FEASIBILITY OF CHANGING FROM A MANUAL TO AN ELECTRONIC PROCUREMENT SYSTEM AT UTI DOMESTIC

By

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CONFIDENTIALITY CLAUSE

26 JANUARY 2006

TO WHOM IT MAY CONCERN

RE: CONFIDENTIALITY CLAUSE

Due to the strategic importance of this research, it would be appreciated if the contents remain confidential and not be circulated for a period of five years.

Sincerely

VINODEN GOVENDER

DECLARATION

I, Vinoden Govender, declare that this research has not been previously accepted for any degree and is not being currently submitted in candidature for any degree.

Signed: ....

Date: ... 26 / 01 / 2006 ....

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ACKNOWLEDGEMENTS

ABSTRACT

Procurement is the acquisition of goods or services at the best possible total cost of ownership, in the correct quantity, at the correct time, in the correct place for the direct benefit or use of corporations, governments or individuals (Procurement 2005). Electronic procurement is the fulfillment of the procurement function by use of the Internet and new technologies to facilitate a seamless, end-to-end stream of strategic procurement activities enabling improved responsiveness and analysis within the procurement organisation (Wheatley 2003).

The aim of the study was to identify the effectiveness and efficiency of the current procurement processes in place at UTi Domestic and to investigate the feasibility of using Electronic Procurement as a possible mechanism for Business Process Re-Engineering within UTi Domestic, to streamline and add value to the overall procurement function.

This study was undertaken at UTi domestic in Johannesburg. Questionnaires were used to collect data. In total, twenty-eight procurement staff members and six management members completed separate questionnaires. One hundred percent response rate was achieved for both groups. The procurement staff completed a structured questionnaire while management were asked unstructured questions. Data obtained from the questionnaires were analysed using the Statistical Package for the Social Sciences (SPSS).

The findings of the study indicated that the procurement process at UTi Domestic was inefficient and ineffective. The procurement process was in need of redesign. Controversy existed between management and procurement staff over whether e-procurement would be the solution to the procurement problem. The researcher recommended the implementation of an e-procurement solution as a resolution to the procurement problem, based on the value potential of the solution and the ability of the solution to positively satisfy all of the aims of the study. As supported by the literature, e-procurement can make a significant difference to UTi Domestic.

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OVERVIEW OF THE STUD Y

1.1 INTRODUCTION

Over the past decade, technology has had a profound impact on business, facilitating change in processes towards desired increases in output. The Internet is changing the way people in business use computing and communications devices such as PC's, laptops and cell phones. New computing technologies and web services are facilitating faster and simpler integration of computing devices and applications, independent of location or development tools deployed (Lawrence, Newton, Corbitt, Braithwaite & Parker 2002). These developments have aided in the creation of a boundary-less environment, where business is free from the traditional constraints of time and resources.

According to Lawrence et al (2002) the Internet is an 'international network of computer networks' permitting public access to information on a variety of subjects and enabling sending and receiving of messages, all operating within an agreed set of rules and protocols defining the mechanisms for the exchange of the information. Technology is at the core of the Internet, facilitating the mechanisms for transacting. The choice of appropriate technologies ensures that an organisation is able to reach its e-business and strategic goals.

No individual would question the mission critical nature of certain software applications; especially those built using the Internet-based technologies. These technologies have experienced an evolution from simple, static, data-manipulation channels into complex, dynamic, transaction-oriented pillars of corporate commerce (Hartley 2004).

The business environment in today's world is changing rapidly. Managers need to be able to react to these changes in a short space of time and make strategic decisions based on

information on hand. A company's strategy and business model needs to be well matched to the company's present and future environment.

1.2 THE STUDY SETTING

The organisation that this research focuses on is UTi Domestic. The core business of UTi Domestic is logistics and courier and the organisation enjoys representation in all major centres and traverses the boundaries of most towns in South Africa. UTi Domestic is Southern Africa's largest and most respected courier company. Founded in 1981, it has grown into a strong group of companies, specialising in the movement of "Express" freight to and from any address in Southern Africa (Webmaster 2001).

With its humble origins, the organisation is a textbook example of a success story and has seen immense growth over the past twenty years. However, the growth enjoyed in the organisation has not been reciprocated in all sectors. According to Roper (2005) the procurement element of UTi Domestic is one such business critical area where the organisation's intense growth has resulted in the need for increased procurement functions. The corresponding implementation of processes to manage the growth is lacking.

Procurement is the acquisition of goods or services at the best possible total cost of ownership, in the correct quantity, at the correct time, in the correct place for the direct benefit or use of corporations, governments or individuals (Procurement 2005). The key consideration in procurement is sourcing the goods that are required, given a limited budget.

Organisations that strive towards process optimisation need to ensure that they have control mechanisms in place, and adequate reporting facilities for management and business success (Weicher et al 2002). Growth is a necessary and welcome aspect in any organisation, but the researcher believes that problems do arise when organisations experience periods of sustained operational and financial growth without the requisite growth in the supporting services. Procurement is a key link in the organisation's value chain and is an important component of an organisation's operations, existing as a

supporting function but having significant impact on the organisation's financial bottom line (Pycraft et al 2001).

Organisations evolve and grow depending on the demands of the markets within which they operate. Organisations need to capitalise on possible synergies between the various operating entities internally, driving towards reductions in input costs and resulting in increased profitability (Lynch 2000).

The researcher believes that many organisations do not place enough importance on the procurement function and thereby lose the benefits that can be achieved by properly defined procurement processes. An organisation's treatment of its procurement policies can have a significant impact on profitability. A good procurement policy will assist in ensuring informed decision-making that will ultimately impact positively on the organisation's buying processes. In larger organisations, a well-structured procurement policy ensures that the organisation leverages its buying power ensuring value at an acceptable price.

This study was conducted in the procurement departments (nationally) of all major branches that form part of UTi Domestic. The study also involved the senior head-office management that have direct control over the procurement policies that exist within UTi Domestic.

The researcher adopted a qualitative research methodology to conduct the study. A qualitative research approach can be conceptualized as a focus on words and feelings that capture the quality of an event or experience (Cooper & Schindler 2003). Qualitative research is a mixture of the rational, explorative and intuitive where the skills of the researcher play an important role in the analysis of the data (Cooper & Schindler 2003).

Different methods for the collection of primary data such as surveys, experiments, or observations are available for research purposes (Diamantopoulos & Schlegelmilch 1997:5). The most appropriate method to be used is largely determined by the type of data required for the study. It was decided that for this study, it was most appropriate to

use the questionnaire method. De Vos (2001:89) states that a questionnaire is an instrument with open or closed questions or statements to which a respondent must react.

The researcher approached UTi Domestic's information technology department, the finance department and the department of strategy and special projects in January 2005 and requested permission to conduct the study. Permission was granted by the IT Director, the General Manager for Finance, and by the General Manager for Strategy and Special Projects to conduct this study within UTi Domestic.

Undertaking business research is helpful in determining whether the strategy of the company is focused in the correct direction. The outcomes of a research study should be intrinsically linked to the corporate strategy of the firm. Management needs to be able to use the information in a way that will add value to the organisation.

1.3 RATIONALE FOR THE STUDY

Over the past decades, UTI Domestic has developed into a formidable force within the Courier and Logistics industry. Positive financial, operational and technological growth is clearly visible. However, not all sectors of the organisation have experienced such positive growth. The growth of the organisation has created a vacuum in certain areas with the dire need for re-dress. The need for attention is clear, relative to the procurement function. Throughout all of the specialised business units (SBU) that make up UTi Domestic, evidence exists of manual procurement processes that lack adequate control mechanisms.

The growth of the organisation has been coupled with a need for increased procurement. However, the use of manual procurement processes has made the management aspect a difficult one with reduced control and inadequate access to reporting facilities.

An interview with Roper (2005) reveals that currently, UTi Domestic is characterised by a decentralised purchasing structure, with distributed departmental purchasing activities. This negates the possible benefits of group purchasing discounts.

Figure 1.1 below illustrates the decentralised purchasing structure with distributed departmental purchasing activities at UTi Domestic.
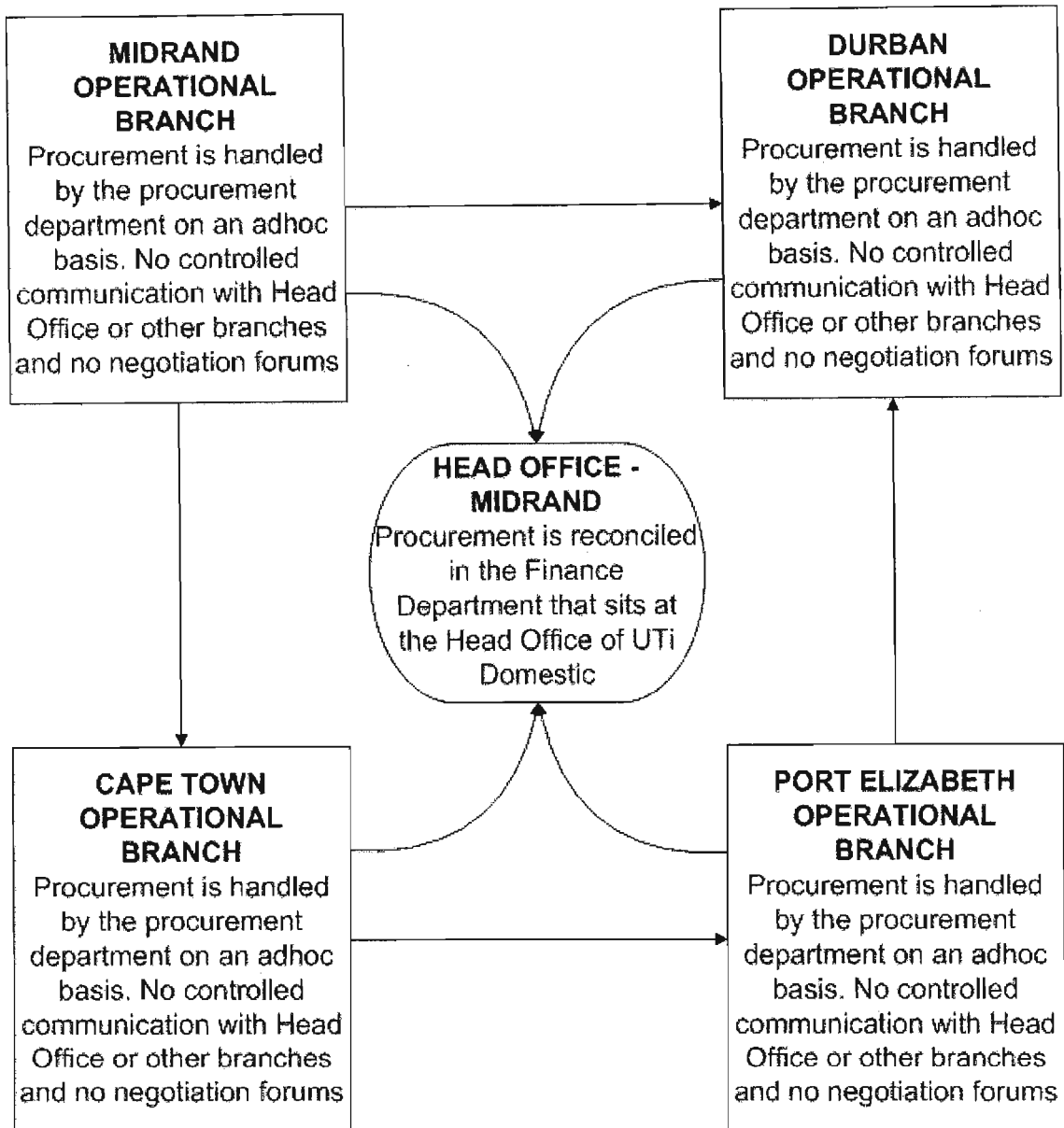
Figure 1.1 – Decentralised and distributed functions at UTi Domestic

The procurement processes at UTi Domestic are manual with minimal control mechanisms and no detailed reporting for effective management. Roper (2005) indicates that UTi Domestic displays multiple layers of approval procedures that often slow down the procurement process without adding any value.

Few Service Level Agreements (SLAs) exist and those that are in place are not effectively and efficiently managed. The organisation has a formidable spend when the individual Specialised Business Unit (SBU) procurement requirements are combined. The organisation is by no means leveraging this power to its financial advantage.

The researcher further believes that the company operates without set processes resulting in duplication, errors and delays of functions by all departments. The company is internally focused rather than being focused on the customer, resulting in silos operating in isolation and duplication of functions between departments. Operating in isolation and the inter-departmental duplication of functions is expensive, does not add value to clients and reduces profits.

It is possible that buying and managing supplies, such as office stationery, can be streamlined by e-procurement. E-procurement enables organisations, irrespective of the constraints of size, to automate their purchasing processes and to reduce their processing by more than 85% (eProcurement 2004). The adoption of an e-procurement solution could save time, money and labour wasted on manual activities.

There is a clear need for the implementation of procurement processes at UTi Domestic to deal with the gaps at hand. In the quarterly report on Technology in Supply Management 2004, jointly issued by the Institute for Supply Management (ISM) and Forrester Research, it was found that procurement executives were finally seeing the much marketed and anticipated cost decreases from their e-Procurement initiatives. At the end of 2003, it was found that cost decreases in the procurement function had reached 35% - the largest in the history of ISM/Forrester research. (Hartley 2004:78)

The implementation of an e-procurement system holds promise of increases in supply chain efficiencies, reduction in costs, centralised supplier information, efficient payment of invoices and various financial opportunities for client and supplier alike (Hartley 2004). E-Procurement solutions have broad appeal because they span across market-sectors and industries. A common denominator in all organisations is the need to perform some form of purchasing function. Organisations that have implemented e-procurement systems have been enjoying significant savings (eProcurement 2004).

The research will attempt to discover whether UTi Domestic could benefit from re-defining procurement processes, and from the use of Internet technologies (e-procurement) to streamline and manage its procurement processes. If the outcome of the research emerges positive (i.e. that the research finding is that e-procurement can add quantifiable value to the organisation), then the organisation would have a possible solution to the procurement problem.

1.4 SAMPLING DESIGN

For this study, a cross-sectional study design was chosen. Cooper and Schindler (2003:136) categorise the cross sectional option as a time dimension study. Cross sectional studies are carried out once and represent a snapshot of a particular point in time (Cooper & Schindler 2003:149). A cross sectional study is a study, which involves a sample of the population being selected.

This study was conducted in the various procurement departments within UTi Domestic and the procurement staff where requested to complete a questionnaire. The sample included all procurement staff members within all the various business units and branches of UTi Domestic. The study was extended to include management members at UTi Domestic who where directly involved in the definition of the procurement processes. Management was requested to complete a separate questionnaire from the one administered to the direct procurement staff.

A response rate of one hundred percent was achieved on both questionnaires. The sample size was appropriate as all staff members and management directly involved in procurement, were chosen for this study. Welman and Kruger (1999:66) regard a response rate of thirty three percent as being representative of the population. Hence, the response rate that was received in this study was considered excellent and was regarded as being representative of the population.

1.5 DATA COLLECTION INSTRUMENT

Questionnaires were used as the primary medium for data collection in this study. A questionnaire is a document comprising a set of questions, and is sent, and or administered to a large number of respondents with a view to obtaining their input and opinions on the subject of the study (Cooper & Schindler 2003:149). Researchers can use either structured or unstructured questionnaires.

A structured questionnaire provides different options to each question, and the respondent is simply required to select and mark the applicable answer (Babie 1998:257). Unstructured questionnaires require the respondents to answer the questions in their own words; hence, far more cooperation is required on the part of the respondents.

In this study, the most important reasons why the structured procurement staff questionnaire and unstructured management questionnaire was used as the method of choice for collecting primary data, included the following:

- The method allowed ease of administration especially in light of the dispersed nature of the respondents (procurement staff) within the UTi Domestic arena.

- All of the respondents were literate in English and were capable of completing the questionnaires individually without assistance.

- It was a relatively cheap method for the researcher.

1.6 AIM OF THE STUDY

The aim of the study was to identify the effectiveness and efficiency of the current procurement processes in place at UTi Domestic and to investigate the feasibility of using Electronic Procurement (e-procurement) as a possible mechanism for Business Process Re-Engineering within UTi Domestic to streamline and add value to the overall procurement processes.

1.7 OBJECTIVES OF THE STUDY

The following objectives will be addressed. This study will:

- Determine whether current procurement processes are adding value to UTi Domestic.

- Determine whether procurement staff at UTi Domestic, have timeous access to information.

- Determine whether procurement staff at UTi Domestic, are ready for the implementation of an e-procurement solution.

- Determine whether management at UTi Domestic believes there is a need for the implementation of an e-procurement solution.

- Determine whether management at UTi Domestic is willing to make the financial investment to make the implementation of e-procurement a success.

- Determine the impact of Electronic Procurement on:

  - profitability,

  - management of the procurement process.

1.8 LIMITATIONS OF THE STUDY

E-procurement is a relatively new concept. A survey of the literature has revealed the lack of information relevant to e-procurement in South Africa. This has required an adaptation of the research to allow, where possible, the secondary data to be generalised to the South African context.

The research also required an analysis of the organisational strategy. It is also possible that information may have been withheld for fear of possible job loss.

The research has focused on the Courier/Logistics industry since a definite gap has been identified here. Thus, the research will exclude all other industries and the findings will be generalised to the Courier/Logistics industry.

With respect to the Internet research, even the most trusted resource is the work of many people who have different ideas regarding what an article is about and how to describe it. Authors could make typographical errors. These inconsistencies and mistakes can compromise an inquiry, so it's important to ask whether the results of a search are accurate and complete.

Time is an important limitation, as the problem that existed in the organisation was a real one and the solution needed to be one, which if implemented, would have immediate impact.

Finance was another limitation, and the research would need to consider the financial impact in contrast to the quantified saving. Even if the cost saving was reasonable, if the implementation costs were too high, this could have an impact on the capital and result in the recommendations being refused.

1.9 STRUCTURE OF THE DISSERTATION

Chapter one provided an introduction to the study setting by providing details about the organisation that is at the core of the research. The rationale for the study was provided and this highlighted the procurement related problems that existed at UTi Domestic. The sampling design was introduced and the data collection instrument was explained. Chapter one ended with an introduction to the objectives of the study and the limitations of the study.

Chapter two provided a review of the literature, as it existed relative to procurement. The focus of the chapter involved an overview of the objectives of business and the key success factors necessary for the accomplishment of the business goals. This was followed by an in-depth review of the literature pertinent to procurement and electronic procurement. Business Process Re-engineering was anlaysed in detail with a view of

determining the possibility of using Business Process Re-engineering as an electronic procurement implementation tool.

Chapter three detailed the research methodology, beginning with an introduction to the need for business research and the essence of good research. The study design and the sampling design were considered in depth and this was followed by an articulation of the questionnaire method for the collection of data. The questionnaire method for data collection was then explained in detail exposing the properties of a 'good' questionnaire.

Chapter four presented the findings of the research as derived from the questionnaires. Chapter five provided a detailed discussion of the results with an aim of highlighting possible trends within the research organisation.

Chapter six concluded the research with recommendations and conclusions. This chapter linked the findings of the research to the aims and objectives of the research with an attempt to provide meaningful recommendations to the organisation.

1.10 CONCLUSION

This research identifies a real problem that exists within UTi Domestic relating to the procurement function, and seeks to evaluate whether the implementation of an electronic procurement system, through the use of new Internet technologies and the Business Process Reengineering approach, is a viable solution to the current procurement problems.

CHAPTER TWO

INTRODUCTION TO ELECTRONIC PROCUREMENT

2.1 INTRODUCTION

Organisations are increasingly faced with the need to continually assess competitor movements and gain greater insight into customer needs. This places a greater emphasis on ensuring that the basis for business decision-making has a stronger information focus. Thus the role of research - business research in particular – has never been as imperative as it has become in the new rapidly changing business environment. Organisations need to engage in research to ensure that their business decisions are informed and that their offerings meet the demands of the markets in which they operate. The research process attempts to systematically gather information, that in most circumstances, holds the potential to provide a solution to an identified problem or that can assist in the decision making process.

This chapter will introduce the objectives of business and the forces that drive business towards success in a competitive global market. This will be followed by an analysis of the key success factors relative to business with a focus on Porter's Value Chain and the impact of the Value Chain on business. Procurement is the core subject of the research and an examination of procurement and its place within business will follow. Special attention will be given to the importance of the procurement function within an organisation and the problems that organisations face relative to procurement.

Business Process Re-Engineering (BPR) is a business concept that can assist organisations in improving processes that are not optimised and efficient. BPR will be analysed in detail from the point of view of the value add potential.

Finally, this chapter will conclude with a detailed analysis of Electronic Procurement and the possibility of using BPR as a tool to achieve UTi Domestic's strategic objectives.

2.2 OBJECTIVES OF BUSINESS

The following quotation aptly describes the power that the modern organisation wields.

"Business has become, in the last half century, the most powerful institution on the planet. The dominant institution in any society needs to take responsibility for the whole.... Every decision that is made, every action that is taken, must be viewed in light of that kind of responsibility" (Korten 1996).

It is true that business has become the most powerful institution on the planet. Consider the following important statistics. The world's 500 largest industrial corporations, which employed only 0.05 of 1 percent of the world's population, controlled 25 percent of the world's economic output. The top 300 trans-nationals, excluding financial institutions, owned approximately 25 percent of the world's productive assets (Korten 1996). This clearly illustrates the magnitude of business and its impact on our lives.

In light of this profound impact of business, the researcher will attempt to provide an analysis of the objectives of business by providing insight into the factors that drive business.

2.2.1 Profit

"The basic incentive for producing goods and services is the expectation of profit" (Schiller 2000:452). The ownership of plant and equipment is in itself not enough. To generate a current flow of income, a business must use the plant and equipment to produce and sell goods.

The definition of profit is the difference between revenue and cost. The profit that a business generates is the difference between the revenue it earns from selling its products and the cost of producing the products (Mohr & Fourie1997: 307). Profit is the residual income that the owners of a business receive.

In 1970, Milton Friedman wrote:

"there is one and only one social responsibility of business - to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception and fraud" (Rethinking the Social Responsibility of Business 2005). This is the orthodox view amongst free market economists that the only social responsibility a law-abiding business has is to maximise profits for shareholder.

Peter Drucker provides the following:

"Business management must always, in every decision and action, put economic performance first" (Philosophy of Business – What is the Purpose of Business? 2005).

From an investor's perspective, the purpose of business is to maximise profits. The motive for profit encourages organisations to produce goods and services that consumer's desire, at prices that consumers are willing to pay (Schiller 2000: 453). However, profit maximisation is not necessarily the sole business purpose in respect of other stakeholders, including customers, employees, suppliers and the community in which the organisation operates. Each of these groups will define the purpose of the business in terms of its own needs and desires, and each perspective is valid and legitimate.

Profit is the driving force behind business, facilitating expansion and growth commensurate to the overall strategy of the business. If the profit potential did not exist, very few people would engage in the supply of goods and services (Schiller 2000: 453). No business can sustain itself or grow without a strong base of profits. The researcher believes that every business should incorporate profitability as a core pillar of its strategy and ensure that the organisation strives towards continuous and sustained profitability.

2.2.2 Customer Services

Peter Drucker considers business to exist to supply goods and services to customers (Philosophy of Business – What is the Purpose of Business? 2005). Businesses exist to

serve the needs of the customer, since without customers the business will cease to exist. The most successful businesses put the customers first, ahead of investors (Rethinking the Social Responsibility of Business 2005). In the profit-centered business, the focus is on profit maximisation. In the customer-centered business, customer happiness is the focus and customer satisfaction is pursued with greater interest and passion.

Businesses must ensure that they are customer focused and that their customer interaction is as inexpensive and effortless as possible (Hammer 2002: 16). Organisations need to design their business around customer needs (Hammer 2002: 56).

In the absence of a focus on process, an organisation cannot consistently deliver the performance levels that customers require and now demand (Hammer 2002: 57). Instead, the organisation will be overwhelmed with overheads, beset by delays, and plagued by error. This will ultimately lead to the organisation operating unpredictably and inconsistently. Efficient and effective processes are the route to improved results and so to success in the future.

Unfortunately, work that does not create value for customers adds to the cost to the overall running of an organisation. Any department or activity that does not deliver value to the customer is a waste of company profits. In addition, internal inefficiencies and duplications of functions consume profits, resulting in the organisation's non-competitiveness in the new global market.

Customer defections are also another problem that plagues organisations. Customer defections have a surprisingly powerful impact on the organisation's bottom line (Reichheld & Sasser 1990: 2). Customer defections can have more to do with an organisation's profits than many other factors usually associated with competitive advantage. As a customer's relationship with the company lengthens, profits rise. Organisations can boost profits by almost 100 % by retaining just 5 % more of their customers (Reichheld & Sasser 1990).

While defection rates are an accurate leading indicator of profit swings, they do more than passively indicate where profits are headed. They also direct management's attention

to the specific factors that are causing customers to leave. Since organisations do not hold customers captive, the only way they can prevent defections is to outperform their competition continually. By soliciting feedback from defecting customers, organisations can identify the weaknesses in their policies and processes that really matter and strengthen them before profits start to dwindle (Reichheld & Sasser 1990: 2). Defection analysis is therefore a guide that helps organisations manage continuous improvement.

In today's highly competitive environment, continuous improvement is necessary to maintain the customers (business) that the organisation holds (Chaneski 2003: 2). How do organisations know whether they are getting better? Organisations need to know how effective their entire process is, and the best way to understand this is by knowing the First Pass Yield rate, or what percentage of the process is completed without any problems (Chaneski 2003: 3).

Customers are the source of revenue to a business and ultimately the reason for profits and the reason for the existence of the organisation. Focus on customer satisfaction and servicing the needs of customers are core considerations of any business that is serious about profits.

2.2.3 Social Responsibility

Thirty-five years ago, Milton Friedman wrote a famous article for the New York Times Magazine with the title of the article being " The Social Responsibility of Business Is to Increase Its Profits" (Rethinking the Social Responsibility of Business 2005). Friedman had no patience for those that claimed that

> "Business is not concerned merely with profit but also with promoting desirable social ends; that business has a social conscience and takes seriously its responsibilities for providing employment, eliminating discrimination and avoiding pollution" (Rethinking the Social Responsibility of Business 2005).

The schools of thought seem clearly split between those that consider profit to be the sole driving force behind the existence of business and the school that considers the social aspects of business responsibility.

Recognising that strong social, environmental and safety performance goes hand-in-hand with financial success, allows an organisation to integrate social responsibility into business decisions (Social Responsibility 2001). The fact that modern organisations possess significant power is clear, and this calls for corporate executives to use that power responsibly in the public interest (Korten 1996). An important question to ask is: "Is it possible to manage a modern corporation responsibly in the larger public's interest and survive?" If we are to consider this, then we need to create a system of business that rewards those organisations that are responsible in the broader eyes of the community.

According to David Hess, assistant professor of business law at the University of Michigan's Ross School of Business, in surveys carried out, 60 to 70 percent of people report that they would spend more money for a product made with a concern for Human Rights (Taylor 2005). This clearly illustrates the importance that society places on the social responsibility of businesses and organisations need to align accordingly to comply with the social demands that society expects.

Bad publicity can hit any organisation very hard, shattering market confidence and causing outrage from the public. This is a sensitive climate in which corporations are feeling their way over the issue of corporate and social responsibility. In the last century, corporations could get away with a few paragraphs in their annual reports paying lip service to social issues. The view in the past was that corporate values and community projects didn't sell products and didn't increase profits (Dixon 2002). This has changed and currently, corporate social responsibility is a requisite for corporate survival.

2.2.4 Employment

In the globally changing environment, it is essential for every organisation to form a strategic plan that enables the organisation to attract, acquire and retain the right people who will be instrumental in leading the organisation into future success. People are now

being recognised as the organisations true source of competitive advantage and this has resulted in the monumental change in the human resource function. The contemporary approach to dealing with the human resource is to recognise the potential of the human resource as a source of competitive advantage.

The modern media portrays the purpose of a business to be the provision of employment to people (Philosophy of Business – What is the Purpose of Business 2005). If an organisation hires a lot of people, the media provides positive publicity. If an organisation terminates employment of many people (even if this is a good business decision), the media portrays negativity (Philosophy of Business – What is the Purpose of Business 2005).

In the past, a decline in economic growth in South Africa had contributed to an increase in unemployment. Unemployment is arguably the most important and vexing problem facing the South African economy (Mohr & Fourie 1997:128). Unemployment poses a serious threat to social and political stability (Mohr & Fourie 1997:128). When unemployment increases, crime and social unrest also tends to increase.

Unemployment has increased in many countries over the recent years. In industrialised countries people are frequently replaced by machines; resulting in an increase in production, without a corresponding increase in employment (Mohr & Fourie 1997:128). The immediate impact of unemployment on individuals is the loss of income associated with employment, and this could result in a financial disaster for the person involved. In view of the economic and social losses associated with unemployment, it is not surprising that full employment is a macroeconomic goal (Schiller 2000:112).

Government has a responsibility to create an environment that encourages businesses to employ people, and this should be a fundamental aspect of government's macro-economic policy. Once employment levels are high, there is a positive effect on crime and this leads to an environment and economy conducive to growth.

2.2.5 Summary

The above analysis clearly indicates that the fundamental drivers for business exist in the earning of profits and the creation of a better world, not just for shareholders, but also for customers, consumers, employees and communities.

2.3 KEY SUCCESS FACTORS

Key success factors are those resources, skills and attributes of the organisation that are essential for the delivery of success in the organisation's specific market (Lynch 2000:123). Success is often linked to profitability, but may in some instances take on a broader meaning. The importance of the key success factors, vary from one industry to another. It is therefore important to identify the key success factors specific to an industry.

2.3.1 Key Factors for Success in an Industry

Key success factors concern not only the resources of an organisation but also the competitive environment in which the organisations operate. There are three principle areas that require analysis (Lynch 2000:254):

- **Customers:** Identify the customer and analyse the needs of the customer. Issues such as price, service, product, quality and branding need to be considered in the context of the customer.

- **Competition:** Identify competitors and analyse the main factors that influence competition in the market place. Analyse the intensity of the competition and examine what resources competitors have that are potentially lacking within the organisation in question. Issues to be considered here include cost comparisons, price comparisons, quality issues, market dominance, service and distributors.

- **Corporation:** Identify the resources and compare these with the resources that competitors have. Investigate what offerings competitors are delivering to their customers. Analyse where the majority of the organisation's costs are

concentrated. Issues to consider here include lost cost operations, economies of scale, labor costs, production output levels, quality operations, innovative ability, labor relations, technologies and skills.

2.3.2 The Value Chain

Every organisation consists of activities that link together to develop the value of the business. This includes the purchasing of supplies, manufacturing, distribution and marketing of goods and services. These activities, taken together form the value chain of the organisation (Lynch 2000:266).

The value chain links the value of the activities of an organisation with its important functional parts. The value chain then attempts to make an assessment of the contribution that each part makes to the overall added value of the business (Lynch 2000).

The value chain is an important contributor to the overall success of an organisation. Michael Porter (Lynch 2000:266) linked the added value that each part of the organisation contributes to the whole organisation with the contribution to the competitive advantage of the whole organisation that each of the parts might make.

Porter splits the activities of the company into primary activities (such as production) and support activities that gives the necessary background to the running of the company.
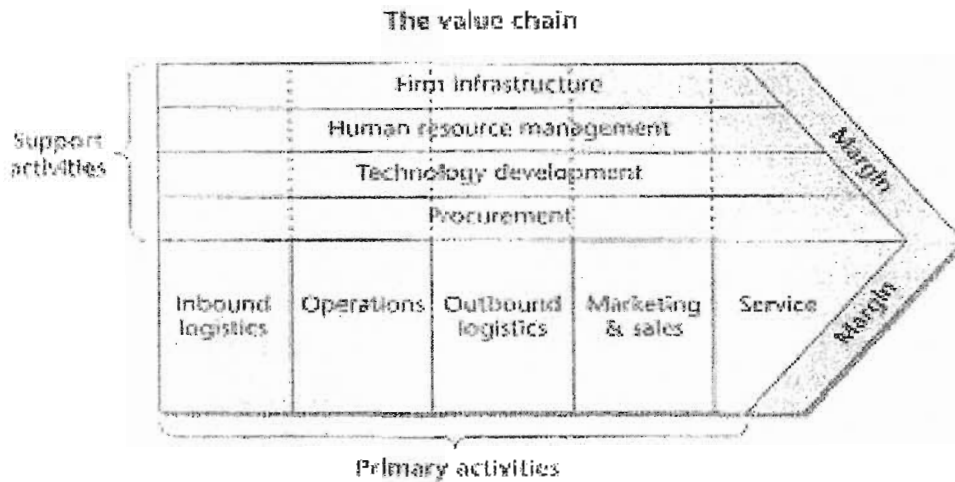
The value chain

Figure 2.1 The Value Chain

(Adapted from Lynch. 2000. Corporate Strategy. 2nd ed. England: Pearson Education Limited. p. 267)

According to Porter (Lynch 2000), the primary activities are:

- Inbound logistics

- Operations

- Outbound logistics

- Marketing and sales

- Service

Each of the above categories will add value to the organisation in its own way.

The support activities include:

- Procurement

- Technology development

- Human resources management

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- Infrastructure

These support activities add value to the organisation, just as the primary activities do, but in a way that is more difficult to link with one particular part of the organisation (Lynch 2000).

The value chain analysis reveals that procurement is a support function to an organisation, and that the procurement function plays a pivotal role in the success of the organisation. Procurement has the potential to make a significant positive impact on an organisation, provided that the organisation's treatment of its procurement policies comply with industry wide best practices. An analysis of procurement will follow.

2.4 PROCUREMENT

2.4.1 What is Procurement?

Procurement is the acquisition of goods or services at the best possible total cost of ownership, in the correct quantity, at the correct time, in the correct place for the direct benefit or use of corporations, governments or individuals (Procurement 2005). The key consideration in procurement is sourcing the goods that you require, given a limited budget.

Organisations that strive towards optimisation in the procurements process need to ensure that they have control mechanisms in place, and adequate reporting facilities for management and business success. Procurement is an important function of any business involving the sourcing of goods for the organisation's successful operation.

The procurement function has been around for centuries but the processes associated with procurement have recently been seeing dramatic changes (eProcurement 2004). With the recent hype surrounding e-Procurement, enterprises have learnt a lot more about the shortcomings in their procurement processes and have seen advantages in automating them (eProcurement 2004).

2.4.2 Procurement Process

The researcher considers the starting point to a successful procurement process to be in the design, documentation and implementation of an effective procurement policy. This entails ensuring that all procurement aspects are considered and included in the procurement policy.

Data is at the center of procurement. If good data is available, the organisation can make use of economic analysis methods such as cost-benefit analysis or cost-utility analysis for procurement decision-making (Procurement 2005).

Procurement is a standard business process and involves securing materials and equipment necessary for the production of the company's goods or services (Process Management 2005). The more the level of investment made into the procurement process, the greater the potential return on investment. To ensure the continuous and successful development and improvement of the procurements process, an organisation needs to consider the following important key issues (Process Management 2005):

- Targets should be clear and measurable.

- Strong commitment from management and personnel is essential.

- Personnel are a valuable source of information. Involving personnel in the process increases the commitment and ensuring the acceptance of proposed changes.

- Communication helps create involvement, commitment and target setting.

Best practices in procurement vary according to the type of item procured, the monetary value of the item and the item's strategic importance to the organisation. Increasingly, organisations are pushing the purchasing of non-strategic items to the end users and optimising the expertise of the procurement function for the more critical items (Optimum Purchasing 2003).

The following have been identified as best practice processes (Optimum Purchasing 2003):

- Integrating procurements across the entire company in line with the overall company strategy.

- Choosing between a centralised/decentralised procurement structures based on overall company strategy.

- Minimising the procurement department's involvement in routine, non-strategic procurement exercises.

- Integrating the procurement process to eliminate waste and to save time.

- Developing procurement professionals into knowledge specialists.

Organisations realise substantive benefits by reducing costs of external non-productive spend using strategic sourcing. Organisations need to identify not only the savings potential that comes with streamlined and strategic procurement processes, but also to ensure that other areas are addressed adequately to ensure sustainability of benefits. These aspects include the procurement organisation, the strategic sourcing process, supplier management and development, day-to-day procurement, performance management, information management and skills and capabilities of procurement staff (Process Management 2005).

2.4.3 Responsibility for Procurement

The overall responsibility for procurement traditionally resides with the procurement manager and his procurement team. However, the Internet and electronic transacting are influencing procurement, and organisations are starting to see a migration of procurement to varying levels within the organisation (Optimum Purchasing 2003). As mentioned, organisations are pushing the purchasing of non-strategic items to the end users and optimising the expertise of the procurement function for the more critical items (Optimum Purchasing 2003).

From a buyer's perspective, the procurement process begins with the identification of certain needs, and proceeds through sourcing and purchasing to the use, maintenance and

ultimate disposal of the product, service or information purchased. The seller's process begins with some arrangement to provide a product, service or information and proceeds through marketing and sales to customer support. Information is exchanged at several points along the process flow, as are money and goods.

2.4.4 Importance of the Procurement Function

An organisation's treatment of its procurement policies can have a significant impact on its overall profitability. A good procurement policy will assist in ensuring informed decision making that will ultimately impact positively on the organisation's buying processes. In larger organisations, a well-structured procurement policy ensures that the organisation leverages its buying power ensuring value at an acceptable price.

Because purchased goods and services consume a large proportion of a company's revenue (approximately 30 percent of revenue for service companies and as much as 70 percent for manufacturers), an effective procurement process directly benefits the company (Optimum Purchasing 2003).

Of fundamental importance to the entire sourcing process is the measurement of benefits. The organisation needs to ensure that time is spent on the development of baseline concepts for each of the sourcing groups. Establishing a baseline enables the measurement of savings achieved as a result of strategic sourcing. The baseline represents a stake in the ground that can be used to evaluate fluctuations in price over time.

Savings measurement and tracking of processes are essential to the maximisation of the sourcing benefits and the sustainability of the savings. The organisation would need to establish a standard against which the procurement benefits can be measured. The establishment of the baseline is an iterative process and should be built over time. The base line elements include unit price, volume, inventory and margins.

2.5 PROBLEMS ASSOCIATED WITH PROCUREMENT

Growth is a necessary and welcome aspect to any organisation, but the researcher believes that problems do arise when organisations experience periods of sustained operational and financial growth without the requisite growth in the supporting services. Procurement is a key link in the organisation's value chain and is an important component of an organisation's operations, existing as a supporting function but having significant impact on the organisation's financial bottom line.

Organisations evolve and grow depending on the demands of the markets within which they operate. Organisations need to capitalise on possible synergies between various operating entities internally, driving towards reductions in input costs and resulting in increased profitability. The researcher believes that many organisations do not place enough importance on the procurement function and thereby lose the benefits that can be achieved by a properly defined procurement process.

When procurement processes are manual and lack control mechanisms, this places the company in a negative position. Some organisations characterized by multiple layers of approval procedures that often slow down the procurement process without adding any value.

The quality of goods and services procured affects the quality of the organisation's product and ultimately influences customer satisfaction. The ability of the procurement department to maximise value while minimising costs has caused companies in the recent years to give priority to effective procurement strategies (Optimum Purchasing 2003).

Information is an essential requirement for the effective management of the procurement function and to assist in the procurement decision-making process (Hartley 2004). Many organisations do not have access to this vital information mainly because many of the procurement processes are manual and paper based and the processes are disparate. This negatively impacts the use of the data as inputs for reporting, management and effective decision-making.

Organisations need to consider the procurement function as a strategically important one, driving organisations towards alignment with existing procurement best practices.

2.6 VALUE ADDING THROUGH BUSINESS PROCESS RE-ENGINEERING

2.6.1 The Essence of Business Process Re-engineering (BPR)

The concept of re-engineering has its origins in management theories developed as early as the nineteenth century. Frederick Taylor suggested in the 1880's that managers could discover the best processes for performing work and then re-engineer them to optimise productivity (Weicher et. al. 2002). Business process re-engineering (BPR) echoes the classical belief that there is one best way to conduct tasks (Weicher et. al. 2002). However, in Taylor's time, technology did not allow companies to design processes in a cross-functional or cross-departmental manner.

In the early 1900's, Henri Fayol originated the concept of re-engineering:

"To conduct the undertaking towards its objectives by seeking to derive optimum advantage from all available resources." (Lloyd 1994:8)

A business process is any broad collection of activities within an organisation that is involved in the ultimate goal of developing a product or service for the customer, irrespective of whether the customer is internal or external to the business (Process Management 2005). Business processes are typically evaluated from the point of view of the customer, and effective business processes are essential in maximising the added value provided to customers. Managing the key processes efficiently is crucial to the success of the company.

BPR has been defined as:

"...the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance, such as

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cost, quality, service and speed" (Pycraft, Singh, Phihlela, Slack, Chambers, Harland, Harrison & Johnston 2001:670).

Today, BPR makes use of modern computer technology to radically simplify an organisation's handling of its administrative tasks (Lynch 2000:328).

The potential of IT to enable the fundamental redesign of processes acted as a catalyst in bringing a number of current ideas in management together, all contributing to the BPR concept. These included just-in-time concepts, process flow charting, critical examination in method study, operations network management and customer focused operations (Pycraft, et al. 2001: 670).

According to Lynch (2000:328), BPR is likely to occur in lower levels of the company and could involve combining departments such as customer services, queries/complaints, stock ordering and control. This results in a dismantling of the demarcation between departments and could be followed by a reduction in the number of employees.

Underlying the BPR approach is the belief that operations should be organised around the total process, which adds value for the customers; rather than the functions, or activities, which are performed at the various stages of the value-adding activity (Pycraft et al. 2001: 671).
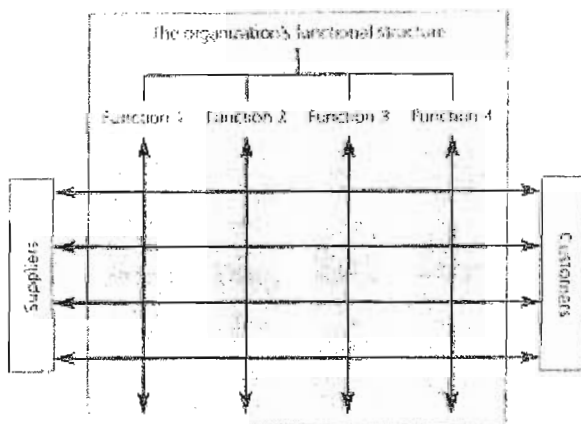
Figure 2.2 Organisation organised by function
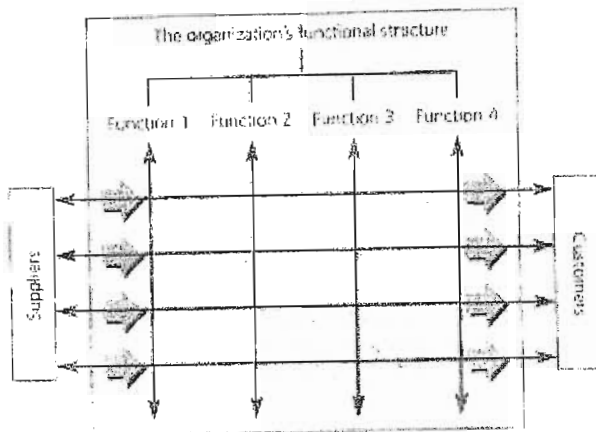
Figure 2.3 An organisation organised by process

(Adapted from Pycraft et al. 2001. Operations Management. Southern African Edition. South Africa: Pearson Education p.671)

Figure 2.2 above indicates how organisations are traditionally organised around each specialist function. BPR advocates re-organisation around the processes themselves as illustrated in figure 2.3.

The main principles of BPR include (Pycraft, et al. 2001: 672):

- Rethinking of business processes in a cross functional manner which organises work around the natural flow of information. This entails organising around outcomes of a process rather than the tasks, which are associated with it.

- Continuous striving for significant improvements in performance by the revolutionary rethinking and redesigning of processes.

- Ensuring that those who use the outputs of the process are the ones that perform the process. Investigate whether all internal customers can be their own suppliers rather than depending on another function in the business to supply them.

- Place decision points were the actual work is performed. Ensure that those who do the work are also those that control and manage the work. The process of control

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and action are just one more type of the supplier-customer relationship, which can be merged.

2.6.2 The Impact of BPR on Business

Business processes are a set of activities that transform a set of inputs into a set of outputs (goods or services) destined for a third party. Improving business processes is of paramount importance to ensure competitiveness in today's market. Over the past 15 years, companies have been forced to improve their business processes due to demand from customers (Reengineering (BPR) Introduction and Concepts 2003).

Over the past decade, several factors have accelerated the need for business process improvement. The main factor has been technology. New technologies like the Internet are rapidly bringing new capabilities to businesses, thereby raising the competitive bar and the need to improve business processes dramatically. Organisations are now seeking out faster business process improvement, hence their reliance on BPR (Reengineering (BPR) Introduction and Concepts 2003).

2.6.3 Implementation of BPR

BPR begins with defining the scope and objectives of the re-engineering project, then going through a learning process with customers, employees, and competitors and with technology. With this knowledge base in hand, a vision can be created for the future culminating in the design of new business processes. Thereafter, a plan can be created for the actions based on the gap between the current processes, technologies and structures and where the organisation wants to go (Reengineering (BPR) Introduction and Concepts 2003).

BPR is often used by companies, which are on the brink of disaster, to attempt to cut costs and to return to a state of profitability. The danger associated with this is that this process may hamper the company's capacity for future growth (Weicher et. al 2002). To ensure that a company is realising lasting benefits, it must be willing to examine how strategy and re-engineering complement each other. By learning to quantify strategy; by

accepting ownership of the strategy throughout the organisation; by assessing the organisations current capabilities and processes realistically; and by linking the strategy to the budgeting process, BPR can be effectively implemented. Otherwise, BPR is only a short-term efficiency exercise (Berman 1994:18)

BPR must have the full support of senior management to succeed, and senior management needs to counteract resistance and work hard to ensure that employee fears are dealt with. BPR will also fail if adequate education and training is NOT administered to those people who will ultimately work with the new processes (Weicher et. al 2002).

The principle obstacles to BPR include the fear among employees that their jobs are in danger and that years of experience will account for nothing. To overcome these apprehensions, managers must constantly communicate their plans and expectations to all employees concerned. This will ensure that all parties buy into the new process, as they were part of the process creation

BPR places the customer at the center by breaking down organisational barriers. Service organisations can initiate their commitment to customer satisfaction by placing the customer at the center of the re-engineering process. Often in service organisations, service workers are unable to satisfy the customer because they have to adhere to strictly defined rules, and these workers lack the authority to make exceptions to complete a transaction (Weicher et. al 2002).

According to Robert Janson (Hyatt 1995:42), there are three basic principles that provide the foundation for service organisations seeking to re-engineer:

- Make the customer the starting point for change, by identifying the customer's needs and expectations and creating the infrastructure to support those expectations.

- Re-design work processes in alignment with organisational goals.

- Restructure processes to support front-line performance.

Most analysts view re-engineering and information technology as irrevocably linked. Walmart, for example, would not have been able to re-engineer the processes used to procure and distribute mass-market retail goods without IT. However, even though studies indicate that over half of all re-engineering efforts are initiated because of perceived technology opportunities, the actual technological solution is far less important than educating employees to use IT as both a strategic initiative and as a tool for the re-engineering process (Weicher et. al 2002).

IT can prove useful during the re-engineering analysis and design process. During the implementation stage, organisations need to recognise that IT is only a part of the re-engineering solution. After implementation the organisation needs to continually monitor IT performance and keep up to date with IT Developments.

2.7 PROCUREMENT AT UTi DOMESTIC

2.7.1 An Insight Into UTi Domestic

UTi Domestic prefers to gain business through personal relationships with clients, rather than by advertising and promotion. UTi Domestic's business is conducted according to stringent performance criteria, which includes strict monitoring to ensure that the performance levels are accomplished. This type of business requires a great deal of co-ordination of activities across a wide area, and accordingly, a degree of procedural control is vital. An interview with Saffy (2005) reveals that beyond this, units operate fairly autonomously, and the principle focus is on sales.

The purpose of UTi Domestic is to provide long-term sustainable and steady real growth. The region that UTi Domestic has identified and will target is Southern Africa, the major focus being on South Africa.

The IT systems track every parcel in real-time and can provide clients with up to the minute information about their parcels, as well as electronic images of the signed Proof of Delivery (Hartley 2004). UTi Domestic has an extensive communications network, and in all of its branches, parcels are already tracked via Radio Frequency trackers,

making the tracking of parcels a real-time operation (Hartley 2004). Clients are able to connect directly to the UTi Domestic applications via a real-time application programmers interface and fully integrate and connect their operations and there own supply chain in real-time (Hartley 2004).

Many of UTi Domestic's larger clients and prospects are large corporates who outsource their entire distribution function to UTi Domestic. With new mobile and real-time technology, there are many IT options to combine into a tailored package to offer the demanding courier market. All of the outsourced Distribution deals involve integration of systems.

The following are the Specialised Business Units (SBUs) that make up UTi-Domestic (Webmaster 2001):

- **UTi Sun Couriers Division** – overnight and express general freight (e.g. envelopes and parcels). This incorporates a Distribution division used by hundreds of larger clients to distribute all their products throughout Southern Africa.

- **UTi Retail Distribution Division** - deliveries to the larger retail and chain stores throughout Southern Africa.

- **UTi Sun Couriers International Division (over border)** - freight to or from South Africa's surrounding states such as Zimbabwe, Namibia, Swaziland, Botswana, Lesotho.

- **Overseas Courier Service (OCS)** - parcels to or from anywhere in the world whose destination or origin is in Southern Africa.

- **UTi Mounties Division** – the express delivery of banking freight such as cheques, cards, mail and internal documents.

2.7.2 UTi Strategy

The strategy of the UTi Worldwide Group for 2005 is categorised into five goals. UTi-Domestic, being a part of the global group needs to align the division's strategy with that of the groups. Saffy (2005) reveals that the goals are as follows:

1. **Twenty (20) new national accounts for the group in South Africa** – UTi-Domestic will only get new national accounts if it provides a superior, reliable and dependable service at market related prices. The competitive nature of the industry makes it easy for clients to switch between suppliers. Customers are now demanding superior service from suppliers. Customised solutions that used to attract a surcharge in the past are now becoming competitive advantages. Within a short period of time the customised solutions will become a standard within the industry. To maintain or acquire new business organisations need to be market leaders delivering an above average service at market related prices. The procurement process can assist to a lesser degree in achieving this strategic goal.

2. **Twenty percent growth in turnover per annum for five years** – can be achieved by addressing several issues simultaneously. Focusing on retention of existing clients, making sure that no client is lost during the year.

3. **Twenty percent operating profit to turnover ratio** – the division currently runs at between 6 % and 8 %. Trying to attain twenty percent would mean substantial price increases to clients or radically reducing the cost structure. Increasing client's prices in a price sensitive market will result in the client defecting to an alternative supplier. The only option left would be to reduce the cost structure by eliminating waste and duplication within the company. This is where BPR relative to procurement at UTi-Domestic, will have the greatest impact.

4. **Twenty (20) methods of evaluating the business** – currently UTi Domestic use only two metrics to evaluate the business. The methods are financial results and delivery standards.

5. **Twenty (20) quarters to deliver results** – setting the goals of what has to be attained is easy. Knowing that it has to be done within five years is a tight schedule. However, setting up a strategy and specific interim goals of what has to be done by each quarter to ensure success is difficult. Keeping to the specific goals and monitoring progress is challenging. Not meeting all set quarterly goals will result in the division's failure. Missing a single goal has a snowball effect almost guaranteeing the division not making its set target.

The driving force behind UTi Domestic is commitment to exceeding customer's expectations. The image projected into the market place will be commitment to delivery, professionalism, and dependable performance. Saffy (2005) indicates that UTi Domestic needs to ensure that all internal processes are streamlined, effective and efficient. The procurement function at UTi Domestic will be analysed in detail.

2.7.3 Procurement at UTi Domestic

An interview with Roper (2005) reveals that currently, UTi Domestic is characterised by a decentralised purchasing structure, with distributed departmental purchasing activities. This negates the possible benefits of group purchasing discounts. The procurement processes are manual with minimal control mechanisms and no detailed reporting for effective management. Roper (2005) indicates that UTi Domestic displays multiple layers of approval procedures that often slow down the procurement process without adding any value.

Roper (2005) details that few Service Level Agreements (SLAs), exist and those in place are not effectively and efficiently managed. The organisation has a formidable spend when the individual SBU procurement requirements are combined. The researcher believes that the organisation is by no means leveraging this power to its financial advantage.

The standard reaction at UTi Domestic is that when something goes wrong people and resources are thrown at the problem. These people and resources cost money, which directly affects profits.

The researcher considers the procurement function at UTi Domestic to be in dire need of re-dress especially in line with trying to meet the group strategy. The following analysis will attempt to look at E-Procurement as a means of BPR to streamline procurement processes at UTi Domestic.

2.8 BUSINESS PROCESS REENGINEERING USING E-PROCUREMENT

2.8.1 BPR and E-Commerce

BPR represents a pervasive and powerful approach to effecting innovation and performance in organisations, and many electronic commerce (e-commerce) technologies are now being employed to redesign inter-organisational processes e.g. procurement. However, one needs to avoid the trap of simply inserting IT into potentially broken processes.

2.8.2 What is E-Procurement?

E-Procurement is the acquisition of direct and indirect products and services using the Internet and new technologies to facilitate a seamless, end-to-end stream of strategic procurement activities by connecting buyers with suppliers with the inclusion of tools and business intelligence systems that enable improved responsiveness and analysis within the procurement organisation (Wheatley 2003). E-Procurement enables organisations to reduce costs and increase efficiencies through supplier interaction, enabling the purchase of products online (E-Procurement 2003).

E-Procurement can occur directly or through facilitation by an electronic marketplace. E-Procurement can be extended to every stage of the purchasing process from the identification of requirements through to payment and potentially to contract management (What is eProcurement 2005).

The impact of the e-revolution on procurement is significant, manifesting itself in the need for e-Procurement initiatives to ensure that the procurement function remains a source of advantage to the organisation.

2.8.3 The Influence of the Internet on E-commerce

Rayport and Jaworski (2001) provide the following contemporary definition of E-commerce:

> "E-commerce can be formally defined as, technology-mediated exchanges between parties (individuals, organisations or both) as well as the electronically based intra- or inter-organisational activities that facilitate such exchanges."

Thus, following the above definition, the key attributes of e-commerce are that:

- It involves the exchange of digitised information between parties.

- It is technology enabled.

- It is technology mediated.

- It includes intra- and inter-organisational activities that support the exchange.

A key driver for e-commerce is the Internet. The Internet is having a profound influence on the world economy with a direct influence on how we live, learn, work play and consume (Rayport and Jaworski 2001:2) The Internet is an extremely important new technology, and it is no surprise that it has received so much attention from entrepreneurs, executives, investors, and business observers. The researcher believes that the Internet is in use in varying degrees in most organisations today.

With the growth in Internet access commencing in the mid 1990s, business application software providers started to offer solutions that could be accessed online. This negated the need for software applications to be localised to the users computer and the transfer of information could be made quickly and efficiently (E-Procurement 2003).

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The use of the Internet by buyers and suppliers to access and exchange large amounts of accurate data for business-to-business (B2B) e-commerce transactions represents a major breakthrough in how companies manage purchasing and selling functions (Pang 2001). Not only has the Internet-based purchasing (E-Procurement) been widely adopted by thousands of companies in a short period of time, its impact is also being felt by an even larger number of suppliers, consulting firms and B2B Websites. This adoption has triggered a wave of technology spending on solutions, content aggregation, catalog creation, enterprise software integration and overall business transformation (Pang 2001).

When an organisation approaches the juncture that enquires the use of the Internet, the emerging question is not whether the Internet is a viable option. The more appropriate enquiry is how to engage the use of the Internet to stay competitive (Porter 2001).

According to Michael Porter (2001), Internet as a technology provides better opportunities for companies to establish distinctive strategic positioning than did previous generations of information technology. However, gaining a competitive advantage does not require a radically new approach to business. It requires building on the proven principles of effective strategy.

Porter (2001) maintains that the Internet itself will rarely deliver a competitive advantage. Many of the companies that succeed will be ones that use the Internet as a complement to traditional ways of competing, not those that set their Internet initiatives apart from their established operations. That is particularly good news for established companies, which are often in the best position to mould the Internet with traditional business practices in ways that buttress existing advantages.

2.8.4 The Impact of E-Procurement on Business

Effective procurement; of which e-Procurement is an integral part, has enormous potential to improve performance and to save money (Delivering E-Procurement 2003). Technology is at the core of a procurement policy and exists as an enabler making it all possible.

An E-Procurement system can be Internet based, making use of relatively inexpensive Internet-based technology to purchase goods and services and track vendors and their offerings. Increased procurement through the use of the web has proven to result in reductions in the amount of paperwork necessary for the completion of the purchasing of items and the turnaround time involved in the delivery of the goods ordered (Rayport and Jaworski 2001:353).

E-Procurement aims to help organisations to streamline their procurement process. Methods and tools now range from point-and-click ordering, using web-based catalogues of individual suppliers, to marketplaces that bring together in one place the products and services offered by multiple suppliers, to live auctions that determine the lowest price bidder (Hartley 2004:78).

An e-Procurement solution typically contains functionality to automate searching for products and services, requisitions, approvals, purchase orders, advanced shipping notices, invoices and payment processing. Some e-Procurement solutions may exist exclusively between two trading partners. Others may operate like a marketplace, allowing qualified and registered buyers or sellers of goods and services to find one another and engage in trade.

What has emerged is the emphasis on an order-to-delivery process rather than a focus on individual procurement tasks. Procurement is migrating from traditional paper-based processes to e-Procurement (Rayport and Jaworski 2001:353). The benefits accrued from e-Procurement exist within two categories, namely efficiency and effectiveness.

Efficiency includes reduced procurement costs, faster cycle times, less unauthorised buying, more highly organised information and tighter integration of the procurement function with key back-office systems. Effectiveness includes increased control over the supply chain, proactive management of key procurement data and higher-quality purchasing decisions within the organisation.

2.8.5 The Early Trials of E-Procurement

E-Procurement has experienced a rocky inception. In early 2000, the stock prices of Ariba -a prominent e-Procurement software vendor- peaked at $183. In May of 2003, this dropped to $3. Commerce One -another prominent e-Procurement software vendor- had shares peaking at $330 but these have dropped to recent low of $2 (Wheatley 2004). E-Procurement might be a maturing concept now, but the early days were characterised by a classic e-business boom-bust scenario. In the late 1990s, just as every business was wildly pursuing e-commerce and the creation of a transactional website as the ultimate new channel to customers, so too, businesses rushed into establishing electronic B2B links with their supply chain partners (Hartley 2004:80).

Here was a new format that offered the virtual reality of the true market, a place were buyers and sellers could come together to perform some of the critical functions that were inadequately performed in a confined physical location or through a traditional media channel. The attraction of one convenient link, capable of making technology connections, arranging credit for transactions and solving logistical problems, presented a rather compelling business proposition that attracted billions from investors (Hartley 2004).

However, industry participants and even many analysts failed to predict the impending crash (Hartley 2004: 81). Over-ambition and irrational excitement at the opportunities that were going to revolutionise the world clouded the fact that precious few ideas were yet working businesses. By the beginning of 2001, early movers were reporting that e-marketplaces were more complicated, time-consuming and resource intensive than anyone expected (Hartley 2004:82). Immature technologies, inexperienced staff, insufficient budget and incompatible infrastructures amongst trading partners were some of the major hurdles encountered.

Many of the businesses went the route of building their own e-marketplace infrastructure. Building the physical structures and the complex technology that customers needed to run all their transactions through an e-marketplace turned out to be a difficult challenge. The laws of software development do not change just because of the age of the Internet. To

think that it was possible to build and deploy a high-functioning system with maximum capabilities in a minimum amount of time was unrealistic (Hartley 2004). Time-to-market pressures, along with the breadth and depth of function required for an e-marketplace to be successful, proved too great a challenge for the early pioneers.

E-Procurement has followed the typical e-business progression: first there was unbridled optimism and hype, then the reality set in as expensive investments proved harder to implement than anticipated (Hartley 2004). However, determined players have persevered, and there is now tremendous growth in the e-Procurement arena, along with the use of the Internet for communication and collaboration between partners in the supply chain. (Hartley 2004:78)

The acquisition of both direct and indirect materials, have migrated online. The software has also matured, there is critical mass of suppliers to buy from, and internal systems are better equipped to deal with e-Procurement. Today it is possible to buy almost anything electronically, although this is not to say that everything should be bought electronically.

2.8.6 Current Statistics on the effect of E-Procurement

Research undertaken by AMR in 2003 revealed that 17% of those companies that did not have sourcing and procurement applications planned to acquire them within the next year (Wheatley 2003). Pierre Mitchell, vice president of research at AMR, considered that to be the highest percentage of any packaged application in the market at that specific juncture in time. The market growth was up 12 percent from $1.7 billion in 2002 to $1.8 billion in 2003.

A survey carried out in 2003 revealed 93% of businesses had revenue growth after joining Internet Business-to-business (B2B) marketplaces with 11% reporting gains of 21% or more and 65% experiencing cost reductions (Does Your Business Have the eProcurement Advantage 2001). This clearly demonstrated the financial impact of implementing an e-Procurement system.

Benchmark Research reports that 63% of high-performing companies (in the US, UK and Germany) have saved between 10% and 50% with e-Procurement solutions up to the beginning of 2002 (e-Procurement 2003). Despite the slowing global economy, businesses in the United States of America (USA) have shown increased optimism towards e-Procurement with studies indicating that return on investments from business-to-business e-Procurement could top 300% in three years (e-Procurement 2003). E-Procurement is in its early stages and early adopters are discovering the benefits of using electronic systems in the procurement process.

Companies could save up to 20% on purchasing costs through an on-line procurement system by tracking purchases, consolidating suppliers and negotiating better discounts (E-Procurement 2003). The literature has revealed that stocks of prominent e-Procurement companies have come crashing due to excessive expectations and the dotcom bust, but e-Procurement itself is quietly booming (Wheatley 2003).

More than a third of Britain's small and medium enterprises are using the Internet to purchase goods or services (E-Procurement 2003). The study carried out revealed that overall electronic procurement can add value to the supply chain process and offers reduced prices, increased efficiency and reduced overheads.

The statistics speak for themselves. After a rocky start, e-Procurement is finally delivering the goods, with a corresponding maturity in the software and a critical mass of suppliers to buy from.

2.8.7 The E-Procurement Decision

Deciding whether to invest in e-Procurement applications i.e. whether or not the business can benefit from electronic sourcing and purchasing, is quite a difficult call. One needs to consider that e-Procurement implementations often simply facilitate the catalogue-based buying of indirect materials such as office supplies. The return on investment is invariably good but they are rarely earthshaking (Wheatley 2003).

This is compounded by the fact that as in many areas of e-business, the wide variety of alternatives can be extremely confusing, not to mention difficult to gauge whether there is true return on investment at the end of the rainbow. Pens, paper clips and copier paper are one thing. Complex, made-to-order, engineered components are quite another. Savings on office supplies can only boost the bottom line so far.

It is much harder to move beyond this stage to direct materials, (the materials that go into a product) and the various services that an organisation buys such as consulting or cleaning and staff. If an organisation makes large purchases of strategically important raw materials or components, it usually does so in structured, negotiated deals (Wheatley 2003). In such environments, automation of process adds little value.

E-Procurement offers the potential of substantial bottom-line benefits but an overnight miracle should not be expected. You should also be aware of the limitations and pitfalls that can accompany dramatic changes in supply chain operations.

The counter argument is that E-Procurement allows an organisation to control pending purchases and lower acquisition costs, as well as, improve supplier relationships by reducing returns and customer support costs. In addition, e-Procurement facilitates better, faster and more informed decision-making by employees allowing them to focus on other value-added tasks (Hartley 2004:83).

And e-Procurement can deliver more than just lower prices, delivering better productivity, faster processing, greater visibility and elimination of unplanned and ad hoc buying. The net result impacts greater on return on investment.

"The bottom line [on e-Procurement] depends on your company and what it is buying," concludes Scott Eliff, president of Capital Consulting and Management (Wheatley 2003).

Eliff suggests that the Chief Information Officer evaluating the pros and cons of e-Procurement consider the following questions:

- Is the value of spending high or low?

- Is the product or commodity highly substitutable or not?

- Is there a lot of competition or a little?

- How efficient are your internal processes?

To manage the expectations of an e-Procurement effort, it is important to remember that the return on investment will come partly through lower purchasing prices. The rest will come from efficiency improvements within the buying process.

MSX international, an $800 million business specialising in providing supply chain management procurement services to the global automotive industry, uses newly available collaborative technology from Commerce One to buy items and services as varied as printer cartridges and contract labour for its automotive customers (Wheatley 2003). Using e-Procurement allows much tighter control over spending and authorisation, easier transaction processing and helps to the avoid stockpiling of a product because the organisation will always know what is available (E-Procurement 2003).

Maturity exists in both the technology and the buyer's expectation, to the point where e-Procurement can genuinely be used to source things other than catalogue based indirect goods (Hartley 2004:84). Direct materials and the services that companies buy are now real options for all businesses and not just for the few companies whose business models and operations lend themselves to it.

Clearly organisations are benefiting from clerical efficiencies by eliminating many paper-based procedures and labour-intensive processes. This is in-line with the goals of BPR. At the same time, purchasing departments can exercise much tighter control over spending and authorisation.

Internet procurement is a key enabler in achieving cost reductions, but this is not the only consideration. An organisation would need to take account of other key enablers such as supplier relationships, internal training and investment in procurement professionals (E-Procurement 2003).

Perhaps the main benefit that the Internet has brought to e-Procurement is the issue of transparency. Many more people within a business can now see the players in the marketplace, their qualifications, the prices on offer and incredible detail on the products and services themselves. This improves the organisation's ability to make better strategic decisions. As the organisation exercises choice, suppliers are forced to work harder in order to remain competitive, developing better products and services that, taken together, raise the effectiveness of the whole economy (Hartley 2004:79).

Suppliers are benefiting as well, by the use of electronic channels to integrate more closely with customers. The process by which suppliers receive and respond to orders is not only more streamlined, but also less prone to miscommunication and errors. As a result, the costs per delivery and of stockholding are significantly lower. Integration in the financial sphere also means that suppliers are typically paid much quicker – with payment cycles reduced by up to 60% in some cases – and some advanced e-Procurement systems even facilitate the re-conciliation of transactions back into the supplier's accounts (Hartley 2004).

Although Business-to-Business (B2B) commerce, in its various forms and manifestations, has the capacity to make business simpler, it does not change the nature of the business relationship. Buyers and suppliers may fear that the need for personal interaction will decline. The fact is that people will always do business with people; it's the way business has been done for thousands of years and it doesn't take technology to change this.

While automation has often been criticised for de-humanising the transactual relationship, the opposite is often more the case. Transparency across the market allows buyers and supplier to 'see' each other more closely, thus promoting closer relationships and opportunities for collaboration.

The B2B relationship is more substantive, requiring more information technology and a greater understanding between the participants in a supply chain. As the relationship grows and matures, each party gains a better position on the playing field in relation to their respective competitors. Far from impersonalising the relationship, technology can

actually improve mutual understanding and trust between business partners in the marketplace.

A real risk is that senior management becomes seduced by the opportunities made available as a result of the web interfaces and loses sight of the bigger picture. Always consider were the benefits will come from. Some of the benefits claimed by service providers can actually be more sensibly achieved from reviewing current practices and developing better procurement policies and guidelines within the organisation (Hartley 2004). The focus on the actual process and the re-engineering thereof (in line with BPR) is the logical starting point.

Take spend analysis and strategic sourcing as examples. Here are exercises that can be performed offline, without the use of any e-Procurement technology, and yet deliver measurable benefits. Even when embarking on an e-Procurement implementation, before and technology is put in place, a company should first conduct a detailed spend analysis, and develop purchasing rules through strategic sourcing.

In line with the principles of BPR, the process would look something like this (Hartley 2004):

- Evaluate historical transactions, categorising purchase items into clearly delineated commodity groups (e.g. stationary, furniture).

- Determine the varying prices paid across business units and establish a baseline cost for each item in each commodity group.

- Determine other critical factors to the purchasing of each item – such as lead times, guarantees, location and supplier. In South Africa, a key determinant may be the suppliers BEE status.

- Assess and evaluate suppliers according to the needs established above, and draw up a short list.

- Negotiate pricing and service level agreements with suppliers, determine fixed suppliers per commodity group, and draw up contracts.

Only after this process has been completed should the appropriate technology platform be put in place that can cement the detailed agreements reached, and create the rules that ensure staff only purchase according to the pre-negotiated contracts.

2.8.8 How does E-Procurement work?

E-Procurement occurs via the set up of a platform by one or more buying enterprise seeking to capitalise on bulk purchasing power. Suppliers either load their catalogues with specifications and bulk purchasing discounts into the system, or integrate the e-Procurement system with their own electronic catalogue. The internal organisation sets access rights for employees to purchase. Electronic requisitions are created and routed to an approval point. Orders are sent to the supplier and payment and distribution are secured through the Internet (e-Procurement 2003).

Real e-Procurement, where e-Procurement becomes a key part of the supply chain, requires commitment and adequate technology. Best of breed e-Procurement should have the ability to locate suppliers, evaluate their offerings and make comparisons (E-Procurement 2003). They also require contract-management capabilities to facilitate contract negotiation, maintain contract terms and pricing details and ensure that proper contractual details are applied (The Basics of eProcurement 2004).

E-Procurement means a lot more than joining an online exchange, and various solution providers now offer a number of blended approaches with which to migrate traditional purchasing functions into electronic processes (Hartley 2004).

The value proposition in terms of efficiency, lower price, transaction volume and deeper buyer-seller relationship, among others, are still valid. Internet based procurement leverages information technology to perform functions with increased effectiveness and reduced transaction costs, resulting in more efficient, 'friction-free' purchasing.

Many large South African companies have already realised the benefits that e-business can bring to their buying processes and have therefore adopted varying flavors of E-Procurement (Hartley 2004). In doing so, they have not only leveraged efficiencies and cost savings in their supply chain, but also gained tighter control over their spend management.

2.8.9 Key Considerations Regarding E-Procurement

The core of developing a business case for e-Procurement involves a consideration of the following (Hartley 2004):

- **Existing procurement strategy**: This requires the analysis of the organisations spend and consideration whether the organisation possesses established procurement policies. A further consideration involves enquiry into whether the organisation has a strategy for how e-Procurement fits into the overall procurement strategy.

- **The Vendor:** This requires an analysis of which vendor is able to complement the intended operational processes.

- **The Technology:** Choice of the appropriate technology is a critical requirement.

- **Spend Analysis**: An analysis of the organisations total spends to identify the appropriate technical solution for e-Procurement. This step requires the identification of the categories of greatest spend and the corresponding categories of greatest benefits/savings

- **Supplier Analysis**: Supplier analysis will assist in determining constraints and opportunities. This aspect involves an undertaking of the organisations supplier profile determination. A consideration of the sourcing strategies for the different spending categories is necessary (1st steps: Preparing for E-Procurement 2003).

- **The Total Cost of Ownership of the Solution**: This involves a consideration of the upfront costs (software, consulting, change management and integration

costs), ongoing costs (license fees, maintenance and support and transaction fees) and supplier costs (E-Procurement 2003).

When implementing an e-Procurement solution, supplier engagement is a crucial success factor. Supplier cooperation is critical to building and maintaining catalogues, and suppliers would also need to invest in the necessary technology to ensure that their internal systems integrate with the e-Procurement platform being set up. Some suppliers are not ready for e-Procurement integration, while some suppliers are veterans. An e-readiness analysis of the supply base is necessary when selecting which suppliers to bring online.

As large suppliers such as Naspers, Bidvest, Anglo Platinum, Telkom and Sasol throw their weight into e-Procurement, those suppliers who were hanging back will be forced to participate (Hartley 2004). Now is a good time to be converting to e-Procurement from the point of view that the market is past the pioneer stage of adoption.

Different organisations have different purchasing needs. For small or medium business, it might be fine to dabble in e-Procurement to perform functions such as sourcing suppliers of new services, or conducting low-level purchasing such as office supplies (Hartley 2004). Often, it is easier than to deal directly with suppliers through their own online purchasing portal (Hartley 2004).

For large corporates that are looking to migrate entire departments and millions of Rands worth of spend onto the online medium, the functionality provided by the e-Procurement partner is more crucial (Hartley 2004). At this stage, the consideration should be whether the organisation is looking for a solution that merely streamlines the flow of transactional information, and logistical processes as a separate application, or whether the organisation requires an end to end that solution that fully integrates into the back-end ERP system (Hartley 2004).

Whilst solution providers that have survived the fall-out have become efficient at designing purchasing workflows in an electronic environment, fully online financial settlement and reconciliation into the back-end systems of both transacting parties is

difficult to find (Hartley 2004). Therefore one must ask whether the solution provider can deliver a fully integrated solution, or will the organisation have to develop a middleware application to link your ERP system to the supplier's platform.

2.8.10 Managing the 'softer' issues

The introduction of an e-Procurement solution entails major changes, often running counter to the corporate culture, and threatening the positions of established employees.

Care is necessary to manage the softer issues such as (Hartley 2004):

- **Visible management participation:** Clear management participation is critical to provide guidance and project sponsorship, and to get all the different e-Procurement stakeholders to take an active part in the success of the project.

- **Motivating end-user adoption:** It is of fundamental importance to talk to end-users to find out about their requirements and explain the benefits of the new system to them. End-users will only want to use the system if they have a say in what is offered and if it actually delivers its benefits through an intuitive front-end.

- **Fitting existing procedures:** A system that conflicts with existing purchasing practices will always face adoption hurdles. Whilst some workflows will naturally need to change, do not forget that sometimes there are good reasons that purchasing occurred in the way it did.

- **Accepting exceptions:** The system has to be robust in terms of being able to deal with unusual cases or the company's unique circumstances. Failure to do so will be seen as a profound weakness by users, and severely limit adoption.

2.8.11 Conclusion

The literature review has attempted to analyse E-Procurement as a possible BPR tool to deal with procurement problems within UTi Domestic. The literature reveals that E-Procurement is in a maturity phase and can be effectively used as a BPR tool within UTi Domestic to assist UTi Domestic in achieving its strategic objectives.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

In Chapter two, the general objectives of a business were defined in an attempt to articulate the most salient features. Here a focus was placed on profitability, customer services, social responsibility and employment opportunity as the key factors that drive business. This was followed by an exploration into the key success factors for the survival and growth of a business in the current modern economy. Thereafter, the concept of procurement was introduced and discussed at length, with a specific focus on the processes associated with procurement and the problems relative to procurement.

This discussion was followed by a review of the concept of Business Process Re-Engineering in light of the value potential it holds for an organisation. Finally, procurement was analysed as a form of business process re-engineering and the potential of the associated value was detailed.

The research being undertaken will attempt to analyse the current procurement policies at UTi Domestic in light of whether the procurement processes are optimal. The researcher will further attempt to consider the possibility of using electronic procurement processes to optimise procurement processes at UTi Domestic.

This Chapter will define the methods and instruments used to conduct the empirical research for the study. This chapter will also discuss the statistical methodology used.

3.2 THE NEED FOR BUSINESS RESEARCH

Over the past years, UTi Domestic has developed into a formidable force in the Courier and Logistics industry. Positive financial, operational and technological growth was clearly visible. However, not all sectors of the organisation have experienced such

positive growth. The growth of the organisation has created a vacuum in certain areas with the dire need for re-dress. The need for attention was manifest in the area of procurement. Throughout all of UTi Domestic's SBUs, evidence existed of manual procurement processes that lacked control mechanisms.

The growth of the organisation has been coupled with a need for increased procurement. However, the manual procurement processes have made the management aspect a difficult one with very little access to reporting facilities. In addition, the organisation was not leveraging its buying power to obtain a financial advantage in the form of cost reductions.

Research was necessary at this specific turning point in the organisation, and informed decision-making was imperative to ensure that the growth of the organisation was sustained (Saffy 2005).

The role of research – business research in particular – is imperative. Organisations are increasingly faced with the need to continually assess competitor movements and gain greater insight into customer needs. This places a greater emphasis on ensuring that the basis for business decision-making has a stronger information focus.

The researcher will attempt to carry out research relative to procurement at UTi Domestic. This will entail an attempt to systematically gather information that will hold the potential of providing a solution to the problem faced by UTi Domestic relative to its procurement policies.

The question at hand involves research to discover whether the implementation of an e-procurement system will add quantifiable value to UTi Domestic.

3.3 THE ESSENCE OF GOOD RESEARCH

Cooper and Schindler (2003) state "good research generates data, being derived by practices that are conducted professionally and that can be used reliably for managerial decision making". Additionally, good research must possess, amongst others, the following characteristics:

- **Clearly defined purpose:** This requires that the research team must carefully distinguish between symptoms of problems, perception of the problem and the actual research problem.

- **Detailed research process:** This will entail having to provide a detailed research proposal.

- **Thoroughly planned research design:** This requires a thorough outline of the exploratory procedures and the accompanying constructs.

- **Limitations frankly revealed:** The desired procedures and samples should be compared with the actual procedures and samples in the report.

- **Adequate analysis for decision-maker's needs:** This will require that sufficiently detailed findings should be tied to the data collection instruments used.

- **Findings presented unambiguously:** This entails a clear and logical organisation and presentation of the findings.

- **Conclusions justified:** The decision-based conclusions should be matched with the findings.

These will be the guiding characteristics that will ensure that this research meets the requirements that it has set out to achieve.

3.4 OBJECTIVES OF THE STUDY

The aim of the study was to analyse the effectiveness and efficiency of the current procurement processes in place at UTi Domestic and to investigate the feasibility of using Electronic Procurement (e-procurement) as a possible mechanism for Business Process Re-Engineering (BPR) within UTi Domestic to streamline and add value to the overall procurement processes.

The following objectives will be addressed. This study will:

- Determine whether current procurement processes are adding value to UTi Domestic.

- Determine whether staff at UTi Domestic:

    - Have timeous access to information.

    - Are ready for the implementation of an e-procurement solution.

- Determine whether management at UTi Domestic believes there is a need for the implementation of an e-procurement solution.

- Determine whether management at UTi Domestic are willing to make the financial investment to make the implementation of e-procurement a success.

- Determine the impact of Electronic Procurement on:

    - profitability,

    - management of the procurement process.

3.5 THE STUDY ENVIRONMENT

This study was conducted in the procurement departments (nationally) in all of the major branches that formed part of UTi Domestic. The study also involved the senior head-office management that had a direct control over the procurement policies that existed within UTi Domestic.

The researcher approached the information technology department, the finance department and the department of strategy and special projects in January 2005 and requested permission to conduct the study. The IT Director, the General Manager for Finance, and the General Manager granted permission for Strategy and Special Projects to conduct this study within UTi Domestic.

3.6 THE STUDY DESIGN

For this study, a cross-sectional study design was chosen. Cooper and Schindler (2003:136) categorise the cross sectional option as a time dimension study. Cross sectional studies are carried out once and represent a snapshot of a particular point in time (Cooper & Schindler 2003:149). A cross-sectional study is a study, which involves a sample of the population being selected.

3.7 SAMPLING DESIGN

This study was conducted within the procurement departments within UTi Domestic and the procurement staff where requested to complete a questionnaire. The study was extended to management at UTi Domestic who where directly involved in the definition of the procurement processes within UTi Domestic. Management where requested to complete a separate questionnaire from the one administered to the direct procurement staff.

The first step in the process of sampling involved the creation of a list of the direct staff involved in the procurement function within UTi Domestic. This was followed by the creation of a list of all members of management that were directly involved in the overall procurement processes at UTi Domestic at the time of the study.

A procurement staff member was accepted into the study based on the following criteria:

- The individual must have been a member of the full time procurement staff at UTi Domestic.

- The individual must have been in the employment of UTi Domestic for twelve months prior to the study.

- The individual must have been willing to participate in the study.

- The individual must be literate in English in order to understand the fill out the questionnaire appropriately.

Exclusion criteria:

- Temporary and or part-time procurement staff members at UTi Domestic.

Table 3.1. Provides a breakdown of the groupings of the procurement staff, the population and sample sizes as well as the response rates.

Male:	18
Female:	10
Population:	28
Black:	1
White:	19
Indian:	6
Coloured:	2
Questionnaires administered	28
Questionnaires returned	28
Response rate	100%

Table 3.1 – Procurement staff groupings from which the sample was drawn (including response rates).

A member of management staff involved directly in the procurement policies was accepted into the study based on the following criteria

- The individual must have been a member of the full time management staff involved directly in the procurement processes at UTi Domestic.

- The individual must have been in the employment of UTi Domestic for twelve months prior to the study.

- The individual must be willing to participate in the study.

- The individual must be literate in English in order to understand and fill out the questionnaire appropriately.

Exclusion criteria:

- Temporary and or part-time staff members at UTi-Africa Domestic.

Table 3.2. Provides a breakdown of the groupings of the procurement management staff, the population and sample sizes as well as the response rates.

Male:	5
Female:	1
Population:	6
Black:	0
White:	4
Indian:	1
Coloured:	1
Questionnaires administered	6
Questionnaires returned	6
Response rate	100%

Table 3.2 – Procurement management staff groupings from which the sample was drawn (including response rates).

According to Welman and Kruger (1999:64), it is not necessary to use a sample size bigger than 500 units of analysis, no matter what size the actual population might be. The

sample size was appropriate as all staff members and management directly involved in procurement, were chosen for this study. Welman and Kruger (1999:66) regard a response rate of thirty three percent as being representative of the population. Hence, the response rate that we received in this study was considered excellent and was regarded as being representative of the population.

3.8 THE RESEARCH METHOD

The methodology used in the study was a qualitative methodology. A qualitative research approach can be conceptualized as a focus on words and feelings that capture the quality of an event or experience (Cooper & Schindler 2003). Qualitative research is a mixture of the rational, explorative and intuitive where the skills and experience of the researcher play an important role in the analysis of the data (Cooper & Schindler 2003). Qualitative research requires abstract thinking, the critical analysis of a situation, the avoidance of biases, ensuring valid and reliable data and having theoretical and social sensitivity while keeping an analytical distance (Cooper & Schindler 2003).

Different methods for the collection of primary data such as surveys, experiments, or observations are available for research purposes (Diamantopoulos & Schlegelmilch 1997:5). The most appropriate method to be used is largely determined by the type of data required for the study. Hence, it was decided that for this study, it was most appropriate to use the questionnaire method. De Vos (2001:89) states that a questionnaire is an instrument with open or closed questions or statements to which a respondent must react.

The reasons for the using the questionnaire as the research instrument of choice, is detailed below.

3.8.1 The Questionnaire

A questionnaire is a document comprising a set of questions, and is sent, and or administered to a large number of respondents with a view to obtaining their input and

opinions on the subject of the study. Researchers can use either structured or unstructured questionnaires.

A structured questionnaire provides different options to each question, and the respondent is simply required to select and mark the applicable answer (Babie 1998:257).

Unstructured questionnaires require the respondents to answer the questions in their own words; hence, far more cooperation is required on the part of the respondents. The use of unstructured questionnaires in a mail survey significantly reduces cooperation but does not provide much helpful information (Sudman & Blair 1998:289). Since mail surveys tend to have the lowest response rates of all survey methods (Welman & Kruger 1999:152), and since according to Aaker, Kumar and Day (1995:378), it is not uncommon for mail surveys to have a non-response rate of ninety percent, it is imperative to choose questionnaires with great care.

The following table outlines the advantages and disadvantages of the questionnaire as a data collection method.

ADVANTAGES	DISADVANTAGES
A relatively cheap method.	A possibility of a low response rate.
Saves time and a lot of information can be collected within a short period.	The researcher has a low control over the conditions under which the questionnaire is completed.
A greater possibility of anonymity.	The explanation and clarification of concepts are not possible.
Standardised questions simplify the coding of data.	Anonymity complicates the following up of questionnaires.

The answering of questions can be kept impersonal.	The method can only be used for short surveys with mainly closed questions.

Table 3.3 – The advantages and disadvantages of questionnaires

(Adapted from Welman and Kruger. 1999. Research Methodology for the Business and Administrative Sciences. Halfway House: International Thomson Publishing Pty Ltd. Page 151-152.)

In this study, the most important reasons why the questionnaire was used as the method of choice for collecting primary data, included the following:

- The method allowed ease of administration especially in light of the dispersed nature of the respondents (procurement staff) within the UTi Domestic arena.

- All of the respondents were literate in English and were capable of completing the questionnaires individually without assistance.

- It was a relatively cheap method for the researcher.

3.8.2 Requirements of a Good Questionnaire

If a researcher succeeds in designing a good questionnaire, many of the shortcomings of a questionnaire can be overcome. A good questionnaire must, however, meet certain requirements. There are a number of requirements that must be considered in the design of a good questionnaire. Sudman and Blair (1998:293-299) have listed a number of requirements for the design of a good questionnaire:

i)   **Use a booklet format**

A booklet format is desirable because:

- It prevents pages from being lost.

- It makes it easier to handle.

- It looks more professional.

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ii) Identify the questionnaire

Questionnaires need a date, the title of the study, and the name of the person conducting the survey.

iii) Do not crowd the questionnaire

Self-administered questionnaires should not be crowded because crowding makes the questionnaire appear more difficult.

iv) Use a large clear print

Making use of a large and clear print can make questionnaires user-friendlier. In addition, small print makes the questionnaire appear more difficult and as a result discourages respondents to complete it.

v) Provide instructions for the completion of the questionnaire

The ease with which a questionnaire can be completed plays a major role in a respondent's decision to complete the questionnaire. Specific instructions should appear on the questionnaire and be placed in the most useful location possible. Instructions should be easy to distinguish and therefore bold print, capital letters or italics can be used.

vi) Do not split questions across pages

Respondents find it confusing if a question is split over two pages especially in respect of response categories for a closed question.

vii) Pre-code all closed questions

Pre-coding allows the respondent to simply circle the right answer. The questionnaire should also make provision for a pre-column (column for data coding purposes), identifying the column in the data file where each response will be entered. This column must clearly indicate it is for office use only.

viii)   **End the questionnaire in a proper way**

Respondents should be thanked for their participation.

Although Leedy (1996:143-145) outlines general requirements for a good questionnaire, he emphasises the important role that questions play. The following summarises the requirements, which Leedy (1996) regards as the most important for a good questionnaire.

- Instructions must be clear and unambiguous.

- A cover letter must accompany the questionnaire and clearly state for what purposes the information is needed.

- Questions must be clear, understandable and objective.

- The questionnaire must be as short as possible.

- A logical flow of questions and sections must exist.

- The questionnaire must be directly related to the research problem.

3.8.2.1 The Design of a Questionnaire

The design of a questionnaire plays a crucial role in the success of the research. Saunders, Lewis and Thornhill (1997:250-263) regard the following as the most important steps in the design of a questionnaire:

- Determine information goals and identify the population.

- Decide which questions need to be asked.

- Identify the respondent's frame of reference.

- Formulate the questions.

- Pretest the questionnaire.

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- Revise the questionnaire.

- Compile the final questionnaire.

The first in the design of a questionnaire involves the translation of the research objectives into information goals for the formulation of specific questions. Once the list of questions has been finalised, it should cover all information goals and research objectives.

Apart from asking the right questions, the following issues also need to be considered when formulating questions:

3.8.2.2 Should Questions Be Open or Closed?

Several situational factors are the key determinants in the choice of using open-ended versus closed questions in the questionnaire (Cooper and Schindler 2003:373). The factors include:

- **Objectives of the study**. If the objective of the question is to classify the respondent on a specific stated point of view, then the closed question is the question of choice. Open-ended questions are applicable when the objective is to discover the opinions of the respondent's and the associated degrees of knowledge.

- **Participant's level of information of about the topic**. While closed questions allow the respondent to apply a clear opinion on the topic, an open-ended question allows the respondent an opportunity to elaborate on the answer.

- **Degree to which participant has thought through the topic**.

- **Ease with which participant communicates**. Open-ended questions require a command of the language in use (English) and the ability to frame responses, to a higher degree than does closed questions.

- **Participant's motivation level to share information**. Closed questions typically require less motivation and answering these questions is less threatening to respondents.

Open-ended questions offer many advantages, but closed questions are generally preferred (Cooper and Schindler 2003:375). Closed questions reduce the variability of responses, are less costly to administer and much easier to code and administer (Cooper and Schindler 2003:375).

According to Sudman and Blair (1998:267), closed questions are mainly used for the following reasons:

- Encourage response by making the completion of the questionnaire easy.

- Enable respondents to complete the questionnaire in a short time.

- Simplify coding for data analysis purposes.

- Reduce the amount of probing needed.

Although closed questions require more pre-testing, limit the richness of data and may become boring for respondents, they work better in situations where there is a preference for inexpensive, structured information. Welman and Kruger (1999:174) recommend that even if a questionnaire is made up exclusively of closed questions, it should conclude with an open question in case anything of importance to the respondent has been omitted.

3.8.2.2.1 Difficulty of Questions

Questionnaires provide few opportunities for probing and therefore the different ways in which people could interpret questions should be given careful consideration. Sudman and Blair (1998:252) believe that the formulation of questions aim specifically at addressing three issues, namely:

- Do all the respondents understand the words in the question?

- Do all the respondents interpret the question in the same way?

- Do the respondents interpret the question in the way it is intended?

Table 3.4 provides guidelines for minimising problems related to the understanding of questions.

Questions must be specific
Use simple language
Use words with only one meaning
Use numbers to measure magnitudes
Ask questions one at a time

Table 3.4 – Guidelines to enhance the understanding of questions in questionnaires

(Adapted from Sudman and Blair. 1998. Marketing Research. A Problem-Solving Approach. New York: Irwin/McGraw-Hill. Page 257.)

3.8.2.2.2 Ordering of Questions

Sudman and Blair (1998:285) regard the ordering of questions as important for three main reasons: Firstly, the order effects must be considered. Secondly, a logical flow for the questionnaire must be developed. Lastly, a rapport must be established with the respondents.

Questions should be arranged in a sequence that minimises order effects. An order effect occurs when the answer to a particular question is influenced by the context of previous questions. In order to create the logical flow of questions, the questions must be divided into sections, each with a specific purpose in mind. To elicit a favorable response for the completion of the questionnaire, the questionnaire must start with easy, non-threatening questions for which there are no wrong answers. By establishing a rapport with respondents, better cooperation can be obtained.

The questionnaires used for the research, were designed with the above in mind. The first section of the questionnaire involved demographic questions. The questions were designed to be non-invasive and all of the questions in the demographic section allowed a choice from a scale that did not require the respondent to provide exact demographic details. There was a natural flow in the questions that formed part of the research questionnaires.

3.9 THE DESIGN AND LAYOUT OF THE QUESTIONNAIRES

The most important components of the questionnaire used for the study, will be discussed in detail.

3.9.1 Type of Questionnaire Used

A structured questionnaire was the questionnaire of choice for the procurement staff questionnaire. A structured questionnaire provides alternatives to each question, and the respondent is required to select the answer by marking the applicable answer. The questionnaire contained mainly closed questions because closed questions are usually self- explanatory, and these questions could be answered with ease in a short period.

The questions in the procurement staff questionnaire focused on the current procurement processes (including associated procurement management capability and importance of the procurement function) as it exists at UTi Domestic and as perceived by the relevant procurement staff members. The questionnaire also focused on the possibility of the use of E-procurement to streamline the procurement process at UTi Domestic.

The management questionnaire used a number of open-ended questions focused on management's perceptions of the current procurement processes at UTi Domestic and an exploration of management's willingness to invest in procurement related activities in an attempt to streamline theses activities. As discussed above, open-ended questions were chosen for the management questionnaire in an attempt to elicit opinions relative to the study, as well as to provide prompts to elicit information relative to possible solutions (in detail) as perceived by the management.

3.10 BIOGRAPHICAL VARIABLES

The first section of the procurement staff and the management questionnaire's required the respondent's to provide personal particulars in an attempt to ease the respondents into the rest of the questionnaires.

3.11 PRETEST OF THE QUESTIONNAIRES

The purpose of the pretest of the questionnaire was to ensure that the questionnaire met the researcher's expectations in terms of what the research study was attempting to achieve. Pre-testing of the questionnaire assisted in identifying and eliminating problematic questions. Once all deficiencies were identified and corrected, the final questionnaire were compiled and distributed.

The most appropriate mechanism to pre-test a questionnaire was to have many people (stakeholders) analysing the questionnaire. Because a pre-test was in essence a pilot run, the respondents should be reasonably representative of the sample population (Aaker et al. 1995:308).

During this study, a pre-test was carried out on the relevant questionnaires, to assess usability and administration methods before the final study was carried out. Three of the respondent of the sample population of procurement staff and one of the management staff were randomly selected for participation in the pre-test. One hundred percent of the respondent's returned the questionnaires fully completed in both instances of the questionnaires.

The overall feedback on the questionnaire was positive. The instructions were clear and the questions were well laid out. The questionnaires remained anonymous at all times and the respondents were informed not to record their names anywhere on the questionnaire.

3.12 CODING OF DATA

Data obtained from the questionnaires must undergo preliminary preparation before analysis can be carried out. Data preparation includes (Aaker et al. 1995:443):

- Data editing,

- Coding,

- Statistical adjustment.

Once all the questionnaires were received, each questionnaire was analysed to identify omissions and errors in responses. The finding was that all questionnaires were completed adequately, and there was no need for editing.

Coding of the closed questions in the procurement staff questionnaire was a straight-forward task. All the questions in the questionnaires (including the demographic questions) were numbered sequentially. Each of the response columns was used for variable identification and was attached a weighting.

3.13 THE STATISTICAL METHODOLOGY

For the purposes of this study, data will be captured using an Excel spreadsheet. The data will be analysed using SPSS software.

3.14 CONCLUSION

In this chapter, the research and statistical methodology used in the study were discussed. The discussion focused on the population, sampling methods, the design and layout of the questionnaire, the type of questions used, the design of the questions and the pre-testing of the questions.

The following chapter will focus on the analysis and presentation of the results obtained from the questionnaires.

CHAPTER FOUR

PRESENTATION OF RESULTS

4.1 INTRODUCTION

The results of the questionnaires administered to the procurement staff and to the management staff involved in the procurement function at UTi Domestic, are presented in this Chapter.

The findings are set out under the following subheadings:

- The study response rate

- Biographical variables

- Procurement management questionnaire results

- Procurement staff questionnaire results

4.2 THE STUDY RESPONSE RATE

One hundred percent response rate was achieved in the study on both the direct procurement staff questionnaires and the procurement management staff questionnaires.

4.3 BIOGRAPHICAL VARIABLES

Both the procurement staff questionnaire and the management questionnaire posed five demographic questions to all the respondents that participated in the study. Of the five demographic questions, responses will only be presented regarding the questions of 'years of service at UTi Domestic' and 'years of experience in the procurement function'. Microsoft Excel Graphs will be used to present the data graphically.

The results reveal that Seventy nine percent of procurement staff have less than ten years of service at UTi Domestic compared to the compared to sixty seven percent of

management. Twenty one percent of the procurement staff displayed service of between ten and twenty years compared to the thirty three percent displayed by management.

Regarding years of experience in the procurement function, eighty nine percent of the procurement staff had between one and five years of procurement experience compared to fifty percent displayed by management. Eleven percent of the procurement staff displayed procurement experience of between six and ten years with no procurement staff member having more than ten years of procurement experience. Management however, had seventeen percent of responses with experience of between six and ten years, seventeen percent with experience of between eleven to fifteen years and seventeen percent of responses greater than twenty years of experience.

This important result will be discussed in the next chapter.

Figure 4.1 below, illustrates the years of service at UTi Domestic for procurement staff.
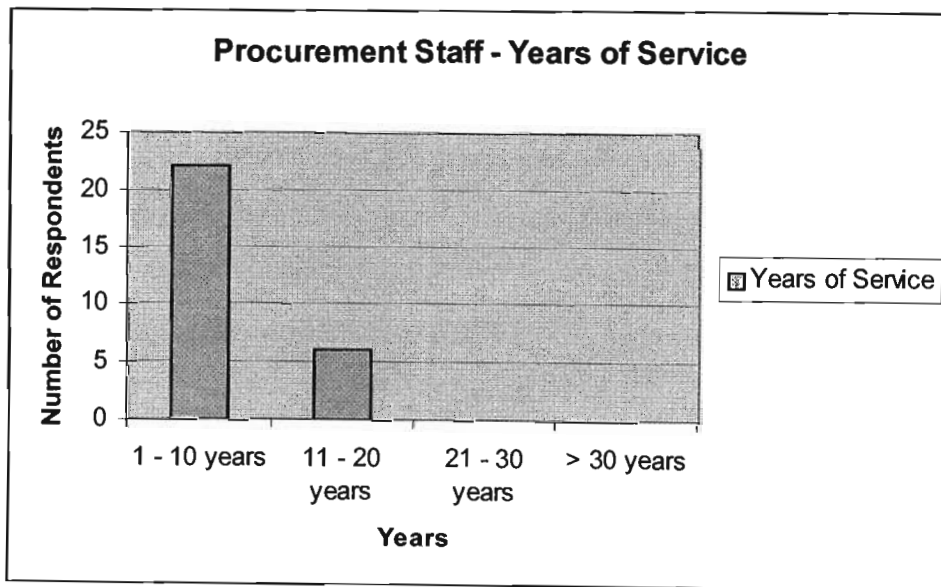

Figure 4.1 – Procurement staff years of service at UTi Domestic.

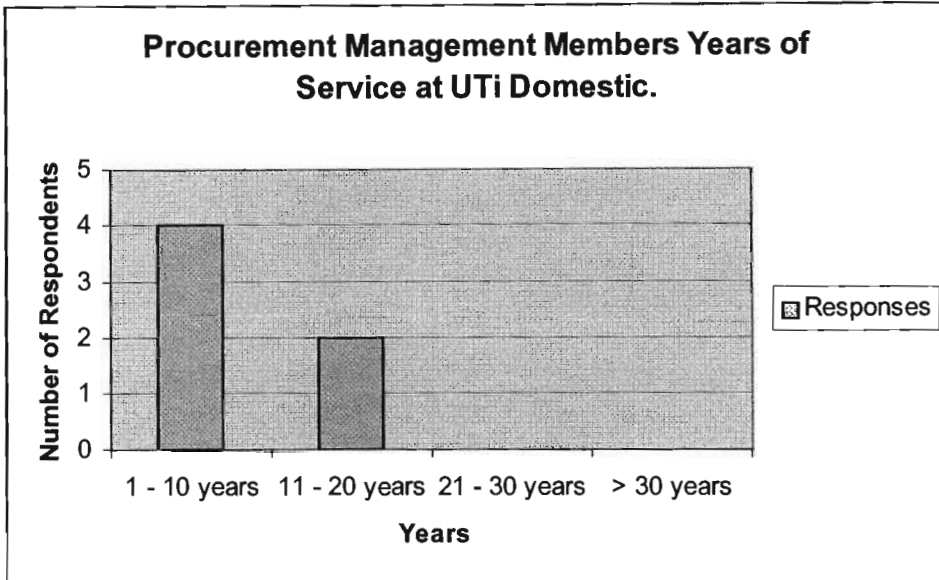Figure 4.2 below, illustrates the years of service at UTi Domestic for procurement management members.

Procurement Management Members Years of Service at UTi Domestic.

Figure 4.2 – Procurement management members' years of service at UTi Domestic.

Figure 4.3 below, illustrates the years of experience in the procurement function for procurement staff.
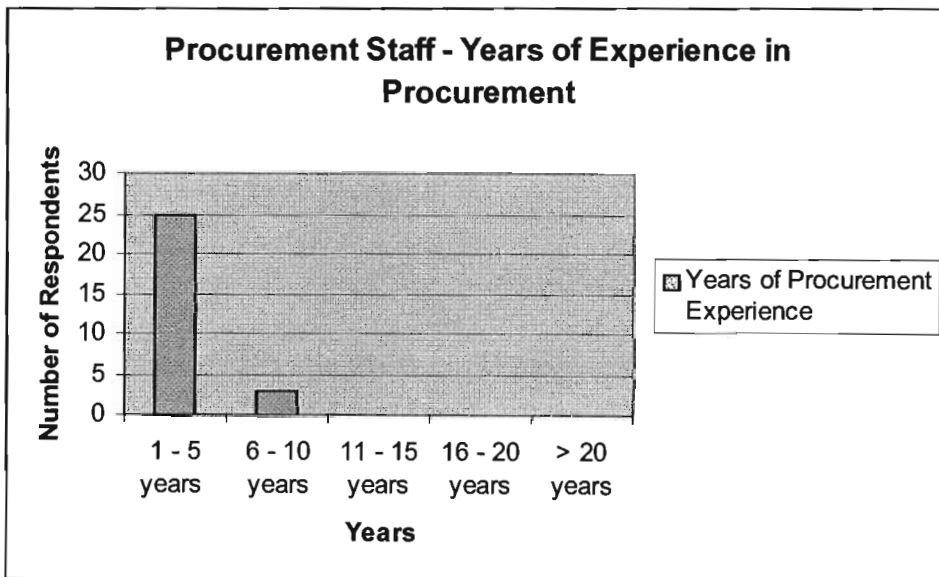

Procurement Staff - Years of Experience in Procurement

Figure 4.3 – Procurement staff years of experience in the procurement function.

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Figure 4.4 below, illustrates the years of experience in the procurement function for procurement management members.
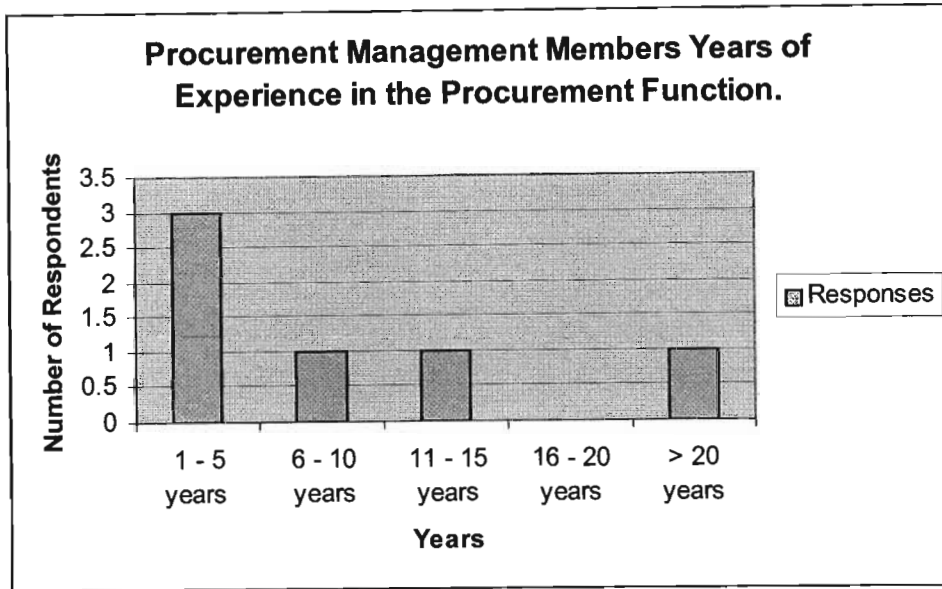

Figure 4.4 – Procurement management years of experience in the procurement function.

4.4 PROCUREMENT MANAGEMENT QUESTIONNAIRE RESULTS

4.4.1 Management Questionnaire Structure

The management questionnaire used open-ended questions to elicit free format answers to various inquiries and the responses are summarised below.

The procurement management questionnaire (Appendix 1) attempted to obtain information relative to four main areas concerning procurement at UTi Domestic:

- The problems relative to procurement at UTi Domestic and the possible causes of the problems.

- The possible solutions to the procurement problems at UTi Domestic. This includes the question of whether e-procurement is a possible solution.

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- The possible financial investment available to remedy the procurement problems and the period over which this investment is available.

- The expected return on the investment and the period over which this should be realised.

The procurement management questionnaire was administered to all six management staff members that were directly involved in procurement function at UTi Domestic. All questionnaires were completed without omissions.

The results are detailed below:

4.4.1.1 The problems relative to procurement at UTi Domestic and the possible causes

All management staff agreed that UTi Domestic had problems with procurement primarily due to a lack of defined and documented procurement policies. This has resulted in the fundamental problem of a lack of control over the procurement function. The procurement process at UTi Domestic is ad hoc with no definition.

The procurement function is distributed and decentralised and this has resulted in all of the procurement staff members in the various divisions and branches of UTi Domestic pursuing different processes in the procurement of goods. No price negotiation forums existed and this negated the benefit of possible bulk discounts that are linked to economies of scale. There is a lack of centralised accountability for the procurement function. There is also a clear lack of information to manage the procurement function. No centralised location exists that could be used to obtain information to manage the procurement function.

4.4.1.2 The possible solutions to the procurement problems at UTi Domestic (Including e-procurement)

Management recommends that a structured procurement department be established. This department should be responsible for the creation and maintenance of a defined

procurement process at UTi Domestic. This would ensure the leveraging of procurement best practices and the consolidation of negotiated price benefits. The communication would need to be coordinated and ensured via this department within all divisions and branches at UTi Domestic. This department would also be tasked with creating a centralised repository of information to be used to manage the procurement function across all the divisions and branches of UTi Domestic.

Management does not consider an e-procurement solution to be the **immediate** solution of choice in these circumstances. Management firmly believes, that the current procurement processes require re-engineering and re-definition so as to meet the current best practices in this regard. Only then would it be wise to consider an e-procurement solution.

4.4.1.3 The possible financial investment available to remedy the procurement problems and the period over which this investment is available

Management unanimously believes that no financial investment is necessary for technology to re-engineer the current processes. An investment in staff may be necessary to manage the procurement process as detailed above. The implementation of defined procurement processes will be the initial step towards remedying the procurement problems at UTi Domestic.

Any financial investment would be a directed at human resources.

4.4.1.4 The expected return on the investment and the period over which this should be realised

Management expects significant returns on investment from the defined procurement process and the bulk discounts (savings) possible from pricing in a group-negotiated forum. The implementation of a defined procurement process and the strict adherence to this process will prevent cavalier and unnecessary spending and this in itself will result in a saving.

Management would have access to information to effectively manage the procurement function at UTi Domestic. Policies and best practice processes will also result in efficiencies in the procurement process. Management expects to realise returns from the increases in levels of effectiveness and efficiencies.

The recommended procurement department would have to engage in an exercise to quantify the possible savings as measured against a current spend analysis.

Management would expect to realise the return on investment within the first year of implementation.

4.5 PROCUREMENT STAFF QUESTIONNAIRES

This section of the research will attempt to present the findings from the results of the procurement staff questionnaires after analysis via SPSS software. The nature of the questionnaire only allows for frequency analysis.

The analysis of the data revealed the following information:

4.5.1 Issues with procurement at UTi Domestic

In line with the findings in the management questionnaires, sixty one percent the procurement staff at UTi Domestic agreed that the procurement processes were manual, while twenty two percent remained neutral on the subject.

Refer below to the graphical depictions that represent these findings:

Figure 4.5 below, illustrates the number of respondents that considered the procurement process manual in nature.
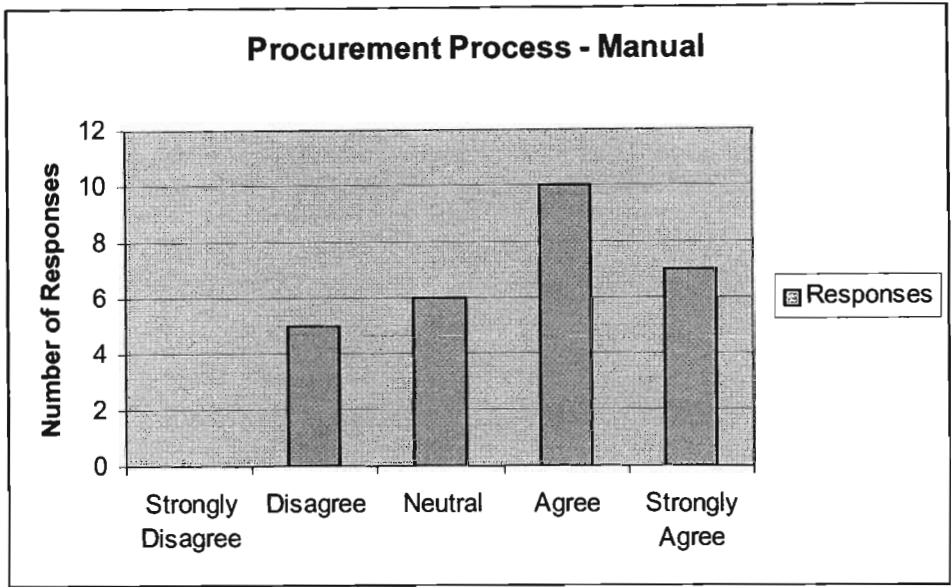
Procurement Process - Manual

Figure 4.5 – Manual nature of procurement processes

4.5.2 Importance and Value of the procurement function at UTi Domestic

Seventy one percent of the respondents acknowledged that the procurement function was considered to be an important function within UTi Domestic (eleven percent of the respondents remained neutral), while fifty percent of the respondents believed that the current procurement process was NOT adding value to UTi Domestic (ten percent of the respondents remained neutral).

The figures below depict these findings:

Figure 4.6 Illustrates the number of respondents that consider the procurement function to be important in the UTi Domestic environment.
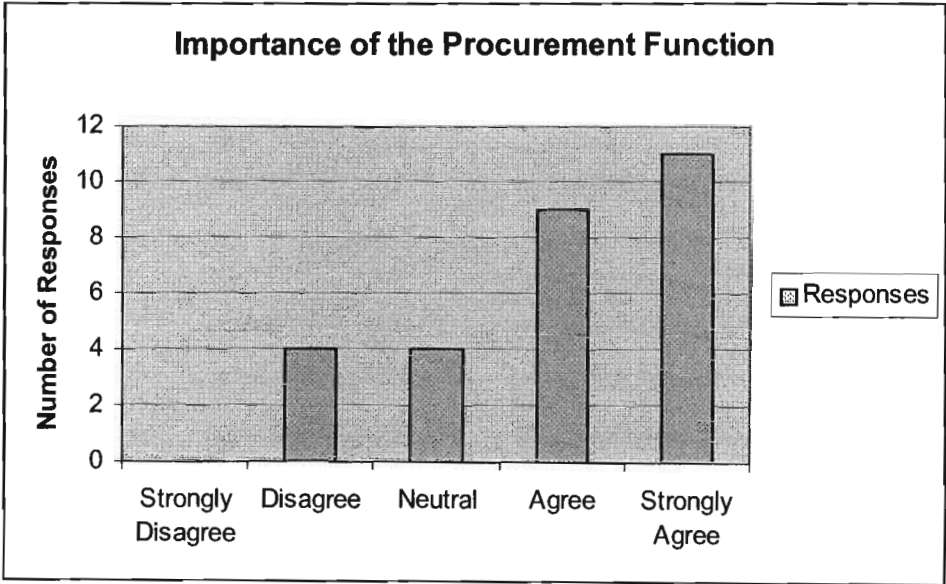

Figure 4.6 – Importance of the procurement function

Figure 4.7 Illustrates the number of respondents that consider the procurement function to be adding value to UTi Domestic.
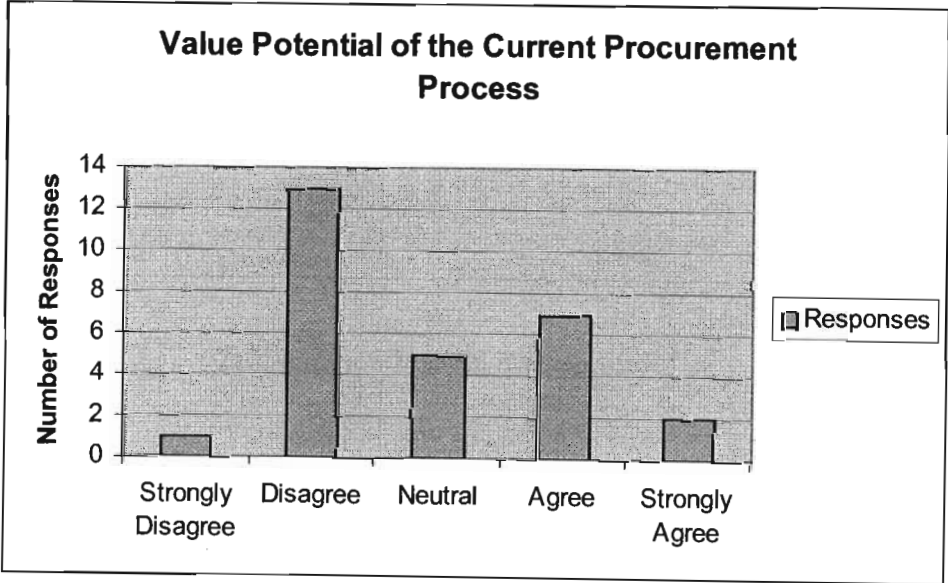

Figure 4.7 – Value potential of the current procurement process

4.5.3 The Importance of Information to the Procurement Function

From the analysis of the responses to the management questionnaire, it was discerned that management felt that there was a clear lack of information to manage the procurement function at UTi Domestic. This finding was echoed by the findings in the staff questionnaires as depicted below.

An overwhelming ninety six percent agreed that information is critical to managing procurement while 50 percent believed that information was not easily available to manage procurement internally at UTi Domestic (25 percent of the respondents remained neutral on this topic). Sixty-four percent of the respondents believed that information regarding goods purchased was not easily available, while fifty four percent believed that there was little information available to manage suppliers.

The respondents were split on whether management had access to information to manage the procurement function at UTi Domestic. Thirty six percent of the respondents believed that management did not have access to information to manage the procurement function, while thirty six percent of the respondent believed the converse. Twenty eight percent of the respondents remained neutral on this subject

These findings point towards a problem with information relative to managing procurement at UTi Domestic and this will be discussed in the next chapter.

Figure 4.8 Illustrates the number of respondents that consider information to be critical to the procurement function.
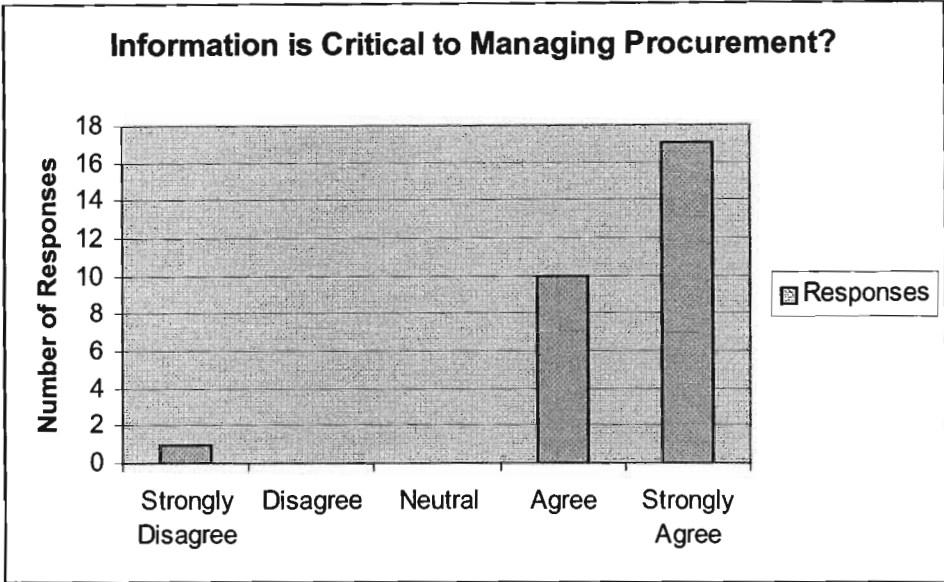

Figure 4.8 – Information is critical to managing procurement?

Figure 4.9 illustrates the responses to the question of whether information is easily accessible internally at UTi Domestic to manage the procurement function.

Figure 4.9 – Availability of information to manage procurement processes internally

Figure 4.10 Illustrates the number of responses to the question of whether information regarding all goods purchased is easily available.
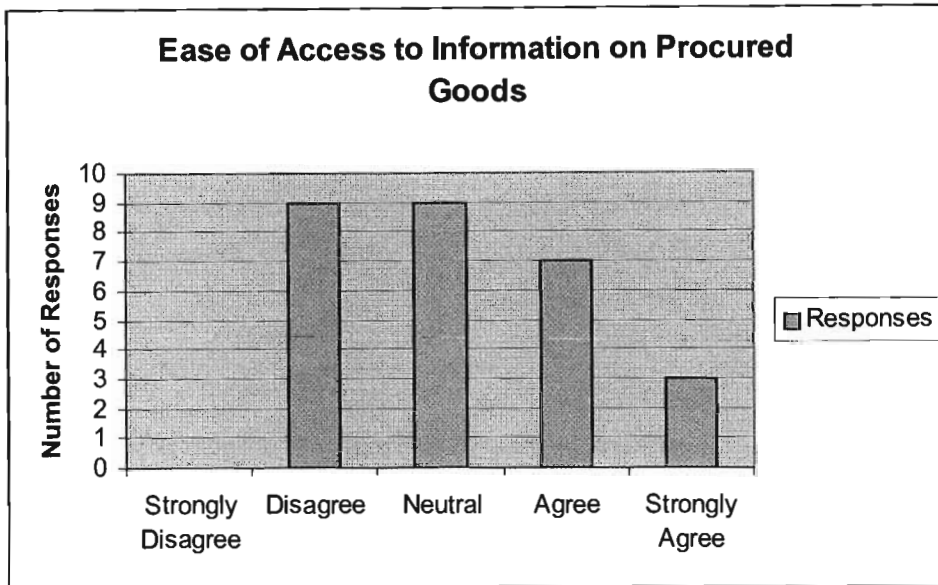
Figure 4.10 – Ease of access to information on procured goods

Figure 4.11 Illustrates the number of responses to the question of whether information was easily accessible at UTi Domestic to manage suppliers.

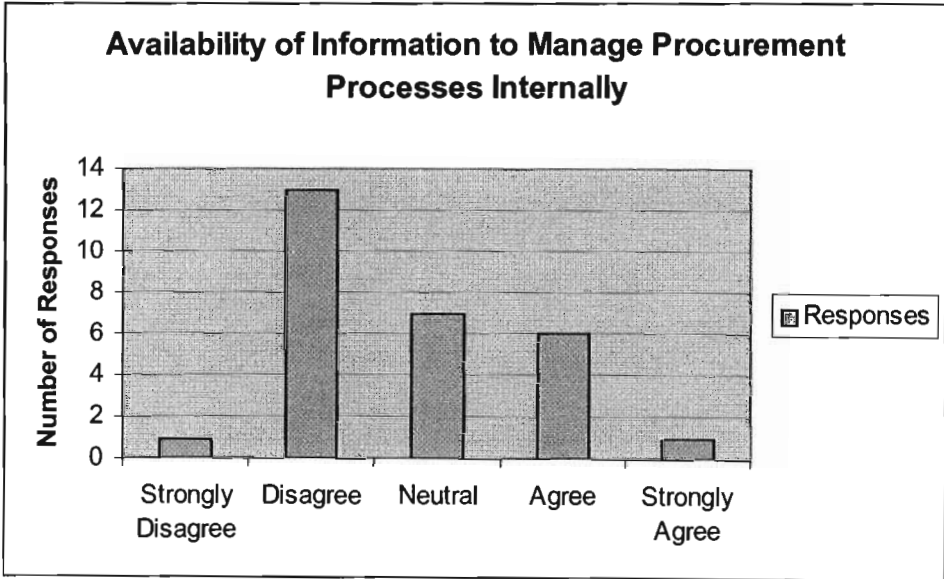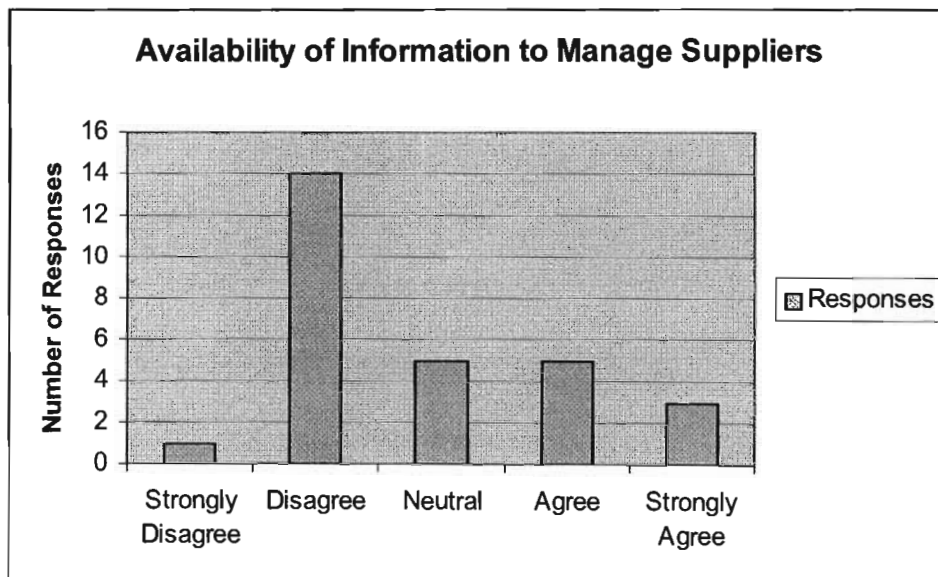**Figure 4.11 – Availability of information to manage suppliers**

Figure 4.12 Illustrates the number of responses to the question of whether management had access to information to manage procurement at UTi Domestic.
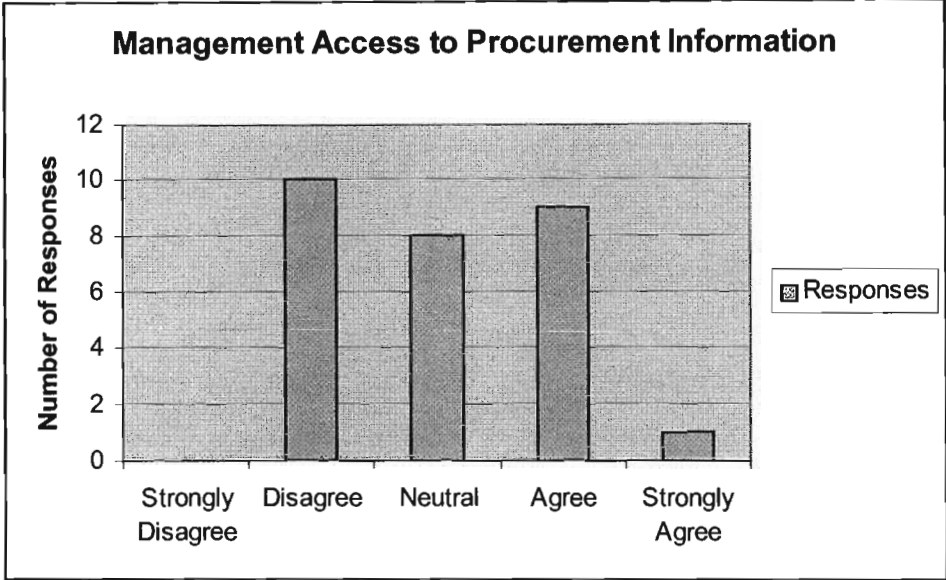
Figure 4.12 – Management access to procurement information

4.5.4 Management Investment to remedy procurement problems

Fifty percent of the respondents believed that management would be willing to invest in the procurement function at UTi-Domestic, while thirty nine percent of the respondents remained neutral on this subject.

This is depicted in the figure below:

Figure 4.13 Illustrates the number of responses to the question of whether management would be willing to invest in the procurement function at UTi Domestic.
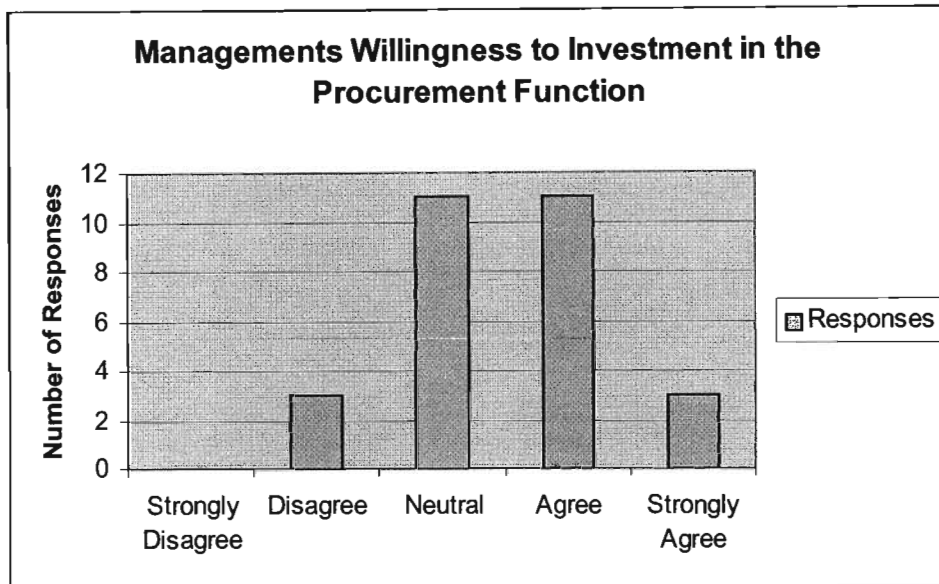
Figure 4.13 – Management's willingness to investment in the procurement function

4.5.5 E-Procurement Possibilities

Eighty six percent of the respondents showed an understanding of what electronic procurement was, while seventy one percent of the respondents believed that the implementation of an e-procurement solution would add quantifiable value to UTi Domestic. Seventy nine percent of the respondents believed that the implementation of an e-procurement solution would enable the effective management of the procurement processes at UTi Domestic.

Forty six percent of the respondents believed that UTi Domestic was ready for the implementation of an e-procurement solution (thirty two percent of the respondents remained neutral on this subject). Most importantly, one hundred percent of the respondents believed that staff training would be a necessity for the successful implementation of an e-procurement solution.

The graphical depictions of these appear below:

Figure 4.14 Illustrates the respondents understanding of the e-procurement concept.
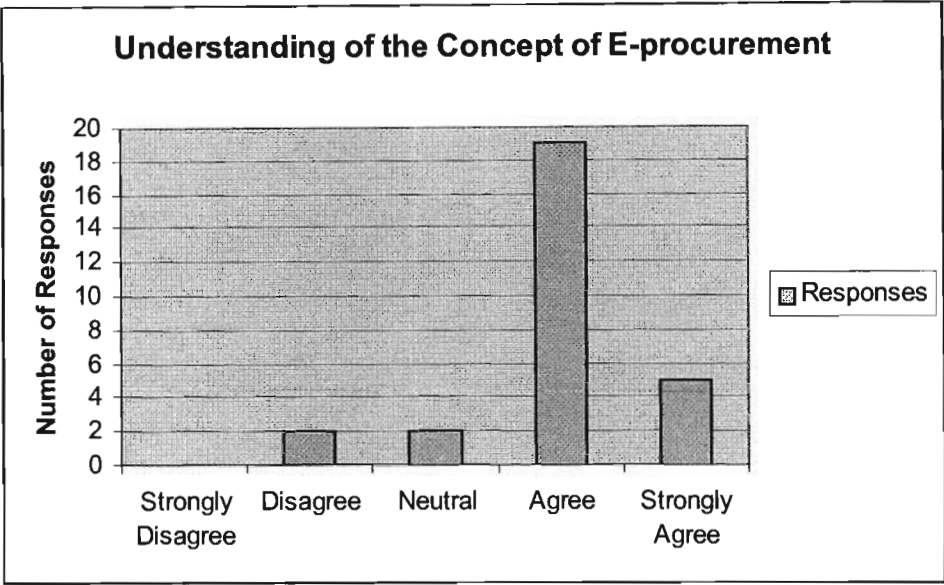
Figure 4.14 – Understanding of the concept of e-procurement

Figure 4.15 illustrates the responses to the question of whether an investment in e-procurement would add value to UTi Domestic.
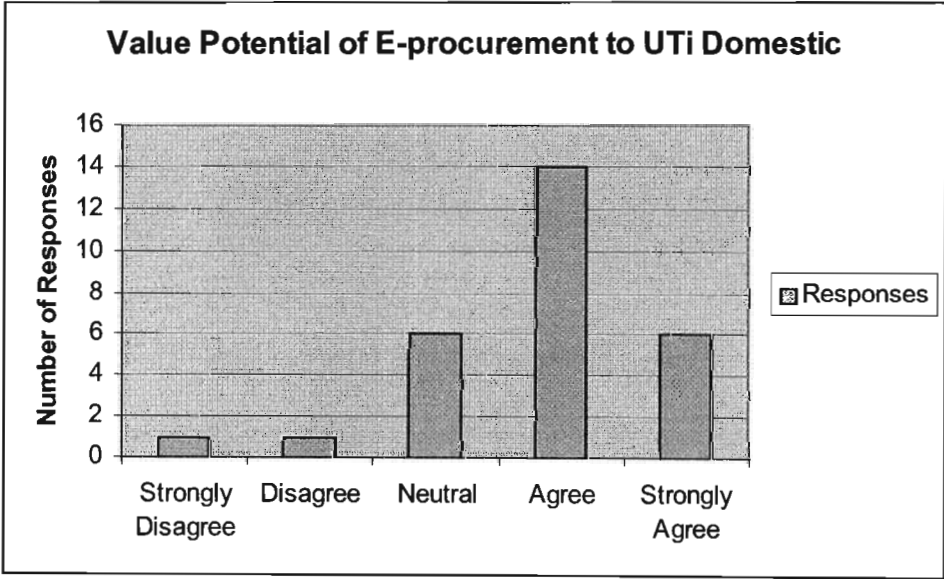

Figure 4.15 – Value potential of e-procurement to UTi Domestic

Figure 4.16 Illustrates the number of responses to the question of whether an e-procurement solution would assist with the effective management of procurement.
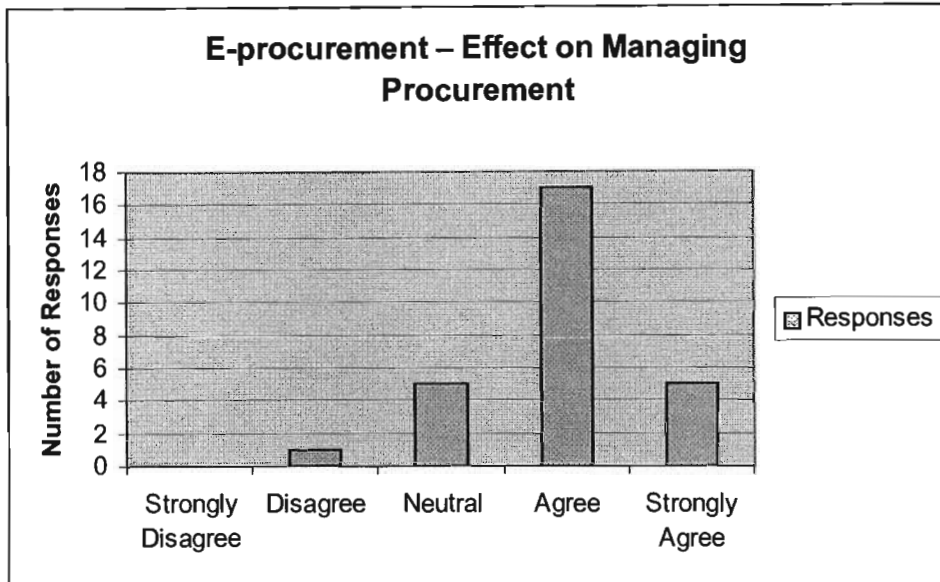
Figure 4.16 – E-procurement – effect on managing procurement

Figure 4.17 illustrates the respondent's views as to whether UTi Domestic is ready for an e-procurement solution.
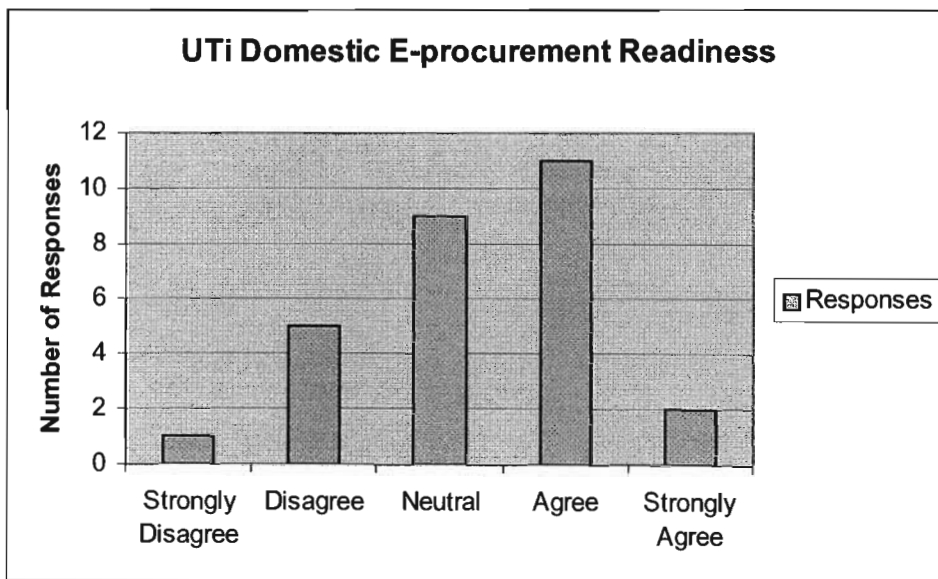
Figure 4.17 – UTi Domestic e-procurement readiness

Figure 4.18 illustrates the respondent's view as to the training requirements for the successful implementation of an e-procurement solution.
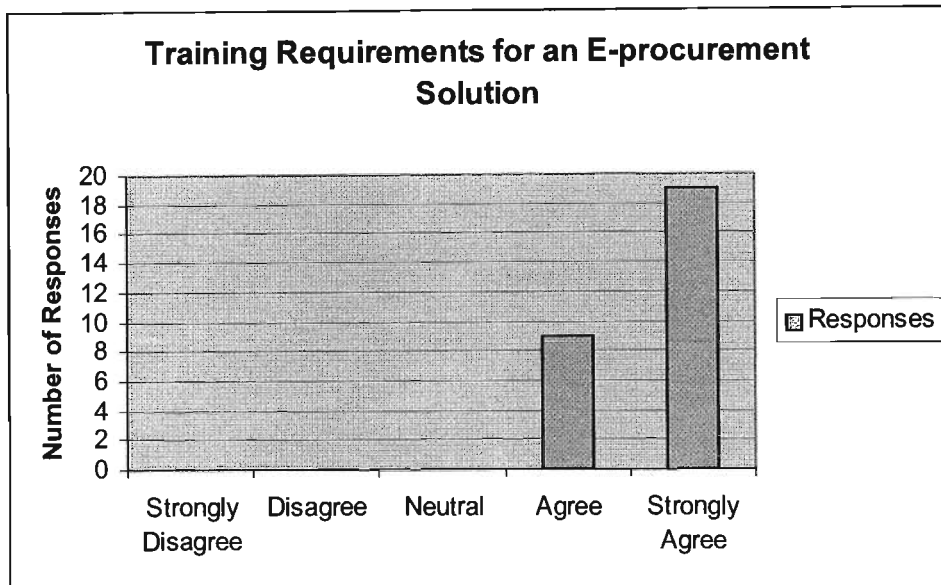
Figure 4.18 – Training requirements for an e-procurement solution

4.6 FREE FORMAT RESPONSES – PROCUREMENT STAFF QUESTIONNAIRE

A free format question was added to the end of the procurement staff questionnaire to determine the views of the respondents relative to the possible benefits that an e-procurement solution could bring to UTi Domestic.

These free format responses were summarised and are presented below. The following themes emerged from the responses:

- Possible cost savings and competitive pricing

- Information available for effective management and informed decision making

- Defined and documented procurement processes for control

- Management of complete procurement process

- Overall better management of procurement function

- Simplicity of procurement process

- Measurable performance – increases in efficiency

- Easier reconciliation of supplier accounts

- Disciplined and controlled spending with an approval process

- On time deliveries and possible time savings

- Visibility

- Better relationships with suppliers

- Paperless Environment

- Management of assets in terms of warranties

- Reduction in staff numbers necessary to perform the procurement function

4.7 CONCLUSION

The current Chapter presented the results of the answers to the procurement staff and management questionnaires. It is clear that management and staff agree on certain important points such as the importance of the procurement function at UTi Domestic and the need for easily accessible information to manage the procurement function.

However, there is clear dissension as to the possible solution to the problems. The procurement staff views an e-procurement solution, as a viable solution to the procurement problem; while management believe the solution to be in the redefinition of procurement processes and the implementation of defined procurement policies.

The following chapter will endeavor to provide an in-depth discussion of the results.

CHAPTER FIVE
DISCUSSION OF RESULTS

5.1 INTRODUCTION

The previous chapter presented the results from the responses to the procurement questionnaires administered to the procurement staff at UTi Domestic. In addition, the chapter presented the results from the procurement management questionnaires.

This chapter will focus on an in-depth discussion of the results. The discussion will engage a critical analysis of the literature as it pertains to the specific findings of the study. An attempt will be made to relate the findings of the study to the objectives of the study, from the perspectives of both management and staff responsible for the procurement function at UTi Domestic.

5.2 AIMS OF THE STUDY

The aims and objectives of the study are the fundamental driving considerations for the research. The aims and objectives will remain the central focus of this discussion and will be considered in conjunction with the findings from the previous Chapter.

The aim of the study was to identify the effectiveness and efficiency of the current procurement processes in place at UTi Domestic and to investigate the feasibility of using Electronic Procurement (e-procurement) as a possible mechanism for Business Process Re-Engineering within UTi Domestic to streamline and add value to the overall procurement processes.

5.3 BIOGRAPHICAL VARIABLES

The results of the questionnaires administered to the procurement staff and management demonstrated that overall, management displayed more years of service at UTi Domestic than the procurement staff.

Regarding years of experience with the procurement function, management also displayed more years of procurement experience than the procurement staff. Eighty nine percent of the procurement staff displayed between one and five years of procurement experience compared to fifty percent displayed by management. Eleven percent of the procurement staff displayed procurement experience of between six and ten years with no procurement staff member having more than ten years of procurement experience. Management however, had seventeen percent of responses with experience of between six to ten years, seventeen percent with experience of between eleven to fifteen years and seventeen percent of responses greater than twenty years of experience.

This is a significant finding as it demonstrates that overall, the management at UTi Domestic are more versed in the business of UTi Domestic due to more years of service. Management are also more experienced in the procurement function, as deduced from the findings regarding years of procurement experience. This finding will be considered when recommendations are made.

The next section of the research will discuss the findings of the study linked to the important aims and objectives of the study.

5.4 VALUE POTENTIAL OF CURRENT PROCUREMENT PROCESSES

The findings of the research revealed that management believed that UTi Domestic had problems with procurement, primarily due to a lack of defined and documented procurement policies. This has resulted in the fundamental problem of a lack of control

over the procurement function. The procurement processes at UTi Domestic were ad hoc with no definition.

Management believed that the procurement function was distributed and decentralised and this had resulted in all of the procurement staff members in the various divisions and branches of UTi Domestic pursuing different processes in the procurement of goods. No price negotiation forums existed, and this negated the benefit of possible bulk discounts that are linked to economies of scale.

A majority of the procurement staff acknowledged the importance of the procurement function at UTi Domestic, and agreed with management vis-à-vis the current procurement processes in place at UTi Domestic. Both parties concluded that the current procurement processes were not adding value to the organisation.

According to Roper (2005), the current procurement processes at UTi Domestic were manual, with minimal control mechanisms. Roper (2005) indicated that UTi Domestic displayed multiple layers of approval procedures that slowed down the procurement process, without adding much value.

The aim of the study required the identification of the effectiveness and efficiency of the current procurement processes in place at UTi Domestic. The above findings clearly indicate that the procurement processes at UTi Domestic are far from being effective and efficient.

According to Hammer (2002:57), in the absence of a focus on process, an organisation cannot consistently deliver the performance levels that customers demand. Hammer (2002) believes that processes are the route to results and the success of an organisation.

A business process such as the procurement process, can be defined as any broad collection of activities within an organisation, involved in the goal of developing a product or service for the customer, irrespective of whether the customer is internal or

external to the business (Process Management 2005). Managing the key business processes is key to the success of an organisation.

Procurement is a standard business process, and the more investment that is made into the design of the procurement process, the greater the potential return on investment (Process Management 2005). Because purchased goods and services consume a large proportion of an organisation's revenue (thirty percent of revenue for service companies and as much as seventy percent for manufacturers), an effective procurement process directly benefits the organisation (Optimum Purchasing 2003).

Key to the procurement process is the procurement policy. The researcher considers the starting point to a successful procurement process to be in the design, documentation and implementation of an effective procurement policy. The treatment by an organisation of its procurement policies can have a significant impact on profitability. In UTi Domestic, a well-structured procurement policy holds the potential of ensuring that the organisation is leveraging its buying power and obtaining value at an acceptable price.

Management recommended that a structured procurement department be established as a solution to the procurement problem. This department would be responsible for the creation and maintenance of a defined procurement process at UTi Domestic. This would ensure the leveraging of procurement best practices and the consolidation of negotiated price benefits.

The discussion clearly reveals that both management and staff agree on the need for a reconsideration of the current procurement process and the redefinition of policies to guide this process. This finding is clearly supported by the literature, which specifies that the definition of a procurement policy is central to the success of the procurement function.

Since both management and procurement staff agree that the procurement process at UTi Domestic is in need of re-design to fit the current business requirements, Business

process reengineering (BPR) will now be considered as a possible tool for the re-definition of processes at UTi Domestic.

Over the past fifteen years, organisations have been forced to improve business processes due to a demand from customers (Reengineering (BPR) Introduction and Concepts 2003). UTi Domestic is under a similar pressure from its customers, driving towards higher levels of efficiencies that translates to reduction in costs for customers. Technology is a key driver in the need for business process improvement. With new technologies like the Internet bringing new capabilities to businesses, requirements have emerged for business process improvements to ensure sustainable competitiveness.

BPR involves the redesign of business processes to achieve improvements in measures of performance such as cost, quality service and speed (Pycraft et al 2001:670). This relates to the findings of the study as both management and procurement staff, agree that the current procurement processes were not adding value to UTi Domestic. BPR holds the potential to ensure that the redesigned procurement process is adding value to the organisation.

BPR is a powerful tool used to ensure performance in organisations, with many electronic commerce technologies being deployed to redesign inter-organisational processes.

E-procurement is a possible means of using technology to reengineer the procurement process at UTi Domestic. According to Hartley (2004), e-procurement aims to help businesses to streamline procurement processes. E-procurement enables organisations to automate their purchasing processes and to reduce the processing by more than 85 percent (eProcurement 2004). The adoption of an e-procurement solution could save time, money and labour wasted on manual activities.

An e-procurement solution can be Internet based and allow technology to facilitate the purchasing of goods and services and the tracking of vendors and their offerings. E-procurement has proven to result in reductions in paperwork necessary for the completion

of the purchasing of items and the turnaround time involved in the delivery of the goods ordered (Rayport and Jaworski 2001:353). This can have a significant impact on the effectiveness and efficiency of the procurement function.

To manage the expectations of an e-procurement effort, it is important to bear in mind that part of the return on investment will be realized through lower purchasing prices. The rest will come from the efficiency improvements within the buying process (Hartley 2004).

5.5 ACCESS TO INFORMATION

The findings of the study revealed that management at UTi Domestic believed that there was a lack of information to manage the procurement function. Management further believed that no centralised location existed that could be used to obtain information relevant to the procurement function at UTi Domestic.

The procurement staff echoed these findings, with a majority of the respondents agreeing that information is critical to managing procurement. Fifty percent of the procurement staff believed that there was a lack of information to manage procurement internally at UTi Domestic. Sixty-four percent of respondents believed that information regarding goods purchased was not easily available, while fifty four percent believed that there was little information available to manage suppliers.

The respondents were split on whether management had access to information to manage the procurement function at UTi Domestic. Thirty six percent of the respondents believed that management did not have access to information to manage the procurement function, while thirty six percent of the respondent believed the converse. Twenty eight percent of the respondents remained neutral on this subject

Further to this, Roper (2005) indicates that there are no detailed reporting capabilities relative to the procurement function at UTi Domestic, and this effects the management of procurement.

This clearly demonstrates a problem relative to information at UTi Domestic. The literature reveals that information is central to the effective management of the procurement function, assisting in the procurement decision-making process (Hartley 200).

Information is essential to procurement, and if good data is available, the organisation can make use of economic analysis methods such as cost-benefit analysis or cost-utility analysis for procurement decision-making (Procurement 2005). The implementation of an e-procurement solution holds promises of centralized supplier information (eProcurement 2004).

Management recommended that a structured procurement department be established as a solution to the procurement problem. This department would also be tasked with creating a centralised repository of information to be used to manage the procurement function across all the divisions and branches of UTi Domestic.

5.6 STAFF READINESS FOR E-PROCUREMENT IMPLEMENTATION

The analysis of the procurement staff questionnaire results revealed that forty six percent of the respondents believed that UTi Domestic was ready for the implementation of an e-procurement solution (thirty two percent of the respondents remained neutral on this subject). An overwhelming one hundred percent of the respondents believed that staff training would be a necessity for the successful implementation of an e-procurement solution.

This clearly demonstrates the importance that the procurement staff, attach to the need for staff training to ensure the success of the e-procurement solution.

BPR is considered to be the possible means for ensuring process redefinition. The literature reveals that BPR will fail if adequate training and education is not administered to the staff that will ultimately work with the new processes (Weicher et. al 2002). The principle obstacle to BPR is the fear among employees that their jobs are in danger.

Most analysts view reengineering and information as irrevocably linked. Studies indicate that over half of all reengineering efforts are initiated due to perceived technology opportunities, but the actual technological solution is less important than educating employees on the use of the information technology as both a strategic initiative and as a tool for the reengineering process (Weicher et. al 2002).

5.7 MANAGEMENT'S VIEW ON AN E-PROCUREMENT SOLUTION

This is the juncture in the research where management and procurement staff take opposing stances. The findings of the study reveal that management does not consider an e-procurement solution to be the immediate solution of choice in these circumstances. Management firmly believes, that the current procurement processes require re-engineering and re-definition so as to meet the current best practices in this regard. Only then would it be wise to consider an e-procurement solution.

The procurement staff; provide an opposing view. Eighty six percent of the respondents showed an understanding of what electronic procurement was, while seventy one percent of the respondents believed that the implementation of an e-procurement solution would add quantifiable value to UTi Domestic. These respondents consider e-procurement to be the solution of choice to the current procurement dilemma faced by UTi Domestic. Seventy nine percent of the respondents believed that the implementation of an e-procurement solution would enable the effective management of the procurement processes at UTi Domestic.

There is clear dissention between management and procurement staff on this subject. The view taken by management is supported by Hartley (2004) who believes that some of the benefits attributed to an e-procurement solution can be sensibly achieved from the review of current procurement practices and the development of defined procurement policies and guidelines within the organisation. Hartley (2004) considers the focus on the actual process and the reengineering thereof to the logical starting point.

According to Hartley (2004), exercises such as spend analysis and strategic sourcing can be performed offline, without the use of any e-procurement technology, and yet deliver measurable benefits. Even if an e-procurement solution is the solution of choice, before the technology is implemented, the organisation should conduct a detailed spend analysis and develop purchasing rules through strategic sourcing (Hartley 2004).

Only after this process is completed, should the appropriate technology platform be put in place that can cement the detailed agreements reached, and create the rules that ensure staff only purchase according to the pre-negotiated contracts (Hartley 2004).

This approach is contrary to the Business Process Reengineering (BPR) approach which is the approach to process redesign as advocated by the procurement staff. The BPR method is defined by Hammer and Champy (1993) as:

> 'the fundamental reconsideration and radical redesign of organizational processes, in order to achieve drastic improvements of current performance in cost, service and speed'.

Contrary to Hartley (2004), Hammer and Champy (1993) consider value creation for the customer as being the leading factor for BPR and believe that information technology plays an important enabling role in the reengineering process.

In the past, information technology has been implemented in organisations to assist with the improvement of business operations. This is known as continuous improvement. The technology has been applied as part of a process rationalization, with the primary motivation behind the use of the technology being to automate existing manual processes (Fitzgerald & Ciaran 1996). In these cases, the processes themselves have been largely left intact. The futility of this approach has been summarized by Drucker, (Fitzgerald & Ciaran 1996) in his declaration: 'there is nothing more useless than to do efficiently that which shouldn't be done at all'.

In contrast to continuous improvement, BPR promotes the radical redesign of processes to achieve a step-function improvement in results (Corporate Reengineering; Business Process Reengineering 2005). It even promotes the abolition of processes that don't work

so that new and more effective ones can be created to replace them (Corporate Reengineering; Business Process Reengineering 2005).

In BPR, organisations start with a blank sheet of paper and rethink existing processes to deliver value to the customer (Rigby 2004). Companies reduce organizational layers and eliminate unproductive activities in two key areas. First, companies redesign functional organisations into cross-functional teams. Second, they use technology to improve data dissemination and decision-making (Rigby 2004).

According to Rigby (2004), BPR can reduce cost and cycle time by eliminating unproductive activities and the employees who perform them. The reorganization of teams associated with BPR decreases the need for management layers and accelerates information flows (Rigby 2004).

BPR has three target categories (Business Process Reengineering 2006):

- Customer friendly – One of the main goals of introducing BPR is to get the competitive edge that can only be gained by providing customers more than what others in the market are asking for.

- Effectiveness – How effective is the product or service that the business or manufacturing company is providing to the customer?

- Efficiency – How efficient is the company that is manufacturing the product, before introducing the product to the market to maximize costs? This is one of the key categories that are believed to be more important than others.

Davenport (1992) prescribes a five-step approach to the BPR model:

1) Develop the business vision and process objectives: The BPR method is driven by a business vision, which implies specific business objectives such as cost reduction, time reduction and output quality improvement.

2) Identify the business processes to be redesigned: Most organisations use the 'High-Impact' approach, which focuses on the most important processes or those that are in conflict with the business vision.

3) Understand and measure the existing processes: This is necessary to ensure that the mistakes associated with past processes are avoided.

4) Identify Information Technology levers: Awareness of Information Technology capabilities can and should influence BPR.

5) Design and build a prototype of the new process: The actual design should not be viewed as the end of the BPR process. Rather, it should be viewed as a prototype, with successive iterations.

Point four in the above BPR model clearly indicates that Information Technology should be a key driver in the BPR solution. Technology is fundamental to BPR and is essential for the success of the implementation (Fitzgerald & Ciaran 1996).

The schools seem to be split on this subject, similar to the difference in opinions between management and procurement staff. Hartley seems to support the management approach, which calls for the possible redesign of processes without the necessary implementation of technology as an enabler. However, Hartley (2004) does not advocate that technology should not be considered at all.

As revealed in the literature above; Champy, Hammer and Davenport consider information technology to be a pivotal component to the redesign of processes. In the BPR approach, technology CANNOT be de-coupled from the redesign of processes, as is being requested by the management at UTi Domestic.

Information Technology can prove to be useful during the reengineering analysis and design process. During the implementation stage, the organisation would need to recognize that Information Technology is only a part of the reengineering solution, and the organisation would need to continually monitor IT performance and keep up to date with IT developments (Weicher et. al 2002).

5.8 MANAGEMENT'S WILLINGNESS TO INVEST IN AN E-PROCUREMENT SOLUTION

Management unanimously believed that no financial investment was necessary for technology (e-procurement) to re-engineer the current processes. An investment in staff may be necessary to reengineer the current procurement processes and to manage the procurement function. The implementation of defined procurement processes would be the initial step towards remedying the procurement problems at UTi Domestic.

Again, this view is contrary to the view of the procurement staff. Fifty percent of the procurement staff believed that management would be willing to invest in the procurement function at UTi-Domestic, while thirty nine percent of the respondents remained neutral on this subject.

The willingness on the part of management to invest in an e-procurement solution would be fundamental to the overall success of a technology driven solution. The literature above seems to favor the investment in technology to facilitate the radical redesign of business processes.

5.9 THE IMPACT OF ELECTRONIC PROCUREMENT ON PROFITABILITY

Seventy one percent of the procurement staff believed that the implementation of an e-procurement solution would add quantifiable value to UTi Domestic.

The implementation of an e-procurement solution holds promises of increases in supply chain efficiencies, reduction in costs, efficient payment of invoices and various financial opportunities for both client and supplier (eProcurement 2004).

According to Hartley (2004), the value proposition in terms of efficiency, lower prices and transaction volume exist with an e-procurement solution, with Internet based procurement leveraging information technology to perform functions with increased effectiveness and reduced transaction costs. This results in more efficient purchasing.

E-procurement enables organisations to reduce costs and increase efficiencies through supplier interaction, enabling the purchase of products online (E-Procurement 2003). Effective procurement, of which e-procurement is an integral part, has huge potential to save an organisation money, thereby increasing overall profitability (Delivering E-Procurement 2003).

Many large South African companies have realized the benefits of an e-procurement solution to the organisations buying processes and have thereby leveraged efficiencies and cost savings in their supply chains and gained tighter controls over their spend management (Hartley 2004).

The statistics detailing the effects of e-procurement (as discussed in Chapter 2 – 2.8.6) clearly reveal that e-procurement can genuinely save an organisation money and boost the overall profitability.

5.10 THE IMPACT OF ELECTRONIC PROCUREMENT ON MANGEMENT OF PROCUREMENT PROCESSES

Seventy nine percent of the procurement staff believed that the implementation of an e-procurement solution would enable the effective management of the procurement processes at UTi Domestic

This is supported by the literature, which advocates that an e-procurement solution would assist in the managing of the procurement function.

According to Hartley (2004), the implementation of an e-procurement solution allows faster and more informed decision-making by employees, due to a centralized repository of information, allowing staff to focus on other value added tasks.

Efficiency benefits that accrue from an e-procurement solution include reduced procurement costs, faster cycle times, less unauthorised buying, more highly organized information and tighter integration of the procurement function with key back-office systems (Rayport and Jaworski 2001). Effectiveness includes increased control over the supply chain, proactive management of key procurement data and higher-quality purchasing decisions within the organisation (Rayport and Jaworski 2001).

This clearly reveals that an e-procurement solution would have a positive impact on the management of the procurement process.

5.11 THE IMPACT OF BPR AND E-PROCUREMENT ON EMPLOYMENT

Unemployment is an important and vexing problem facing the South African economy (Mohr & Fourie 1997:128). Unemployment poses a serious threat to social and political stability (Mohr & Fourie 1997:128). The immediate impact of unemployment on individuals is the loss of income associated with employment and this could result in financial disaster for the person involved.

The introduction of an e-procurement solution to an organisation results in significant changes in the organisation, often running counter to the corporate culture and threatening the positions of established employees.

Michael Hammer and James Champy have admitted that in their book, BPR had not taken account of the human constituent of the business process (Business Process Reengineering 2006). BPR has become synonymous with 'downsizing', due to the abuse

by organisations of this concept, some of whom implemented indiscriminate cost-cutting under the guise of BPR, using the theory as an excuse for getting rid of staff (Corporate Reengineering; Business Process Reengineering 2005).

BPR should be implemented with caution and care to ensure that the organisation deals with the 'softer human issues'.

The implementation of BPR could also lead to Human Resources issues since people would now be replaced with Information Technology. This would be questionable within the current political climate in which the government is trying to increase employment levels (Mohr & Fourie 1997)

5.12 CONCLUSION

In conclusion, this chapter will summarise the findings of the study as they relate to the objectives.

The first objective of the study required the determination of whether the current procurement processes at UTi Domestic, were adding value to the organisation. The findings of the study revealed that both management and procurement staff agreed that the current procurement processes were not adding value to UTi Domestic. This result was also supported by Roper (2005); who indicated that UTi Domestic displayed multiple layers of approval procedures, which slowed down the procurement process, without adding much value. Both management and procurement staff believed that the current procurement processes were in need of re-design to fit the existing procurement requirements of UTi Domestic. The first objective of the study was entirely met.

The second objective of the study required the determination of whether staff at UTi Domestic had timeous access to information. The findings of the study revealed that staff at UTi Domestic did not have timeous access to information. Both management and a majority of the procurement staff agreed that no central repository of information existed, that was relevant to the procurement function. Further to this, Roper (2005) indicated that there were no detailed reporting capabilities relative to the procurement function at UTi

Domestic, supporting the findings of the study. This objective of the study was entirely met.

The third objective of the study required the determination of the readiness of the procurement staff at UTi Domestic for the implementation of an e-procurement solution. The findings of the study revealed that the procurement staff were not ready for an e-procurement implementation and all of the procurement staff believed that training would be necessary for the success of the solution. This objective was entirely met.

The fourth objective of the study required the determination of whether management at UTi Domestic believed that there was a need for the implementation of an e-procurement solution. The findings of the study were controversial relative to this objective. Management firmly believed that an e-procurement solution was not necessary in the circumstances, while procurement staff considered an e-procurement solution to be effective in the resolution of the procurement dilemma at UTi Domestic. Literature exists to support both points of view. This objective was entirely met as well, as it clearly provided management's insight in this regard.

The fifth objective required the determination of whether management at UTi Domestic were willing to make the financial investment to make the implementation of e-procurement a success. As discussed above, management did not believe that an e-procurement solution was viable in the current scenario. Management further believed that no financial investment was necessary in the procurement function at UTi Domestic apart from the human resource investment that management believed necessary to redesign and maintain procurement processes. This objective was entirely met.

The sixth objective required the determination of the impact of electronic procurement on profitability. The findings of the study reveal that a majority of the procurement staff believed that an e-procurement solution would boost profitability. This finding is also supported by the research on this subject as discussed above. This objective was entirely met.

The final objective of the study required the determination of the impact of electronic procurement on the management of the procurement processes. The findings of the study revealed that a majority of the procurement staff believed that the implementation of an e-procurement solution would enable the effective management of the procurement processes at UTi Domestic. This finding was also supported by the literature on this subject. This objective was entirely met.

The above analysis indicates that all of the objectives of the study have been entirely met. The next Chapter will provide recommendations to UTi Domestic relative to its procurement problems.

CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

Procurement is the acquisition of goods or services at the best possible total cost of ownership, in the correct quantity, at the correct time, in the correct place for the direct benefit or use of corporations, governments or individuals (Procurement 2005).

The aim of the study was to identify the effectiveness and efficiency of the current procurement processes in place at UTi Domestic and to investigate the feasibility of using Electronic Procurement (e-procurement) as a possible mechanism for Business Process Re-Engineering within UTi Domestic to streamline and add value to the overall procurement process.

The findings of the study indicate that all of the objectives have been entirely met. This is important, as it will allow the researcher to validly provide recommendations to UTi Domestic.

When the primary aim of the study is considered, the findings of the study indicated that the procurement process at UTI Domestic was ineffective and inefficient and this was having a negative impact on the management of the procurement function as well as on the overall profitability of the organisation. The findings of the study also revealed that both management and procurement staff concurred that the current procurement process at UTi Domestic was in need of redesign.

However, opinions varied dramatically between management and procurement staff regarding whether BPR (through the implementation e-procurement) was the solution to the procurement problems at UTi Domestic.

This chapter will provide recommendations to UTi Domestic relative to the procurement dilemma, by considering the following key factors:

- The years of procurement experience of management versus procurement staff,

- Process redefinition without technology versus the BPR approach,

- Staff readiness for an e-procurement solution,

- Management's willingness to invest in an e-procurement solution,

- The impact of BPR and e-procurement on employment,

- Is BPR worth the effort?

6.2 THE EFFECT OF MANAGEMENT EXPERIENCE

The findings of the study indicated that overall, management displayed more years of service at UTi Domestic and more years of procurement experience, than the procurement staff. This demonstrates that management at UTi Domestic were more versed in the business activities of UTi Domestic and more experienced in the procurement function.

This finding tends to guide the researcher into considering the opinions of management to hold more value than those of the procurement staff. However, the researcher believes that sound business principles and proven best practices should prevail if the ideas of management are contrary to these.

6.3 PROCUREMENT PROCESS REDEFINED

The requirement for the redesign of the procurement process is supported by the literature, indicating that a successful procurement function is inextricably linked to a properly designed and documented procurement process. Procurement is considered to be a standard business process, and the more investment that is made into the design of the procurement process, the greater the potential return on investment (Process Management 2005).

6.4 THE NEED FOR INFORMATION

The findings of the study indicated that both management and procurement staff displayed consensus that access to relevant information was essential to the procurement function and the management thereof. This information was lacking at UTi Domestic.

The literature reveals that information is central to the effective management of the procurement function, assisting in the procurement decision-making process (Hartley 200). If good data is available, the organisation can make use of economic analysis methods such as cost-benefit analysis or cost-utility analysis for informed procurement decision-making (Procurement 2005).

6.5 RECOMMENDATIONS

The findings of the study indicate that UTi Domestic is in need of the redesign of procurement processes, and this redesign must incorporate the informational needs that are necessary for the effective and efficient functioning and management of the procurement purpose.

6.5.1 Process redesign with or without technology

The findings indicate that the opinions of management and procurement staff were conflicting on this subject. Management recommended that a structured procurement department be established as a solution to the procurement problem with the responsibility for the creation and maintenance of a defined procurement process at UTi Domestic. This would ensure the leveraging of procurement best practices and the consolidation of negotiated price benefits.

While the procurement staff were in favour of an e-procurement solution to remedy the procurement problems at UTi Domestic, management were reluctant to invest in technology to remedy the current procurement problems. Management believed that the organisation could achieve colossal savings and ensure that the procurement function was effective and efficient, primarily by the redesign and management of the procurement

processes according to the requirements of the organisation and the industry best practices.

Management further believed that the recommended procurement department would also be tasked with creating a centralised repository of information to be used to manage the procurement function across all the divisions and branches of UTi Domestic. However, this recommendation does not provide a mechanism for the data collection and doesn't specify the means in which the data will be aggregated to ensure that the data is capable of being used as information for the procurement function. The researcher believes that this would require the intervention of a technological solution to ensure success, given the high volume of transactions and the decentralized and distributed nature of the divisions and branches that engage the procurement function.

Management has the experience advantage, but the literature and best practices indicate that in totality, the e-procurement solution is a viable solution.

E-procurement is a possible means of using technology to reengineer the procurement process at UTi Domestic. An e-procurement solution clearly retains the potential of meeting all the aims of the study, which attempted to investigate the feasibility of using Electronic Procurement (e-procurement) as a possible mechanism for Business Process Re-Engineering within UTi Domestic to streamline and add value to the overall procurement processes.

According to Hartley (2004), e-procurement aims to help businesses to streamline procurement processes. E-procurement enables organisations to automate their purchasing processes and to reduce the processing by more than 85 percent (eProcurement 2004). The adoption of an e-procurement solution could save time, money and labour wasted on manual activities.

Efficiency benefits that accrue from an e-procurement solution include reduced procurement costs, faster cycle times, less unauthorised buying, more highly organized

information and tighter integration of the procurement function with key back-office systems (Rayport and Jaworski 2001). Effectiveness includes increased control over the supply chain, proactive management of key procurement data and higher-quality purchasing decisions within the organisation (Rayport and Jaworski 2001).

The e-procurement solution holds immense potential for UTi Domestic.

6.5.2 Staff readiness for the e-procurement solution

The findings of the study indicated that the procurement staff at UTi Domestic required training for the successful implementation of an e-procurement solution. The literature reveals that BPR will fail if adequate training and education is not administered to the staff that will ultimately work with the new processes.

Procurement staff would need to be trained on the new procurement processes and on the new e-procurement technologies to ensure that the implementation of the solution would be a success.

6.5.3 Management's willingness to invest in an e-procurement solution

Management unanimous belief that no financial investment was necessary for technology (e-procurement) to re-engineer the current processes would need to be revised. The literature clearly reveals that there are massive returns on investment possibility with the implementation of an e-procurement solution. Management would need to see the solution in totality and avoid the need to invest initially in the redesign of the processes and then again (albeit double) in technology to streamline and enable these newly designed processes.

At this juncture, it is clear that change is necessary facilitate a resolution to the current problem. Management is demonstrating a resistance to change in these circumstances, as management is not willing to consider the implementation of an e-procurement solution. The literature clearly indicates that an e-procurement solution holds huge value potential

for UTi Domestic. Management is demonstrating a conservative approach to the procurement problem. In current business environment, technology is an important enabler for business success, and decisions to use technology to streamline processes should always be considered.

Change is a necessary process in any modern organisation, not only when an organisation is in need of change to allow the resolution of existing problems, but also when transformation is necessary to ensure that the organisation is meeting the demands of its customers and other stakeholders. Management needs to embrace that technology is a necessary component for the success and survival of the organisation and management needs to ensure that all business processes are making use of technology to facilitate effective and efficient business processes. This is the same for the procurement process at UTi Domestic that is in need of technology enablement.

Management would also need to allow the opinions of the procurement staff to be heard. The procurement staff are responsible for the procurement function, and their requirements for the successful fulfillment of this function needs to be considered. The procurement staff are requesting an e-procurement solution as a resolution to the procurement problem and management would need to give consideration to this request.

Management would need to consider conducting further research, among all stakeholders to establish what the stake holder's feelings are in these circumstances.

The previous chapter has demonstrated the positive impact of e-procurement on profitability; effectiveness and efficiency of the procurement function and on the management of the procurement process. The investment in an e-procurement solution would be a wise one.

6.5.4 Impact of BPR and e-procurement on employment

BPR has become synonymous with 'downsizing', due to the abuse by organisations of this concept, some of whom implemented indiscriminate cost-cutting under the guise of

BPR, using the theory as an excuse for getting rid of staff (Corporate Reengineering; Business Process Reengineering 2005).

Even though BPR is open to abuse, this approach would not be acceptable in organisations that are genuinely looking at process redesign, and that are committed to a culture that recognizes the importance of the Human Resource. The fundamental driver for the process redesign would be the achievement of the organizational goals.

The procurement process is in need of redesign because this process is not effective and efficient and is not adding value to the organisation. The redesign of the procurement process would occur according to the following BPR model:

1) Develop the business vision and process objectives: The BPR method is driven by a business vision, which implies specific business objectives such as cost reduction, time reduction and output quality improvement.

2) Understand and measure the existing processes: This is necessary to ensure that the mistakes associated with past processes are avoided.

3) Identify Information Technology levers: Awareness of Information Technology capabilities can and should influence BPR.

4) Design and build a prototype of the new process: The actual design should not be viewed as the end of the BPR process. Rather, it should be viewed as a prototype, with successive iterations.

The key driver behind the BPR implementation is the creation of effective and efficient processes that will add value to the organisation.

6.5.5 BPR using e-procurement is worth the effort

The question arises whether it is worth initiating BPR projects in the first place. The answer is in the affirmative. Firstly, a thorough understanding of the current process, which is a key deliverable from the methodology discussed above, can help identify basic problems, some which can be rectified without radical change. Also, it may be possible to

identify stages in the process where a richer approach could add value for the organisation without too much extra effort. Finally, BPR could give rise to the benefits as discussed previously, and these make the exercise very valuable. BPR would ensure that the initial spend in technology is prudent. The technology would complement the redesigned process and an–procurement solution would avoid having to bastardise technology to fit the business process and vice versa.

There is no easy road to success in business, as is the case for BPR. However, the journey may be just as important as the destination, as there are potentially significant benefits to be gained from the undertaking of the exercise. The rewards of a successful e-procurement implementation can result in a prosperous organisation.

6.6 CONCLUSION

This chapter concludes the study. The above analysis favours the implementation of an e-procurement solution as the solution of choice for resolution of the current procurement problems at UTi Domestic. The researcher recommends that UTi Domestic consider the implementation of an e-procurement solution as a resolution to the current procurement problems.

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APPENDICES

Appendix one: Procurement Staff Questionnaire

PROCUREMENT PROCESS – Questionnaire

I appreciate your participation in this research program regarding procurement processes at UTi Domestic. Please can you answer the following questions as honestly as possible?

Please answer the following demographic questions:

1. **AGE**   :

20 – 29	30 - 39	40 - 49	50>

2. **GENDER** :

FEMALE	4.7.1.1.1 MALE

3. **RACE**   :

BLACK	4.7.1.1.2 WHITE	INDIAN	COLOURED	Other

4. **YEARS OF SERVICE AT UTi**   :

1 – 10	11 - 20	21 – 30	30 >

5. **YEARS OF EXPERIENCE IN PROCUREMENT**   :

1 – 5	6 – 10	11 – 15	16 – 20	20 >

For the following questions, please place an "X" in the box for each statement that best describes your point of view on the issue. Your answers should as best as possible represent your choice based on your understanding of the situation, as it exists at UTi Domestic.

6. **The current procurement process at UTi Domestic is a manual paper-based procurement process?**

Strongly disagree	Disagree	Neutral	Agree	Strongly agree

7. **The procurement function is considered to be important to UTi Domestic?**

Strongly disagree	Disagree	Neutral	Agree	Strongly agree

8. **The current procurement process is adding value to UTi Domestic?**

Strongly disagree	Disagree	Neutral	Agree	Strongly agree

9. **The current procurement process will allow UTi Domestic to grow in line with its overall growth strategy?**

Strongly disagree	Disagree	Neutral	Agree	Strongly agree

10. **You usually have to wait for extended periods of time to receive goods that have been purchased?**

Strongly disagree	Disagree	Neutral	Agree	Strongly agree

11. Information is critical to managing procurement?

Strongly disagree	Disagree	Neutral	Agree	Strongly agree

12. You have easy access to information regarding all goods purchased?

Strongly disagree	Disagree	Neutral	Agree	Strongly agree

13. You have all the information available to manage the procurement processes internally at UTi Domestic?

Strongly disagree	Disagree	Neutral	Agree	Strongly agree

14. You have all the information available to be able to manage suppliers?

Strongly disagree	Disagree	Neutral	Agree	Strongly agree

15. You can easily track the status of your order with your suppliers?

Strongly disagree	Disagree	Neutral	Agree	Strongly agree

16. You can easily reconcile your supplier accounts?

Strongly disagree	Disagree	Neutral	Agree	Strongly agree

17. Management has access to information to manage procurement at UTi Domestic?

Strongly disagree	Disagree	Neutral	Agree	Strongly agree

18. Management at UTi Domestic will be willing to invest in procurement?

Strongly disagree	Disagree	Neutral	Agree	Strongly agree

19. E-procurement (Electronic Procurement) is the use of technology (mainly the Internet) to manage all procurement transactions?

Strongly disagree	Disagree	Neutral	Agree	Strongly agree

20. An Investment into an E-procurement system will add to the financial bottom line at UTi Domestic?

Strongly disagree	Disagree	Neutral	Agree	Strongly agree

21. The implementation of an E-procurement system will assist UTi Domestic with effectively managing the procurement process?

Strongly disagree	Disagree	Neutral	Agree	Strongly agree

22. UTi Domestic uses technology to streamline processes?

Strongly disagree	Disagree	Neutral	Agree	Strongly agree

23. UTi Domestic is successfully using the Internet to transact?

Strongly disagree	Disagree	Neutral	Agree	Strongly agree

24. UTi Domestic is ready to implement E-Procurement?

Strongly disagree	Disagree	Neutral	Agree	Strongly agree

25. Staff training is required for the successful implementation of E-Procurement at UTi Domestic?

Strongly disagree	Disagree	Neutral	Agree	Strongly agree

Please provide a free-format answer to the question below

26. What benefits do you think an Electronic Procurement system will provide for yourself, suppliers and the company?

_____

_____

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Appendix two: Procurement Management Questionnaire

PROCUREMENT PROCESS– Management Questionnaire

Please answer the following demographic questions:

1. **AGE** :

20 – 29	30 - 39	40 - 49	50>

2. **GENDER:**

FEMALE	4.7.1.1.3 MALE

3. **RACE** :

BLACK	4.7.1.1.4 WHITE	INDIAN	COLOURED	Other

4. **LEVEL OF MANAGEMENT** :

JUNIOR	MIDDLE	SENIOR

5. **YEARS OF SERVICE AT UTi** :

1 – 10	11 - 20	21 – 30	30 >

6. **YEARS OF EXPERIENCE IN PROCUREMENT** :

1 – 5	6 – 10	11 – 15	16 – 20	20 >

7. What is your knowledge of the current procurement process in place at UTi Domestic?

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8. In your opinion, are there problems with the current procurement process?

    a. Prompt – What specifically are these problems?

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9. In your opinion, what are the probable causes of these problems?

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10. What recommendations would you make to address these problems?

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11. Is the implementation of an e-procurement solution, a possible solution to the current procurement problems?

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12. What financial investment are you willing to make to remedy these problems?

_____
_____
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13. What period would you anticipate making the spend over?

_____

14. What returns would you expect from the investment?

    a. Prompt - How would you quantify this?

_____

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15. What period would you allow for the return on this investment to be realized?

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