EFFECTIVENESS OF BUSINESS SHARED SERVICES MODEL IN COST REDUCTION IN EAST AFRICAN BREWERIES LIMITED

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DECLARATION

I declare that this dissertation is my original work and has not been previously published or submitted elsewhere for the award of a degree. I also declare that this contains no material written or published by other people except where due reference is made, and the author duly acknowledged.

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I do hereby confirm that I have examined the master's dissertation of

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And have certified that all revisions that the dissertation panel and examiners recommended have been adequately addressed

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ABSTRACT

The business shared services model (BSSM) seeks to deliver corporate support, combine and consolidate services from headquarters and business units into a distinct entity based on market-like principles. The purpose is to align processes, position the firm strategically and reduce cost. However, some of the firms using the BSSM do not experience a significant reduction in cost after the implementation of BSSM. The general objective of the study was to establish the influence of the business shared services model on cost reduction in EABL. The study's specific objectives were to determine the influence of human resource shared services, finance shared services, logistic shared services, and customer service shared services on cost reduction in EABL. This study used a descriptive research design. The study's target population was all the 238 employees in management positions of EABL in the company's headquarters in Ruaraka, Nairobi Kenya. The study used a stratified sampling technique to select a sample of 149. The study utilized a structured questionnaire to collect data from the management-level employees targeted in the study. Data analysis was done through descriptive statistics (frequencies and percentages) and inferential statistics (multiple linear regression). SPSS was applied in the analysis and the results were presented in tables and figures. The study findings determined that human resource shared services had a significant positive influence on cost reduction in EABL ($\beta = 0.470$, $p < 0.05$). The study findings also determined that finance shared services had a significant positive influence on cost reduction in EABL ($\beta = 0.209$, $p = 0.022$). Moreover, logistics shared services had a significant positive influence on cost reduction in EABL ($\beta = 0.226$, $p = 0.023$). However, customer service shared services had no significant influence on cost reduction in EABL ($\beta = 0.182$, $p = 0.108$). The study makes the following recommendations. First, the study recommends to EABL to expand the sharing of its human resources model to include the services that are shared to a small extent since this could help the organization to be efficient and reduce waste. Besides, the study recommends to EABL to standardize finance processes across the whole organization, ensuring that not only is the organization running at peak efficiency but that its clients are getting the same high-quality experience regardless of whatever department they interact with. Finally, the study recommends to EABL adopt the BSSM to a greater extent relating to sharing of the critical logistics functions. This would foster a distinct culture of collaboration in a shared services centre, where workers can combine their expertise to successfully finish these logistics services efficiently.

Key words: Business shared services, Cost reduction, EABL.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACRONYMS AND ABBREVIATIONS

ABSC	Africa Business Service Centre
BSSM	Business Shared Services Model
EABL	East African Breweries Limited
ERP	Enterprise Resource Planning
FMCG	Fast Moving Consumer Goods
FSS	Finance Shared Services
HRSS	Human Resource Shared Services
ICT	Information and Communications Technology
IT	Information Technology
LSS	Logistics Shared Services
NSE	Nairobi Securities Exchange
PWC	PriceWaterhouseCoopers
SPSS	Statistical Package for Social Sciences
SSC	Shared Service Centres
VIF	Variance Inflation Factor
WBG	World Bank Group

OPERATIONAL DEFINITION OF TERMS

Business shared services model – A corporate framework for providing assistance based on market-like concepts, integrating and consolidating services from headquarters and business divisions into a single organization (Aguirre et al., 2015).

Cost reduction - The process of identifying, evaluating, and eradicating unwarranted expenses from a business to make the processes and activities more efficient (Santosh, 2017).

Shared services centre – A hub for an organization's joint services responsible for the handling and execution of specific operational tasks, such as logistics, customer service, IT, accounting, payroll, human resources, compliance, legal, and security.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The business shared services model (BSSM) was introduced into the corporate environment in the early 1990's as large decentralized firms sought to combine basic transactional processes such as general accounting, payables, payroll, plant, property, and equipment capital budgeting, receivables and credit management and resell those services at cost to the individual business units (Rutledge & Duncan, 2018). As companies extend their presence across borders, it becomes increasingly uneconomical to maintain a duplicate procurement, human resource, finance, and accounting infrastructure within each country of operation. BSSM was therefore created to gain an advantage in cost savings, standardization of process, and to increase efficiency.

The most often mentioned advantage of BSSM is the significant cost reduction in support and infrastructure services (Squilla, Lee & Steil, 2018). While this is the main rationale for most successful shared services initiatives, repositioning support organizations as service providers is also a significant advantage. Shared services are distinguished from mere centralization by repositioning and the ensuing organizational, technological, and process improvements. For businesses attempting to handle the difficulties of fast expansion and globalization, repositioning is a critical component. Companies have historically duplicated fundamental transaction processing capabilities across all of their corporate divisions, factories, and retail locations. As a consequence, there is a lot of redundancy and not enough scale to attain optimum efficiency (Adkins & Misch, 2017). Shared services, on the other hand, may provide a variety of solutions that provide rapid customer support without needing physical presence to the client by using ERP systems, e-enabled technology, and other advancements. This is also expected to provide cost benefits (Santosh, 2017).

Many Fortune 500 corporations have made significant investments in BSSM in order to enhance their competitive position during the last ten years (Rutledge & Duncan, 2018). This action by these businesses demonstrates the tremendous potential for companies to use shared services to respond to competitive cost constraints while still achieving corporate development objectives. Following in the footsteps of the Fortune 500, the US middle market is increasingly embracing the intelligent use of BSSM. They want the operational flexibility and cost reductions that the Fortune 500 have experienced in recent years. Companies in Europe started by establishing shared service centers (SSCs) in Asia, especially India (Cluver & Stevens, 2014). However, there are European companies that have set SSCs in other low-cost European countries (Rutledge & Duncan, 2018). Africa has also not been left behind in the shift in culture towards expanding businesses to accommodate shared services centres. This has come due to rising demand from global, regional, and local multinationals. Kenya is mostly a favored destination for centralizing operations due to its central location in Africa.

1.1.1 Business Shared Service Model

BSSM according to Aguirre et al. (2015) is a model for delivering corporate support, combining and consolidating services from headquarters and business units into a distinct entity based on market-like principles. Santosh (2017) indicates that BSSM is where an organization has a central location where geographically dispersed departments of branches can share certain services from a central location. The SCC serves internal customers who can specify their service needs. The SCC must meet those requirements, and they can expect to have their performance evaluated using pre-agreed measurable criteria. Further, Rutledge and Duncan (2018) posit BSSM is where an organization develops and implement an entity responsible for the execution and the handling of specific operational tasks, such as accounting,

human resources, payroll, Information Technology (IT), legal, compliance, purchasing, security, and other tasks.

The processes shared using the BSSM model include human resource, finance, information, and communications technology (ICT), logistics/materials management, customer service, and corporate and legal affairs (Rutledge & Duncan, 2018). Human resource services shared include compensation, payroll processing, benefits administration, records management, relocation services, training and education, and travel and expense. Finance shared services include cash management, accounts payable, general ledger, planning and budgeting, accounts receivable, tax compliance, foreign exchange, and internal audit (Wanyande, 2015). Information shared services include standards, desktop support, technology/development, telecommunications, data centre operations, applications development, application maintenance, and hardware and software. Logistics/materials management shared services include procurement, inventory management, strategic sourcing, warehousing, and transportation. Customer service shared resources include call centres, order management, credit and collections, and returns processing. Lastly, legal/corporate affairs shared services include communication services, media relations, litigation support and coordination, insurance, regulatory compliance and environment, health, and safety (Cluver & Stevens, 2014).

1.1.2 Cost Reduction

Cost reduction is the process of identifying, evaluating, and eradicating unwarranted expenses from a business to make the processes and activities more efficient (Santosh, 2017). According to Aguirre et al. (2015), cost reduction is the optimization of processes, procedures, and activities to make the least possible use of inputs and other resources. Additionally, Strikwerda (2014) indicates that cost reduction is the sustained decrease in the unit cost of

products provided by the company, without compromising on suitability and quality. This is mostly enabled by continuous improvement or adoption of innovative technology or practices.

Most firms have focussed on cost reduction because of the tightening margins and competitive strategies focussed on cost leadership (Rutledge & Duncan, 2018). Cost reduction is important in a firm to enable it to keep costs down, free resources for growth and expansion, and enable it to remain profitable and competitive in its sector. Indicators of cost efficiency in an organization include volume billed per worker, quality of service, losses, coverage, and financial data. These measures are generally available and provide the simplest way to perform cost comparisons. However, such indicators are partial and do not provide an overall picture. The cost to income ratio is the most used indicator and it is appropriate because it provides an overall picture. It is computed by dividing total operating and administration costs with the total revenue generated. High cost-to-income ratio shows inefficiency while reduced ratios show cost reduction.

The main motivation for using shared services is cost reduction. As global competitiveness becomes a reality and more nations join the global economy, cost management, particularly in support services, becomes more important. Back-office expenses may be reduced by 25% to 50% with shared services (Santosh, 2017). Shared services efforts reduce infrastructure expenses such as technology, buildings and services, and other administrative overhead items in addition to labour savings. Savings may also be realized in the expenses of operating an SSC at a new site. Furthermore, BSSM provides a chance to remove inefficient technology. Ongoing maintenance is one of the most expensive parts of most IT budgets, although it may be significantly lowered through consolidation and standardization.

1.1.3 Overview of East African Breweries Limited

East African Breweries Limited (EABL) is a Kenyan business that produces alcoholic and non-alcoholic drinks. Formally known as Kenya Breweries Limited, it was established in 1922. In 1934, it became a public business, and in 1935, it purchased Tanganyika Breweries, requiring a name change to East African Breweries Limited in 1936. In 1959, it purchased a financial stake in Ugandan Breweries, giving it a dominant stake in the East African market. EABL is East Africa's largest branded alcoholic beverage company, having a diverse portfolio of products ranging from beer to spirits to adult non-alcoholic beverages (EABL, 2019).

While EABL (a Diageo subsidiary) is Kenya's leading brewer, minor local brewers and foreign brands like as Heineken and SABMiller have increased rivalry in recent years (EABL, 2019). EABL, on the other hand, still dominates about 90% of the Kenyan beer industry and is expanding throughout the rest of East Africa. The group's variety is a key element in providing the best quality brands to East African customers and long-term value to East African investors, including brewers, distilleries, support industries, and a distribution network throughout the region.

EABL has engaged in BSSM model as a strategy to reduce costs, remain competitive and enhance its profitability. It has developed and implemented several SCCs to serve its different subsidiaries and branches all over Africa. The SCCs provide most back-office services, including administration, finance, customer service and some HR tasks. and computing payrolls, leaving country-specific HR units to oversee recruitment, terms and conditions, pay and benefits. Kenya harbours Africa Business Service Centre (ABSC) which is one of Diageo’s main SCC that performs various finance processes (EABL, 2019). This study sought to establish the effectiveness of the BSSM Model on cost reduction at EABL.

1.2 Statement of the Problem

The most frequently cited benefit of BSSM is significant cost savings in support and infrastructure services (Rutledge & Duncan, 2018). However, Adkins and Misch (2017) report that over 47% of firms using the BSSM do not experience a significant reduction in cost after implementation of BSSM. This indicates that adopting the BSSM does not guarantee cost savings. Establishing SCCs can be expensive and before making such a huge investment, decision makers in the firm need to understand the expected value of such investment. Further, though there has been an uptake of BSSM model for most multinationals in Kenya, this adoption has not led to enhanced performance. Additionally, most of the SCCs are being relocated to countries such as India. This puts to question the extent of adoption of the BSSM and the value of BSSM to businesses in Kenya.

Among the various empirical studies conducted on the effect of BSSM on cost savings, there is no consensus as the findings are mixed. Adkins and Misch (2017) established that success of BSSM in a company depends mostly on location implementation. The companies that report success in cost reduction have better implementation than those that do not report success in cost reduction. Wanyande (2015) on a study on manufacturing firms listed at Nairobi Securities Exchange (NSE) investigated the influence of finance shared service on financial performance. The study established that finance shared services had not led to significant cost savings. Strikwerda (2014) investigated the effect of IT and finance shared services on cost reduction and other corporate benefits, the study established that when implemented effectively, finance and IT shared services enabled firms to reduce their costs significantly. These mixed findings justified the current study to establish the influence of BSSM on cost reduction in EABL.

1.3 Research Objectives

The general objective of the study was to establish the influence of business shared services model on cost reduction in EABL.

The study's specific objectives were to;

i) Determine the influence of human resource shared services on cost reduction in EABL.

ii) Establish the influence of finance shared services on cost reduction in EABL.

iii) Examine the influence of logistic shared services on cost reduction in EABL.

iv) Establish the influence of customer service shared services on cost reduction in EABL.

1.4 Research Questions

The study provided answers to the following research questions;

i) What is the influence of human resource shared services on cost reduction in EABL?

ii) To what extent does finance shared services influence cost reduction in EABL?

iii) What is the influence of logistic shared services on cost reduction in EABL?

iv) What is the influence of customer service shared services on cost reduction in EABL?

1.5 Justification of the Study

This study will provide valuable evidence regarding the effectiveness of BSSM in cost reduction. The empirical findings from this study will be of value to chief executive officers, chief technology officers and chief information officers in the various sectors such as telecommunications, aviation, mining, fast moving consumer goods (FMCG), manufacturing,

insurance, banking and other sectors that utilized BSSM. The findings will assist these top managers in these firms in decision making regarding which BSSM to apply for best results in cost reduction.

The study findings will be of value to policy makers in ICT, business process outsourcing and ministries of foreign affairs and international trade. These policy makers can use the findings to devise effective policies that will enhance the country as a hub for the shared services that enhance cost reduction in companies.

The study findings will also be of value to scholarship and future research. The empirical findings will be an addition to the existing body of knowledge on the role played by BSSM on cost reduction. Further, the study will document limitations which could inform future researchers on the improvements required in conducting research in this area. Lastly, the study will provide suggestions for future research which could guide future researchers in the subject area.

1.6 Scope of the Study

This study sought to establish the influence of BSSM on cost reduction in EABL. The shared services that were the focus of the study included human resource shared services, finance shared services, logistic shared services and customer service shared services. The study location was EABL headquarters in Ruaraka, Nairobi. The population of the study was senior management employees at EABL and all other employees in human resources, IT, finance, procurement and customer service departments.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The extant literature on business shared services model and cost reduction are presented in this chapter. The chapter includes the theoretical literature, empirical literature, conceptual framework and operationalization of the variables. The theoretical literature presents the theories that this study is anchored on. The empirical literature provides past studies conducted on the effect of human resource shared services, finance shared services, logistic shared services and customer service shared services on cost reduction. This is followed by a discussion of the research gaps identified in the past studies which the current study sought to bridge. The conceptual framework is then provided which presents the hypothesized relationship between the business shared services variables and cost reduction. Lastly, the measurement of the study variables is provided.

2.2 Theoretical Review

This section presents the two theories that the study was based upon. These theories are transaction cost theory and the service platform theory. The proponents of the theories, their development, application in past studies and how they were used in the current study are presented.

2.2.1 Transaction Cost Theory

The transaction cost theory by North (1992), offers a conventional economic methodology to establish the organization's confines and applies efficiency as a main motivation that makes firms to enter into inter-firm partnerships or collaborations. An organization can enhance its performance and decrease its total operational costs by

collaborating with inside or outside partners to provide some non-strategic services (Halldorssonet al., 2007). Transaction costs are the main determinant whether firm undertakings will be shared or every department, branch or subsidiary will have its own separate department to provide the services. be inbound. With high transaction costs, it is appropriate to share services and enhance efficiency and quality. On the contrary, with low transaction costs, it is advisable for each subsidiary or departments to have its own internal service provider (Zylbersztajn, 2018). A three-dimensional framework was formulated to characterize transactions. These dimensions are frequency, uncertainty, and specificity. These dimensions determine how organizations plan their back-office services.

Putting emphasis on the benefits of capabilities, most scholars have opined that organizations tend to share those back-office services that provide maximum savings and cost reduction when shared by many departments or subsidiaries (Akbar & Tracogna, 2018). According to Peng and Associates (2016), multinational or large organizations with different geographically dispersed branches would engage in sharing services on those activities that the organization lacks enough resources or those activities that the organization feels are being duplicated by the different business units, branches or subsidiaries.

The transaction cost theory was applied in this study to explained the expected cost reduction when human resource or finance services are shared by various subsidiaries, business units or branches of EABL. The main focus of shared services units is to provide administrative, and transactional support. A shared service centre is considered successful if costs are reduced and quality of services are increased. However, shared services are not considered a success if the costs of the services do not reduce or the service quality does not improve.

2.2.2 Service Platform Theory

The service platform theory developed by Halman et al. (2003) is an underlying philosophy of corporate shared services. Service platform thinking, according to Halman et al. (2003), is the process of identifying and exploiting commonalities among a firm's offerings, target markets, and processes for creating and delivering offerings, and developing a successful strategy to create variety while maximizing the use of resources such as time and money. The sharing of components, services, modules, and other assets across a family of business divisions, branches, subsidiaries, or products is critical in the platform thinking approach (Halman, et al., 2003). It's an example of organizational architecture that spans several business divisions.

A product family is a group of goods that have similar features (Halman, et al., 2003). According to Robertson and Ulrich, these assets may be divided into four groups (1998). Components, processes, knowledge, and people and connections are the four categories. These important elements in platform thinking are similar to the core ideas of shared services, which are centered on service reuse or consolidation (Schulz, et al., 2009). Platform thinking is based on the fact that shared services and platforms have a lot of commonalities. Platform thinking, according to Halman et al., (2003) and Robertson and Ulrich (1998), may lead to increased efficiency (costs, time, variety), flexibility (time to market), reduced risk, improved service, and effectiveness (training, learning curve). The majority of these advantages are also present in the shared services paradigm.

The product environment is where the platform theory comes from. Platform theory has been connected to the sharing and reuse of services by authors such as Voss and Hsuan (2009) and Meyer and DeTore (2001). A shared service platform is used for all services provided to the company's various business units and offers the highest level of uniformity feasible in terms of the performance criteria that must be met owing to varied client demands (Hofman &

Meijerink, 2015). This theory was used in this study to link sharing of customer service and logistic service sand cost reduction. Since logistics and customer services are could be similar for the various business units of the same organization, they can be shared through a service platform and thereby reducing overall cost to the organization.

2.3 Empirical Review

The review of past studies on business shared services and their effect on cost reduction are provided in this section. The review is provided as per the research objectives of the study. The review covers the effect of human resource shared services, finance shared services, logistics shared services and customer service shared services on cost reduction.

2.3.1 Influence of Human Resource Shared Services on Cost Reduction

A study by Redman, Snape, Wass, and Hamilton (2007) examined the relationship between human resource management functions and the ability to reduce cost in four NHS organizations. The qualitative research used a total of 28 interviews to collect the required information. From the study findings, human resource strategies have a significant impact on institutions' ability to reduce cost of production. A corresponding study by Tammel (2017) investigated the application of share services as an approach to reduce cost within the public sector in Estonia. A total of 10 interviews were conducted to collect required information which involved the county and central governments. The researcher acknowledges the lack of reliable information to assess the relationship. The findings exemplify that human resource is a paramount element in managing costs reduction. From the studies, it is clear that HR functions play a major role in assisting institutions to reduce costs.

Elston and MacCarthaigh (2016) posit that shared services are a strategic approach to reform institutions under financial pressure. The objective of using the approach is to reduce

overheads and enhance efficiency through provision of support services such as human resource. Paagman, Tate, Furtmueller and Bloom (2015) also support the argument that shared services have a significant impact on institutions' capacity to reduce costs. According to the study, integrating shared services such as human resource functions aid the public sector to minimize cost. Selden and Wooters (2011) examined the emerging trends in human resource management especially adoption of shared services. According to the study findings, shared services is considered as a strategic approach that addresses challenges linked to centralization and decentralization of human resource management systems. Different scholars agree that human resource shared services are an approach to reduce cost and ensure a functioning human capital within institutions.

Wandera (2016) examined the impact of shared services on the performance of multinational companies in Kenya. The research employed a descriptive design to examine the independent variable; shared services and dependent variable; performance. The study targeted 3 multinational companies and senior personnel for data collection. A questionnaire was administered to 59 where 47 respondents completed the process. According the study findings, shared services such as human resource have a significant impact on performance which can be measured through reduced cost. The findings are exemplified by Elston and Maccarthaigh (2016) research that affirms the role of human resource shared services in promoting institutions' performance and reducing costs. Tammel (2017) also supports the argument that shared services linked to human resource functions have a significant impact on reduction of cost. The research exemplifies the concept that human resource shared services aid firms to reduce cost.

Meijerink, Bondarouk, and Looise (2013) examined the concept of creating value within business through human resource shared services. The objective of the study was to derive the measure for performance of HR shared service providers. The findings of the

research show that adoption of HR shared services ensures business develop transformational and transactional value. According to Meijerink, Bondarouk, and Looise (2013), transactional value directly influences institutional capital where the human resources aid in leveraging finances. Walsh, McGregor-Lowndes, and Newton (2008) posit that shared services play a significant role in both the private and public sector. According to the researchers, shared services liked to human resource functions aid in reducing costs. Researchers agree that human resource shared services is an approach for firms especially within the private sector to implement cost saving strategies by managing workers social and economic needs.

Meijerink and Bondarouk (2013) investigated the characteristics of human resource shared services in Netherlands. The researchers affirm that HRSS is an approach to improve service delivery to end users. From the research findings, realizing human resource shared services is paramount in promoting performance and ensuring cost reduction. According to Meijerink and Bondarouk (2013) updating employees' skills and knowledge is one of the effective methods to ensure shared services and improved performance. A similar argument by Noda (2017) exemplifies that shared services especially within the public sector has a significant impact on sustaining service delivery. According to the researcher, shared services have a significant impact on the performance and reduction of costs within institutions.

Mbugua and Kinoti's (2011) research examined the impact of shared services strategy on the cost reduction within East African Breweries Limited. The study's objective was to assess whether there was reduction of transactional costs at the company due to shared service environment. The independent variables included human resource, procurement, finance, and information technology while the dependent variable included cost reduction. Purposeful sampling was used to select a sample population of 10 respondents within the nine departments within the institution. A mixed method of study was used to collect and analyze the data. Data was collected using a semi structured questionnaire and interviews. From the study findings,

human resource shared services have a significant impact on reduction of transactional costs. It is decisive to note that shared services assessed during the study had an influence on the company's ability to reduce the costs of production.

2.3.2 Influence of Finance Shared Services on Cost Reduction

Lueg (2013) notes that implementation of finance shared services is a widely accepted method to gain efficiency and reduce costs within firms. The approach is an attractive option since it frees up essential finances in business units from less consuming activities. Helbing, Rau, and Riedel (2013) research show that shared services linked to finance is an important driver to enhance effectiveness and achieving cost-saving for account functions. Ensuring implementation of finance shared services within institutions is a way of attaining competitive advantage and reducing costs. Research by Häusser (2013) examined the relationship between finance shared services and performance among corporates. According to the research, shared services is an important aspect within the business environment. FSS ensures firms attain cost effectiveness by eliminating unnecessary expenses and activities within during production processes. Helbing, Rau, and Riedel (2013) have a similar argument that FSS has been a strategic approach to ensure firms reduce cost and enhance competitive advantage.

Domingues and Gomes (2011) investigated the impact of shared services on the performance of Portuguese public sector. According to the researchers, to enhance quality of service delivery, implementation of shared services ascertains transformation and efficiency within the sector. Domingues and Gomes (2011) affirm that finance shared services management solutions embrace the concept of reducing costs and ensuring effectiveness while delivering services or producing goods. This is supported by Miskon, Bandara, Fielt, and Gable (2010) study that investigated the role of shared services through a review of previous studies. According to the researchers, finance shared services is a superior approach to lower cost. It is

extensively adopted in practice to improve institutional performance by ensuring supportive functions have been implemented. Domingues and Gomes (2011) and Miskon, Bandara, Fielt, and Gable (2010) agree that finance shared services is an approach for firms to respond to challenges and improve the quality of business processes.

Leibfried (2007) affirms that shared services are a strategic approach to manage performance. According to the researcher, finance shared services ensure effective accounting strategies aimed at reducing the cost of production. This is exemplified by Domingues and Gomes (2011) argument that finance shared services aims at reducing cost through economies of scale and consolidation of activities thus minimizing the expenses incurred. Helbing, Rau, and Riedel (2013) also exemplify that FSS is a process that is achieved through effective budget process that eliminates redundancy of activities.

Wang (2007) research sought to examine the performance analysis of implementing shared services within the business environment. The researcher describes finance shared services as an approach to standardize and consolidate common functions and costs as an approach to reduce operational expenses and enhance sharing. One of the elements to successful approach is to maintain important services and response levels within institutions. From the study findings, share costs and financial functions within institutions can be collective to reduce the costs and improve on services of production process (Wang, 2007). According to Mbugua and Kinoti (2011), shared services is founded on the ability to develop technique for ensuring high performance is achieved. This idea is exemplified by Wang's (2007) study that affirms the role of finance shared services in ensuring firms achieve sustainability and a balance between resource allocation and desired performance.

Mbugua and Kinoti (2011) posit that FSS strategy has played a significant role in reducing costs within the East African Breweries Limited. From the study findings, shared services eliminate the unnecessary cost incurred over time by lowering the overhead expenses

within the institution. From the study, EABL overhead costs were estimated at 184 million in 2000 as compared to 156 million shillings by 2009 which exemplifies the role of shared services in business (Mbugua & Kinoti, 2011). A similar study by Herbert & Seal (2012) examined the impact of shared services as a form of improving accounting functions within institutions. The researchers exemplify that finance shared services is an alternative method to outsourcing which ensures firm attain control over its finances. This concept supports a previous argument by Mbugua and Kinoti (2011) that finance shared services is an essential approach to reduce costs over time.

Wanyande (2015) examined the effect of finance shared services on the financial performance of manufacturing institutions listed at the Nairobi Security Exchange. The research adopted a descriptive design to assess the relationship between the two variables and used a Chi square test to analyze. A total of 9 companies were selected for the study with inclusion criteria being among the listed firms in NSE. According to the study findings, there is no association between finance shared service and financial performance among manufacturing firms listed at NSE. This is a contradiction to previous study by Mbugua & Kinoti (2011) findings that finance shared services have a significant impact on firms' financial performance. Wanyande (2015) opposes that FSS has the ability to reduce the cost of operations within institutions by enhancing accounting efficiency. This is founded on the measurement of earning per share, market price per share, return on capital employed, and return on equity after implementation of finance shared services (Wanyande, 2015).

2.3.3 Influence of Logistic Shared Services on Cost Reduction

Dan, Wu, Zhang, and Xiao (2007) notes that logistic shared services is an approach for firms to reduce the cost of moving goods to its end users. The researchers note that it involves adoption of effective models that minimize the expenses associated with supply chain.

Corresponding research by Xu, Niu, and Cai (2020) examined the role of shared services in the transportation cost management. Based on the concept of shared logistics, there is need to ensure a strategic approach to control costs linked to movement of products. According to the study findings, allocation of scarce resources in the transportation of products remains an important aspect of reducing the cost of production. This exemplifies a previous finding by Dan, Wu, Zhang, and Xiao (2007) that affirms the role of shared services in logistic as a process of ensuring efficient cost accounting in relation of logistics.

A report by Deloitte (2015) affirms the need for shared services in management of logistics operations within firms. According to the report, institutions are now adopting hybrid shared services by customizing delivery functions as an approach to reduce the cost of transportation and supply chain management. This concept is supported by Van der Linde, Boessenkool, and Jooste (2006) study that sought to examine the key success factors for managing shared services within institutions. According to the study, logistic is one of the strategic operations where businesses have adopted the concept of shared services. From the research, it is evident that as institution seek to reduce the costs of production, movement of products have been a strategic means to reduce expenses. Deloitte (2015) report is supported by a recent study by Xu, Niu, and Cai (2020) that shared services in logistics have a significant impact on cost reduction and performance.

Themido, Arantes, Fernandes, and Guedes (2000) examined the factors influencing logistic costs. According to the study, institutions that operate shared warehousing services benefit from reduced cost within their supply chain operations. This exemplifies that shared services within the logistic functions enables firms to reduce cost and enhance efficiency. Themido et al. (2000) affirm that institutions that embrace the approach are able to manage the unit cost per item during distribution thus lower the overall expenses incurred during movement of products. This idea is exemplified by Dan, Wu, Zhang, & Xiao (2007) that affirms the role

of shared services in logistic as an approach to ensure firms save on overall cost. Adopting LSS and reducing the expenses is described as one approach to enhance efficiency and satisfy the end users (Themido et al., 2000).

A report by PriceWaterhousecCoopers (PWC) (2015) exemplified the future of the logistic sector and approaches to lower the cost of moving products. The idea of shared channels and standardized approaches is described as one of the approaches to reduce the cost incurred during logistics. The report also affirms the role of shared services in ensuring firms gain sustainable performance. A similar concept is exemplified by Deloitte (2015) report that exemplifies the need for firms to embrace shared services while developing logistics model to reduce the cost per unit and promote institutional performance. Dan, Wu, Zhang, and Xiao (2007) affirm this by stating that shared services play a major role in ensuring effective management of the logistic operations within firms. Studies exemplify the fact that logistic is an important part of institutional growth which exemplifies the need for adopting shared services as an approach to ensure low costs.

Xu, Niu, and Cai (2020) gives an insight on how shared services especially in logistical operations influence institutional performance and costs. A similar argument is given by PWC (2015) and Deloitte (2015) reports that exemplifies the importance of adopting shared services as an approach to reduce costs incurred in the supply chan. It is eminent from the research that shared services is a strategic model that ensures cost saving and enhancement of efficiency especially in logistics. Themido et al. (2000) study also exemplifies the role of shared services in promoting effectiveness and reducing the cost incurred in movement of products to end users. PWC (2015) exemplifies the role of shared services beyond the concept of reducing cost but also as an approach to achieve sustainability.

Mbugua and Kinoti (2011) research examined the use of shared service approach in East Africa Breweries Limited. According to the study, competitive advantage can be achieved

through outsourcing of non-core logistic activities as an approach to embrace shared service approaches. A report by PWC (2015) affirms that shared services is an approach that is beyond reduction of cost since it also increases sustainability and growth. A study by Kalinzi (2016) examined the relationship between outsourcing logistic services and the efficiency within the supply chain. The goal of the study was to examine the impact of outsourcing as an approach to implement shared service model on organizational performance in different industries. According to the study findings, outsourcing non-essential logistic functions ensures reduced costs and high performance within firms. This exemplifies PWC's (2015) report that shared services in the supply chain is one of the modern strategies to ensure cost reduction.

Domingues and Gomes (2011) investigated the impact of shared services on the performance of Portuguese public sector. The study determined that logistic shared services employees can better detect and react to changes in client needs thanks to a unified customer-oriented perspective. Regional center-based shared services models are also well-positioned to cater for regional requirements, laws, and language. Logistics service centres may discover opportunities to add or remove services from the portfolio and reallocate resources to meet the most urgent service requirements by proactively managing the customer relationship. Moreover, the study determined that shared services may reach out to a wider audience with new-in-kind offerings thanks to visibility into their client base, enabling them to rapidly achieve economies of scale and reduce service costs. In the shared services paradigm, process teams also report to a single leader who is in charge of establishing a unified, customer-focused vision for the shared services centre. This shared vision improves alignment with the overall service objective, allowing for improvements throughout the logistics service value chain.

2.3.4 Influence of Customer Service Shared Services on Cost Reduction

A report by World Bank Group (WBG, 2017) acknowledges the role of consumer-driven shared services as an approach to drive growth in business. According the summary, the approach aids institutions to focus on delivering strategic goals and less on non-core support services. The concept supports the findings by Mbugua and Kinoti (2011) that customer driven shared services have a significant impact on reduction of cost within firms. According to this research that examined the impact of shared services in EABL, the predominant drivers for reducing cost approaches put emphasis on customer services. According to WBG (2017) report, consumers need efficient and quick services founded on flexibility. In this regard, there is a need for business to manage the cost incurred to ensure customer satisfaction. Mbugua and Kinoti (2011) affirms that customer drive shared services ensure firms minimize on cost but also ensure customers' expectations are met.

A report by Institute of Management Accountants (2000) investigated the implementation of shared services within organizations. According to the report, institutions consistently use customer driven shared services as an approach to leverage limited resources to manage consumers concerns and needs. As businesses restructure approaches to enhance customers' service, research exemplifies the need for shared services to reduce the cost per unit. WBG (2017) report notes that the key to shared services is to eradicated bureaucracy and create responsive customer-driven processes beyond the need to minimize costs. Herbert and Seal (2012) affirm that shared service approach is applied to ensure market driven strategies are achieved within businesses. The Institute of Management Accountants (2000) report confirms that adoption of customer drive SS enables delivery of quality services at a lower cost. The study shows the importance of shared services in ensuring customers achieve satisfaction while firms minimize the costs incurred to engage the target population.

Duggal (2015) report on application of customer value to control and implement shared services examined the role of this concept in promoting efficiency and reducing cost. According to the report, shared services boost institutions' ability to execute cost saving approaches. The concept that is driven by the need to ensure customer value in business has an effect on cost per unit and enables managements to control risks while allocating lower resources to the initiative. A report by Deloitte (2019) examined the impact of shared services on modern businesses. From the report, it is clear that shared services are an acceptable model to enhance delivery of services and is a prevalent tactic by large institutions. It is an increasing practice to manage customers' needs and support marketing practices (Deloitte, 2015). As institutions seek for more hybrid approaches to reduce costs, consumer-driven shared services remain a strategic means to achieve the goals.

Strikwerda (2006) investigated the impact of shared services on the strategy, governance, and change within institutions. The findings are based on empirical review, theoretical consideration, experiences, and consulting experiences. According to the researcher, customer value is achieved through shared services approach that are aimed at reducing the cost incurred to manage the market. The findings are supported by a report by Deloitte (2019) that affirms the role of customer drive shared services in ensuring target consumers achieve the desired satisfaction. The report also exemplifies the need to implement the concept to ensure businesses reduce the cost incurred to manage customers. This is need especially for large institutions that have a wide range of consumers and forced to outsource services linked to non-essential activities (Deloitte, 2019). It is important to note that different reports and research exemplify the impact of customer driven shared services in reducing the costs incurred to manage consumers' needs and concerns.

Study by Duggal (2015) exemplifies the importance of shared services in managing and controlling costs incurred in delivering quality customers' services. From PWC (2015) report

it is a strategic model that ensures business attain the market expectations as they control and reduce the costs incurred. This is also exemplified by Deloitte (2019) report that emphasize the need for modern and large institutions to outsource the delivery of customer services as an approach to ensure effective management of market expectations and effective use of limited institutional resources.

Lauro (2013) examined the impact of shared services on customer support within institutions. According to the report, customer driven shared services model is an approach founded on self-services and assisted support through outsourced methods. From the report, shared services are a strategic approach to ensure consumers are satisfied and well engaged. Lauro (2013) exemplifies that it is a model adopted by business to save on the limited resources while managing consumers' requirements. This concept resonates with Mbugua and Kinoti (2011) findings that customer driven shared services model is an approach to reduce the cost incurred during advertisement and engagement with consumers. The research describes customer service shared services as a customer driven method that allows business to use limited resources to ensure buyers are satisfied and informed (Lauro, 2013). Deloitte (2019) acknowledges the role of customer driven shared services in ensuring value and reduction of per unit cost.

A study in Estonia by Tammel (2017) investigated the application of share services as an approach to reduce cost within the public sector. The study was conducted through interviews with 10 managers in the public companies. The findings determined that since cost of delivering services is charged to the final consumer, the sharing of customer services ensures that the services are priced competitively. This dynamic also drives the centre to cultivate a strong culture of continuous improvement, ensuring that they are constantly looking for new and more efficient methods to provide current and new customer services. Instead of relying on expensive training efforts to build in-house analytics knowledge, the customer service centre

might use creative ways to complete analytic work, such as recruiting specialists from a low-cost location, hiring contractual employees, or collaborating with an internal customer. Technology, processes and people are integrated in a centralized model, resulting in cost reductions.

2.4 Research Gaps

The empirical studies reviewed have illustrated several methodological, contextual and conceptual gaps. For example, the study by Redman et al. (2007) examined the relationship between sharing of human resource management functions and the ability to reduce cost in four NHS organizations. This study used a qualitative research design and selected data through 28 interviews. The study leaves some methodological gaps since the use of qualitative information can have issues of objectivity, bias and reliability of the collected data. The current study used a structured questionnaire whose validity and reliability were assessed.

Other studies such as Elston and MacCarthaigh (2016) and Paagman et al. (2015) have left some conceptual and theoretical gaps. For example, Paagman et al. (2015) assessed the effect of human resource shared services on cost reduction and did not focus on other critical shared services such as finance, customer service and logistics. Similarly, Lueg (2013) Häusser (2013) and Helbing et al. (2013) focused on finance shared services and did not focus on the other key shared services such as human resources and logistics. Besides, Selden and Wooters (2011) focused on human resource shared services on commercial firms. The findings from such a study would not be effectively generalizable to manufacturing firms. The current study informed on how shared services can be linked to cost reduction in manufacturing companies.

The various studies reviewed also had conflicting findings. For example, Wanyande (2015) examined the effect of finance shared services on the financial performance of manufacturing institutions listed at the Nairobi Security Exchange. The study established no

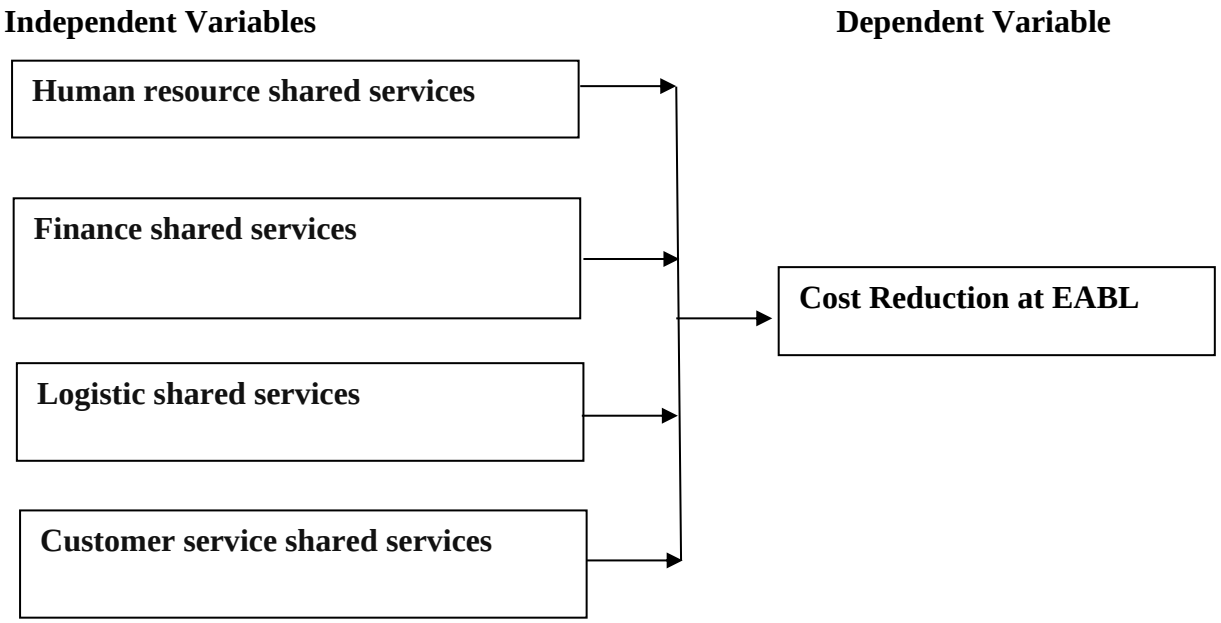
association between finance shared service and financial performance among manufacturing firms listed at NSE. These findings contradicted other studies such as Mbugua and Kinoti (2011), Domingues and Gomes (2011) and Miskon et al. (2010) who all found a significant association between finance shared services and cost reduction. The current study hence advanced the debate by adding to the extant literature on how finance shared services are linked to cost reduction at EABL. Though the study by Mbugua and Kinoti (2011) was conducted on EABL, the study focused on outsourcing of logistics which is different from sharing logistics resources, which is the focus of the current study.

2.5 Conceptual Framework

Figure 1 presents the conceptual framework that guided the study. The conceptual framework provides the hypothesized relationship between finance shared services, human resource shared services, logistics shared services. In the framework, it is hypothesized that human resource shared services, finance shared services, logistics shared services and customer service shared services have an influence on cost reduction at EABL. The relationship between the predictor and response variables is depicted in Figure 1.

FIGURE 1

Conceptual Framework



2.6 Operationalization of the Study Variables

The measurement and operationalization of variables is provided in this section. Operationalization is the procedure that defines variables into their measurable indicators. Table 1 provides the operationalization framework.

TABLE 1
Operationalization of the Variables

Variable	Measurements	Level of measurement
Human resource shared services	• Payroll processing • Benefits administration • Training and education • Relocation services	Ordinal (likert scale questions)
Finance shared services	• Insurance • Internal audit • Accounts receivable • Accounts payable • Purchasing • Cash management	Ordinal (likert scale questions)
Logistic shared services	• Materials handling • Order processing. • Inventory control • Warehousing. • Packaging • Transportation	Ordinal (likert scale questions)
Customer service shared services	• Customer queries • Customer complaints • Customer relationship management • Taking orders • Provision of product information	Ordinal (likert scale questions)
Cost reduction	• Savings on expenses • Savings on human resources • Savings on materials • Savings on time	Ordinal (likert scale questions)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides details of the research methodology applied to address the research problem and attain the research objectives. The chapter contains the research design, study population and the sample and sampling method. Besides, the research instrument, testing of the validity and reliability of the study instrument and data collection process are provided in the chapter. Furthermore, the data analysis methods, the empirical model and the diagnostic tests that were conducted are presented in the chapter.

3.2 Research Design

Research design is the theoretical plan within which a study is conducted (Creswell & Creswell, 2017). This study used the descriptive research design. Descriptive research design is a methodical approach to research that involves collecting information or observing a unit of analysis and defining the aspect of interest without influencing it in any way. This type of research design is appropriate when a study is interested in identifying categories, trends, relationships, characteristics and trends of a variable of interest (Zikmund et al., 2013).

This design was considered appropriate for this study as it enabled the study to gather information and determine the extent of human resource shared services, finance shared services, logistic shared services and customer service shared services at East African Breweries Limited (EABL). The design also enabled the study to gather data that indicate the extent that EABL has managed to experience cost reduction. Besides, the design enabled the study to determine the relationship that exists between the different forms of business shared services and cost reduction at EABL.

3.3 Target Population

A research population is a huge group of units, entities, objects or individuals that forms the central focus of a scientific research (Sharp et al., 2017). On the other hand, the target population in a study is the entire group of entities, units or individuals from which the sample is drawn (Easterby-Smith et al., 2012). This study's target population was all employees in management positions of EABL in the company's headquarters in Ruaraka, Nairobi Kenya. There were 238 employees with management capacity at EABL who were in top, middle and lower management positions. This target population was selected since information on business shared services is strategic in nature and only management level employees are expected to have the relevant information that the study sought.

The unit of analysis in the study was EABL while the units of observation were the management level employees. A unit of analysis is the object, unit, entity or individual that the study seeks to make conclusions about and which is the main focus of the study (Angrist & Pischke, 2014). A unit of observation, on the other hand, is the entity, object or item that is actually observed measured or data collected from, in seeking to gain insights into the unit of analysis (Colomb et al., 2016). In seeking to understand about business shared services and their association to cost reduction at EABL, the study sought information from the management level employees.

3.4 Sampling and Sampling Procedure

Collis and Hussey (2013) defines a sample as a collection of units, objects or individuals selected from the target population that participate in a study. A sample is the group of people who take part in the investigation. The study applied stratified sampling technique to select the sample. This sampling procedure was applied as the management level employees were

stratified into top, middle and lower-level management. The sampling was conducted to ensure that the sample selected is representative of the three management groups in the company.

The study used the sampling formula provided by Yamane (1967) to select the sample that participated in the study. The formula is;

$$n = \frac{\mathrm{N}}{1 + \mathrm{Ne}^2}$$

When 'n' in the formula represents the computed sample size, 'N' represents the target population and 'e' represents the applied significance level. The study applied a significance level of 5% (0.05). The computation of the sample is indicated hereunder.

$$n = \frac{238}{1 + 238(0.05)^2} = 149$$

The selected sample was 149 management level employees at EABL headquarters in Nairobi.

3.5 Research Instrument

The study utilized a structure questionnaire to collect data from the management level employees targeted in the study. Lincoln and Guba (2018) observe that a structured questionnaire is a quantitative data collection instrument with standardized, fixed scheme, and fixed order closed questions. These are aimed at gathering standardized responses that can be analysed using various summary descriptive and inferential statistics. The study questionnaire was developed with sections for each study variable and a section for demographic and general information about the study participants and the company. Besides, each variable had items designed to elicit responses that can be provided on a six-point Likert scale (0 = Not at all, 1 = To a small extent, 2 = To some extent, 3 = To a moderate extent, 4 = To a great extent and 5 = To a very great extent).

Questionnaire was applied in this study as it enabled the study to collect data from the large sample selected efficiently than other methods such as interviews. Moreover, structured

questionnaire was selected to collect data that can be used in testing hypothesis quantitatively. In designing the questionnaire, focus was on clarity of the questions, length of the questionnaire and comprehensibility of the questions in the questionnaire. Bell (2015) advices that when designing a questionnaire, one has to establish the information required to answer the research questions, draft the questions, refine the questions, develop the response format and design the questionnaire into an appropriate structure. The drafting of the questionnaire for this study followed these guidelines. Besides, an in-depth review of theoretical and empirical literature was conducted to ensure that the questionnaire covered all the content and constructs that the study focussed on.

3.6 Validity and Reliability of the Instrument

Testing the validity and reliability of the study instrument is critical to ensure its dependability in collecting useful data that can provide answers to the research questions. Validity is the capacity of the research tool to measure what it is designed to measure (Sharp et al., 2017). It is also indicated as the degree of systematic error in the study instrument (Collis & Hussey, 2013). The study tested the validity of the questionnaire through expert reviews by using a panel of experts on business shared services to determine construct, face and content validity of the instrument. The recommendations provided by the panel of experts was used to improve the validity of the questionnaire.

Reliability is the extent that a study instrument produces similar results on repeated trials. It is also the consistency or stability of measures or scores across raters or over time (Bolarinwa, 2015). Reliability of the questionnaire was assessed through a pilot test whose results were used to compute Cronbach’s alpha. Cronbach's alpha is an indicator of the questionnaire’s internal consistency. A questionnaire with Cronbach’s alpha of 0.7 and above

indicates that it has internal consistency whereas an alpha of below 0.7 indicates lack of internal consistency.

3.7 Data Collection Procedure

Data collection procedure outlines the steps and process of gathering the data for the study. The process of data collection in this study started after authorization for data collection was granted by the KCA university. This was then followed by printing the questionnaires and attaching the data collection authorization form. The researcher then visited the study location (EABL Head offices in Ruaraka, Nairobi, Kenya) where permission to conduct the study was sought from the human resources department of the organization. This was followed by procuring a list of all management level employees from the HR department.

Sampling of the respondents was conducted ensuring that a representative sample was selected from each management level. Thereafter, consent was sought from each potential respondent before administration of the questionnaire. Those who provided consent to participate were issued with the questionnaire whereas those who did not give consent were excluded from the study. The process continued until all questionnaires were issued. Collection of filled questionnaires was done once the respondents had filled the questionnaires. All collected questionnaires were safely stored ready for analysis.

3.8 Data Processing and Analysis

Data processing and analysis are the procedures and activities conducted in preparing and analysing the data. The collected questionnaires were first inspected to establish whether they were appropriately filled. The information in the questionnaires was then entered into Statistical Package for Social Sciences (SPSS) which enabled analysis. The study utilized

various analysis approaches and techniques including descriptive and inferential analysis techniques.

The descriptive analysis was applied on information on demographic characteristics, general information about EABL and the ratings on the independent and dependent variables. Frequencies and percentages were used to establish the distribution of the information sought on respondent's demographics. The study applied mean scores and standard deviations to establish the central tendency and dispersion of business shared services and cost reduction in EABL.

The inferential statistics used included correlation analysis and multiple regression analysis. Correlation analysis was applied to determine the association between the four aspects of business shared services (Human resource shared services, finance shared services, logistic shared services and customer service shared services) and cost reduction at EABL. Besides, the study used multiple linear regression to assess the influence of human resource shared services, finance shared services, logistic shared services and customer service shared services on cost reduction at EABL. This regression model was selected because the data was ordered on a six-point likert scale (0 = Not at all, 1 = To a small extent, 2 = To some extent, 3 = To a moderate extent, 4 = To a great extent and 5 = To a very great extent) and a mean rating determined. The regression model is;

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon \quad \text{...} (1)$$

In the model, Y = Cost reduction at EABL, α = Constant, β_i = Coefficients, X_1= Human resource shared services, X_2= Finance shared services, X_3= Logistic shared services, X_4= Customer service shared services and ε = Error term. The presentation of the study results was in form of figures (pie charts and bar graphs) and tables. These results were then presented and discussed in relation to the reviewed theoretical and empirical literature.

3.9 Diagnostic Tests

The study conducted various model specification tests to ensure that the ordinal logistic regression is appropriate for the study. These include test of linearity, test of multicollinearity, test of heteroscedasticity and test of normality of regression errors. The first test to be conducted was the linearity test. This test is conducted to ascertain whether there is a linear association between the independent and dependent variables before fitting the linear regression model (Wooldridge, 2015). The study used ANOVA test of deviation from linearity to assess the linear association between the variables. The null hypothesis in this test is that the independent and dependent variables have a linear association. The null hypothesis is hence accepted when the p values are above 0.05 and rejected when the p values are 0.05 or below (Wooldridge, 2015).

The second specification test conducted was the multicollinearity test. This test assesses the presence of high relationship between any two independent variables. Presence of multicollinearity undermines the statistical significance of the independent variables that are highly correlated (Gujarati, 2011). To assess multicollinearity, the study applied the variance inflation factor (VIF). Variables with multicollinearity have VIF of 5 or above while VIF below 5 indicates no multicollinearity (Gujarati, 2011).

After fitting the multiple linear regression model, the study conducted the test of heteroscedasticity. Heteroscedasticity is the presence of unequal scatter of the regression residuals at all values of the predicted variables. Heteroscedasticity is a problem because it makes the standard errors unreliable and thus making the confidence intervals to be too wide or too narrow (Linton, 2017). The study used Breusch–Pagan test to assess heteroscedasticity in the study. The null hypothesis in this test is that the errors are homoscedastic. The null hypothesis is hence accepted when the p value is above 0.05 and rejected when the p value is 0.05 or below (Linton, 2017).

Lastly, the study conducted the test of normality of the regression residuals. In any form of linear regression, the residuals should be normally distributed. Though violation of the assumption of normality of errors does not contribute to inefficiency or bias in the regression model, it could make computation of significance tests to be unreliable, mostly in small samples (Angrist & Pischke, 2014). The study applied the Shapiro-Wilk test to assess the normality of the error term. After fitting the multiple linear regression model, the errors were saved and the test generated. The null hypothesis in the test is that the residuals are normally distributed. The null hypothesis is accepted when the p value is above 0.05 and rejected when the p value is 0.05 or below (Angrist & Pischke, 2014).

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND DISCUSSION

4.1 Introduction

This section provides the procedures followed in analysing the collected data, the findings derived from the analysis and the discussion of the findings. The study first presents the response rate, the reliability findings and the demographic information. Further, the descriptive statistics of the independent and dependent variables are provided, diagnostic tests and the multiple linear regression model.

4.2 Response Rate

This study had targeted a sample of 149 management level employees holding lower, middle and top management positions at EABL headquarters in Nairobi, Kenya. Questionnaires were issued to all these potential respondents but those who filled and retuned the questionnaires were 117. This was a response rate of 78.5% which was considered adequate for the analysis and reporting of research findings.

4.3 Reliability of The Questionnaire

The researcher examined the reliability of the questionnaire through pilot test. Cronbach alpha coefficients were computed for all the study variables and the findings are provided in Table 2.

TABLE 2

Reliability of Questionnaire

Variable	No. of items	Cronbach alpha
Human resource shared services	9	0.956
Finance Shared Services	8	0.918
Logistics Shared Services	6	0.943
Customer Service Shared Services	5	0.919
Cost Reduction	11	0.979

The finding summarized in Table 2 indicate that the questionnaire had high reliability since all the Cronbach alpha coefficients were above 0.9, which was significantly above the threshold of 0.7.

4.4 Demographic Information

The analysis of demographic information sought in the study is presented in this section. This includes age of the respondents, their gender, highest level of education of the respondents and number of years the respondents had worked at EABL. Table 3 presents findings regarding age of the respondents.

TABLE 3

Age of Respondents

Age in years	Frequency	Percent
Below 30	1	.9
30 – 39	91	77.8
40 – 49	19	16.2
50 and over	6	5.1
Total	**117**	**100.0**

The findings summarized in Table 4.1 show that 77.8% of the respondents were aged between 30 and 39 years while only 0.9% were aged below 30 years. These findings indicate that most of the management employees at EABL were young and middle aged. The study also sought to the gender of the respondents. The findings are provided in Table 4.

TABLE 4

Gender of Respondents

Gender	Frequency	Percent
Male	70	59.8
Female	47	40.2
Total	**117**	**100.0**

The findings summarized in Table 4 indicate that 59.8% of the respondents were male while female respondents were 40.2%. These findings indicate that though male employees were the majority, the organization had observed gender equity regarding the representation of both male and female employees in management positions. Regarding highest level of education attained by the respondents, findings are summarized in Table 5.

TABLE 5

Highest Level of Education of Respondents

Highest education level	Frequency	Percent
Bachelor's degree	55	47.0
Postgraduate degree	62	53.0
Total	**117**	**100.0**

The findings displayed in Table 5 indicate that 53% of the respondents had attained post graduate degrees while 47% had attained first university degrees. These findings imply that a university education qualification, preferable a postgraduate degree was one of the key requirements for a managerial position at the organization. The study also assessed the number of years that the respondents had worked in the organization. The findings are provided in Table 6.

TABLE 6

Number of Years Worked in The Company

Number of years	Frequency	Percent
Below 5 years	12	10.3
5-10	94	80.3
11-15	7	6.0
16 and above	4	3.4
Total	**117**	**100.0**

The findings (Table 6) show that 80.3% of the respondents had worked in the organization for a period between 5 and 10 years. Only 3.4% had served in the organization for more than 16 years.

4.5 Study Variables

The study conducted a descriptive analysis of the study variables (independent and dependent) in the study. The findings of the descriptive analysis are provided in this section. This provides an analysis of the responses that were provided on a six-point Likert scale: 0 = Not at all, 1 = To a small extent, 2 = To some extent, 3 = To a moderate extent, 4 = To a great extent and 5 = To a very great extent. The means and standard deviations of the responses are provided which indicate the extent that EABL engaged in BSSM and the resultant cost reduction. The findings are provided according to the study variables.

4.5.1 Human Resource Shared Services

The study assessed the extent that EABL engaged in human resource shared services. This was assessed through asking the respondents to indicate the extent that EABL shared the listed human resource shared services. The responses were analyzed through means and standard deviation and the findings are provided in Table 7.

TABLE 7

Descriptive Statistics For Human Resource Shared Services

Human resource shared services	Mean	Std. Deviation
Payroll processing	2.8547	1.26126
Benefits administration	2.5641	1.26889
Training and education	2.2137	1.60188
Relocation services	2.3761	1.58509
Health Benefits	2.4872	1.80333
Employee claims	2.5128	1.72515
Employee counseling	2.1538	1.86444
Recruitment	2.6239	1.91512
Talent management	2.3063	1.69916

The study results summarized in Table 7 show that respondents indicated that EABL engaged in sharing of payroll processing services to a moderate extent (mean = 2.85, std. deviation = 1.26) and also indicated that EABL engaged in sharing of recruitment services to

a moderate extent (mean = 2.62, Std deviation = 1.92). Besides, findings showed that EABL shared benefits administration to a moderate extent (mean = 2.56, std deviation = 1.27) and also engaged in sharing of employee claims to a moderate extent (mean = 2.51, std deviation = 1.73). Additionally, findings indicate that EABL engaged in sharing of health benefits administration to some extent (mean = 2.49, std deviation = 1.80) and also shared relocations services (mean = 2.38, std deviation = 1.59), talent management (mean = 2.31, std deviation = 1.70) and training and education (mean = 2.21, std deviation = 1.60) to some extent. Furthermore, findings show that EABL shared employee counselling (mean = 2.15, std deviation = 1.86) to some extent. These findings indicated that EABL shared most of the human resource services to a moderate or some extent.

4.5.2 Finance Shared Services

The study investigated the extent that EABL engaged in finance shared services. This was assessed through providing statements to the respondents and requiring the respondents to indicate the extent that EABL shared the listed finance services. The responses were analyzed through means and standard deviation and the findings are provided in Table 8.

TABLE 8

Descriptive Statistics For Finance Shared Services

Finance Shared Services	Mean	Std. Deviation
Insurance	1.8803	1.55454
Internal audit	2.9060	1.54241
Cash management	3.0598	1.54970
Purchasing	3.2650	1.56135
Accounts receivable	3.2931	1.57158
Accounts payable	3.3504	1.34752
Inventory management	2.7350	1.59953
Customer billing	3.4017	1.34587

The study findings provided in Table 8 indicate that respondents were of the view that EABL engaged in sharing of customer billing to a moderate extent (mean = 3.40, std. deviation = 1.35) and also indicated that EABL engaged in sharing of accounts payable administration to a moderate extent (mean = 3.35, Std deviation = 1.35). Besides, findings showed that EABL shared accounts receivable management to a moderate extent (mean = 3.29, std deviation = 1.57) and also engaged in sharing of purchasing function to a moderate extent (mean = 3.27, std deviation = 1.56). Besides, findings indicate that EABL engaged in sharing of health benefits administration to a moderate extent (mean = 3.06, std deviation = 1.55) and also shared internal audit (mean = 2.91, std deviation = 1.54), and inventory management (mean = 2.74, std deviation = 1.60) to a moderate extent. Furthermore, findings indicated that EABL shared insurance function to some extent (mean = 1.88, std deviation = 1.55).

4.5.3 Logistics Shared Services

The study assessed the degree to which EABL engaged in logistics shared services. This was investigated through providing statements to the respondents and requiring them to indicate the extent that EABL shared the listed logistics services. The responses were analyzed through means and standard deviations and the findings are provided in Table 9.

TABLE 9

Descriptive Statistics For Logistics Shared Services

Logistics Shared Services	Mean	Std. Deviation
Inventory control	2.9316	1.54656
Materials handling	2.8205	1.69998
Order processing	3.1453	1.54398
Transportation	2.1368	1.75630
Warehousing	2.1538	1.74502
Packaging	2.1880	1.78080

The study findings summarized in Table 9 show that the respondents were of the view that EABL engaged in sharing of order processing to a moderate extent (mean = 3.14, std. deviation = 1.54) and also indicated that EABL engaged in sharing of inventory control to a moderate extent (mean = 2.93, Std deviation = 1.55). Besides, findings showed that EABL shared materials handing function to a moderate extent (mean = 2.82, std. deviation = 1.70). However, the respondents indicated that EABL engaged in sharing of packaging function to some extent (mean = 2.19, std deviation = 1.78). Besides, the study findings indicated that EABL engaged in sharing of warehousing (mean = 2.15, std deviation = 1.75) and transportation (mean = 2.14, std deviation = 1.76) to some extent. These findings show that EABL engaged in sharing of logistics services to a moderate and some extent.

4.5.4 Customer Service Shared Services

The study investigated the degree to which EABL engaged in customer service shared services. This was assessed through providing statements to the respondents and requiring them to indicate the extent that EABL shared the listed customer services. The responses were analyzed through means and standard deviations and the findings are provided in Table 10.

TABLE 10

Descriptive Statistics For Customer Service Shared Services

Customer Service Shared Services	Mean	Std. Deviation
Provision of product information	2.2564	1.75260
Customer queries	2.6410	1.72937
Taking orders	2.6752	1.89750
Customer relationship management	2.1966	1.73324
Customer complaints handling	2.2821	1.78038

The study results provided in Table 10 indicate that EABL engaged in sharing of order taking function to a moderate extent (mean = 2.68, std. deviation = 1.90) and also indicated that EABL engaged in sharing of customer queries function to a moderate extent (mean = 2.64,

Std deviation = 1.72). Besides, findings showed that EABL shared customer complaints handling function to some extent (mean = 2.28, std. deviation = 1.78). Moreover, the respondents indicated that EABL engaged in sharing of provision of product information function to some extent (mean = 2.26, std deviation = 1.75). Besides, the study findings indicated that EABL engaged in sharing of customer relationship management to some extent (mean = 2.20, std deviation = 1.73). These findings indicate that EABL engaged in sharing of customer service functions to a moderate and some extent.

4.5.5 Cost Reduction in EABL

The study's dependent variable was cost reduction. This was assessed through various statements that were rated on a six-point Likert scale: 0 = Not at all, 1 = To a small extent, 2 = To some extent, 3 = To a moderate extent, 4 = To a great extent and 5 = To a very great extent. This rating provided a feel of the extent that EABL had experienced cost reduction. The means and standard deviations of the responses were computed and the findings are summarized in Table 11.

TABLE 11

Descriptive Statistics For Cost Reduction in EABL

Cost reduction aspects	Mean	Std. Deviation
Reducing back-office headcount	3.1880	1.30603
Reducing the number of ICT systems	2.9231	1.48064
Reducing redundant activities	2.9316	1.63331
Reduction in duplication	2.7265	1.84589
Reduction in procurement costs	2.3604	1.87225
Reduction in inventory costs	2.7521	1.78551
Reduction in labour costs	2.7949	1.67403
Reduction in customer complaints	2.2479	1.72660
Reduction in human resource disciplinary cases	2.2051	1.79817
Reduction in staff conflicts	2.2671	1.65651
Reduction in bad debts	2.2564	1.88531

The findings summarized in Table 11 show that EABL had experienced reduction back-office headcount to a moderate extent (mean = 3.19, std. deviation = 1.31) and also indicated that EABL experienced reduction in redundant activities to a moderate extent (mean = 2.93, Std deviation = 1.63). Besides, findings showed that EABL experienced reduction in the number of ICT systems to a moderate extent (mean = 2.92, std. deviation = 1.48). Moreover, the respondents indicated that EABL had experienced reduction in labour costs to a moderate extent (mean = 2.79, std deviation = 1.67). Besides, the study findings indicated that EABL experienced reduction in inventory costs (mean = 2.75, std deviation = 1.79) and duplication (mean = 2.73, std deviation = 1.85) to a moderate extent.

Further findings indicate that EABL experienced reduction in procurement costs (mean = 2.36, std. deviation = 1.87), staff conflicts (mean = 2.27, std. deviation = 1.66), and bad debts (mean = 2.26, std. deviation = 1.88) to some extent. Moreover, findings showed that EABL experienced reduction customer complaints (mean = 2.25, std. deviation = 1.73), and human resource disciplinary cases (mean = 2.21, std. deviation = 1.80) to some extent. These findings imply that EABL experienced reduction in costs in its various functions and aspects to a moderate and some extent.

4.6 Diagnostic Tests

The study conducted a multiple linear regression to enable answering of the study's questions. To perform the multiple linear regression, the mean of the items for each variable were used. However, before fitting them model the multiple linear regression assumptions of linearity and no multicollinearity were evaluated. Besides, after fitting the model, the assumptions of homoscedasticity and normality of regression residuals were evaluated. This section provides the results of the tests of the regression assumptions.

4.6.1 Linearity Test

The first test to be conducted was the linearity test. This test is conducted to ascertain whether there is a linear association between the independent and dependent variables before fitting the linear regression model (Wooldridge, 2015). The study used ANOVA test of deviation from linearity to assess the linear association between the variables. The null hypothesis in this test is that the independent and dependent variables have a linear association. The null hypothesis is hence accepted when the p values are above 0.05 and rejected when the p values are 0.05 or below. The findings are provided in Table 12,

TABLE 12

Test of Linear Association Between Predictor And Dependent Variables

Linear association	df	Mean Square	F	Sig.
Cost Reduction * HRSS	3	1.725	1.099	0.410
Cost Reduction * FSS	3	1.222	1.083	0.562
Cost Reduction * LSS	3	1.893	1.111	0.348
Cost Reduction * CSSS	3	1.729	1.098	0.411

The findings summarized in Table 12 show that all the independent variables had a linear association with cost reduction. This is because all the p values of the deviation from linearity were above 0.05. This hence satisfied the assumption of linear regression that the dependent and independent variables need to have a linear relationship.

4.6.2 Multicollinearity Test

The second specification test conducted was the multicollinearity test. This test assesses the presence of high relationship between any two independent variables. Presence of multicollinearity undermines the statistical significance of the independent variables that are highly correlated (Gujarati, 2011). To assess multicollinearity, the study applied the variance inflation factor (VIF). Variables with multicollinearity have VIF of 5 or above while VIF below 5 indicates no multicollinearity. The findings are summarized in Table 13.

TABLE 13

Test of Multicollinearity

	Collinearity Statistics	
Predictor variables	**Tolerance**	**VIF**
Human resource shared services	.420	2.383
Finance shared services	.457	2.187
Logistics shared services	.379	2.636
Customer service shared services	.447	2.236

The findings summarized on Table 13 indicate that the assumption of no multicollinearity was not violated. This was because all the independent variables had VIFs of below 5 which implies that there was no multicollinearity.

4.6.3 Homoscedasticity Test

After fitting the multiple linear regression model, the study conducted the test of heteroscedasticity. Heteroscedasticity is the presence of unequal scatter of the regression residuals at all values of the predicted variables. Heteroscedasticity is a problem because it makes the standard errors unreliable and thus making the confidence intervals to be too wide or too narrow (Linton, 2017). The study used Breusch–Pagan test to assess heteroscedasticity in the study. The null hypothesis in this test is that the errors are homoscedastic. The null hypothesis is hence accepted when the p value is above 0.05 and rejected when the p value is 0.05 or below.

Table 14

Breusch Pagan Test of Homoscedasticity

Test statistic	**Chi square**	**Prob > Chi square**
Breusch Pagan	2.454	.211

The study results summarized in Table 14 indicate that the chi square value was 2.454 which is not significant at 5% ($p = 0.211$). This indicates that there was no evidence to reject the null hypothesis of homoscedasticity and hence homoscedasticity was assumed.

4.6.4 Test of Normality of Residuals

Lastly, the study conducted the test of normality of the regression residuals. In any form of linear regression, the residuals should be normally distributed. Though violation of the assumption of normality of errors does not contribute to inefficiency or bias in the regression model, it could make computation of significance tests to be unreliable, mostly in small samples (Angrist & Pischke, 2014). The study applied the Shapiro-Wilk test to assess the normality of the error term. After fitting the multiple linear regression model, the errors were saved and the test generated. The null hypothesis in the test is that the residuals are normally distributed. The null hypothesis is accepted when the p value is above 0.05 and rejected when the p value is 0.05 or below. The results of the normality test are provided in Table 15.

TABLE 15

Tests of Normality of Residuals

	Kolmogorov-Smirnov			**Shapiro-Wilk**		
	Statistic	df	Sig.	Statistic	df	Sig.
Unstandardized Residuals	.612	111	.168	.965	111	.171

The findings provided in Table 15 indicate that the null hypothesis that the unstandardized errors of the regression were normally distributed could not be rejected based on the evidence (Shapiro wilk statistic = 0.965, p = 0.171). This finding implies that the null hypothesis that the errors of the regression model were normally distributed was accepted, and thus the assumption of normality was attained.

4.7 Correlation Analysis

To determine the linear relationship between the study variables, the researcher used bivariate correlation analysis. Table 16 summarizes the study's results. The findings show that

human resource shared services ($r = 0.728$, $p < 0.05$), finance shared services ($r = 0.552$, $p < 0.05$), logistics shared services ($r = 0.684$, $p < 0.05$) and customer service shared services ($r = 0.527$, $p < 0.05$) all had significant positive relationship with cost reduction.

TABLE 16

Correlation of the Study Variables

Variables		1	2	3	4	5
1. Human resource shared services	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	117				
2. Finance shared services	Pearson Correlation	.323**	1			
	Sig. (2-tailed)	.001				
	N	117	117			
3. Logistics shared services	Pearson Correlation	.575**	.730**	1		
	Sig. (2-tailed)	.000	.000			
	N	117	117	117		
4. Customer service shared services	Pearson Correlation	.593**	.363**	.414**	1	
	Sig. (2-tailed)	.000	.000	.000		
	N	117	117	117	117	
5. Cost Reduction	Pearson Correlation	.728**	.552**	.684**	.527**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	117	117	117	117	117

**. Correlation is significant at the 0.01 level (2-tailed).

4.8 Multiple Regression Model Fitting

The multiple linear regression was fitted after the main assumptions of the linear regression analysis were satisfied. In fitting the linear regression model, the mean rating of all the items of each of the study variables were used. The independent variables were human resource shared services, finance shared services, logistics shared services and customer service shared services. The dependent variable in the study was cost reduction. The findings of the multiple linear regression model including the model summary, the analysis of variance (ANOVA) and the significance of the independent variables is provided in this section. Table 17 provides the model summary.

TABLE 17

Multiple Regression Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.784[a]	.615	.600	1.08200

a. Predictors: (Constant), Human resource shared services, Finance shared services, Logistic shared services, Customer service shared services

The findings summarized in Table 17 indicate that the correlation coefficient (r), was 0.784 indicating that there was a string linear association between the independent variables and the dependent variable. Besides, the coefficient of determination (r squared = 0.615) indicates that 61.5% of the variance in cost reduction at EABL was explained by the four independent variables (Human resource shared services, finance shared services, logistics shared services and customer service shared services) included in the study. This also implies that 38.5% of the variation in cost reduction at EABL was explained by the error term and other factors that were not included in the model.

Table 18 provides findings on the ANOVA of the regression model. the findings provide the source of the variance, the sum of squares, the means square and the f and its resultant significance value.

TABLE 18

Analysis of Variance of the Multiple Regression Model

Source of variance	Sum of Squares	df	Mean Square	F	Sig.
Regression	197.814	4	49.454	42.242	.000[b]
Residual	124.096	106	1.171		
Total	321.910	110			

a. Dependent Variable: Cost Reduction

b. Predictors: (Constant), Human resource shared services, Finance shared services, Logistic shared services, Customer service shared services

The findings summarized in Table 18 indicate that the model was statistically significant ($F = 42.242$, $p < 0.05$) and a good fit for the data. These findings imply that at least one of the independent variables had a significant influence on the cost reduction at EABL.

The significance of the independent variables in explaining the dependent variable was assessed and the findings are displayed in Table 19.

TABLE 19

Significance of Coefficients in the Multiple Regression Model

	Unstandardized Coefficients		Standardized Coefficients		
Variables	**B**	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	-.238	.286		-.832	.407
Human resource shared services	.470	.113	.388	4.171	.000
Finance shared services	.209	.090	.208	2.328	.022
Logistic shared services	.226	.098	.227	2.315	.023
Customer service shared services	.182	.112	.146	1.620	.108

a. Dependent Variable: Cost Reduction

The findings presented in Table 19 provides the significance of the independent variables (human resource shared services, finance shared services, logistic shared services and customer service shared services) in explaining the dependent variable (cost reduction). The constant term in the regression model was -0.238 indicating that when EABL does not engage in BSSM, it would experience an increase in costs. This is also the level of cost reduction when all the other independent variables (human resource shared services, finance shared services, logistic shared services and customer service shared services) are set at zero.

The study findings (Table 19) determined that human resource shared services had a significant positive influence on cost reduction in EABL ($\beta = 0.470$, $p < 0.05$). These findings enabled the study to answer the first research question, what is the influence of human resource shared services on cost reduction in EABL? The findings also indicated that when all other

factors are held constant, a one unit change in human resources shared services would result in a direct change of 0.470 in cost reduction at EABL.

Regarding finance shared services, the study findings (Table 19) determined that finance shared services had a significant positive influence on cost reduction in EABL (β = 0.209, p = 0.022). These findings enabled the study to answer the second research question, To what extent does finance shared services influence cost reduction in EABL? The findings also imply that when all other factors are held constant, a one unit change in finance shared services would result in a direct change of 0.209 in cost reduction at EABL.

The study findings (Table 19) showed that logistics shared services had a significant positive influence on cost reduction in EABL (β = 0.226, p = 0.023). These findings enabled the study to answer the study's third research question, what is the influence of logistic shared services on cost reduction in EABL? The findings also imply that when all other factors are held constant, a one unit change in logistics shared services would result in a direct change of 0.226 in cost reduction at EABL.

Regarding customer service shared services, the study findings (Table 19) determined that customer service shared services had no significant influence on cost reduction in EABL (β = 0.182, p = 0.108). These findings enabled the study to answer the fourth research question, what is the influence of customer service shared services on cost reduction in EABL? The findings imply that engaging in customer service shared services would have no notable effect on cost reduction at EABL.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides the summary of the study, the study conclusions, the discussion of the findings and the recommendations. Besides, the chapter offer suggestions for further research.

5.2 Summary

This section offers a summary of the findings after data analysis. The findings are provided in this section based on each research objective. The presentation of the summary of the findings culminates in providing answers to the study's research questions.

5.2.1 Influence of Human Resource Shared Services on Cost Reduction

The study findings determined that human resource shared services had a significant positive influence on cost reduction in EABL ($\beta = 0.470$, $p < 0.05$). These findings enabled the study to answer the first research question, what is the influence of human resource shared services on cost reduction in EABL? The findings also indicated that when all other factors are held constant, a one unit change in human resources shared services would result in a direct change of 0.470 in cost reduction at EABL. Further study results indicate the extent that EABL engaged in human resource shared services. The study results show that EABL engaged in sharing of payroll processing services to a moderate extent (mean = 2.85, std. deviation = 1.26) and also that EABL engaged in sharing of recruitment services to a moderate extent (mean = 2.62, Std deviation = 1.92). Besides, findings showed that EABL shared benefits administration to a moderate extent (mean = 2.56, std deviation = 1.27) and also engaged in sharing of employee claims to a moderate extent (mean = 2.51, std deviation = 1.73). Additionally, findings indicate that EABL engaged in sharing of health benefits administration to some extent

(mean = 2.49, std deviation = 1.80) and also shared relocations services (mean = 2.38, std deviation = 1.59), talent management (mean = 2.31, std deviation = 1.70) and training and education (mean = 2.21, std deviation = 1.60) to some extent. Furthermore, findings show that EABL shared employee counselling (mean = 2.15, std deviation = 1.86) to some extent. These findings indicated that EABL shared most of the human resource services to a moderate or some extent, but still human resources shared services had a significant influence on cost reduction in the organization.

5.2.2 Influence of Finance Shared Services on Cost Reduction

Regarding finance shared services, the study findings determined that finance shared services had a significant positive influence on cost reduction in EABL ($\beta = 0.209$, $p = 0.022$). These findings enabled the study to answer the second research question, To what extent does finance shared services influence cost reduction in EABL? The findings also implied that when all other factors are held constant, a one unit change in finance shared services would result in a direct change of 0.209 in cost reduction at EABL. Further study findings indicate that EABL engaged in sharing of customer billing to a moderate extent (mean = 3.40, std. deviation = 1.35) and also indicated that EABL engaged in sharing of accounts payable administration to a moderate extent (mean = 3.35, Std deviation = 1.35). Besides, findings showed that EABL shared accounts receivable management to a moderate extent (mean = 3.29, std deviation = 1.57) and also engaged in sharing of purchasing function to a moderate extent (mean = 3.27, std deviation = 1.56). Besides, findings indicate that EABL engaged in sharing of health benefits administration to a moderate extent (mean = 3.06, std deviation = 1.55) and also shared internal audit (mean = 2.91, std deviation = 1.54), and inventory management (mean = 2.74, std deviation = 1.60) to a moderate extent. Furthermore, findings indicated that EABL shared insurance function to some extent (mean = 1.88, std deviation = 1.55). The findings indicated

that though finance shared services had a significant influence on cost reduction in EABL, the sharing of those services was to a moderate and some extent.

5.2.3 Influence of Logistic Shared Services on Cost Reduction

The study findings showed that logistics shared services had a significant positive influence on cost reduction in EABL ($\beta = 0.226$, $p = 0.023$). These findings enabled the study to answer the study's third research question, what is the influence of logistic shared services on cost reduction in EABL? The findings also imply that when all other factors are held constant, a one unit change in logistics shared services would result in a direct change of 0.226 in cost reduction at EABL. The study findings on the extent that EABL engaged in logistics shared services showed that EABL engaged in sharing of order processing to a moderate extent (mean = 3.14, std. deviation = 1.54) and also indicated that EABL engaged in sharing of inventory control to a moderate extent (mean = 2.93, Std deviation = 1.55). Besides, findings showed that EABL shared materials handing function to a moderate extent (mean = 2.82, std. deviation = 1.70). However, the respondents indicated that EABL engaged in sharing of packaging function to some extent (mean = 2.19, std deviation = 1.78). Besides, the study findings indicated that EABL engaged in sharing of warehousing (mean = 2.15, std deviation = 1.75) and transportation (mean = 2.14, std deviation = 1.76) to some extent. These findings show that though logistics shared services had a significant influence on cost reduction of EABL, the organization engaged in sharing of logistics services to a moderate and some extent.

5.2.4 Influence of Customer Service Shared Services on Cost Reduction

Regarding customer service shared services, the study findings determined that customer service shared services had no significant influence on cost reduction in EABL ($\beta = 0.182$, $p = 0.108$). These findings enabled the study to answer the fourth research question, what is the

influence of customer service shared services on cost reduction in EABL? The findings imply that engaging in customer service shared services would have no notable effect on cost reduction at EABL. The study results further provided evidence regarding the extent that EABL engaged in customer service shared services. The findings indicated that EABL engaged in sharing of order taking function to a moderate extent (mean = 2.68, std. deviation = 1.90) and also indicated that EABL engaged in sharing of customer queries function to a moderate extent (mean = 2.64, Std deviation = 1.72). Besides, findings showed that EABL shared customer complaints handling function to some extent (mean = 2.28, std. deviation = 1.78). Moreover, EABL engaged in sharing of provision of product information function to some extent (mean = 2.26, std deviation = 1.75). Besides, the study findings indicated that EABL engaged in sharing of customer relationship management to some extent (mean = 2.20, std deviation = 1.73). These findings indicate that EABL engaged in sharing of customer service functions to a moderate and some extent, through engaging in customer services shared services did not have a significant influence on cost reduction of the organization.

5.3 Discussion of Findings

The study findings (Table 4.16) determined that human resource shared services had a significant positive influence on cost reduction in EABL ($\beta = 0.470$, $p < 0.05$). These findings support the transaction cost theory by North (1992), which posits that efficiency as the main motivation that makes firms to enter into inter-departmental or inter-firm partnerships or collaborations. This theory further indicates that an organization can experience decrease its total operational costs by collaborating with inside or outside partners to provide some non-strategic services. The transaction cost theory was supported by the findings from this study as cost reduction was the result when human resource services were shared by various subsidiaries, business units or branches of EABL.

The study findings of the positive influence of human resource shares service so cost reduction support the findings by Redman, Snape, Wass, and Hamilton (2007) examined the relationship between human resource shared services on the ability to reduce cost in four NHS organizations. The qualitative research determined that human resource shared services have a significant impact on institutions' ability to reduce cost of operations. The study also has similar findings to the study by Tammel (2017) who investigated the application of shared services as an approach to reduce cost within the public sector in Estonia. The findings exemplified that human resource shared services are a paramount element in managing costs reduction.

The study findings about human resources shared services also concur with the findings by Elston and MacCarthaigh (2016) who established that human resource shared services are a strategic approach to reform institutions under financial pressure. Other studies with similar findings to this study include Paagman, Tate, Furtmueller and Bloom (2015), and Selden and Wooters (2011) who examined the emerging trends in human resource management especially adoption of shared services. Wandera (2016) who examined the impact of human resource shared services on the performance of multinational companies in Kenya also had similar findings to the findings from this study. Similarly, Elston and Maccarthaigh (2016), and Meijerink, Bondarouk, and Looise (2013) who examined the concept of creating value within business through human resource shared services had comparable findings to the findings from this study.

Regarding finance shared services, the study findings determined that finance shared services had a significant positive influence on cost reduction in EABL ($\beta = 0.209$, $p = 0.022$). These findings support the transaction cost theory by North (1992) which denotes that transaction costs are the main determinants whether firm undertakings will be shared or every department, branch or subsidiary will have its own separate department to provide the services.

Putting emphasis on the benefits of capabilities, most scholars have opined that organizations tend to share those back-office services that provide maximum savings and cost reduction when shared by many departments or subsidiaries such as finance services as indicated by Akbar and Tracogna (2018). This resonates to the findings from this study.

The study findings on the positive influence of finance shared services on cost reduction agrees with the findings by Lueg (2013) who determined that implementation of finance shared services is a widely accepted method to gain efficiency and reduce costs within firms. This was also supported by Helbing, Rau, and Riedel (2013) who showed that finance shared services is an important driver to enhance effectiveness and achieving cost-saving for account functions. Another study by Häusser (2013) who examined the relationship between finance shared services and performance among corporates had similar findings. According to the research, finance shared services is an important aspect within the business environment. FSS ensures firms attain cost effectiveness by eliminating unnecessary expenses and activities within during production processes.

The findings from this study also concur with the findings by Domingues and Gomes (2011) who investigated the impact of finance shared services on the performance of Portuguese public sector. According to the researchers, to enhance quality of service delivery, implementation of shared services ascertains transformation and efficiency within the sector. Domingues and Gomes (2011) affirmed that finance shared services embrace the concept of reducing costs and ensuring effectiveness while delivering services or producing goods. The findings from this study were also supported by Miskon, Bandara, Fielt, and Gable (2010) who investigated the role of finance shared services through a review of previous studies. According to the researchers, finance shared services is a superior approach to lowering operational costs which is extensively adopted in practice to improve institutional performance by ensuring supportive functions are efficiently implemented.

Other studies with similar findings to the findings of this study include Leibfried (2007) who affirms that shared services are a strategic approach to manage performance. Similarly, Helbing, Rau, and Riedel (2013) also exemplify that FSS is a process that is achieved through effective budget process that eliminates redundancy of activities. Moreover, Wang (2007) who sought to examine the performance analysis of implementing shared services within the business environment had similar findings. The researcher established that finance shared services was an approach to standardize and consolidate common functions and costs as an approach to reduce operational expenses.

Similarly, the study by Mbugua and Kinoti (2011) which found that FSS strategy has played a significant role in reducing costs within the East African Breweries Limited had comparable findings to this study. Similarly, the studies by Herbert and Seal (2012) who examined the impact of shared services as a form of improving accounting functions within institutions, and Wanyande (2015) who examined the effect of finance shared services on the financial performance of manufacturing institutions listed at the Nairobi Security Exchange had comparable findings to the findings from this study.

The study findings showed that logistics shared services had a significant positive influence on cost reduction in EABL ($\beta = 0.226$, $p = 0.023$). These findings are supported by the platform theory developed by Halman et al. (2003) which describes platform thinking as the process of identifying and exploiting commonalities among a firm's offerings, target markets, and the processes for creating and delivering offerings, and developing a successful strategy to create variety with an efficient use of resources such as time and costs. Key in the platform thinking approach is the sharing of components, services, modules and other assets across a family of business units, branches, subsidiaries or products such as in sharing of logistics services. The findings from this study resonate with the theory as the advantages of sharing logistics services were cost reduction as predicted in theory.

The findings regarding the effect of logistics shared services on cost reduction support the findings by Dan, Wu, Zhang, and Xiao (2007) who determined that logistics shared services is an approach for firms to reduce the cost of moving goods to its end users. Another corresponding research by Xu, Niu, and Cai (2020) which examined the role of shared services in the transportation cost management. Based on the concept of shared logistics, the study determined that allocation of scarce resources in the transportation of products remains an important aspect of reducing the cost of production. This also concurs with previous findings by Deloitte (2015) that affirms the need for shared services in management of logistics operations within firms.

The findings from this study of the positive influence of logistics shared services on cost reduction concur with previous findings by Van der Linde, Boessenkool, and Jooste (2006) in a study that sought to examine the key success factors for managing shared services within institutions. According to the study, logistics is one of the strategic operations where businesses have adopted the concept of shared services. From the research, it is evident that as institution seek to reduce the costs of production, movement of products have been a strategic means to reduce expenses. Similarly, this study's findings agree with findings by Themido, Arantes, Fernandes, and Guedes (2000) who examined the factors influencing logistic costs. According to the study, institutions that operate shared warehousing services benefit from reduced cost within their supply chain operations. This exemplifies that shared services within the logistic functions enables firms to reduce cost and enhance efficiency which collaborates the findings from this study.

Other previous studies with findings that are similar to this study include Themido et al. (2000), and PriceWaterhouseCoopers (PWC) (2015) which exemplified the future of the logistic sector and approaches to lower the cost of moving products. Besides, the findings from this study concur with findings by Xu, Niu, and Cai (2020), Themido et al. (2000), Mbugua

and Kinoti (2011) and Kalinzi (2016) who examined the relationship between outsourcing logistic services and the efficiency within the supply chain. All these studies had findings which indicated that logistic shared services model was significantly effective in cost reduction.

Regarding customer service shared services, the study findings determined that customer service shared services had no significant influence on cost reduction in EABL ($\beta = 0.182$, $p = 0.108$). These findings are not supported by the platform theory by Halman et al. (2003) which posits that when an organization has a platform to share common services and functions such as customer service, it can benefit from efficiency. The findings from the study also contradict the observation by Robertson and Ulrich (1998) that platform thinking can contribute to more efficiency (costs, time, variety), flexibility (time to market), lower risk, improvement of service and effectiveness (training, learning curve) when repetitive functions such as customer service are shared.

The findings from the current study contradict the findings by World Bank Group (2017) which indicated that customer service shared services are an approach to drive growth in business and reduce costs. The current study findings also contradict the findings by Mbugua and Kinoti (2011) which determined that customer service shared services have a significant impact on reduction of cost within firms. Other studies with contradictory findings to this study include Institute of Management Accountants (2000) which investigated the implementation of shared services within organizations. According to the study, institutions consistently use customer service shared services as an approach to leverage limited resources to manage consumers concerns and needs. As businesses restructure approaches to enhance customers' service, the research exemplifies the need for shared services to reduce the cost per unit. Similarly, the study contradicts the findings by Herbert and Seal (2012) which affirmed that customer service shared service approach is applied to ensure market driven strategies are

achieved within businesses, with one of the key outcomes being cost reduction. This was contradictory to the findings from the current study.

5.4 Conclusions

The study findings lead the study to the following conclusions. First, the study concludes that human resource shared services are vital for cost reduction in EABL. This comprises shared service relating to HR services such as payroll processing, recruitment, benefits administration and employee claims. Other HR shared services at EABL included health benefits administration, talent management, training and education, and employee counselling.

The study concludes that finance shared services are essential for cost reduction in EABL. Besides, the study concludes that vital finance services that are shared in EABL include customer billing, accounts payable administration, accounts receivable management, purchasing, internal audit and inventory management. Sharing of these finance services enabled EABL to have significant effect on its cost reduction

Regarding logistic shared services, the study concludes that engaging in logistics shared services is necessary for cost reduction in EABL. EABL engaged in various shared logistics services that included order processing, inventory control, and materials handing. However, EABL engaged in sharing packaging function, warehousing and transportation to a small extent.

The study lastly concludes that customer service shared services were not instrumental in cost reduction in EABL. This was despite the organization moderately engaging in shared services regarding order taking function, customer queries function, and management of customer complaints.

5.5 Recommendations

The conclusions of the study lead to the following recommendations. First, the study determined that though human resource shared services contributed towards cost reduction in EABL, the organization only engaged in sharing of health benefits administration, relocations services, talent management, training and education and employee counselling to a small extent. The study hence recommends to EABL to expand its human resources sharing model to include these services since this could help the organization to efficiency and reduce waste. Besides, the study recommends to EABL to enhance its sharing model to incorporate various repetitive HR tasks as this could enable the company to rise above the competition.

Regarding finance shared services, the study determined that they were instrumental for cost reduction in EABL. However, the study determined that EABL engaged in sharing of finance functions to a moderate and small extent. The study hence recommends that EABL should enhance the portfolio of activities in the business services sharing model. This could make it easy to for the organization to standardize finance processes across the whole organization, ensuring that not only is the organization running at peak efficiency, but that its clients are getting the same high-quality experience regardless of whatever department they interact with. Besides, incorporating more finance activities and processes in the BSSM makes training of employees in the finance department a lot easier. This is because the organization does not have to locate a separate training course for each department because they are all expected to function and act in the same way while dealing with financial transactions, activities and processes.

Concerning logistics shared services, the study determined that they are essential for cost reduction for EABL. However, the study determined that EABL engaged in sharing of packaging function, warehousing and transportation to a small extent. The study recommends to adopt the BSSM to a greater extent relating to sharing of these critical logistics functions.

This would foster a distinct culture of collaboration in a shared services centre, where workers are able to combine their expertise to successfully finish these logistics services efficiently. Besides, sharing these logistics functions will enable EABL to experience and mentality to optimize your business model, as well as the talents to make that model a reality. This will also allow the organization to get the most out of its employees by grouping departments and functions together depending on how well they complement each other.

Lastly, the study concludes that sharing customer service functions may not be beneficial for the organization. This is because shared service implementation can potentially cause issues within the firm. Customer service employees who formerly provided services in numerous business divisions, for example, may be dissatisfied with the new arrangement's loss of control. Furthermore, staff at the headquarters who provide shared services from a central location may be hesitant to treat business units as clients, and to provide the exclusive service that a department would want to provide its clients. Since customer services is a critical function that deals with outside stakeholders, switching to a shared services environment, in reality, would necessitate EABL engaging in the development of new skills, with a greater emphasis on flexibility and customer service.

5.6 Recommendations for Further Research

This study provided evidence on how the BSSM influences cost reduction. The study focussed on EABL and only focussed on sharing on four key functions which are human resources, customer services, finance and logistics. Based on the current cutthroat competition in the operating environment for all firms, interest in the BSSM is increasing. Though this study depicted the influence of BSSM model to a business by combining service functions into a single department, and how the BSSM can eliminate service duplication and business unit silos inside enterprises, further research is required in other organizations to determine whether

similar benefits are experienced. The study should not only focus on large organizations like EABL but should also focus on medium enterprises. Moreover, implementation of the BSSM model can be riddled with challenges that may make various organizations fail to experience the promised benefits. This study hence recommends further research onto the challenges in implementation of BSSM that could enable management to under stand the challenges so that they can devise appropriate responses.

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APPENDICES

Appendix I: Questionnaire to Management Level Employees at EABL

The purpose of this questionnaire is to gather information on business shard serves at EABL and how these has enabled EABL to attain cost reduction. You have been selected in the study due to your involvement in management and the expectation that this has provided you with experience about business shared services concept and its applicability in EABL.

Please submit correct data since the information you provide may be used to influence policy and aid improvement initiatives. Please enter the required information by filling in the blanks or selecting the relevant option from the drop-down menu. The information you give will be used only for academic purpose.

SECTION A: GENERAL INFORMATION

1. Please indicate your age in years

   Below 30 [ ]
   30 – 39 [ ]
   40 – 49 [ ]
   50 and over [ ]

2. What is your gender?

   Male [ ]
   Female [ ]

3. What is your highest level of education?

   College Certificate [ ]
   College Diploma [ ]
   Bachelor's degree [ ]
   Postgraduate degree [ ]

4. Indicate the number of years you have worked in this company.

   Below 5 years [ ]
   5 – 10 years [ ]
   11 – 15 years [ ]
   16 and above [ ]

SECTION B: HUMAN RESOURCE SHARED SERVICES

1. For the human resource shared services provided in the table below, please indicate the extent that EABL engages in those shared services. Use the following rating: 0 = Not at all, 1 = To a small extent, 2 = To some extent, 3 = To a moderate extent, 4 = To a great extent and 5 = To a very great extent.

Statement	0	1	2	3	4	5
Payroll processing						
Benefits administration						
Training and education						
Relocation services						
Health Benefits						
Employee claims						
Employee counseling						
Recruitment						
Talent management						

SECTION C: FINANCE SHARED SERVICES

1. For the finance shared services provided in the table below, please indicate the extent that EABL engages in those shared services. Use the following rating: 0 = Not at all, 1 = To a small extent, 2 = To some extent, 3 = To a moderate extent, 4 = To a great extent and 5 = To a very great extent.

Statement	0	1	2	3	4	5
Insurance						
Internal audit						
Cash management						
Purchasing						
Accounts receivable						
Accounts payable						
Inventory management						
Customer billing						

SECTION D: LOGISTIC SHARED SERVICES

1. For the logistic shared services provided in the table below, please indicate the extent that EABL engages in those shared services. Use the following rating: 0 = Not at all, 1 = To a small extent, 2 = To some extent, 3 = To a moderate extent, 4 = To a great extent and 5 = To a very great extent.

Statement	0	1	2	3	4	5
Inventory control						
Materials handling						
Order processing						
Transportation						
Warehousing						
Packaging						

SECTION E: CUSTOMER SERVICE SHARED SERVICES

1. For the customer service shared services provided in the table below, please indicate the extent that EABL engages in those shared services. Use the following rating: 0 = Not at all, 1 = To a small extent, 2 = To some extent, 3 = To a moderate extent, 4 = To a great extent and 5 = To a very great extent.

Statement	0	1	2	3	4	5
Provision of product information						
Customer queries						
Taking orders						
Customer relationship management						
Customer complaints handling						

SECTION F: COST REDUCTION AT EABL AS A RESULT OF BUSINESS SHARED SERVICES

1. For the cost reduction aspects provided in the table below, please indicate the extent that EABL has experienced those reductions by engaging in business shared services. Use the following rating: 0 = Not at all, 1 = To a small extent, 2 = To some extent, 3 = To a moderate extent, 4 = To a great extent and 5 = To a very great extent.

Measure	0	1	2	3	4	5
Reducing back-office headcount						
Reducing the number of ICT systems						
Reducing redundant activities						
Reduction in duplication						
Reduction in procurement costs						
Reduction in inventory costs						
Reduction in labour costs						
Reduction in customer complaints						
Reduction in human resource disciplinary cases						
Reduction in staff conflicts						
Reduction in bad debts						

Thank you for your input