**BINDURA UNIVERSITY OF SCIENCE EDUCATION.**


**FACULTY OF COMMERCE**

**DEPARTMENT OF ECONOMICS.**

# THE IMPACT OF E-PROCUREMENT ON PERFORMANCE: CASE STUDY OF ZIMBABWE REVENUE AUTHORITY (ZIMRA) IN MASHONALAND CENTRAL.

A RESEARCH

BY

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# DEDICATION

This study is dedicated to the Almighty God. I give thanks to God for being my source of courage, insight, and motivation as well as for being the source of my excellent health and long life.

## ABSTRACT

E-procurement has grown in popularity across the globe, especially with the development of technology. The goal of this study was to determine how e-procurement affected Zimbabwe Revenue Authority's (ZIMRA) performance. The study specifically aimed to ascertain the impact of e-sourcing, e-ordering, e-contracting and e-information sharing on performance at ZIMRA. The study was guided by three theories: The Resource Based View theory, Innovation Diffusion theory, and Transaction Cost theory. The Resource Based View theory explained how e-procurement was viewed as a technology resource, and the Innovation Diffusion theory explained how that resource was adopted. The 60 members of the committee who worked on procurement management were the target population. A sample of 52 respondents was chosen using a combination of cluster, random, and purposeful sampling. A quantitative research approach was used to collect primary data from 40 respondents utilizing simple sampling and an online survey, after which the data was evaluated. The analysis was carried out using an SPSS data analysis tool. Pilot data from 10 respondents was used to test the validity of the questionnaires, and the results showed internal consistency (alpha coefficients greater than.701). Utilizing qualified reviewers, the content validity test was conducted. According to the study's findings, adopting e-sourcing, e-ordering, e-contracting, and e-information sharing improves ZIMRA's performance. The study also demonstrates how e-procurement practices help ZIMRA Company perform better and operate more effectively and efficiently. Policymakers participating in the government of Zimbabwe's procurement process may use the findings. The findings of this study may inspire additional investigation by researchers.

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# Contents

## List of Acronyms and Abbreviations

| | |
|---|---|
| **ZIMRA** | Zimbabwe Revenue Authority |
| **SPSS** | Statistical Packages for Social Sciences |
| **GDP** | Gross Domestic Product |
| **PRAZ** | Procurement Regulatory Authority of Zimbabwe |
| **EDI** | Electronic Data Interchange |
| **RBV** | Resource Based View |
| **OECD** | Organization for Economic Co-operation and Development |
| **IT** | Information Technology |
| **RFI** | Request for Information |
| **RFPs** | Request for Proposals |
| **B2B** | Business to Business |
| **CSFs** | Critical Success Factors |
| **SMEs** | Small and Medium Sized Enterprises |
| **PP** | Procurement Performance |
| **EPT** | E-procurement technology |

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# CHAPTER ONE

# INTRODUCTION

## 1.0 Introduction

At the moment, ZIMRA bases its selection, recommendation, and performance evaluation processes on a traditional method that requires a lot of paperwork, takes a long time, and is prone to mistakes. It takes time to look for each supplier's paperwork as the selection of bids depends on written documents, some of which could not be available. The completion of procurement processes between the purchasing entity and the supplier takes a long time under the traditional procurement method, which slows down the entire process and lowers productivity. Manual methods are cumbersome, expensive, ineffective, and have poor data storage and retrieval limitations. The majority of organizations now heavily rely on e-procurement to remain competitive and successful. The task for this research was to investigate the ZIMRA system in order to identify areas where technology is still lagging behind. The researcher found that the decision-making process for electronic procurement is still done manually with paper and pens. To improve the efficiency and effectiveness of an organization in the procurement process, which in turn enables the business to provide its internal as well as external suppliers with better value.

By automating conventional procurement procedures, e-procurement eliminates the need for paper-based operations and aids in the analysis of spending for every organization's strategic cost-cutting initiative. The implementation of e-procurement technologies at ZIMRA is thought to be significant since it contributes to improving the effectiveness and speed of the procurement process. Additionally, enhanced transparency will enable the establishment of goodwill with suppliers. Implementation of electronic procurement has been shown to reduce the cost of purchasing transactions due to process simplicity, a shorter purchasing cycle time that promotes flexibility, and the availability of up-to-date information when submitting purchase orders.

Additionally, e-procurement helps a company to lower manual errors. Automation reduces paper-based documentation and enables an organization to conveniently and securely store information and data.

## 1.1 Background of the study

In the 18th century, the development of electronic procurement was aided by company expansion brought on by the industrial revolution, which boosted efficiency, reduced transaction costs, sped up the purchase cycle, and permitted mass production. E-procurement has grown to be a serious issue that requires top emphasis because it affects organizational performance (Lysons and Farrington, 2006). E-procurement systems were developed to aid in the practice of procurement in commercial organizations so that they would have the right goods and services to satisfy organizational needs and maintain operations in the pursuit of predetermined goals. Successful organizations are those that have mastered innovation while maintaining the amount of discipline necessary to properly implement executive initiatives. The redefining of the organization is made possible in large part by information and communication technology (ICT). ICT makes it possible to distribute authority, function, and control to the locations where they are most useful in light of the objectives of the company, its mission, and the culture it employs (Morton, 2010).

Globally, e-procurement has grown in favour, especially as technology has advanced. E-procurement in the United States of America is developing quickly, according to reports from early 2000, right before the recession hit. All state agencies-maintained websites by the end of 2000, and some of them included online bidding among their participants in their procurement processes (Reddick, 2004). According to a government announcement in Malaysia, all vendors must use e-procurement platforms (Yossuf, Islam, and Yusuf, 2011). Kaliannan et al. (2009) claim that Malaysia's public sector is undergoing a rapid transformation, especially in terms of the usage of e-procurement. The national governments of Italy, New Zealand, Scotland, New South Wales, and Western Australia revealed that their nations were already using electronic procurement systems for public sector procurement activities, according to the Commonwealth of Australia (2005). African countries are increasingly using electronic procurement, especially in the public sector. To address problems with a lack of accountability, fairness, integrity, and bribery in public sector procurement, the majority of African governments have turned to legal reforms and the use of electronic procurement. Kenya's government mandated that all purchases of public goods and

services must be conducted online (USAID, 2008). E-procurement gained substantial global appeal in the 1990s as internet and information technology developed (Schoenherr and Tummala, 2007). Many nations have adopted e-procurement; however, some only have the e-submission step (World Bank, 2015). E-procurement in Korea began in 1977 and came to an end in 2002 with the implementation of the online system (Public Procurement service, 2016). In Korea, e-bidding and e-payment systems were fully implemented starting in 2001 (Public Procurement service, 2016). Electronic data exchange was first adopted in 2000. Ghana established its public electronic procurement system on April 30, 2019, making it the first nation in West Africa to adopt public e-procurement (Public Procurement Authority, 2019). The Public Procurement Authority and the Ministry of Communication collaborated to launch Ghana's electronic procurement systems (Public Procurement Authority, 2019). When Rwanda created the Rwanda Public Procurement Authority in 2007, e-procurement was already in development in that country (Rwanda Public Procurement Authority, 2007).

According to Panetto and Boudjilida (2013), the percentage of public procurement in the GDP of Southern African nations shows that in recent years, the importance of public procurement has increased not only in Zimbabwe but also in other countries in the region. In the early 2000s, Zimbabwe, like many of her peers in the developing world, had considerable inefficiency in the use of tax payer funds, notably in the area of public procurement (Shalle and Irayo, 2013). There was no institutional framework, no regulation, and zero transparency in the public procurement process (Susan and Hardy, 2005). In Tanzania, e-procurement systems were implemented to enable e-informing, e-sourcing, e-payment, e-tendering, e-ordering, and monitoring in order to guarantee that all public procurement activities are carried out through online platforms (Sijaona, 2010).

The 2018 Zimbabwe Public Procurement and Disposal of Public Assets Act was successfully created by the Zimbabwean government, enabling public institutions like ZIMRA to conduct their own procurement procedures. In accordance with Statutory Instrument 5 of 2018 (S.I.5, 2018), a purchasing organization may make a direct acquisition from a single bidder or supplier without first receiving offers from further bidders. The Public Procurement and Disposal of Public Assets Act of 2018 also establishes the duration during which offers must be accepted. According to Public Procurement and Disposal of Public Assets (2018), subject to the Authority's e-procurement

policy, a procuring entity may authorize other methods of bid submission in its bidding documents, such as electronic mail, as long as the bids' confidentiality and security are ensured. According to the Public Procurement and Disposal of Public Assets Act of 2018, each bidder must possess a certificate from the Procurement Regulatory Authority of Zimbabwe (PRAZ) in order to be qualified to participate in a tender. (Public Procurement and Disposal of Public Assets Act, 2018) The PRAZ portal is a web-based, one-stop public procurement system to manage the full life cycle of tendering and contract management for both procuring organizations and suppliers. In order to maintain effectiveness, equity, and transparency in the public procurement process, PRAZ portal serves as a link between procurement entities and suppliers (Public Procurement and Disposal of Public Assets Act, 2018). E-notification is the process through which the government publishes tenders, contracts, and announcements of contract awards online, allowing for 24/7 access to tender documents (World Bank, 2015). According to the Public Procurement and Disposal of Assets Act of 2018, PRAZ is responsible for implementing electronic methods of monitoring and supervising procuring entities, as well as developing the usage of electronic instruments for purchasing, including a public procurement web page and statistically database that contains data on public procurement in Zimbabwe. It also details the conditions of the public's access to these databases.

ZIMRA thought about putting effort into managing e-procurement systems. Electronic resources such as e-data interchange (EDI), e-sourcing, e-tendering, e-ordering, e-informing, and e-payment become available. PROMUN systems, established in 1996 and used by all public institutions in Zimbabwe, were options for computer packages. In 2018, software packages were replaced by PASTEL's evolution. PASTEL evolution systems electronically capture all the data on receipt goods, issues, and stocks. While problems items would have been assigned to user departments, receipt items include goods and services that were purchased and received by the buyer's business.

According to Deloitte Consulting (2001), implementing e-procurement has become a key approach in most businesses' e-business plans due to the rising trend of buying goods and services from suppliers. Standard procurement abilities of today are quickly turning into overhead expenses. Due to the advantages of reduced transaction costs, increased options for competitive sourcing, and improved interorganizational coordination, many businesses see the necessity of integrating

electronic procurement into their order processing. Through e-catalogues, qualified and authorized users can search for purchasers or suppliers of products and services and conduct transactions. Depending on the strategy employed, whether goods and services are supplied by suppliers on the supply side e-catalogue or requested on the buying side e-catalogue, buyers or suppliers may specify quality, quantity, pricing, or solicit bids of goods and services offered or needed. Businesses who have embraced e-procurement anticipate improved manufacturing cycles, lower purchasing agent overhead, and better inventory control. It is projected that electronic procurement will be integrated into the larger purchase to pay value chain as a result of the trend toward computerized supply chain management (Martin, 2006).

E-procurement is gaining grounds and becoming more and more common in the market nowadays. According to Gerald and Joan (2009), any business must embrace and incorporate information and communication technology into its everyday operations in order to succeed. Due to the positive effects of e-procurement, Uniform Distributors Limited, like many other local and international firms, has adopted and utilized IT in its procurement procedures and overall business operations.

In the majority of developing nations, public procurement accounts for 20% of public spending and, on average, roughly 5% of GDP (Chigudu, 2014). In most African countries, public procurement can make up as much as 70% of total government spending, so achieving a 1% reduction in spending would need significant tax payer savings. According to estimations from the World Bank, switching to e-procurement often results in price drops of 15% to 25%.

## 1.2 Statement of the problem

Traditional procurement processes require a lot of paperwork, are laborious, and are error-prone. The Zimbabwe Revenue Authority's (ZIMRA) existing performance recommendation, selection and evaluation procedures are based on traditional procurement procedures, which may be inconsistent or unfair because they rely on human judgment. The assessment of bids is based on written documentation, some of which might not be available, and it takes time to search for paperwork from each supplier because ZIMRA's procurement decision-making processes are not automated. There are no established, automated methods for evaluating and grading the effectiveness of various vendors. ZIMRA lacks a database to track and record the capabilities and

performance of every supplier. Manual procedures have poor data storage and retrieval limits and are sluggish, expensive, inefficient, and costly. E-procurement enhances supplier relationships through transparent procurement processes that increase speed, accuracy, and integration (Carayannis and Popescu, 2005). ZIMRA intends to use a lot of electronic procurement methods, including e-tendering, e-sourcing, e-reverse auctions, e-data interchange, e-ordering, e-payment, e-informing, and web-based ERP, to increase the efficiency of its procurement processes. As a result, the researcher aims to assess how employing electronic procurement might improve an organization's performance.

## 1.3 Research Objectives

This study's main goal was to determine how the Zimbabwe Revenue Authority's paper based system affected business performance.

**Specifically, the study sought to:**

i. Determine the effects of e-sourcing on company performance.
ii. Establish the effects of e-ordering on company performance.
iii. Assess the effects of e-contracting on company performance.
iv. Find out the effects of e-information sharing on company performance.

## 1.4 Research Questions

The following are the questions of the study;

### 1.4.1 Main Research Question

What are the impacts of e-procurement on company performance?

### 1.4.2 Sub-Questions

i. What are the effects of e-sourcing on company performance?

ii. What are the effects of e-ordering on company performance?

iii. What are the effects of e-contracting on company performance?

iv. What are the effects of e-information sharing on company performance?

## 1.5 Significance of the study

The majority of the research on e-procurement systems in Zimbabwe has been straightforward descriptive analysis, with a primary focus on identifying the different kinds of e-procurement systems utilized by enterprises. These studies' main flaw, which is difficult to see through observable factors, is their lack of adaptability in assessing complex interactions. The Zimbabwean government will have the chance to evaluate its procurement practices thanks to this study. The results of this study will be helpful to policy makers in the Zimbabwean government's procurement function. Based on the results of this study, the Zimbabwean government may argue in favor of or against the adoption and usage of e-procurement for additional purposes. The study's findings are expected to be advantageous to private businesses as well because they will help guide government policies and legislation around government procurement. The study aids in the redefining of the procurement department for effective performance through the use of e-procurement by policy makers.

The study will be useful to academics who are looking for information about research that has been done in the fields of e-procurement and related fields. The study will be useful for future research to gain understanding about the e-procurement process. It may also be advantageous for researchers to use the study's information to do further research.

This study offers ZIMRA (Zimbabwe Revenue Authority) novel insights. Due to the outdated and inefficient manual procurement method now in use, ZIMRA in the public sector lacks competitiveness. Additionally, the procurement procedure takes a long time because of this inefficiency. In order to help ZIMRA systems improve their performance, this study will be useful in identifying the appropriate e-procurement systems to use.

## 1.6 Assumptions of the study

Assumptions made by the study's researcher include:

- E-procurement systems will have access to an intact database that can be used in the future.
- E-procurement systems will generate clear, distinctive reports that make it easy to analyse and evaluate different suppliers.
- All respondents will be honest and cooperation in their responses.
- The information to be gathered will be accurate, reliable and trustworthy.

## 1.7 Delimitations of the study

The Zimbabwe Revenue Authority (ZIMRA) was the only subject of the study. The study evaluates how e-procurement affects company performance. Electronic procurement systems include, electronic data interchange, e-ordering, e-informing, e-sourcing, e-payment, e-auctioning, and e-communication with an organization's internal and external stakeholders.

## 1.8 Limitations of the study

### 1.8.1 Confidentiality

Some respondents were reluctant to divulge information because they feared being found out, but the researcher was able to persuade them that their identity would not be revealed. According to Walliman (2011), the author should be explicit about how the study will be done and confidentiality be preserved while dealing with organizations, managers, or other persons with overall responsibility.

### 1.8.2 Technology risk

E-procurement systems need to have clear and open coding, technological, and process standards in order to support inter-organizational e-procurement technologies (Davila et al., 2003). If not, the e-procurement procedure can be restricted and slowed down.

### 1.8.3 Financial resources constraints

Since the study was not funded, the researcher was having trouble paying for travel. The researcher overcame this obstacle by taking out funds from friends and family to cover the cost of travel. Additionally, phone conversations and other forms of electronic communication, such as emails, were used to conduct the research.

## 1.9 Definition of key terms

**E-procurement:** is the act of requisitioning, authorizing, ordering, receiving, and paying for the necessary services or products while also receiving payment online (CIPS, 2009).

**Electronic Data Interchange (EDI):** uses a communications standard to enable the electronic exchange of common business documents and information between organizations (Monczka et al., 2016).

**Performance:** The accomplishment of a given work is evaluated in comparison to previously established accuracy, completeness, cost, and speed requirements (Mwangi and Kwasira, 2015).

**E-sourcing:** Using the internet to decide where to get services and products and to plan a strategy for doing so (CIPS, 2009).

**E-catalogues:** a website that offers details on the goods and services a vendor sells and facilitates online purchasing and payments (Lysons and Farrington, 2016).

## 1.10 Chapter Summary

The main emphasis of this chapter was on the subject's introduction. This chapter also covers the study's background, the problem statement, the research objectives, the research questions, the hypothesis, the study's significance, the assumptions made while conducting the study, the delimitations made while conducting the study, the restrictions made while conducting the study, and the definition of terminology.

# CHAPTER TWO

# LITERATURE REVIEW

## 2.0 Introduction

This chapter includes reviews of the theoretical and empirical literature relevant to the research. The description of e-procurement ideas and systems makes up the theoretical review. The empirical review looked at studies that other scholars have done on the relationship between electronic procurement and company performance. The conceptual framework, gap analysis, and chapter summary are further examined in this chapter.

## 2.1 Theoretical literature review

The Resource Based View Theory of the Company, the Innovation Diffusion Theory, and the Transaction Cost Theory served as the study's theoretical foundations.

### 2.1.1 Resource Based View Theory (RBV)

According to Prahalad and Hamel (1990), a company's internal resources can provide it a competitive edge. Resources-based view theory, according to Lysons and Farrington (2016), emphasizes that each firm is distinguished by a distinctive set of resources and core competencies. Resources should be valuable in that they should be hard to replace, unique, and scarce, according to the Resource Based View Theory. This hypothesis discovered that the resources that are able to make it easier for methods to be implemented that increase a company's performance, exploit market opportunities, and eliminate hindering risks are those that are thought to be precious, rare, difficult to copy, and irreplaceable. The resource-based view theory is centred on an organization's internal resources, which it suggests can be utilized to produce superior performance. Intangible assets including knowledge, management, intellectual property, organizational learning,

technological capabilities, and market orientation, identified by researchers, enable an organization to build skills that strengthen competitive advantage, resulting in greater company performance. According to this theory, a company should concentrate on utilizing its resources to create competitive advantages rather than imitating what its rivals are doing. Internal operational processes are recognized under the resource-based view as essential elements of organizational resources, and this might include procedures like integrating electronic platforms while carrying out duties like sending out invitations to bid (Munyao & Moronge, 2018).

Technology is a resource that is used in e-procurement. This theory is very important to the study because it promotes the effective integration of e-procurement services into the supply chain management at the Zimbabwe Revenue Authority (ZIMRA) in order to make the best use of limited resources. The corporate performance of ZIMRA is anticipated to improve with the implementation and use of electronic procurement. This could result in gains in efficiency as well as increases in time, speed, quality, and error reduction. The internal resources and skills of ZIMRA should be identified and evaluated before being used to gain a sustainable competitive advantage through e-procurement.

### 2.1.2 Innovation Diffusion Theory

Innovation is a procedure intended to improve economic growth (Rogers, 1962). Innovation, in accordance with the principle of innovation dissemination, is a new idea that people accept. Innovation is all the financial, organizational, commercial, scientific, and technological processes necessary to create new products, services, or markets, according to the OECD (1997), which was cited by Andreanne and Swaminathan (2007). The adoption of technology from the idea conceptualization stage to the implementation stage is based on the innovation diffusion theory. This idea serves as a framework for forecasting and comprehending the pace at which various organizations adopt new technology. The innovation diffusion theory examines variables that affect how quickly organizations adopt e-procurement technologies. Compatibility, complexity, trial ability, observability, and relative advantage of electronic procurement systems are factors that affect the implementation of electronic procurement.

According to the theory, there are five types of innovation adoption: Individuals who want to be the first to adopt a new technology idea are known as innovators. Early adopters, who represent opinion leaders and are the second group to adopt innovation, The Early Majority, the third

category to absorb innovation, are people who need to see proof that innovation is effective before they adopt it. The fourth category of people, the late majority, is more resistant to change and only adopts innovations after they have been thoroughly accepted by the majority. The fifth group is the laggards, who are the most difficult to convince to adopt innovations.

Innovation theory states that the rate of innovation adoption techniques may be analyzed in terms of the relative advantage provided to the company, with e-procurement offering a relative advantage that includes greater efficiency, cost savings, speed of transaction, and closer supplier relationships. trialability, observability, compatibility of new tactics, and complexity of new technologies by stakeholders within the social system can all be taken into account when determining the rate of innovation adoption methods. The theory's ideas are applicable to ZIMRA's adoption of e-procurement, and it is anticipated that diffusion of innovation to various degrees will result in high levels of company performance in terms of cost savings, efficiency, and collaborative relationships.

### 2.1.3 Transaction Cost Theory

Lysons and Farrington (2016) cite Williams' assertion that it would be more expensive to provide certain commodities or services if they were acquired from outside the organization. According to Lysons and Farrington (2016), transaction costs include costs associated with searching for and bargaining with suppliers, making decisions, and policing and enforcement. According to the theory, a firm's ability to manage a trade-off between transaction costs and internal production costs is essential (Williamson, 1985). According to the theory, the concept of a transaction between two parties entails costs related to sourcing, negotiating, monitoring, and enforcing the conditions of the transaction. According to the theory of transaction costs, businesses will choose the alternative that has the lowest overall transaction costs when purchasing goods or services from outside providers. Producing a good or service in-house rather than buying it from an outside supplier may be more cost-effective in some circumstances (Lysons and Farrington, 2016). This is because buying goods or services from an outside supplier may have higher transaction costs. In other situations, outsourcing a product or service's production to a third party provider may be more cost-effective than producing it internally because of the potential increase in transaction expenses. The decision of a buyer to conduct procurement using electronic means as opposed to

traditional ways is explained by the transaction cost theory of e-procurement, which is a theoretical framework.

As a result, transaction cost theory is crucial for ZIMRA's implementation of e-procurement since adopting e-procurement tools can lower transaction costs related to buying products and services. By increasing transparency and reducing errors, e-procurement can boost the effectiveness of the procurement process while lowering transactional costs. Adopting e-procurement will increase cost reduction by removing transaction costs. Transaction cost theory is crucial to improving ZIMRA's supply chain efficiency.

## 2.2 E-procurement Systems

E-procurement is crucial to a company because it is designed to reduce costs while increasing productivity by ensuring that goods and services are maintained at the right quality, quantity, and are accessible at the right time and place. Electronic procurement is the computerized integration and control of all procurement operations, including order requests, authorizations, deliveries, and payments between a buyer and a vendor (Chaffey, 2002). Electronic procurement is a Web-based business-to-business (B2B) e-commerce platform that enables sellers to manage and communicate the delivery of submitted purchase orders while also enabling workers of an organization that buys to make purchases of products and services (Rayport and Jaworski, 2002).

It entails management of the catalogue, processing, receiving, approval and control, request of exceptions, payment and financial. According to Thomson and Singh (2001), electronic procurement procedures should incorporate logistics and supply chain management, sourcing of buyers and sellers, an online product catalogue, ordering, payments, and goods dispatch notices (fulfilment). E-procurement is being used by an increasing number of companies in an effort to reduce costs and increase profitability in response to the always evolving competitive challenges. Electronic procurement includes e-payment, e-purchasing, electronic data interchange and e-market research (Uba et-al, 2013). Academics and practitioners agree that one of the biggest benefits of e-procurement is its potential to enable integration within the business and throughout the supply chain (Dawn et-al, 2010). The broad usage of e-procurement is still a topic about which there is a lot to learn.

A quick set of market changes, new technical developments, and changes in governmental policy confront businesses today (Eisenhardt & Brown, 2009). An environment where businesses must operate in which is becoming more turbulent is the mirror image of such events (Bradley & Nolan, 2008; Haeckel & Nolan, 2008,). As a result, inventive and creative businesses that maintain the level of discipline necessary for successfully carrying out plans are those that have learned how to be successful. They must do this by adjusting their organizational structures and utilizing ICTs. Information and communication technologies is a vital enabler for the organization's redefinition. Given the company's goals, mission, and culture, it enables the distribution of authority, responsibility, and control to where they are most useful (Morton, 2010).

Raju (2009) found that electronic procurement encompasses much more than just a straightforward platform for purchasing goods online. E-procurement is a comprehensive platform that makes use of the Internet to help organizations source their needs quickly, affordably, and in a way that is in line with corporate objectives and goals. E-procurement helps businesses streamline their whole purchasing process in the present environment, which is defined by a focus on important strategic projects, a reduction in time-to-market, and increasing global competition. This allows them to concentrate on their core business operations and boost profitability.

### 2.2.1 E-sourcing

CIPS quoted by Lysons and Farrington (2016), E-sourcing is the process of developing strategies and choosing where and how to acquire goods and services utilizing the internet. E-sourcing enables workers involved in product research, design, and procurement to locate goods or services for prototypes and ensuing production models. A buyer can improve the level of competition in the tendering process for this purchasing category by finding new suppliers. E-sourcing is an e-procurement tool used for reducing the supply risk connected to this type of purchases. For instance, new backup suppliers can be sought more rapidly in the event that the current supplier is unable to deliver, or a deeper analysis of the existing pool of potential suppliers can be facilitated (De Boer et-al, 2002).

E-sourcing offers remedies for the issues related to traditional procurement. E-sourcing has several advantages over traditional procurement, including cost savings (an organization like ZIMRA can lower procurement costs by improving supplier selection), increased efficiency, and promotion of

greater transparency (as opposed to traditional procurement) due to its centralized system for gathering, storing, and sharing procurement data in the public procurement).

### 2.2.2 E-tendering

E-tendering is defined as the process of using Internet technology to communicate information requests, submit price bids to vendors, and receive supplier responses. E-tendering is the procedure of sending and receiving bids and proposals electronically as opposed to through traditional paper-based procedures. When necessary for the execution of a portion or the entirety of the project or for the supplies to be delivered by the vendor, the contractor submits a quotation electronically in this situation (Singh & Punia, 2011). Through technologically connected platforms, e-tendering involves the distribution and receipt of tender information, expressions of interest in the tender, and ultimately the digital awarding of the tender (Ibem & Laryea, 2015).

It includes contacting vendors with requests for information (RFIs) and requests for proposals (RFPs) and receiving their responses online. Most often, an e-tendering system that analyses the responses obtained from the suppliers supports e-tendering (Corina, 2011). As a result, it is simpler to keep track of orders and make modifications if necessary for earlier orders, which improves order tracking. The use of less time and fewer labor-intensive operations are two of the major benefits (Barngetuny & Kimutai, 2015). A secure online environment is provided by e-tendering for the filing and evaluation of bids, lowering the possibility of fraud and corruption and doing away with the requirement for paper-based documentation.

### 2.2.3 E-informing

E-informing is the process of obtaining and transmitting purchasing data to and from internal and external parties via internet technology. One method of e-informing is to post buying management data on an extranet that internal clients and suppliers can access. De Boer, Harink, and Heijboer (2002). It covers all form of data that may be converted to digital form, including text, photos, audio, and video. E-information is more convenient to access and share since it can be accessed and retrieved instantaneously from anywhere in the globe, at any time. Collaboration is greatly facilitated by the real-time sharing, searching, and editing of e-information by several users.

### 2.2.4 E-ordering

According to Ibem and Laryea (2015), e-ordering is the formal electronic request for goods or services that includes all phases, including need identification, purchasing, payment for the goods or services received, and after-sales services, such as management of the contract and the suppliers. Requisitions must be created, approved, and executed before orders can be placed and goods can be delivered. On-call contracts that have been fulfilled are now indexed in a digital catalogue. Employees have 24/7 access to this catalogue and can place orders whenever they want. E-ordering makes it simpler and quicker to provide services and deliver goods by enabling clients to place orders online or using electronic devices. E-ordering reduces the need for verbal or handwritten orders, lowering the possibility of errors from manual order processing, resulting in more accurate and timely delivery of goods or services.

### 2.2.5 E-contracting

An electronic contract is an agreement that is entirely written, negotiated, and signed online (O'Shea et al., 2008). Instead of in-person interaction, the parties communicate with one another digitally. An electronic offer, acceptance, consideration, capacity, and legality are used to create a binding mutual obligation between two people or businesses. This agreement must also satisfy specific legal requirements in order to be enforced. The process of generating, evaluating, and signing contracts digitally while utilizing tools like electronic signatures, email, cloud computing, and block chains is known as electronic contracting (O'Shea et al., 2008).

By lowering human labour expenses and paper waste, electronic contracts can remove many costs related to traditional pen and paper contracts. Additionally, to guarantee the integrity and confidentiality of contracts, e-contracting systems can include cutting-edge security features like digital signatures, time stamping, identity verification, and encryption. Digital contract management systems reduce the risk of lost or forgotten contracts by making it simpler to maintain and monitor contract progress.

## 2.3 Concept of Company Performance

Changes in a person's wellbeing that can be connected to certain interventions such as policy, project or program by the relevant institution, can be used to measure an organization's performance (Gupta, 2005). Accordance to Dehn et al. (2005), ZIMRA is projected to enhance business performance, which will result in advancements toward the accomplishment of the

Millennium Development Goals. An organization's performance can be evaluated based on the breadth and quality of the services it provides. According to Amin et al. (2008), a greater comprehension of business performance will allow policymakers to improve the effectiveness and efficiency with which resources are converted into welfare outcomes. Measuring company performance may be a powerful tool for getting feedback from customers to suppliers. According to Stevenson & William, (1999), efficiency measures how effectively resources are converted into results, whereas effectiveness measures how well goals are met and how well specific issues are resolved. Efficiency is typically defined as the ratio of the amount of resources or time used to complete a task to a predetermined amount of time or resources.

## 2.5 Empirical Literature Review

### 2.5.1 E-Sourcing and Company Performance

Barngetuny and Kimutai (2015), examined the effectiveness of the supply chain management in Elgeyo Marakwet County. Public organizations were the focus of the study on Elgeyo Marakwet County. The investigation's sole focus was on how well supply chain management and electronic procurement performed. The study used questionnaires and interview schedules to collect primary data. Additionally, a descriptive methodology was employed in the study to collect quantitative and qualitative data on the effects of e-procurement and supply chain management. The study's target group was employees of Elgeyo Marakwet County governmental agencies, such as the county administration and the Iten County Referral Hospital. Using a stratified sampling technique, the study population was split into management and non-management strata. The following step was utilizing purposive sampling to select 30 personnel from Elgeyo Marakwet County and 10 staff from the county referral hospital Iten. Data of both the quantitative and qualitative kinds were acquired. Content analysis was used to examine qualitative data. The analysis of quantitative data used frequency distribution, mean scores, and standard deviations. The data were then displayed with the help of the Statistical Package for Social Science (SPSS) as frequency bar charts, pie charts and distribution tables. The information was then put together in accordance with the study's specific objectives. All of the study’s variables and the independent variables were shown to be correlated by the study.

Mikalef, Pateli, Batenburg, and Wetering (2013), looked at how procurement procedures affected SCM performance. Partial least squares structural equation modeling was used to examine data from 172 European companies that were included in the study's sample. The results showed that over time, procurement alignment leads to improved performance. The study also discovered that centralized SCM methods encourage good alignment in procurement, in contrast to the findings of empirical studies that support the idea that decentralization of functions enables implementation of electronic procurement. Instead of operational performance, the study concentrated on e-procurement and supply chain management.

According to Gupta and Palmer (2003), who used a study of 168 US private and public sector organizations, electronic procurement technology will play a significant role in supply chain management, and as more adopters share their perceptions of low risk and success factors, the adoption rate will increase. Similar to this, Barua et-al (2001), found that the part of electronic business that contributed the most to the operational excellence of e-Business for major businesses was electronic procurement.

Yet another research looked into how much organizations planned to make purchases via electronic marketplaces. Norway was the location of the survey. According to survey findings, the majority of firms had plans; only 3% had none at all and 34% had actual ones for using electronic marketplaces for purchasing (Petter & Anne, 2002). Responding businesses intended to use electronic markets to buy many more indirect goods than indirect services. Reduced transaction costs were the key advantage anticipated from using electronic marketplaces for purchasing. Business-to-business electronic markets are strategically important because they may help respondent companies and strategies forecast how much they will use online marketplaces for transactions.

According to Basheka et al. (2012), the implementation of e-procurement relies on a number of critical success factors (CSFs), including careful selection of software providers, careful supplier involvement, use of experienced consultants, systematic redesign of organizational processes and systematic risk management approaches on adoption of new strategies for public procurement efficiency in Uganda. The following five factors contributed to the success of the adoption: management and staff commitment, supplier performance and dependability of information technology, performance monitoring of electronic procurement systems, user acceptance of e-

procurement systems, and support from senior management. Employee resistance to change, a lack of board approval for electronic procurement, the presence of antiquated IT equipment among the businesses in need of refurbishment and lack of support from managers are the challenges that have been discovered.

Matunga, Nyanamba, and Okibo (2013), evaluated how e-procurement affected effective purchasing at Kisii, Kenya's public hospitals. The study's goals were to evaluate how much electronic procurement has increased the standard of products in public hospitals, how much it has decreased the cost of goods purchased in public hospitals, and how well it has ensured the best value for money in purchasing for public hospitals. Five hospitals were utilized as a sample in the study. According to the study, the primary e-procurement applications used by Kisii Level 5 hospital are e-quotations, e-sourcing, and e-tendering. The biggest obstacles to using electronic market provider were a lack of employee training on how to use the system, a lack of funding and the organization's inability to manage change. The study came to the conclusion that despite the difficulties associated with adoption, some of the e-procurement apps have been adopted by public hospitals.

Rotich and Okello (2015), examined the impact of electronic procurement on how well their procurement duties performed in Kenya. This study's objective was to investigate the connection between electronic procurement and Kenyan County Governments' procurement performance. In the county of Kericho, data were gathered. In this study, correlational research design was used. Using stratified random sampling, the sample frame was purposefully chosen to consist of 120 individuals working in Kericho County's procurement, finance and accounting, and IT departments. Through the use of structured questionnaires, data was gathered. There were two types of analysis used: descriptive and inferential (correlation). The findings showed a positive correlation between e-procurement and the County Governments of Kenya's supply chain performance. Therefore, it was advised by the study that the government develop policies for the implementation of electronic procurement methods and leadership in this regard and offer crucial resources.

### 2.5.2 E-Ordering and Company Performance

Ngeno and Owenga (2015), conducted research to ascertain how technology affects the county's progress with e-procurement, how organizational culture affects e-procurement implementation,

and how the environment influences the County Government of Bomet's utilization of the electronic procurement system. The cross-sectional survey approach used in the research study included stratified and simple random sampling, with the departments interested in implementing electronic procurement building the basic framework. A total of 45 employees from the accounting, IFMIS/ICT, and procurement departments made up the sample size. All of the staff members working in the aforementioned departments were given 45 questionnaires in this respect, 41 questionnaires in total were successfully completed and returned, representing a 91% response rate. According to the study, 24% of respondents favored the manual method of procurement, with 76% of respondents favoring e-procurement. The study discovered that the implementation of the electronic procurement system is significantly affected by technology, environment, and organizational culture.

Vaidya, Sajeev, and Callender (2006), performed research on the key variables that affect the success of electronic procurement adoption in the public sector in Australia and England. They discovered that the implementation of electronic procurement still presents a significant difficulty for many procurement operations, despite the government initiatives that have been made to encourage its adoption. The results also showed that systems and feedback mechanisms were developed through successful e-procurement implementation. They linked improved procurement performance to e-procurement.

According to Abarden Group (2001), electronic procurement systems improve supply chain capacity, contract compliance, customer demand fulfillment, inventory management and inventory cost control. A group discovered the secret to electronic procurement successful in Netherlands and Central American high technology companies. They emphasized that electronic procurement should not be viewed as a strategy, that the company needed to have a plan and be aware of its spending, that benchmarking was necessary to start the implementation of e-procurement, that it needed to be overseen from the top, and that other functional areas needed to support it.

She and Thuraisingham's (2007), study on the security of ERP systems in the USA revealed that e-procurement improves management data security, which could improve procurement performance. The aforementioned conclusion is consistent with Martinez's (2008) findings from the European, North American, South American and Asian Pacific regions on procurement objectives, enterprise resource planning and supplier collaboration in light of competition and the

global economy, which found that enterprise resource planning systems enhance delivery to customers and permit cooperative relationships between suppliers and customers. Improved relationships with suppliers and customers, which will help procurement strategies succeed. According to Nah and Delgado's (2006) study on the essential successful implementation factors and upgrade of enterprise resource planning in Santiago, the implementation of ERP calls for essential elements like commitment from senior management and leadership, a business plan and direction, communication, change management, technical expertise, systems management, project and implementation management.

Ho, Tai, Wu, and Jou (2008), investigated how the effectiveness of an organization was impacted by web-based electronic procurement. From an organizational and inter-organizational perspective, the study presented a performance effect model for developing a Web-based e-procurement system for direct purchasing. In the performance impact model, the aspect of operational effectiveness involves buyer performance, process automation, process integration and supplier performance, while the strategic dimension focused on partner relationships. The study's results, which were based on a survey of Taiwanese manufacturing companies, demonstrated that the strategic and operational efficiency dimensions are both improved by the implementation of purchase actions using electronic means. The findings showed that deploying a web-based e-procurement system might increase partner relationship management and supplier organization performance in addition to the performance of the buyer organization.

According to Oduor (2010), most organizations use computers and automated operations systems to carry out most organizational tasks, including planning, data storage, management and internal communication processes, in order to increase operational dependability and efficiency. This was seen when assessing the impact of technological advancements on Nairobi's retail sector's performance. Many firms have recently set aside significant sums of funds for the installation and implementation of computerized systems, despite the fact that doing so is expensive and has numerous benefits.

### 2.5.3 E-Contracting and Company Performance

Anuar (2015), looked into how the use of e- procurement technology and procurement procedures affected the effectiveness of procurement inside a business. A model of the linkages between the use of procurement performance (PP), procurement practices (PPR) and e-procurement technology (EPT) was proposed in the project paper. A questionnaire-based survey method was employed. The results revealed that EPT usage and procurement practices have a beneficial impact on an organization's procurement performance. The findings of this research mostly concern the organization's operational level. It was recommended that future studies focus on the effect of certain e-procurement technology on organizational performance.

Morteza, Daniel, and Jose (2011) examined a variety of factors within the context of the technology organization-environment (TOE), including the adoption of electronic commerce (EC), the extent of electronic commerce implementation, and the implementation and non-adoption of different electronic commerce applications within small- and medium-sized enterprises (SMEs). A questionnaire-based study was conducted to collect data from 235 managers or owners of manufacturing SMEs in Iran. The data were evaluated using a factor analysis, and pertinent hypotheses were created and verified using multiple and logistic regression analysis. The results demonstrated that the intensity of the information, support from technology suppliers, the innovativeness of the CEO, perceived compatibility, purchasers or suppliers' pressure, perceived relative advantage and competitiveness have an impact on the implementation of e-commerce inside SMEs. Similar to this, a description of the factors that influence the adoption and rejection of certain e-commerce applications has been given.

Wei-Hsi Hung (2014) looked into how Web-based e-procurement affected performance from systems perspective, inter-organizational and an organizational. This study examined how the advantages of using a Web-based e-procurement system in a supply chain can affect a firm's organizational performance. They put forth a model that takes into account the contextual elements that are engaged in the Web-enabled direct procurement procedures from systems perspectives, inter-organizational, and organizational. The study surveyed 105 Taiwanese manufacturing companies to evaluate the model, and then used partial least-squares regression to analyze the data. The results demonstrated that electronic purchasing operations enhance organizational level efficiency as well as the interorganizational dimension. Additionally, the

performance of both buyers and suppliers is benefited by a strengthened cooperation. System start and system breadth have a beneficial effect on the organizational performance of buyers.

Muhia and Afande (2015), investigated the implementation of an electronic procurement strategy and the effectiveness of procurement in Kenyan state corporations. The Kenya Revenue Authority was highlighted. The study aimed to look into how e-procurement tactics could be used to enhance the performance of procurement in Kenyan government-run firms, specifically the Kenya Revenue Authority. The workers from pertinent Departments in the Organization participated in the study, which was particularly concerned with the operations and management of the Kenya Revenue Authority's workforce. As there were variables that could only be described in descriptive statistics and not quantified, the researcher modified a descriptive research design. Out of a total of 90 respondents, the researcher chose 45 using a random stratified selection technique. 20 vendors were also purposefully chosen to take part in the survey. According to study results, instantaneous responses and real-time information provided through electronic communication have a favorable impact on Kenya Revenue Authority's procurement effectiveness. The results also demonstrate how The Kenya Revenue Authority's performance in the procurement process improved by electronic order processing. The results also showed that, because everyone uses the same catalog and business practices have been standardized, self-invoicing by clients can boost revenue and the problem of incorrect items being ordered or inaccurate pricing being offered can be resolved through month-end reconciliation.

Muinde and Shale (2014), investigated how procurement strategy could improve the efficiency of Kenyan saving and credit cooperatives. Examining how e-procurement strategy can improve SACCOS's performance in Kenyan procurement was the study's main goal. A descriptive research design was used for this research. The study is focused on Kitui Teachers Sacco Limited's complete 1000 staff workforce. The Statistical Package for Social Sciences (SPSS) was utilized in conjunction with a descriptive research approach for this investigation. It was found that the majority of SACCOS's personnel in Kenya who work in the procurement departments had the necessary knowledge and expertise to undertake e-procurement for innovations. The study came to the conclusion that SACCOS can use ICT and effective customer service levels on e-procurement for long-term SACCOS'S success and the capacity to grow and sustain a sizable and devoted customer base. The study came to the conclusion that the procurement of SACCOS in

Kenya is impacted by electronic business, effective governance, internet control application and electronic data interchange transaction costs management. The study demonstrated how SACCOS in Kenya's procurement performance is impacted by audits and compliance.

### 2.5.4 E-Information sharing and Company Performance

Rotich, Bernard, and Waruguru (2015), investigated the connection between electronic tendering and the efficiency of Kenyan county governments' procurement processes. In the county of Kericho, data were gathered. The study used a correlational research design. The research's target audience consisted of Kericho County employees, and the sample frame included 120 of them from the county's IT, finance and accounting, and procurement departments. The sample size was established using stratified sampling, and the sample components were chosen using simple random sampling. Structured questionnaires that the researcher issued and later collected for analysis were used to gather data. The relationship between procurement performance and electronic tendering was investigated using correlation analysis. Percentages and frequencies were utilized to represent the dependent and independent variables. According to the findings, e-tendering has a favorable relationship with how well County Governments in Kenya conduct their supply chain functions.

Quesada, Gonzalez, and Mueller (2010), examined the effects of procurement performance (PP), e-procurement technology on procurement practices (PPR). The study proposed a model of the relationships between PPR, PP, and the use of electronic procurement technology (EPT). Using a sample of 368 United States of America procurement specialists, the model was tested and verified. The findings showed that the adoption of EPT had a positive effect on managers' perceptions of PPR and PP. Future study should concentrate on identifying the effects of certain electronic procurement technology on business performance, according to the study, whose findings mostly related to an organization's operational level.

Oh, Yang, and Kim (2014), investigated how e-procurement tools affected the relationship between IT skills and business success. The study gathered primary data from 142 Korean manufacturers and performed moderated regression analysis to look for any correlations between ICT skills, such as coordination skills, and e-procurement systems. The results showed a connection between the firms' profitability and ICT capability. Although operational performance was not a focus of this study, e-procurement practices and IT proficiency were.

Wojciech and Zahir (2010), sought to highlight the advantages of electronic procurement as they were discovered in four case studies from the UK's technological information, high-tech industry. A multi-case study approach was used. Taxonomies from the information systems discipline were used to examine and categorize the benefits reported by the businesses. Finally, a new categorization of benefits was suggested. The model was developed with the literature on information systems as a base. In addition to intangible benefits, non-financial, operational benefits were also identified on a strategic level in the research, which verified challenges with benefits evaluation. A new taxonomy was established, allowing for the examination of the multifaceted effects of e-procurement.

Nepelski (2006), investigated how electronic procurement affects how Netherlands business organizations organize their economic transactions. The study revealed further evidence that electronic procurement encourages more market transactions by examining the relationship between the impacts of e-procurement on sourcing strategy procurement cost. By increasing market transparency, reducing search and supplier switching costs, and enhancing supply chain management, electronic procurement defies predictions that ICT will lead to a dominance of network-like organizational form and an increased reliance on hybrid forms of organizing economic transactions.

Helen and Christine (2008) investigated the elements that influence the adoption of e-procurement within the United Nations system of organizations. On the subject of UN e-procurement, they used a comprehensive, multi-method case study. An approach with three stages was used: a questionnaire survey of the United Nations, case studies of e-procurement issues in three UN organizations, and a workshop with input from the directors of purchasing of UN agencies. According to the survey, transactions involving routine, non-strategic purchases are handled by the UN via electronic procurement. Humanitarian relief groups are less likely to implement e-procurement than UN development agencies since their operations are more predictable

Uba et al. (2013) used a survey design on 202 employees to look into how e-procurement affected the performance of a sample of Ugandan service companies. They found that e-procurement and organizational performance have a strong connection. They defined electronic procurement as including e-data interchange, electronic payment, electronic market research, and e-purchasing. This claim is made as a result of the widespread adoption of information technology, which has

caused modern life to increasingly revolve around its use. It's important to keep in mind that competition forces people to think of ways to outwit their rivals, and technology is the way to go.

## 2.6 Conceptual Framework

In the conceptual model below, it is expected that e-procurement, as represented by e-sourcing, e-information sharing, e-ordering processes, e-contracting and e-tendering, will have an impact on company performance, as represented by efficiency and effectiveness. Additionally, it has been noted that macro environmental elements like economic, political, socio-cultural, technological, demographic, and legal aspects may have an impact on the relationship.

Independent Variable | Intervening Variable | Dependent Variable

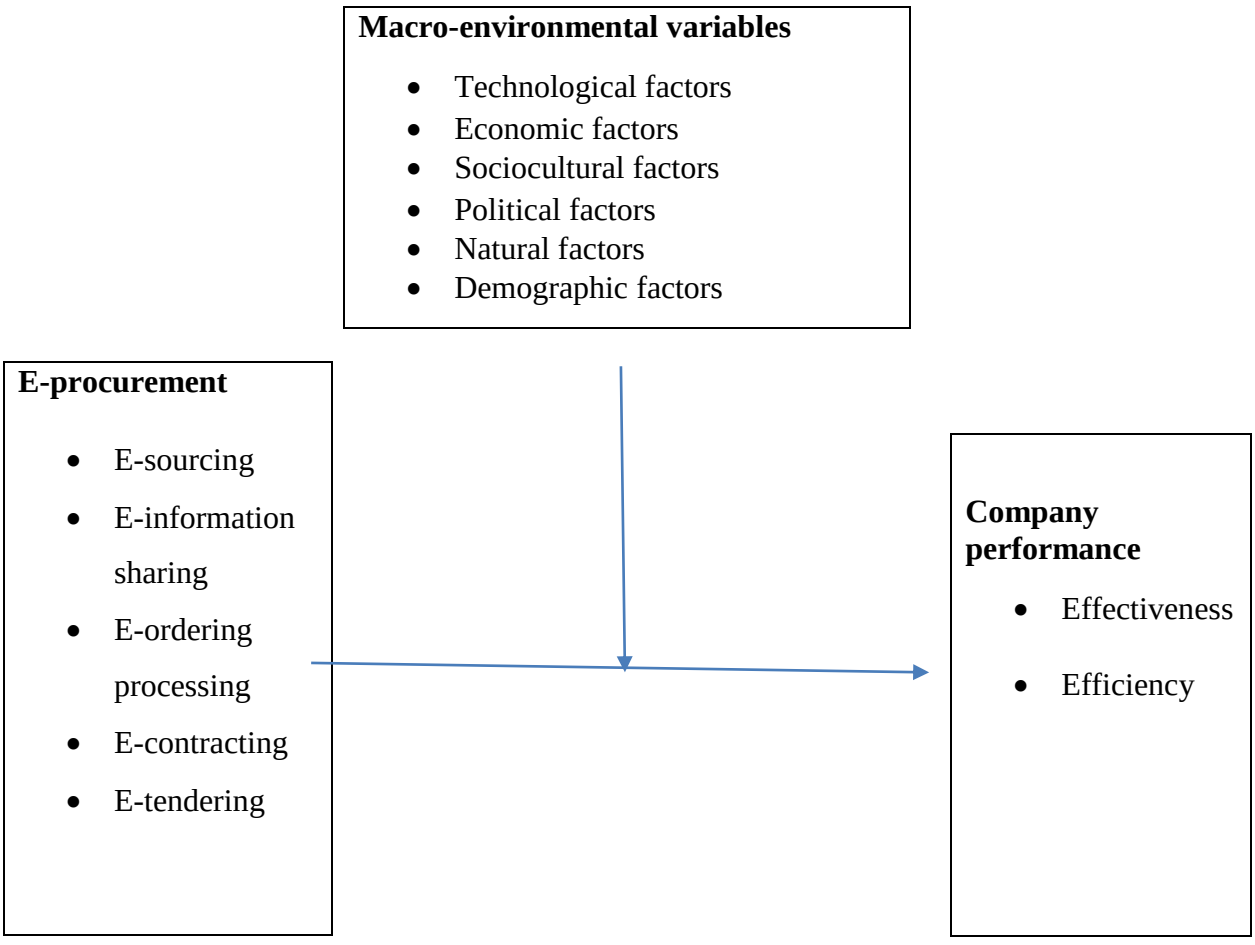

Figure 2.1 Expected relationship between electronic procurement and company performance

**Source:** Author (2023)

## 2.7 Gap analysis

It is clear from the literature cited above that a number of research concentrated on e-procurement adoption, electronic procurement consequences and electronic commerce adoption. They concentrated on e-procurement and or e-commerce-related operational performance and/or procurement. They looked into how managers felt about e-procurement, adoption goals, influencing factors, and information behavior of e-procurement users. They also considered operational performance. They concentrated in IT and service companies. None of the aforementioned studies directly looked at how e-sourcing, e-ordering, e-contracting, and e-information sharing affect company performance. As a result, information on how e-ordering, e-information, e-contracting, and e-sourcing affect company performance is lacking.

## 2.8 Chapter Summary

This chapter covered the theoretical literature that is currently available on e-procurement systems and e-procurement theories. The chapter provided an explanation of the conceptual framework, empirical literature, and research gaps.

# CHAPTER THREE

# RESEARCH METHODOLOGY

## 3.0 Introduction

This chapter's major objective is to explain the methodology used to achieve the study's objectives. The research design, subjects (population and sample), instruments for research, data collection procedure, and chapter summary are all described.

## 3.1 Research design

According to Rahi (2017), a research design is the complete strategy used to link a conceptual analysis with actual research utilizing either a qualitative, quantitative, or combined approach. A quantitative method was adopted. This suggests that the analysis and outcomes of the study have exclusively been based on quantitative data. According to Poot et al. (2018), it is more accurate to produce a prediction of the precise relationship between variables using a quantitative approach. The researcher was able to quantify the existing e-procurement systems, explain them, and assess how they affected the performance of the Zimbabwe Revenue Authority's company. A study design serves as the blueprint for collecting and analysing data. A research design is a strategy and framework for carrying out research that is developed to answer a particular research topic (Kothari, 2004).

## 3.2 Target population

The population of the study includes all committee members engaged in procurement activities, including both procurement managers and non-procurement managers (see Table 3:1 below).

### Table 3.1 Population distribution

| **ZIMRA in Mashonaland Central** | **Population** |
|---|---|

| | |
|---|---|
| Procurement managers | 24 |
| Non procurement managers committee members | 36 |
| **Total** | 60 |

**Source:** Author 2023

### 3.3 Sample Size and Sampling Technique

Sample size is calculated using the following formula:

n= N/ [1+N (e) ^2] (Yamane, 1967)

Where n is the necessary sample size, N (60) is the population of procurement managers and committee members, and e is the level of precision at a 95% confidence level set at 0, 05.

Therefore: n= 60/ [1+60(0.05) ^2] = 60/1, 15

=52 procurement managers and non-procurement manager's committee members

Table 3.2 Sample distribution

| **ZIMRA in Mashonaland Central** | **Population** | **Sample** |
|---|---|---|
| Procurement managers | 24 | 24 |
| Non procurement managers committee members | 36 | 28 |
| **Total** | **60** | **52** |

**Source:** Author 2023

Stratified and simple random sampling techniques was used to choose the procurement managers. The members of the non-procurement manager's committee were then selected using simple random selection. The two groups served as the study's sample.

### 3.4 Data source

Primary data were used in the study. By using questionnaires, the researcher obtained first-hand information from respondents at ZIMRA. Due to its direct relevance to the issue at hand and the researcher's ability to manage the degree of inaccuracy for correctness, primary data was chosen (Kumar, 2005). However, the researcher encountered some difficulties when attempting to use primary data due to the time and expense involved in data collection.

### 3.5 Research Instruments

Self-administered questionnaires were employed in the study as a data collection instrument. All responders had plenty of time to think about the questions and prepare their truthful responses. The use of questionnaires was made possible by their low cost and uniform responses, which made it simple for the researcher to evaluate the results (Hair et al., 2003).

#### 3.5.1 Reliability Test for Research Instrument

A pilot test was used to determine the questionnaire's reliability in order to determine whether or not it consistently measures the things it claims to. To verify the intelligibility of the questions, 10 procurement managers from the four counties were used. However, the 10 procurement managers were not included in the study's final sample, which resulted in an actual sample of 42 participants. According to Norland (1990), the instrument's reliability was determined to be.701 Cronbach's Alpha.

Table 3.3 Summary of Pilot Results Based on Cronbach's Apha Reliability Test

| **Variables** | **No. of Items** | **Cronbach's Alpha** |
|---|---|---|
| E-sourcing | 4 | 0.980 |
| E-ordering | 4 | 0.984 |
| E-contracting | 4 | 0.988 |
| E-Information sharing | 4 | 0.975 |
| Efficiency | 5 | 0.984 |
| Effectiveness | 5 | 0.990 |

**Source:** Primary data, 2023

Table 3.3 show the findings on reliability test for e-procurement systems, e-sourcing, e-ordering, e-contracting, and e-information, and company performance (efficiency and effectiveness). The alpha values of all the variables were higher than 0.701, indicating a high level of internal consistency between the measures of the variable items.

### 3.5.2 Validity Test for Research Instrument

Nunnally (1978) defined a measure's validity as the extent to which a construct or set of constructs accurately represents the study's central idea and the absence of any systematic or non-random error. A group of academic advisors or specialists decided on validity. The basic principle for assessing validity is the same as for generally verifying audit findings and conclusions, i.e., by comparison to evidence from numerous sources and of various kinds. What counts is how objective the results are. A research tool (questionnaire) is required to accurately measure the study's topics (Pallant, 2011).

## 3.6 Data collection procedure

Primary data were gathered using a self-administered structured questionnaire. To begin, the researcher requested authorization to conduct the study in a letter to ZIMRA. The management of ZIMRA has been informed in a letter that the study will only be used for academic purposes. After that, the researcher gave out questionnaires to participants in person and some by email. Following that, complete copies of the questionnaires were emailed back to the researcher, and some were picked up in person. The data collection process was completed in June 2023.

## 3.7 Data presentation and analysis procedures

The characteristics of the respondents were compiled using a correlational research methodology, which was applied in the study. The quantitative data analysis used both descriptive and inferential statistics. According to Amin (2005), descriptive statistics give us the tools for numerically and

graphically presenting data that gives us a broad view of the data gathered. The results were presented using tables and pie charts.

## 3.8 Ethical Considerations

According to Christensen (2002), research ethics are a set of rules that help the researcher perform morally sound research. The researcher first asked Zimbabwe Revenue Authority (ZIMRA) for permission to conduct the study there before informing the respondents of its goal. Walliman (2011) argues that when researchers want to carry out research studies in organizations, they must have the managers' or other people with overall responsibility's agreement and must be explicit about the study's purpose. It is suggested that there is a chance that harms will arise in some way throughout the research process as a result of interaction with participants; therefore, it is the responsibility of the researcher to anticipate any harms and find a peaceful solution to them (Narayan et al., 2020).

The researcher promised ZIMRA that the data he acquired from them would be handled with the utmost confidentiality, that the study would only be utilized for academic purposes, and that the researcher would not share any of their information with anyone else and that he would be honest when reporting his findings and debriefing the participants. The researcher won't coerce or mislead participants into providing information. The study's target group and individuals who are willing to participate will be identified. The data provided will be an accurate representation of what respondents will provide. One of the study's ethical concerns is the use of appropriate referencing to prevent plagiarism. According to Dooly et al. (2017), the primary ethical problem in conducting research is obtaining informed consent. As a result, the study is carried out while adhering to all university policies regarding research ethics and conduct.

## 3.9 Chapter Summary

The study's methodology, including the approach taken, the research design, the target population, sample size and sampling techniques, the data source, the data collection instrument, the data collection procedure, the methods for data presentation and analysis, validity and reliability, as well as the ethical considerations, have all been examined in this chapter.

# CHAPTER FOUR

# DATA PRESENTATION, ANALYSIS AND DISCUSSION

## 4.0 Introduction

The study's data collection and analysis are covered in this chapter. The response rate, demographic analysis, and descriptive statistics on e-procurement practices and company performance are all presented with care. The chapter goes on to present the results of the study's interpretation. This is done using tables and pie charts, which improves comprehension of the subject.

## 4.1 Response rate

The respondents were given the questionnaires in person by the researcher. Some participants completed the surveys while the researcher was there and then promptly returned them. Some people choose to fill them whenever they had free time. Table 4.1 below shows a response rate of 95.24% was achieved out of the 42 questionnaires that were sent to the respondents; 40 of them were returned. According to Ray (2012), who claims that a response rate of 75% or higher is considered to be a "fortunate" rate of return because most studies typically receive lower response rates, the response rate is good and appropriate.

Table 4.1 Questionnaire Response Rate

| **Instrument** | **Expected** | **Actual** | **Percentage** |
|---|---|---|---|
| Questionnaire | 42 | 40 | 95.24 |

**Source**: Primary data

## 4.2 Demographic Characteristics of the sample

The purpose of the study was to identify the backgrounds of the respondents in terms of gender classification, time spent working at ZIMRA and highest education level reached. The outcomes are displayed in the following sections.

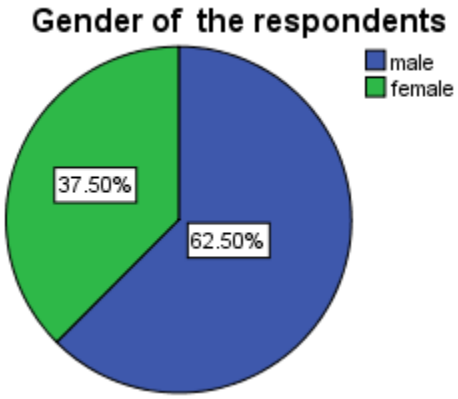


Figure 4.1 Respondents categorisation

**Source: Primary Data, 2023**

Figure 4.1 reveals that male respondents make up the majority of the sample, accounting for 62.5% respondents of the total and 37.5% respondents of the sample, who are female. This suggests that both sexes took part in data collection. The findings show that the majority of respondents were men.

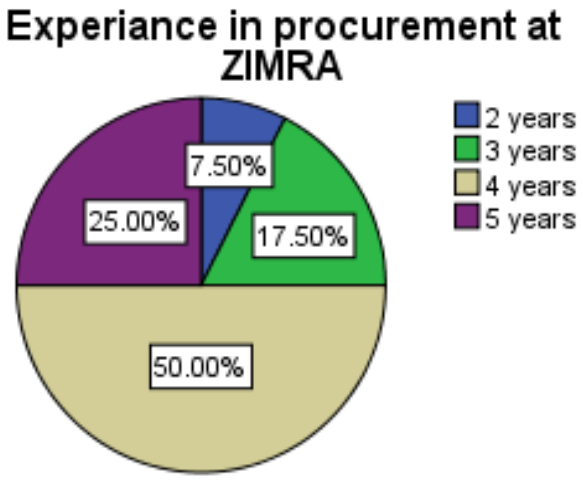


Figure 4.2 Respondent's working experience in procurement at ZIMRA

**Source: Primary Data, 2023**

Figure 4.2 demonstrates that 50% of respondents had been employed by ZIMRA for 4 years, which implies low labour turnover; 25% had been employed for 5 years; 17.5% had been employed for 3 years; and only 7.5% had been employed by ZIMRA for 2 years. This suggests that the respondents who provided the data had professional expertise with e-procurement and were more knowledgeable about the dynamics of company performance in their line of work. This suggests that the majority of research participants had been around long enough to explore introducing e-procurement processes. The results are consistent with Braxton's (2008) suggestion that well-experienced respondents assist in providing accurate data on the research subject since they have technical knowledge of the issue at hand.

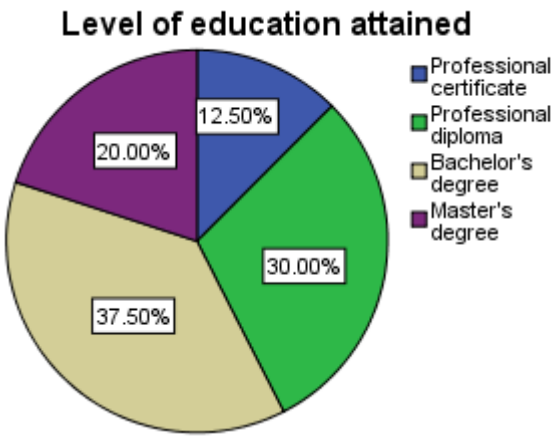


Figure 4.3 Highest education level attained

**Source: Primary Data, 2023**

Figure 4.3 reveals that just 12.5% of respondents have a professional certificate qualification, whereas 37.5% have a bachelor's degree, 30% have a professional diploma, and 20% have a master's degree. This suggests that data for the study was gathered from knowledgeable respondents who quickly embraced the use of e-procurement platforms, and since company performance counts, the findings are reliable. This is consistent with Joppe's (2000) claim that volunteers who are familiar with the research problem aid the researcher in gathering reliable and accurate data.

## 4.3 E-procurement adoption rates at ZIMRA in their entirety

To determining the level of e-procurement practice adoption was one of the goals. The respondents were asked to rate their adoption of e-procurement techniques on a Likert scale. The following subsections cover the findings.

### 4.3.1 Extent of E-Sourcing at ZIMRA in Mashonaland Central

Four items were used to gauge the level of e-sourcing at ZIMRA in the sample. Respondents were asked to rate the level of e-sourcing at ZIMRA. Responses were solicited using a 5-point scale (very high = 5, high = 4, moderate = 3, low = 2, and very low = 1). Frequencies, percentage means, and standard deviations were used to examine these replies.

Table 4.2 Rating the extent of e-sourcing practice at ZIMRA in Mashonaland Central (n=40)

| Constructs | 1 | 2 | 3 | 4 | 5 | Mean | Std.Dev |
|---|---|---|---|---|---|---|---|
| Electronically search for suppliers' location | 1(2.5%) | 3(7.5%) | 5(12.5%) | 8(20%) | 23(57.5%) | 4.23 | 1.097 |
| Using e-catalogues | 1(2.5%) | 2(5%) | 7(17.5%) | 12(30%) | 18(45%) | 4.10 | 1.033 |
| Online supplier appraisal | 2(5%) | 3(7.5%) | 8(20%) | 11(27.5%) | 16(40%) | 3.90 | 1.172 |
| Searching for new suppliers online | 1(2.5%) | 2(5%) | 5(12.5%) | 7(17.5%) | 25(62.5%) | 4.33 | 1.047 |

**Key:** 1-very low, 2-low, 3-moderate, 4-high, 5-very high

**Source: Primary data, 2023**

Table 4.1 results suggest that the respondents rated very highly extent all the constructs of e-sourcing at Zimbabwe Revenue Authority of Zimbabwe (ZIMRA), meaning that e-sourcing is highly practiced. The table indicates that the company searching for new suppliers online, supplier appraisal online, using electronic catalogues and searching suppliers' location online to a very high extent as indicated by the percentage values of 62.5%, 40%, 45%, and 57.5% and mean values of 4.33, 3.90, 4.10 and 4.23 respectively. The study concluded that e-procurement, when correctly implemented and adhered to, results in greatly improved company performance, inventory management as well as supplier relationships. The most highly rated activity was searching for new suppliers online (Mean =4.33, Std. Dev =1.047) while the least rated activity was online supplier appraisal (Mean=3.90, Std. Dev = 1.172). This outcome is consistent with claims made by Uba et al. (2013) and Helen and Christine (2008) that the e-sourcing aspect of e-procurement is the most often employed procedure among companies in the industrialized world.

### 4.3.2 Extent of E-Ordering at ZIMRA in Mashonaland Central

Four items were used to measure the level of e-ordering at ZIMRA in the sample. The degree to which e-ordering was used at ZIMRA was rated by respondents. Five-point scales (5-very high, 4-

high, 3-moderate, 2-low, and 1-very low) were used to elicit responses. The frequencies, percentages, means, and standard deviation of these replies were then examined.

Table 4.3 Rating the extent of e-ordering practice at ZIMRA in Mashonaland Central (n=40)

| Constructs | 1 | 2 | 3 | 4 | 5 | Mean | Std. Dev |
|---|---|---|---|---|---|---|---|
| Purchase approval done online | 1(2.5%) | 1(2.5%) | 7(17.5%) | 10(25%) | 21(52.5%) | 4.23 | 1.00 |
| Placing orders for supplies online | 2(5%) | 3(7.5%) | 5(12.5%) | 8(20%) | 22(55%) | 4.13 | 1.202 |
| Defining order specifications online | 3(7.5%) | 2(5%) | 4(10%) | 8(20%) | 23(57,5%) | 4.15 | 1.252 |
| Receiving order acceptance online | 2(5%) | 1(2.5%) | 5(12.5%) | 6(15%) | 26(65%) | 4.33 | 1.118 |

**Key:** 1-very low, 2-low, 3-moderate, 4-high, 5-very high

**Source: Primary Data, 2023**

The results shown in Table 4.2 indicate that the respondents rated all of the e-ordering constructs at ZIMRA to a very high extent. The percentage values of 55%, 52.5%, 57.5%, and 65%, respectively, and the mean values of 4.13, 4.23, 4.15, and 4.33 in the table show that the company places orders for supplies online, approves purchases online, defines order specifications online, and receives order acceptance online to a highly rated extent. The action that received the highest rating was accepting orders online (mean = 4.33, standard deviation = 1.118), whereas the activity that received the lowest rating was placing orders for supplies online (mean = 4.13, standard deviation = 1.220). Additionally, the low percentage values suggest that there were little differences in the replies to the items that were scored. This outcome is consistent with the findings of Basheka et al. (2012), who provide evidence of the widespread use of e-ordering by businesses. The results, on the other hand, differ from those of Gupta and Palmer, 2003, who discovered that organizations in India only seldom used e-ordering.

### 4.3.3 Extent of E-Contracting at ZIMRA in Mashonaland Central

Four items were used to measure ZIMRA's level of e-contracting. The degree to which e-contracting was used at ZIMRA in the sample was rated by respondents. Five-point scales (5-very

high, 4-high, 3-moderate, 2-low, and 1-very low) were used to elicit responses. The frequencies, percentages, means, and standard deviations of these responses were then examined.

Table 4.4 Rating the extent of e-contracting practice at ZIMRA in Mashonaland Central (n=40)

| Constructs | 1 | 2 | 3 | 4 | 5 | Mean | Std.Dev |
|---|---|---|---|---|---|---|---|
| Evaluation of contracts online | 22(55%) | 8(20%) | 5(12.5%) | 3(7.5%) | 2(5%) | 1.88 | 1.202 |
| Signing of contracts agreements online | 16(40%) | 11(27.5%) | 6(15%) | 2(5%) | 5(12.5%) | 2.23 | 1.368 |
| Delivery of contracts documents online | 20(50%) | 10(25%) | 5(12.5%) | 3(7.5%) | 2(5%) | 1.93 | 1.185 |
| Monitoring contracts online | 20(50%) | 11(27.5%) | 4(10%) | 3(7.5%) | 2(5%) | 1.90 | 1.172 |

**Key:** 1-very low, 2-low, 3-moderate, 4-high, 5-very high

**Source: Primary Data, 2023**

Table 4.3 results suggest that the respondents rated very lowly extent all the constructs of e-contracting at ZIMRA. The table indicates that the company evaluate contracts online, signing of contracts agreements online, delivery of contracts online and monitoring contracts online to a lowly rated extent as indicated by the percentage values of 55%, 40%, 50%, and 50% and mean values of 1.88, 2.23, 1.93 and 1.90 respectively. The most highly rated activity was signing of contracts agreements online (mean =2.23) whereas the activity that received the lowest rating was evaluation of contracts online (mean =1.88), e-contracting is lowly used by ZIMRA, as indicated by the designation "low." The results shows that there is lack of awareness, infrastructure challenges, resistance to change and limited expertise to implement e-contracting at ZIMRA. This result conflicts with earlier research (Batenbury, 2007; Oduor, 2010), which revealed that the public sector's organizations routinely used the e-contracting component of e-procurement. Nevertheless, the outcomes differ from those of Oduor (2010), who discovered a poor correlation between e-contracting and company performance.

### 4.3.4 Extent of E-Information sharing at ZIMRA in Mashonaland Central

Four items were used to measure how much e-information was shared at ZIMRA in the sample. The extent of e-information sharing at ZIMRA was rated by respondents. Responses were measured on a 5-point scale (5-very high, 4-high, 3-moderate, 2-low, and 1-very low). The responses were then examined using the frequencies, percentages, means, and standard deviations depicted below.

Table 4.5 Rating the extent of e-information sharing practices at ZIMRA in Mashonaland Central (n=40)

| Constructs | 1 | 2 | 3 | 4 | 5 | Mean | | Std. Dev |
|---|---|---|---|---|---|---|---|---|
| Distribution of pricing information and the exchange of technical information | 0(0.0%) | 2(5%) | 4(10%) | 12(30%) | 22(55%) | 4.35 | | 0.864 |
| Viewing supplier's e-catalogues | 3(7.5%) | 4(10%) | 6(15%) | 7(17.5%) | 20(50%) | 3.93 | | 1.328 |
| Electronically consult references for quality | 1(2.5%) | 2(5%) | 4(10%) | 10(25%) | 23(57.5%) | 4.30 | | 1.018 |
| Gathering information from suppliers online | 2(5%) | 3(7.5%) | 6(15%) | 11(27.5) | 18(45%) | 4.00 | | 1.177 |

**Key:** 1-very low, 2-low, 3-moderate, 4-high, 5-very high

**Source: Primary Data, 2023**

The results shown in Table 4.4 indicate that the respondents assessed all of the ZIMRA's e-information sharing constructs to a very high extent. The table indicates that the company's distribution of pricing information and the exchange of technical information, viewing supplier's e-catalogues, electronically consult references for quality and gathering information from suppliers online to a highly rated extent as indicated by the percentage values of 55%, 50%, 57.5%, and 45% and mean values of 4.35, 3.93, 4.30 and 4.00 respectively. The distribution of pricing information and the exchange of technical information received the highest ratings (mean = 4.35, standard deviation = 0.864), while viewing supplier e-catalogues received the lowest ratings (mean = 3.93, standard deviation = 1.328), indicating that ZIMRA places a high priority on e-information sharing. These findings concur with those of Njuguna (2011), Muhia and Afande (2015), and

Morteza, David, and Jose (2011), who show that organizations in the public and private sectors frequently share electronic information.

## 4.4 The extent of company performance after adoption of e-procurement practices at ZIMRA

The various aspects of company performance at ZIMRA are assessed in this section. The respondents were asked to rate the impact that adopting e-procurement methods had on their company's performance using a Likert scale. The following subsections discuss the findings.

### 4.4.1 Extent of company efficiency at ZIMRA in Mashonaland Central

Five items were used to measure ZIMRA's level of company efficiency following the introduction of e-procurement. Respondents were asked to rank how much ZIMRA's company efficiency had improved. Responses were measured on a 5-point scale (5-very high, 4-high, 3-moderate, 2-low, and 1-very low). The responses were then examined using the frequencies, percentages, means, and standard deviations depicted below.

Table 4.6 Rating the extent of company efficiency after adoption of e-procurement at ZIMRA in Mashonaland Central (n=40)

| Constructs | 1 | 2 | 3 | 4 | 5 | Mean | Std. Dev |
|---|---|---|---|---|---|---|---|
| Reduction of time wastage in activities | 3(7.5%) | 4(10%) | 6(15%) | 7(17.5%) | 20(50%) | 3.93 | 1.328 |
| Reduction in level of physical resource wastage | 2(5%) | 3(7.5%) | 7(17.5%) | 9(22.5%) | 19(47.5%) | 4.00 | 1.198 |
| The company has improved capacity utilization | 0(0.0%) | 2(5%) | 4(10%) | 12(30%) | 22(55%) | 4.35 | 0.864 |
| Increased in coordination of processes of company performance | 1(2.5%) | 3(7.5%) | 4(10%) | 11(27.5%) | 21(52.5%) | 4.20 | 1.067 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| The company has improved inventory turns | 1(2.5%) | 2(5%) | 3(7.5%) | 13(32.5%) | 21(52.5%) | 4.28 | 0.987 |

**Key:** 1-very low, 2-low, 3-moderate, 4-high, 5-very high

**Source: Primary Data, 2023**

Table 4.5 indicates that the company had reduced time wastage in activities, reduced in level of physical resource wastage, improved capacity utilization and increased in coordination of processes of company performance to a very highly extent as indicated by the percentage values of 50%, 47.5%, 55%, and 52.5% and mean values of 3.93, 4.00, 4.35 and 4.20 respectively. The results also show that the company has improved inventory turns to a very highly extent as indicated by percentage value of 52.5% and mean value of 4.28. This indicates that ZIMRA's usage of e-procurement systems improves company performance as measured by efficiency. According to a study by Abouzeedan et al. (2013), enterprise digitalization strengthens organizations' capacity to obtain the resources needed for operations, production, innovation, and other activities while reducing associated costs.

### 4.4.2 Extent of company effectiveness at ZIMRA in Mashonaland Central

Five items were used to measure ZIMRA's level of company effectiveness following the implementation of e-procurement. Respondents were asked to rate how much ZIMRA's company effectiveness had improved. Five-point scales (5-very high, 4-high, 3-moderate, 2-low, and 1-very low) were used to elicit responses. Following that, the replies were examined using the frequencies, percentages, means, and standard deviations depicted below.

Table 4.7 Rating the extent of company effectiveness after adoption of e-procurement at ZIMRA in Mashonaland Central (n=40)

| Constructs | 1 | 2 | 3 | 4 | 5 | Mean | Std. Dev |
|---|---|---|---|---|---|---|---|
| Quality of essential services at ZIMRA | 1(2.5%) | 2(5%) | 4(10%) | 10(25%) | 23(57.5%) | 4.30 | 1.018 |
| Conformity with standards | 2(5%) | 3(7.5%) | 5(12.5%) | 9(22.5%) | 21(52.5%) | 4.10 | 1.194 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| The spread of essential services at ZIMRA | 1(2.5%) | 2(5%) | 4(10%) | 11(27.5 %) | 22(55%) | 4.28 | 1.012 |
| Number of projects completed against numbers scheduled | 2(5%) | 1(2.5%) | 6(15%) | 13(32.5 %) | 18(45%) | 4.10 | 1.081 |
| The company has improved on time delivery commitment | 1(2.5%) | 2(5%) | 6(15%) | 10(25%) | 21(52.5%) | 4.20 | 1.043 |

**Key:** 1-very low, 2-low, 3-moderate, 4-high, 5-very high

**Source: Primary Data, 2023**

Table 4.6 indicates that the company had improved quality of essential services, improved conformity with standards, improved the spread of essential services and improved in number of projects completed against numbers scheduled to a very highly extent as indicated by the percentage values 57.5%, 52.5%, 55%, and 45% and mean values of 4.30, 4.10, 4.28 and 4.10 respectively. The results also show that the company has improved on time delivery commitment to a very highly extent as indicated by percentage value of 52.5% and value of 4.20. These results suggest that the use of e-procurement systems has positively impacted ZIMRA's effectiveness, overall company performance and competitiveness in today's digital age. These findings are consistent with the study of Khan and Qureshi (2017), found that e-procurement can lead to improved efficiency, cost savings and better supplier relationships. Similarly, a study by Gupta and Gunasekaran (2018), revealed that e-procurement can improve supply chain performance and reduced lead times.

## 4.5 Chapter Summary

The data on research findings was provided, analysed, and discussed in the chapter based on the replies to questionnaires distributed by the Zimbabwe Revenue Authority (ZIMRA) in Mashonaland Central. Tables and pie charts were used to exhibit the data, and the analysis and discussion of the results were completed.

# CHAPTER FIVE

## 5.0 Introduction

The main goal of this study was to determine how the Zimbabwe Revenue Authority's (ZIMRA) e-procurement platforms affected company performance. Based on the outcomes of the data analysis and the study's goals, this chapter summarizes the major findings of the investigation. There are also conclusion and recommendations that are in line with the results.

## 5.1 Summary of research findings

The purpose of this study was to examine how ZIMRA's e-procurement technologies affected company performance. The research employed a quantitative survey methodology. The study discovered that e-procurement platforms improve company performance both directly and indirectly. The study's primary goal was to determine how often the e-procurement system was used, with a focus on the effects of e-sourcing, e-ordering, e-contracting, and e-information sharing at ZIMRA. According to the data gathered and the analysis provided, the respondents concurred that the majority of them always utilize the e-procurement method, which is the current procurement system in use. The majority of them were comfortable with the dynamics of e-procurement and had enough knowledge of it. In general, there seems to be a fair amount of agreement that the first object has been achieved. The study also sought to determine the impact of e-procurement on company performance and, consequently, effectiveness and efficiency. The findings demonstrate that e-procurement increases respondents' effectiveness and efficiency, which positively affects their overall productivity. Additionally, respondents agreed that e-procurement would be suitable and highly likely if the organization met these requirements.

## 5.2 Conclusions

The study offers empirical support for a framework that identifies four essential aspects of e-procurement systems and explains how e-procurement systems, e-sourcing, e-ordering, e-contracting, and e-information sharing relate to one another. The study finds that e-procurement is widely recognized and used by ZIMRA, and the majority of employees value using it because they believe it has a favourable impact on their productivity in general. However, some suppliers are uncomfortable using it because it merely wastes their time and renders them ineffective due to the

significant difficulties that come with using e-procurement, which include but are not limited to poor internet connectivity, expensive e-procurement software, low level technology, and insufficient knowledge and skills in the usage of e-procurement. E-procurement users should have increased access to technology, and there should be regular training for users in order to make e-procurement highly beneficial. To do this, measures should be taken to upgrade internet options to 5G, to subsidize the cost of software, and to improve access to technology.

### 5.3 Recommendations.

Government should assist in educating and training all ZIMRA employees so they have the necessary skills and expertise to use e-procurement. Seminars, workshops, and short courses are just a few of the training options. To lower the high cost of purchasing e-procurement software, a national software system for the industry should exist that is of the same level and is offered at a discounted price. This will persuade the majority of government agencies and ZIMRA employees to use it instead of the traditional procurement system.

For effective procurement management procedures, the supply chain department of the Zimbabwe Revenue Authority (ZIMRA) should employ modern electronic procurement technologies, such as e-sourcing, e-ordering, e-contracting, and e-information sharing. Due to their ability to successfully manage lead times and maintain quality standards, their supply chain department's purchasing performance improves, which in turn improves the performance of the entire business, particularly by enhancing effectiveness and cost efficiency.

In order to advance the effectiveness of procurement management and enhance both customer satisfaction and business performance, ZIMRA Company must hire or train employees who are proficient in using modern electronic procurement technologies, including e-sourcing, e-ordering, e-contracting, e-information sharing, and many others.

### 5.4 Recommendations for future research

The researcher suggests that future research be done on the effects of electronic procurement systems on company performance at ZIMRA utilizing additional modern electronic procurement systems that are distinct from those employed in this study. Comprehensive research is also required to determine how e-procurement technologies affect company performance in industries other than ZIMRA firm. This will help fill in any gaps regarding how modern computerized

procurement processes affect company performance across the economy. Last but not least, future research projects could focus on comparing ZIMRA's e-procurement and company performance and employ more reliable study designs like time series and panel techniques.

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# APPENDICES

## Appendix 1: Introductory Letter

BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF COMMERCE

DEPARTMENT OF ECONOMICS

Dear Participant

I'm a student at Bindura University of Science Education studying a Bachelor of Commerce (Honours) Degree in Purchasing and Supply. I'm conducting this study on "The impact of e-procurement on the company performance at ZIMRA" in order to fulfil the requirements. Please help by responding to the survey's questions. Please take the time to thoroughly read each question and mark the box that best represents your truthful and sincere response. The information you supply will be maintained in strict confidence and your identity is not required.

I remain grateful.

Yours Sincerely

Gilbert Mudzingwa

Contact Numbers: 0784133761 / 0711456204

Email address: mudzingwagilbert7@gmail.com

## Appendix 2: Questionnaire

**Section A: Demographic information**

(Tick one box to indicate the information)

**1. What is your gender?**

| | |
|---|---|
| Male | |
| Female | |

**2. What is your highest education level?**

| | |
|---|---|
| Professional certificate | |
| Professional diploma | |
| Bachelor's degree | |
| Master's degree | |
| Other qualifications (specify)…… | |

**3. How many years have you worked at Zimbabwe Revenue Authority (ZIMRA)?**

| | |
|---|---|
| 2 years | |
| 3 years | |
| 4 years | |
| 5 years | |

**b) E-procurement**

To what extent do you think e-procurement improves company performance at ZIMRA?

(Tick one box to indicate the extent)

| **E-procurement** | **THE EXTENT** |
|---|---|

| | **Very low 1** | **Low 2** | **Moderate 3** | **High 4** | **Very high 5** |
|---|---|---|---|---|---|
| **E-sourcing** | | | | | |
| • Electronically search for suppliers' location | | | | | |
| • Using e-catalogues | | | | | |
| • Online supplier appraisal | | | | | |
| • Search for new suppliers online | | | | | |
| **E-ordering** | | | | | |
| • Purchase approval done online | | | | | |
| • Placing orders for supplies online | | | | | |
| • Defining order specifications online | | | | | |
| • Receiving order acceptance online | | | | | |
| **E-contracting** | | | | | |
| • Evaluation of contracts online | | | | | |
| • Signing of contracts agreements online | | | | | |
| • Delivery of contracts documents online | | | | | |
| • Monitoring contracts online | | | | | |
| **E-information sharing** | | | | | |
| Distribution of pricing information and the exchange of technical information | | | | | |
| • Viewing supplier's e-catalogues | | | | | |
| • Electronically consult references for quality service | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| • Gathering information from suppliers online | | | | | |

c) **Company performance**

To what extent do you think company performance increased after implementation of e-procurement?

(Tick one box to indicate the extent)

| **Company performance** | **The Extent** | | | | |
|---|---|---|---|---|---|
| | **Very low 1** | **Low 2** | **Moderate 3** | **High 4** | **Very high 5** |
| **Efficiency** | | | | | |
| • Reduction of time wastage in activities | | | | | |
| • Reduction in level of physical resource wastage | | | | | |
| • The company has improved capacity utilization | | | | | |
| • Increased in coordination of processes of company performance at ZIMRA | | | | | |
| • The firm has improved inventory turns | | | | | |
| **Effectiveness** | | | | | |
| • Quality of essential services at ZIMRA | | | | | |
| • Conformity with standards | | | | | |
| • The spread of essential services at ZIMRA | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| • Number of projects completed against numbers scheduled | | | | | |
| • The company has improved on time delivery commitment | | | | | |

Thank you for participating!

P Bag 1020
BINDURA, Zimbabwe
Tel: 271 – 7531-6, 7621-4 ,6230
Fax: 263 – 271 – 7534
Cell No 0777603758

**BINDURA UNIVERSITY OF SCIENCE EDUCATION**
**FACULTY OF COMMERCE**
**ECONOMICS DEPARTMENT**

12 June 2023

**To Whom It May Concern**

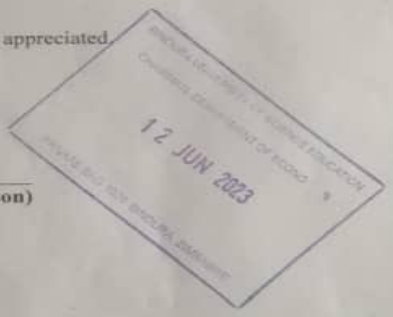
Dear Sir/Madam,

**RE: REQUEST FOR PERMISSION TO COLLECT DATA**

This letter serves to inform you that Mr. Mudzingwa Gilbert (B192699B) is pursuing Bachelor of Commerce in Purchasing and Supply Degree with our Department. Please assist him with data for his dissertation titled "Impact of E-Procurement on performance" A case study of Zimbabwe Revenue Authority (ZIMRA) in Mashonaland Central".

The information gathered from this research will be used purely for academic purposes and your response will be classified as private and confidential.

Your cooperation will be greatly appreciated.




Yours sincerely,

**Dr. S. Mutsvangwa (Chairperson)**

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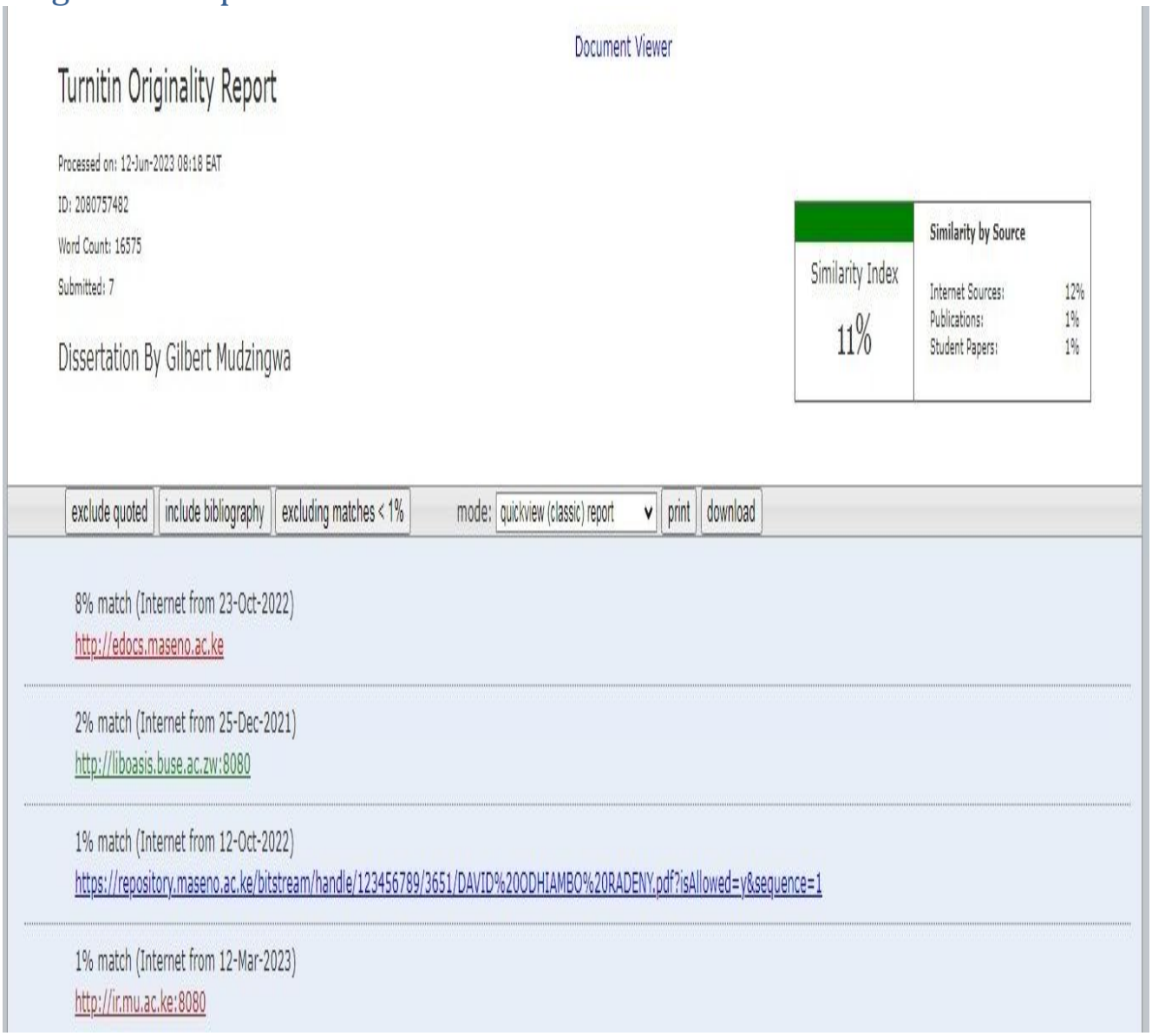

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