

**An examination of the procurement processes in the
Information Technology Division of the Department of
Finance, North West provincial government**

by

Oageng Jeffrey Mokhuane

Mini-dissertation submitted in part fulfilment for the
requirements for the degree of Masters of Business
Administration at the Mafikeng Campus of the North-West
University

Supervisor: Professor WPJ van Rensburg

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ABSTRACT

The Information Technology directorate within the department of Finance in the North West Province has traditionally been the sole custodian of Information Technology and IT budgets for other departments in the province. Over the years, there has been drastic technological changes and growth in terms of needs by various departments for IT resources and related services.

The aim of the study was to examine procurement processes within the department of finance which culminated to poor service delivery and to recommend possible solutions to the department through the study.

Methodology: population, sample, and instrument

This research was aimed at improving service delivery in the department of finance in the North West Province by interviewing IT personnel as well as staff in the procurement division. The interviews conducted were meant to gather and evaluate what IT consumers deemed critical and important for the department of finance to improve service delivery to other provincial departments.

(ii)

DECLARATION

I declare that the mini-dissertation for the degree of Masters of Business Administration at the North West University hereby submitted, has not previously been submitted by me for a degree at this or any other university, that it is my own work in design and execution and that all material contained herein has been duly acknowledged.

Oageng Jeffrey Mokhuane

December 2007

ACKNOWLEDGEMENTS

I would like to acknowledge many people for helping me during my long and thorny journey during this MBA research. I would especially like to thank my supervisor, Professor WPJ van Rensburg, for his generous time and commitment. Throughout my MBA work, he encouraged me to develop independent thinking and research skills. He continually stimulated my analytical thinking and greatly assisted me with methodical writing.

I extend many thanks to my colleagues and friends, especially Esther Kelebogile Ngakane, Sean Cloete and Oshebeng Alpheus Koonyaditse for their support during this period of study.

Finally, I'd like to thank my family; especially my wife and friend, (Mmamathe) for being a constant source of support, for her patience and, for helping me keep my life in proper perspective and balance.

Furthermore, my mother, Gaelebale, who has since passed on and whose memories live on as an inspiration and motivation. I'm grateful to my brothers and sisters for their encouragement and enthusiasm.

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CHAPTER 1 : ORIENTATION

1.1 INTRODUCTION

Information technology is the term that describes the organisation's computing and communications infrastructure, including computer systems, telecommunication networks, and multimedia (combined audio, text, and video) hardware and software. Another commonly used term in information technology is information management. It refers to business-related data and communication standards and operations in the firm. Still another term, information resource management, refers to the activities of investing in and managing people, managing technology and data, and establishing policy regarding these assets' use. In this text, information technology management encompasses these three terms and includes the tasks of managing the infrastructure, the standards, and operations; making technology related investments; and recommending appropriate corporate policy (Frenzel, 1999).

Modern organisations use resources of several types to benefit the people they serve. The most common resources upon which organisations depend to carry out their missions are money, skilled people, information, physical property, and time. Some of managers' primary tasks are to combine these resources, optimize their value in discharging the organisation's mission, and obtain superior returns for the organisation's stakeholders (Frenzel, 1999).

Information systems are mostly distributed across organisations. This has been greatly influenced by the changing information technology (IT) infrastructure, application portfolio, organisational structure and business environment. The IT infrastructure evolved from the time when a computer could only be used by one person at a time, then batch processing, then time sharing systems and finally the development of the personal computer and associated local area network technologies.

Most firms today have an information technology organisation with a status similar to that of marketing, accounting, engineering, or manufacturing. With information technology broadly dispersed through client/servers, intranets, and other forms of distributed processing, some thought that centralised IT organisations and centralised processing would disappear. This is highly unlikely, however, because IT depends on a collection of specialised knowledge and skills, important to the firm and not available more generally. In addition, the development of coordinated plans, the maintenance and development of infrastructures, and greatly increasing staff responsibilities require firms to have strong and vital IT function (Frenzel, 1999).

Organisations have progressed beyond automating processes within their organisations. The application portfolio has traversed different classes, that is operational systems to strategic planning systems. Whilst computer operators and data capturers dominated the operational systems era, the strategic planning era has the users as the domain. There is a general consensus that Information Technology is a strategic tool that can aid organisations to achieve

the desired goals and objectives. The notions of using information resources have become commonplace for both public and private organisations.

The Central Computer Telecommunications Agency (CCTA, 1990) makes an important point about information being an expensive resource that requires planning, proper procurement and acquisition, protection and management. Whilst strategic planning for Information Technology is important, the management and procurement aspects also need to be addressed. Effective management requires policies and practices and structures that will provide the desired control hence the State Information Technology Agency (SITA) Pty Ltd as government as the sole share holder has been formulated with its new structures, to consider IT and information systems (IS) as integral parts of each other. Lincoln (1990) noted that although there are many ways in which organisations try to integrate IT with the business, evidence of failure is not hard to find.

1. 2. STATEMENT OF THE PROBLEM

Procurement is looking at cutting the red tape of government environment and paving the way to profitability, reducing costs and improving services. Breaking through the barriers and business processes to arrive at higher levels of quality, efficiency and effectiveness and profits are what effective procurement is all about. Increased competitiveness, reduced costs and greater satisfaction among internal and external customers and citizens are some of the significant advantages of procurement within countries. The other advantage of

Procurement is that it gets rid of the bureaucracy and the politics of entrepreneurship as private companies are allowed and encouraged to be innovative while they bring the total quality management and risk sharing concept with the aim of continuous improvement of services they are rendering.

Customers or citizens want quality services and they want them now at an affordable cost while the supplier has to make profit in rendering such a service. Government, the organization studied, on the other hand does not have the urgency, the expertise and the quality standards that the customers or citizens demand. Citizens go to government for services because they have to and they have no choice.

Public monies finance government procurement and the obtaining of services by the Government. The Government is therefore under an obligation to ensure that the best interest of the public is served when monies are spent. "Best interest" includes obtaining its requirements at the most favourable conditions, including price, and also ensuring that the businesses and industries are afforded the best possible opportunity to supply such requirements on a competitive basis and citizens enjoy the fruits of such an investment.

1.3. OBJECTIVES OF THE STUDY

The main objective of this study is to establish how inefficiency in procurement within the department of finance, North-West Province has previously prevented the Information Technology from delivering the expected levels of service to customers.

More specifically the study aims to:

- 1.3.1 look at factors leading to inefficiency in the procurement processes.
- 1.3.2 explore IT related issues affecting staff retention within the Department of Finance in the North-West Province.
- 1.3.3 describe the level of service delivery by the Finance Department IT division.
- 1.3.4 describe the processes followed in procurement of IT services.

1.4 ASSUMPTIONS OF THE STUDY

Due to the descriptive nature of the study, the researcher use assumptions instead of hypothesis. According to Bailey (1987:128) an assumption refer to something that is taken as a fact or believed to be true without proof. The assumptions of the study are conceptualized as follows:

- a. That there is inefficiency in the procurement process of IT equipments.
- b. That there is high level of bureaucracy in procurement of IT equipments.

- c. That there is poor service delivery of IT services by the department of finance, thereby contributing to other departments failing to retain their staff members.

1.5 IMPORTANCE OF THE STUDY

In order to keep up with changing technologies, the IT directorate procures IT resources including equipment on a regular basis. The importance of this study was therefore to assist with formulation of procurement policies, rules and regulations for the IT directorate in the department of finance North West Province according to acceptable standards and best practice. The department has to review and increase its budget in order to facilitate efficiency in procurement of IT resources for the IT directorate. The main aim was to improve service delivery, and budgets which are there for the people, should therefore serve the people who are benefactors of government services. This will be done according to government's promise to the citizens as indicated by the "*Batho Pele*" principles.

Skilled and competent IT personnel leave the department for the private sector at an alarming rate. This is also due to low budgets resulting in poor salaries which are not market related.



1.6. SCOPE OF THE STUDY

The research was limited to employees in the Department of Finance, IT division in the North West Province and hopes to come up with a strategy to ensure effective and efficient procurement policy and return on investment for the department.

1.7. PLAN OF THE STUDY

CHAPTER 1 : INTRODUCTION AND BACKGROUND

The chapter focuses on the introduction of the study, background of the study, statement of the problems and research methodology to be used by the researcher.

CHAPTER 2 : LITERATURE STUDY AND THEORETICAL FOUNDATION

The chapter will focus on literatures by different authors on procurement process, procurement of IT equipments. The chapter will draw experiences in order to arrive at a certain conclusion.

CHAPTER 3 : DEFINING THE PROBLEM AND RESEARCH QUESTIONS

The chapter will give a background of the methodology used by the researcher in undertaking the study. The chapter will include aspects such as research design, sampling, data collection and concludes with data analysis and interpretation.

CHAPTER 4 : RESEARCH DESIGN AND ANALYSIS

The chapter includes aspects such as research design, sampling, data collection and concludes with data analysis and interpretation of data collected.

CHAPTER 5 : RESEARCH FINDINGS AND INTERPRETATION

The chapter sets out the results of the study. The results are compiled and analysed against the various characteristics identified in the literature to indicate applicability.

CHAPTER 6 : DISCUSSION, RECOMMENDATIONS AND CONCLUSION.

The chapter will discuss main findings as per the research objectives, it will further advance recommendations on the basis of the findings, and also make a general conclusion of the study.

CHAPTER 2: LITERATURE STUDY AND THEORETICAL FOUNDATION

2.1. Introduction

Public sector procurement has a major impact on the South African macro economy, both in terms of consumption and investment spending. As such, public sector procurement can be used as a tool by government to achieve economic ideals, including certain socio-economic objectives. At the same time, an effective and efficient procurement system will permit government to deliver the quality and quantity of services demanded by its new constituency in accordance with the Reconstruction and Development Programme (RDP) principles and other policy objectives.

The South African Government's aim is to transform the public procurement process in order to achieve its socio-economic objectives within the ambit of good governance. The procurement system in the department of finance North West Province needs to be changed in order to face the challenges presented by changes in both the local and international environments.

This chapter will, after studying literature on the procurement processes and supply chain management pertaining to IT resources that is human and IT equipment, make reference to different authors. The primary focus will be to support the Government's Batho Pele principles for improved service delivery both for the internal IT users in the department of finance North West Province as well as external clients in other provincial departments. Secondly, the focus will be in examination of best practices pertaining to procurement processes in

the IT industry, and lastly, examines ways to retain skilled IT personnel in the province.

The most common mistake that public officials commit is that they more often neglect their duties and overlook their mandates. The core function of civil servants is to selflessly deliver service to the public to the best of their ability and with due diligence. Civil servants must adhere to the requirements put forth and as stipulated by the “Batho Pele” principles.

2.2 Service delivery in Finance IT

Since 1994, the department of finance in the North West Province had been the sole custodian of all IT services and resources including IT budgets. It is in the same breadth that all other provincial departments expected quality service from finance IT. The department with a need for network connectivity submits a request to the provincial customer care centre (CCC). The remedy AR system used in the customer care center generates a request reference number which is then given to the requester of service. This reference number is used to track the progress of the action request or the AR. There are escalation processes in place and where an action request is not attended speedily, normal escalation processes follow. There are two different types of clients that require IT related services from the IT directorate viz. internal and external clients.

2.2.1 Internal clients

The internal clients are the users in the IT division as well as users in the finance department as a whole. These clients are more often unhappy about the quality of services provided by the IT directorate, for example, the long procurement processes in acquiring IT equipment and consumables which hampers service delivery. An example of this is where a user in the salary section waits for a month or two for finance IT to replace a faulty hard drive. The client is, in the meantime, unable to do his or her work efficiently and has to wait for other users to finish before capturing and processing salaries. Secondly, the same clients blame central IT staff for incompetence which is not always a true reflection of all IT personnel. The above inefficiencies are clear evidence of poor demand and supply management of IT resources in the IT directorate within the department of finance, in the North West Province.

According to Burt et al (2003) an expenditure of company funds is an investment. If purchased wisely and operated efficiently, equipment generates profits for its owner. Because it impacts on the costs of production, the selection of major capital equipment should be a matter of concern to top management. They further say that although it is not easy to estimate operating and maintenance costs to be incurred in future years is not easy, such costs will be incurred and must be addressed when comparing the total cost of ownership of two or more items of equipment which will satisfy the firm's need. (Burt et al, 2003 – World Class Supply Management).

2.2.2 External clients

External clients include users from other provincial departments as well as members of the public. Other departments expect quality service from central IT as the custodian of IT services in the province. The department of social development for example, depends on central IT to provide them with network services in order for the department to capture and process social grants. If the network is not available at the time of grant payments, pensioners and all other benefactors of social grants do not get paid which causes financial pain for all concerned. It is therefore imperative for all network services to be available twenty four hours a day and three hundred and sixty five days a year.

The second type of clients are members of the public who are providing services to government departments. These are SMME's ranging from building contractors to food caterers. If IT systems are down for long periods of time leading to non-payment of salaries to building contractors, it leads to strikes and delays in projects which affect service delivery. Due to the nature of their business, caterers sometimes have to fork out their hard earned cash to prepare fancy meals to government officials during special events and claim later. If they are not paid on time, this leads to frustrations and sometimes closure of their small businesses. The IT systems should therefore always be reliable and able to cater for the needs of clients as and when it is needed.

2.3. Batho Pele - Putting people first

The Batho Pele initiative aims to enhance the quality and accessibility of government services by improving efficiency and accountability to the recipients of public goods and services. Batho Pele is Sesotho meaning “People First”. It is the name of the governments programme for transforming its public service delivery from an inefficient bureaucracy with a focus on rules to a culture of customer care, in which the needs of all the citizens of South Africa are truly served irrespective of their race, gender or creed. This programme is set out in the White Paper on Transforming Public Service Delivery (Government Gazette No. 18340 dated 1 October 1997). A guiding principle of the public service in South Africa will be that of service to the people. Batho Pele seeks to do this by calling on Public Sector organisations to deliver responsive, quality services according to eight national principles referred to as the Batho Pele Principles.

These principles are:

- **Consultation:** Citizens should be consulted about the level and quality of the public service they receive and wherever possible should be given a choice about the services that are offered.
- **Service Standards:** Citizens should be told what level and quality of public services they will receive so that they are aware of what to expect.
- **Access:** All citizens should have equal access to the services to which they are entitled.
- **Courtesy:** Citizens should be treated with courtesy and consideration.
- **Information:** Citizens should be given full, accurate information about the public services that they are entitled to receive.

- **Openness and Transparency:** Citizens should be told how national and provincial departments are run, how much they cost, and who is in charge.
 - **Redress:** If the promised standard of service is not delivered, citizens should be offered an apology, a full explanation, a speedy and effective remedy; and when complaints are made, citizens should receive a sympathetic, positive response.
 - **Value for money:** Public services should be provided economically and efficiently in order to give citizens the best possible value for money.
- (Source: <http://www.bathopele.co.za/bathopel.html>)

2.4 Alignment of the IT plan with the organisational plan.

The first task of IT planning is to identify information systems applications that fit the priorities established by the organisation. Surprisingly, organisational strategies and plans are often not available in written form, or they may be formulated in terms that are not useful for information systems planning. Therefore, it is often difficult to ascertain the strategies and goals to which the information systems plan should be aligned. Nevertheless, without this alignment, the information systems plan cannot get and keep long-term organisational support. If selecting and scheduling information systems projects are based solely on proposals submitted by users, the projects will reflect existing computer-use biases in the organisation, managers' aggressiveness in submitting proposals, and organisational power struggles, rather than the overall needs and priorities of the organization (Turban et al, 1999).

2.4.1 Strategic information systems planning (SISP)

According to Curry (1995) and Earl (1992) strategic information systems planning (SISP) has become a key priority in many organisations in recent years. A study into SISP experiences in twenty seven companies, where IS managers were interviewed along with general and line managers, found that five different SISP approaches were being adopted. They are labeled as Business-Led, Method-Driven, Administrative, Technological, and Organisational. The taxonomy of five areas is intended as a diagnostic tool for evaluating and analysing company SISP experience. Earl however recognises that whilst companies may produce formal documentation outlining their strategic and operational plans for technology, it is important to remember that informal, *ad hoc* sub-strategies also emerge. The political dimension of SISP should not be overlooked also (Markus, 1983).

2.4.2 Information Technology (IT) in supply chain management

Information technology (IT) is an important enabler of effective supply chain management. Much of the current interest in supply chain management is motivated by the possibilities that are introduced by the abundance of data and the savings inherent in sophisticated analysis of these data. The innovative opportunities coming to the fore with electronic commerce (e-commerce), especially throughout the Internet, have also increased the interest in IT. For many firms, IT provides a competitive advantage. Though this has been true for some time in service industries such as banks, it is also becoming more

relevant for firms such as large retailers, airlines, and manufacturers (Levi et al, 2003)

2.4.3 Supply chain management

According to Hugo et al (2004), Leenders & Fearon (1997: 295) define supply chain management as the systems approach to managing the entire flow of information, materials, and services from raw materials suppliers through factories and warehouses to the end customer.

Hugo (2004) further emphasizes that the supply chain encompasses all activities associated with the flow and transformation of goods from the raw material stage (extraction), through to the end user, as well as the associated information flows. Material and information flow both up and down the supply chain.

The structure of a supply chain is fundamentally a reflection of a firm's business model. For example, in the personal computer (PC) industry, the supply chain often takes a hybrid form: the components – processor, memory, hard disk, monitors, and other peripherals – are built to stock, whereas the end product, the “box”, is assembled to order. In such a system, the time it takes to assemble the end product is quite negligible (provided all the components are available), while the production/procurement lead-time for each component is more substantial. (Yao, 2002).

2.4.4 Electronic Commerce

Electronic commerce (e-commerce) refers to the replacement of physical processes with electronic ones and the creation of new models for collaboration with customers and suppliers. E-commerce can be used to facilitate the interaction between different companies as well as the interaction of individuals within the companies. Examples include purchasing over the Internet, exchanges, order tracking, and e-mail. Companies use Internet standards internally-intranets-as well as externally-extranets and exchanges. The difference between Internets, intranets, and extranets is explained mostly by who is allowed access to the system. Intranets allow companies to implement internal applications without having to develop custom interfaces and avoid incompatible types of hardware and special dial-in procedures. Internet applications typically allow unlimited access but extranets allow limited access by restricting partners and customers from outside the company to certain applications and data (Simchi-Levi et al, 2003).

2.4.5 The Internet, the WEB and E-commerce

The Internet – generally defined as a global network of computer networks – has established itself as a powerful tool for business (Bothma, 2000:3). It serves as a global communication channel, a giant store of information and represents a marketing medium and environment, as well as a tool for facilitating business exchanges and enabling business integration. According to

Bothma in Hugo (2004), all these features are important components of the supply chain process.

2.4.6 E-procurement – A subset of supply chain management

Many businesses turned to e-procurement systems during the e-commerce boom with the aim of controlling, simplifying and automating the purchase of goods and services from multiple suppliers. These online products organisations aggregate suppliers' offerings into a single catalogue, manage approval processing, and control the transaction process. Businesses today are extending e-procurement beyond controlling the purchase of office supplies and goods for maintenance and repair to reap its benefits in the direct-goods arena. Among the benefits are tighter control over spending authorisation and the elimination of redundant stock, plus easier transaction processing (Hugo et al: 2004).

2.4.7 E-procurement benefits

Automating the day-to-day purchasing tasks through the use of e-commerce technologies, whilst at the same time spending more time on the strategic procurement issues, results in the following benefits of e-procurement to the organisation:

- Purchasing process cost reduction – it is not uncommon for the cost of a purchase order to be greater than the cost of the goods.

- Vendor consolidation – the more volume that can be achieved, the more leverage the organisation has enabling end-user self-service through automation allowing greater emphasis to be placed on strategic purchasing issues.
- Seller self-service – reduced cycle times and costs.
- Vendor performance analysis – enabling the procurement organisation to manage their vendor better.
- Automating and consolidating purchases means that there is less chance for “maverick” purchases to take place.
- By automating purchasing rules, better consistency can be achieved in purchasing matters.
- Procurement allows a company to work with less fewer suppliers, leveraging its ability to aggregate purchasing spend.
- There is less risk of misunderstanding and discrepancies.
- Less time is spent on tactical buying and more on strategic procurement.
- An e-procurement system will track all costs allowing a company to determine the amount spent with each supplier.
- The improvements and efficiencies achieved through automated procurement have a direct bearing on cost reduction, which, in turn, translates into lower prices.
- Improving compliance with approved suppliers.
- The more efficient the procurement system, the faster inventory turnover is.
- Better utilization of assets, better approval controls and faster response times to supplier needs.

Bothma (2000:120) in (Hugo et al (2004)

2.5 The five pillars of procurement

Proper and successful government procurement rests upon certain core principles of behaviour – the five pillars of procurement. They are best described as pillars because if any one of them is broken the procurement system falls down.

The five pillars are:

Value for money

Open and effective competition

Ethics and fair dealing

Accountability and reporting

Equity

2.5.1 Value for money

This is an essential test against which a department must justify a procurement outcome. Price alone is often not a reliable indicator and departments will not necessarily obtain the best value for money by accepting the lowest price offer that meets mandatory requirements. Best value for money means the best available outcome when all relevant costs and benefits over the procurement cycle are considered.

The procurement function itself must also provide value for money and must be carried out in a cost-effective way. Procurement organisations, whether centrally located or devolved to individual departments should:

- Avoid any unnecessary costs and delays for themselves and suppliers;
- Monitor the supply arrangements and reconsider them if they cease to provide the expected benefits; and
- Ensure continuous improvement in the efficiency of internal processes and systems.

www.gov.za

2.5.2 Open and effective competition

This requires:

- A framework of procurement laws, policies, practices and procedures that is transparent, that is they must be readily accessible to all parties;
- Openness in the procurement process;
- Encouragement of effective competition through procurement methods suited to market circumstances; and
- Observance of the provisions of the Preferential Procurement Policy Framework Act.

Departments need to apply effort to get the best possible outcome from the market by ensuring that:

- Potential suppliers have reasonable access to procurement opportunities and that available opportunities are notified at least in the Government Tender Bulletin;
- Where market circumstances limit competition, departments recognise that fact and use procurement methods that take account; of it;
- Adequate and timely information is provided to suppliers to enable them to bid;
- Bias and favoritism are eliminated;
- The costs of bidding for opportunities do not deter competent suppliers; and
- Costs incurred in promoting competition are at least commensurate with the benefits received.

2.5.3 Ethics and fair dealing

In procurement, if all parties comply with ethical standards they can;

- Deal with each other on a basis of mutual trust and respect; and
- Conduct their business in a fair and reasonable manner and with integrity.

All government staff associated with procurement, particularly those dealing direct with suppliers or potential suppliers, are required;

- To recognise and deal with conflicts of interest or the potential thereof;
- To deal with the suppliers even-handedly;
- To ensure they do not compromise the standing of the state through acceptance of gifts or hospitality;
- To be scrupulous in their use of public property; and
- To provide all assistance in the elimination of fraud and corruption.

2.5.4 Accountability and reporting

This involves ensuring that individuals and organisations are answerable for their plans, actions and outcomes.

Openness and transparency in administration, by external scrutiny through public reporting, is an essential element of accountability within the procurement framework. This occurs when

- Heads of departments are accountable to their ministers for the overall management of procurement activities;
- Heads of procurement and senior procurement directors are accountable to heads of departments for various high-level management and co-ordination activities;
- Individual procurement officers are accountable to Heads of Procurement, and to their clients, for the services they provide; and

- All people exercising procurement functions must have regard to these guidelines and are accountable to management.

2.5.5 Equity

This fifth pillar is vital to public sector procurement in South Africa. It ensures that government is committed to economic growth by implementing measures to support industry generally and especially to advance the development of Small, Medium and Micro Enterprises (SMME's) and Historically Disadvantaged Individuals (HDI's)

In accordance with the Reconstruction and Development Programme (RDP), SMMEs and HDI's need to play a bigger role in the economy. Greater participation in the economy and more diversified representation of blacks and gender in ownership is essential.

The government has implemented the Preferential Procurement Policy Framework Act as the foundation on which all procurement activities are to be based. Its aim is to:

- Advance the development of SMME's and HDI's
- Promote women and physically handicapped people;
- Create new jobs;
- Promote local enterprises in specific provinces, in a particular region, in a specific local authority, or in rural areas; and

- Support the local product (buy South African)

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2.6 Procurement processes in the State Information Technology Agency (SITA)

SITA is the information system (IS) facility of the State responsible for the management and execution of Government IT related work. The company has the task of implementing the Government's IT policy.

The PFMA appointed National Treasury as the author and custodian of rules and regulations with regard to public spending. National Treasury has transferred the acquisition of Government requirements to SITA and plays a pivotal role in approving the policy and related procedures from a legal perspective.

SITA is governed by the DPSA as mandated by the minister in accordance with the SITA Act. The DPSA is therefore the primary stakeholder in both SITA and any of its guiding policies and procedures.

The ITAC (Information Technology Acquisition Center) is a division within SITA eServices that developed the policy and procedures for Government to procure their own ICT requirements from industry. ITAC is mandated by the SITA Board of Directors to conduct all actions relating to ICT Procurement in SITA and Government Departments.

Actions performed by ITAC include:

- Drafting of ICT procurement policy and procedures.
- Delegation of ICT procurement powers to Government Accounting Officers or their delegates.
- Development and management of all ICT related contracts in the Public Sector.
- Managing the ICT tendering process in the Public Sector, assisting in drafting tender specifications in consultation with the client.
- Provide procurement related consulting and training to its client base and industry representatives.

www.sita.co.za

2.6.1 SITA Procurement Policy and Procedures (SPPP)

This document takes full cognisance of the legal framework within which Public Sector procurement is required to take place. Simultaneously, an attempt is made to address a number of IT-specific challenges with regards to the procurement of goods and services.

Activities that take place in the Procurement Value Chain

- Client identifies business requirements and translates requirements into a User Requirements Specification (URS) and/or a Technical Specification.
- A Business Case is developed and approved.

- The Business Case is registered at the Tender Office who verifies compliance of each business case received by Tender Office against SPPP requirements.
- The Tender Office forwards all documentation received to Contract Management to give the go ahead to publish the tender.
- A tender is registered and published.
- A tender is evaluated.
- A tender is awarded.
- A contract is developed.
- The vendor delivers services/goods to the client.
- An invoice is generated.
- Time spent on project is verified.
- SITA pays the vendor.
- Client pays SITA.

Source: www.sita.co.za/itac

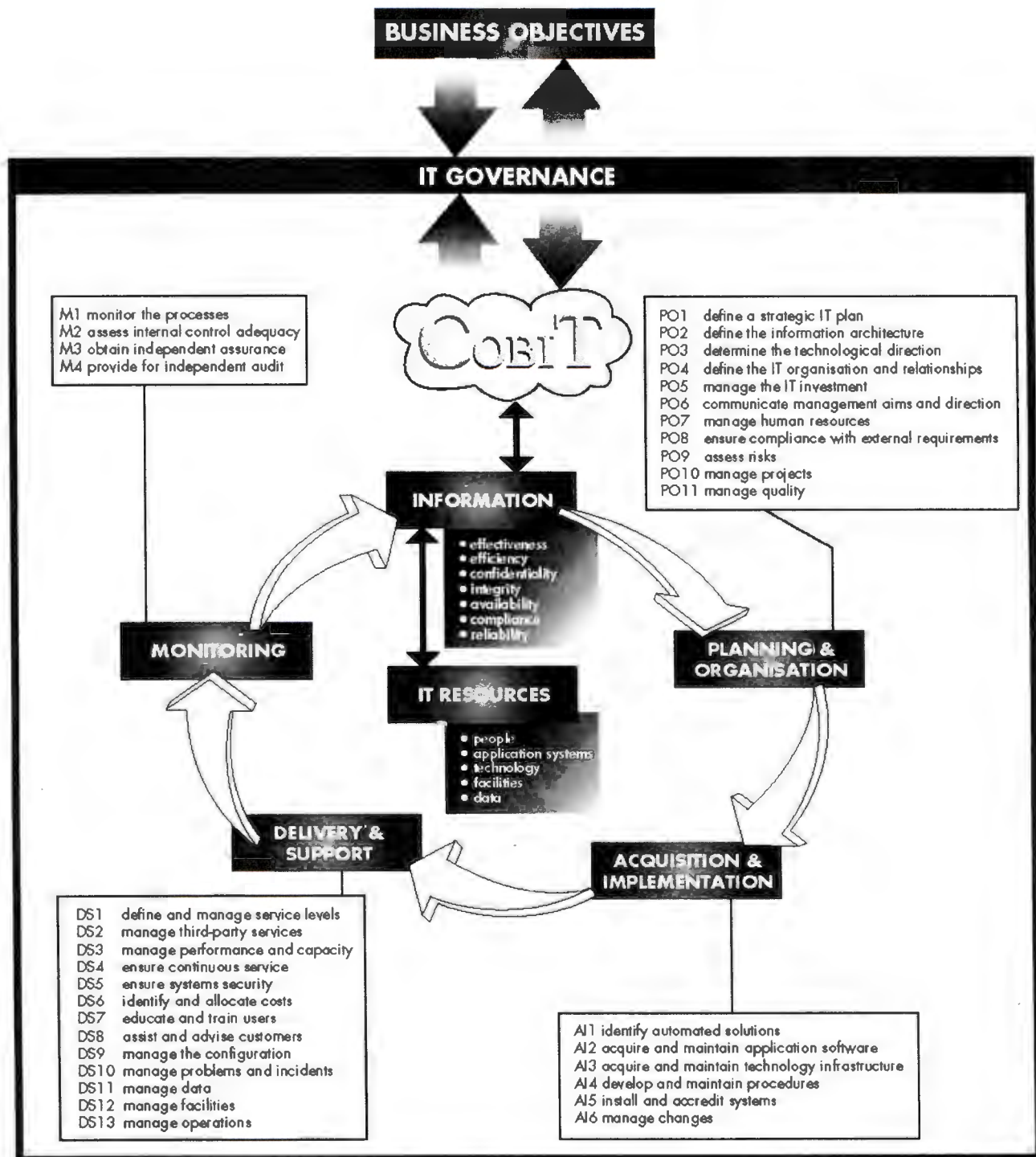
2.6.2 COBIT (Control Objectives for Information and Related Technology)

Successful organisations understand the benefits of information technology (IT) and use this knowledge to drive their shareholders' value. They recognise the critical dependence of many business processes on IT, the need to comply with increasing regulatory compliance demands and the benefits of managing risk effectively. To aid organisations in successfully meeting today's business challenges, the IT Governance Institute (ITGI) has published version 4.0 of Control Objectives for Information and related Technology (COBIT).

COBIT is an IT governance framework and supporting toolset that allows managers to bridge the gap between control requirements, technical issues and business risks. COBIT enables clear policy development and good practice for IT control throughout organizations. ITGI's latest version— COBIT 4.0— emphasises regulatory compliance, helps organisations to increase the value attained from IT, enables alignment and simplifies implementation of the COBIT framework. It does not invalidate work done based on earlier versions of COBIT but instead can be used to enhance work already done based upon those earlier versions. When major activities are planned for IT governance initiatives, or when an overhaul of the enterprise control framework is anticipated, it is recommended to start fresh with COBIT 4.0. COBIT 4.0 presents activities in a more streamlined and practical manner so continuous improvement in IT governance is easier than ever to achieve.

COBIT provides a generic set of grouped ICT processes that can be adopted “off the shelf”, customised and included as part of IT Finance ICT processes. It is based on best practices and includes the E&Y IT process maturity models. *“It provides good practices for the management of IT processes in a manageable and logical structure, meeting the multiple needs of enterprise management by bridging the gaps between business risks, technical issues, control needs and performance measurement requirements.”*





Source: www.itigi.org

Figure 1

2.7 The importance of IT infrastructure and Implications for IT Investments

The role of corporate IS (information systems) groups is changing as a responsibility for IT is dispersed throughout the firm. An important (or perhaps the only) role for the corporate IS group in a decentralized or federated environment is to coordinate the IT infrastructure for the business units. IT infrastructure has consistently been a key concern of IS management and its significance is now increasingly being recognised by senior management. IT infrastructure is the largest contributor to long-term strategic business advantage and accounts for about 57% of IT expenditure. IT infrastructures underpin new and sustainable competitive strategies, the emergence of new organisational forms, international business and facilitate the development of virtual (or electronic) value chains. IT infrastructure can be a significant barrier or enabler in the practical options for planning and changing business processes. The support of enabling technologies and platforms is an important contributor to successful business process change (Willocks, 1999).

2.7.1 IT Infrastructure Library (ITIL)

The IT Infrastructure Library, **ITIL**, is a series of documents that are used to aid the implementation of a framework for IT Service Management (**ITSM**). This framework defines how Service Management is applied within specific

organisations. Being a framework, it is completely customisable for application within any type of business or organisation that has a reliance on IT infrastructure.

The **ITIL** (IT Infrastructure Library) consists of 6 sets: *Service Support*; *Service Delivery*; *Planning to Implement Service Management*; *ICT Infrastructure Management*; *Applications Management*; *The Business Perspective*. Within these a variable number of very specific disciplines are described.

2.7.2 ITIL Service Delivery

Service Delivery is the management of the IT services themselves, and involves a number of management practices to ensure that IT services are provided as agreed between the Service Provider and the Customer.

Service Delivery consists of 5 disciplines. These are:

- Service Level Management
- Capacity Management
- Contingency Planning
- Availability Management
- IT Financial Management

2.7.3 Service Review and Delivery Process

The review process should be based on re-confirming the existing products and services, their level of quality and performance, the required change and new needs and then determine the resource allocation.

The following is a graphic representation of this process (Figure 2).

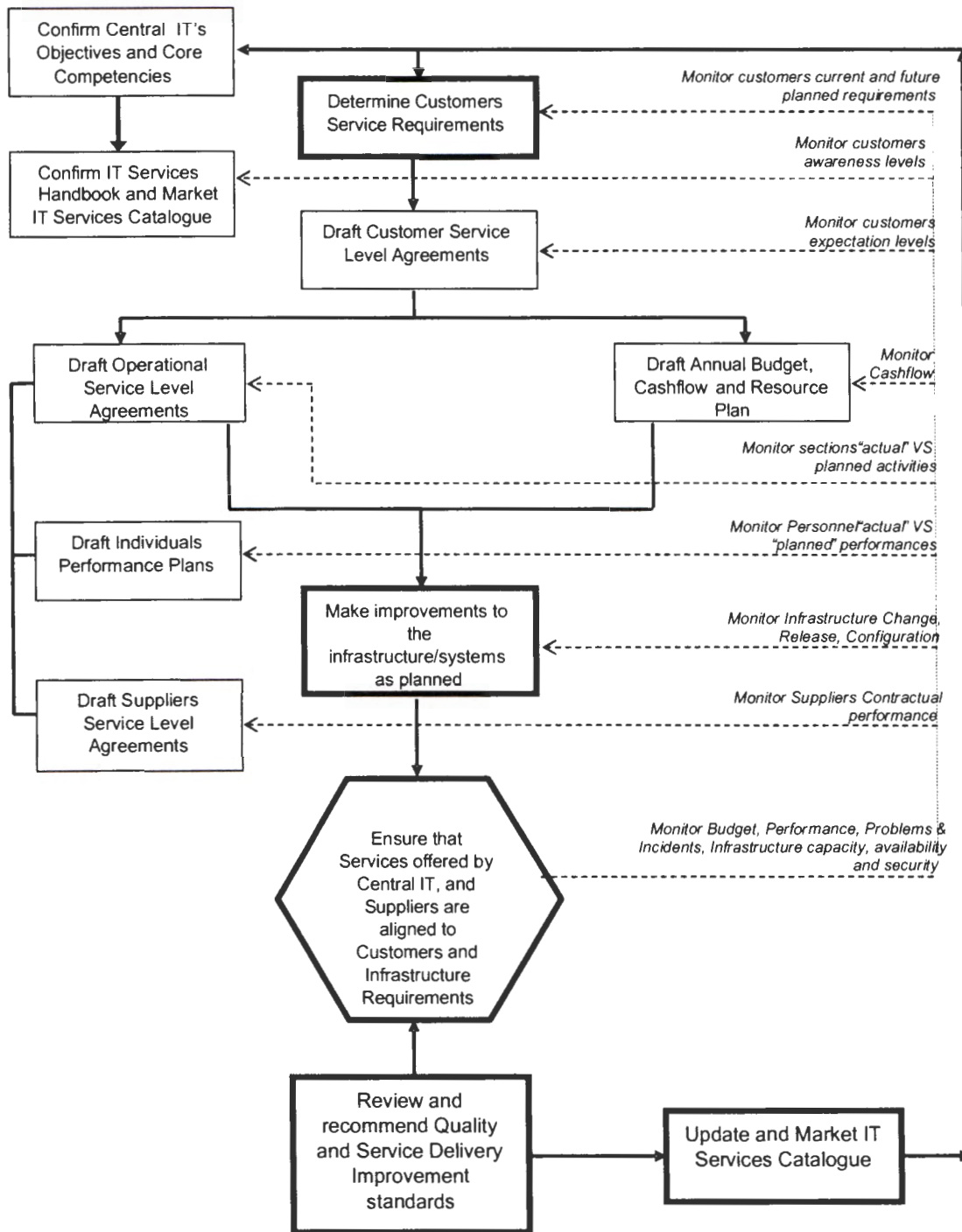


Figure: 2

Source: www.itlibrary.org

2.7.4 Service Level Management

Service Level Management is the primary management of IT services, ensuring that agreed services are delivered when and where they are supposed to be delivered. The Service Level Manager is dependent upon all the other areas of Service Delivery providing the necessary support that ensures the agreed services are provided in a secure, efficient and cost effective manner.

There are a number of business processes that form part of Service Level Management. These are:

- Reviewing existing services,
- Negotiating with the Customers,
- Reviewing the underpinning contacts of 3rd party service providers,
- Producing and monitoring the Service Level Agreement (SLA),
- Implementation of Service Improvement policy and processes,
- Establishing priorities,
- Planning for service growth and
- Involvement in the Accounting process to cost services and recover these costs.

2.7.5 Service Level Management and IT Security

IT Security is an integral part of Service Delivery, and as Service Level Management is the key discipline in providing Service Delivery, this process is also ultimately responsible for ensuring that IT Services are provided in a secure manner, and the availability of the services is maximised within cost and efficiency constraints. Contingency Planning also forms part of Service Delivery to ensure that services can be recovered and maintained in the event of a serious incident.

2.7.6 Capacity Management

Capacity Management is the discipline that ensures IT infrastructure is provided at the right time in the right volume at the right price, and ensuring that IT is used in the most efficient manner.

This involves input from many areas of the business to identify what services are (or will be) required, what IT infrastructure is required to support these services, what level of Contingency will be needed, and what the cost of this infrastructure will be.

These are inputs into the following Capacity Management processes:

- Performance monitoring
- Workload monitoring
- Application sizing

- Resource forecasting
- Demand forecasting
- Modeling

From these processes come the results of capacity management, these being the capacity plan itself, forecasts, tuning data and Service Level Management guidelines.

2.7.7 Continuity Management / Disaster Recovery / Business Continuity

Continuity management is the process by which plans are put in place and managed to ensure that IT Services can recover and continue should a serious incident occur. It is not just about reactive measures, but also about proactive measures - reducing the risk of a disaster in the first instance.

Continuity management is so important that many organisations will not do business with IT service providers if contingency planning is not practiced within the service provider's organisation. It is also a fact that many organisations that have been involved in a disaster where their contingency plan failed ceased trading within 18 months following the disaster.

Continuity management is regarded as the recovery of the IT infrastructure used to deliver IT Services, but many businesses these days practice the much further

reaching process of Business Continuity Planning (BCP), to ensure that the whole end-to-end business process can continue should a serious incident occur.

Continuity management involves the following basic steps:

- Prioritising the businesses to be recovered by conducting a Business Impact Analysis (BIA);
- Performing a Risk Assessment for each of the IT Services to identify the assets, threats, vulnerabilities and countermeasures for each service;
- Evaluating the options for recovery;
- Producing the Contingency Plan; and
- Testing, reviewing, and revising the plan on a regular basis.

2.7.8 Continuity Management and Contingency Planning of Information and Resources

The most challenging problem for the IT directorate is the lack of disaster recovery policies. This has on several occasions affected business operations and productivity for the department of finance as well as other departments. One example of this is where water from the first floor in the Garona government building flooded the server room and affected power supply to IT equipment. This took place in March 2006, and the network services were down for at least 5 working days.

Continuity Management (and contingency planning, business continuity and disaster recovery) is an integral part of IT security and risk analysis. Inadequate contingency planning is regarded as a risk to the business, and is often overlooked until it is too late, when a security or other breach results in the loss of supporting IT systems.

a. Availability Management

Closely related to Continuity Management is Availability Management. This is the practice of identifying levels of IT Service availability for use in Service Level Reviews with Customers. Availability Management is the practice of identifying levels of IT Service availability for use in Service Level Reviews with Customers.

All areas of a service must be measurable and defined within the Service Level Agreement (SLA).

To measure service availability the following areas are usually included in the SLA:

- **Agreement statistics** – such as what is included within the agreed service.
- **Availability** – agreed service times, response times, among others
- **Help Desk Calls** – number of incidents raised, response times, resolution times.

- **Contingency** – agreed contingency details, location of documentation, contingency site, 3rd party involvement, among others
- **Capacity** – performance timings for online transactions, report production, numbers of users, among others
- **Costing Details** – charges for the service, and any penalties should service levels not be met.

Availability is usually calculated based on a model involving the Availability Ratio and techniques such as Fault Tree Analysis, and includes the following elements:

- **Serviceability** – where a service is provided by a 3rd party organisation, this is the expected availability of a component.
- **Reliability** – the time for which a component can be expected to perform under specific conditions without failure.
- **Recoverability** – the time it should take to restore a component back to its operational state after a failure.
- **Maintainability** – the ease with which a component can be maintained, which can be either remedial or preventative.
- **Resilience** – the ability to withstand failure.
- **Security** – the ability of components to withstand breaches of security.

2.7.9 Availability Management and IT Security

IT Security is an integral part of Availability Management; this being the primary focus of ensuring IT infrastructure continues to be available for the provision of IT Services.

Some of the above elements are really the outcome of performing a risk analysis to identify any resilience measures to be put in place, identifying just how reliable elements are and how many problems have been caused as a result of system failure.

The risk analysis also recommends controls to improve availability of IT infrastructure such as development standards, testing, physical security, the right skills in the right place at the right time, etc.

a. Service Level Agreements

Service level agreements are clearly of fundamental importance with respect to availability management.

b. IT Financial Management

IT Financial Management is the discipline of ensuring IT infrastructure is obtained at the most effective price (which does not necessarily mean cheapest), and calculating the cost of providing IT services so that an organisation can understand the costs of its IT services. These costs may then be recovered from the Customer of the service.

Costs are divided into costing units:

- Equipment
- Software
- Organisation (staff, overtime)
- Accommodation
- Transfer (costs of 3rd party service providers)

The costs are divided into Direct and Indirect costs, and can be Capital or Ongoing.

2.7.10 IT Financial Management and IT Security

The practice of IT financial management enables the Service Manager to identify the amount being spent on security counter measures in the provision of the IT services. The amount being spent on these counter measures needs to be balanced with the risks and the potential losses that the service could incur as identified during a Business Impact Assessment and Risk Assessment. Management of these costs will ultimately reflect on the cost of providing the IT services, and potentially what is charged in the recovery of those costs (<http://www.itil-itsm-world.com/delivery.htm>).

2.8 Disaster recovery policies

Policies underpin an organisations whole approach to contingency and disaster recovery. They determine the fundamental practices and culture throughout the enterprise. They are usually linked closely with security policies, both addressing the basic defence requirements to ensure the stability and continuity of the organization. It is essential therefore that they exist, are up to date and are comprehensive (<http://www.business-continuity-and-disaster-recovery-world.co.uk/>).

2.8.1 ITIL Configuration Management

Configuration Management is the implementation of a database (Configuration Management Database – CMDB) that contains details of the organisation's elements that are used in the provision and management of its IT services. This is more than just an 'asset register', as it will contain information that relates to the maintenance, movement, and problems experienced with the Configuration Items.

The CMDB also holds a much wider range of information about items that the organisation's IT Services are dependant upon. This range of information includes:

- Hardware

- Software
- Documentation
- Personnel

Configuration Management essentially consists of the following 4 tasks:

Identification – this is the specification, identification of all IT components and their inclusion in the CMDB.

Control – this is the management of each Configuration Item, specifying who is authorised to 'change' it.

Status – this task is the recording of the status of all Configuration Items in the CMDB, and the maintenance of this information.

Verification – this task involves reviews and audits to ensure the information contained in the CMDB is accurate.

2.8.2 Configuration Management and IT Security

Without the definition of all configuration items that are used to provide an organisation's IT services, it can be very difficult to identify which items are used for which services. This could result in critical configuration items being stolen, moved or misplaced, affecting the availability of the services dependant upon them. It could also result in unauthorised items being used in the provision of IT services.

2.8.3 Change Management and IT Security

IT Security must be embedded into the change management process to ensure that all changes have been assessed for risks. This will include assessing the potential business impacts should the change produce undesired results.

If Change Management procedures are not effective, this may result in unauthorised changes to IT Services, which could have major impacts on the business, including financial loss, customer loss, market loss, litigation, and in the worse case scenario, even collapse of the business that the IT Services are there to support (<http://www.itil-itsm-world.com/itil-3.htm>).

2.8.4 The ITIL Service Desk

a. Service/Help Desk

The Service/Help Desk plays an important part in the provision of IT Services. It is very often the first contact the business users have in their use of IT Services when something does not work as expected. The Service/Help Desk is a single point of contact for end users who need help. Without this, an organisation could certainly face losses due to inefficiencies.

The two main focuses of the Service Desk are **Incident Control** and **Communication**.

There are different types of Help Desk, the selection of which is dependant upon what the business requires. Some Help Desks provide a simple call logging function, and escalate calls to more experienced and trained staff. Others provide a high degree of business and technical knowledge with the ability to solve most incidents at the time that the business user reports them.

b. Service/Help Desk Activities

Other than for the Call Centre, Service or Help Desks tend to embrace the following: receive all calls and e-mails on incidents; incident recording; incident prioritisation, classification and escalation; search for a 'work around'; update the end user on progress; handle communication for other ITIL processes; report to management, process managers and customers on service desk performance.

c. Service Desk and IT Security

As the Service/Help Desk is generally the first contact a business user has when reporting something out of the ordinary, the skill and assiduity of the Help Desk staff can often prevent recurrence of incidents, and instigate measures that will limit the impact of any breaches in IT Security (<http://www.iti-itsm-world.com/iti-4.htm>).

d. Release Management

This discipline of IT Service Management is the management of all software configuration items within the organisation. It is responsible for the management of software development, installation and support of an organisation's software products.

Software is often not regarded as a tangible asset because of its intangible nature, which results in it not being effectively controlled. There can be several versions of the same software within the organisation, and there can also be unlicensed and illegal copies of externally provided software.

The practice of effective Software Control & Distribution involves the creation of a Definitive Software Library (DSL), into which the master copies of all software is stored and from here its control and release is managed. The DSL consists of a physical store and a logical store. The physical store is where the master copies of all software media are stored. This tends to be software that has been provided from an external source. The logical store is the index of all software and releases, versions, among others, highlighting where the physical media can be located. The logical store may also be used for the storage of software developed within the organisation.

SC&D procedures include the management of the software Configuration Items and their distribution and implementation into a production environment. This will involve the definition of a release programme suitable for the organisation, the

definition of how version control will be implemented, and the procedures surrounding how software will be built, released and audited.

e. Software Control & Distribution and IT Security

All three of the key areas of IT Security (Availability, Confidentiality, and Integrity) can be exposed as a direct result of inadequate software control and distribution. If software changes are badly managed and not fully tested, this can lead to problems if these changes reach the production environment by causing services to be unavailable. In addition, unauthorised software modifications can lead to fraud, viruses, and malicious damage to data files.

For these and other reasons, it is important that SC&D procedures are fully reviewed by a security assessment, to ensure that appropriate counter measures are in place to reduce the threats described above.

<http://www.itil-itsm-world.com/itil-5.htm>

2.8.5 Introduction to Risk Analysis

Security in any system should be commensurate with its risks. However, the process to determine which security controls are appropriate and cost effective is quite often a complex and sometimes a subjective matter. One of the prime functions of security risk analysis is to put this process onto a more objective basis.

There are a number of distinct approaches to risk analysis. However, these essentially break down into two types: **quantitative** and **qualitative**.

2.8.5.1 Quantitative Risk Analysis

This approach employs two fundamental elements; the probability of an event occurring and the likely loss should it occur. Quantitative risk analysis makes use of a single figure produced from these elements. This is called the 'Annual Loss Expectancy (ALE)' or the 'Estimated Annual Cost (EAC)'. This is calculated for an event by simply multiplying the potential loss by the probability. It is thus theoretically possible to rank events in order of risk (ALE) and to make decisions based upon this.

The problems with this type of risk analysis are usually associated with the unreliability and inaccuracy of the data. Probability can rarely be precise and can, in some cases, promote complacency. In addition, controls and counter measures often tackle a number of potential events and the events themselves are frequently interrelated.

Notwithstanding the drawbacks, a number of organisations have successfully adopted quantitative risk analysis.

2.8.5.2 Qualitative Risk Analysis

This is by far the most widely used approach to risk analysis. Probability data is not required and only estimated potential loss is used.

Most qualitative risk analysis methodologies make use of a number of interrelated elements:

2.8.5.2.1 Threats

These are things that can go wrong or that can 'attack' the system. Examples might include fire or fraud. Threats are ever present for every system.

2.8.5.2.2 Vulnerabilities

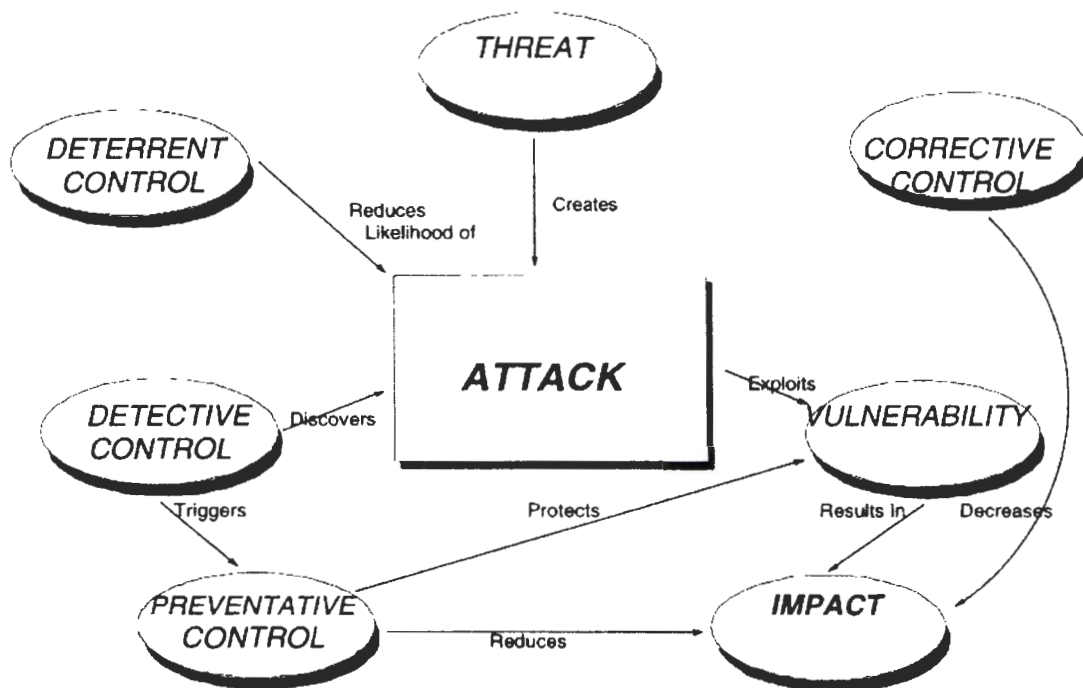
These make a system more prone to attack by a threat or make an attack more likely to have some success or impact. For example, for fire, vulnerability would be the presence of inflammable materials for example paper.

2.8.5.2.3 Controls

These are the countermeasures for vulnerabilities. There are four types which are:

- **Deterrent** controls reduce the likelihood of a deliberate attack;
- **Preventative** controls protect vulnerabilities and make an attack unsuccessful or reduce its impact;
- **Corrective** controls reduce the effect of an attack and

- **Detective** controls discover attacks and trigger preventative or corrective controls.



These elements are illustrated by a simple relational model: Fig: 3

Source 2003 C & A Security Risk Analysis Group Source:

<http://www.security-risk-analysis.com/introduction.htm>

2.9 Procurement of IT equipments in the Department of Finance, North-West Province.

The department of Finance in the Northwest province has formulated the provincial Master Systems Plan (MSP) which informs all activities and policies for all directorates within the Finance department. The IT division also has a Strategic Information Systems Plan (SISP) which informs all activities in the division. The department of finance has formulated and introduced policies for the use of Email and Internet as well as procurement of IT resources. These procurement policies need to be reviewed as a matter of urgency in order to improve service delivery.

A MSP exercise encapsulates the entire business model of the organization. It spans the three supporting architectures of Process, Technology and People. These three architectures, although individually identifiable, are inextricably integrated. Due cognisance must therefore be taken of continuous dynamic alignment that must be achieved amongst all three.

Traditionally, all the IT services were centralised within the department of finance in the province and this led to poor communication with the users and other stakeholders. Departments duplicate resources by procuring IT services from private suppliers and service providers due to poor service delivery from the department of finance. The department of finance is run at a very low budget and therefore cannot sustain the expected service delivery for other provincial departments.

2.9.1 IT in the provincial department of finance – environmental analysis

The Information Technology Directorate is responsible for the provision of efficient and effective integrated information and communication technologies to the North West Provincial government.

In an attempt to align itself with the key requirements of the Provincial Master Systems Plan (MSP), the IT Directorate had to refocus its priorities to meet the increasing demand of Provincial Departments. Assuming the role of a central ICT service provider for the NWPG, the directorate had to reevaluate its “core services” focusing on the enterprise as a whole, rather than on a specific Provincial Department. As such, the “core services” of the central IT directorate focuses on the provision of ICT solutions shared or common to all provincial departments thus creating operational effectiveness and subsequently enabling the Provincial Government to capitalise on economies of scale.

2.9.2 Existing Services

a. Core Services:

Service # 01 Infrastructure Management

Service # 02 Software Management

Service # 03 Enterprise Architecture Alignment

Service # 04 Data and Storage Management

b. Ancillary Services:

Service: # 01 Project Management Services

Service: # 02 ICT Security Management and Disaster Recovery

Service: # 03 Quality and Service Level Management Services

Service: # 04 User Support

Service: # 05 ICT Asset Management

Service: # 06 ICT Management (General)

2.9.2.1. Core Services

#1 Infrastructure management

Purpose

To plan, maintain and support the Provincial network architecture and related systems.

Customers

Customers include Provincial Departments and Internal sub-directorates.

Services

The Networks sub-directorate will provide the following services as defined in the Strategic Plan:

- Planning of the NWPG network architecture and determine technological direction;

- Maintenance and support of the NWPG network architecture and systems;
and
- Provision of Capacity and Performance Management of the network architecture.

#2 Software management

Purpose

The purpose of the planning, selection and deployment and maintenance of business software and data.

Customers

Customers include Provincial Departments and Internal sub-directorates.

Services

This sub-directorate will assume the following roles and responsibilities as defined in the Strategic Plan:

- The provision of Systems Analysis, Design, Implementation and maintenance of transversal and non-transversal systems in the NWPG
- The provision of Enterprise Application Integration support and maintenance to NWPG
- Provision of Content Management Services and Web development, implementation and maintenance support

- Facilitating and maintaining the Application Selection and Deployment process

#3 Enterprise Architecture Alignment

Purpose

The purpose of the Enterprise Architecture Service is to ensure that the enterprise architectures are continuously aligned with the management intent of the NWPG.

Customers

Customers include Provincial Departments and Internal sub-directorates

Services

The EAPO will provide the following services as defined in the Strategic Plan:

- Providing business analysis and business improvement products, services and support.
- Formulating application and technical specifications for Request for Information (RFI's), Request for Proposals (RFP's) and Tenders.
- Recommending application and technical standard frameworks for the improvement of standardization in NWPG.
- Maintaining the Master Systems Plan (MSP) and provide assistance for the upkeep of Provincial Strategic Information Systems Plan (SISP) with

respect to its Target Architecture, Current Architecture and Sequence Plans.

- Maintaining and managing the Provincial Competency Centre.
- Providing Architectural Change management Services.
- Facilitating and maintain the Application Selection Process.
- Providing research and development services and support.

#4 Data and Storage Management

Purpose

To manage the operations and maintainance (backup and recovery) of strategic data of the Provincial Government.

Customers

Customers include Provincial Departments and Internal sub-directorates

Services

The Storage Management and Server sub-directorate will assume the following services as defined in the Strategic Plan:

- Providing Server and mainframe Operations and administration (database administration, storage, backups and recovery)
- Ensuring Capacity and Performance Management of the server and mainframe environments.
- Providing database administration services and support.

- Offering and maintaining central IS/IT hosting for Service Continuity to ensure that the NWPG as whole is capable of responding to and recovering from any disaster.

2.9.2.2 Ancillary Services

#1 Project Management

Purpose

The purpose with respect to the provision of project management services is to ensure that enterprise-wide IS/IT projects in the NWPG, through the Project Management Office (PMO) and projects are implemented and supported with a higher degree of efficiency, quality, within estimates and customer expectations.

Customers

Customers include Provincial Departments and Internal sub-directorates

Services

The PMO will provide the following services as defined in the Strategic Plan:

- Offering a central repository for provincial ICT projects
- Offering standardised use of project management methodology

#2 Security Management and Disaster Recovery

Purpose

The purpose of this service is to provide ICT Security management and Disaster Recovery Services.

Customers

Provincial Departments and Internal sub-directorates

Services

The ISO will provide the following services as defined in the Strategic Plan:

- Developing and maintaining NWPG information system security architecture to be applied in the design, implementation and evolution of all NWPG tactical and information system infrastructures;
- Identifying security mechanisms, products and approaches relevant to the implementation of NWPG information system security architecture within budgetary constraints;
- Formulating offensive and defensive security strategy applicable to all NWPG systems;
- Providing functional execution and management of NWPG information system security policies and standards for NWPG systems;
- Publicising required NWPG information system security implementation guidelines;

#3 Quality and Service Level Management

Purpose

The provision of this hybrid service is to ensure that the right product is made available, to the right customer, at the right time in accordance with quality

expectations. To develop and measure internal (directorates) and external (vendors) service delivery performance and standards.

Customers

Provincial Departments and Internal sub-directorates.

Services

The QA & SLA sub-directorate will provide the following services as defined in the Strategic Plan:

- Management of Service Level Agreements between central IT and Provincial Departments
- Management of outsourced suppliers (Contract Management) that offer products and services specific to the IT Directorate and common to all Provincial Departments
- Develop, maintain and audit generic procedures and standards
- Manage the change and deployment / release environment

#4 User Support

Purpose

To provide optimal assistance to our user base through the provision of user technical support, ICT training (IT related), the identification of user concerns and problems and the effective communication thereof.

Customers

Customers include Provincial Departments and Internal sub-directorates

Services

The Support Services Desk will assume the following roles and responsibilities as defined in the Strategic Plan:

- Providing Incident and Problem Management services and support
- Providing User Group management and support services
- Providing first and second-line services and support
- Providing user training for shared products and services
- Developing, maintaining and implementing the IT Directorate's Internal and External Communication Strategy
- Facilitating and contributing towards the development of information / Management training programmes for decision-makers in the IT Directorate and NWPG

#5 ICT Asset Management

Purpose

Its purpose is to maintain the directorate's hardware and software assets by ensuring the accurate traceability of all assets and ensuring that its hardware and software at all times, reflect its current configuration baseline.

Customers

Internal sub-directorates

Services

The Procurement sub-directorate will assume the following roles and responsibilities as defined in the Strategic Plan:

- Providing IT Asset Management and support to the IT Directorate
- Managing and controlling the infrastructure Configuration Management process

#6 ICT Management

Purpose

To ensure the continuous availability and optimal usage of the directorate's key resources (financial, human).

Customers

Internal sub-directorates

Services

The Procurement sub-directorate will assume the following roles and responsibilities as defined in the Strategic Plan:

- Providing procurement services and support inline with minimum requirements and specifications
- Providing Financial planning and management services and support
- Ensuring the prompt payment of suppliers
- Maintaining the IT Directorate's Stores
- Contributing towards the development and measurement of IT Personnel Work-plans and change management plans

2.10 Staff retention

The IT directorate in the department of finance, North West Province has for the past 10 years been reliant on consultants for IT and other professional services for example IT project management and quality assurance among others. The reliance on consultancies led to partnerships with the IT directorate.

In March 2006, the Minister of public service and administration availed to all national and provincial government departments a "retention guide". It is therefore the duty of all parties affected to ensure that this document is used effectively and for the intended purpose in order to achieve the required objective.

2.10.1 Remunerating employees

The concept “remuneration” can be defined as the financial and non-financial extrinsic rewards provided by an employer for the time, skills and effort made by employees in fulfilling job requirements aimed at achieving business objectives.

The most basic dimension of the employment relationship is the economic aspect. The relationship between employers and employees is usually based on the principle that employees make their services available to employers in exchange for certain economic rewards. Rewards in the form of pay and benefits motivate the behaviour of people in a business. Remunerating employees is a very important part of human resources management and is usually the single largest cost factor in a business’s budget (Cronje et al, 2000).

The IT personnel in the department of finance are not happy about their salaries and other benefits because the salaries are not market related. Most consultants who have been with the department for years are earning handsomely and this is causing dissatisfaction amongst permanent employees. Morale is very low and so is the overall performance and service delivery.

In order for the North West Province and not only the department of finance to provide develop local talent and develop skill, the department has to investigate the possibility of benchmarking pay packages for IT staff with the private sector in order to attract and retain skilled IT staff. IT Training is at the bottom of the agenda for central IT and where people do not receive quality training, there is

lack of self confidence and non-performance. IT staff is arranged by consultants who do not have the interest of the government employees at heart. Management is not actively involved or is less interested in developing staff because, after all, consultants are there to do the job.

The training budget lies with the human resources division and half the time, this budget is not even utilised. A task team comprising of training specialist should be formed to investigate the situation within the department of finance, IT division. The appointed task team should do a proper skills audit for all staff and come up with recommendations to management. This, in the end, will yield positive results because a trained person is a confident and productive person, and this is also going to save government money by reducing dependency on consultants in the IT division.

Conclusion

The aim of this research was to investigate and develop a procurement policy framework for the department of finance in the North West province. Evidence from the research is clearly that the department should adopt and implement government approved procurement policies and also make use of SITA for procurement of IT services. People in the procurement section should be properly trained well versed with all procurement processes. Proper retention policies for the department of finance have to be developed in order to retain skilled IT staff in the province.

CHAPTER 3: DEFINING THE PROBLEM AND RESEARCH QUESTIONS

3.1 Introduction

In recent years, governments have increasingly come to understand the essential role of information technology (IT) in improving the effectiveness, efficiency and quality of government service delivery. Whereas government's use of information technology was once limited to supporting back office agency operations, modern technologies such as the Internet have transformed information technology's role into becoming a primary channel of delivering government services to citizens. As the role of information technology in government continues to evolve, a proactive approach is required to ensure that state resources are wisely invested and stakeholder expectations are met. Strategic planning helps provide that proactive approach.

3.2. Background to the problem

The purpose of any technology is to improve the effectiveness by which organisations convert limited resources into goods and services. Citizens and businesses expect government to provide the same high level of service that is delivered in the marketplace. Financial, telecommunications and other service-oriented industries enable customers to get services they desire when they want them, where they need them, and in a manner convenient for their lifestyle.

These services are expected to be delivered at the convenience of the user without respect to internal government structures, organisations or jurisdictions. Stakeholder expectations are reflected in the six principles listed below. It is important that state agencies select IT initiatives that relate to one or more of these six principles:

- Information technology will improve the efficiency and quality of government operations
- Information technology will improve effectiveness through which government services are delivered.
- Information technology will improve stakeholder convenience in the interaction with government.
- Information technology will improve the quality of information upon which policy-makers act.
- Information technology will improve the transparency of government and the policy making process.
- Information technology will ensure the security and privacy of sensitive data.

These six principles serve as the ultimate goals of information technology initiatives and direct the government's utilisation of information technology resources (www.cio.arkansas.gov).

3.3 Defining the problem and research questions

A critical area that has to be given sufficient importance is the current status of service delivery by the information technology division within the department of finance in the North West province to other departments in the province. Furthermore it is important to benchmark with other service providers against practices in the global market.

3.3.1 Primary problem

The primary problem of this study is to determine to what extent provincial departments in the North West Province are affected by levels of service delivery by the finance department in the province through tedious procurement processes and bureaucracy

3.3.2 Research questions based on the primary problem

- What is the impact of procurement inefficiencies on service delivery in the IT division within the department of finance?

3.3.3 Secondary problems

The secondary problems of this study are:

- Retention of qualified and skilled IT staff in the department of finance, North West province
- Lack of disaster recovery and business continuity plans in the IT division

3.3.4 Research questions based on secondary problems

- Why is the department of finance not able to retain competent IT staff in the province?
- Does the IT division within the department of finance have a disaster recovery and business continuity plan?

Conclusion

The literature study ensured that the questions of the secondary objectives were achieved.

CHAPTER 4 RESEARCH DESIGN AND ANALYSIS

4.1 Introduction

The researcher is the Technical Manager for the State Information Technology Agency in the North West Province and was previously employed by the department of finance in the North West Province. During his period of employ in the department of finance, it became evident for the researcher that there were problems with internal procurement processes which led to poor service delivery. The research was among others conducted through interviews with IT staff as well as users from other departments with a dependency on IT to deliver and perform effectively.

4.2 Research Methodology

Mouton and Marais (1998:16) state that methodology addresses the how part of social science research. That is, how research is planned, structured and exempted. It basically refers to various techniques or tools that the researcher uses to implement manipulate and present the obtained data.

4.2.1 Research design

Research design can be understood as the planning of any scientific research from the first to the last step. In this case it is a program to guide the researcher in collecting, analysing and interpreting the observed facts (Taylor and Morris 1987:22). The aim of the research design can be explained as an effort to plan and structure the research according to the aim and to enhance the validity on internal and external levels (Mouton and Marais, 1992:35). The researcher used exploratory and descriptive research design. The purpose of an exploratory research is to gain a broad understanding of a situation, phenomenon, community or person. The need for such a study could arise from a lack of basic information in a new area of interest (Claire; Higson and Kagee, 2006:49). The researcher will use exploratory to explore possible ways and means of improving the current processes of procuring IT equipment by the Finance Department. The researcher used descriptive research design to describe the current situation in as far as the procurement of IT equipment is concerned.

4.2.2 Sampling

Nichmias (1992:185) states that a sample is any subset of sampling unit from the population. A subset is any combination of sampling units that does not include the entire set of sampling units that has been defined as the population.

Sampling is a scientific foundation or a technical accounting device to rationalise the collection of information, to choose in an appropriate way the restricted set of objects, persons, events and so forth from which the actual information will be drawn (Taylor et al, 1987:33).

The researcher used probability sampling, which Bailey (1982) highlights that through it, the probability of selection of each respondent is known. The researcher applied stratified random sampling, which according to Mendenhall, Ott & Scheaffer (2000) is obtained by separating the population elements into overlapping groups called strata. The use of stratified random sampling is set to avoid the possibilities of biases of taking a systematic sample from non-stratified sampling frame.

Bailey (1982) argues that the correct sample size is dependent upon the nature of population and the type of the research. That is, the sample size is influenced and informed by the size of the population to be studied. The researcher considered a sample size of 100 respondents drawn from different directorates within the Finance Department adequate, particularly the Procurement division. The selected sample size will be best covered the selected stratum within the population to be studied. The sample size will also be best suited well with the selected research designs in use, which are descriptive and exploratory.

4.2.3 Data collection

Data is an important part of any research in that it does not only give the description of how data will be collected, but also constitutes the basic information from which conclusions will be drawn (Monette, 1990:11).

Data collection methods are those specific procedures utilised by a researcher to obtain information about the topic at hand from the subset in choosing the appropriate data collection methods. It is imperative that the researcher consults the research problem to determine the instruments.

The following methods were used:

4.2.3.1 Literature Study

Literature study is a process where the researcher reads whatever that has been published that is relevant to the topic. The purpose of the review is to sharpen and deepen theoretical framework of the research (Grinnel 1998:434). Literature study is a unique research step in that it encompasses two partially overlapping purposes. Firstly it serves to support the conduct of empirical study, and secondly as a type of non-empirical study (Wilkinson & Mcneil, 1996:47). Literature study helps the researcher to develop knowledge and understanding of previous work done on the study.

The researcher studied departmental procurement procedure policies in order to ascertain compliance.

4.2.3.2 Personally administered questionnaires.

A questionnaire is a set of questions on a form which is completed by respondents in respect of a research project (Devos, 2000:152). The target group to whom the questionnaires were distributed to are unit managers/directors, heads of departments, procurement officers, administrative officers and finance managers.

4.3 Data presentation, analysis and interpretation.

According to Denzin and Lincoln (1994:393), the analysis and interpretation of written material offer distinctive challenges which enable the researcher to collect data which would have not become available otherwise.

The researcher used both qualitative and quantitative means of data analysis. Quantitative data was analysed using an SPSS and presented in tables reflecting frequencies and percentages, Charts and graphs were also used to present the data. Qualitative data was analysed through the use of grounded theory, and the

categorisation method. According to Bryman (2001:303), categorisation operates at a somewhat higher level of abstraction than a concept in that it may group together several concepts that have common features.

Conclusion

The objective of the research design and analysis was to obtain evidence from consumers of Information Technology within the department of finance and also from other departments in order to evaluate the impact of IT procurement on service delivery. Workshops and formal interviews were conducted which allowed participants to give unbiased evidence for the purpose of the research.

CHAPTER 5: RESEARCH FINDINGS AND INTERPRETATION

5.1 INTRODUCTION

In this chapter, reports on the findings of the empirical investigation on the analysis of the procurement of information technology resources and equipments by the Department of Finance of the North-West Provincial Government are written. Steyl (1993:105) defines data analysis as the process of bringing data in order. It is an effort to construct order out of the confusion that stands before the investigator. It makes the researcher discover themes and concepts embedded throughout the interviews and are the final stages to the meaning of what was said.

According to Denzin and Lincoln (1994:393), the analysis and interpretation of written material offer distinctive challenges, which enable the researcher to collect data, which would have not become available otherwise.

Both qualitative and quantitative means of data analysis that included tables and categorization were used in this study. According to Bryman, (2001:303) categorization operates at a somewhat higher level of abstraction than a concept in that it groups together several concepts that have common features.

Data was collected on two categories of subjects, the first being the non-approving personnel and the second being the approving personnel. In section A,

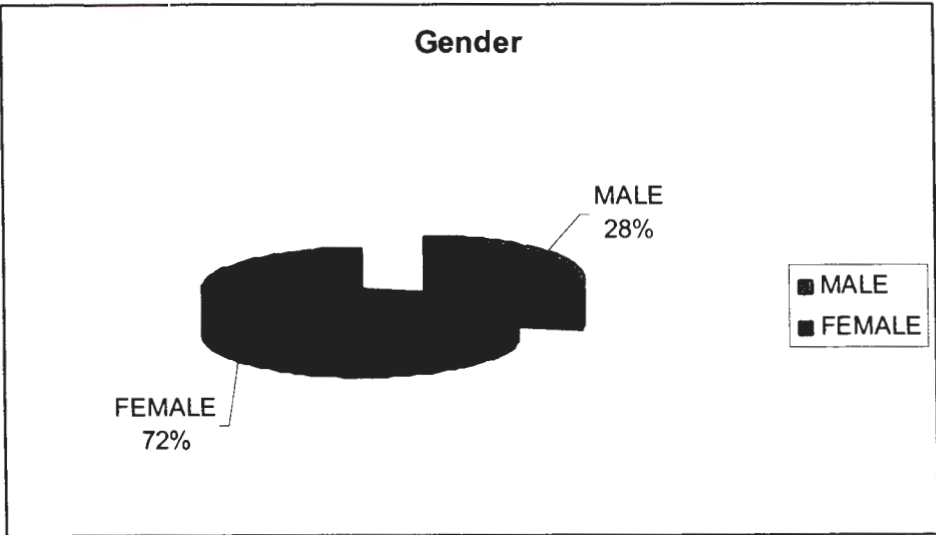
a sample of 100 respondents were selected and questionnaires distributed to them, but only 82 were returned and analysed. In Section B, a sample of 30 respondents were selected and questionnaires distributed to them, but only 13 were returned.

Section A : Non-Approving personnel.

5.1 Gender

Table 5.1 : Gender of the respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	23	28	28	28
Female	59	72	72	72
Total	82	100.0	100.0	100.0



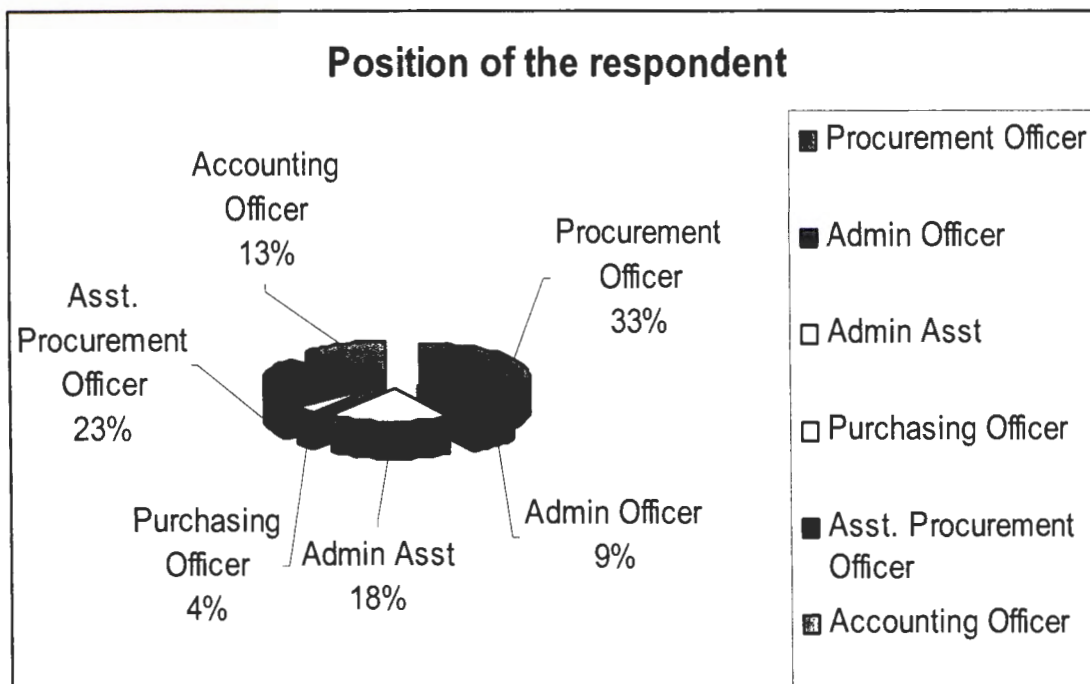
Graph 5.1: Gender of the respondents.

In accordance with data presented in table 5.1 and graph 5.1 above 72% of the respondents are females while 28% of the respondents are males. The statistics depicts the rate and application of equity policy and affirmative action in Government. It further indicates the role that females are playing in Government.

5.2 Position of the respondents in the Department/Unit

Table 5.2: Position of the respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Procurement Officer	27	33	33	33
Admin Officer	7	8.5	8.5	8.5
Admin Asst	15	18.29	18.29	18.29
Purchasing Officer	3	3.65	3.65	3.65
Asst. Procurement Officer	19	23	23	23
Accounting Officer	11	13.41	13.41	13.41
Total	82	100.0	100.0	100.0



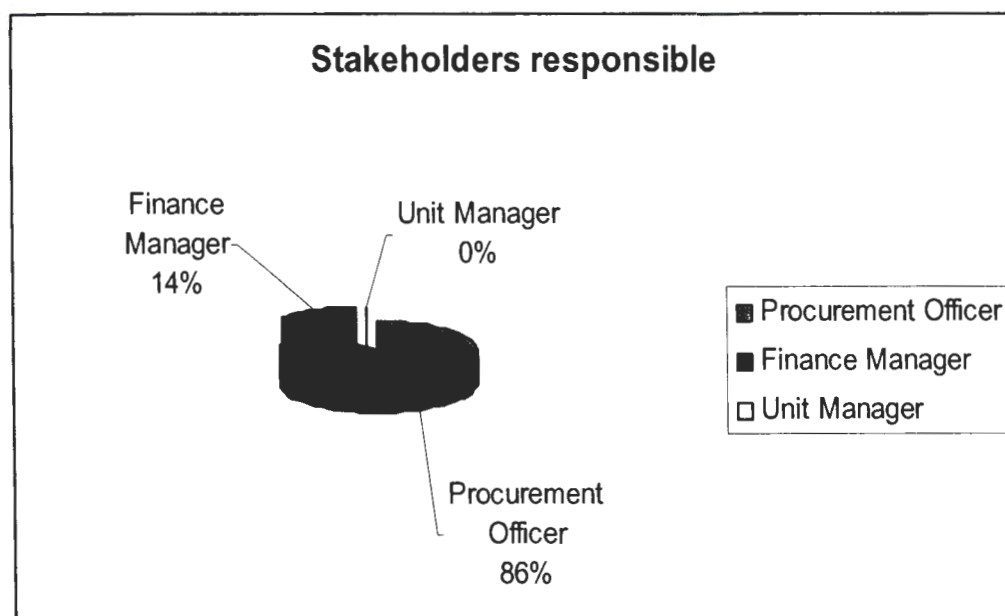
Graph 5.2: Position of the respondents

In accordance with data presented in Table 5.2 and Graph 5.2 above, 33% of the respondents are Procurement Officers, 23% being Assistant Procurement Officers, 18% are Administrative Assistants, 13% are Accounting Officers, while 9% are Administrative Officers and 4% are Purchasing Officers. The statistics indicates the number and positions of officials who are responsible for procurement of IT resources within the Department of Finance.

5.3 Stakeholders responsible for procurement process

Table 5.3: stakeholders responsible for procurement process

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Procurement Officer	71	86	86	86
Finance Manager	11	14	14	14
Unit Manager	0	0	0	0
Total	82	100.0	100.0	100.0



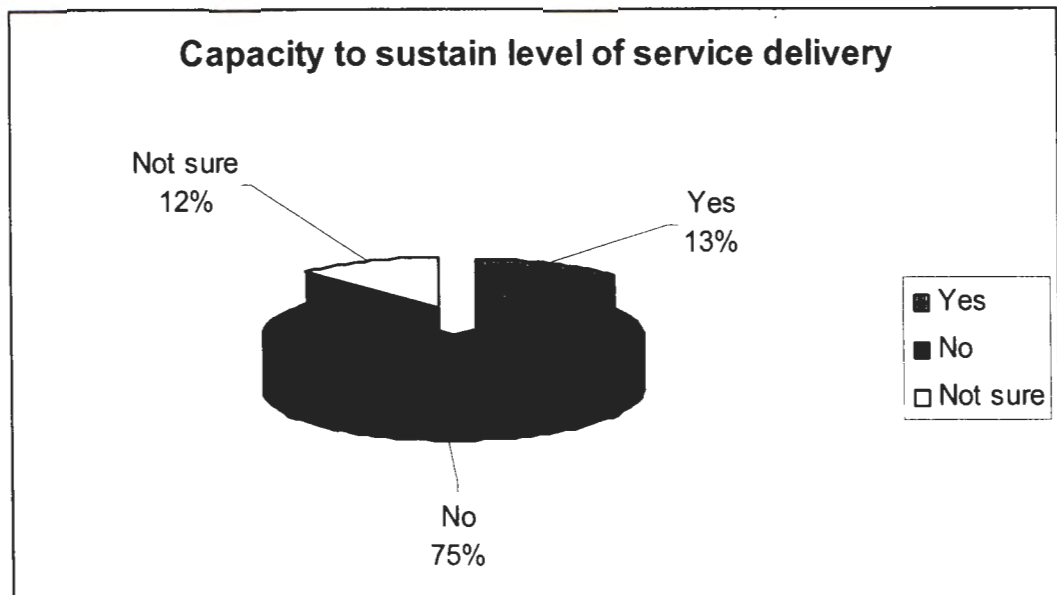
Graph 5.3: stakeholders responsible for procurement process.

In accordance with data presented in Table 5.3 and Graph 5.3 above, 86% of the respondents are procurement officers, while 14% of the respondents are finance managers. The statistics indicates that only officials with authority are responsible for procurement process of all IT resources.

5.4 The Department's capacity to sustain the expected level of service delivery.

Table 5.4: The Department's capacity to sustain the expected level of service delivery

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	11	13.41	13.41	13.41
No	61	74.39	74.39	74.39
Not sure	10	12.19	12.19	12.19
Total	82	100.0	100.0	100.0



Graph 5.4: The Department's capacity to sustain the expected level of service delivery

In accordance with data presented in Table 5.4 and Graph 5.4 above, 75% of the respondents indicated that the Department of Finance does not have the capacity to deliver and sustain the expected service delivery to all Departments that depend on it for procurement of IT resources. While 13% indicate that it has the capacity and 12% are not sure. This indicates that the centralisation of procurement of IT resources in the Finance Department is not a workable idea. It further indicates the need to beef-up the staffing component within the procurement section of the Finance Department, in order to ensure capacity to meet the expected rate and level of service delivery in all Departments.

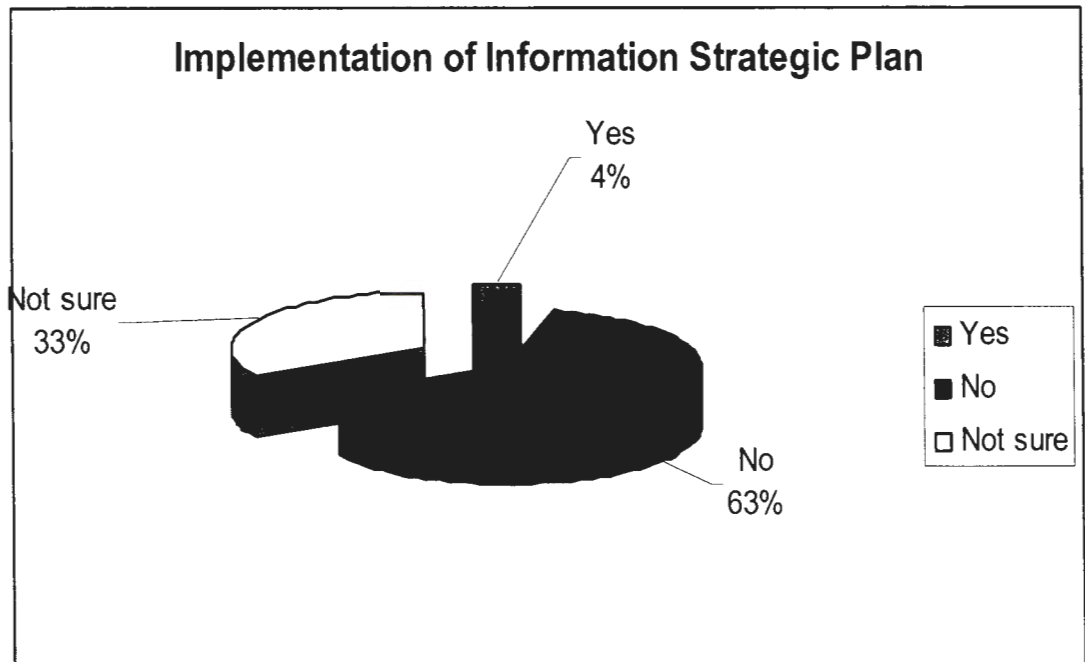
5.5 If no why?

The respondents indicate that the reason why the Department is not able to meet the expected service delivery to all Departments is because of the slow progress in the procurement process which is as a result of lack of staff with skills and knowledge on supply chain and procurement. They further indicated that other problems are lack of clear processes on procurement and the fact that each Department is responsible for its own budget, which makes it difficult for the procurement officers to access funds with ease, and finally they indicated that lack of skills strategies and lack of training on procurement leads to this problem.

5.6 Implementation of strategic information plan

Table 5.5: Implementation of strategic information plan

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	3	4	4	4
No	52	63	63	63
Not sure	27	33	33	33
Total	82	100.0	100.0	100.0



Graph 5.5: Implementation of Information Strategic Plan

In accordance with data presented in Table 5.5 and Graph 5.5 above, 63% of the respondents indicated that the strategic information plan is not being implemented by the Department of Finance, hence the failures to meet the IT requirements and targets. 33% of the respondents are not sure, while 4% of the respondents indicated that the Department did implement the plan.

5.7 If no why?

The respondents indicated that managers do not have the knowledge on the implementation of the strategic information plan. The non-implementation of the plan results in government not being able to meet its targets and ensuring that all Departments are able to meet the required service delivery level.

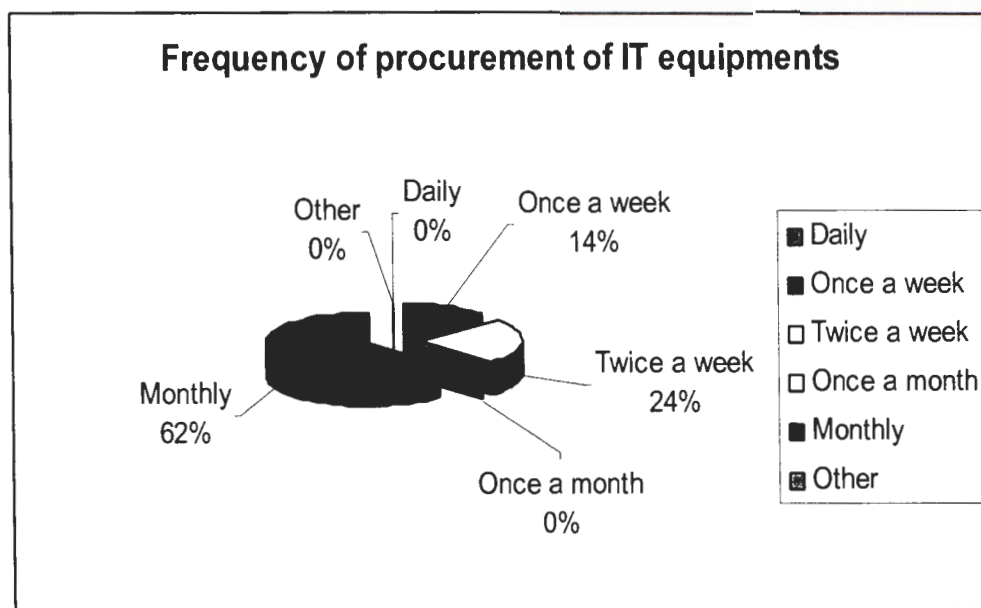
5.8 Functions of central and ancillary services of the IT directorate

The respondents indicated that the central functions of the IT Directorate in the Department of Finance is on maintenance, procurement and support on IT resources.

5.9 Frequency of procurement of IT equipment.

Table 5.6 : frequency of procurement of IT equipments

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Daily	0	0	0	0
Once a week	11	14	14	14
Twice a week	20	24	24	24
Once a month	0	0	0	0
Monthly	50	62	62	62
Other	0	0	0	0
Total	82	100.0	100.0	100.0



Graph 5.6: frequency of procurement of IT equipments

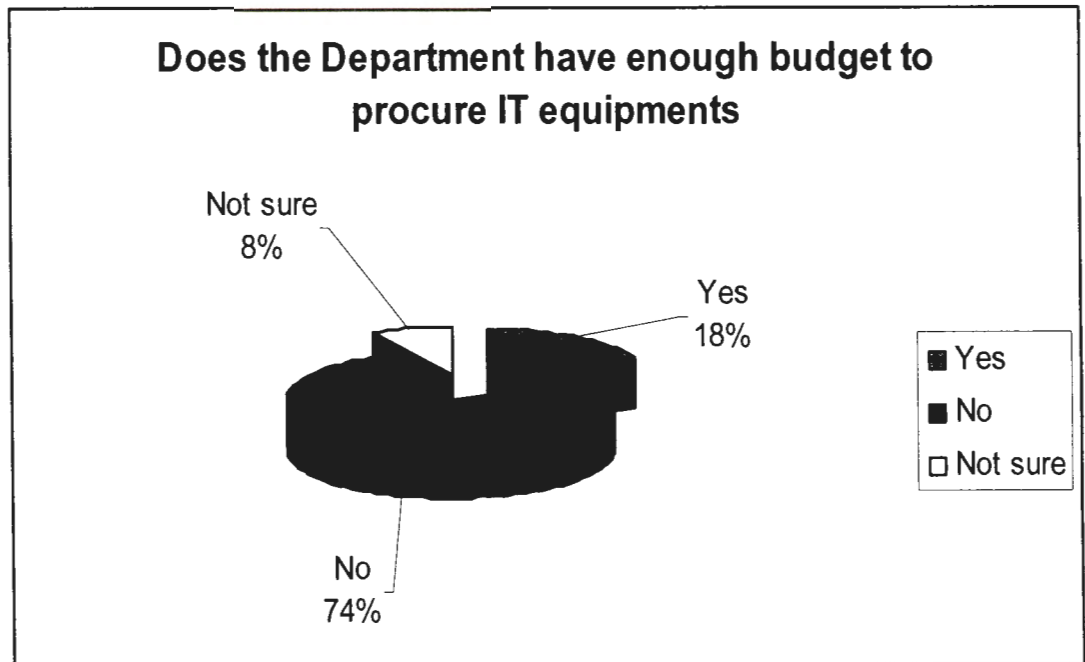
In accordance with data presented in Table 5.6 and Graph 5.6 above, 62% of the respondents indicated that they procure IT resources monthly, while 24% indicated that they procure twice a week and 14% procure once a week. The statistics indicates that the procurement process takes longer.

5.10 Does the Department have enough budget to procure all necessary IT resources?

Table 5.7: Budget for procurement

5.11

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	15	18	18	18
No	60	74	74	74
Not sure	7	8	8	8
Total	82	100.0	100.0	100.0



Graph 5.7 Budget for procurement of IT resources

In accordance with data presented in Table 5.7 and Graph 5.7 above, 74% of the respondents indicated that the Department does not have enough money to procure IT resources for all the Departments since each Department is responsible for its budget. 18% of the respondents indicated that the Department have enough budget, whereas 8% was not sure.

5.12 Processes taken in the procurement of IT resources.

The respondents indicated that the process of procurement of IT resources involves the generation of requisition by admin officers, procurement officers, or accounting clerks. They are then sent through to the senior managers for approval.

5.12 Period taken to complete the procurement process

The respondents indicated that the process of procurement normally takes one week to be completed. But on cases of emergencies, the process could be fast-tracked to two or three days.

5.13 Impacts of possible delays in the procurement process.

The respondents indicated that the impacts of possible delays on the procurement process are:

- Service delivery in all other Department.
- Shortage of information needed.

5.14 Main procurement requirements

The respondents indicated that the main requirement for a successful procurement to take place is,

- Submission of three quotations, and
- Adherence to PFMA requirements

5.15 Standard computer systems which are mostly procured

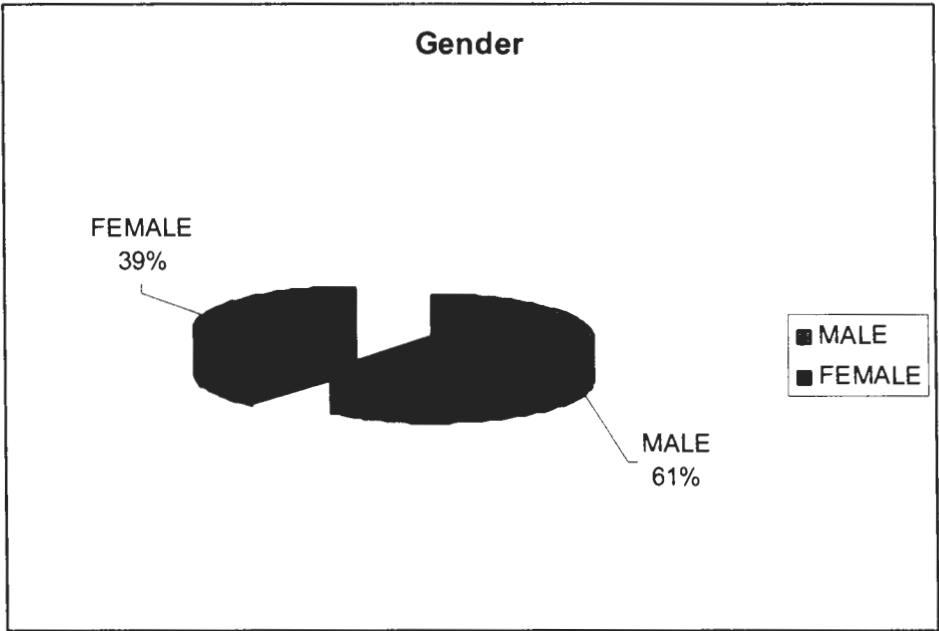
The respondents indicated that the standard computer systems which are mostly procured are generally word processing computers, printers, computer softwares and other related hardwares, computer speakers, and external memories.

Section B: Approving Managers (N=13)

5.16 Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	8	61	61	61
Female	5	39	39	39
Total	82	100.0	100.0	100.0

Table 5.8: Gender



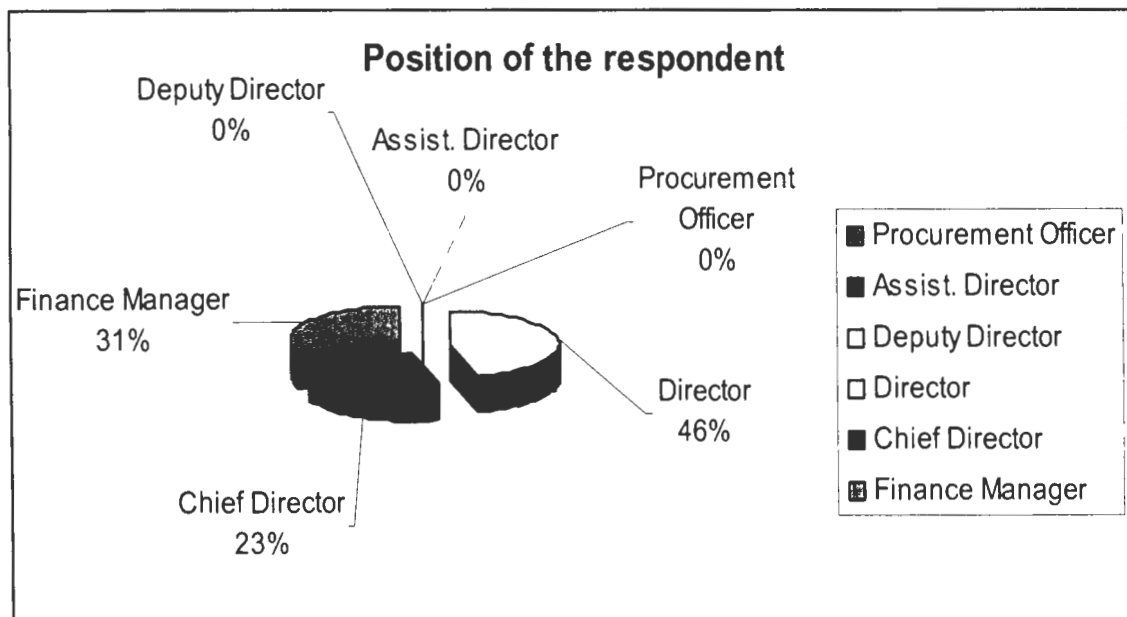
Graph 5.8: Gender

In accordance with data presented in Table 5.8 and Graph 5.8 above, 61% of the respondents are males, while 39% of the respondents are females.

5.17 Position within the Department

Table 5.9: Position of the respondents within the Department

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Procurement Officer	0	0	0	0
Assist. Director	0	0	0	0
Deputy Director	0	0	0	0
Director	6	46	46	46
Chief Director	3	23	23	23
Finance Manager	4	31	31	31
Total	82	100.0	100.0	100.0



Graph 5.9: Position of the respondents in the Department

In accordance with data presented in Table 5.9 and Graph 5.9 above, 46% of the respondents are Directors, 31% are Finance Managers, 23% and are Chief Directors. The statistics indicates the levels of people responsible for approval of procurement within the Department of Finance.

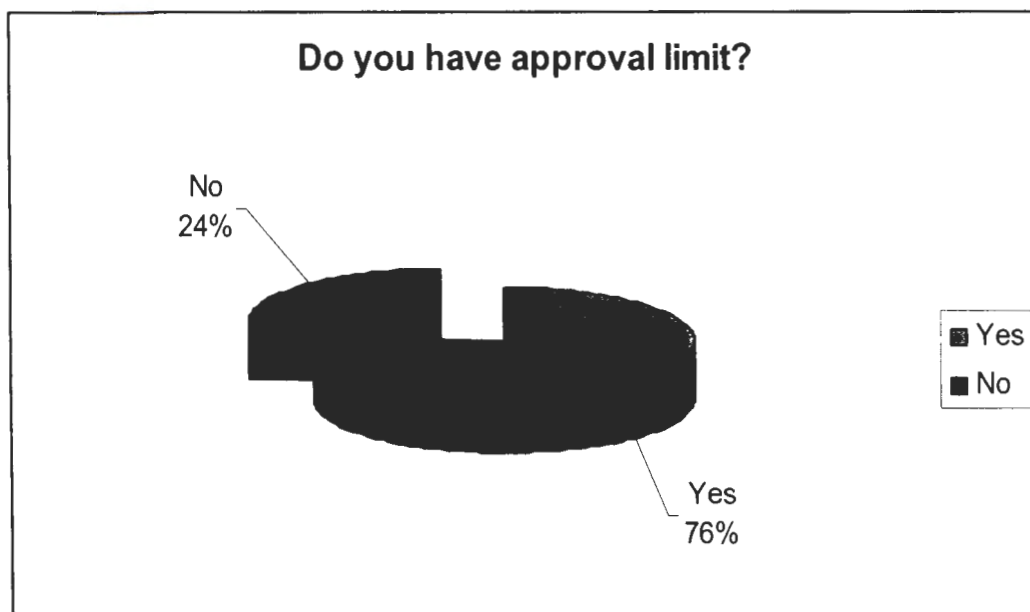
5.18 Frequency of approval of requisitions

The respondents indicated that there are no limitations to approval of requisitions; it is done any time, as long as they are submitted to them for approval.

5.19 Do you have approval limit?

Table 5.10: Approval Limit

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	10	76	76	76
No	3	24	24	24
Total	82	100.0	100.0	100.0



Graph 5.10: Approval Limit.

In accordance with data presented in Table 5.10 and Graph 5.10 above, 76% of the respondents indicated that they have approval limit in the procurement process, while 24% indicated that they do not have approval limit.

5.20 If yes what is the limit?

The respondents indicated that their limits are determined by the procurement policies and the Public Financial Management Act.

5.21 Measures put in place to ensure compliance with the purchasing requirements.

The respondents indicated that the pre-audit section and asset management section verify all requests to purchase assets, and further indicated that verification is further done by the manager before approval.

CHAPTER 6: DISCUSSION, RECOMMENDATIONS AND CONCLUSION

6.1 Introduction

The study investigated the procurement processes within the department of Finance, IT directorate in the North West Province. In chapter 4 the research questions examine and postulates regarding the inefficiencies of procurement of resources were described. In chapter 5 the results of various statistical procedures to investigate these relationships were presented.

In this chapter the findings of the present study are discussed and the results are then used to formulate conclusions for the current study in the context of theoretical and empirical research. Thereafter the study is evaluated in terms of some limitations, and the chapter is concluded with recommendations for further research.

6.2 Discussion of the results

The study attempted to investigate the following question:

- Why is the department of finance through the IT division unable to deliver expected levels of service to other departments in the province?

Based on the information from the research, and a scan of envisaged service delivery improvement plans, it seems as if there is a need to broaden the understanding of what constitutes a service standard. There are many ways in which this may be done, not just in terms of their reflecting processes, outputs and outcomes, but also in terms of their measuring effectiveness, efficiency, service quality, access to services and equity in service provision. In setting service standards, it is important that service delivery also be viewed from the customer's viewpoint and judged from criteria that he or she might use.

6.2.1 Questions on Primary Problems

What is the impact of procurement inefficiencies on service delivery in the IT division within the department of finance?

6.2.2 Questions on Secondary Problems

- Why is the department of finance not able to retain competent IT staff in the province?
- Does the IT division within the department of finance have a disaster recovery and business continuity plan?

6.3 Responses to questions on the Primary Problems

In accordance with data presented in Table 5.3 and Graph 5.3, 86% of the respondents are procurement officers, while 14% of the respondents are finance managers. The statistics indicates that only officials with authority are responsible for procurement process of all IT resources. The indication of the result is that some managers may not necessarily understand the impact of delays in procurement of IT services due to low levels of IT literacy.

In accordance with data presented in Table 5.4 and Graph 5.4, 75% of the respondents indicated that the Department of Finance does not have the capacity to deliver and sustain the expected service delivery to all Departments that depend on it for procurement of IT resources. While 13% indicate that it has the capacity and 12% are not sure. This indicates that the centralisation of procurement of IT resources in the Finance Department is not a workable idea. It further indicates the need to beef-up the staffing component within the procurement section of the Finance Department, in order to ensure capacity to meet the expected rate and level of service delivery in all Departments.

The respondents indicate that the reason why the Department is not able to meet the expected service delivery to all Departments is because of the slow progress in the procurement process which is as a result of lack of staff with skills and knowledge on supply chain and procurement. They

further indicated that other problems are lack of clear processes on procurement and the fact that each Department is responsible for its own budget, which makes it difficult for the procurement officers to access funds with ease, and finally they indicated that lack of skills strategies and lack of training on procurement leads to this problem.

6.4 Responses to questions on the Secondary Problems

Emphasis should be placed on adherence to staff retention policies as well as retention guides as depicted by legislation and corporate governance principles. The problems on staff retention which dealt with remuneration of employees, development and training was addressed in the literature study (page 62). The second problem on secondary problems which addresses lack of disaster recovery and business continuity plan for the department was also addressed extensively in the literature review (page 36)

6.5 Implications

From the above, it is clear that the IT division within finance department In the North West Province needs to revisit their procurement policies with immediate effect and to respond to the demands of departments otherwise the current situation will worsen and departments will seek IT services elsewhere.

Highly skilled IT staff will continue to leave the North West Province resulting in a perpetual shortage of scarce IT skill and dependency on consultants.

6.6 Recommendations

From the findings of the study, the following recommendations are made.

Recommendation 1

- The department of finance in the North West Province has to review their Strategic Information Systems Plan, Master Systems Plan and procurement policies to incorporate current trends in procurement of IT resources.

Recommendation 2

- It is imperative that training for staff in procurement division be implemented as a matter of urgency particularly on e-procurement.

Recommendation 3

- The department should outsource or use SITA for procurement of IT resources. SITA has well defined procurement policies in the form of ITAC for example.

Recommendation 4

- All IT staff including management in the finance IT directorate should be well versed with the ITIL and COBIT frameworks in order to improve service delivery. Training in this area is therefore a requirement.

Recommendation 5

- Implement ITIL and COBIT best practices in the IT environment for better and improved IT governance.

Limitations of the research

The following factor may limit the value of the research:

1. The research was only limited to staff in the IT directorate within the department of finance, North West Province. It may not be generalised to other departments.

Conclusion

The department of finance has traditionally been in the forefront of service delivery regarding Information Technology in the North West Province. Much was achieved in an endeavour to build a solid IT infrastructure for efficiency and effectiveness in delivery of IT services. It is in the same breadth that departments are now at a stage whereby the finance department cannot meet the demands of these departments. The results of this lack of service delivery are eminent and departments are building their own IT capacity. Lack of proper and clear policies, budgets, retention of skilled staff and poor IT governance are the results of this poor service standards from the aforementioned department.

7. BIBLIOGRAPHY

Bailey (1987). Methods of social research. London: Collier Macmillan.

Bothma T., (2000). Differentiating between data and text-mining terminology. South African Journal of Information Management, 6 (4) / Dec, pp 1-14.

Bryman A., (2001). Social research methods. New York: Oxford University Press.

Burt (2003). World Class Supply Management - the key to supply chain management. UK: McGraw Hill.

Claire, B. Higson, C. and Kagee, A. (2006). Fundamentals of social research method: an African perspective. Cape Town: South Africa.

Cronje, J. et al. (2000) Introduction to Business Management Southern Africa – International Thomson publishing (Pty) Ltd, 4th Edition

Curry. W. (1995). Management Strategy for IT. An International perspective.

David, D, Yao, (2002). Supply chain structure- coordination, information and optimization. USA : Kluwer Academic Publisher.

Denzin and Lincoln. (1994). Handbook of qualitative research. California: Thousand Oaks.

Devos A. (2000). Research at grass roots: A premier for the caring professions. New York: Peacock Publishers.

Earl, M, (1993). Experiences in strategic information systems planning. USA: University of Minnesota.

Frenzel. (1999). Management of information technology, USA: Course Technology Inc.

Grinnel (1998). Social Work research and evaluation. Peacock Publishers: New York.

Government Gazette No. 18340 dated 1 October 1997

Hugo, Leenders & Fearon (2004). Supply chain management- Logistics perspective. Pretoria: Van Schaik

<http://www.business-continuity-and-disaster-recovery-world.co.uk/>

<http://www.itiil-itsm-world.com/itiil-3.htm>

<http://www.itiil-itsm-world.com/itiil-4.htm>

<http://www.itiil-itsm-world.com/itiil-5.htm>

<http://www.security-risk-analysis.com/introduction.htm>

2003 C & A Security Risk Analysis Group

Lincoln. (1990). Handbook of qualitative research. Sage Publication: London

Mendenhall, Ott & Scheaffer (2000) Social Science Research. Sage Publication: Carlifonia.

Monette, D.R (1990). Applied social research. Rinchart and Winston Publishers: Holt

Mouton J. and Marais,H. (1992). Basic concepts in the methodology of the social sciences. HSRC: Pretoria

Nichmias (1992). Research methods in Social Sciences. St. Martin Press: London

Simchi-Levi et al (2003). Designing and managing the supply chain: concepts, strategies and case studies. McGraw-Hill: Boston

Taylor and Morris (1987) Scientific social science research. Sage Publication: Los Angels.

Turban, E, (1999). Information technology for management: making for strategic advantage connections. Wiley: New York

www.treasury.gov.za

www.sita.co.za

Willocks, P., Lester, S, (1999). Beyond the IT productivity paradox. England: John Wiley & Sons.

www.cio.arkansas.gov

Wilkinson & McNeil (1996). Basics of qualitative research. California; Thousand Oaks

8. APPENDIXES

RESEARCH QUESTIONNAIRE

This questionnaire is an instrument for collecting data for the research on the analysis of the procurement of IT resources and equipments by the Department of Finance of the North-West Provincial Government. The questionnaire is divided into two sections which require your knowledge of the procurements system, Section A is to be completed by personnel who are responsible for capturing of requisitions in the system, and section B is to be completed by approving managers. In responding to the questionnaire, please mark with a tick (√) or cross (x) the appropriate choice

SECTION A: TO BE COMPLETED BY NON-APPROVING PERSONNEL

1. What is your gender?

Descriptions	
Male	
Female	

2. What is your position in the Department/Unit?

Descriptions	
Procurement Officer	
Administrative Officer	
Administrative Assistant	
Purchasing Officer	
Assistant Procurement Officer	
Accounting Officer	

3. Stakeholders responsible for procurement process

Descriptions	
Procurement Officer	
Unit Manager	
Finance Manager	

4. Is the department able to sustain the expected service delivery to all Departments?

Descriptions	
Yes	
No	
Not sure	

5. If no why? _____

6. Is the strategic information systems plan being implemented by your Department/Unit?

Descriptions	
Yes	
No	
Not sure	

7. If no, why? _____

8. What are the functions of the central and ancillary services of the central IT directorate on the provision of the ICT solutions? _____

9. How often does the Department/Unit procure IT resources?

Descriptions	
Daily	
Once a week	
Twice a week	
Once in two weeks	
Monthly	
Other (Specify)	

10. Does the Department/Unit have enough budget to procure all necessary and required IT resources?

Descriptions	
Yes	
No	
Not sure	

11. What are the processes taken in the procurement of IT related resources? _____

12. How long does it take to complete the above process of procurement of resources? _____

13. What impacts does any possible delays in the procurement process have towards other Departments/Units? _____

14. What are the main procurement requirements? _____

15. What are the standard computer systems/components which are mostly required and procured by Departments/Units? _____

SECTION B: TO BE ANSWERED BY APPROVING MANAGERS

15. What is your gender?

Descriptions	
Male	
Female	

16. Your position within the department/unit.

Descriptions	
Procurement Officer	
Assistant Director	
Deputy Director	
Director	
Chief Director	
Finance Manager	
Other (Specify)	

17. How often do you approve requisitions for purchase of I.T equipments? _____

18. Do you have any approval limit on IT equipments or any requisition?

Descriptions	
Yes	
No	
Not sure	

19. If yes to the above, what is the limit, and what problems do you encounter due to the limitations? _____

20. What measures are put in place to ensure compliance with the purchasing requirements? _____

Thank you for cooperation.