GREEN PROCUREMENT PRACTICES AND SUPPLY CHAIN MANAGEMENT IN PRIVATE COMPANIES: A CASE OF GRACE FORM U LTD MBALE BRANCH

DIANA CHEMUTAI

S22/MUC/BPLM/005

A DISSERTATION SUBMITTED TO THE SCHOOL OF BUSINESS IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A DEGREE OF BACHELOR OF PROCUREMENT AND LOGISTICS MANAGEMENT OF UGANDA CHRISTIAN UNIVERSITY

October, 2024

UGANDA CHRISTIAN UNIVERSITY

A Centre of Excellence in the Heart of Africa

DECLARATION

I Chemutai Diana, declare that the content of this research report is my original work and to the best of my knowledge this work has never been submitted anywhere for any award. It is done through my own efforts.

Signature: ..... Date: 28/8/2024.

CHEMUTAI DIANA

S22/MUC/BPLM/005

APPROVAL

This research report has been submitted with my approval as the university supervisor

Signature: ..... Date: 27/05/2024

MR.OWINO SAMSON

(UNIVERSITY SUPERVISOR)

DEDICATION

I dedicate this research report to my parents, Mr. Muyeke Augustine and Mrs. Justin Muyeke, whose unwavering financial support from my childhood through my higher education has been the foundation of my academic journey. Their sacrifices and encouragement have been instrumental in helping me achieve my goals. I also extend my heartfelt gratitude to my husband, Humuza Habibu, for his continuous support and understanding, which has been invaluable in my pursuit of academic excellence.

ACKNOWLEDGEMENT

I am deeply grateful to my research supervisor, Mr. Owino Sam, for his continuous guidance and unwavering support throughout the entire process of writing this report. His insightful feedback, expertise, and encouragement have been crucial to the development and completion of this work. Mr. Owino's dedication to my academic progress has been both inspiring and invaluable.

I would also like to express my profound appreciation to God for the gift of life, which has provided me with the strength and perseverance needed to undertake this research. His blessings have guided me through the challenges and triumphs of this journey, and I am truly thankful for the opportunity to pursue my academic goals.

Additionally, I extend my heartfelt thanks to my loving husband, Mr. Humuza Habibi. His support, encouragement, and willingness to give me the chance to return to school have been pivotal in my academic success. His understanding and dedication have been a source of motivation and strength throughout this journey.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF ACHRONYMNS

CIPS	:	Chartered Institute of Procurement & Supply
CVI	:	Content Validity Index
EPTA	:	Environmental Protection Agency
ERP	:	Enterprise Resource Planning
ESD	:	Early supplier development
HR	:	Human Resources
KPC	:	Kenya Pipeline Company
LCA	:	Life Cycle Assessment
REPA	:	Resource and Environmental Profile Analysis
SCM	:	Supply Chain Management
SCOR	:	Supply Chain Operations Reference
SPSS	:	Statistical Package for Social Sciences
TCT	:	Transaction cost theory
UCU	:	Uganda Christian University

ABSTRACT

This research was undertaken to examine green procurement practices and supply chain management in private companies. It was guided by three objectives; to find out the effect of e-procurement on supply chain management of grace form (U) Ltd**,** to analyze the effect of lean supply on supply chain management of grace form (U) Ltd, to assess the effect of supplier engagement on supply chain management of grace form (U) Ltd. The researcher used a sample size of 36 respondents and used questionnaires and interview guide to collect data and later the data was analyzed using the statistical package for social sciences (SPSS). Results of the first objective showed that e-procurement has a significant effect on supply chain management of grace form (U) Ltd. Supported by the following responses; 66% were positive to the statement that the firm implements e-procurement as a strategy due to increased competitor activity; 44% were positive to the statement that the firm continues to rely on mainly traditional procurement systems even through more advanced technologies are available; 50% were positive to the statement that the firm has faced a number of challenges in implementing E-procurement. Results of the second objective revealed that lean supply has a significant effect on supply chain management of grace form (U) Ltd. Supported by the following responses; 42% of the respondents were positive to the statement that there is supplies of products to the end customer in the most efficient manner possible, 55% of the respondents were positive to the statement that the firm incurs lower inventory costs, it can be observed that 56% were positive to the statement that there is an increase in productivity and flexibility. Results of the third objective showed that supplier engagement has a significant effect on supply chain management of grace form (U) Ltd**.** 61% forming the majority were positive to the statement that respondents basically focus on creating long term relationships with suppliers, 47% were positive to the statement that respondents simplify the process of working together as much as possible, 59% had a positive response to the statement that respondents understand each vendor and personalize the approach. There is need for superiors to employ inventory management strategies for tracking inventory levels and timing replenishment to combat this waste and reduce costs, so that an ecommerce business has just the right amount of inventory on hand just in time to meet customer demand.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter consists of background to the study, statement of the problem, purpose of the study, specific objectives, and research questions, scope of the study, significance of the study, conceptual framework and definition of key terms.

1.1 Background of the study

Green procurement practices and supply chain management in private companies have gained significant attention worldwide due to the growing concern for environmental sustainability. The movement towards sustainable business practices emerged in the late 20th century, as corporations recognized the need to address environmental issues along their supply chains (Min & Kim, 2012). In an international perspective, global organizations such as the United Nations Environment Programme (UNEP) and the World Trade Organization (WTO) have been instrumental in promoting sustainable procurement and advocating for the inclusion of environmental criteria in supply chain management (UNEP, 2009; WTO, 2011).

The global movement towards sustainable development and environmental conservation has brought increased attention to green procurement practices and supply chain management. The topic gained prominence in the 1990s as organizations recognized the need to reduce their environmental impact throughout their supply chains. International initiatives such as the United Nations Global Compact and the ISO 14001 environmental management standard have further incentivized companies to adopt green procurement practices globally (Darnall et al., 2019). As businesses increasingly operate in a global marketplace, it becomes crucial for companies to align their procurement practices and supply chain management with international sustainability goals. Since then, various international initiatives such as the United Nations Global Compact (UNGC) and the International Organization for Standardization (ISO) have played pivotal roles in promoting and standardizing green procurement practices globally.

In the context of Africa, sustainable procurement practices and supply chain management have become particularly relevant given the continent's abundant natural resources and the need for responsible resource management. Additionally, Africa has experienced rapid economic growth in recent decades, leading to increased consumption and environmental pressures. The African Union, through its various institutions and initiatives like the African Sustainable Development Goals (SDGs), aims to address sustainability challenges, including green procurement practices and supply chain management, to foster sustainable economic development (African Union, 2015). Furthermore, the adoption of green procurement practices and sustainable supply chain management has seen significant growth in recent years. As a region that heavily relies on natural resources and faces ecological challenges such as deforestation and water scarcity, African countries have recognized the importance of integrating environmental considerations into their procurement decisions (Mushunje et al., 2017). African Union initiatives like the African Green Growth Agenda and the Sustainable Development Goals have played a vital role in promoting sustainability and green practices across the continent.

In East African perspective, countries in this region have increasingly recognized the importance of sustainable practices. The East African Community (EAC), a regional intergovernmental organization comprising six member states, has emphasized the role of sustainable procurement and green supply chain management in fostering regional integration and sustainable development (EAC, 2018). With initiatives like the EAC Industrialization Strategy and the East African Green Label Scheme, the EAC aims to promote sustainable industrial practices and encourage private companies to adopt green procurement practices (EAC, 2017; EAC, 2020).

Furthermore, the prominence of green procurement practices and supply chain management has been increasing steadily. The region, which includes countries such as Uganda, Kenya, Tanzania, Rwanda, and Burundi, has witnessed a shift towards sustainable practices driven by increasing awareness of environmental issues and the potential for economic and social benefits. Initiatives such as the East African Community Environmental Management Framework, Sustainable Procurement and Eco-labeling Project, and the East African Green University Network have provided a framework for promoting green practices in procurement and supply chain management (Sekomo et al., 2020).

In Uganda, sustainable procurement practices and supply chain management have gained traction among private companies. Grace Form (U) Ltd, a leading manufacturing company based in Uganda, has been committed to integrating sustainability into its operations. The company has implemented various green procurement practices, such as sourcing materials from environmentally certified suppliers and prioritizing energy-efficient technologies in its production processes. Grace Form (U) Ltd also collaborates with local environmental organizations to minimize its ecological footprint and contributes to initiatives promoting sustainability within the country.

Uganda, as a representative case study within East Africa, has experienced significant developments in green procurement practices and supply chain management. Organizations such as Grace Form (U) Ltd, a leading private company, have actively embraced green procurement practices. In Uganda, there is a growing recognition of the importance of sustainable resource use and conservation. The Ugandan government has introduced policies and regulations that promote green practices, such as the National Environmental Management Authority Act and the National Environmental Policy. Additionally, organizations like Grace Form (U) Ltd have implemented their own sustainability programs to reduce their environmental impact and promote responsible sourcing (Mugagga et al., 2017).

Grace Form (U) Ltd is an exemplary private company in Uganda that has demonstrated a commitment to green procurement practices and supply chain management. The company recognizes the environmental challenges in the region and has developed strategies to integrate sustainability principles into its operations. Grace Form (U) Ltd has engaged in sustainable sourcing of raw materials, reduction of waste generation, and adoption of green manufacturing processes. The company's efforts align with international standards such as ISO 14001 and show a dedication to responsible business practices.

1.2 Statement of the problem

Green initiative has elicited interest among scholars in supply chain management. The prominence of green sourcing is driven by various factors key being the increasing corrosion of the environment, reduction of raw materials, neglected waste sites and the rise in levels of environmental pollution. However, as focus shifts to adoption of 4 environmental strategies, there is need to be in tandem with the business requirements that lead to high profits (Wilkerson, 2005).

Martha and Houston (2010) noted that the objective of green procurement initiatives is to reduce waste, with a focus on what creates value by taking into consideration the total cost of implementing green procurement strategies. There are several studies on impact of green purchasing to suppliers performance and involvement in the green strategies by companies. Blomea, Hollosby and Paulrajac (2013) found that the link between GP and supplier performance is supported by green supplier development. Caniëls (2013) identifies supplier readiness and customer requirements to be key motivators for suppliers to adopt GP practices. In addition, cooperative relation norms and customer investment enhanced adoption of green procurement practices by large suppliers.

However, at Grace form (U) Ltd Mbale branch, it has been observed that there are challenges in assigning value to sustainability and the costs associated with it, lack of access to market information, providers and products that meet green criteria, lack of knowledge about sustainability, few internal resources, little support or pushback from suppliers, lack of government funding or cultural support, higher costs, difficulty in accessing proper technology, difficulties in implementing robust methods of tracking and verifying supplier compliance with green criteria, lack of experience and training of procurement officials and suppliers to comply with green criteria, limited supplier options ,lack of knowledge and lack of standard guidelines.

It should be noted that Grace form (U) Ltd Mbale branch has put in place measures that include using greater energy efficiency, utilizing clean energy source or technology, controlled use or absence of toxic substances for example carbon emissions, improved recycling ability, minimal packaging needs, extended durability, reduced water and other natural resource consumption. Despite the interventions put in place by the company, the problem has still persisted hence calling for a research on green procurement practices and supply chain management in private companies.

1.3 Purpose of the study

To examine green procurement practices and supply chain management in private companies

1.4 Specific objectives

i. To find out the effect of e-procurement on supply chain management of grace form (U) Ltd Mbale branch

ii. To analyze the effect of lean supply on supply chain management of grace form (U) Ltd Mbale branch
iii. To assess the effect of supplier engagement on supply chain management of grace form (U) Ltd Mbale branch

1.5 Research questions

i. What is the effect of e-procurement on supply chain management of grace form (U) Ltd Mbale branch?
ii. What is the effect of lean supply on supply chain management of grace form (U) Ltd Mbale branch?
iii. What is the effect of supplier engagement on supply chain management of grace form (U) Ltd Mbale branch?

1.6 Scope of the study

1.6.1 Time scope

The period to be considered for the study was 3 years that is 2020-2024. this is because during that period, Grace form (U) ltd Mbale branch's performance in terms production of high quality products is irrational.

1.6.2 Content of the study

The study was limited to the following;

Green procurement practices as independent variable (IV) which was looked at in terms of e-procurement, lean supply, and supplier engagement and also supply chain management as dependent variable (DV) in terms of procurement planning, sourcing, and logistics.

1.6.3 Geographical Scope of the study

The study is carried out at Grace Form (U) Ltd Mbale branch which is among the 31 private companies at Sino Uganda Mbale industrial park that is situated along Mbale Tirinyi road However, Grace Foam (U) Limited Mbale branch was incorporated in 2019 and is a manufacturer of high-quality and new technology foam products that meet both local and international standards.

1.7 Significance of the study

The significance of the study on green procurement practices and supply chain management in private companies is manifold. Here are some key points highlighting its importance:

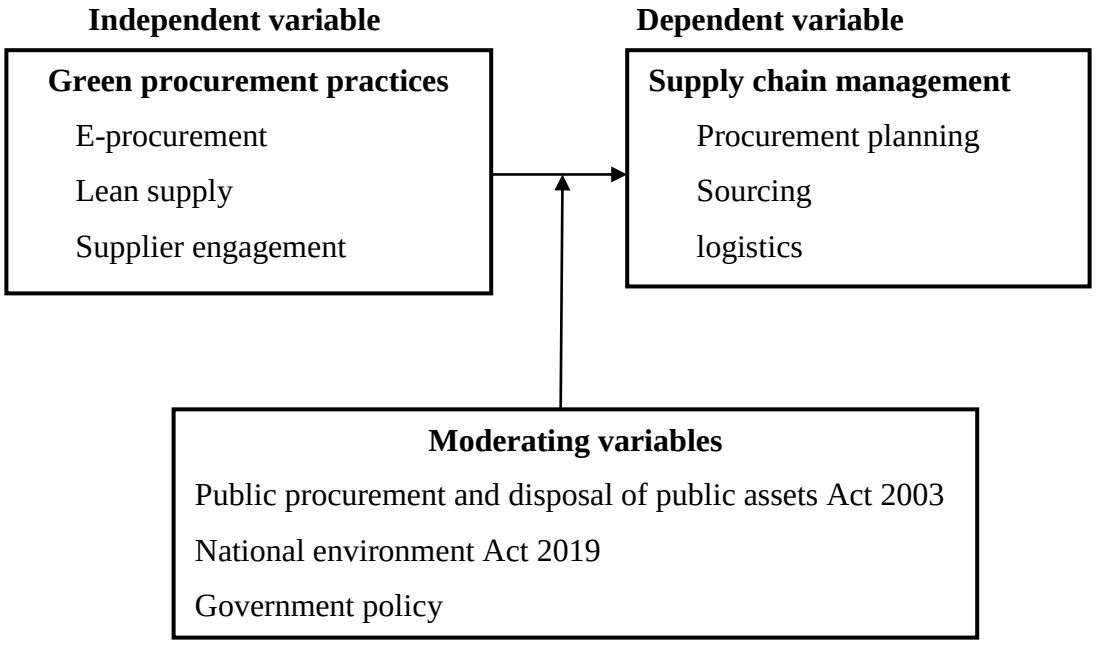
Environmental sustainability: Green procurement practices and sustainable supply chain management are vital for addressing environmental concerns and achieving sustainability goals. Private companies play a significant role in promoting sustainable practices, as they have the ability to influence their suppliers and drive positive change throughout the supply chain.

Reduced environmental impact: Implementing green procurement practices and sustainable supply chain management strategies can lead to a significant reduction in the environmental impact of private companies. This includes lowering greenhouse gas emissions, minimizing waste generation, conserving natural resources, and mitigating pollution.

Cost savings: Engaging in sustainable procurement and supply chain management often results in cost savings for private companies. By optimizing resource usage, minimizing waste, and adopting energy-efficient strategies, companies can reduce operational costs in the long run.

Improved corporate image: Demonstrating a commitment to environmental sustainability through green procurement practices and sustainable supply chain management can enhance a company's reputation and brand image. Consumers and stakeholders increasingly value companies that prioritize sustainability, leading to improved trust, customer loyalty, and market competitiveness.

1.8 Figure 1 conceptual framework



Source: Researcher's conceptualization (2024)

Figure 1 above shows green procurement practices as an independent variable in supply chain management by integrating several key components such as E-procurement, lean supply, and supplier engagement. E-procurement streamlines the procurement process by digitizing and automating tasks, reducing paper waste, and enhancing transparency. Lean supply focuses on minimizing waste and optimizing efficiency throughout the supply chain, leading to lower energy consumption and reduced environmental impact. Supplier engagement ensures that all parties in the supply chain adhere to environmentally friendly practices, fostering a culture of sustainability and responsible sourcing. When combined, these elements create a holistic framework for green procurement practices that not only benefit the environment but also enhance supply chain management by improving operational efficiency, reducing costs, and establishing long-term relationships with eco-conscious suppliers.

Supply chain management is a complex process where the efficiency of various interconnected components directly impacts the overall performance of the system. Procurement planning, sourcing, and logistics are critical elements within the supply chain that act as dependent variables influencing the effectiveness and efficiency of the entire chain. Procurement planning involves determining the required materials and resources to meet demand, sourcing focuses on identifying and selecting suppliers to fulfill those requirements, and logistics encompass the movement and

storage of goods throughout the supply chain network. The coordination and optimization of these components play a vital role in maximizing overall supply chain performance by ensuring timely delivery, cost efficiency, and customer satisfaction.

Moderating variables such as the Public Procurement and Disposal of Public Assets Act, 2003, the National Environment Act, 2019, and various government policies play a crucial role in influencing the relationship between green procurement practices (independent variable) and supply chain management (dependent variable). These laws and policies establish legal frameworks and guidelines that encourage or mandate environmentally responsible procurement practices, shaping how organizations integrate green considerations into their purchasing decisions. For instance, the Public Procurement and Disposal of Public Assets Act provides guidelines that promote transparency, efficiency, and environmental sustainability in procurement, while the National Environment Act mandates the consideration of environmental impacts, thereby fostering green procurement. As these moderating variables strengthen or weaken the implementation of green procurement practices, they directly affect the efficiency, sustainability, and overall performance of supply chain management by encouraging practices that reduce environmental footprints, enhance resource efficiency, and promote sustainable development throughout the supply chain.

1.9 Definitions of key terms

Green procurement practices

Paulraj, A. (2015) denoted that green Procurement means purchasing products and services that cause minimal adverse environmental impacts. It incorporates human health and environmental concerns into the search for high quality products and services at competitive prices. .Chartered Institute of Purchasing and Supplies, CIPS (2007), on the other hand defines green procurement as a consideration to the environmental, social and economic consequences of design; materials used (renewable and non-renewable) manufacturing methods, logistics and disposal.

Supply chain management

Cruz-Machado, V. (2019) asserted that supply chain management is the organization and management of an integrated system that controls the flow of value from the source to the final destination. Every phase in the supply chain process creates an environmental concern that affect, from resource mining, to processing, recycling, or disposal (Ninlawan and Seksan, 2010).

Procurement planning

Chang, H., Tsai, (2017) acknowledges that procurement planning is the process of identifying and consolidating requirements and determining the timeframes for their procurement with the aim of having them as and when they are required. A good procurement plan will describe the process in the identification and selection of suppliers/contractors/consultants.

Sourcing

Lamming (2018) contends that sourcing in procurement is a process of assessing, selecting, and managing suppliers to acquire the desired goods and services from them. As the name suggests, sourcing focuses on creating sources through which an organization can obtain its supplies. Strategic sourcing allows businesses to consolidate their purchasing power to achieve the lowest possible total cost of ownership and minimize risk to the supply chain (Lamming. 2018).

E-procurement

According to Monczka et al. (2016), E-procurement refers to the use of internet-based technology for the procurement of goods and services, which includes activities such as supplier identification, sourcing, requisitions, and purchase order processing (Field, A. 2015).

Lean supply

According to Christopher M (2020, Lean supply refers to the implementation of lean principles in supply chain management, with the goal of eliminating waste, reducing cycle times, improving quality, and increasing flexibility and responsiveness in the supply chain. This involves the adoption of a holistic approach that integrates suppliers, customers, and internal processes to create value and improve overall performance.

Supplier engagement

According to Jabbour et al (2019) Supplier engagement refers to the process of establishing and maintaining relationships with suppliers to optimize mutual benefits and achieve sustainability goals. This involves collaboration, communication, and information sharing between the buyer and supplier to improve performance and address social and environmental issues.

Logistics

According to Bowersox et al (2015)., Logistics refers to the process of planning, implementing, and controlling the movement of goods from the point of origin to the point of consumption, with the

goal of satisfying customer requirements at minimum cost. This involves activities such as transportation, warehousing, inventory management, and order processing, and requires coordination and collaboration among various stakeholders in the supply chain.

Conceptual frame work

A conceptual framework is a structure which the researcher believes can best explain the natural progression of the phenomenon to be studied (Camp, 2001). A Conceptual Framework is a visual representation in research that helps to illustrate the expected relationship between cause and effect. A conceptual framework provides the orientation to the study and assists both the researcher and the reader in seeing how the study contributes to the body of knowledge on the topic, how elements of the study align, and how the study design and methodology meet rigorous research standards.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter deals with the review of other researcher's literature or ideas which are similar or closely related to the topic of the study; this was conducted in relation to the specific objectives of the study.

2.1 Theoretical perspective

Green supply chain management theory

The Theory of Green Supply Chain Management (GSCM) was developed by Zhu and Sarkis in 2004 as a framework to integrate environmental thinking into traditional supply chain management practices (Zhu & Sarkis, 2004). The theory assumes that by embedding environmental considerations into each stage of the supply chain—ranging from product design and material sourcing to production processes, distribution, and end-of-life management—organizations can achieve both environmental and economic benefits. The GSCM theory posits that companies adopting green practices not only reduce their environmental footprint but also enhance operational efficiency and brand reputation, thereby achieving a competitive advantage in the market (Zhu, Sarkis, & Lai, 2008).

However, the theory also acknowledges several limitations. One key limitation is that the implementation of GSCM practices often requires significant upfront investments in green technologies and training, which can be a barrier for smaller organizations or those with limited resources. Additionally, the theory assumes that there is a straightforward path to integrating green practices into the supply chain, but in reality, companies face complex challenges, including resistance to change, lack of green expertise, and varying regulatory environments across different regions. These challenges can slow down the adoption of green practices and limit their effectiveness, particularly in global supply chains with diverse stakeholders and interests (Testa & Iraldo, 2010).

2.2 Empirical literature

Empirical studies on green procurement practices have explored how organizations integrate environmental considerations into their purchasing decisions and the resulting impacts on both environmental and organizational performance. Research by Chari and Ngugi (2018) in the context of public institutions found that green procurement is primarily driven by regulatory compliance, environmental awareness, and the desire to enhance corporate reputation. Their findings indicate that organizations adopting green procurement practices can reduce waste, lower energy consumption, and mitigate environmental risks. Similarly, Testa et al. (2016) investigated the implementation of green procurement in the European context and discovered that companies adopting these practices not only comply with environmental regulations but also achieve operational efficiencies and cost savings through resource optimization and waste reduction.

Empirical research consistently supports the notion that green procurement is a vital component of sustainable supply chain management, driving improvements in environmental and economic performance. Zhu, Sarkis, and Lai (2015) examined the impact of green procurement practices on supply chain sustainability in manufacturing enterprises and found that these practices promote resource efficiency and waste minimization, leading to a more sustainable supply chain. Moreover, Younis, Sundarakani, and Vel (2016) highlighted that the adoption of green procurement practices is essential for fostering innovation and encouraging suppliers to adopt greener practices, ultimately contributing to the overall sustainability of the supply chain. These studies collectively suggest that green procurement not only benefits individual organizations by reducing costs and enhancing brand reputation but also has broader implications for creating more sustainable supply chains.

In the field of supply chain management, the adoption of sustainable practices, including green procurement, has been a focal point of empirical research. Dubey, Gunasekaran, and Ali (2015) conducted a study on manufacturing firms and demonstrated that green procurement practices significantly contribute to improved supply chain performance. Their research highlights that companies integrating green procurement into their supply chains not only meet environmental regulations but also benefit from enhanced operational performance, such as reduced lead times and improved quality.

2.2.1 Effect of e-procurement on supply chain management

E-procurement has emerged as a key enabler of supply chain management, offering numerous benefits to organizations seeking to improve their procurement processes. According to Sharma and Adhikari (2020), the adoption of e-procurement systems allows organizations to streamline their sourcing activities, enhance cost savings, and increase efficiency through automation and digitization. By leveraging electronic platforms for purchasing goods and services, companies can achieve greater transparency in their supply chains, facilitating better supplier relationships and reducing procurement cycle times (Chen et al., 2019). Furthermore, e-procurement systems enable real-time monitoring of inventory levels and supplier performance, ensuring on-time delivery and minimizing the risk of stockouts or disruptions in the supply chain (Saeed et al., 2018).

In addition to operational efficiencies, e-procurement has significant implications for strategic sourcing and supplier relationship management within the supply chain. Research conducted by Lee and Lee (2017) highlights the role of e-procurement in fostering collaboration between buyers and suppliers, which is crucial for driving innovation, quality improvement, and long-term partnerships. Through digital platforms, organizations can engage in strategic sourcing practices such as e-auctions, reverse auctions, and electronic negotiation, enabling them to achieve better pricing, terms, and conditions with suppliers (Kumar et al., 2019). Moreover, e-procurement systems support data analytics and business intelligence capabilities, allowing organizations to make informed decisions based on real-time data insights and market trends, leading to improved supply chain visibility and risk management (Li et al., 2021).

However, while the benefits of e-procurement on supply chain management are significant, several challenges exist in the implementation and utilization of these systems. Studies by Song and Zhao (2018) suggest that issues related to data security, system integration, and supplier adoption can hinder the effective implementation of e-procurement initiatives. Organizations must invest in adequate training programs, cyber-security measures, and change management strategies to overcome resistance to technology adoption and ensure successful integration of e-procurement systems into their supply chain processes (Jones et al., 2020). Despite these challenges, the overall impact of e-procurement on supply chain management is evident, with research literature highlighting its transformative potential in driving operational excellence.

According to Arunthari and Shunmugam (2019), e-procurement systems enable organizations to automate and digitize their procurement activities, leading to better visibility into the entire supply chain, reduced lead times, and increased accuracy in order processing. The integration of e-procurement solutions with supply chain management systems has shown to not only drive cost savings but also improve supplier relationships by enabling real-time communication and data sharing (Lee et al., 2017). The evolution of e-procurement tools and technologies has revolutionized the way organizations source, procure, and manage their supply chains, offering new opportunities for competitive advantage and value creation.

The adoption of e-procurement has brought significant benefits to supply chain management in terms of cost reduction, process efficiency, and strategic decision-making. Research by Rao and Subramanian (2018) highlights that organizations using e-procurement systems experience lower transaction costs, better negotiation outcomes with suppliers, and improved compliance with procurement policies and regulations. Moreover, e-procurement solutions facilitate better inventory management, demand forecasting, and supplier performance tracking, leading to a more responsive and agile supply chain (Tan et al., 2020). By leveraging e-procurement tools, organizations can enhance process transparency, reduce procurement cycle times, and mitigate risks associated with supply chain disruptions, ultimately improving overall operational performance and customer satisfaction.

Despite the numerous benefits of e-procurement on supply chain management, several challenges hinder its full potential realization. Issues such as data security risks, integration complexities with legacy systems, supplier resistance, and lack of skilled workforce pose obstacles to successful e-procurement implementation (Jain et al., 2019). To address these challenges, future research should focus on developing robust cyber-security measures, enhancing system interoperability, and providing training programs to enhance user capabilities and acceptance. Additionally, the integration of emerging technologies like block-chain, artificial intelligence, and internet of things (IoT) with e-procurement systems holds promise for further optimizing supply chain processes and driving sustainable competitive advantages in the digital era (Chofreh et al., 2021). By addressing these challenges and embracing technological advancements, organizations can harness the full transformative potential of e-procurement in shaping the future of supply chain management.

Research by Jensen and Larsen (2008) highlights that E-procurement can lead to cost reductions, improved process cycle times, and increased visibility into the supply chain. By digitizing and automating the procurement process, organizations can achieve significant savings through better contract compliance, reduced maverick spending, and strategic sourcing initiatives (Ngai et al., 2007). E-procurement solutions provide real-time data and analytics that enable organizations to make more informed decisions and optimize their sourcing strategies, ultimately leading to improved supply chain performance.

Furthermore, the adoption of E-procurement systems has been shown to enhance collaboration and communication among supply chain partners. According to Akabom and Omodele (2017), E-procurement fosters greater transparency and information sharing, resulting in improved coordination between buyers and suppliers. The use of online platforms for procurement activities helps streamline communication, facilitate faster approvals, and ensure better alignment of supply chain activities with organizational goals (Chen et al., 2010). By promoting closer relationships and information exchange, E-procurement contributes to improved supplier relationships, reduced lead times, and increased overall supply chain responsiveness.

Despite the numerous benefits of E-procurement, challenges still exist in its implementation and integration within supply chain operations. Research by Monczka and Handfield (2009) emphasizes the importance of aligning organizational strategies with E-procurement initiatives to ensure successful adoption and integration. Issues such as data security, system compatibility, and change management require careful consideration to maximize the potential advantages of E-procurement systems (Wu and Olson, 2009). Organizations need to invest in employee training, develop robust IT infrastructure, and establish clear governance structures to effectively leverage E-procurement technologies and drive sustainable improvements in supply chain performance.

Amit, R. and Zott, C. (2017) articulated that a procurement system is a vital component of a company's Supply Chain system. Typically, a company’s procurement function is subdivided into strategic and operational processes since activities and priorities in these two areas are entirely different (Kaufmann, 2009). Further, e-Procurement can be used in conjunction with the varied technologies of electronic commerce such as document imaging, workflow management, bulletin boards and e-mail to enable business process reengineering.

The implementation of e-procurement systems has significantly impacted supply chain management practices by streamlining procurement processes within organizations. E-procurement has been credited with reducing operational costs and improving overall efficiency in supply chain operations (Croom & Brandon-Jones, 2007). By digitizing procurement processes, organizations can automate routine tasks such as sourcing, ordering, and invoicing, leading to increased process efficiency and reduced cycle times. For example, a study by Kraljic (1983) highlighted how e-procurement systems can enhance strategic sourcing decisions by providing real-time data on supplier performance, pricing trends, and market dynamics.

Moreover, e-procurement has enabled organizations to establish closer collaboration with suppliers and foster stronger relationships across the supply chain. Integrating e-procurement systems with supplier relationship management (SRM) tools allows for real-time communication and information exchange, leading to improved visibility and transparency in the supply chain (Monczka et al., 2016). This increased visibility enables organizations to track supplier performance, monitor compliance with contracts, and identify potential risks in the supply chain proactively. As noted by Cousins et al. (2008), e-procurement systems facilitate better collaboration between buyers and suppliers, leading to mutual benefits such as reduced lead times, lower inventory holding costs, and improved product quality.

Furthermore, the adoption of e-procurement systems has enabled organizations to enhance their strategic sourcing capabilities and drive innovation in their supply chain processes. E-procurement platforms offer advanced analytics and reporting functionalities that enable organizations to conduct spend analysis, identify cost-saving opportunities, and optimize their supplier base (Giannakis & Louis, 2018). By leveraging e-procurement data, organizations can make data-driven decisions, negotiate better pricing strategies, and identify potential areas for process improvements. This strategic approach to procurement, as highlighted by Meehan et al. (2019), enables organizations to drive continuous improvement in their supply chain operations, enhance supplier performance, and achieve long-term sustainability goals.

2.2.2 Effect of lean supply on supply chain management

Lean supply has gained significant traction in supply chain management due to its focus on eliminating waste and optimizing processes to enhance efficiency and reduce costs. A study by Christopher and Peck (2004) emphasizes the importance of adopting lean principles to streamline supply chain operations and improve overall performance. By implementing lean practices such as continuous improvement, just-in-time inventory management, and reducing lead times, organizations can achieve higher levels of productivity and customer satisfaction (Womack and Jones, 2003). Lean supply not only improves operational efficiency but also enhances collaboration with suppliers, fosters innovation, and promotes sustainability in the supply chain (Sarkis, 2013).

One of the key benefits of lean supply in supply chain management is the reduction of inventory levels and associated carrying costs. According to Liu and Lyu (2018), lean principles help organizations to minimize excess inventory and create a demand-driven supply chain, leading to improved inventory turnover and cost savings. Furthermore, lean supply enables organizations to respond more effectively to changes in customer demand and market fluctuations by enhancing flexibility and agility in the supply chain (Nakajima, 1988). This responsiveness to market dynamics is crucial for organizations to stay competitive in today's rapidly evolving business environment (O'Keeffe et al., 2020).

While the adoption of lean supply practices offers numerous advantages, organizations also face challenges in implementing and sustaining lean initiatives in their supply chains. Research by Bhuiyan and Baghel (2005) highlights the importance of organizational commitment, employee engagement, and cultural alignment in successfully implementing lean principles across the supply chain. Resistance to change, lack of top management support, and inadequate training of employees are common barriers that organizations encounter when implementing lean supply strategies (Muddassir and Sharma, 2016). Overcoming these challenges requires a holistic approach that involves cultural transformation, continuous learning, and proactive management support to embed lean principles effectively into the supply chain operations.

Lean supply principles have been widely recognized for their significant impact on supply chain management practices in various industries. According to a study by Graban and Balle (2015), implementing lean supply strategies can lead to improvements in operational efficiency, quality control, and overall supply chain performance. By streamlining processes, reducing waste, and

increasing transparency throughout the supply chain, organizations can achieve enhanced agility and responsiveness to customer demands. This viewpoint is reinforced by Womack and Jones (2003), who underscore the importance of eliminating non-value-added activities and fostering a culture of continuous improvement to optimize supply chain operations.

In addition to operational benefits, the application of lean supply practices can also yield financial advantages for organizations. Research by Shah and Ward (2003) highlights that lean supply techniques such as Just-in-Time (JIT) inventory management and demand-driven production scheduling help businesses minimize inventory holding costs, lead times, and stock obsolescence By synchronizing supply and demand in real-time, companies can reduce working capital requirements and enhance cash flow management. These findings underscore the importance of integrating lean principles into supply chain management strategies to achieve cost savings and competitive advantages in today's dynamic business environment.

Moreover, the impact of lean supply on supply chain resilience and risk management has garnered increasing attention in recent literature. As noted by Christopher and Lee (2004), lean practices can enhance supply chain flexibility and responsiveness, enabling organizations to adapt quickly to disruptions and unforeseen events. By fostering collaboration with suppliers, implementing robust contingency plans, and leveraging technology for real-time visibility, companies can build resilience into their supply chains and mitigate risks effectively. This perspective emphasizes the strategic significance of integrating lean principles into supply chain management frameworks to ensure operational sustainability and continuity in the face of uncertainties and challenges. Petrzelka and Waller (2017) emphasize the importance of cultural change and employee buy-in to successfully adopt lean practices within the supply chain. Additionally, maintaining close relationships with key suppliers and effectively managing demand variability are critical factors to consider when implementing lean supply initiatives (Min and Zhou, 2013).

According to Shah and Ward (2003), lean supply is characterized by the elimination of non-value-added activities and continuous improvement practices along the supply chain. This approach enables organizations to streamline their processes, minimize inventory levels, and enhance responsiveness to customer demand. Moreover, Sarkis and Sundarraj (2006) emphasize that lean supply practices can lead to cost savings, improved quality, and increased customer satisfaction, thus contributing to overall supply chain performance.

The implementation of lean supply principles has been shown to have a positive impact on various aspects of supply chain management. For instance, Christopher and Towill (2001) highlight that lean supply strategies facilitate better coordination between different supply chain partners, leading to enhanced collaboration and information sharing. This collaboration helps in reducing lead times, improving product quality, and increasing overall supply chain agility. Furthermore, Sabri and Shaikh (2013) suggest that lean supply practices promote a culture of continuous improvement within organizations, fostering innovation and adaptability in response to changing market dynamics.

Despite the benefits associated with lean supply, some researchers have identified potential challenges in implementing these principles effectively. For example, Pagell and LePine (2002) argue that the successful adoption of lean supply requires a significant cultural shift within organizations, as well as strong leadership commitment and employee empowerment. Additionally, Lee and Ozer (2007) point out that disruption in the supply chain, such as unexpected demand fluctuations or supplier issues, can pose challenges to lean supply implementation. Overall, while lean supply offers numerous advantages for supply chain management, organizations must carefully consider these challenges to ensure successful integration and sustained improvement.

As demonstrated by Kannan and Tan (2005), lean supply principles have a substantial impact on modern supply chain management practices. Scholars emphasize the importance of waste reduction, improved flexibility, and enhanced collaboration within supply chains as key benefits derived from implementing lean supply strategies (Kannan & Tan, 2005). By focusing on minimizing excess inventory and streamlining production processes, organizations can achieve higher levels of efficiency while maintaining responsiveness to changing market demands.

Moreover, research by Sarkis and Talluri (2004) underscores the significance of integrating lean supply principles into supply chain management to achieve sustainable operations and cost savings. Lean practices such as Just-in-Time (JIT) inventory management and continuous process improvement play a crucial role in reducing lead times, improving product quality, and minimizing production costs (Sarkis & Talluri, 2004). Organizations that embrace lean supply concepts not only enhance their operational efficiency but also foster stronger relationships with suppliers and customers through enhanced communication and collaboration. As pointed out by Christopher

(2016), the successful implementation of lean supply practices requires a strategic shift towards a demand-driven supply chain model that emphasizes customer value creation and responsiveness.

Furthermore, recent literature by Naim and Potter (2011) highlights the need for a holistic approach to integrating lean supply principles into comprehensive supply chain strategies. Effective implementation of lean supply techniques necessitates a deep understanding of each stage of the supply chain and the ability to align operational processes with strategic objectives (Naim & Potter, 2011). By synchronizing production, inventory management, and distribution activities through a lean lens, organizations can achieve higher levels of transparency, efficiency, and cost-effectiveness. As emphasized by Mentzer et al. (2001), a lean supply chain not only drives operational excellence but also enables firms to adapt quickly to changing market conditions and customer preferences, thereby boosting competitiveness and long-term sustainability.

Efficiency and waste reduction in the supply chain have gained increased attention due to the rising complexity and globalization of markets. Lean supply principles have become a key driver in enhancing supply chain management performance by focusing on eliminating non-value-added activities and streamlining processes. According to Bhuiyan and Baghel (2005), the core principles of lean supply, such as continuous improvement, waste minimization, and customer focus, directly contribute to improving supply chain efficiency and effectiveness. By implementing lean practices, organizations can optimize inventory levels, reduce lead times, and enhance overall supply chain responsiveness (Dickson et al., 2005).

Lean practices have gained significant attention in the field of supply chain management due to their potential impact on operational efficiency and cost reduction. According to Womack and Jones (2003), lean principles focus on minimizing waste and optimizing processes for enhanced productivity. By applying lean techniques such as Just-In-Time (JIT) inventory management and continuous improvement, organizations can streamline their supply chain operations and improve overall performance. For instance, Lee and Klassen (2008) found that implementing lean practices in supply chain management can lead to reduced lead times and improved responsiveness to customer demands.

One of the significant impacts of lean supply on supply chain management is improved overall operational performance and cost reduction. Studies by Ferdows and De Meyer (1990) have shown

that implementing lean principles in the supply chain leads to significant improvements in productivity, quality, and lead times. By reducing waste and optimizing processes, organizations can achieve operational excellence and enhance competitive advantage in the market. Moreover, lean supply practices enable organizations to respond more quickly to changing customer demands and market fluctuations, thereby increasing flexibility and adaptability within the supply chain (Narasimhan and Talluri, 2009).

Additionally, the integration of lean supply practices has been shown to positively affect various aspects of supply chain management, including inventory management and supplier relationships. Research by Gavirneni et al. (2006) suggests that lean supply principles can help in achieving inventory reduction targets by eliminating unnecessary buffering and enhancing material flow within the supply chain. Furthermore, enhancing collaboration and communication with suppliers through lean techniques like supplier kaizen events can result in improved quality, delivery performance, and cost savings (Sarkis and Sundarraj, 2013). This highlights the importance of aligning lean supply strategies with supplier engagement to drive supply chain efficiency. Petrzelka and Waller (2017) emphasize the importance of cultural change and employee buy-in to successfully adopt lean practices within the supply chain. Additionally, maintaining close relationships with key suppliers and effectively managing demand variability are critical factors to consider when implementing lean supply initiatives (Min and Zhou, 2013).

2.2.3 Effect of supplier engagement on supply chain management

Supplier engagement plays a critical role in supply chain management by enhancing collaboration, communication, and relationship building between organizations and their suppliers. According to Hingley et al. (2012), when suppliers are actively engaged in the decision-making process and encouraged to provide input, it leads to better alignment of goals, increased transparency, and improved performance across the supply chain. This collaborative approach fosters a sense of partnership and trust, resulting in greater supply chain resilience and efficiency (Cousins et al., 2008). Additionally, supplier engagement can lead to innovation and continuous improvement initiatives, as suppliers are more likely to share knowledge and expertise when they feel valued and part of the decision-making process (Wu et al., 2016).

Furthermore, supplier engagement has been shown to positively impact supply chain risk management. By involving suppliers in risk identification, assessment, and mitigation strategies, organizations can proactively address potential disruptions and vulnerabilities in the supply chain (Pagell et al., 2010). The establishment of strong relationships through supplier engagement enables companies to collaborate on risk-sharing mechanisms and develop contingency plans to mitigate the impact of unforeseen events (Caniato et al., 2018). Research by Fawcett et al. (2011) highlights the importance of supplier engagement in building resilience against supply chain disruptions, emphasizing the need for a coordinated approach to risk management that involves key suppliers.

Moreover, the growing importance of sustainability in supply chain management has further emphasized the significance of supplier engagement. Sustainable supply chain practices require organizations to work closely with their suppliers to ensure ethical sourcing, environmental responsibility, and social accountability throughout the supply chain (Tachizawa and Wong, 2014). Supplier engagement in sustainability initiatives can lead to cost savings, enhanced brand reputation, and compliance with regulations and standards (Carter and Rogers, 2008). By working collaboratively with suppliers to address sustainability challenges, companies can create long-term value and competitive advantage while meeting the expectations of stakeholders and consumers (Walker et al., 2018).

Supplier engagement is a vital aspect of supply chain management, as it plays a crucial role in enhancing overall supply chain performance. Research studies have highlighted the various ways in which supplier engagement impacts supply chain management. For instance, Li et al. (2018) demonstrated that effective supplier engagement leads to better communication, collaboration, and information sharing within the supply chain network, which ultimately results in improved operational efficiency and customer satisfaction. Additionally, Chen et al. (2019) found that supplier engagement positively influences supply chain resilience by enabling rapid response to disruptions and facilitating risk management strategies.

According to research by Wagner and Bode (2008), when suppliers are actively engaged in the innovation processes of buying firms, it results in the development of new products, processes, and technologies that can give the company a competitive edge. This highlights the significance of close collaboration and partnership with suppliers in driving innovation and fostering a culture of continuous improvement within the supply chain. Furthermore, the study by Cousins et al. (2019)

emphasized that supplier engagement enables co-creation of value, where both parties work together to identify and exploit opportunities for mutual benefit, contributing to long-term sustainability and competitiveness in the supply chain.

A study by Wagner and Bode (2008) highlights how supplier engagement can lead to improved collaboration and information sharing within the supply chain network, thereby increasing responsiveness and flexibility. Furthermore, Eng and Welsh (2019) emphasize the importance of forming strong relationships with suppliers to foster trust and mutual commitment, which are essential for achieving supply chain integration and coordination.

Supplier engagement has been shown to positively impact various aspects of supply chain management. For instance, research by Giunipero and Pearce (2009) indicates that a high level of supplier engagement can lead to cost reductions through improved quality, innovation, and coordination in the supply chain. Additionally, Fawcett et al. (2011) discuss how supplier development programs can enhance supplier capabilities and performance, ultimately leading to increased efficiency and competitiveness within the supply chain network.

Research has shown that supplier engagement positively impacts various dimensions of supply chain management. For instance, a study by Handfield et al. (2016) found that companies with highly engaged suppliers experience fewer disruptions in their supply chains, as suppliers are more responsive and proactive in addressing potential issues. Moreover, increased collaboration with suppliers can lead to innovation and continuous improvement in product quality and design (Wagner & Bode, 2008). By involving suppliers early in the product development process, companies can leverage supplier expertise and capabilities to create competitive advantages and meet customer demands more effectively.

Despite the benefits of supplier engagement on supply chain performance, achieving effective engagement requires careful planning and implementation. Gligor and Holcomb (2012) highlight the importance of developing trust-based relationships with suppliers through open communication, transparency, and shared goals. Moreover, companies need to invest in technologies and systems that facilitate information sharing and collaboration with suppliers (Handfield et al., 2019). By fostering strong relationships and mutual understanding with suppliers, organizations can enhance supply chain flexibility, responsiveness, and resilience to market changes and disruptions.

Research has shown that effective supplier engagement leads to improved supply chain visibility, collaboration, and responsiveness (Wagner et al., 2015). Suppliers who are actively engaged in the decision-making process and collaborate closely with their buyers tend to have a better understanding of supply chain dynamics and can proactively respond to changing market conditions. For example, a study by Choi and Krause (2006) highlighted that supplier involvement in new product development can significantly enhance the speed and quality of product innovation, ultimately leading to a competitive advantage for firms. This underscores the importance of engaging suppliers as strategic partners rather than mere transactional entities.

Furthermore, supplier engagement has been linked to supply chain risk management and resilience. When suppliers are actively engaged in the supply chain, they are more likely to share information transparently, which enables firms to identify potential risks and develop effective mitigation strategies (Caniato et al., 2015). Collaborative supplier relationships have been shown to enhance a firm's ability to anticipate and respond to disruptions in the supply chain, ultimately improving resilience (Zsidisin and Wagner, 2010).

Supplier engagement has been increasingly recognized as a crucial element in supply chain management, enabling firms to build effective relationships with suppliers to achieve operational excellence and competitive advantage. According to Peltier et al. (2014), engaging with suppliers involves collaborating closely with them, sharing information, and aligning goals and strategies to improve overall supply chain performance. Supplier engagement is associated with various benefits, such as increased efficiency, innovation, risk mitigation, and cost reduction (Crosby et al., 2019). By involving suppliers in decision-making processes and fostering open communication channels, organizations can better respond to market demands and challenges, ultimately enhancing their competitive position in the market.

Furthermore, research by Johnston and Brignall (2014) suggests that effective supplier engagement contributes to greater supply chain resilience and flexibility. Engaged suppliers are more likely to proactively address issues, adapt to changing circumstances, and collaborate in developing flexible solutions to supply chain disruptions. Such collaborative relationships lead to improved responsiveness, enabling organizations to better handle unexpected events like supplier delays, natural disasters, or economic fluctuations. By fostering strong relationships with suppliers through

effective engagement practices, firms can build agile supply chains capable of quickly adapting to the dynamic business environment.

Moreover, supplier engagement plays a significant role in promoting sustainability and corporate social responsibility within supply chains. Studies by Pagell and Wu (2019) emphasize that engaging with suppliers to implement sustainability initiatives, such as ethical sourcing practices, reduced carbon footprint, and waste minimization; can create shared value for all partners involved. By working closely with suppliers to establish environmentally friendly practices and social initiatives, companies can enhance their reputation, attract environmentally conscious customers, and drive long-term profitability. Supplier engagement in sustainability efforts not only aligns with global trends towards more responsible business practices but also fosters a culture of collaboration and shared commitment to environmental stewardship throughout the supply chain.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This presents the research design, study population, sample size, sources of data, data collection method, quality control methods, data analysis, ethical consideration, and limitation of the study.

3.1 Research Design

A research design according to Andrew B kirumbi (2018) is the set of methods and procedures used in collecting and analyzing measures of the variables specified in the research problem research**.** Saunders, et al. (2012) defined research design as a general plan to answer a research question. As a systematic approach to conducting a scientific inquiry, it brings together several components, strategies, and methods to collect data and analyze it. The researcher used case study research design is a research approach that is used to generate an in-depth, multi-faceted understanding of a complex issue in its real-life context**.** It is was used because it allows the researcher to explore the key characteristics, meanings, and implications of the case. The phases in this study are situation analysis (also called a needs assessment), design, implementation and evaluation**.**

3.2 Study population

According to Hensen, M.C. (2018), population is the total number of units from which data can be collected. Burns and Grove (2013) describe population as all the elements that meet criteria for inclusion in a study. The study involved a study population of 40 to represent the entire population of Grace Form (U) Ltd of different departments that comprises of 1 general manager, 3 cashiers, 2 accountants, 10 employees, 1human resource manager, 21 opinion leaders, and 2 auditors, all was respondents from Grace Form (U) Ltd.

3.3 Sample size and Sampling procedures

Sample size

Eisenhardt, K.M. (2019) articulated a sample size as a proportion of a population. The sample was selected from the Grace Form (U) Ltd which was include stake holders, accountants, secretaries, human resource manager, auditors, and general manager.

Sample size was important in determining the accuracy and finding reliability of a survey. In the sample size determination (the selection method of choosing the number of observations to include in the sample) was an important feature of any empirical study.

The researcher used Slovenes formula of (1960) which was as seen below;

$$n = \frac{N}{1+N(e^2)}$$

Where;

n is the sample size

N is the whole population

1 is the constant

e^2 error in sampling (0.05)

The total sample size was computed as indicated below

$$n = \frac{N}{1+N(e^2)} \quad n = \frac{40}{1+40*0.05^2} \quad n = \frac{40}{1+0.1} \quad \underline{n = 40} \quad 1.1$$

n = 36 Respondents

Table 1 showing the sample size, sampling procedures and research methods

Respondents	**Population**	**Sample size**	**Sampling procedures**
General manager	1	1	Purposive sampling
Cashiers	3	2	Simple random sampling
Accountants	2	2	Simple random sampling
Employees	10	10	Simple random sampling
Opinion leaders	21	19	Simple random sampling
Human resource manager	1	1	purposive sampling
Auditors	2	1	Purposive sampling
Total	**40**	**36**	

Source: Grace Form (U) Ltd Mbale branch (2024)

3.4 Sampling procedures

Gilmore, A. (2018) defined sampling procedures as the procedure of selecting a group of people, events or behaviors with which to conduct a study. Sampling procedure which was as follows:

3.4.1 Purposive sampling

Hayes, R. (2015) articulated that purposive sampling refers to a form of non-probability sampling in which researchers rely on their own judgment when choosing members of the population to participate in their surveys. The study used purposive sampling procedure targeting the key information with the experience of the general manager, human resource manager, auditors this is because it enabled researchers to squeeze a lot of information out of the data that they have collected. This allows researchers to describe the major impact their findings have on the population.

3.4.2 Simple random sampling

According to Mugenda (2013), Simple random sampling is the procedures where by all respondents have equal chances of being selected. It minimizes biasness in sample selection. The procedure was used in sampling cashiers, accountants, employees, opinion leaders. The use of simple random sampling removes all hints of bias. Because individuals who make up the subset of the larger group are chosen at random, each individual in the large population set has the same probability of being selected.

3.5 Sources of Data

According to Baire, W. (2017), data is about row facts which have not been processed and from which no meaningful interpretation can use. Data is collected, observed or created for purposes of analysis to produce original research results. These sources include secondary and primary data.

3.5.1 Primary Data collection.

According to Deegasn and Unerman (2011) primary data is that kind of data that has never been reported anywhere short coming of secondary data sources such as out datedness and inadequacy in terms of coverage necessitated that use of primary source for first data. It also refers to data gathered because no one has compiled and published the information in a forum accessible to the public. Companies generally take the time and allocate the resources required to gather primary data only when a question, issue or problem presents itself that is sufficiently important or unique that it warrants the expenditure necessary to gather the primary data. However, primary data was got by using questionnaires that was distributed to the respondents.

3.5.2 Secondary data collection

According to Dennis, A. (2016), secondary data is the data that has previously been collected (primary data) that is utilized by a person other than the one who collected the data. Secondary data is often used in social and economic analysis, especially when access to primary data is unavailable.

Lowe, D.M. (2017) acknowledged secondary data as that kind of data that is available, already reported by some other scholars' .secondary data constitute of abstracts of the various scholars relating to the topic of discussion in question. Secondary data for this study is got from sources like libraries, archived records from the pride micro finance bank, records of selected business, government publication, online information, text books, newspaper and unpublished research reports this is because it was readily available and easier to complement, as it comprises of extensively researched work.

3.6 Data collection instruments

Data collection is a tool that is used to collect data (Dilworth 2018). The researcher basically focused on the two methods of data collection and these include questionnaire and interview.

3.6.1 Questionnaires

According to Lowe, D.M. (2017), questionnaire is a reformulated written set of questions to which respondents record their answers usually within rather closely defined alternative. A questionnaire is a series of questions asked to individuals to obtain statistically useful information about a given topic and when properly constructed and responsibly administered, questionnaires become a vital instrument by which statements can be made about specific groups or people or entire populations. An open and close ended questionnaire was used to collect information from the general manager, accountants, auditors, and cashier from Grace Form (U) Ltd Mbale branch where the researcher allowed the study respondents to fill the questionnaire in the study population. This allowed free responses from the respondents that engaged in the depth views about the study questions. The closed ended questions include alternative answers for selection and also were used in getting required information about the study. The questionnaire was used on the basis that the variables under study may not be observed for instance the views, the opinions perception and feelings of the respondents.

3.6.2 Interview guide

According to Coase, R.H. (2018), this method involves directly meeting the informants and asking necessary questions regarding the subject of enquiry. Usually a set of questions or a questionnaire is carried by him and questions are also asked according to that. The interviewer efficiently collects the data from the informants by cross examining them.

3.7 Quality Control Methods.

According to Ndifon Ejoh and Patrick Ejom.(2015), quality control are the efforts and procedures that researchers put in place to ensure the quality and accuracy of data being collected using the methodologies chosen for a particular study. Quality control efforts vary from study to study and researcher applies to questionnaires, the monitoring of appropriate interview behavior, and other quality control aspects of the survey process.

3.7.1 Validity

Validity refers to how well an instrument measures what it is intended to measure (Mallery, 2013). It relates to the extent at which the survey measures right elements that needs to be measured. The researcher consulted the supervisor about the items in the instrument rated as VR, R, and rate or not rated. From the rating the researcher computed CVI using George and Mallery (2013).

The tools may be valid if the CVI of 0.5 or above is attained as illustrated in Table below.

Interpretation	**Mean Range**
Not Acceptable	Below 0.50
Acceptable	0.50 to 0.699
Good	0.70 to 0.799
Great	0.80 to 0.899
Superb	Above 0.90

Source*:* Researcher (2024*)*

CVI = 30/34 = **0.882**

The Content Validity Index could be found to be 0.882 for all the items on the questionnaire and interview guide was combined. Thus the questionnaires was considered valid given that a CVI of at least 0.8 is considered greatly in measuring validity.

3.7.2 Reliability

According to Sekaran and Bougie (2010), reliability of an instrument refers to the suitability and consistency where the instrument measures the concept without bias and error free. Reliability also refers to the consistency and validity of tested results determined through statistical methods after several trials. According to Sekaran and Bogie, the researcher tested the inter item consistency of the respondents answer to all items in the questionnaire and the reliability of the instruments is tested and determined using Cronbach's Alpha test (2014) using SPSS software if the reliability test is closer to one.

The researcher used Cronbach Alpha Coefficient.

Variable	Cronbach alpha Value
E-procurement	.821
Lean supply	.769
Supplier engagement	.808
Supply chain management	.889

Source: Primary data 2024

According to Cronbach (1950), coefficient alpha of 0.7 assuming above is considered, they look adequate. From the results all the Cronbach alpha coefficients could range from .769 to .889, therefore meeting the acceptable standards. Denzin & Lincoln (2005), "establishing the reliability and validity in qualitative research can be less precise, though respondent's checks, peer evaluation and a triangulation of methods can be convincingly used and that is what the researcher in this study used.

3.8 Data Processing and Analysis

Analysis of Quantitative Data

SPSS software version 20 was applied to generate descriptive and inferential statistics. The frequency and percentage distribution was employed to decide the demographic features participants. While mean and SD was used for different points of agreements in relation to the questions are asked on the Likert scale. Green procurement practices and supply chain management in private companies was evaluated using a simple regression analysis. The stated variables in the

questionnaires were analyzed using descriptive statistics of reactions that can be categorized. Where strongly agree=1, Agree=2, Neutral=3, Disagree=4, strongly disagree=5

Analysis of Qualitative Data

The inductive method was helpful as it helps to regularly replicate reported patterns that were used in qualitative data analysis. The assumptions of inductive method are data analysis is established through research objectives and multiple readings and interpretation of raw data. Therefore, results were got from both the research objectives outlined by the researcher and results arising from analysis of raw data" (Thomas, 2003).

According to Robinson (2014) data analysis is the process of systematically applying statistical and logical techniques to describe and illustrate, condense and recap, and evaluate data. Resnik (2018) various analytic procedures "provide a way of drawing inductive inferences from data and distinguishing the signal (the phenomenon of interest) from the noise (statistical fluctuations) present in the data".

While data analysis in qualitative research can include statistical procedures, many times analysis becomes an ongoing iterative process where data is continuously collected and analyzed almost simultaneously. The form of the analysis was determined by the specific qualitative approach taken content analysis, and the form of the data (field notes, documents) in order to identify the main theme incurved from the response given by the researcher. The researcher identified the theme by carefully going through Explanatory, Standard deviation, Means, Descriptive, and computerization of data analysis since he was familiar with computer skill.

3.9 Data collection procedure

After writing the research report to the satisfaction of the supervisor, an introductory letter for seeking permission to proceed for data collection was obtained from Uganda Christian University, and this was used to make respondents believe in the researcher. This letter was taken to the general manager of the Grace form (U) Ltd Mbale branch to seek for permission before engaging the population for the study.

3.10 Ethical Consideration.

Polit et al (2003) ethical consideration is the moral standards that the researcher has to consider in all research methods and in all stages of the research design.

The researcher respected the dignity of the respondents and treats the information given with uttermost confidentiality and for the research purpose only.

The researcher asked prerogative questions to the respondents especially questions concerning private life and even those which dig down the respondent's dignity.

Participant in a study were protected from an adverse situation. They were assured that information that is provided to the researcher and their participation could not affect them.

Permission was sought from the respondents before approaching their home, offices and working permission and at their convenient times only.

An issue of bribes, undue influence, and cohesion was strongly avoided by the researcher.

CHAPTER FOUR

DATA PRESENTATION, INTERPRETATION AND DISCUSSION OF THE FINDINGS

4.0 Introduction

This chapter presents the findings on the green procurement practices and supply chain management in private companies. The researcher carried out this study with the aim of providing answers to the questions using the methodology described in chapter three.

4.1 Findings on the general information about respondents.

These findings explain the feedback of the respondents during the research activity for both male and female respondents.

4.1.0 Response rate.

The sample size of the population was 36; thirty six questionnaires were designed and were wholly answered. This implies that the response rate was perfect.

4.2.1 Gender of Respondents

Table 2 showing the Gender of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	22	61.0	61.0	61.0
	Females	14	39.0	39.0	100.0
	Total	36	100.0	100.0	

Source: primary data (2024)

With reference to table 2 above, it can be seen that male consisted of 61%, and 39% were females. This implies that there were more males were involved in the study since they were the majority taking up various positions at the bank.

4.2.2 Age

Table 3 showing Age group of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21-30 years	12	33.0	33.0	33.0
	31-40 years	15	42.0	42.0	75.0
	41-50 years	8	22.0	22.0	97.0
	Above 60 years	1	3.0	3.0	100.0
	Total	36	100.0	100.0	

Source: Primary data (2024)

The table 4 above shows that 33% lie between the ages of 20-30 years, 42% make it to the age of 31-40 years, 22% lie between the age of 41-50 years, and above the age of 60 years constituted 3%. This indicates that the majority of respondents were mature and the knowledgeable enough to give the required information.

4.2.3 Qualification of respondents

Table 4 Showing academic qualification of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Secondary	8	22.0	22.0	22.0
	Certificate	5	14.0	14.0	36.0
	Diploma	7	19.0	19.0	55.0
	Degree	14	39.0	39.0	94.0
	Masters	2	6.0	6.0	100.0
	Total	36	100.0	100.0	

Source: primary data (2024)

Table 4 above shows that 22%, 14%, 19% ,39% and 6% correspond to secondary, certificate, diploma, degree, and masters respectively. This indicates that all people employed by grace form (U) Ltd have attained certain level of education and knowledge with the majority corresponding to degree at 39%.

4.2.4 Years of working

Table 5 showing years of working by respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1 year	9	25.0	25.0	25.0
	1-2 years	11	31.0	31.0	56.0
	Above 3 years	16	44.0	44.0	100.0
	Total	36	100.0	100.0	

Source: Primary data (2024)

Table 5 above intimates that 25%, 31%, and 44%, correspond to less than 1 year, 1-2 years, and above 3 years respectively, this however implies that grace form (U) Ltd employs experienced workers who have had reasonable numbers of years of experience with 44% such that the goals formulated by the entity can be achieved well.

4.3.0 Research question one: Finding out on the effect of e-procurement on supply chain management of grace form (U) Ltd

4.3.1 The firm implements e-procurement as a strategy due to increased competitor activity

The table 6 Showing whether the firm implements e-procurement as a strategy due to increased competitor activity

		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	strongly agree	16	44.0	44.0	44.0
	Agree	8	22.0	22.0	66.0
	not sure	6	17.0	17.0	83.0
	Disagree	4	11.0	11.0	94.0
	strongly disagree	2	6.0	6.0	100.0
	Total	36	100.0	100.0	

Source: primary data (2024)

Table 6 above indicates that out of total sample of the study, 66% (44%, 22%) were positive to the statement that the firm implements e-procurement as a strategy due to increased competitor activity

and 17% of the respondents were not sure while 17% (11%, 6%) of the respondents objected to the same statement hence implying that the firm implements e-procurement as a strategy due to increased competitor activity

4.3.2 E-procurement is still in its early stages of adoption in this company

The table 7 Showing whether e-procurement is still in its early stages of adoption in this company

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	2	6.0	6.0	6.0
	Agree	5	14.0	14.0	20.0
	not sure	7	19.0	19.0	39.0
	Disagree	9	25.0	25.0	64.0
	strongly disagree	13	36.0	36.0	100.0
	Total	36	100.0	100.0	

Source: primary data (2024)

Table 7 above indicates that out of total sample of the study 20% (6%, 14%) were positive to the statement that E-procurement is still in its early stages of adoption in this company, and 19% 0f the respondents were not sure while 61% (25%, 36%) objected to the same statement hence implying that E-procurement is not still in its early stages of adoption in this company.

4.3.3 The firm continues to rely on mainly traditional procurement systems even through more advanced technologies are available

Table 8 Showing whether the firm continues to rely on mainly traditional procurement systems even through more advanced technologies are available

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	9	25.0	25.0	25.0
	Agree	7	19.0	19.0	44.0
	not sure	8	22.0	22.0	66.0
	Disagree	9	25.0	25.0	91.0
	strongly disagree	3	9.0	9.0	100.0
	Total	36	100.0	100.0	

Source: primary data (2024)

Table 8 above shows that 44% (25%, 19%) of the respondents had appositive response to the statement that the firm continues to rely on mainly traditional procurement systems even through more advanced technologies are available ,22% of the respondents were not sure whereous 34% (25%, 9%) rejected the same statement. This concurs with the research carried out by Ford, M (2021) affirmed that the firm continues to rely on mainly traditional procurement systems even through more advanced technologies are available hence indicating that the firm continues to rely on mainly traditional procurement systems even through more advanced technologies are available.

4.3.4 The firm has faced a number of challenges in implementing E-procurement

The table 9 Showing whether the firm has faced a number of challenges in implementing e-procurement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	15	42.0	42.0	42.0
	Agree	3	8.0	8.0	50.0
	not sure	6	17.0	17.0	67.0
	Disagree	2	5.0	5.0	72.0
	strongly disagree	10	28.0	28.0	100.0
	Total	36	100.0	100.0	

Source: primary data (2024)

Table 9 above shows that the majority of the respondents 50% (42%, 8%) were positive to the statement that the firm has faced a number of challenges in implementing E-procurement while 33% (5%, 28%) had negative responses to the same statement, 17% of the respondents were not sure. These findings are in-line with Dawe, R.L. (2019) stressed that the firm has faced a number of challenges in implementing E-procurement hence implying that the firm has faced a number of challenges in implementing E-procurement.

4.3.5 The firm's procurement staff have the necessary knowledge and experience in information technology systems to handle E-procurement

The tables 10 Showing whether the firm's procurement staff have the necessary knowledge and experience in information technology systems to handle E-procurement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	7	19.0	19.0	19.0
	Agree	11	31.0	31.0	50.0
	not sure	6	17.0	17.0	67.0
	Disagree	9	25.0	25.0	92.0
	strongly disagree	3	8.0	8.0	100.0
	Total	36	100.0	100.0	

Source: primary data (2024)

Table 10 above indicates that 50% (19%, 31%) of the respondents were positive to the statement that the firm's procurement staff have the necessary knowledge and experience in information technology systems to handle E-procurement*;* while 33% (25%, 8%) were negative to the same statement and 17% of the respondents were not sure. These findings concur with the research carried out by Furkan, (2017) articulated that the firm's procurement staff have the necessary knowledge and experience in information technology systems to handle E-procurement.

4.4. Research question two: Finding out the effect of lean supply on supply chain management of grace form (U) Ltd

4.4.1 There is supplies of products to the end customer in the most efficient manner possible

Table 11 Showing whether there is supplies of products to the end customer in the most efficient manner possible

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	5	14.0	14.0	14.0
	Agree	10	28.0	28.0	42.0
	not sure	8	22.0	22.0	64.0
	Disagree	9	25.0	25.0	89.0
	strongly disagree	4	11.0	11.0	100.0
	Total	36	100.0	100.0	

Source: primary data (2024)

With reference to table 11 above, it can be seen that the majority of the respondents 42% (14%, 28%) were positive to the statement that there is supplies of products to the end customer in the most efficient manner possible while 36% (25%, 11%) of the respondents were negative to the same statement while 22% were not sure. This implies that there are supplies of products to the end customer in the most efficient manner possible.

4.4.2 There is an increase customer satisfaction while reducing costs and improving efficiency

Table 12 Showing whether there is an increase customer satisfaction while reducing costs and improving efficiency

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	7	19.0	19.0	19.0
	Agree	4	11.0	11.0	30.0
	not sure	11	31.0	31.0	61.0
	Disagree	6	17.0	17.0	78.0
	strongly disagree	8	22.0	22.0	100.0
	Total	36	100.0	100.0	

Source: primary data (2024)

With reference to table 12, it can be observed that 30% (19%, 11%) of the respondents were positive to the statement that there is an increase customer satisfaction while reducing costs and improving efficiency , 39% (17%, 22%) were negative to the same statement while 31% of the respondents were not sure. These findings are in line with Adjei-Kumi, T. (2019) postulated that there is an increase customer satisfaction while reducing costs and improving efficiency hence implying that there is no increase customer satisfaction while reducing costs and improving efficiency.

4.4.3 The firm incurs lower inventory costs

Table 13 Showing whether the firm incurs lower inventory costs

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	16	44.0	44.0	44.0
	Agree	4	11.0	11.0	55.0
	not sure	7	19.0	19.0	74.0
	Disagree	6	18.0	18.0	92.0
	strongly disagree	3	8.0	8.0	100.0
	Total	36	100.0	100.0	

Source: primary data (2024)

Table 13 above indicates that the majority of the respondents 55% (44%, 11%) were positive to the statement that the firm incurs lower inventory costs while 26% (18%, 8%) were negative to the same statement, 19% were not sure. This implies the firm incurs lower inventory costs.

4.4.4 There is an increase in productivity and flexibility

Table 14 Showing whether there is an increase in productivity and flexibility

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	5	14.0	14.0	14.0
	Agree	15	42.0	42.0	56.0
	not sure	2	6.0	6.0	62.0
	Disagree	4	11.0	11.0	73.0
	strongly disagree	10	27.0	27.0	100.0
	Total	36	100.0	100.0	

Source: primary data (2024)

With reference to table 14 above, it can be seen that 56% (14%, 42%) of the respondents were negative to the statement that there is an increase in productivity and flexibility, 38% (11%, 27%)

were negative to the same statement meanwhile 6% of the respondents were not sure. This implies that there is an increase in productivity and flexibility.

4.4.5 Employee morale is improved

Table 15 Showing whether employee morale is improved

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	9	25.0	25.0	25.0
	Agree	6	17.0	17.0	42.0
	not sure	3	8.0	8.0	50.0
	Disagree	14	39.0	39.0	89.0
	strongly disagree	4	11.0	11.0	100.0
	Total	36	100.0	100.0	

Source: primary data (2024)

Table 15 above shows that 42% of the respondents (25%, 17%) were positive to the statement that employee morale is improved and 50% (39%, 1!%) were negative to the same statement while 8% of the respondents were not sure. These finding contradict with Maleyeff, J. (2015) denoted that employee morale is improved and hence this implies that employee morale is not improved.

4.5 Research question three: Finding out the effect of supplier engagement on supply chain management of grace form (U) Ltd

4.5.1 Engaged suppliers perform at a much higher level

Table 16 Showing whether engaged suppliers perform at a much higher level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	4	11.0	11.0	11.0
	Agree	6	17.0	17.0	28.0
	not sure	7	1 9.0	19.0	47.0
	Disagree	9	25.0	25.0	72.0
	strongly disagree	10	28.0	28.0	100.0
	Total	36	100.0	100.0	

Source: primary data (2024)

With reference to table 16 above, it can be seen that the minority of the respondents 28% (11%, 17%) were positive to the statement that engaged suppliers perform at a much higher level while 53% (25%, 28%) were negative to the same statement and 19% of the respondents were not sure there by implying that engaged suppliers do not perform at a much higher level.

4.5.2 You basically focus on creating long term relationships with suppliers

Table 17 showing whether respondents basically focus on creating long term relationships with suppliers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	5	14.0	14.0	14.0
	Agree	17	47.0	47.0	61.0
	Not sure	2	6.0	6.0	67.0
	Disagree	5	14.0	14.0	81.0
	Strongly disagree	7	19.0	19.0	100.0
	Total	36	100.0	100.0	

Source: primary data (2024)

With reference to table 17 above, it can be observed that the majority of the respondents 61% (14%, 47%) were positive to the statement that respondents basically focus on creating long term relationships with suppliers, 33% (14%, 19%) were negative to the same statement while 6% were

not sure. This implies that respondents basically focus on creating long term relationships with suppliers**.**

4.5.3 You simplify the process of working together as much as possible

Table 18 Showing whether respondents simplify the process of working together as much as possible

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	5	14.0	14.0	14.0
	Agree	12	33.0	33.0	47.0
	not sure	6	17.0	17.0	64.0
	Disagree	9	25.0	25.0	89.0
	strongly disagree	4	11.0	11.0	100.0
	Total	36	100.0	100.0	

Source: primary data (2024)

Table 18 above shows that 47% (14%, 33%) of the respondents were positive to the statement that respondents simplify the process of working together as much as possible while 36% (25.5%, 11%) were negative to the same statement and 17% of the respondents were not sure. These findings contradict with Bill Swanton, (2019) stresses that respondents simplify the process of working together as much as possible.

4.5.4 You understand each vendor and personalize the approach

Table 19 showing whether respondents understand each vendor and personalize the approach

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	8	22.0	22.0	22.0
	Agree	13	37.0	37.0	59.0
	not sure	4	11.0	11.0	70.0
	Disagree	8	22.0	22.0	92.0
	strongly disagree	3	8.0	8.0	100.0
	Total	36	100.0	100.0	

Source: primary data (2024)

Table 19 above indicates that the majority of the respondents 59% (22%, 237%) were positive to the statement that respondents understand each vendor and personalize the approach, 32.5% (22%,8%) had a negative response to the same statement while 11% of

the respondents were not sure. This implies that respondents understand each vendor and personalize the approach.

4.5.5 You have unsynchronized priorities and dependence risks

Table 20 Showing whether respondents have unsynchronized priorities and dependence risks

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	13	36.0	36.0	36.0
	Agree	9	25.0	25.0	61.0
	not sure	2	6.0	6.0	67.0
	Disagree	5	14.0	14.0	81.0
	strongly disagree	7	19.0	19.0	100.0
	Total	36	100.0	100.0	

Source: primary data (2024)

Table 20 above shows that the majority of the respondents 61% (36%, 25%) were positive to the statement that respondents have unsynchronized priorities and dependence risks while 33% (14%, 19%) had a negative response to the same statement and 6% of the respondents were not sure there by implying that no time wasted on collecting loans that have a low recovery rate since it increases the cost operations.

4.6 Supply chain management

4.6.1 Quality is emphasized as one way of ensuring customer satisfaction in the supply chain

Table 21 Showing whether quality is emphasized as one way of ensuring customer satisfaction in the supply chain

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	6	17.0	17.0	17.0
	Agree	11	31.0	31.0	48.0
	not sure	5	14.0	14.0	62.0
	Disagree	10	27.0	27.0	89.0
	strongly disagree	4	11.0	11.0	100.0
	Total	36	100.0	100.0	

Source: primary data (2024)

With reference to table 21 above, it can be seen that 48% (17%, 31%) of the respondents were positive to the statement that quality is emphasized as one way of ensuring customer satisfaction in the supply chain, 38% (27%, 11%) were negative to the same statement while 14% of the respondents were not sure. This implies that quality is emphasized as one way of ensuring customer satisfaction in the supply chain.

4.6.2 There better collaboration with suppliers

Table 22 Showing whether there better collaboration with suppliers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	15	42.0	42.0	42.0
	Agree	6	17.0	17.0	59.0
	not sure	1	2.0	2.0	61.0
	Disagree	9	25.0	25.0	86.0
	strongly disagree	5	14.0	14.0	100.0
	Total	36	100.0	100.0	

Source: primary data (2024)

Table 22 above shows that the majority of the respondents 59% (42%, 17%) were positive to the statement that there better collaboration with suppliers, 39% (25%, 14%) were negative to the same statement and 2% of the respondents were not sure. These findings were in line with Chigbu,(2012) who noted that there better collaboration with suppliers.

4.6.3 You have reduced inventory and overhead costs

Table 23 Showing whether respondents have reduced inventory and overhead costs

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	19	53.0	53.0	53.0
	Agree	6	17.0	17.0	70.0
	not sure	1	3.0	3.0	73.0
	Disagree	6	17.0	17.0	90.0
	strongly disagree	4	10.0	10.0	100.0
	Total	36	100.0	100.0	

Source: primary data (2024)

With reference to table 23 above it can be seen that the majority of the respondents 70% (53%, 17%) were positive to the statement that respondents have reduced inventory and overhead costs, 27%(17%, 10%) had negative responses to the same statement while 3% of the respondents were not sure. This implies that respondents have reduced inventory and overhead costs.

4.6.4 There is better visibility and data analytics

Table 24 Showing whether there is better visibility and data analytics

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	8	22.0	22.0	22.0
	Agree	14	39.0	39.0	61.0
	not sure	2	6.0	6.0	67.0
	Disagree	5	14.0	14.0	81.0
	strongly disagree	7	19.0	19.0	100.0
	Total	36	100.0	100.0	

Source: primary data (2024)

With reference to table 24 above, it can be seen that 61% (22%, 39%) of the respondents had a positive response to the statement that there is better visibility and data analytics while 33% (14%, 19%) were negative to the same statement and 6% of the respondents were not sure. This implies that there is better visibility and data analytics.

4.5.5 There is improved risk mitigation

Table 25 Showing whether there is improved risk mitigation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	9	25.0	25.0	25.0
	Agree	5	14.0	14.0	39.0
	not sure	3	8.0	8.0	47.0
	Disagree	12	33.0	33.0	80.0
	strongly disagree	7	20.0	20.0	100.0
	Total	36	100.0	100.0	

Source: primary data (2024)

With reference to above table 25, it can be seen that 39 %(25%, 14%) were positive to the statement that there is improved risk mitigation, 53 %(33%, 20%) forming the majority had negative responses to the same statement while 8% of the respondents were not sure. This implies that there is no improved risk mitigation.

CHAPTER FIVE

SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction.

In this chapter the researcher gives a summary of findings, conclusions and recommendation in line with the research questions and objectives.

5.1 Summary of findings.

The researcher provided a summary of findings in line with the objectives as follows;

5.1.1 Research Question one: Findings on the effect of e-procurement on supply chain management of grace form (U) Ltd

The study investigated into the effect of e-procurement on supply chain management of grace form (U) Ltd. Results showed that most respondents were positive to the statements that they were asked. For example; majority of respondents constituting 66% were positive to the statement that the firm implements e-procurement as a strategy due to increased competitor activity; 44% were positive to the statement that the firm continues to rely on mainly traditional procurement systems even through more advanced technologies are available; 50% were positive to the statement that the firm has faced a number of challenges in implementing E-procurement, 50% of the respondents had appositive response to the statement that the firm's procurement staff have the necessary knowledge and experience in information technology systems to handle E-procurement.

On the other hand**,** 61% constituting the majority were negative to statement that E-procurement is still in its early stages of adoption in this company.

Basing on the above results, it can be concluded that e-procurement has a significant effect on supply chain management of grace form (U) Ltd**.**

5.1.2 Research Question two: Findings on the effect of lean supply on supply chain management of grace form (U) Ltd.

The study investigated into the effect of lean supply on supply chain management of grace form (U) Ltd.

Majority of the respondents 42% of the respondents were positive to the statement that there is supplies of products to the end customer in the most efficient manner possible, 55% of the respondents were positive to the statement that the firm incurs lower inventory costs, it can be observed that 56% were positive to the statement that there is an increase in productivity and flexibility while 39% forming the majority were negative to the statement that there is an increase customer satisfaction while reducing costs and improving efficiency, and also 50% of the respondents also objected to the statement that employee morale is improved. Basing on the above results, it can be concluded that lean supply has a significant effect on supply chain management of grace form (U) Ltd.

5.1.3 Research Question three: Findings on the effect of supplier engagement on supply chain management of grace form (U) Ltd

The findings revealed that 61% forming the majority were positive to the statement that respondents basically focus on creating long term relationships with suppliers, 47% were positive to the statement that respondents simplify the process of working together as much as possible, 59% had a positive response to the statement that respondents understand each vendor and personalize the approach, and 61% had a positive response to the statement that respondents have unsynchronized priorities and dependence risks.

On the other hand, 53% forming the majority rejected the statement that engaged suppliers perform at a much higher level.

Most responses were positive indicating that supplier engagement has a significant effect on supply chain management of grace form (U) Ltd**.**

5.2 Conclusion

Basing on the results of the first objective, it can be concluded that e-procurement has a significant effect on supply chain management of grace form (U) Ltd. Therefore should be enhanced by; Identifying and anticipating material or service needs, Evaluating potential suppliers, selecting suppliers, releasing and receiving purchase requirements, continuously measuring and managing supplier performance, reviewing existing purchase contracts for compliance and making sure the firm is getting the best possible deal on the products and services that are used most often, creating an implementation plan, Seizing discounts by combining orders and purchasing in volume, Optimizing spend by reducing maverick purchases , Alleviates routine tasks so procurement teams can focus on strategic initiatives.

Basing on the results of the second objective, it can be concluded that lean supply has a significant effect on supply chain management of grace form (U) Ltd. This can be enhanced by employing inventory management strategies for tracking inventory levels and timing replenishment to combat this waste and reduce costs, so that an ecommerce business has just the right amount of inventory on hand just in time to meet customer demand, without accidentally over- or under stocking, eliminating all waste in the supply chain so that only value remains, considering advancements in technology to improve the supply chain, making customer usage visible to all members of the supply chain, reducing lead time, creating a level flow/level load, using pull systems.

It can also be concluded basing on objective three that supplier engagement has a significant effect on supply chain management of grace form (U) Ltd**.** This can be enhanced by strategic market sector scanning, informing the market about supply opportunities, keeping suppliers informed during all stages of the tender process, managing relationships during the list of the contract, managing post-tender debriefs and complaints, supplier management actions boost supply chain accomplishment as buyers and suppliers form a sole shared forecast of demand and a plan of supply, buyers issue order of materials from the suppliers is streamlined, quick information sharing with suppliers, predictability of flow of goods, electronic payment to suppliers improve delivery and improved relations with channel partners.

5.3 Recommendations

Management should identify and anticipate material or service needs, evaluat3e potential suppliers, select suppliers, release and receive purchase requirements, continuously measuring and manage supplier performance, review existing purchase contracts for compliance and making sure the firm is getting the best possible deal on the products and services that are used most often, create an implementation plan, Seize discounts by combining orders and purchasing in volume, Optimize spend by reducing maverick purchases , Alleviates routine tasks so procurement teams can focus on strategic initiatives.

There is need for superiors to employ inventory management strategies for tracking inventory levels and timing replenishment to combat this waste and reduce costs, so that an ecommerce business has just the right amount of inventory on hand just in time to meet customer demand, without accidentally over- or under stocking, eliminating all waste in the supply chain so that only value remains, considering advancements in technology to improve the supply chain, making customer usage visible to all members of the supply chain, reducing lead time, creating a level flow/level load, using pull systems.

There is need to put in place strategic market sector scanning, inform the market about supply opportunities, keeping suppliers informed during all stages of the tender process, managing relationships during the list of the contract, managing post-tender debriefs and complaints, supplier management actions boost supply chain accomplishment as buyers and suppliers form a sole shared forecast of demand and a plan of supply, buyers issue order of materials from the suppliers is streamlined, quick information sharing with suppliers, predictability of flow of goods, electronic payment to suppliers improve delivery and improved relations with channel partners.

5.4 Areas of further research

Further research can be done on;

i. Relationship between green procurement and supply chain management
ii. Effect of supplier engagement on procurement planning in public sectors
iii. Lean supply management and supply chain performance in local governments

References

Abdulmaleka, F.A. and Rajgopal, J. (2017). *Analyzing the benefits of lean manufacturing and value stream mapping via simulation: a process sector case study. International Journal of Production Economics, Vol. 107 No. 1, pp. 223-236*

Agyekum, K., Ayarkwa, J. and Adjei-Kumi, T. (2019). *Minimizing Materials Wastage in Construction. A Lean Construction Approach. Journal of Engineering and Applied Science, Vol. 5, No. 1, pp. 125-146, ISSN: 2277-0097*

Amid, A., Ghodsypour, S. (2016). *A weighted max-min model for fuzzy multi-objective supplier selection in a supply chain. International Journal of Production Economics, Vol. 131 No. 1, pp. 139-145*

Amit, R. and Zott, C. (2017), "*Value creation in e-business", Strategic Management Journal, Vol. 22 Nos 6-7, pp. 493-520*

Arnheiter, E.D. and Maleyeff, J. (2015). *The integration of lean management and Six Sigma. The TQM Magazine, Vol. 17 No. 1, pp.5-18*

Arunthari, S., & Shunmugam, M. (2019). *Impact of e-procurement in supply chain management with reference to selected companies in Malaysia. International Journal of Innovative Technology and Exploring Engineering, 8(9), 497-501.*

Lee, S., et al. (2017). *The impact of e-procurement on the strategic roles of purchasing and supply management. Journal of Purchasing & Supply Management, 23(3), 162-170.*

Rao, P. B., & Subramanian, R. (2018). *E-procurement system and its impact in supply chain management. International Journal of Research in Management, Economics and Commerce, 8(1), 112-120.*

Tan, C. L., et al. (2020). *E-procurement and supply chain performance in manufacturing companies in Malaysia. Academia. edu.*

Jain, A., et al. (2019). *Critical success factors for e-procurement implementation and their impact on supply chain performance: A review. International Journal of Engineering Research and Technology, 12(6), 808-813.*

Chofreh, A. G., et al. (2021). *Impact of blockchain, AI and IoT on e-procurement in supply chain management: A literature review. Future Internet, 13(1), 14-28.*

Baily, P. Farmer, d. Crocker, B. Jessop, D. & Jones D. (2018) *Procurement Principle and Supply Chain.*

Birks, C., Bound,S & RAd Ford, M (2021) *Guide to e-Procurement in the Public Sector cutting through the Hype. London.UK: Office of Government Commerce, HMSO*

Borac N., Milovanovic G. & Andjelkovic A, (2019). *Lean Production and Six Sigma Quality in Lean Supply Chain Management: presented to Ministry of Science and Technological Development of the Republic of Serbia*

Boussema, M., A. Bueno and P. Sequier. (2020). *Transaction costs and trading strategies: an empirical analysis on global equity markets. Working paper*

Croom S and Brandon-Jones A (2017), *"e-Procurement: Key Issues in e-Procurement*

Cudney, E.; Elrod, C. (2017). *Incorporating lean concepts into supply chain management. International Journal of Six Sigma and Competitive Advantage, 6 (1-2): 12-30*

Davis, M. and Heineke, J. (2015). *Operations Management. Integrating Manufacturing and Services, 5th ed., McGraw-Hill, New York, NY*

Dawe, R.L. (2019), "*An investigation of the pace and determination of information technology use in the manufacturing materials logistics system", Journal of Business Logistics, Vol. 15 No. 1, pp. 229-58*

Dong, S. (2019), "*Information technology in supply chains: the value of IT-enabled resources under competition", Information Systems Research, Vol. 20 No. 1, pp. 18-32. e-Maintenance and e-Service", Draft Report NSF Workshop Organized by NFS Industry/University Cooperative Research Center, October 1-2, Wisconsin, USA.*

Drucker, P. F., (2017). *Workers hands bound by tradition. Wall Street Journal, Aug. 2, pp.18 Eaton M., (2013). Letting Lean into Your Supply Chain, Institute of Operations Management*

Evans, P. and Wruster, T.S. (2017), *Blown to Bits: How the New Economics of Information Transforms Strategy, Harvard Business School Press, Boston, MA.*

Galbraith JR (2022). *Designing the innovating organization. Organizational Dynamics.10(3):5-25*

Godfrey, G., Dale, B., Marchington, M. and Wilkinson, A. (2017). *Control: a contested concept in TQM research. International Journal of Operations & Production Management, Vol. 17No. 6, pp. 558-73*

Green, K. (2018). *The effect of logistics performance on organizational performance in a supply chain context, Supply Chain Management: An International Journal, Vol. 13 No. 4, pp. 317-27 42*

Green, K. W. Jr, MCgaughey, R. and Casey, K.M. (2016). *Does supply chain management strategy mediate the association between market orientation and organizational performance? Supply Chain Management. An International Journal, Vol. 11 No. 5, pp.407-14*

Greg Aimi, Mickey North Rizza, Bill Swanton, (2019). *AMR Research. Supplier Collaboration Streamlines Direct Material Procurement (Article)*

Greunen D. V. et al (2016) *Implementation of regulation based e- procurement in Eastern Cape provincial administration African journal of Business Management Vol 4(17), pp 3655-3665*

Gupta M and Narain R (2018), "*A Survey on Adoption of e-Procurement in Indian Implementation and Operation in the Public Sector", Journal of Public Procurement, 53*

Hannan, M. T., Freeman, J., (2018). *Structural inertia and organizational change. American Sociological Review, 49 (2), 149-164*

Jaideep Motwani, (2017). *A business process change framework for examining lean manufacturing: a case study", Industrial Management & Data Systems, Vol. 103 Iss 5 pp. 339 – 346*

Jaskanwal M., Deep C. & Rajdeep S., (2020). *Application of Lean and JIT Principles in Supply Chain Management, International Journal of Management Research and Business strategy, Vol. 2*

Joshi D., Rathore A., Sharma D.,& Nepal B. (2021). *Determinants of competitiveness and their relative importance: a study of Indian auto-component industry, International Journal of Service and Operations Management, Vol. 10, Issue 4, pp. 426-448*

Karlsson, C. and Ahlstrom, P. (2016). *Assessing changes towards lean production. International Journal of Operations, Vol. 16 No. 2, pp. 24-41*

Kiefer, A.W. and Novack, R.A. (1999). *An Empirical Analysis of Warehouse Measurement Systems in the Context of Supply Chain Management. Transportation Journal, 38(3), p.18-27*

Koorn R, Smith D and Mueller C (2019), *e-Procurement and Online Marketplaces, Compact, Amsterdam, The Netherlands.*

Lamming, R. (1996). *Squaring lean supply with supply chain management. International Journal of Operations & Production Management, 16(2)*

Liker, J.K. and Choi, T.Y. (2004), "*Building deep supplier relationships", Harvard Business Review, Vol. 82 No. 12, pp. 104-13*

Lysons K. and Gilligham M. (2003) *Purchasing and Supply Chain Management, Prentice, Hall*

MacManus S A (2002), "*Understanding the Incremental Nature of e-Procurement Implementation at the State and Local Levels", Journal of Public Procurement, Vol. 2,Management Prentice Hall, 10th Edition. Networks, Prentice Hall No. 1, pp. 5-28. Madison, USA.*

Mugenda,O.& Mugenda ,A,(2003) *Research Methods; Quantitative & Qualitative Approaches Acts Press.*

Ordanini, A. and Rubera, G. (2008), *"Strategic capabilities and internet resources in procurement", International Journal of Operations & Production Management, Vol. 28 No. 1, pp. 27-52 Organisations", International Journal of Indian Culture and Business Management, Vol.5, No. 1, pp. 76-109.*

Orori J.M (2011) *Factors that influence the introduction of e-procurement in retail industry: A survey of retail Chain supermarkets in Kenyan, unpublished research, Jomo Kenyatta University of Agriculture and Technology.*

Panayides, P.M. and So, M. (2005), *"Logistics service provider-client relationships", Transportation Research Part E, Vol. 41 No. 3, pp. 179-200. perspective", Journal of Business Logistics, Vol. 12 No. 1, pp. 145-68.*

Porter, M.E. (1980), *Competitive Strategy, The Free Press, New York, NY Presutti, W.D. (2008), "Supply management and e-procurement: creating value added in the supply chain", Industrial Marketing Management, Vol. 33 No. 2, pp. 219-2*

Powel (2016), "*The role of e-marketplaces in supply chain management", Industrial Marketing Management, Vol. 33 No. 2, pp. 97-105 Entrepreneurship, Vol. 9, No. 2, pp. 22-43.*

Prentice, Hall Bowersox, D.J. and Daugherty, P.J. (2019), "*Logistics paradigm: the impact of information technology", Journal of Business Logistics, Vol. 16 No. 1, pp. 65-80.*

Puschmann, T. and Alt, R. (2005), *"Successful use of e-procurement in supply chains", Supply Chain Management: An International Journal, Vol. 10 No. 2, pp. 122-33.*

Rasheed H S (2004), "*Capital Access Barriers to Public Procurement Performance: The moderating effects of Ethnicity, Gender and Education" Journal of Development Entrepreneurship, 9(2):22-43) 54*

Reichel, M., & Ramey, M. A. (Eds.). (1987). *Conceptual frameworks for bibliographic education: Theory to Practice. Littleton Colorado: Libraries Unlimited Inc.*

River, NJ Vaast, E. and Walsham, G. (2009), "*Trans-situated learning: supporting a network of practice with an information infrastructure", Information Systems Research, Vol. 20 No. 4, pp. 547-64. Vol. 5, No. 3, pp. 367-387.*

Shah, R., & Ward, P. T. (2003). *Lean manufacturing: context, practice bundles, and performance. Journal of Operations Management, 21(2), 129-149.*

Sarkis, J., & Sundarraj, R. P. (2006). *A supply chain performance measurement framework for the lean production supply chain. Supply Chain Management: An International Journal, 11(1), 56-67.*

Christopher, M., & Towill, D. (2001). *An integrated model for the design of agile supply chains. International Journal of Physical Distribution & Logistics Management, 31(4), 235-246.*

Sabri, E. H., & Shaikh, S. H. (2013). *Lean supply chain and its effect on product cost and quality: a case study on Ford Motor Company. Supply Chain Thought Leadership Series, SCRM Information and Resources.*

Pagell, M., & LePine, J. A. (2002). *Multiple perspectives on the impact of manufacturing flexibility. Academy of Management Journal, 45(2), 292-303.*

Lee, H. L., & Ozer, O. (2007). *The impact of the Product Life Cycle on Supply Chain Strategy. Stanford Global Supply Chain Forum.*

SteinbergR,(2003) *Strategies for successful government eprocureement.htt://4gartner.com*

Tatsis, V., Mena, C., Wassenhove, L.V. and Whicker, L. (2006), "*E-procurement in the Greek food and drink industry", Journal of Purchasing and Supply management, Vol. 12 No. 2, pp. 63-74 The Moderating Effects of Ethnicity, Gender and Education", Journal of Developmental*

Timme, S.G. and Timme, C. (2001), "*The financial-SCM connection", Supply Chain Management Review, Vol. 4 No. 2, pp. 33-40*

Turban, E., Lee, J., King, D. and Chung, M.H. (2000*), Electronic Commerce, Prentice Hall, Upper Saddle*

Vaidya K, (2006). *Journal of Public Procurement, volume 6 issues 1&3, 7099. University of New England, Australia*

Walters, P.G.P. (2008), "*Adding value in global B2B supply chains: strategic directions and the role of the internet as a driver of competitive advantage", Industrial Marketing Management, Vol. 37 No. 1, pp. 59-68.*

APPENDICES

APPENDIX I: QUESTIONNAIRE

Dear respondent;

I am Chemutai Diana carrying out research on the topic "Green procurement practices and supply chain management in private companies**"** as a partial fulfillment for the award of bachelors degree in procurement and logistics management at Uganda Christian University. The questionnaire is designed to help me collect relevant information and therefore I kindly request you to participate in responding to the questions that was asked .However the information given was treated confidential and will only be used for academic purpose.

SECTION 1: DEMOGRAPHIC DATA

(Tick in the box provided)

1. Gender distribution of the respondent

a) Male ☐ b) Female ☐

2. Marital status of the respondent

a) Single ☐ b) Married ☐ Divorced ☐ Widowed ☐

3. Age bracket of the respondent (years)

a) 20-30 ☐ b) 31-40 ☐ c) 41-50 ☐ C) 60 and above ☐

4**.** Academic qualification of respondent

a) Secondary ☐ b) Certificate ☐ c) Diploma ☐ d) Bachelors' ☐ e) Masters ☐

5. Years of working by the respondents.

a) Less than 1 year ☐ b) 1-2 years ☐ c) 3 years and above ☐

SECTION A: To find out the effect of e-procurement on supply chain management of grace form (U) Ltd. This section aims at finding out the effect of e-procurement on supply chain management of grace form (U) Ltd. Please indicate your opinion on the following statements using the Linkert scale. Key: **1= Agree; 2= strongly Agree; 3= not sure; 4= Disagree; 5= strongly disagree.**

No	Statements	1	2	3	4	5
1	The firm implements e-procurement as a strategy due to increased competitor activity.					
2	E-procurement is still in its early stages of adoption in this company					
3	The firm continues to rely on mainly traditional procurement systems even through more advanced technologies are available					
4	The firm has faced a number of challenges in implementing E-procurement					
5	The firm's procurement staff have the necessary knowledge and experience in information technology systems to handle E-procurement					

Section B: To analyze the effect of lean supply on supply chain management of grace form (U) Ltd. This section aims at analyzing the effect of lean supply on supply chain management of grace form (U) Ltd. Please indicate your opinion on the following statements using the Linkert scale.
Key: **1= Agree; 2= strongly Agree; 3= not sure; 4= Disagree; 5= strongly disagree.**

No	Statements	1	2	3	4	5
1	There is supplies of products to the end customer in the most efficient manner possible					
2	There is an increase customer satisfaction while reducing costs and improving efficiency					
3	The firm incurs lower inventory costs					
4	There is an increase in productivity and flexibility					
5	Employee morale is improved					

Section C: To assess the effect of supplier engagement on supply chain management of grace form (U) Ltd

This section aims at assessing the effect of supplier engagement on supply chain management of grace form (U) Ltd. Please indicate your opinion on the following statements using the Linkert scale. Key: **1= Agree; 2= strongly Agree; 3= not sure; 4= Disagree; 5= strongly disagree.**

No	Statements	1	2	3	4	5
1	Engaged suppliers perform at a much higher level					
2	You basically focus on creating long term relationships					
3	You simplify the process of working together as much as possible					
4	You understand each vendor and personalize the approach					
5	You have unsynchronized priorities and dependency risks					
6	There is an encouragement of engaged suppliers to bring passion and interest to their retailers					

Section 3: Supply chain management

This section aims at establishing the indicators of supply chain management in grace form (U) Ltd. Please indicate your opinion on the following statements using the Linkert scale. Key: **1= Agree; 2= strongly Agree; 3= not sure; 4= Disagree; 5= strongly disagree.**

No	Statements	1	2	3	4	5
1	Quality is emphasized as one way of ensuring customer satisfaction in the supply chain					
2	There better collaboration with suppliers					
3	You have reduced inventory and overhead costs					
4	There is better visibility and data analytics					
5	There is improved risk mitigation					

APPENDIX II: INTERVIEW GUIDE

1. How has the adoption of E-procurement impacted the efficiency of your supply chain processes?
2. In what ways has E-procurement improved transparency and visibility in your supply chain operations?
3. Can you discuss any cost savings or financial benefits that resulted from implementing E-procurement in your supply chain?
4. How has E-procurement influenced your relationships with suppliers and other partners in the supply chain?
5. What challenges have you faced in integrating E-procurement systems into your existing supply chain management practices?
6. What benefits have you experienced from implementing lean supply principles in your supply chain management strategy?
7. How has lean supply helped in reducing waste and improving overall efficiency in your supply chain?
8. Can you share any specific examples where lean supply practices have led to improvements in customer satisfaction or product quality?
9. How has lean supply influenced your inventory management practices and supply chain responsiveness?
10. What are some challenges you have encountered in implementing lean supply principles across your supply chain?
11. How have innovative practices from suppliers impacted the agility and competitiveness of your supply chain?
12. Can you provide examples of how supplier innovation has helped in product development or customization for your customers?
13. In what ways has collaboration with innovative suppliers improved your supply chain risk management strategies?
14. How do you assess and prioritize suppliers based on their level of innovation and contribution to your supply chain goals?
15. What are some key performance indicators you use to measure the effectiveness of supplier innovation on your supply chain performance?

APPENDIX III: LETTER OF DATA COLLECTION

UGANDA CHRISTIAN UNIVERSITY.
A Centre of Excellence in the Heart of Africa
MBALE UNIVERSITY COLLEGE.

BUSINESS DEPARTMENT

To THE HUMAN RESOURCE MANAGER GRACE FORM U LTD MBALE BRANCH.

H/R
Kindly render her support the necessary
28/5/2024.

GRACE FORM U LTD
28 MAY 2024
MBALE BRANCH

Dear Sir/Madam,

Re: Academic Research

Christian greetings!

We are honored to introduce to you Mr. Mrs./Miss. CHEMUTA DIANA
Of Registration Number; S22/MUC/BPLM/005 pursuing a Masters' Degree/Postgraduate Diploma / Bachelor's Degree
BACHELORS DEGREE IN PROCUREMENT AND LOGISTICS MGT

He/ she is required to carry out an academic research on the topic
GREEN PROCUREMENT PRACTICES AND SUPPLY CHAIN MANAGEMENT IN PRIVATE COMPANIES.

and thereafter produce a well bound hard cover research report (**MAROON**) in color for undergraduate and three (**BLACK**)copies for Postgraduate students as a University requirement for the award of a degree/diploma in the academic discipline that he / she is pursuing.

We shall be grateful for the help you may offer to him or her accordingly.
Thank you.
Yours faithfully,

Henry Omache
Ag. Head of Department Business

UGANDA CHRISTIAN UNIVERSITY
HEAD OF DEPARTMENT
27 JAN 2024
BUSINESS
MBALE UNIVERSITY COLLEGE

P. O Box 189, Mbale, Uganda. Tel: +256 454 436 222. E-mail: directormbale@ucu.ac.ug