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**TITLE: THE IMPACT OF E-PROCUREMENT ON ORGANISATIONAL EFFICIENCY
OF SOFT DRINK MANUFACTURERS IN HARARE-ZIMBABWE**

By

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**A DISSERTATION/THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS OF THE BACHELORS OF HONOURS DEGREE IN PURCHASING
AND SUPPLY MANAGEMENT. UNIVERSITY OF SCIENCE EDUCATION**

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DEDICATION

To the Almighty Lord my one and only wife Chelsea Ruvimbo Taruvinga and my supervisor Dr Chikwabi and all the purchasing department staff.

And my family members

Hugh Mukungatu

Nicole Mukungatu

Stewart Mukungatu

ABSTRACT

The study investigates the effects of e-procurement on procurement efficiency of soft drink manufacturers in Zimbabwe. The research aimed to achieve the following objectives: to explore the level of e-procurement adoption at soft drink manufacturing firms in Zimbabwe and to identify factors influencing the adoption of e-procurement on soft drink manufacturing firms in Zimbabwe. The study applied a descriptive research design and SPSS to analyses the data and found out that e-procurement increases procurement efficiency of soft drink manufacturers in Zimbabwe. The researcher also established that accountability and cost reduction were among some of the factors that influence the adoption of e-procurement. The study revealed that even though most firms have adopted the use of e-procurement systems, some procurement activities are being still done manually. The study recommends manufacturing firms to implement e-procurement to enhance efficiency within their procurement systems.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

The adoption of e-procurement has enabled many organizations to share information, cooperate with suppliers and collaborate across geographical boundaries (Terri 2011). This chapter focuses on the background of the study, statement of the problem, research objectives and questions, significance of the study, assumptions, definition of terms delimitations and limitations of the study. It also gives the path of the whole study.

1.2 Background of the study

The prompt development of Information and Communication Technologies (ICT) across the world is moving the way businesses are being conducted. Researchers have discovered that the adoption of ICT's has triggered economic development by becoming a tool with which firms diffuse information (Wu; Zsdisin and Ross, 2007). Most firms spend more than a third of their overall budget on acquisition of materials and services hence the adoption of e-procurement increases savings (Kollen and Kamauff 2005). The main goals of e-procurement are to receive the right product or service at the right time, at the right place, with the right quality and at the right prize (Enporion 2005).

According to Epiq Technologies (2010) report adoption of eProcurement technology in an organisation enables a firm to interact with many suppliers and improve efficiency. The adoption of Information Communication Technologies (CT) has transformed business and efficiency of data sharing and service delivery (Brown and Maniam, 2005). There has been a growing trend in the adoption of e-procurement in the past decade (Dai and Kauffman 2001). However, there is no doubt that the adoption of e-procurement offers numerous benefits, for example Electronic Data Interchange (EDI), has automated transactions between buyers and sellers, and World Wide Web (WWW) in the 1990's. According to Min and

Galle (2003) the main procurement benefits are cost savings which increase return on investment and upgrading of inventories by continuously giving updates on stock levels. An organisation can benefit through the adoption and implementation of e-procurement such benefits can improve profitability and efficiency (Eakins 2003).

The author suggests that through proper utilization of e-procurement the following benefits would be achieved. This will be done through the bank It also reduces the chances of fraud or reduced manpower and expenditure on stationery and postage (Eakin 2003). Compliance – With the proper use of eProcurement such issues could be solved using approved processes, standard orders, and catalogues. Compliance could be achieved through order requisitioning and payment processes.

The risk of bribes is also avoided since the transactions will be done online after negotiation. (Eakin 2003). Transactional benefits (TB) simplify transactional processes (Eakin 2003). When successfully implemented the adoption of e-procurement brings three major benefits which includes cost savings (Parida et al., 2005), accuracy (Reddick, 2004), and time savings (Osmonbekov et al, 2002).

Caniato et al (2011) summarized the procurement benefits as follows; operational examples are paper cost, transaction cost and time saving, Tactical examples are reduced maverick buying, understanding the purchasing needs and improved decision making and lastly strategic examples being enhanced time usage and improved relationship with suppliers. In contrary (Piotrowitz and Irani 2010) categorise benefits in four categories financial, growth, and learning customer and business processes. According to Arabind (2003) management support is essential to recognize benefits of using e-procurement.

According to research carried out by (Kipyego 2012) on factors affecting adoption of eProcurement systems, costs associated with the implementation were found to have a direct impact on the firm. The study further established that staff development has a positive impact on the adoption of the e-procurement systems and the need for integration of the organizations systems and those of the suppliers.

There are many types of e-procurement According to Koorn et al (2001) there are three types of e-procurement which are buyer e-procurement systems: seller e-procurement systems and online intermediaries. Baily et al (2008) defined three major processes in e-procurement which are e sourcing which uses RFO (request for quotations), eProcurement processes used for transactional which use e catalogues and e- payment which uses embedded cards. Berger and Gattorna (2001) gave their version into three processes which are: e sourcing, e requisitioning and e intelligence.

This research aims to investigate the adoption of eProcurement and its impact on soft drinks manufacturing companies in Harare – Zimbabwe.

1.3 Statement of the problem

Procurement function has been one of the vital departments in any organisation. It contributes tremendously to the organizational efficiency and effectiveness. Soft drink manufacturing firms continue to lose millions of dollars through fraud in procurement activities in the mainstream Snider and Rendon (2001) With the continued growth of the internet service the adoption of eProcurement has become an important tool for procurement as organizations are striving to reach higher levels of performance (Engelbrecht-Wiggans and Katok, 2006).

The role of eProcurement has drastically changed due to technological advancement. For an organization to be competitive and sustainable in the modern business it must adopt e business (Brook 2002). The adoption of information technology in e-procurement systems is an innovation strategy that enables buyers to purchase goods and services using internet facilities (Sarikas and Weerakkody 2007). Firms should derive great benefits from the adoption of e-procurement (Snider and Rendon 2001) Tai et al (2010) states that firms which adopt the e-procurement when making transactions with suppliers reduce transaction costs and develop an efficient internal procurement system.

Other benefits which accrue from the adoption of e-procurement e data sharing which effectively facilitates forecasting and inventory control (Tai et al 2010). Hence there is need to have a robust automated procurement system which is interlinked, and this will lead to enhanced competitiveness and lowered costs. (Ogot et al 2009). Therefore, this study explores the uptake of e-procurement by soft drink manufacturing firms in Harare – Zimbabwe.

1.4 Research Objectives

This study seeks to achieve the following objectives.

- To explore the level of e-procurement adoption by soft drink manufacturing firms in Harare –, Zimbabwe.

- To identify factors influencing the adoption of e-procurement at soft drink manufacturing firms in Harare –, Zimbabwe.
- To explore challenges faced in implementing e-procurement at soft drink manufacturing firms. In Harare –, Zimbabwe.

1.5 Research questions

This study seeks to answer the following research questions.

- To what extent has soft drink manufacturing firms adopted e-procurement?
- What are the factors influencing the adoption e-procurement in soft drink manufacturing firms in Zimbabwe?
- What are the challenges facing companies in implementing e-procurement in Zimbabwe?

1.6 Assumptions

The researcher's assumptions were as follows:

- The organisations under review will not change their organizational policies during the period. Of study.
- The participants will have considerable knowledge about e-procurement
- All the respondents will give accurate and correct information.

1.7 Significance of the study

1.7.1 Government

The government will benefit in that this study will give essential knowledge to already existing literature on the adoption and implementation of e-procurement in Zimbabwe.

1.7.2 Companies

The findings of this study will help purchasing managers in strategic measurements towards the adoption of e-procurement and its implementation and integrating as a strategy for growth and performance of the organizations to achieve smooth service delivery.

1.7.3 University

The results of the project will also be published on the University repository. This will be done on all platforms that students can access. Since the research findings can also be filed in the library, students will be able to easily access them, and use them accordingly in their research as well.

1.7.4 Researcher

The findings could be of great importance to this researcher as the researcher could acquire knowledge. The management could also be able to adopt and implement e-procurement to achieve sustainability, growth, and profitability.

The researcher will also benefit in that it is done in partial fulfillment of the requirements of the Bachelor of Commerce honors degree in Purchasing and Supply at Bindura University of Science Education. The research findings could also be of great importance to me as a student since the findings could enhance my knowledge on business sustainability growth and profitability.

1.7.5 Employees

The findings of the study will also assist employees to appreciate their role towards growth and strategic adoption of. Management e-procurement. Will also be motivated towards improvement of service delivery and organizational status in the industry and enhance profitability.

1.8 Delimitations of the study

The research was carried in the capital city of Zimbabwe which is Harare at three soft drink manufacturing companies the research is expounding on the importance of adopting. The study was carried out between the periods from January 2018 to December 2018. The participants only included middle and top management as well as employees. This was a true representative of those concerned with e procurement at the companies.

1.9 Limitations

Some employees were afraid of giving enough information as they tried to secure their jobs. The researcher assured them that the information was going to be treated confidentially and that it was only for academic purposes (Mithras et al 2008).

The organizations had some information which was deemed to be very confidential, and that information was not revealed to this researcher or any outsiders. They are afraid of their competitors. However, the researcher tried to convince staff members that the research in intended to help them improve their effectiveness and efficiency and that the information was only for research purposes. The researcher assured them of confidentiality.

The research being self-sponsored, the researcher faced some financial constrains in the administration of questionnaires and structured interviews. They were costs associated with the printing questionnaires, buying stationary, and delivering the questionnaires. The researcher borrowed funds from a financial institution.

Some heads of departments were unwilling to provide information on questionnaires especially in the accounting department. However, the researcher produced the introductory letter from the college.

The researcher also faced challenges of limited time to carry out this research. Being a full-time employee; always out on duty, time was so critical and had to be managed with care to make the study possible. The researcher also worked during weekends.

1.10 Definition of terms

1.10.1 Business to business (B2B) it is when firms buy from each other and sell from each other online (Presutti, 2003). The exchange of products services or information between businesses rather than between business and consumers.

1.10.2 Information technology (IT) The use of computers and software to manage information such as business data and other electronic files. It involves storing, processing, transmitting and retrieving data (Narasimban et al 2003).

1.10.3 Information Communication Technology – A diverse set of technological tools used to communicate, store, and manage information. It is a term that covers the combination of electronic technology for the information needs of a business at all levels (Atkinson 2006)

1.12.4 Procurement performance measurement through which procurement establishes criteria based on strategic planning goals for results and quality of its actions. This is done to determine whether the procurement function is meeting its targets (Amaratunga and Baldry 2002).

1.11.5 Sustainability This Refers to practice which can meet the needs for goods services and works not on a private Cost-benefit analysis, but with a view to maximizing net benefits for the public and the wider community (Williams, 2006).

1.11.6 Transparency

Transparency is operating in such a way that it is easy for others to see what actions are performed. (Puschmann and Alt, 2005).

1.11.7 Value for money concept According to (Lysons, (2012) defines value for money as considering the optimum combination of the whole life cost and quality necessary to meet the customer's requirements

1.12 Acronyms

B2B	Business to Business
DOI	Diffusion Of Innovation
EDI	electronic data interchange
EFT	Electronic Funds Transfer
EAI	Enterprise Application Integration
ERP	Enterprise Resource Planning
EP	Electronic Procurement
FTP	File Transfer Protocol
ICT	Information Communication Technology
IT	information technology
ORA	Online Reverse Auction
R&D	Research and Development
RTP	Requisition to Pay
SRM	Supplier Relationship Management
TAM	Technology Acceptance Model
TB	Transactional benefits
TCT	Transaction Cost Theory
TDCC	Transportation Data Coordinating Committee.
TOE	Technology Organisation Environment
VAN	Value Added Network
VPN	virtual private networks

WWW	World wide web
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1.13 Chapter summary

The chapter introduced the following concerns the back ground to the study, statement of the problem , purpose of the study, research questions and statement of hypothesis, assumptions, and significance of the study, delimitation of the study, limitations and definitions of terms. The next chapter will review literature and aims to give definitions of core aspects of the adoption of ICT and purchasing efficiency. It will also give theoretical and empirical evidence on the adoption of ICT concept as it relates to purchasing efficiency. Chapter two will cover literature review; this includes theoretical and empirical literature. Knowledge of related research enables the researcher to explore work done by other academics. Chapter three spells out the research methodology, the design, research instruments and how data was collected. Chapter 4 is about data presentation analysis and discussion. It focuses on scanning and sifting the collected data. The last chapter 5 is about summary, conclusions, and recommendations. It gives a summary of the major findings of the research.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter seeks to give a comprehensive overview of literature reviews and aims to give the major aspects of the adoption of e-procurement and its impact on the procurement efficiency of soft drinks manufacturers in Harare Zimbabwe... The researcher in this chapter will explore the work that was done by several authors concerning the adoption of E-procurement. This involves critically analyzing literature and the works that were published by other researchers related to this research. It also gives theoretical and empirical evidence on why most companies now adopt and implement e-procurement. The researcher is also going to discuss the theories on which the research is based as well.

2.2 E- procurement

Panayiotis, et al. (2004) define e--procurement as an Internet based purchasing system that offers electronic purchase, ordering processing and enhanced administrative functions to buyers. Schooner and Tammala (2007) define e-procurement as the sourcing of goods and services via electronic means usually through the Internet. Parida and Parida (2005) define e-procurement as a technology solution that facilitates corporate buying using the internet.

The automation of the procurement processes is the sourcing of goods and services online, vendor selection goods tracking, and payments can also be done online (Bhaskar, 2005). According to Lysons (2006) e-procurement is the use of internet to operate the transactional aspects of requisitioning, authorizing, ordering, receiving and payment process for the required goods and services.

Chaffey (2002) also defines e procurement as the electronic integration and management and management of all procurement activities including purchase request authorization, ordering delivery and payment between a buyer and a supplier. EP is a system of reducing operation cost allowing wider choice of products and administrative costs (Chaffey 2002). EP is not about

reducing the operational costs of an organisation but more about promoting the wellbeing of the employees and the enterprise through organizational efficiency. Chen, Paulraj and Lado (2004) states that strategic e purchasing is a vital link in a working supply chain. They mean that e purchasing can give an organisation competitive advantage by enabling the firm to foster close working relationships with a limited number of suppliers. Chen et al (2004), also states that EP will lead to communication with suppliers. The adoption of e procurement has been slower in developing countries than expected.

However, despite the rate of adoption being slower, there is evidence that e-procurement is being implemented in varying degrees amongst organisations (Whyte, et al., 2002 and Wong and Sloan, 2004). Technology has played a pivotal role in the evolution of e procurement (Makhopadhyay and Kekre 2000). E procurement is defined as sourcing of goods and services via electronic means usually through the internet (Schoenherr and Tammala 2007).

The precursors of e procurement in the 1980s formed the basic technological trends. It began with the evolution of Materials Requirement Planning, Manufacturing Resource and Planning and Enterprise Resource Planning in the 1990s (Schoenherr et al 2007). Most firms adopting e procurement software should have a significant investment in the relevant technology system, failure to integrate these technologies with the existing platforms creates duplicative work and jeopardize the efficiency of e procurement (Davilla et al 2006).

E-procurement adoption can suffer widely accepted and standadised solution and this blocks the integration of different e procurement software (Davilla et al 2006). Thus, without widely accepted standards and coding technical and process specifications e procurement technologies adoption will be slow and may fail to deliver the benefits expected (Davilla et al 2006). The level of information technology infrastructure and usage in developing countries remains an impediment to a full integration of e procurement (EU 2012).

The skills and knowledge of employees influence the future adoption of the new technology in a large extent. Implementing new software requires skills and knowledge to operate e procurement. Thus, lack of skills can limit productivity (Chaffey 2009). Lack of IT skills makes it difficult to implement supplier relationships.

The adoption of new technologies has an impact on the productivity of businesses which will in turn increase profitability. The recent advancement in ICT have made a paradigm shift in the way procurement is being done (Subramanaim and Shaw 2005).

Laryea, et al. (2014), defined e-procurement as entailing the use of electronic communication to notify or inform stakeholders about tender opportunities, exchange of construction project information and data, conduct tendering for works, evaluate tenders, award and administer contracts.

2.3 Electronic data interchange (EDI)

EDI can be traced back to its origin to the 1960s when computer systems acquired the ability to exchange data with each other. Ed Guilbert, the father of EDI, expanded upon the standardized shipping manifests he had developed with U.S. Army officers during the 1948 Berlin airlift.

Guilbert's expansion was an electronic message format for sending cargo information. The first EDI messages were sent in 1965 when the Holland-American steamship line sent trans-Atlantic shipping manifests using telex messages, which could send a full page of information in roughly 2 minutes. These messages were then converted into tape that could be loaded onto computers. In 1968, a group of railroad companies to develop EDI standard formats, as oceanic shipping companies, railroads, airlines, formed the Transportation Data Coordinating Committee (TDCC) and trucking companies were exchanging electronic messages. These messages were in varied formats, and it was creating confusion and problems.

By 1973, the File Transfer Protocol (FTP) was published and enabled file transfer between internet sites. In 1975, the TDCC releases the first EDI standards, of which Guilbert was a major contributor. In this year, the first Value Added Network (VAN), Telenet, was established. Telenet was the first commercial packet-switching network which added more than the basic service of linking computer systems, hence the name VAN.

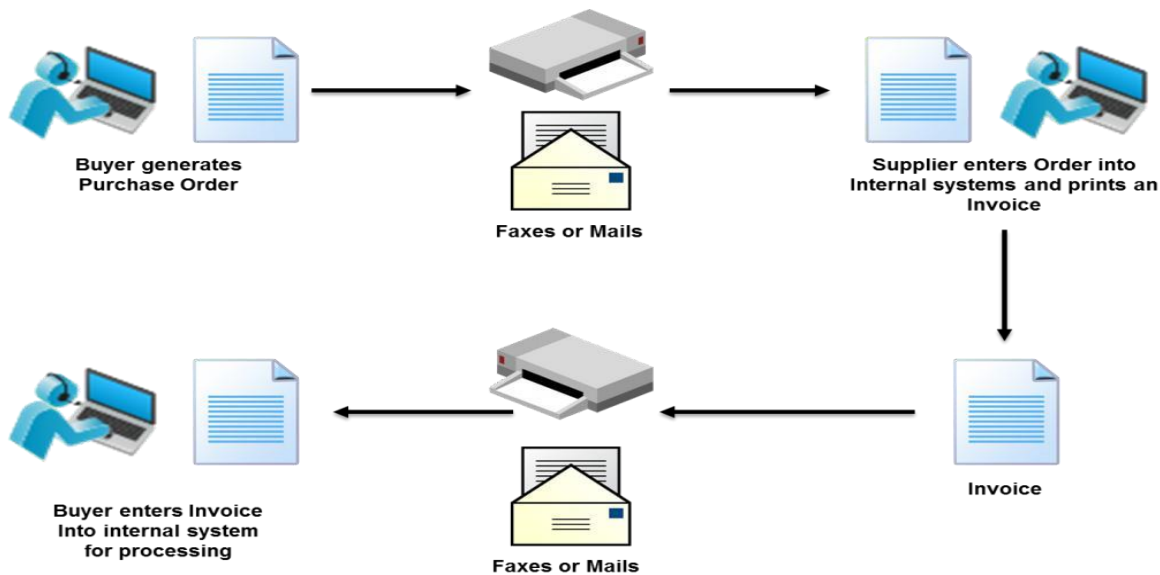


Figure 2. 1 How an order is sent from buyer to supplier using EDI

Source Sriram, V. and Stump, R. (2004),

It is the computer-to-computer exchange of business documents in a standard electronic format between business partners. By moving from a paper-based exchange of business documents to one that is electronic, businesses enjoy major benefits such as reduced costs, increased processing speed, reduced errors and improved relationships with business partners

Computer to computer EDI replaces postal mail, fax, and email. While email is also an electronic approach, the documents exchanged via email must still be handled by people rather than computers. Having people involved slows down the processing of the documents and also introduces errors instead EDI documents can flow straight through to the appropriate application on the receiver's computer example the order management system and processing can begin immediately. . A typical manual process has lots of paper and people involvement

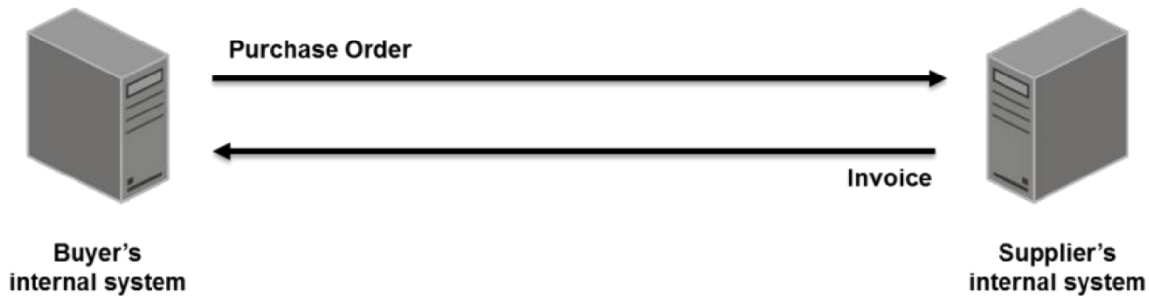


Figure 2.2 How an order is sent from buyer to supplier using EDI

Source Scala S and McGrath (2001)

2.4 Adoption of e-procurement

The factors that influence EP adoption by firms under the Environmental Context are market scope, industry, competitive pressure, and external EP support. According to Ramdani et al.

(2013) the Environmental Context can be claimed to have a high impact on the firm's adoption of Enterprise Applications. Tan et al. (2012) environmental factors provide significant forces for

EP adoption by firms where the issues relating to market climate and the firm's standing in the market directly influence the uptake of technology. This study conducted by Tan et al., (2012) found that the Governmental support is another important environmental characteristic for technological innovation. Furthermore Mpofu et al. (2013) in a study carried out in South Africa EP adoption was found to be based on the perceived benefits and driven by pressure from customers, competitors, employees, and technology suppliers.

ICT applications were adopted mainly based on their perceived benefits in improving their business efficiency, competitiveness, planning, management; communication; emailing; security; cash handling and billing purposes as well as online advertising and market sourcing. Tan et al., (2012) the competitor can also be one of the important external factors considered in EP adoption. So, EP adoption decision can be influenced by the relative advantage gained by the firm compared to their competitors. Gono et al. (2013) the pressure that some of the firms come under from their customers to use inter-organizational information systems is enormous. In that study some of the firms interviewed indicated that if they win a long-term contract with a large organization they adopt the

needed EP, streamline their systems, or seek upgrades to facilitate customer demands. Further still Gono et al. (2013) found that one benefit of having EP knowledge in-house is better management of the relationships with EP suppliers. This also offers the firm the ability to decide which EP is suitable for their firm. Finally, according to Ramdani and Kawalek (2008), industry, market scope, competitive pressure, and external IT support are factors impacting the adoption of EP

2.5 Theoretical framework

Driven by the increasing trend towards the adoption of e procurement, organisations are implementing EP. EP has become a significant tactic in many organisations (Deloitte Consulting 2001). The adoption of e procurement is influenced by understanding its benefits but not only financial but also non-financial of e procurement in a firm. The major benefits of e procurement are real time information sharing, interlinked procurement processes, integrated supply chain, improved relationships with suppliers, JIT, carrying cost, reduction in prices and shorter lead time (Gunasekaran et al 2009)

Departmental satisfaction through EP has contributed to the competitive position of any company through cost saving (Van Weele 2005). Through EP real time transaction reduces the amount of stock lying idle in stock yards and improves capital employment (Chen Paulraj and Lando 2004). EP is an application that has many usable functions to help the firm in processing all purchasing transactions, monitoring, and controlling (Subramaniam and Shaw 2002).

2.5.3 Diffusion of Innovation (DIO)

It is a process which is connected by certain straits overtime among the members Rogers (2010) clarifies the DOI is a process of how novel technology spread through cultures. The major concern of this process is about how new innovations are adopted as well as the cause behind many stages of innovation adoption Makau (2014) explained that the rate of e procurement adoption is very slow Rodgers (2010) revealed that the spread of new technology which among others include the innovation itself, communication channels. time and social systems.

2.5.4 The Technology acceptance model

Davis et al (1989) outline the TAM providing one of the most widely accepted theories on the factors leading to acceptance of information systems (Ma and Lin (2004), Reunis et al (2004), Barton Jones and Hubona (2006) King and He (2006), Van Raaij et al (2007). concurred that TAM model is used as the foundation for building this research. The TAM model highlights two acceptance theories that influence behavioural intentions perceived usefulness and perceived ease of use. The TAM model is inconclusive with the two acceptance factors perceived usefulness and perceived ease of use not always significantly influencing acceptance. (King and He (2006) thus giving mixed results. External factors such as supplier participation significantly vary the relative influence of usefulness and ease of use on behavioural intentions (Amoaka-Gyampah and Salan (2004).

Therefore a range of other acceptance factor needs to be included within the conceptual model. User types show differences in the significance of the regression between ease of use and behavioural intentions (Olsen and Boyer 2003).

2.6 Factors that influence the adoption of e procurement

A review of the literature generated a number of positive factors influencing the use of e-procurement systems and these are described in more detail below. Interestingly, none of the previous research has included all factors but rather focused on a few. This research differs from previous research as it brings together a broad range of factors that influence the use of EP systems. In particular, acceptance factors originating both internally within and externally from the organisation..

2.6.1 Organisational factors

ISM Forrester research (2003) cited lack of IT infrastructure, limited knowledge and expertise with information systems (Hurland et al 2007). E procurement can be viable through web based cooperation (Berlak and Weber 2004). The use of e procurement application helps eradicate repetition of purchases from suppliers reducing human interaction and paperwork and often

resulting in improved performance for buyers and sellers.(Melville et al 2004, Sanders 2005; Subramann2004).

2.6.2 Readiness factors

External pressure impact on the business strategy (Mehrtens et al 2001). Many firms are experiencing a number of major problems in implementing the e procurement business. The availability of software, vendor type determines which application are most appropriate (Cox et al 2001). To attain greatest benefits purchasing processes should be evaluated and improved. (Presutli 2003). Internet technologies enable integration with trading partners and simplify the need for fundamental organizational change (Power and Sigh 2007). Lack of readiness has been attributed mainly to human readiness (Osmenbekov et al 2002). Internal barriers adoption are more significant than supplier barriers (Fronlich 2002). Procurement professionals need to ensure their organisation are ready for adoption (Harley et al 2006).

2.6.3 Environmental factors

The environment plays a critical role in technology adoption and implementation of EP. Most factors in this category are more influential than others. Competition can strongly influence a firm to adopt e procurement (Kauffman and Mohtadi 2004)

2.6.4 Information Communication Technology infrastructure

Many firms believe that there are many benefits of adopting e procurement (Duncan 1989). He also agreed that perceived benefits do not outweigh the other factors that have to be taken into consideration before adoption. The need for change to adopt to a dynamic environment can explain the impact of perceived compatibility on the adoption (Hastings 2012)

2.6.5 Influence of suppliers

Supplier participation is an important external force driving e-procurement uptake (Carr and Smeltzer 2002, Ellram and Zsidisin 2002, Subramanian and Shaw 2002, Zahay, Wu et al. 2007). Improvements in supply chain efficiency develop through closer interactions between buyers and suppliers thus improving relationships (Håkansson and Snehota 1995). 2002) and Zahay and Handfield (2004). Supplier pressure is particularly strong when the buyer side has less power, and competitive pressures exist from other network players using electronic technologies (Subramanian and Shaw 2002).

2.6.6 Perception of task improvement and convenience

Perceptions of task improvement and convenience incorporate the transactional efficiencies gained from using e-procurement systems and these are extensively mentioned throughout the literature (Croom 2000, Ellram and Zsidisin 2002, Van Raaij *et al.* 2007). Still, only a few researchers measure whether a direct link to e-procurement exists. Improvements cover three main categories: savings through reduction in cost prices, efficiency benefits through reduced work content, and cost/efficiency benefits through reduced time taken to undertake the tasks (Croom and Brandon-Jones 2004). Reduction in cost structures occurs through greater compliance with existing contracts, improved pricing through increased competition, gains in processing costs, and sourcing new suppliers with lower pricing structures (Angeles and Nath 2007). Reducing the administrative aspects of the procurement process allows purchasing professionals to spend more time on the strategic aspects of procurement such as implementing supplier development programmes, improving supplier relationships, and improving communication processes (Puschmann and Alt 2005). Van Raaij *et al.* (2007) and (Dooley 2006) both find that perceptions of convenience and usefulness directly influence intentions. Minand Galle (2003) highlight that familiarity with e-procurement systems influence the extent of eProcurement usage and adoption.

2.6.7 Internal support for utilizing e-procurement

Internal support structures are an important aspect in influencing the use of electronic technologies (Croom 2000, Kennedy and Van Raaij *et al.* 2007). Internal organizational forces impacting on the adoption of e-procurement include the following: technical capabilities of purchasing personnel

(Zahay and Handfield 2004), extent of investment in training (Subramanian and Panayiotou *et al.* 2004), influence of the IT division in choosing software (Osmonbekov *et al.* 2002), and top management support (Kennedy and Deeter-Schmelz 2001) find internal support mechanisms important for the use of electronic communication technologies, while Joo and Kim (2004) did not find that top management support influences the use of EP. Olsen and Boyer ((2003) also contradict the above findings by showing that computer training has little impact on e-procurement perceptions.

2.7 Empirical evidence

2.7.1 Norman AU and Rob Law (2015)

Norman AU and Rob Law. (2015) carried their research in six hotels in Hong Kong. The objective of the study was, to explore the key factors that can explain the low adoption of e procurement specifically in the Hong Kong's Hotel industry. The methodology used was an exploratory qualitative approach to identify specific elements associated with the adoption of e procurement in hotel industry. The findings also revealed that even through the perceived benefits in terms of cost saving that e procurement brings to hotels can be demonstrated objectively.

2.7.2 Rebecca, Angeles, Ravi. Nath, (2007).

Rebecca, Angeles, Ravi, Nath, (2007). carried their research in the United States of America. The major objective of the research was, to investigate success factors and challenges to implementation of e procurement. The methodology used was questionnaire study, two sets of questionnaire items - one of the items that captured e procurement success factors and the other set to determine the challenges to successful e procurement implementation. The findings were that, factor analysis resulted in three e procurement success, supplier and contract management, end user behavior and e procurement business processes and information and e procurement business processes and information and e procurement infrastructure. Three challenges to implement factors also emerged lack of system integration and standardisation issues, immaturity of e procurement-based market service and end user resistance and maverick buying and difficulty in integrating e commerce with other systems.

2.7.3 Kunnapapdeelert, Sirintorn, Thepmongkorn, (2017),

Kunnapapdeelert, Sirintorn, Thepmongkorn, (2017) carried their research in Thailand. The objective of the research was, to understand current state of e procurement adoption in Thailand and to examine the factors of e procurement adoption in Thailand. The study employed a cross sectional field study survey approach. The data was collected from a survey of the companies in Thailand 100 companies are randomly selected for the survey with the response of 40 replies. The questionnaire composed of four main sections. The first section focuses on the status and readiness of a company to implement the e procurement. In the third section the respondents were asked for rating perceived benefits of using e procurement. There was a strong positive correlation between the two variables. It further showed that the success of the adoption will strongly depend on the adoption

2.7.4 Bilaji J and Bwisa H (2015)

Bilaji J and Bwisa H (2015) carried their research in Kenya. The objective of the study was to investigate the factors influencing the adoption of e procurement in Garissa County. The research adopted stratified random sampling. According to Bryman (2008). Sampling is the process of selecting a few individuals for a study in such a way that the individual represents a larger group from which they are selected, it will involve dividing the questions according to (Maina

2012). The research findings proved that there is a commitment by the top management with regards to adoption of e procurement and willingness to facilitate training as evidenced in the rating of the statement

2.7.5 Gunasekaran et al (2009),

Gunasekaran et al (2009), carried out a survey among SMEs in South coast of Massachusetts to understand the current state of EP in SMEs and examined how the following factors status and readiness of company for EP, perceived benefits of EP, perceived barriers to EP implementation, perceived future organisation performance with EP and critical success factors in EP affect the adoption of EP by SMEs located in the South coast of Massachusetts. Through the study the author found that SMEs on the South coast of Massachusetts were not embracing EP even though a substantial number of them seem to realize its strategic value and appreciate the potential effect on organizational performance. The most important barrier was that EP was not a top management priority

2.8 Gap analysis

The previous research were carried out in developed countries where the infrastructure is not a problem as compared to developing countries as the case of Zimbabwe. Also the research instrument used in previous researches was a questionnaires; this paper used both questionnaires and interviews. This study identifies several gaps between the academic literature and current management practice suggesting that researchers should consider the impact of theory on the process of organizational performance management. It also offers advice organizations with respect to absorbing e business measures into their performance measurement systems.

2.9 Summary

This chapter reviews related literature and gives major aspects of e procurement and purchasing performance. It also gives theoretical and empirical evidence on the concept of e procurement as it relates to purchasing performance. The next chapter will give an outline of the methodology that will be used in data gathering for the research and the basis for such methods that will be adopted for the research it will also lay down the foundation to be considered for the research that is the research instruments, data sources, data collection techniques and data analysis techniques.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

After having looked at the body of knowledge on the analysis of the impact of e procurement adoption on purchasing efficiency. This chapter gives an overview of the methodology that was used in data gathering for the study and the basis for such methods that were adopted for the research. It also laid down the parameters to be considered for the research that is the research instruments, data sources, data collection methods and the data analysis techniques. This section provides details of what research methodology will be used, what type of secondary data will be collected and what procedure will be employed in collecting primary data and lastly what sample and sampling techniques will be used.

3.2 Research design

The study adopted a descriptive research design. The design is chosen since it is more precise (Babbie 2002). Descriptive research design allowed the researcher to come up with descriptive statistics that can assist in explaining the relationship that exists among variables. The study also used cross sectional survey that involves the analysis of data collected from a population, or a representative subset, at one specific point in time (Orodho 2003). The choice of this design is appropriate for this study since it utilizes a questionnaire as a tool of data collection and helps to establish the behavior of employees towards embracing e-procurement in soft drink manufacturing firms in Zimbabwe.

This is supported by (Mugenda and Mugenda, 2003) who assert that this type of design enables one to obtain information with sufficient precision so that hypothesis can be tested properly. It is also a framework that guides the collection and analysis of data. (Kothari, 2005) observes that a descriptive research design is used when data is collected to describe persons, organizational settings, or phenomenon. (Orodho, 2003).

The researcher also used triangulation as it involves using multiple data sources in an investigation to produce results which are understandable. This technique is used to ensure that an account is rich, comprehensive, well developed, and robust. (Orodho, 2003). Some reasons for using triangulation are: One method can never adequately shed light on a phenomenon and using different methods can help facilitate a deeper understanding.

3.3 Population

The study targeted all the soft drink manufacturing firms in Harare, Zimbabwe. According to statistics, there are 72 firms.

3.4 Sample size

A Sample of 70 employees (Krejcie and Morgan 1970) from soft drink manufacturing firms in Harare – Zimbabwe was used. The sample was chosen randomly because of their professional expertise in e procurement. The researcher used a sample, (Klein and Ford, 2003) because:

- Time to visit all the firms was not adequate.
- Analysis there was limited facilities to analyze large quantities of data for a sample.

3.5 Sampling techniques

The sample was selected using purposive and random sampling to have a targeted sample with required information. Purposive sampling was basically used to obtain the key respondents' procurement staff and IT departments. This technique allows items to be selected, deliberately as according to their suitability of the study. (Kothari, 2004). Simple random was employed to select representatives from different departments because it gave equal opportunity to each element in the department to be selected. The size of the sample should neither be too large nor too small; it should be optimal (Kothari, 2004). The researcher used convenience sampling where the elements that are more convenient were selected and judgmental where people that are part of the procurement staff and members of other departments were selected.

3.6 Sampling procedure

Under purposive sampling technique, the researchers purposely choose who, in their opinion are thought to be relevant to the research topic. In this case, the judgment of the researcher was more important than obtaining a probability sample. The process of sampling in this case involved purposive identification of the respondents Sekaran (2003), the researcher uses the expert judgment to select participants that are representative of the population. Factors that used were intelligence and the level of education

3.7 Research Instruments

In this research the researcher used the following questionnaire, interviews, and company documents. The primary ways of gathering data for the purpose of research are through interviews and observation. Interviews were in the form of a questionnaire which allows the respondent to answer questions during the interviewer's absence; in-depth interviews and observation were also used.

3.7.1 Questionnaire

This is a method of collecting primary data whereby prepared questions was given to the respondents and requests to complete them and return them to the researcher (Krishnaswami, 2003). This can be open ended type of questionnaire whereby the 70 respondent is free to answer the question according to their own opinion and closed end questionnaire this is where a respondent is been fixed to answer the question by using options provided (Kothari, 2006). Open ended type of questionnaires was asked to the respondents to let them feel free to answer what they know, also closed type of questions was used to obtain a specific opinion. These methods help to obtain data at a lower cost and with minimum errors. The researcher adopted both open and closed ended questions to ensure sufficient data collection.

It enabled the researcher to collect data quantitatively and qualitatively. A Lickert scaled questionnaire facilitates accurate graphs by SPSS. It made work easier since 60 respondents were given the same questionnaire.

3.7.2 Interviews

This technique includes structured interview or formal interview and semi structured interview. Structured interview where a list of specific question that guide the process is prepared prior to the interview. Semi-structured interview is conducted where a broad type of questions is asked to interviewers while proceeding with their own way. Semi-structured interview is useful if the researcher has a clear theoretical understanding of the topic which allows the researcher to create an appropriate questionnaire. Semi-structured interview means that there is some flexibility in the wording and order of the questions.

The script of the interview is not preplanned, and the order of the questions can vary, the interviewer can also ask for examples and so on to get more detailed answer (Eriksson and Kovalainen, 2008). The major advantage of semi-structured interview is that the materials are somewhat systematic and comprehensive, while the tone of the interview is conversational and informal (Eriksson and Kovalainen, 2008).

3.7.3 Observation

The researcher observed how quotations were made and how payments were done. The researcher also observed how information in the suppliers list was gathered. The researcher also visited the suppliers on the suppliers list to see if they existed. The major advantage of observation was that it was not necessary to rely on the willingness and ability of respondents to report accurately, hence eliminated the biasing effect of interviewees. (Mugenda, 2003). The researcher used an observation guide.

3.8 Data Collection Procedure

The researcher collected primary data from 70 staff among the soft drink manufacturing firms in Harare on the adoption of e procurement using semi structured questionnaire. Respondents were assured of confidentiality of information provided. The data enhanced commitment and contact with respondents as they were given one week to respond to the questionnaire items. The researcher made follow-up calls to ensure effectiveness of filling of questionnaire thereby clarifying questions which might have arisen.

The researcher also used observation method, by this method the observer was observing how quotations were done online.

The researcher also conducted interviews to participants. The researcher used structured questions. The researcher used a standard laid down procedure. This method has the advantage of immediate feedback and the researcher probed to get a satisfactory answer.

3.9 Data sources

All such inputs or data must be specified before we can analyse the model and recommend a decision or solution to the problem. The research encompassed the use of both primary and

secondary data to come up with detailed meaningful and objective findings free from preconceived performance bias that the researcher expected.

3.9.1 Primary data.

Is firsthand information collected through methods like observation and interviews (Krishnashwami, 2003). The major benefits that the researcher experienced from the use of primary data was that the data specifically addressed the research questions hence was more reliable, credible, and accurate. However, it took a lot of time and financial resources for the researcher to gather primary data.

3.9.2 Secondary data

These are firsthand information collected through methods like observation and interviews (Krishnashwami, 2003). This is data collected by the researchers, practitioners and scholars that is relevant to the research. The secondary data for this research was obtained from Purchasing and Supply Management journals, textbooks, past researchers, and the internet. The use of secondary data was useful as it broadened the scope of the study giving access to views of the scholars and practitioners who covered similar studies. (Mugenda, 2003). However, it was very difficult to identify some sources or sponsors of data.

3.10 Validity and reliability

(Sattler 1982) defines validity as the extent to which an instrument measures what it is supposed to measure. The researcher used the questionnaires and interview guide, and the results were checked against the actual results. The internal validity reflects the extent to which the study reflects the truth in respect of the population under study. The researcher used both qualitative and quantitative design to obtain reliable information and draw the conclusion easily. Quantitative design provides the fundamental connection between empirical observation and mathematical expression of quantitative relationships. Qualitative design provides opportunity to explore a subject in a real manner as possible. This approach involves an in depth understanding of the behaviors of the clients and the staff and the reasons that govern their behavior, (Kothari, 2006). Validity was addressed using data collected from multiple sources from other employees who were the users of e-procurement system.

By combining multiple methods and empirical materials as well as theories, the researcher was able to overcome the weaknesses or intrinsic biases and problems that come from single method and single theory studies. As also enhanced through triangulation. Gray (2004) refers to triangulation as the use of different research methods in the same study to collect data to check the validity of any findings. The interview gave the researcher the opportunity to probe resulting in more quality information released by the respondents hence improved validity of the study. This is understood to concern the reliability of research findings and whether they would be repeated if another study were to be repeated, Ritchie and Lewis, (2006).

It is assessed by examining the process by which scale items are generated. Content validity in this study should be relatively acceptable since the various parts of questionnaire were all adapted from the literature. Furthermore, a pre-test is performed to validate the research instrument within the targeted context since its validity may not be persistent across different technologies and user groups (Straub, 1989). As suggested by Cooper and Schindler (2003), a panel of expert professionals in the field of procurement was interviewed to judge how well the instruments meet the standard. Thus, the researcher conducted independent interviews with seven respondents who had more than seven years' experience using e procurement technology. Respondents were asked to comment on the length of the instrument, the format, and the wording of the. They suggested that the procedure and wording of the questionnaire was generally appropriate, with some modifications in the translated version of the questionnaire. Respondents who had participated in the pre-test were excluded from the subsequent study.

3.11 Pilot Study

A pilot study was carried out on people who were not part and parcel of the sample. In this study the researcher used the remainder of workers who were not on the sample. Corrections were made on the instruments such as wording. Definitions were prescribed by the pilot population. A pilot study was conducted before the questionnaire was fully administered. This was done to measure the reliability and validity of the instrument and eliminate ambiguous questions before the actual full-scale study. Pilot testing enabled the researcher to refine the questions to a level that ensured that respondents understood the questions as well as instructions.

3.12 Ethical Considerations

With plagiarism an academic crime the researcher took care in acknowledging all the work that was used in this research. To ensure the ethical treatment of the participants in the study all surveys were stored and kept in a secure place. One of the most important aspects of this research was to maintain anonymity for all participants throughout the duration of the study. A concerted and conscious effort was always made to uphold that promise. Privacy and confidentiality such as informed consent, privacy and confidentiality and accuracy must be followed. In this research all ethical requirements were followed throughout all phases of the research. The participants were asked to participate voluntarily and told that answering and returning of the questionnaire assumed their consent to participate in this study. All participants were assured that anonymity and confidentiality of their response was guaranteed. Faithfulness, confidentiality, and courtesy were also observed in carrying out the research.

3.13 Data presentation and analysis

Data analysis methods employed involved quantitative and qualitative procedures. Quantitative data was analyzed using Statistical Package for Social Sciences (SPSS), descriptive analysis by use of descriptive statistics such as the measure of central tendency, mean and mode. The researcher used various deductive methods to give a clear trend of data. This assisted in effective interpretation of data. All the methods mentioned above are easy to understand, bar charts and data tables give a clear description of trends movements over the years Pie charts will clearly illustrate a summary of information gathered.

The researcher observed that many firms have adopted the e procurement as evidenced by the number of years in use. The researcher has also observed that ICT infrastructure, organizational readiness and influence by suppliers are the major factors influencing the adoption of e procurement. The researcher also observed that the extent of e procurement is at an advanced stage as evidenced by procurement personnel seek quotations online and full automation of the procurement function.

3.15 Summary

This chapter explained the tools and techniques that were used by the researcher in carrying out and interpreting the research. The following chapter shows an outline of data presentation analysis and discussions of research findings.

CHAPTER 4

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Introduction.

This chapter highlights more on strategic research findings with a view to drawing conclusions that provided a platform for executing the adoption of e procurement on purchasing efficiency on soft drinks manufacturers in Harare - Zimbabwe. Pictorial or graphical presentation was used in presenting the findings which are linked to the overall research objectives and sub- research questions.

After administering the questionnaires, they were collected from the respondents ready for analysis. The completed questionnaires were checked for completeness and consistency. The data was first coded and grouped into various categories (Dunn 2001). Descriptive statistics describes what the data shows it includes the use of percentages, mean and standard deviation (Isaac and Michael 2005). This chapter also focused on the responses obtained from the interviews and questionnaires.

Table 4.1 Response rate

`Table 4 1 Percentage distribution of ` responses – Questionnaire (N=70)

Administered questionnaires	Returned questionnaires	Unreturned questionnaires	Total response	Percentage response rate
70	70	0	70	100%

Source primary data

The table 4.1 above shows that from the 70 questionnaires that were distributed 70 were returned. This translates to 100% response rate.

4.2 Gender representation

Table 4.2 Percentage of gender representation

Gender	Frequency	Cumulative percentage
Male	61	87.14
Female	9	100
Total	70	

Source primary data

The table 4.2 above shows that the males are dominating in this organizations with 85 % males and 15% females.

4.3 Age distributions

Table 4.3 Percentage of age distribution

Age	Frequency	Cumulative percentage
20-25	7	10
26-30	8	21.43
31-35	16	44.29
36-40	13	62.86
41+	26	100
Total	70	

Source primary data

The table 4.3. Shows that most of the employees are 41 years as depicted in the table 4.3. This is clear evidence that the respondents have a lot of experience in the soft drink manufacturing industries.

4.4 Number of years served

Table 4.4 Employment experience

Number of years served	Frequency	Percentage	Cumulative percentage
0 - 5	8	11.43	11.43
6 - 10	18	25.71	37.14
11 - 15	22	31.43	68.57
16 - 20	10	14.29	82.86
21+	12	17.14	100
Total	70	100	

Source primary data

Table 4.4 showed that 8 respondents have worked for 1-5 years and 20 had worked for 11-15 years. Therefore, these respondents had adequate information pertaining to the study under review. Employees who have experience knew the development of e- procurement.

4.5 Staff qualifications

Table 4.5 Percentage distribution of profession

Qualification	Frequency	Percentage	Cumulative percentage
National Certificate	21	30	30
National Diploma	15	21.43	51.43
Higher National Diploma	7	10	61.43
Degree	12	17.14	78.57
Masters	9	12.86	91.43
PHD	6	8.57	100
TOTAL	70	100	

Source primary data

The table 4.5 shows that 30% have a National Certificate. This is a clear indication that the majority of respondents have a minimum educational qualification hence they give correct information pertaining to e-procurement.

4.6 Duration worked at soft drink manufacturing firms

Table 4.6 Percentage distribution of work experience

Number of years lapsed	Frequency	Cumulative percentage
1 – 5	20	28.57
6 – 10	34	77.14
11 +	16	100
Total	70	

Source primary data

The study results in the above table 4.6. Reveal that 48.57% had a working experience of 6 to 10 years. This shows that most of the respondents had enough work experience in soft drink manufacturers hence conversant with the influence of relationship between adoption of e procurement and its impact on soft drink manufacturing firms.

4.8 Duration in operation with e procurement

Table 4.7 Percentage distributions showing the duration in operation with e procurement

Number of years	Frequency	cumulative percentage
1 – 5	13	18.57
6 – 10	22	50
11 +	35	100
Total	70	

Source primary data

The table 4.7. Sought to establish from the respondents the duration in which the soft drink manufacturing firms had been using e procurement. It is evident that over 50% of the firms have adopted the e procurement system for over 11 years

4.9 Extend of e procurement adoption

Table 4.8 Extent of e procurement adoption

Extent of e procurement implementation	N	Minimum	Maximum	Mean	Standard deviation
Procurement personnel seek quotations online	70	1	5	4.172	1.0469
The firm has fully automated the e procurement system	70	1	5	4.103	1.0121
Departments share the same information	70	1	5	4.089	0.9660
Online submissions of quotations	70	1	5	4.034	0.8334

Source Primary data

From table 4.8 EProcurement personnel seek quotations online, as shown it had a mean of 4.172 and a standard deviation of 1.0469. This was also revealed by interviews that procurement personnel were seeking quotations online. This was also revealed by the studies carried by (Angeles R. and Nath, N.2007).

The table 4.8 shows that, the firm no longer uses manual system as shown by a standard deviation of 1.0121 and a mean of 4.103. The same results were also given by respondents on the interview (Arbuckle, J. and Wothke, W. 1999) also concurred with the same results.

The table 4.8 above shows that, departments share the same information has a mean of 4.089 and a standard deviation of 0.9660. The interviewees also provided this result during the interview. According to Arrowsmith, S., and Trybus, M. Eds (2008) the sharing of the same information is relevant

Lastly on the table 4.8 online submissions of quotations had a mean of 4.034 and a standard deviation of 0.8334. This was also highlighted by the respondents that most of the firm's quotations were now being done online. The same results were also given by (Burton-Jones, A. and Hubona, G., 2006).

4.10 Factors influencing the adoption of e procurement

Table 4.10 factors that influence adoption of e procurement

Factors that influence e procurement adoption	Mean	Standard deviation
Organisational factors	3.7533	1.1933
Readiness of the firm	3.6828	1.1560
Environmental factors	3.5845	0.6754
Information Communication Technology infrastructure	3.5027	1.2390
Influence of suppliers	3.4321	1.8765
Perception of task improvement and convenience	3.1265	1.9087
Internal support for utilizing e procurement	3.1111	0.2123

Accountability of personnel	3.1111	0.2123
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Source primary data

The table 4.10 indicates that, organizational factors had a mean of 3.7533 and a standard deviation of 1.1933 the same results were revealed by the interview respondents. According to Premkumar (2003) they discovered that organizational factors play a pivotal role towards the adoption of e procurement.

The table 4.10 above shows that, environmental factors have a standard deviation of 0.6754 and a mean of 3.5846. The interview respondents also raised that; external environment of an organisation includes existing and potential customers. Common infrastructure environments used to enable and to control access to e procurement functionalities. Boer et al (2002) also concurred.

From the table 4.10 above, Information Communication Technology infrastructure has a mean of 3.5027 and standard deviation of 1.2990. The interview respondents also reiterated that, the technological context of an organisation is a very crucial element that affects the adoption and implementation of e procurement. According to Kwon and Zmud (1987) and Zhu et al (2003). The technological level is highly affected by IT infrastructure and employee technical skill. IT infrastructure and internet skills are used to assess the level of technological readiness. IT infrastructures represent the technologies hardware that enables an organisation to develop e business processes (Zhu et al 2006).

The table 4.10 shows that, influence of suppliers has a mean of 3.4321 and a standard deviation of 1.8765. The interview respondents also agreed that e procurement enables organisations to access wider markets (Ganasekaran and Ngai 2008 Ganasekaran et al 2009; Harrigan et al 2008) they also agreed that Tthe use of e procurement allows organisations to reach trading partners regardless of geographical distance and time difference.

From table 4.10 perceptions of task improvement and convenience had a standard deviation of 1.9087 and a mean of 3.1265. The interview respondents agreed that perceptions of task improvements can positively influence the motivation of purchasing professionals to use electronic technologies, Wu et al. (2007) concurred with the same sentiments.

The table 4.10. above shows that, internal support for utilizing e procurement has a standard deviation of 0.2123 and a mean of 3.1111. The interview respondents highlighted tat internal support structures influence the use of electronic procurement. This was also highlighted by (Puschmann and Alt 2005).

4.11 Chapter Summary

This chapter looked at the response rate from the targeted population data presentation and analysis. The chapter revealed the strength of e procurement which results in low cost high savings, reduced lead times and high quality of goods and services to be purchased resulting in improved purchasing performance. The results were obtained from primary data collected through a questionnaire and interviews.

CHAPTER 5

SUMMARY CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction.

This is the final chapter, which gives the highlights on conclusions drawn from the research findings in chapter four. Conclusions and recommendations were made on the adoption of e procurement and its impact on purchasing efficiency. The major findings were summarized, and conclusions were made in relation to the research questions which were investigated.

5.2 Summary of research findings

The researcher observed that the level of adoption of e procurement at soft drink manufacturing firms is at an advanced stage as evidenced by the number of years that firms have adopted the e procurement. The findings concur with (Kearney 2004) that the adoption of ICT influences the accomplishments of firms, and the significance of ICT is to create process efficiency, cost reduction and accountability.

In addition, the following factors influenced the adoption of e procurement; organizational factors, readiness factors, environmental factors, ICT infrastructure influence of suppliers, perception of

task improvement and convenience, internal support for utilizing e procurement and accountability. According to Weele A.J (2010) e procurement requires firms to share information with suppliers online.

The study further established that e procurement improves relationship with suppliers and provides greater data accuracy and reduced lead times. Despite the benefits brought by e procurement the soft drink manufacturing firms experience various challenges in the adoption of e procurement. The study found that the manufacturing firms experienced resistance to change, IT issues, security of transactions, lack of infrastructure, and legal issues. According to (Thai 2009) most developing countries are not aware of the best use of ICT.

5.3 Conclusions

From the research conducted managers are aware of the importance of the adoption of e procurement. This change has resulted in greater adoption of a functioning website and online requisition. The adoption of e procurement can reduce lead times in an organisation effectively and it had high impact on cost reduction resulting in high levels of quality and it saves hours of management; improve operational performance and quality of service delivered to the organisations which benefit the customers (Van Weele 2010). The high percentage figure showed that most of the people at soft drink manufacturers are happy to adapt to e procurement

The study pointed out that there is a lot to be done to improve purchasing efficiency at soft drink manufacturers. Based on the results from questionnaire responses, observations and interviews carried out with top management at soft drink manufacturers. The researcher concluded that if the adoption of e procurement has reduced costs by a large margin other firms should also adopt e procurement.

5.4 Recommendations

- Based on the findings and conclusions, the study recommends that soft drink firms should incorporate e procurement activities into their system.
- They should also find ways of encouraging staff to make use of the adopted system to make it a success. Management should always be on the lookout for better and improved ways of

doing business. Management should always be on the lookout for ways that can minimize costs to an organization.

- The researcher noted several aspects that he recommends are very vital to the adoption of e procurement to improve purchasing efficiency. The recommendations are listed as follows:
- soft drink manufacturers need to redesign its business structure and consider a structure that gives purchasing strategic importance to be effective rather than being efficient.
The current structure does not accord strategic importance of purchasing and at the end little is expected from the purchasing function of the organization.
- The organisation needs to centralize the purchasing functions to a department that will be fully confined to undertake purchasing duties. This will help to control purchasing spend by grouping related costs, see how these costs can be seriously controlled and to be quality consciousness. The organizations should consider adoption of strategic alliance and partnership with its outstanding suppliers that helps to renewal effectiveness, cost cutting and enhance quality of purchases to improve purchasing performance.
- Soft drink manufacturers should professionalize the function by designating purchasing professionals to the strategic function so that contracts problems and principal agent problems would not add to high costs. Soft drink manufacturing companies should have in their system methods that can evaluate and measuring the efficiency of the procurement function just like other functions in the organization such as Human resources (HR), Engineering department, Research and Design and Finance whose performance are measured and analyzed time and again.

5.5 Recommendations for further studies

The researcher suggest that other people who are interested to do the research on the adoption of e procurement should do the research on public organisations like parastatals and higher institutions of learning to see if the same findings will be established since this entire research was carried out to the private organisations. The study has only focused on the adoption of e procurement in soft drink manufacturers in Harare – Zimbabwe. The same study should also be

extended to other industries. It will also be advisable to replicate the same research after some years have elapsed to see the changes that could have taken place since technology is subject to change. In summary, the adoption of e procurement reduced costs and efficient services along with alliance building are the key benefits of digitizing the purchasing processes.

5.6 Chapter summary

This chapter looked at summary of major findings, conclusions, summary of research findings, recommendations, and recommendations for further studies

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BINDURA UNIVERSITY OF SCIENCE EDUCATION
FACULTY OF COMMERCE
DEPARTMENT OF ECONOMICS

Dear Sir/Madam

REF: APPLICATION FOR PERMISSION TO CARRYOUT A RESEARCH:

**TOPIC: THE IMPACT OF E-PROCUREMENT ON ORGANISATIONAL EFFICIENCY AT
SOFT DRINK MANUFACTURERS IN HARARE-ZIMBABWE**

I am a final year student at the above-mentioned university, and I am studying towards a Bachelor of Purchasing and Supply Management degree. As a prerequisite of the institution. I am carrying out research which is entitled 'The impact of e Procurement on organizational efficiency at soft drink manufacturers in Harare-Zimbabwe.

I kindly ask you and your workmates to assist me by completing the questionnaire attached to this letter as accurately as possible. The information that you will provide will be treated with utmost confidentiality and will be used exclusively for academic purposes.

You are kindly asked not to provide your names on the questionnaire. Your completion and the subsequent forwarding of this questionnaire to the undersigned will be interpreted as implying your willingness to participate in this study.

Your cooperation is sincerely appreciated

Yours faithfully

Hughven Mukungatu

QUESTIONNAIRE

This is a questionnaire for collection of data on the adoption of e procurement among soft drink manufacturing firms in Harare-Zimbabwe. The data collected will only be used for academic purposes

Section A

Demographic information

1 Tick where appropriate on the spaces provided

Gender

	TICK
Male	<u>1</u>
Female	<u>2</u>

Age

Age group in years	TICK
20 -25	<u>1</u>
26 -30	<u>2</u>
31 -35	<u>3</u>
36+	<u>4</u>

2 Number of years served in the company

Years served	Tick
1 -5 years	<u>1</u>
6 – 10 years	<u>2</u>
11 – 15 years	<u>3</u>
16+	<u>4</u>

2 Highest qualifications

Qualification	Tick
Certificate holder	<u>1</u>
National Diploma	<u>2</u>
Higher National Diploma	<u>3</u>
Degree holder	<u>4</u>
Masters degree holder	<u>5</u>
PHD Holder	<u>6</u>

4 Position held

Position	Tick
Purchasing clerk	<u>1</u>

Middle management	<u>2</u>
Purchasing officer	<u>3</u>
Top management	<u>4</u>

5 How many years have elapsed since the adoption of e procurement?

Number of years	Tick
1 – 5 years	<u>1</u>
6 – 10 years	<u>2</u>
10 +	<u>3</u>

6 Was the adoption process successful?

Yes	No
-----	----

6 Have your firm adopted the use of e procurement

Yes	No
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SECTION B

1 To what extent have your firm adopted the e procurement in the following phases of the procurement cycle

Extent of e procurement implementation	Very great extent	Great extent	Moderate extent	Little extent	Very low extent
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Procurement personnel seek quotations online					
The firm has fully automated the e procurement system					
Departments share the same information					
Online submissions of quotations					

7How does the following factors of e procurement influence adoption in your firm

Factors	Greatly improved	Improved	Constant	Decreasing	Greatly decreased
Organisational factors					
Readiness of the firm					
Environmental factors					
ICT infrastructure					
Influence of suppliers					
Perception of task improvement and convenience					
Internal support for utilizing e procurement					
Accountability					

3 In your own opinion what do you recommend to be done in your organisation in order to enhance e procurement?

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APPENDIX I

Interview questions for soft drink manufacturing companies in Harare- Zimbabwe 1]

Has your firm adopted of e procurement?

.....

2] What are the justifications for the adoption e procurement?

.....

.....

3] What is the position of the purchasing function in your organization?

.....

4) To what extent has your organisation adopted e procurement?



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BINDURA UNIVERSITY OF SCIENCE EDUCATION

PO BOX 1020

BINDURA

Dear Sir/Madam

RE: REQUEST FOR PERMISSION TO CARRY OUT A RESEARCH STUDY

Dear Sir

My name is Mukungatu Hughven a fourth year Bindura University convectional student doing Bachelor of Commerce (Honors) Degree in Purchasing and Supply I am conducting research on: The impact of e-procurement on organizational efficiency at soft drink manufacturers in Harare-

Zimbabwe. The purpose of the research is to fulfill the requirement of attaining the degree. As such, I am kindly requesting for your permission to carry out my research.

The information obtained will be strictly and specifically used for academic purposes only and shall be treated with confidentiality. Your assistance will be greatly appreciated. May you please assist the researcher by responding to the questionnaire? Your cooperation in filling out the questionnaire is appreciated.

Thank you for being there for me

Yours faithfully

Mukungatu Hughven