

**BINDURA UNIVERSITY OF SCIENCE EDUCATION**

**FACULTY OF COMMERCE**



**THE EFFECT OF E-PROCUREMENT ON PURCHASING PERFORMANCE IN THE  
GROCERY RETAIL SECTOR IN ZIMBABWE. A CASE OF OK BINDURA.**

A Research

By

Bertha S Mupfure

B190603B

A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS  
FOR THE BACHELOR OF PURCHASING AND SUPPLY HONOURS DEGREE OF  
BINDURA UNIVERSITY OF SCIENCE EDUCATION. FACULTY OF COMMERCE.

## APPROVAL FORM

The undersigned certify that they have read and recommend Bindura University of Science Education for acceptance, a research project entitled: "THE EFFECTS OF EPROCUREMENT SYSTEMS ON PURCHASING PERFORMANCE IN THE GROCERY RETAIL SECTOR IN ZIMBABWE. A CASE OF OK BINDURA", submitted by BERTHA S MUPFURE in partial fulfilment of the requirements of the Honors degree in Purchasing and Supply Chain Management.

I. To be completed by student.

I certify that this dissertation meets the preparation guidelines as presented in the Faculty Guide and Instructions for typing dissertations.

\_\_\_\_\_ Signature of student Date

II. To be completed by supervisor.

This dissertation is suitable for submission to the Faculty. This dissertation should be checked for conformity with Faculty guidelines.

\_\_\_\_\_ Signature of Supervisor Date

III. To be completed by Chair of Department. I certify to the best of my knowledge that the required procedures have been followed and the preparation criteria has been met for this dissertation.

\_\_\_\_\_ Signature of Chairman Date

RELEASE FORM

NAME OF AUTHOR: Bertha S Mupfure

PROJECT TITLE: Effects of e-procurement on purchasing performance in the grocery retail sector in Zimbabwe case of OK Bindura.

PROGRAMME: Bachelor of Purchasing and Supply  
Honors Degree

YEAR GRAND 2023

SIGNED.....

PERMANENT ADDRSS: Borrowdale Doveton Rd

DATE.....

DECLARATION FORM

I, Bertha Mupfure, Registration number B190603B do hereby declare that this research project is the efforts of my own work, free of any material unauthorized or unacknowledged. The study has not been submitted before under another researcher, and all acknowledgements have been made to the contributions of others where appropriate.

NAME OF STUDENT: .....

.....  
SIGNATURE: ...

.....  
DATE: ...

## DEDICATION

I would like to express my heartfelt gratitude to the Almighty God, who gave me the wisdom and the strength I needed to pursue my career and complete this dissertation. To my humble, supportive and encouraging supervisor, you have been a great source of support and inspiration to me through the process of this dissertation. I sincerely appreciate your support and encouragement through this process. Special thanks goes to my mother Christabel Mupfure, my father Eddie Mupfure and Maruma family for always being there for me throughout this process.

## **ABSTRACT**

The study aimed to determine the effect of e-procurement on purchasing performance in the grocery retail sector in Zimbabwe, a case of OK Bindura. In order to achieve the objectives of the study, a quantitative survey approach was adopted to quantify and explain e-procurement systems and to measure their effect on purchasing performance in the grocery retail sector in Zimbabwe. A sample of 28 workers at OK Bindura was used for data analysis. SPSS version 25 was used to evaluate the correlation of variables and to test the formulated hypotheses. The findings of the study were that, e-procurement systems have both positive direct and positive indirect effect on purchasing performance. The study concluded that, the practice of procurement by means of e-procurement systems has a positive effect on purchasing performance at OK Bindura. The study recommends grocery retails in Zimbabwe to implement modern computerized e-procurement systems for effective procurement activities in order to enhance purchasing performance and be competitive.

**Key words:** e-procurement systems, purchasing performance

## Table of Contents

<b>ABSTRACT</b> .....	vi
List of Acronyms and Abbreviations .....	9
Chapter 1 .....	11
1.1 Introduction.....	11
1.2 Background of study .....	12
1.3 Problem statement.....	14
1.4 Research objectives.....	15
1.5 Research Questions .....	15
1.6 Significance of the Study .....	16
1.7 Assumptions of the Study .....	16
1.8 Scope of the Study .....	16
1.9. Delimitations of the Study .....	17
1.10 Limitations of the Study.....	17
1.11 Definition of terms.....	18
1.12 Structure of the dissertation .....	18
1.13 Chapter Summary .....	19
CHAPTER 2 .....	20
2.1 Introduction.....	20
2.2 Theoretical framework.....	20
2.2.1. Resource Based Theory .....	21
2.2.2Stakeholder theory .....	21
2.2.3 Agency theory .....	22
2.3Conceptual framework.....	23
2.3.1. E-procurement.....	24
2.3.1.1 Enterprise Resource Planning (ERP) .....	24
2.3.1.2 Maintenance and Repair Operations software (MRO).....	24
<b>2.3.1.3 E-tendering</b> .....	25
2.3.1.4 E-markets sites .....	25
2.3.2.1 Purchasing performance.....	25

2.3.2.2 Procurement Time.....	26
<b>2.3.2.3 Procurement Efficiency</b> .....	26
2.3.2.4 Procurement cost.....	27
2.4 Empirical evidence.....	27
2.4.1 Asia .....	27
2.4.2 America.....	28
2.4.3 Africa .....	28
2.4.4 Africa .....	29
<b>2.4.5 Europe</b> .....	30
<b>2.4.6 Africa</b> .....	30
2.5 Research gap .....	31
<b>2.6 Summary</b> .....	31
<b>CHAPTER 3</b> .....	32
<b>RESEARCH METHODOLOGY</b> .....	32
<b>3.1 Introduction</b> .....	32
<b>3.1.1 Research Approach</b> .....	32
<b>3.1.2 Research Paradigm</b> .....	32
<b>3.1.3 Research Strategy</b> .....	33
<b>3.1.4 Research Design</b> .....	34
<b>3.1 Target population of the Study</b> .....	34
<b>3.2 Sample size Determination</b> .....	34
The sample size for this study are 28 employees.....	35
<b>3.4 Sampling Method</b> .....	35
<b>3.4.1 Sampling Techniques</b> .....	35
<b>3.5.1 Data Collection Instruments and Methods</b> .....	35
<b>3.5.2 Structure of the Questionnaire</b> .....	35
<b>3.6.1 Data Analysis</b> .....	36
<b>3.7.1 Validity and Reliability of Results</b> .....	36
<b>3.8.1 Ethical and Legal Considerations</b> .....	37
<b>3.8.1 Ethical Considerations</b> .....	37
<b>3.9 Summary</b> .....	38
<b>CHAPTER 4</b> .....	39



DATA PRESENTATION, INTERPRETATION AND DISCUSSION.....	39
4.1 Introduction.....	39
4.2 Questionnaire Response Rate.....	39
4.3 The Demographic Data.....	40
<b>4.3.1 Gender of respondents.....</b>	<b>41</b>
<b>4.3.4 Level of education of respondents .....</b>	<b>42</b>
<b>4.3.5 Department of respondents.....</b>	<b>44</b>
<b>4.4 Reliability Test .....</b>	<b>45</b>
4.5 Presentation of Regression Analysis.....	46
4.5.1 The effect of e-procurement systems on procurement time.....	46
<b>4.5.2 Effects of e-procurement systems on procurement cost .....</b>	<b>49</b>
<b>Table 4.14 Effects of e-procurement systems on procurement efficiency .....</b>	<b>52</b>
<b>4.6 Types of e-procurement systems implemented at OK Bindura.....</b>	<b>55</b>
4.7 Chapter Summary .....	56
CHAPTER 5 .....	57
SUMMARY CONCLUSIONS AND RECOMMENDATIONS.....	57
5.1 Introduction.....	57
5.2 Summary of research findings .....	57
5.3 Conclusions.....	60
5.4 Recommendations.....	61
5.5 Recommendations for further studies .....	61
Figure 2.1 : Conceptual Framework.....	23
Figure 4.2 Level of education.....	41
Figure 4.3 Department of respondents .....	43

## List of Acronyms and Abbreviations

MRO – Maintenance and repair operation

EPR –Enterprise resource plan

EDI - Electronic Data Interchange

RFP – Request for Quotation

B2B- Business to Business

KPIs-key performance indicators

ICT- Information Communication Technology

## Chapter 1

### 1.1 Introduction

Organizations are increasingly adopting e-business using information, communication technologies and the internet. This study explores the uptake of a particular form of e-business, that of e-procurement. E-procurement has been defined as the use of information technologies to facilitate business-to-business (B2B) purchase transactions for materials and services (Ross, 2018). Internet technology has prompted the ease of doing business across all sectors in Zimbabwe. The internet is helping firms to become efficient in their operations for instance, firms in the grocery retail firm sector, have embraced the use of the internet to provide many benefits across a wide range of intra- and inter-firm business processes and transactions. OK Zimbabwe which is a giant grocery retail grocery retail firm, has embraced e-procurement to conduct its procurement activities and this has greatly assisted the firm to change the way that the global world conducts businesses through the provision of quick communication platforms such as social media, provision, and promotion of research and development leading to most firms attaining a competitive advantage. In support of Yin (grocery retail ), Shoko (2018) showed that in developed countries such as China, information and communication technology is being used to drive economic growth and performance and this has led to the increase in the number of registered companies in China. E-procurement is the process of purchasing goods and services electronically through the internet. It has become a popular method of procurement in recent years due to its ability to streamline the procurement process, reduce costs, and improve efficiency. The grocery sector is one of the industries that have adopted e-procurement in their purchasing processes. This study aims to investigate the effects of e-procurement on purchasing performance in the grocery sector.

This chapter looks into the background of the study, objectives, questioners, limitations, delimitations, assumptions, definitions of key words and chapter summary.

## 1.2 Background of study

E-procurement has been widely adopted by various industries due to its potential benefits such as cost reduction, improved efficiency, and reduced lead time. In the grocery sector, e-procurement has been used for various purposes such as sourcing suppliers, managing contracts, and ordering goods and services. However, there is limited research on how e-procurement affects purchasing performance in this industry.

Previous studies have shown that e-procurement can improve purchasing performance by reducing transaction costs, improving supplier selection and management, and increasing transparency. However, these studies were conducted in different industries and may not be applicable to the grocery sector. Therefore, this study aims to investigate how e-procurement affects purchasing performance specifically in the grocery sector.

E-procurement began in the 1980s, following the development of Electronic Data Interchange (EDI). It allows files and documents to be shared between business people and was revolutionary at the time. Businesses no longer had to send documents physically; instead, they could send them electronically. A decade later, advancements in EDI enabled organizations to create online vendor catalogs. It evolved into a supporting function, ensuring that material quality and availability requirements were met. In the 1990s, procurement began to be integrated into businesses' strategic planning processes, influencing decision-making and developing effective supplier relationships (Daniel Usifoh,). In the late 1990s, several consulting firms popularized strategy sourcing through work with a variety of Bluechip companies. This methodology has become the standard for procurement departments in large, sophisticated corporations such as Fortune 500 firms. While some procurement practices, like the RFP, are older than e-procurement, using digital tools goes back further than you may think. Sending digital transaction-related data started back in the 1980s. The Electronic Data Interchange (EDI) allowed businesses to transmit simple, standardized data from computer to computer, Tobias Schoenberg (2018) naturally, many organizations have adopted EDI to conduct business more efficiently. Processes such as e-sourcing, rendering, informing, ordering also lead to increased efficiency. They could send transaction information like

shipping addresses, product numbers, gathering and analyzing spending data to make better business decisions in the future easier. It wasn't fancy, but it was more efficient than orders by post or phone.

Then, during the tech boom of the late 1990s, the first systems dedicated to e-procurement were created. These were enterprise resource planning (ERP) systems. ERP focuses primarily on workflows, catalogs and creating purchase orders. Over time, their popularity grew. By 2001, when the Oracle report was released, 70 percent of companies were preparing for the dawn of e-purchasing.

E-procurement made use of a web interface or another type of networked system to connect users and customers. A chief procurement officer or procurement department was required to establish policies governing the organization's e-procurement of materials. Oracle published a white paper in 2001 that examined the promise and reality of e-procurement. According to the report, that year would be the year of e-procurement. They were not mistaken. E-procurement adoption is still increasing 22 years later. Every year, more businesses adopt e-sourcing technology and start reaping the benefits.

According to Chebii (2016), adequate ICT infrastructure helps strengths our e-procurement systems. However, in a country like Malawi, a developing country consisting of very few ICT infrastructure and systems, resistance to change by procurer's system incompatibility, lack of staff motivation, low or lack of data security and lack of proper legal framework affect the adoption of E-Procurement. It is recommended that public sector organizations should be staffed with well-qualified IT professionals. In Zimbabwe, the problem is that most firms face high ordering (administrative) costs, perhaps, due to an inability to adopt cost cutting strategies such as e-procurement. It was also revealed that employee competency, inadequate legal framework, inadequate technological infrastructure and security of procurement transaction data were challenges to e-procurement adoption in the organizations (James Kanyepe, 2017)

Globally, e-procurement has expanded business innovation more than 95% of businesses have an on-line presence. According to Andrew Montandon (2014), e-procurement is contributing to the growth. For example, a 10% rise in broadband penetration is related to a 1.4% increase in GDP growth in emerging markets. In China, this wide variety can reach 2.5%. The doubling of cell use induced by the increase in 3 G connections boosts GDP per capita rise by 0.5% globally

### 1.3 Problem statement

The grocery sector is a highly competitive industry that requires efficient and effective procurement processes to remain competitive. E-procurement has been identified as a potential solution to improve purchasing performance in this industry. However, there is limited research on the effects of e-procurement on purchasing performance in the grocery sector. Therefore, there is a need for empirical research to investigate how e-procurement affects purchasing performance in this industry.

At OK Zimbabwe, there are delays in replenishing stock because of the prolonged procurement processes which are caused by the traditional ways of procurement which is negatively affecting their procurement performance. For instance, requisitions, and purchase orders take long period of time being processed because they are generated manually. According to Obwogi (2013), Zimbabwe has been experiencing turbulent times with regard to its organizational performances and this has resulted in declining profits in the retail supermarket sector of the economy. Statistics from World Bank show that Zimbabwean grocery retail sector of large scale firms have registered declining profits and stagnation for the last five years due to a turbulent operating environment (World Bank, 2018). Despite e-procurement playing a major role in procurement performance in retail supermarket companies, most of the procurement operations in the retail supermarket area are still manual with the internet only being used for e-mails and internet browsing. Due to lack of ICT infrastructure and systems, lack of data security, lack of proper legal framework, lack of staff motivation and, resistance to change by procurers system

incompatibility, this has led to OK Zimbabwe incurring high procurement costs which can stifle company performance.

OK Zimbabwe, like most businesses in Zimbabwe, used the traditional procurement method prior to implementing the e-procurement system for its procurement function. This resulted in high costs while profits were falling. To address this, the company decided to implement a computerized system in order to improve organizational performance. The company has implemented an e-procurement system, which is designed to reduce costs while increasing profits through efficient and quick transactions.

#### 1.4 Research objectives

This study sought to achieve the following objectives:

##### 1.4.1 Main objective

The main objective of this study was to determine the effect of e-procurement on procurement performance in the grocery retail sector. Case of OK Zimbabwe Bindura.

##### 1.4.2 Specific Objectives

- i. To assess the e-procurement systems at OK Bindura.
- ii. To determine the impact of e-procurement on procurement time at OK Bindura.
- iii. To find out the impact of e-procurement on procurement efficiency OK Bindura
- iv. To examine the impact of e-procurement on procurement cost at Ok Bindura.

#### 1.5 Research Questions

- i) What are the e-procurement systems used at OK Bindura?
- ii) What is the impact of e-procurement on procurement time at OK Bindura?
- iii) What is the impact of e-procurement on procurement efficiency at OK Bindura?

iv. What is the effect of e-procurement on procurement costs at OK Bindura?

### 1.6 Significance of the Study

The recommendations of this study are expected to help grocery retail sector to implement e-procurement systems so as to determine the effects of e-procurement on procurement efficiency, procurement costs, and procurement time.

Moreover, the findings of this study are expected to be helpful to the academia since the documented report would provide ready reference material that could equip the learners with more knowledge and skills on issues relating to the effects of e-procurement on purchasing performance in the grocery retail sector in Zimbabwe. Therefore, the final report of this study will be kept in the university's library for view in future by other researchers who may wish to undertake new research or continue on the similar topic.

Furthermore, the study could be of importance to supply chain management professionals across all sectors in the grocery retail sector in Zimbabwe since it would add a body of knowledge to theory on the effects of e-procurement on purchasing performance particularly for OK Bindura.

### 1.7 Assumptions of the Study

This study was carried out under the following assumptions:

- i. That the researcher will observe all ethical considerations throughout the course of this study.
- ii. That the participants will respond within a reasonable time period to allow the study to be carried out as scheduled.
- iii. That the participants will supply the researcher with true and accurate information.
- iv. That the selected sample will be a true representative of the population under study.

### 1.8 Scope of the Study

The study mostly focused on e-procurement systems where it investigated the effects of e-procurement on the purchasing performance in the grocery retail sector in Zimbabwe. The study



focused on e-procurement because it is considered to be one of the most efficient ways of improving purchasing performance in terms of procurement efficiency, lowering transactional costs, reducing corruption, enhancing control and monitoring procurement processes.

### 1.9. Delimitations of the Study

This study is a case study of Ok Bindura, a private limited company based in Bindura, Zimbabwe. The study looks into the effect of e-procurement on OK Bandura's procurement performance. The study used a positivist approach and was deductive in nature because transactions were the main subject being examined rather than people.

### 1.10 Limitations of the Study

During the process of carrying out this study, the researcher had the following challenges:

To start with, the researcher had challenges in collecting data because some respondents were unwilling to answer some questions because they regarded the information to be very much confidential. In order to address the problem, the researcher has used emails to send questionnaires to OK Bindura and encouraged the respondents to answer the questions as she assured them that the findings of the study will be treated with strictest confidentiality and the study is carried out for academic purposes only. This corroborates with Walliman (2011) who opines that in the process of carrying out a research study, the researcher should clearly explain the purpose of the study to participants and how confidentiality will be maintained.

Also, the researcher had the challenge of financial resources and time limitations to carry out this study. To address the challenges, questionnaires were used to collect data from respondents as they are cost effective. The researcher also distributed questionnaires to respondents using emails. Questionnaires were also returned to the researcher through emails. This agrees with Sekeran (2003) who put forward that e-mails are used to distribute and receive completed questionnaires because they are cheap, almost instant, and have extra benefit of guaranteed delivery subject only to the correctness of the e-mail address.

### 1.11 Definition of terms

**E-procurement-** It refers to the purchase and sale of supplies, work, and services from one business to another via the Internet and other information and networking systems such as electronic data interchange and enterprise resource planning (Starry Night, 2022) or can be defined as the process of requisitioning, ordering and purchasing goods and services online. It is a business-to-business process. Rahul Awati

**Procurement-** According to John Chandra, Tim (2008) procurement is the process of obtaining goods and services a company needs to support its daily operations including sourcing, negotiating terms, purchasing terms, receiving and inspecting goods as necessary and keeping records of all steps in the process.

**Strategic sourcing-** Is concerned with the top- level, longer-term decision relating to high-profit, high supply risk items and low-profit, high supply risk bottleneck product and services (Lysons and Farrington, 2006).

### 1.12 Structure of the dissertation

The structure of this dissertation is split into five chapters and it is organized as follows:

**Chapter 1:** This chapter is the introduction to this research study and serves as a guide. It provides background information, statement of the problem, objectives of the study, research questions, assumptions, significance of the study, delimitations of the study, limitations, definition of terms, abbreviations and finally the chapter summary.

**Chapter 2:** Literature review: This chapter reviews literature on e-procurement by exploring the effects of e-procurement on purchasing performance in the grocery retail sector in Zimbabwe. The chapter reviews the gap from previous researches on e-procurement and purchasing performance and thus gives direction to this research study.

**Chapter 3: Research Methodology:** The purpose of this chapter is to discuss the research methodology used in this study to collect data regarding this study. It covers aspects such as research design, sampling procedures, research instruments, data analysis and presentation procedures.

**Chapter 4: Data presentation, analysis and discussion:** This chapter presents data in the form of tables for information gathered through questionnaires. The researcher will discuss the information immediately below the tables. Qualitative data from interviews will be reported in narrative episode.

**Chapter 5: Summary, conclusions, and recommendations:** This chapter winds off the study with summary, conclusions and recommendations.

### 1.13 Chapter Summary

This chapter looked at the background of e-procurement giving a historical background on the development of e-procurement over time and how it has affected purchasing performance, problem identification, objectives of the study, research questions, assumptions, significance of the study, delimitations of the study, limitations faced by the researcher, definitions of terms, abbreviations and structure of the dissertation. Basically this chapter laid out the importance of the study to grocery retail firms in Zimbabwe. Chapter 2 is going to review the literature on the current study.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter reviews the literature that is related to this study. The chapter has 5 sections which are the theoretical framework, conceptual framework theory underpinning the study, empirical framework, gap analysis and chapter summary. . The first section introduces the chapter. The second section will look at the conceptual framework which shows the relationship between independent and dependent variables. Theoretical framework which explains the theories that are used in the study follows. This is followed by the theory underpinning the study which explains sourcing strategies and supply chain resilience indicators. The fifth section will look at empirical framework which gives the studies which were conducted by other researchers related to the topic. Research gap analysis followed by a chapter summary is provided at the end of the chapter.

#### 2.2 Theoretical framework

This section reviews the theories that underpins this study. Theories such as resource based theory, contingency theory of management and stakeholder theory will help to clarify the importance of assessing the effect of e-procurement on purchasing performance

A considerable quantity of literature has been generated on supply chain management and related topics. However, as Chen and Paulraj (2004) pointed out, no comprehensive supply chain management theories exist. What exists are prescriptive models designed for use in practice. With a recent emphasis on e-procurement, supply chain management models advocating for the use of ICT in integrating demand and supply side activities have evolved. In general, the resource-based theory and the contingency theory of management were used in this study.

### 2.2.1. Resource Based Theory

According to Kozlenkova (2013), resource based theory is a management theory that suggests that a firm's resources and capabilities are the key determinants of its competitive advantage and long term success. In the context of e-procurement resource based theory can be applied to understand how firms can leverage their resources to gain a competitive advantage in the procurement process.

One of the key resources that firms can leverage in the e-procurement is their technological capabilities. For example, OK Bindura has advanced e-procurement systems and tools which allow them to streamline their procurement process, reduce cost and improve efficiency. This gives them a significant advantage over competitors who lack these capabilities.

Another important resource for firms in e-procurement is their supplier network. OK Bindura has strong relationships with suppliers and a diverse range of suppliers, this allows them to secure better prices, quality products and timely delivery. This is helping OK to gain a competitive advantage over firms with weaker supplier networks.

Therefore, resource based theory provides valuable insights into how firms can leverage their resources to gain a competitive advantage in e-procurement. By focusing on technological capabilities and supplier networks OK can improve their procurement processes and achieve long term success in this area.

### 2.2.2 Stakeholder theory

According to Harrison (2015), the stakeholder theory is a management concept that suggests that businesses should consider the interests of all stakeholders, including customers, employees,

suppliers, shareholders, and the community. In line with e-procurement, stakeholder theory is relevant because it emphasizes the importance of building strong relationships with suppliers and other stakeholders to ensure the success of procurement activities.

E-procurement involves using digital technologies to streamline procurement processes and improve efficiency. This can include online bidding platforms, electronic catalogs, and automated purchasing systems. By adopting e-procurement practices, organizations can reduce costs, increase transparency and accountability in procurement activities, and improve supplier relationships.

Stakeholder theory suggests that organizations should consider the interests of all stakeholders when implementing e-procurement practices. This includes suppliers who may be impacted by changes in procurement processes or technology. By involving suppliers in the e-procurement process and addressing their concerns and needs, organizations can build stronger relationships with their suppliers and improve overall procurement outcomes.

Stakeholder theory is relevant to OK because it emphasizes the importance of considering the interests of all stakeholders when implementing digital procurement practices. By taking a stakeholder-centric approach to e-procurement, organizations can build stronger relationships with suppliers and other stakeholders while improving efficiency and reducing costs.

### 2.2.3 Agency theory

Agency theory is a framework that explains the relationship between the principal (buyer) and the agent (supplier) in a contractual agreement. In e-procurement, the buyer relies on the supplier to provide goods or services that meet their requirements, and the supplier is expected to act in the best interest of the buyer (Panda and Leepsa, 2017).

For example, the PMU at OK can use agency theory principles to design contracts that incentivize suppliers to provide high-quality goods or services at a reasonable price. This can be achieved by including performance metrics such as delivery time, quality standards, and pricing benchmarks in contracts.

In addition, agency theory can help e-procurement platforms to manage risks associated with online transactions by establishing trust mechanisms such as escrow accounts or third-party verification systems. These mechanisms help to reduce opportunistic behavior by suppliers and ensure that buyers receive what they paid for.

Overall, agency theory is relevant in e-procurement as it provides a framework for understanding how to align incentives between buyers and suppliers and manage risks associated with online transactions.

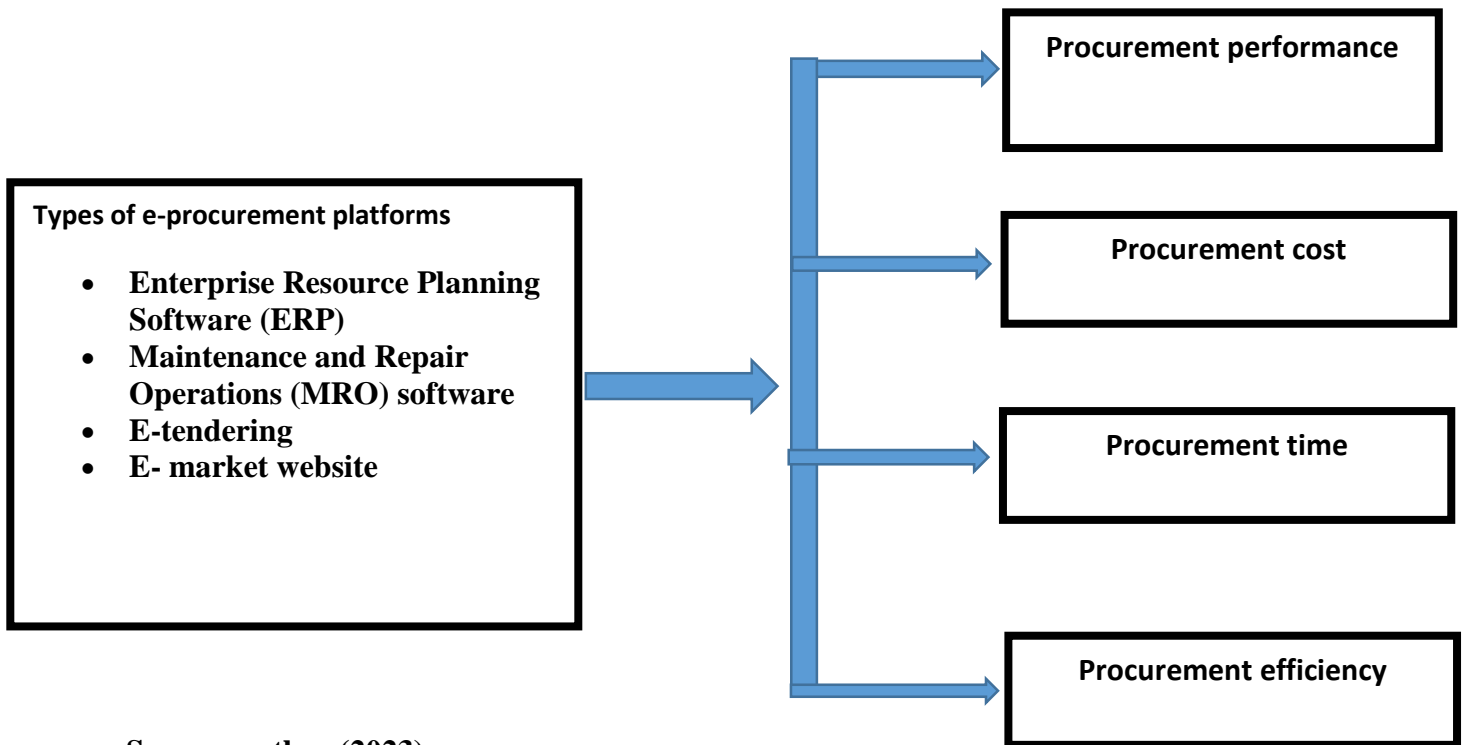
### 2.3 Conceptual framework

This study has two variables which are e-procurement and purchasing performance. These variables have their indicators and they are illustrated in the following diagram in figure 2.1 below:

Figure 2.1 : Conceptual Framework

#### Independent variables

#### Dependent variables



Source: author (2023)

### 2.3.1. E-procurement

E-procurement, also known as electronic procurement, is the process of purchasing goods and services using electronic means such as the internet, electronic data interchange (EDI), or other digital technologies. It involves the use of online platforms to streamline and automate procurement processes, from sourcing suppliers to making payments (Vaidya and Campbell, 2014).

E-procurement systems typically include features such as online catalogs, supplier databases and request for proposal (RFP) tools, purchase order management, invoicing and payment processing. These systems can help organizations reduce costs, improve efficiency and transparency in procurement processes.

Overall, e-procurement offers a range of benefits including increased efficiency, cost savings, improved supplier relationships and greater transparency in procurement processes.

#### 2.3.1.1 Enterprise Resource Planning (ERP)

According to Hawking, Stein, Wyld, and Forster (2019), Enterprise Resource Planning (ERP) is a commonly utilized technology that aids in the integration of organizational processes. ERP software aids in the integration of organizational procurement procedures as well as other tasks such as human resource management. When utilizing an ERP system, internet-based apps make it easier to create requisitions, approve purchases, place orders, receive products and services, and provide feedback mechanisms on customer satisfaction with the entire procurement process.

#### 2.3.1.2 Maintenance and Repair Operations software (MRO)

The Maintenance and Repair Operations software (MRO), according to Baily (2020), is intended to track, produce, and approve MRO-related purchases. Such a technique is extremely beneficial in firms that deal with plants that require frequent maintenance and repair materials. The system automates the process of establishing purchase orders and receipting or recording received MRO supplies. An e-sourcing platform is distinguished by the use of ICT to handle supplier sourcing. A platform is established where providers may enter their information, and the system either prequalifies or rejects their applications based on certain standards. A system like this comprises product specifications and buying requirements for each category of products and services that a



company need. The system also serves as a portal for supplier training and feedback. Some procurement systems have been modified and designed to handle tendering processes (Eadie, 2019).

### 2.3.1.3 E-tendering

The e-tendering systems manage all stages of the tendering process. They are designed to transmit tender announcements to suppliers, review tender submissions, and award marks based on tender criteria and specifications, according to Eadie (2019). Suppliers may use such a platform to make information requests and receive comments that will help them prepare contract bids. If a company does not want to engage in lengthy tender processes, E-reverse auctioning platforms might be highly useful.

Such platforms enable buyers to get bids for specific goods and services from both established and new vendors. E-procurement may be used with traditional procurement practices in organizations (Egbu, 2020). This may be accomplished by installing platforms such as the E-informing software. Such systems simply allow the procurement department to collect and share data. Individuals can use the program to raise internal requisitions, provide feedback to internal customers, collect information from market participants, and provide feedback to suppliers.

### 2.3.1.4 E-markets sites

According to Omondi and Namusonge (2018), e-marketplaces are getting more popular in Zimbabwe. These websites allow groups of suppliers and buyers to access a wide range of goods and services and conduct online business transactions. These sites have advanced systems that incorporate financial services into a system where orders can be raised, buy approvals can be made, purchasing orders can be issued, electronic invoices can be generated, and items can be paid for electronically.

### 2.3.2.1 Purchasing performance

Purchasing performance in e-procurement refers to the effectiveness and efficiency of the procurement process in achieving the organization's goals and objectives. It involves measuring the performance of various procurement activities such as supplier selection, contract

management, purchase order processing, and payment processing. The key performance indicators (KPIs) used to measure purchasing performance in e-procurement include cost savings, cycle time reduction, supplier performance, compliance with regulations and policies, and customer satisfaction. By monitoring these KPIs, organizations can identify areas for improvement and implement strategies to enhance their purchasing performance in e-procurement (Richter, 2019).

#### **2.3.2.2 Procurement Time**

Procurement time in e-procurement refers to the duration it takes for a company to complete the procurement process using electronic means. This process typically involves identifying the need for goods or services, creating a request for proposal (RFP), soliciting bids from suppliers, evaluating proposals, and selecting a supplier. The procurement time in e-procurement can vary depending on several factors such as the complexity of the procurement process, the number of suppliers involved, and the level of automation used. However, e-procurement is generally faster than traditional procurement methods as it eliminates manual processes and reduces paperwork. E-procurement can also provide real-time updates on the status of orders and deliveries, which can help companies manage their inventory more efficiently (Rejeb, 2018).

#### **2.3.2.3 Procurement Efficiency**

Procurement efficiency in e-procurement refers to the ability of an organization to streamline its procurement processes using electronic tools and technologies. E-procurement can help organizations reduce costs, improve supplier relationships, and increase transparency and accountability in the procurement process.

Procurement efficiency is when a procurement function of a procuring entity is performing or functioning in the best probable manner with the minimum waste of time and other resources. In procurement, efficient procurement officers' complete tasks in the least amount of time possible with the minimum resources possible by using certain time saving strategies and inefficient employees take the long road (Kakwezi, 2019).

#### 2.3.2.4 Procurement cost

According to Pereira (2011), procurement cost in e-procurement refers to the expenses incurred in the process of acquiring goods and services through electronic means. These costs can include:

- System implementation costs: This includes the cost of purchasing and setting up e-procurement software, hardware, and infrastructure.
- Training costs: This includes the cost of training employees on how to use the e-procurement system effectively.
- Maintenance costs: This includes the cost of maintaining and upgrading the e-procurement system over time.
- Transaction fees: This includes any fees charged by third-party providers for processing transactions through their platforms.
- Supplier onboarding costs: This includes the cost of verifying supplier information, setting up supplier accounts, and integrating suppliers into the e-procurement system.
- Compliance costs: This includes the cost of ensuring that all procurement activities comply with relevant laws, regulations, and policies.

#### 2.4 Empirical evidence

Literature has shown that there are many studies on e-procurement its effect on purchasing performance. These studies show that efforts were made in various parts of the world to determine whether e-procurement is affecting purchasing performance.

##### 2.4.1 Asia

Bendoly and Schoenherr (2005) carried out a study on the consequences of e-procurement in Hong Kong. The primary objective of the study was to provide a framework for the implementation of e-procurement. The study used a mixed approach to provide a better and deeper understanding on the consequences of-procurement in Hong Kong. The findings of the study were, 77% of firms felt

that e-procurement is crucial, and companies use e-procurement models such as business to employee requisitioning tools, corporate procurement portals, and electronic data exchange networks. The study concluded that in many situations, the genuine benefits of e-procurement, such as strategic effect and non-financial results, are not spelled clearly, resulting in many organizations failing to recognize the full worth of e-procurement in supply chain. The study recommended that companies should employ e-procurement and be able to offer sufficient training and knowledge to their employees on how to use e-procurement systems so as improve their purchasing performance.

#### 2.4.2 America

Reddick, CG (2004) conducted a study on the growth of e-procurement in American state governments. The primary objective was to discern the extent of adoption of e-procurement especially as it relates to the use of the internet in the procurement function. The study used a quantitative approach to determine the growth of e-procurement in American state government. It was found that, e-procurement minimizes corruption by reducing the amount to which government officials conceal information from unfavorable bidders, while also increasing openness and the potential of public supervision by assuring public access to all procurement data. Based on the study's findings, the e-procurement model suggested that good support for e-procurement on state management capacity and its management capacity indicated that high performing management is a critical catalyst of e-procurement development. The study recommended that American governments should adopt e-procurement systems to improve efficiency and transparency in their procurement processes also the government should provide adequate training and resources to staff to ensure successful implementation of e-procurement systems. Additionally the study recommended that the government should collaborate with private sector vendors to develop and implement e-procurement solutions tailored to their specific needs.

#### 2.4.3 Africa

Asare (2017) carried out a study on the factors that influence the implementation of e-procurement technical universities in Ghana. The main objective was to demonstrate the critical role that e-

procurement plays in maintaining a successful and efficient procurement system. The study used a qualitative approach to determine the factors that influence the implementation of e-procurement in technical universities in Ghana. It was found that due to lack of resources and ICT infrastructure technical universities were not being able to implement e-procurement. The study concluded that for technical universities in Ghana to realize the benefits of effective e-procurement adoption, they must invest in ICT infrastructure, including hardware and software. The study recommended that, the administration of the numerous technical universities must be able to adopt plans to assure the transformation process's success. Furthermore, the research advised that staff, particularly procurement officials, be taught in ICT as well as all procurement procedures and tasks.

#### 2.4.4 Africa

Kanyepe (2004) conducted a study to analyze the possibilities of e-procurement in Zimbabwe's public sector with the State Owned Enterprise. The primary objectives were to determine the current state of e-procurement in Zimbabwe public procurement, identify important areas of e-procurement issues, and offer a framework to enhance e-procurement in Zimbabwe. The study used a mixed approach to analyze the possibilities of e-procurement in Zimbabwe. It was found that employee competency, an acceptable legislative framework, insufficient technology infrastructure, and procurement transaction data security were being impediments to e-procurement adoption in the firms under examination. The study concluded, despite the fact that numerous procurement processes are still handled manually, the study indicated that the majority of state-owned enterprises in Zimbabwe have implemented the e-procurement system. The study recommended that formal legal acknowledgement of e-procurement transactions should be encouraged so as to enhance e-procurement in the public sector.

### 2.4.5 Europe

Andrea (2020) conducted a study on the adoption of e-procurement in the Italian market. The primary objective was to comprehend e-procurement adoption characteristics and the function of consulting services. The approach used in the study was an exploratory-inductive analysis of two of Italy's most major e-procurement consulting firms: Jaggaer-BravoSolution Italia and I-Faber S.p.A. The study examined e-procurement adoption, its primary factors, and outputs through a comparative case study based on an exploratory-inductive analysis of two large Italian suppliers. The findings show that when businesses decide to embrace e-procurement, advising services may help them through the implementation process, notably in overcoming hurdles and achieving the projected advantages. The study concluded that there are four major variables associated with e-procurement adoption projects: process innovation input (change strategy and implementation), barriers to e-procurement implementation (resistance to change), enablers for change (as in procurement implementation process), and output. The study recommended that public and private organizations should adopt to e-procurement systems to improve efficiency, transparency and cost saving.

### 2.4.6 Africa

Nasidai (2016) conducted a study on the factors influencing the implementation of e-procurement in Voi town. The study's three main objectives were to determine the effect of skills on e-procurement implementation in SMEs, the effect of supplier compatibility on e-procurement implementation in SMEs, and the effect of system infrastructure cost on e-procurement implementation in SMEs. The study used a descriptive method and found that skills, supplier compatibility, and the cost of system infrastructure all impact e-procurement deployment in SMEs in Voi town. The study concluded that the implementation in Voi town was influenced by factors such as lack of awareness, inadequate infrastructure, and resistance to change and inadequate training. The study recommended that they should be more awareness campaigns to sensitize stakeholders on the benefits of e-procurement and addressing resistance to change through effective change management strategies.

## 2.5 Research gap

This study took a mixed approach whereas the studies shown in the empirical evidence section used quantitative approach. The objectives of this study differ from these of previous studies in the empirical evidence section. This study was conducted for OK Bindura in Zimbabwe, whereas other studies discussed in the empirical section above were conducted in countries like Ghana, Hong Kong and United States of America and outcomes will differ due to differences in ICT infrastructure and the level of knowledge. It also shows that studies were carried out 5 to 10 years back whereas this study was carried out in 2023.

## 2.6 Summary

This chapter addressed the current theoretical literature on e-procurement. This chapter established the conceptual basis for both independent and dependent variables. The chapter also included empirical literature that detailed investigations on similar problems undertaken by other researchers. Furthermore, the research gap uncovered significant gaps between the current study and earlier studies done by other researchers. The research methods will be explained in the next chapter.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

Chapter three covers the methodology used in this study. The chapter looks at the research approach, research approach, research design, research paradigm, research strategy, target population, sample size, sampling techniques, data collection methods and instruments, validity and reliability of results .Lastly a chapter summary is provided

##### **3.1.1 Research Approach**

In this study, the researcher used a deductive research approach which more suitable for studying the effect of e-procurement on purchasing performance using quantitative studies. This approach involves starting with a theory or hypothesis and testing it through empirical data collection and analysis. In this case, the hypothesis could be that e-procurement positively affects purchasing performance, and quantitative data can be collected through questionnaires to test this hypothesis. The deductive approach allows for a more structured and systematic analysis of the data, which can lead to more reliable and valid conclusions about the relationship between e-procurement and purchasing performance (Bhatti, 2022).

##### **3.1.2 Research Paradigm**



A pragmatic paradigm was used in this study. A pragmatic paradigm is a research that includes operational decisions based on what will work best in answering research questions, allowing pragmatic researchers to conduct research in novel and dynamic ways to solve research challenges. According to Creswell (2017), a pragmatic paradigm allows the researcher to use both quantitative and qualitative research approaches to acquire significant, realistic insights on disaster risk reduction in the real world. Since the researcher was not restricted to a single strategy, the mixed method approach allowed her to answer a wide range of study issues.

### **3.1.3 Research Strategy**

OK is a large multinational company that operates in several countries around the world. The company had been using traditional procurement methods for many years, which were time-consuming and often resulted in delays and inefficiencies. In an effort to improve its purchasing performance, the company decided to implement an e-procurement system. The e-procurement system was designed to streamline the procurement process by automating many of the tasks involved in purchasing goods and services. The system allowed suppliers to submit bids electronically, which reduced the time required for procurement staff to evaluate bids manually. The system also provided real-time information on inventory levels, which helped procurement staff make more informed decisions about when to order new supplies.

After implementing the e-procurement system, the company saw significant improvements in its purchasing performance. The system reduced procurement cycle times by 50%, which meant that goods and services were delivered faster than before. This resulted in improved customer satisfaction as well as cost savings for the company. The e-procurement system also improved transparency in the procurement process. All bids were stored electronically, which made it easier for auditors to review procurement activities. This helped ensure compliance with regulations and reduced the risk of fraud or corruption.

This case study demonstrates that there is a clear link between e-procurement and purchasing performance. By implementing an e-procurement system, organizations can improve efficiency, reduce costs, increase transparency, and enhance customer satisfaction. As such, e-procurement should be considered as a key strategy for any organization looking to improve its purchasing performance.

### 3.1.4 Research Design

This study adopted a descriptive survey design, with semi-structured questionnaires utilized to collect data from a sample of respondents. The technique was chosen for this study since it facilitated in the collection of both qualitative and quantitative data (Ridder, 2017).

### 3.1 Target population of the Study

Personnel from the Procurement Management Unit were among those targeted. This staff is from OK Bindura's finance, administration, and procurement profession departments. As a result, the personnel complement at the time of the research was 30, the target population was 30 employees.

### 3.2 Sample size Determination

The sample size was determined using Krejcie and Morgan (1970) model. The model is shown on table 3.1 below:

Table 3.1

Table 3.1 Table for Determining Sample Size of a Known Population									
N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	100000	384

Note: N is Population Size; S is Sample Size Source: Krejcie & Morgan, 1970

**Source:** Krejcie and Morgan (1970)

The sample size for this study are 28 employees.

### **3.4 Sampling Method**

Probability sampling was utilized in this investigation. Probability sampling is the selecting of a sample from a population based on the idea of randomization, often known as random selection or chance. According to Sekaran (2003), with probability sampling, members of the population have a known chance of being chosen as sample subjects.

#### **3.4.1 Sampling Techniques**

According to Sekaran (2003), used stratified and basic random sampling approaches. Because stratified sampling divides the population into homogeneous strata, it enhances accuracy and efficiency in data collection. According to Walliman (2011), a basic random sampling strategy gives every element in the population an equal chance of being chosen as a topic.

A sample is drawn from a population in order to get representative and impartial data and information about that population. In the study, the researcher was already aware of the target population that would be investigated; hence, the population was stratified first, followed by a systematic random sampling approach. The stratification approach divides the population into recognized groups called strata that have almost identical features and are congruent with the study's aims.

#### **3.5.1 Data Collection Instruments and Methods**

#### **3.5.2 Structure of the Questionnaire**

A questionnaire was used to collect data from respondents. A questionnaire with open ended questions on respondents' age and work experience and closed ended questions on respondents' gender, department, level of education, position, e-procurement platforms, and their effect on purchasing performance was created and distributed to collect data from a selected sample of respondents.

Questionnaires were utilized because they are affordable and offer uniform responses that allow the researcher to easily evaluate data (Hair et al, 2003). Structured demographic questions were arranged using a Likert scale ranging from 0 to 1 point (0 = female and 1 = male), while other factors were organized using a Likert scale ranging from 1 to 5 points (1 = strongly disagree, 2 = disagree, 3 = Uncertain, 4 = agree, 5 = strongly disagree).

### **3.6.1 Data Analysis**

In quantitative data analysis, regression analysis was used to test the research hypothesis. In addition, the researcher used descriptive statistical analysis techniques such as mean, standard deviations, mode, and median to analyse data. Bar charts, graphs, pie charts, tables, and figures were used to present statistics and findings. Using different data presentation techniques will improve the summarization of large amounts of data. A thematic approach was observed in the presentation of qualitative data, in which information collected was represented and processed in codes, themes, and patterns.

### **3.7.1 Validity and Reliability of Results**

According to Joppe Golafshani (2003), the degree to which results are consistent over time is referred to as dependability. In this study, the Cronbach alpha test was performed to analyze the measuring instrument's reliability, and all of the variables on the measurement instrument had a Cronbach alpha value more than 0.70. This is congruent with Nunnally and Bernstein (2017), who contend that Cronbach alpha values of 0.70 or above are suitable for confirmatory study data. To guarantee that the items in the questionnaire were relevant to the study's aims, the researcher employed content validity. A pilot research was also carried out to evaluate the study's face

validity. The pilot research was carried out to guarantee that the questionnaire is changed if any difficulties are highlighted by respondents, as well as to evaluate the questionnaire's perceived validity and reliability.

### **3.8.1 Ethical and Legal Considerations**

Throughout the study, respondents were asked to provide informed permission. The researcher began by asking permission to conduct the study at Bindura University of Science Education and informing the University of its Goal. This was consistent with Walliman (2011), who argues that when researchers wish to conduct research studies in businesses, they must acquire permission from managers or other persons with overall responsibility and explain the goal of the study.

To safeguard their identities, the researcher ordered the respondents not to put their names on surveys. This was consistent with Morrison et al. (2011), who proposed that when participants' information is confidential, they should not reveal their identities in order for them to participate freely and without fear of punishment, allowing the researcher to collect more relevant data.

Furthermore, the work was not reproduced nor plagiarized. Plagiarism is defined as presenting someone else's work or ideas as your own (Ezikiel, 2008). The complete literature and structure utilized in this study were cited and mentioned in the references section. As a result, the investigation was completed entirely by the researcher

### **3.8.1 Ethical Considerations**

Respondents were asked to offer informed consent throughout the investigation. First, the researcher received authorization to conduct the research in retail businesses and notified the respondents about the goal of the study. According to Walliman (2011), when researchers wish to conduct research studies in businesses, they must acquire permission from managers or other persons with overall responsibility and explain the goal of the study.

Additionally, the researcher informed retail firms that any information received from them would be kept totally private and that the study would only be utilized for academic purposes. This is consistent with Patten (2019), who argues that researchers have a commitment to keep study participants' information secret, not to reveal it to others, and to utilize it for the purpose for which it was acquired.

Furthermore, the researcher asked respondents not to put their names on surveys in order to conceal their identities. The confidentiality of the information requested was critical since it was utilized for competitive and strategic objectives in retail organizations. This is according to Morrison et al. (2011), who suggest that when participants' information is private, they shouldn't disclose their names so that they may engage freely and without fear of penalty, allowing the researcher to acquire more relevant data.

Finally, no one duplicated or plagiarized this research. Plagiarism, according to Ezikiel (2018), is the act of presenting someone else's work or ideas as your own. In the references section, the full literature and structure utilized in this work were cited and listed. As a consequence, the entire study was carried out and written by the researcher.

### **3.9 Summary**

The methodology of the study was examined in detail, including the study's approach, the target population, sample size and sampling techniques, data source, data collection instrument, data collection procedure, data presentation and analysis methods, validity and reliability, and ethical considerations. The following chapter will examine data presentation, analysis, and discussion.

## CHAPTER 4

### DATA PRESENTATION, INTERPRETATION AND DISCUSSION

#### 4.1 Introduction

The fourth chapter examines data presentation, interpretation, and discussion. The study's findings are evaluated and discussed based on data acquired via questionnaires and analyzed using the Statistical Package for Social Sciences (SPSS). The study's findings are given in the form of pie charts, bar graphs and tables.

#### 4.2 Questionnaire Response Rate

Table 3.2 below shows the findings on questionnaire response rate

Questionnaires distributed	Expected	Actual	Variance	Response rate
30	30	28	2	93.3%

**Source: Fieldwork, (2023)**

The findings of the questionnaire distribution at OK Bindura are shown in Table 4.1 above. The researcher distributed 30 questionnaires to targeted departments, and 28 of them were completed and returned to the researcher on time. The response rate was 93.3%, which is considered adequate. This is consistent with Ray (2012), who claims that a response rate of 75% or higher is a good and fortunate rate of return because most researchers receive a lower response rate. As a result, the response rate was sufficient to assist the researcher in producing results that provide answers to the study's questions.

### 4.3 The Demographic Data

The demographics were used as control variables in this study. Demographic data on gender, age, educational qualifications, position held, and work experience of the targeted respondents was collected at OK Bindura. Table 4.2 below shows the summary statistics of the findings on age and work experience of respondents.

**Table 4.2 below shows the findings on the demographic data**

		Demographic summary statistics	
		AGE	WORK EXPERINCE
N	Valid	28	28
	Missing	0	0
Mean		34.96	7.29
Sum		979	204

**Source:** Fieldwork (2023)

Table 4.2 above shows the findings on age and work experience of respondents. Age of respondents had a mean with a score of 34.96 which means that most respondents were 35 years old. The findings also show that, work experience of respondents had a mean with a score of 7.29 which means that most respondents had 7 years of work experience. Therefore, the findings mean that most of the respondents are mature and fairly experienced to provide meaningful responses to the questions of the study. This corroborates well with Braxton (2008) who opines that obtaining responses from mature and experienced respondents is very key since the study will benefit from reliable sources of data.



### 4.3.1 Gender of respondents

Table 4.3 below shows the findings on the gender of respondents

		GENDER			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	7	25.0	25.0	25.0
	Male	21	75.0	75.0	100.0
	Total	28	100.0	100.0	

Source: Fieldwork (2023)

Figure 4.1: Gender of respondents

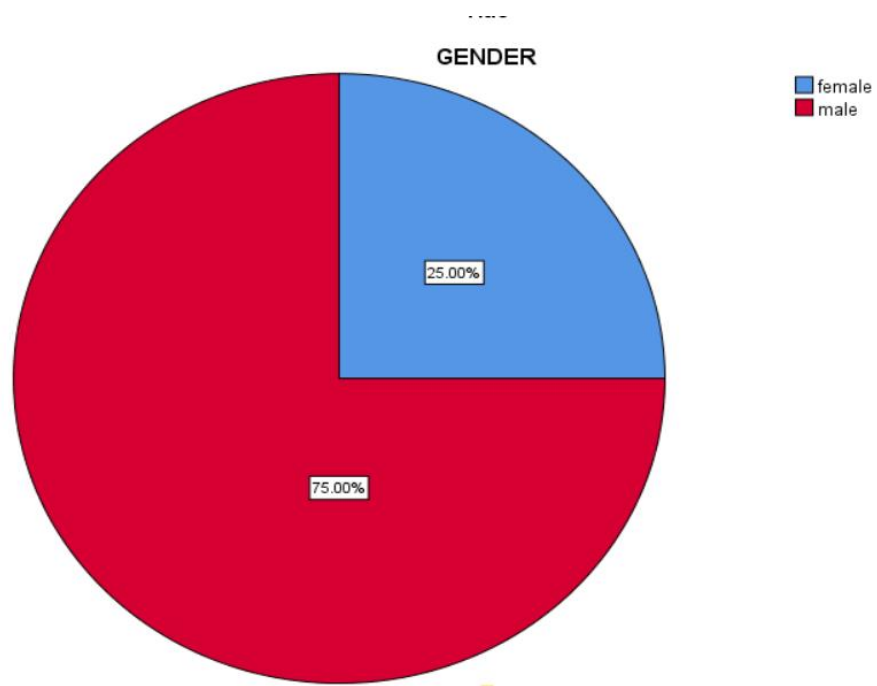


Figure 4.1

Source: Fieldwork (2023)

Figure 4.1 above shows that 75 % of the respondents were males and 25 % of the respondents were females. The findings on figure 4.1 shows an unbalanced distribution of gender of the respondents. The results mean that OK Bindura is dominated by male employees regardless the fact that the population of Zimbabwe is dominated by women.

#### 4.3.4 Level of education of respondents

The research also included a section through which employees indicated the level of education they attained. The research categorized the level of education in to five divisions which were certificate, diploma, first degree, Masters and PHD. The level of education plays a critical role in improving the accuracy of the research. It helped in determining the forms of employee compensation at the institution. According to Davis, (2020), an educated work force is more corporative in a research and understand the nature of questions. The table below shows the level of education of the respondents

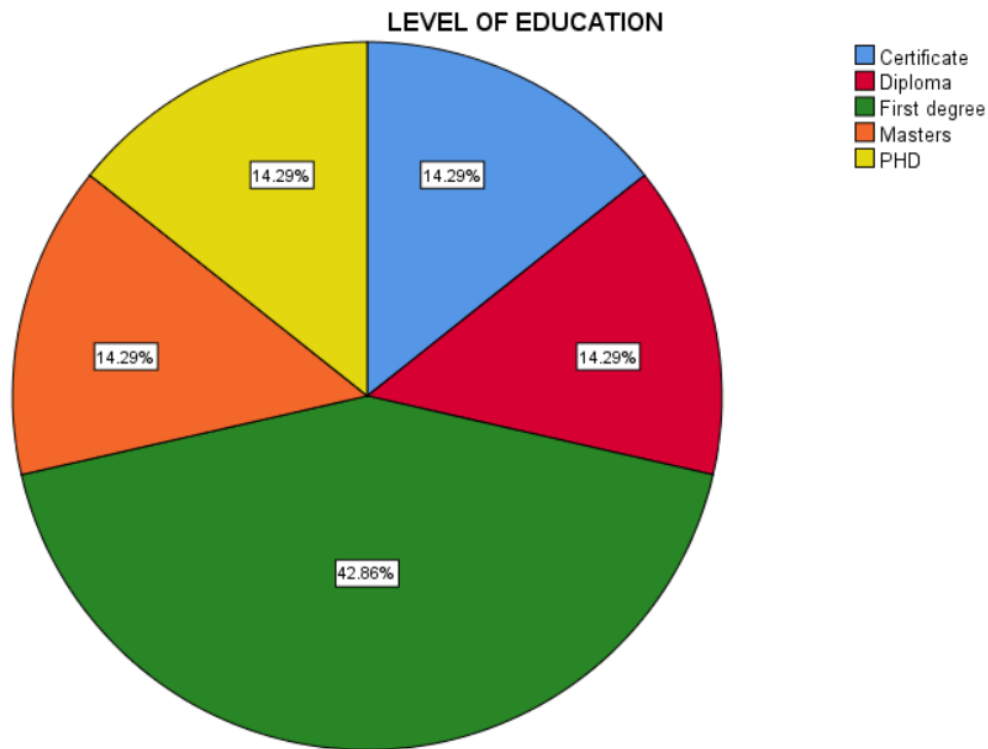
**Table 4.6 below shows the findings on the level of education of respondents**

		LEVEL OF EDUCATION			Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Certificate	4	14.3	14.3	14.3
	Diploma	4	14.3	14.3	28.6
	First degree	12	42.9	42.9	71.4
	Masters	4	14.3	14.3	85.7
	PHD	4	14.3	14.3	100.0
	Total	28	100.0	100.0	

**Source: Fieldwork, (2023)**

Figure 4.2

Figure 4.2 below shows findings on the level of education of the respondents



**Source:** Fieldwork (2023)

The findings on figure 4.4 above show that 14.29% of the respondents are holders of certificates, 14.29 % of the respondents are holders of diplomas, 14.29% are holders of masters , 14.29% of respondents are holders of PHD and 42.86% of the respondents are holders of first degree. These findings agree with the high literacy in Zimbabwe and this assisted the researcher to collect data from respondents with no challenges in understanding the questions of the study and who understood the purpose of the study. This was in line with Joppe (2000) who put forward that when the researcher is collecting data, it is very helpful for the study subjects to have an understanding

of the subject matter and research questions as this will assist the researcher to collect reliable and accurate data.

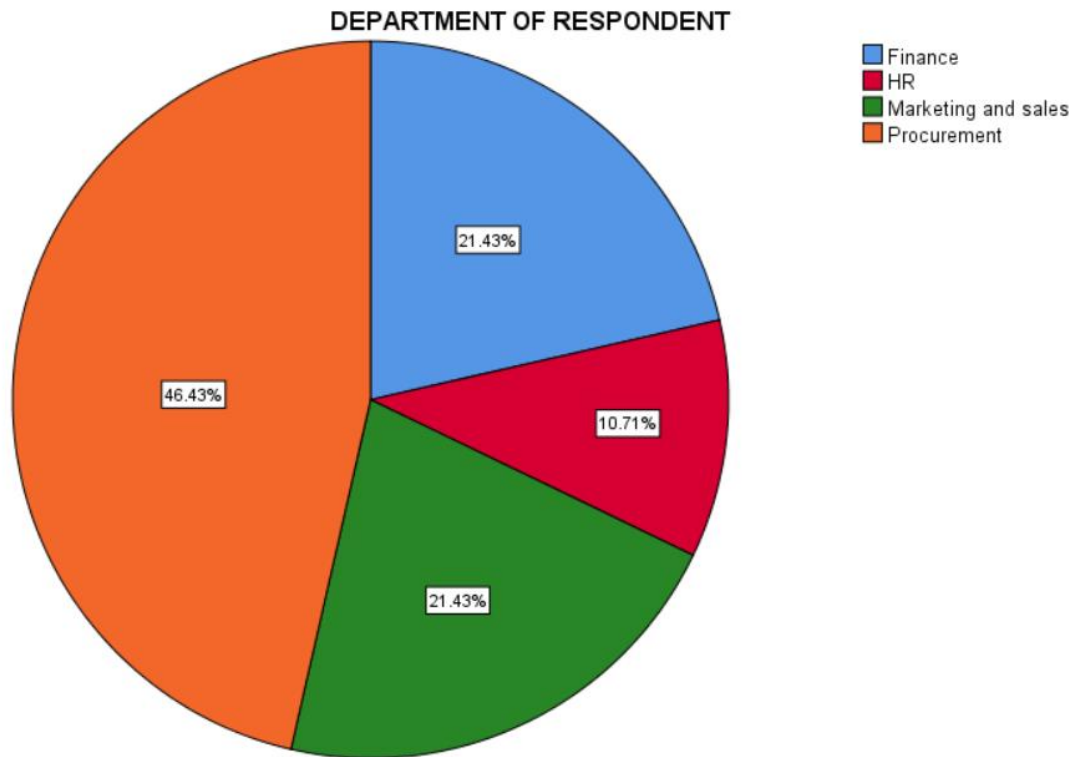
#### 4.3.5 Department of respondents

Table 4.7 below shows findings on department of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Finance	6	21.4	21.4	21.4
	HR	3	10.7	10.7	32.1
	Marketing and sales	6	21.4	21.4	53.6
	Procurement	13	46.4	46.4	100.0
	Total	28	100.0	100.0	

Source: Fieldwork, (2023)

Figure 4.3 below shows the findings on department of Respondents



**Source:** Fieldwork (2023)

Figure 4.3 above shows that 46.43% of the respondents at OK Bindura works in Procurement and warehouse, 21.43% of the respondents work in Marketing and sales whilst 21.43% of the respondents work in the Finance departments work and 10.71% of the respondents work in Human Resources. Therefore, this means the response rate from the staff in the Procurement and warehouse was good and their responses are critical in providing answers to the questions of the study

#### **4.4 Reliability Test**

The researcher used the Cronbach's coefficient alpha to test the reliability of the measurement instrument. The content validity of the variables of the study were measured using the Cronbach's

coefficient alpha in order to ensure the truthfulness of the findings of the study. Table 4.3 below shows the findings on the reliability test.

**Table 4.8 Reliability Test**

Variables	Cronbach's alpha value	No. of Items
Demographics	0.780	5
E-procurement Procurement Systems	0.840	3
Procurement performance	0.780	2

**Source:** Fieldwork (2023)

The findings on table 4.3 results show that all variables have cronbach's alpha value above 0.70. The findings agree with Nunnally and Bernstein (1994) who put forward that the accepted cronbach's alpha value for a measurement instrument should be above 0.70.

#### 4.5 Presentation of Regression Analysis

##### 4.5.1 The effect of e-procurement systems on procurement time

The results below show the findings of the study on the effects of e-procurement systems on procurement time. The results specifically show the findings on the effects of e-procurement systems on procurement time, procurement efficiency and procurement cost as follows:

**Table 4.9 Effects of e-procurement systems on procurement time**

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				Sig. F Change
					R Square Change	F Change	df1	df2	
1	.490 <sup>a</sup>	.240	.108	1.019	.240	1.820	4	23	.015

- a. Predictors: (Constant), E-tendering, E-market website, MRO, ERP
- b. Dependent Variable: Procurement time

Table 4.9 above shows the model summary which measures the strength and the direction of a linear relationship between two variables. The table shows  $R = 0.490$ . This shows that there is a strong linear relationship between e-procurement systems and procurement time. The multilinear regression (ANOVA) table is shown on table 4.10 below

**Table 4.10 Effects of e-procurement systems on procurement time**

		ANOVA				
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	7.557	4	1.889	1.820	.015 <sup>b</sup>
	Residual	23.872	23	1.038		
	Total	31.429	27			

- a. Dependent Variable: Procurement time
- b. Predictors: (Constant), E-tendering, E-market website, MRO, ERP

Table 4.10 above shows the analysis of variance. Analysis of variance (ANOVA) was done to ascertain the appropriateness of the model used. The ANOVA table shows that the F-ratio (**F=1,820 p=.015**) was statistically significant. This means that the model used was appropriate and the relationship of the variables shown could not have occurred by chance. Table 4.11 below show the coefficients of determination.

**Table 4.11**

**Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.005	1.771		2.261	.034
	ERP	.364	.188	.401	1.934	.065
	E-market website	-.160	.243	-.124	-.660	.516
	MRO	-.050	.349	-.030	-.144	.886
	E-tendering	.203	.248	.156	-.818	.422

a. Dependent Variable: Procurement time

Table 4.11 above shows the coefficients of determination. The estimated coefficients illustrate the input of the independent variables (e-procurement systems) to the change in the dependent variable (procurement time).

The results show a positive and significant relationship between ERP and procurement time. This is shown by a coefficient value of 0.364 and a P-value of 0.65 which is significant at 5%. The results mean that when the procurement function at OK Bindura implement ERP in their procurement activities, procurement time will be reduced and this improves the procurement performance. These results agree with the results in a study by Sengbeh (2015) that procurement performance is influenced by e-tenders in procurement.

E-tendering has a positive and insignificant effect on procurement time. This shown by a coefficient value of 0.203 and P-value of 0.422 which is insignificant at 5% level of significance. Therefore, this means that it is important for procurement professionals at OK Bindura to use e-tenders in conducting procurement activities although this has insignificant effect on procurement time.

The findings also show that MRO has a negative effect on procurement time. This is shown by a coefficient value of - 0.50 and a P-value of 0.886 which is significant at 5% level of significance.



The findings mean that MRO is less important as it does not have any help in reducing procurement time at OK Bindura.

The findings on table 4.10 also show that, e-market websites has a negative effect on procurement time. This is shown by a value of -0.16 and a P-value of 0.516 which is significant at 5% level of significance. This means that e-market websites are less important as it slightly helps procurement function at OK Bindura to reduce procurement time and this improves procurement performance.

By substituting the coefficient in the regression equation, we can predict the procurement performance in terms of procurement time at OK Bindura when independent variables are changed:

- $PP [\text{procurement time}] = 4.005 + 0.364 E_1 - 0.160 E_2 - 0.50 E_3 + 0.203 E_4$

#### 4.5.2 Effects of e-procurement systems on procurement cost

**Table 4.11 Effects of e-procurement systems on procurement cost**

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.395 <sup>a</sup>	.156	.009	1.192	.156	1.062	4	23	.039

a. Predictors: (Constant), E-tendering, E-market website, MRO, ERP

b. Dependent Variable: Procurement cost

Table 4.11 above shows the model summary which measures the strength and the direction of a linear relationship between two variables. The table shows R = 0.395. This shows that there is a

strong linear relationship between ethical procurement practices and value for money. The multilinear regression (ANOVA) table is shown on table 4.12 below

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.037	4	1.509	1.062	.039 <sup>b</sup>
	Residual	32.678	23	1.421		
	Total	38.714	27			

a. Dependent Variable: Procurement cost

b. Predictors: (Constant), E-tendering, E-market website, MRO, ERP

Table 4.6 above shows the analysis of variance. Analysis of variance (ANOVA) was done to ascertain the appropriateness of the model used. The ANOVA table shows that the F-ratio (**F=1,062 p=.039**) was statistically significant. This means that the model used was appropriate and the relationship of the variables shown could not have occurred by chance. Table 4.13 below show the coefficients of determination.

**Table 4.13**

Model		Unstandardized Coefficients		Standardized	T	Sig.
		B	Std. Error	Coefficients Beta		
1	(Constant)	1.887	2.072		.911	.372
	ERP	.433	.220	-.174	-.798	.017
	E-market website	.306	.284	.214	1.077	.293
	MRO	-.466	.408	.247	1.143	.265
	E-tendering	.099	.290	.069	.343	.735

a. Dependent Variable: Procurement cost

Table 4.13 above shows the coefficients of determination. The estimated coefficients illustrate the input of the independent variables (e-procurement systems) to the change in the dependent variable (procurement cost).

From the table above, the results show a positive and significant relationship between procurement cost and ERP. This is shown by a coefficient value of 0.433 and a P-value of 0.017 which is significant at 5%. The results mean that when the procurement function at OK Bindura uses EPR in their procurement activities, procurement cost are reduced and this improves the procurement performance.

The findings on table 4.7 also show that e-market websites have a positive and insignificant effect on procurement cost. This shown by a coefficient value of 0.306 and P-value of 0.293 which is insignificant at 5% level of significance. Therefore, this means that e-market websites are important at OK Bindura but it has insignificant effect on procurement cost and procurement performance.

The findings also show that MRO have a negative and insignificant effect on procurement cost. This is shown by a coefficient value of - 0.466 and a P-value of 0.265 which is insignificant at 5% level of significance. The findings mean that MRO is less important as it does not have any help in ensuring procurement cost.

Furthermore, the findings on table 4.7 show that, e-tenders have a positive significant effect on procurement cost. This is shown by a value of 0.99 and a P-value of 0.735 which is significant at 5% level of significance. This means that e-tendering is important to OK Bindura as it helps to reduce procurement cost and to improve procurement performance.

By substituting the coefficient in the regression equation, we can predict the procurement performance in terms of value for money at OK Bindura when independent variables are changed:

- $PP \text{ [Value for money]} = 1.887 + 0.433 E_1 + 0.306 E_2 - 0.446 E_3 + 0.99 E_4$

**Table 4.14 Effects of e-procurement systems on procurement efficiency**

<b>Model Summary</b>									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				Sig. F Change
					R Square Change	F Change	df1	df2	
1	.532 <sup>a</sup>	.283	.158	.882	.283	2.266	4	23	.093

a. Predictors: (Constant), E-tendering, E-market website, MRO, ERP

b. Dependent Variable: Procurement efficiency

Table 4.14 above shows the model summary which measures the strength and the direction of a linear relationship between two variables. The table shows  $R = 0.532$ . This shows that there is a strong linear relationship between e-procurement systems and procurement efficiency. The multilinear regression (ANOVA) table is shown on table 4.15 below

**Table 4.15****ANOVA**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	7.056	4	1.764	2.266	.093 <sup>b</sup>
	Residual	17.908	23	.779		
	Total	24.964	27			

a. Dependent Variable: Procurement efficiency

b. Predictors: (Constant), E-tendering, E-market website, MRO, ERP

Table 4.9 above shows the analysis of variance. Analysis of variance (ANOVA) was done to ascertain the appropriateness of the model used. The ANOVA table shows that the F-ratio (**F=2,266 p=.093**) was statistically significant. This means that the model used was appropriate and the relationship of the variables shown could not have occurred by chance. Table 4.16 below show the coefficients of determination.

**Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.168	1.534		-.109	.914
	ERP	.429	.163	.530	2.634	.015
	E-market website	.335	.210	.292	1.595	.124
	MRO	-.231	.302	.284	1.427	.167

E-tendering	.256	.215	.221	1.193	.245
-------------	------	------	------	-------	------

a. Dependent Variable: Procurement efficiency

The findings on Table 4.16 above shows the coefficients of determination. The estimated coefficients illustrate the input of the independent variables (e-procurement systems) to the change in the dependent variable (procurement efficiency).

The results show a positive and significant relationship between EPR and procurement efficiency. This is shown by a coefficient value of 0.429 and a P-value of 0.15 which is significant at 5%. The results mean that when OK Bindura uses ERP in its procurement activities, this leads to procurement efficiency and this improves the procurement performance. This corroborates with the findings and the recommendations in a study by Kenya by Sengbeh (2015) that procurement teams in procuring entities must adopt e-procurement systems.

E-market websites have a positive and insignificant effect on procurement efficiency. This shown by a coefficient value of 0.335 and P-value of 0.124 which is significant at 5% level of significance. Therefore, this means that it is important for procurement professionals to use e-market websites when conducting procurement activities as pi have a significant effect on procurement efficiency.

Table 4.10 also shows that MRO have a negative and insignificant effect on procurement efficiency. This is shown by a coefficient value of - 0.231 and a P-value of 0.167 which is insignificant at 5% level of significance. The findings mean that MRO is less important as it does not have any help in achieving procurement efficiency at OK Bindura.

The findings on table 4.10 also show that, e-tenders have a positive and significant effect on procurement efficiency. This is shown by a value of 0.256 and a P-value of 0.045 which is significant at 5% level of significance. This means that e-tenders are important as they help to achieve procurement efficiency and improve procurement performance at OK Bindura. The findings agree with the findings in a study by Kilonzo (2017) that there is a positive and significant relationship between e-procurement and organizational performance.

By substituting the coefficient in the regression equation, we can predict the procurement performance in terms of procurement efficiency at OK Bindura when independent variables are changed:

- $PP [\text{procurement efficiency}] = -0.168 + 0.429E_1 + 0.335E_2 - 0.335E_3 + 0.256E_4$

#### 4.6 Types of e-procurement systems implemented at OK Bindura

**Table 4.17 types of e-procurement systems used**

		Statistics			
		ERP	MRO	E-tendering	E-market website
N	Valid	28	28	28	28
	Missing	0	0	0	0
Mean		3.82	1.57	3.39	3.04
Std. Deviation		1.188	.634	.832	.838
Sum		107	44	95	85

Table 4.17 above shows that, MRO have the mean with a score of 1.57 and a standard deviation with a value of 0.634. The findings mean that the respondents were uncertain that MRO systems are being used in procurement at OK Bindura.

The findings also show that e-market websites have mean with a score of 3.04 and a standard deviation with a value of 0.838. This means that the respondent's certainly agreed that e-market websites are being used in procurement at OK Bindura.

Furthermore, the findings show that, EPR systems have a mean with a score of 3.182 and standard deviation with a value of 1.188. The findings mean that the respondents certainly agree that EPR systems are being used at OK Bindura.

Moreover, the findings show that e-tendering has mean with a score of 3.39 and standard deviation with a value of 0.832 respectively. This mean that the respondents agree that at OK Bindura e-tenders are being used in procurement activities.

#### 4.7 Chapter Summary

The chapter has presented data on findings from the research instrument which is the questionnaires. Data has been presented in form of tables and pie charts while analysis was done to relate the research findings to the previous researches by others. The next chapter is going to focus on summarizing the findings, conclusions and to put forward some recommendations ethical procurement practices that are appropriate to use at OK Bindura.



## CHAPTER 5

### SUMMARY CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

The primary objective of this study was to assess the effect of e-procurement on procurement performance at OK Bindura. The problem statement of the study was clear that OK Bindura face challenges such which is affecting the achievement of cost saving, procurement efficiency and reducing lead time. Based on the challenges which the OK faced, the study sought to establish the effect of e-procurement on cost saving, procurement efficiency and lead time in order to improve the procurement performance.

#### 5.2 Summary of research findings

OK Bindura is using e-procurement systems such as e-market websites, ERP, MRO and e-tenders. As well, it was noted from the findings of the study that the PMU at OK Bindura is certain of the positive effects of e-procurement systems on purchasing performance. The researcher utilised a descriptive survey design, in which 28 participants were sample using stratified sampling technique. There was high response rate of 93.3% as they were cooperative.

#### **Objective 1: To assess the e-procurement systems at OK Bindura.**

The study aimed at establishing whether e-procurement systems were being used at OK Bindura. Questionnaires were distributed to collect data on e-procurement systems being used at OK Bindura and the findings from the data that was collected showed that the respondents hardly

implement MRO systems. However, the respondents agreed that ERP systems-tendering and e-market websites have a significant effect on procurement activities at OK Bindura. Generally, the findings were that e-procurement is being used at OK Bindura.

**Objective 2: To determine the effect of e-procurement on procurement performance at OK Bindura.**

The researcher utilised a mixed research design, in which 28 participants were sample using stratified sampling technique. There was high response rate of 93.3% as they were cooperative.

The regression analysis was carried out to determine the effect of e-procurement systems on three metrics of procurement performance in this study as follows:

**The effect of e-procurement on procurement time;** A model summary, analysis of variance and the coefficient of determination were done to determine the effects of e-procurement systems on procurement time. The model summary showed that  $R = 0.490$  which meant that there is a strong linear relationship between e-procurement systems and procurement time. The Analysis of variance (ANOVA) was done to ascertain the appropriateness of the model which was used and it showed that the F-ratio ( $F=1,820$   $p=.000$ ) was statistically significant which meant that the model used was appropriate and the relationship of the variables shown could not have occurred by chance.

The table with the coefficient of determination was provided and the findings showed a positive and significant relationship between EPR and e-procurement which was shown by a coefficient value of 0.364 and a P-value of 0.065 which is significant at 5%. The findings also showed that e-tendering had a positive and insignificant effect on value for money and this was shown by a coefficient value of 0.203 and P-value of 0.422 which is insignificant at 5% level of significance. Furthermore, the findings showed that MRO had a negative and insignificant effect on procurement time and this was shown by a coefficient value of - 0.50 and a P-value of 0.886 which is insignificant at 5% level of significance. Lastly the coefficient of determination table showed

that e-market websites had a positive significant effect on procurement time and this was shown by a value of 0.160 and a P-value of 0.516 which is significant at 5% level of significance.

**The effect of e-procurement on procurement efficiency;** Model summary, analysis of variance and the coefficient of determination done to determine the effects of e-procurement systems on procurement efficiency. The model summary showed that  $R = 0.532$  which meant that there is a strong linear relationship between e-procurement systems and procurement efficiency. Also, the Analysis of variance (ANOVA) was done to ascertain the appropriateness of the model which was used and it showed that the F-ratio ( $F=2,266$   $p=.093$ ) was statistically significant which meant that the model used was appropriate and the relationship of the variables shown could not have occurred by chance.

The table with the coefficient of determination was provided and the findings showed a positive and significant relationship between EPR and procurement efficiency. This is was shown by a coefficient value of 0.429 and a P-value of 0.015 which is significant at 5%. The findings also showed that e-market websites had a positive and insignificant effect on procurement efficiency. This was shown by a coefficient value of 0.335 and P-value of 0.124 which is insignificant at 5% level of significance. MRO had a negative and insignificant effect on procurement efficiency. This was shown by a coefficient value of - 0.231 and a P-value of 0.167 which is insignificant at 5% level of significance. It was also shown that e-tenders had a positive and significant effect on procurement efficiency. This was shown by a value of 0.256 and a P-value of 0.045 which is significant at 5% level of significance.

**The effect of e- procurement on procurement cost;** A model summary, analysis of variance and the coefficient of determination done to determine the effects of ethical procurement practices on procurement efficiency. The model summary showed that  $R = 0.395$  which meant that there is a strong linear relationship between e-procurement systems and procurement cost. Also, the Analysis of variance (ANOVA) was done to ascertain the appropriateness of the model which was used and it showed that the F-ratio ( $F=1,062$   $p=.039$ ) was statistically significant which meant that

the model used was appropriate and the relationship of the variables shown could not have occurred by chance.

The table with the coefficient of determination was provided and the findings showed a positive and significant relationship between EPR and procurement cost. This is was shown by a coefficient value of 0.433 and a P-value of 0.017 which is significant at 5%. The findings also showed that e-market websites had a positive and insignificant effect on procurement cost. This was shown by a coefficient value of 0.306 and P-value of 0.293 which is insignificant at 5% level of significance. MRO had a negative and insignificant effect on procurement cost. This was shown by a coefficient value of – 0.466 and a P-value of 0.265 which is insignificant at 5% level of significance. It was also shown that e-tenders had a positive and significant effect on procurement cost. This was shown by a value of 0.990 and a P-value of 0.735 which is significant at 5% level of significance.

### 5.3 Conclusions

The PMU at OK Bindura is aware of e-procurement systems that enhance procurement performance as evidenced by the respondents who agreed that they use e-catalogues, e-payments, e-invoicing and e-ordering in procurement activities in their organization. Also, employees who work in key departments that were chosen know about the effect of e-procurement on procurement performance as this is as well evidenced by their responses when the results showed the relationship between e-procurement and metrics of procurement performance lead time , procurement efficiency ,cost saving and timely payment of goods.

#### **Objective 1: To assess the e-procurement systems at OK Bindura.**

Based on the findings of the study, it can be concluded that OK Bindura do use e-procurement systems namely e-market websites, e-tenders and ERP .These e-procurement systems are critical in ensuring that procurement time is reduced, procurement efficiency is improved and procurement costs are reduced .

## **Objective 2: To determine the effects of e-procurement on procurement performance at OK Bindura.**

It is concluded that, e-market websites, e-tenders and ERP have a positive effect on procurement cost, efficiency and time at OK Bindura. It can also be concluded that MRO have an insignificant effect on procurement cost and efficiency considering that they barely use it at OK Bindura.

### **5.4 Recommendations**

Based on the aforementioned findings, the following recommendations were made:

- OK Bindura must embrace e-procurement because it has a positive and significant effect procurement cost, procurement efficiency and procurement time. This is very important because it improves procurement performance.
- It is recommended that procurement professionals at OK Bindura should seek ways to upgrade their e-procurement systems by modernizing their ICT systems and training their procurement team to improve procurement performance. The company will benefit a lot through e-procurement as it will be able to reduce procurement time, improve procurement efficiency as well as reduce procurement costs.

### **5.5 Recommendations for further studies**

The researcher recommends further studies to be carried out on the effect of e-procurement on procurement performance in companies that are operating in other sectors of the economy. Studies can be done to find out the effect of e-procurement systems on procurement performance using different e-procurement systems and metrics of procurement performance. This will help to cover huge gaps that are existing on the effects of e-procurement and procurement performance in the grocery retail sector, public procurement sector and other sectors of the economy.

**BINDURA UNIVERSITY OF SCIENCE EDUCATION**

**DEPARTMENT OF ECONOMICS**

**RESEARCH QUESTIONNAIRE**

---

**Appendix II: Introduction letter**

Dear Respondent

**REF: RESEARCH QUESTIONNAIRE ASSISTANCE**

My name is Bertha Shingai Mupfure (B190603B), a Bachelor of Commerce Honours Degree in Purchasing and Supply, fourth year student at Bindura University of Science Education. I am currently undertaking a research on the Effect of E-procurement on purchasing performance in the grocery retail sector a case of OK Bindura (2019-2023) as it is a requirement in partial fulfilment of the respective degree program.

I kindly ask you to assist me by filling in the attached questionnaire. Any information provided will be strictly and specifically be used for academic purposes and shall be treated with confidentiality and anonymity. Your contributions will be greatly appreciated.

Yours Sincerely

Bertha S Mupfure (B190603B)

Contact number 0786322711

Email address: mupfurebertha@gmail.com

Are you willing to participate      YES      [ ]      NO [ ]

Signature

Questionnaire number    Date of interview /    /2023

## Instructions to the participant

Please attempt to answer all questions in truth.

Do not write your name on the questionnaire.

Please tick where appropriate.

E-procurement is a concept which aims to acquire products or services at the best possible price and at the best possible time. To meet this objective, it is very important for businesses to establish relationships with suppliers, this enables procurement personnel to negotiate contracts with suppliers.

## Section A

*Please tick appropriate box*

### 1. Gender of respondents

male	<input type="checkbox"/>
female	<input type="checkbox"/>

### 2. Age of respondent

.....years

### 3. Work experience

.....



#### 4. Level of education of respondents

Certificate	
Diploma	
First Degree	
Masters	
PHD	

#### 5. Department of respondents

Finance	
Procurement and warehouse	
Human resource	
Marketing and sales	

#### Section B

<b>Strongly agree</b>	<b>Agree</b>	<b>Neither agree or disagree</b>	<b>Disagree</b>	<b>Strongly disagree</b>
5	4	3	2	1

*For the following questions, please tick the appropriate box as indicated by the above scale*

**Question 6**

The following e-procurement systems are implemented at your organization

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
ERP					
MRO					
E-tendering					
E-Market website					

**Question 7**

**What is the effect of e-procurement on purchasing performance at your organization?**

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
E-procurement systems have a positive effect on procurement performance					
E-procurement systems have a positive effect on procurement cost					
E-procurement systems have a positive effect on procurement efficiency					
E-procurement systems have a positive effect on procurement time					

---

**Thank you**

## References

- Ademola, E. O. & A. M. G., 2014. An assessment of non-compliance with procurement proceedings in procurement of works in Nigeria. *International Journal of Economics and Business Management*, 2(3), pp. 25-34..
- Bank, W., 2010. *Silent and Lethal: How quiet corruption undermines Africa's development efforts*. New York., World Bank Publishers.
- Creswell, J. W., 2003. *Research design: Qualitative, quantitative and mixed methods approaches*. London.: Sage Publications.
- Gikonyo, N., 2010. Performance Monitoring and Quality Outcomes in Contracted Services. *International Journal of Quality and Reliability Management*, 19.(4), pp. 396 - 413..
- Jeppesen, A., 2010. Enhancing Procurement Practices: Comprehensive Approach to Acquiring Complex Facilities and Projects. *the Journal of Public Procurement*, 4(3), pp. 471-477.
- Kumur, A. S. a. S. N., 2009. *Production and Operations Management*. 2nd ed. New Delhi.: New Age International Publishers.
- Magaya, K. a. C. T., 2013.. An Assessment of Professional Ethics in Public Procurement Systems in Zimbabwe: A Case of the State Procurement Board (2009-2013). *Review Pub Administration Management*, 4(1), pp. 185 -190..
- Mahmood, S. A., 2010. Public Procurement and Corruption in Bangladesh, Confronting the Challenges and Opportunities. *Journal of Public Administration and Policy Research*, 2(3), pp. 6 -11..
- Moyo, J. N., 2011. *“What are the challenges of public administration today in Zimbabwe?”*. Harare , University Press.
- Mupanduki, M. M., 2012.. *An Analysis of the Nature of and Remedies for corruption in Sub-Saharan Africa: Focusing on Zimbabwe*. Durban, Eisenhower Parkway..
- Musanzikwa, M., 2013. Public Procurement System Challenges in Developing Countries: The Case Study of Zimbabwe. *International Journal of Economics, Finance and Management Sciences*, 1(2), pp. 119-127..
- Mwangi, L. W. a. K. J., 2015. Effects of ethical practices on performance of procurement function in state corporations. *Journal of Business and Economics*, 3(3), pp. 112-132a.
- Odhiambo, W. a. K. P., 2003. *Public Procurement: Lessons Learnt from Kenya, Tanzania and Uganda*, Nairobi.: Institute of Development Studies.
- OECD, 2007. *Integrity in Public Procurement*, Massachusetts.: OECD Publishing..

Osei-Tutu, E. M. S. a. A. C., 2014. Conflict of Interest and Related corrupt Practices in Public Procurement in Ghana': *International Journal of Civil Engineering Construction and Estate Management*, 19(2), pp. pp 1-5..

Pidaparthy, V. R., 2006. 'Supply Side Issues in Procurement Corruption, is the Developed World responding adequately to the Needs of Developing World?'. *Journal of Development and Social Transformation*, , 1(8), pp. 109-116..

Saunders, M. L. P. a. T. D., 2009. *Research Methods for Business Students*. 5th ed. London.: Pearson Education Ltd.

Sengbeh, A. B., 2015. *Ethical procurement practices and supply chain performance of Kenyan energy sector*, s.l.: Published thesis..

Shakantu, W., 2003. *Curbing Corruption in the Public Procurement Process*. s.l., Retrieved from [www.iiste.org/journals/index.php/PPAR/article](http://www.iiste.org/journals/index.php/PPAR/article) on 26/12/16..

Teorell, J., 2007. 'Corruption as an Institution: Rethinking the Nature and Origins of the Grabbing Hand'. *Working Paper Series*..

Thai, K. V., 2001.. 'Public Procurement Re-Examined: Know Where you Stand on Ethics'. *Journal of Public Procurement*,, 1(1), pp. 9-50..

Tian, Q., 2008. Perception of Business Bribery in China: The Impact of Moral Philosophy. *Journal of Business Ethics*, 80(3), pp. 437-445..

TransparencyInternational, 2012. *Curbing Corruption in Public Procurement*,, Berlin: Transparency International.

Trevino, L. K., 2006. 'Ethical Decision Making In Organizations: A Person-Situation Interactionist Model'. *The Academy Of Management Review*, 11(2), pp. 601-617..

Tsabora, J., 2014. 'Public Procurement in Zimbabwe: Law, Policy and Practice. *African Public Procurement Law Journal*,, 9(3), pp. 115-123.

Wegner, T., 2012.. *Applied Business Statistics Methods and Excel Based Applications*. 3rd ed. s.l.:Juta And Company Ltd..

Yin, R., 2003. *Applications of Case Study Research*.. Beverly Hills.: Sage.

B190603B

ORIGINALITY REPORT

**26%**  
SIMILARITY INDEX

**20%**  
INTERNET SOURCES

**4%**  
PUBLICATIONS

**16%**  
STUDENT PAPERS

PRIMARY SOURCES

<b>1</b>	<b>Submitted to Midlands State University</b> Student Paper	<b>8%</b>
<b>2</b>	<b>liboasis.buse.ac.zw:8080</b> Internet Source	<b>6%</b>
<b>3</b>	<b>erepository.uonbi.ac.ke</b> Internet Source	<b>3%</b>
<b>4</b>	<b>Submitted to Westlake High School</b> Student Paper	<b>3%</b>
<b>5</b>	<b>rfp360.com</b> Internet Source	<b>1%</b>
<b>6</b>	<b>erepository.kafuco.ac.ke</b> Internet Source	<b>1%</b>
<b>7</b>	<b>uir.unisa.ac.za</b> Internet Source	<b>1%</b>
<b>8</b>	<b>www.tandfonline.com</b> Internet Source	<b>1%</b>
<b>9</b>	<b>impactjournals.us</b> Internet Source	<b>1%</b>