy: South African energy synopsis 2010. Pretoria: Government Printers. [Web:] http://www.energy.gov.za Date of access: 10 May 2011.

SOUTH AFRICA. 2008. National Energy Bill (Section 75 of 2008). *Government Gazette*, No. 31124, 21. Pretoria: Government printers.

SOUTH AFRICA. 2009. Electricity pricing policy of the South African electricity supply industry. Government Notice No. 1398, 20. *Government Gazette*, 31741:51. Pretoria: Government printers.

SOUTH AFRICA. 2011. Department of Treasury: Budget speech. [Web:] http://treasury.gov.za Date of access: 5 Oct 2011.

SPIEGEL, E., MCARTHUR, N. & NORTON, R. 2010. Energy shift. Game-changing options for fuelling the future. New York, NY: McGraw Hill. 199p.

SSON. 2009. Shared services and outsourcing network. [Web:] http://www.ssonetwork.com/ Date of access: 10 Oct. 2011.

STANDAGE, T. 2010. The future of technology. London: Profile. 358p.

STATEN, J. 2010. Are you ready to rightsource your IT portfolio? [Web:] http://www.zdnet.com Date of access: 25 Aug. 2010.

SWARD, D.S. 2006. Measuring the business value of information technology. Practical strategies for IT and business managers. [Web:] http://www.intel.com/intelpress/samples/bvm_chapter1.pdf .17p. Date of access: 25 Aug. 2011.

THOMPSON, A.A., STRICKLAND, A.J., GAMBLE, J.E. 2010. Crafting and executing strategy, the quest for competitive advantage: concepts and cases. New York, NY: McGraw-Hill. 478p.

WARRILOW, S. 2009. Organizational culture: Strategies For Managing Change - The Excellent Case For Creating Your Own Culture Maturity Model. [Web:] http://ezinearticles.com/?Strategies-For-Managing-Change---The-Excellent-Case-For-Creating-Your-Own-Culture-Maturity-Model&id=2751455 Date of access: 1 May 2011.

WELMAN, C., KRUGER, F. & MITCHELL, B. 2005. Research methodology, 3rd ed. Cape Town: Oxford. 342p.

WENTZEL, W. 2009. King III Report on Governance launched. [Web:] http://www.polity.org.za/article/king-iii-report-on-governance-launched-2009-09-03. Date access: 25 Oct 2011

WESTDIJK, S., ADRIAANS, R. & MEIJBORG, O. 2009. Sourcing strategy – key to success in the dynamic environment of the credit crunch. [Web:] http://www.ssonetwork.com. Date of access: 23 Feb. 2011.

WOODRUFF, S., SANDERS, R. & MARINKO, G. 2010. Proficient Learning: Right-Sourcing 101. [Web:] http://impactivitillc.files.wordpress.com /2009/02/vendor-selection_spbt_2010.ppt Date of access: 23 Feb. 2011.

YOUNG, A., DANE, S., ANDERSON, K.F., BRANT, R.H., BROWN, L.R. & COHEN, L. 2008. Global value chains on a post-crises world. Washington, DC: The World Bank.

ZINNOV OFFSHORING RESEARCH AND CONSULTING. 2011. How Exchange Rates Affect Outsourcing. [Web:] http://www.zinnov.com/whitepaper_global_currency_trends.html. Jun 2011. Date of access: 25 Oct. 2011.

APPENDIX A: QUESTIONNAIRE

Appendix A.

Current state of Information Technology sourcing in the Electricity Supply Industry

Survey Questionnaire October 2011

Aim of the Study

The South African industry has a growing number of Specialist companies targeting outsourcing of support functions to enable the company to focus on their core business.

This survey aims to determine the current Information Technology sourcing strategies

currently being utilised in the Electricity Supply Industry and the company experiences in
Dealing with the specialised companies.

Instructions:

The questions are based on company experience in dealing with various outsource/ insource partners.

Select the most suitable option with an (X) in the allocated space provided next to the option. *Example*

2. Number of years in existence:	0 - 2 years	3 - 5 years	6 - 10 years	11 - 50 years	51 to 100 years
	X				

A comments field has been included for any pertinent observations or where the question requests a comment.

Thank you in advance for your participation in this study.

Section A.
Background Historical Information:

Respond to each question by ticking the most suitable option with an X

1. Organisation name: (Please state name of company)					
2. Number of years in existence:	*0 - 2 years*	*3 - 5 years*	*6 - 10 years*	*11 - 50 years*	*51 to 100 years*
3. Number of years employed at co:	*0 - 2 years*	*3 - 5 years*	*6 - 10 years*	*11 - 50 years*	*51 to 100 years*
4. Number of years IT experience:	*0 - 2 years*	*3 - 5 years*	*6 - 10 years*	*11 - 50 years*	*51 to 100 years*
5. Respondent background:	*Information Technology*	*Engineering*	*Finance*	*Human Resource*	*Other (specify)*
6. Current Position Responsibilities:	*Information Technology*	*Engineer*	*Sales & Marketing*	*Management*	*Other (specify)*
7. Define types of sourcing used by company:	*Outsourcing*	*Insourcing*	*Near-sourcing*	*Far-sourcing*	*Other (specify)*
8. What was the main motivator for the selected sourcing strategy?	*Financial Savings*	*Specialised Skills*	*Non-core function*	*Industry Trend*	*Other (specify)*

Section B

The company successfully outsources the following functions:

Respond to each question by ticking the most suitable option with an X

1. Laptops	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
2. Desktops	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
3. Servers and cabinets	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
4. Printers	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
5. Network Security Systems	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
6. Asset management	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
7. Enterprise Software Solutions	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
8. Remote access and mobile solutions	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
9. Unified Communications Solutions	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
10. VoIP	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
11. Helpdesks	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
12. Comments if any:					

Section C

The Information Technology section has a strong focus on:

Respond to each question by ticking the most suitable option with an X

1. Service Review	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
2. Enterprise Architecture	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
3. Strategy and Leadership	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
4. Change Management	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
5. Financial Management	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
6. Sourcing Performance Management	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
7. Security and Risk Management	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
8. Asset Management	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
9. Governance	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
10. Organisation People	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
11. Shifting the focus from systems to service	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
12.Comments if any:					

Section D

The following factors have the greatest influence on Information Technology Strategy?

Respond to each question by ticking the most suitable option with an X

1. Executive mandate	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
2. Change in leadership	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
3. Financial pressure	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
4. New rollouts	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
5. Technology shift	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
6. Regulatory/ compliance	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
7. Industry consolidation	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
8. Emerging markets	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
9. Comments:					

Section E

Which of the following processes more

closely resembles the processes followed by the company when entering into a sourcing contract?

Process X:

Respond to each question by ticking the most suitable option with an X

1. Perform thorough needs analysis.	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
2. Set goals for project.	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
3. Perform sourcing analysis.	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
4. Create project definition.	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
5. Create/distribute request for information (RFI).	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
6. Establish pool of potential suppliers.	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
7. Create/distribute request for proposal (RFP).	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
8. Decide on finalists among potential suppliers.	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
9. Invite finalists to present to stakeholders.	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
10. Negotiate with selected bidder(s) and finalise details.	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*

OR

Process Y:

Respond to each question by ticking the most suitable option with an X

1.Clearly define the scope and the outsourcing agenda in detail, upfront.	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
2. Carefully evaluate the response from the Service Providers (SP), and request clarity where necessary.	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
3. Evaluate the SP's track record for the services being requested.	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
4. Do not use cost as the only selection criteria for appointing a SP – look at stability, balance and excellent results.	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
5. Assess the SP portfolios – Was their work of an acceptable standard?	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
6. Use a sliding scale approach: first request a small project and see how they perform before you increase the scale to larger projects.	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
7. Have a transparent work-plan, with project milestones clearly defined and costing attached per milestone.	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
8. Have a clear ownership matrix in place for existing, new and upcoming projects. Who owns the end products? Who provides the components?	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
9. Ensure that post-project support is included after each venture.	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
10. Ensure that each interaction during the engagement process is recorded and agreed to by both parties. This includes scope definitions, payments, any amendments, and service agreements.	*Strongly Agree*	*Agree*	*Don't know*	*Disagree*	*Strongly disagree*
11. Comments if any:					

Section F

Concluding Questions:

Respond to each question by ticking the most suitable option with an X

1. Have you had any significant service delivery failures?	*No*	*Don't know*	*Yes*
2. Could this be rectified within the terms of the contract?	*No*	*Don't know*	*Yes*
3. Have any enforceable penalty clauses been included?	*No*	*Don't know*	*Yes*
4. Would you consider making use of the same service provider again?	*No*	*Don't know*	*Yes*
5. Do you consider them a strategic partner?	*No*	*Don't know*	*Yes*

6. What is the greatest benefit derived from outsourcing?	*Cost Saving*	*Staff reduction*	*Greater efficiency*	*Other (Specify)*
7. How do you overcome obstacles posed by the Strategic Alignment Trap? 80/20 principle. *Comment in adjacent tab*				
8. What would you do differently if you had an opportunity to redo the sourcing strategy? *Comment in adjacent tab*				
9. Concluding comments: *Comment in adjacent tab*				

Thank you for your participation. If you have any queries you can email me at pnerisha@hotmail.com

Addendum B

Interviews on the current state of IT sourcing in the Electricity Supply Industry.

I	**Section A**	
	Historical Information:	
1	Organisation name:	
2	Number of years in existence:	
3	Interviewee Name:	
4	Date of interview:	
5	Job Title:	
6	Contact Number/ Email:	
7	Number of years employed at co:	
8	Number of years IT experience:	
9	Interviewee background:	
10	Current Position Responsibilities:	
11	Define types of sourcing used by company:	
	Other (specify)	
	Outsourcing	
	Insourcing	
	Nearsourcing	
	Farsourcing.	

II. Section B					
Our company successfully outsources the following functions:					
	Respond to each question by ticking the most suitable option with an X				
1. Laptops	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
2. Desktops	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
3. Servers and cabinets	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
4. Printers	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
5. Network Security Systems	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
6. Asset management	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
7. Enterprise Software Solutions	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
8. Remote access and mobile solutions	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
9. Unified Communications Solutions	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
10. VoIP	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
11. Helpdesks	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
12. Comments if any:					

III. Section C.
The Information Technology section has a strong focus on:

	Respond to each question by ticking the most suitable option with an X				
1. Service Review	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
2. Enterprise Architecture	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
3. Strategy and Leadership	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
4. Change Management	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
5. Financial Management	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
6. Sourcing Performance Management	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
7. Security and Risk Management	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
8. Asset Management	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
9. Governance	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
10. Organisation People	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
11. Shifting the focus from systems to service	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
12.Comments if any:					

IV. SECTION D.
The following factors have the greatest influence on Information Technology Strategy?

	Respond to each question by ticking the most suitable option with an X				
1. Executive mandate	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
2. Change in leadership	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
3. Financial pressure	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
4. New rollouts	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
5. Technology shift	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
6. Regulatory/ compliance	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
7. Industry consolidation	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
8. Emerging markets	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
9. Comments:					

V. Section E.

Which of the following processes more closely resembles the processes followed by the company when entering into a sourcing contract?

Process X:	*Respond to each question by ticking the most suitable option with an X*				
1. Perform thorough needs analysis.	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
2. Set goals for project.	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
3. Perform sourcing analysis.	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
4. Create project definition.	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
5. Create/distribute request for information (RFI).	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
6. Establish pool of potential suppliers.	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
7. Create/distribute request for proposal (RFP).	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
8. Decide on finalists among potential suppliers.	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
9. Invite finalists to present to stakeholders.	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
10. Negotiate with selected bidder(s) and finalise details.	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree

OR

Process Y:	*Respond to each question by ticking the most suitable option with an X*				
1. Clearly define the scope and the outsourcing agenda in detail, upfront.	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
2. Carefully evaluate the response from the Service Providers (SP), and request clarity where necessary.	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
3. Evaluate the SP's track record for the services being requested.	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
4. Do not use cost as the only selection criteria for appointing a SP – look at stability, balance and excellent results.	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
5. Assess the SP portfolios – Was their work of an acceptable standard?	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
6. Use a sliding scale approach: first request a small project and see how they perform before you increase the scale to larger projects.	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
7. Have a transparent work plan, with project milestones clearly defined and costing attached per milestone.	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
8. Have a clear ownership matrix in place for existing, new and upcoming projects. Who owns the end products? Who provides the components?	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
9. Ensure that post-project support is included after each venture.	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
10. Ensure that each interaction during the engagement process is recorded and agreed to by both parties. This includes scope definitions, payments, any amendments, and service agreements.	Strongly Agree	Agree	Don't know	Disagree	Strongly disagree
11. Comments if any:					

VI. Section F

Concluding Questions:	Respond to each question by ticking the most suitable option with an X			
1. Have you had any significant service delivery failures?	No	Don't know	Yes	
2. Could this be rectified within the terms of the contract?	No	Don't know	Yes	
3. Have any enforceable penalty clauses been included?	No	Don't know	Yes	
4. Would you consider making use of the same service provider again?	No	Don't know	Yes	
5. Do you consider them a strategic partner?	No	Don't know	Yes	
6. What is the greatest benefit derived from outsourcing?	Cost Saving	Staff reduction	Greater efficiency	Other (Specify)

7. How do you overcome obstacles posed by the Strategic Alignment Trap? 80/20 principle.

8. What would you do differently if you had an opportunity to redo the sourcing strategy?

9. Concluding comments: