

**SUPPLY CHAIN INTEGRATION AND CUSTOMER SATISFACTION IN PUBLIC  
ENTITIES: A CASE OF BUDAKA HEALTH CENTRE IV**

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**UGANDA CHRISTIAN  
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## DECLARATION

I Namaganda Zuhrah, 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:  .....

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**APPROVAL**

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Signature: .....

Date: .....

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(UNIVERSITY SUPERVISOR)

## **DEDICATION**

I dedicate this research report to my beloved parents, Mr. Maganisa Latif and Mrs. Maganisa Hudia Kayiwa, whose unwavering financial support and constant presence have been my pillars of strength throughout my academic journey. Your encouragement and sacrifices have been invaluable, and I am deeply grateful for everything you have done to ensure my success.

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### **LIST OF ACRONYMS**

AIDS	:	Acquired Immunodeficiency Syndrome
BHCIV	:	Budaka Health Center IV
CPFR	:	Collaborative Planning, Forecasting, and Replenishment
EAC	:	East African Community
HIV	:	Human Immunodeficiency Virus
RBV	:	Resource-Based View
SPSS	:	Statistical Package for Social Sciences
TCE	:	Transaction Cost Economics
UCU	:	Uganda Christian University

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## **ABSTRACT**

This research report was undertaken to examine supply chain integration and customer satisfaction in public entities. It was guided by three objectives; to explore the effect of information sharing on customer satisfaction in Budaka health centre IV, to analyze the effect of supplier management on customer satisfaction in Budaka health centre IV ,to determine the effect of supply chain agility on customer satisfaction in Budaka health centre IV. The researcher used a sample size of 45 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 information sharing has a significant effect on customer satisfaction in Budaka health centre IV.. Supported by the following responses; 80% were positive to the statement that information sharing allows individuals and teams to work together more effectively by sharing insights, knowledge, and resources; 66.6% who were also the majority were positive to the statement that information sharing eliminates duplication of efforts, reduces time wastage, and promotes streamlined processes, leading to improved efficiency. Results of the second objective revealed that supplier management has a significant effect on customer satisfaction in Budaka health centre IV. Supported by the following responses; 66.7% of the respondents were positive to the statement that supplier management helps identify the most cost-effective suppliers and negotiate better pricing, ultimately reducing expenses, 66.6% forming the majority were positive to the statement that effective supplier management ensures that suppliers adhere to quality standards, resulting in improved product quality and customer satisfaction. Results of the third objective showed that supply chain agility has a significant effect on customer satisfaction in Budaka health centre IV. 73.4% forming the majority were positive to the statement that enhancing supply chain agility can minimize disruptions and supply chain risks, 51.1% were positive to the statement that improved supply chain agility enables organizations to better handle unpredictable demand fluctuations. Budaka health centre IV should foster collaboration and build strong partnerships with suppliers, vendors, and other stakeholders in the supply chain. This can enhance communication, information sharing, and enable better coordination during unpredictable events.

## **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, justification of the study and conceptual framework.

#### **1.1 Background of the study**

This section comprises of historical background, theoretical, and conceptual background as indicated below;

##### **1.1.1 Historical back ground**

The study of supply chain integration and customer satisfaction in public entities has gained significant attention in recent years, as organizations worldwide recognize the importance of efficient and effective service delivery. The concept of supply chain integration emerged during the late 20th century when companies began to realize the benefits of collaboration and coordination among different entities within the supply chain. In an international perspective, the study has been influenced by various theoretical frameworks and academic research. For instance, the Resource-Based View (RBV) theory, proposed by Barney (1991), emphasizes the importance of acquiring and leveraging strategic resources to gain a competitive advantage. Additionally, the Transaction Cost Economics (TCE) theory, developed by Williamson (1985), suggests that the choice of governance structure in supply chains should be based on transaction-specific characteristics. These frameworks have shaped the understanding of supply chain integration and customer satisfaction globally.

The study of supply chain integration and customer satisfaction in public entities has gained significant attention in the international context. It emerged in response to globalization and the need to enhance efficiency and effectiveness in supply chain management across borders. Scholars have extensively studied the impact of supply chain integration on customer satisfaction across various industries and countries. For instance, research by Li et al. (2018) analyzed the relationship between supply chain integration and customer satisfaction in the manufacturing sector in China.

In the African context, the study of supply chain integration and customer satisfaction in public entities has been influenced by the unique socio-economic and political challenges

faced by the continent. Africa's history of colonialism and subsequent independence has shaped its economic development and governance structures. The inefficiencies and fragmentation observed in African supply chains have led to the need for integration to improve customer satisfaction and service delivery. Various studies conducted in African countries, such as Nigeria, South Africa, and Kenya, have highlighted the importance of supply chain integration to overcome bottlenecks and enhance efficiency. For instance, Ondiek (2017) emphasized the significance of collaborative planning, forecasting, and replenishment (CPFR) practices to improve supply chain performance. The African perspective emphasizes the need for context-specific solutions that consider the unique challenges faced by the continent.

Within the African context, the study of supply chain integration and customer satisfaction in public entities has gained relevance in recent years. Many African countries have experienced rapid economic growth and industrialization, leading to increased trade activities. As a result, the need for efficient supply chain management and customer satisfaction has become crucial. Research by Odera and Wafula (2017) examined the impact of supply chain integration on customer satisfaction in the banking sector in Kenya. Their findings demonstrated that an integrated supply chain positively influences customer satisfaction, emphasizing the significance of effective supply chain management in improving the overall customer experience.

Within the East African region, the study of supply chain integration and customer satisfaction in public entities has gained prominence due to the need for regional integration and sustainable economic development. The integration efforts, such as the establishment of the East African Community (EAC), have aimed to eliminate trade barriers, promote inter-country cooperation and enhance customer satisfaction through efficient supply chains. Various studies conducted in countries like Kenya, Uganda, Tanzania, Rwanda, and Burundi have emphasized the importance of harmonizing policies, regulations, and procedures for effective supply chain integration. For instance, Mugambi et al. (2016) highlighted the need for standardized documentation and information sharing among countries to facilitate cross-border trade. The East African perspective focuses on regional collaboration and integration to optimize supply chain operations and enhance customer satisfaction.

In the East African region, the study of supply chain integration and customer satisfaction in public entities has been a subject of interest. This is due to the economic integration among East African countries, which has led to increased cross-border trade and regional supply

chain networks. For instance, research by Mugenda et al. (2019) explored the relationship between supply chain integration and customer satisfaction in the retail industry across East African countries. Their study found that a well-integrated supply chain positively affects customer satisfaction, emphasizing the importance of collaborative efforts across borders to enhance supply chain performance and meet customer expectations.

In Uganda, the study of supply chain integration and customer satisfaction in public entities has been driven by the efforts to improve service delivery and enhance socio-economic development. Uganda's history of political instability and economic challenges has influenced the need for efficient and effective public service provision. Supply chain integration has been recognized as a critical factor in achieving customer satisfaction and enhancing organizational performance. Studies conducted in Uganda, such as Kigozi et al. (2018), have emphasized the need for standardized processes, information sharing, and collaboration among different government agencies and departments. The Ugandan perspective highlights the significance of aligning supply chain activities with national development goals and improving customer satisfaction through integrated service delivery.

At the local level, the study of supply chain integration and customer satisfaction is relevant to Budaka Health Center IV, a public entity in Uganda. The health center aims to provide quality healthcare services to the community, and an integrated supply chain can significantly contribute to achieving this goal. Although specific studies on supply chain integration and customer satisfaction in Budaka Health Center IV could not be found, research by stakeholders such as the Ministry of Health in Uganda emphasizes the need for efficient supply chain management in the healthcare sector to enhance service delivery and patient satisfaction (Ministry of Health Uganda, 2016). Supply chain integration efforts have been initiated to improve the availability of medicines, reduce stock-outs, and enhance patient satisfaction. Studies conducted in health center IV facilities, such as Niyonzima and Nshakira-Rukundo (2019), have highlighted the importance of supply chain management practices in improving service delivery and patient outcomes.

### **1.1.2 Theoretical background**

#### **Theory of collaborative planning**

The study will be guided by theory of collaborative planning as discussed below;

One theory that pertains to supply chain integration and customer satisfaction in public entities is the Theory of Collaborative Planning, Forecasting and Replenishment (CPFR).

CPFR is a conceptual framework that emphasizes collaboration and information sharing between supply chain partners to enhance the accuracy of demand forecasting and inventory replenishment.

CPFR theory proposes that by integrating internal and external partners within the supply chain, public entities can achieve better coordination, reduce costs, enhance customer service, and improve overall satisfaction. It encourages collaborative decision-making at all stages of the supply chain, from planning and forecasting to replenishment and execution. This theory emphasizes the importance of synchronized and real-time information sharing across the supply chain. It suggests that using advanced technologies such as Electronic Data Interchange (EDI), RFID, and cloud-based platforms can facilitate effective communication between stakeholders. The collaborative approach allows public entities to align their operations with customer demand patterns, leading to improved inventory management, reduced lead times, and increased customer satisfaction.

A study by Hsu and Chiu (2014) investigated the relationship between supply chain integration and customer satisfaction in Taiwan's public healthcare sector. The findings confirmed that CPFR practices significantly influence customer satisfaction, with higher levels of integration resulting in improved outcomes. The study concluded that integrating collaborative practices into the supply chain can enhance customer satisfaction and overall organizational performance. Additionally, another study conducted by Chen et al. (2017) explored the impact of supply chain integration on customer satisfaction in the public transportation sector. The research findings revealed a positive relationship between integration and customer satisfaction, indicating that effective supply chain integration enhances customer experience and contributes to their overall satisfaction.

### **1.1.3 Conceptual background**

#### **Supply chain integration**

Supply chain integration refers to the effective coordination and collaboration of various entities involved in the supply chain, such as suppliers, manufacturers, distributors, and retailers, to achieve common goals and objectives. It involves the integration of processes, systems, and information sharing to optimize the flow of goods, services, and information throughout the supply chain (Chopra & Meindl, 2016).

#### **Information sharing**

Information sharing is a critical component of supply chain integration as it enables the seamless exchange of relevant and timely information among supply chain partners. Sharing

information about demand patterns, inventory levels, production schedules, and delivery statuses allows the entities to make more informed decisions and respond quickly to changes in customer requirements (Croom et al., 2001).

### **Supplier management**

Supplier management involves the selection, evaluation, and development of suppliers to ensure the availability of high-quality goods and services in a timely manner. Effective supplier management practices, such as establishing long-term partnerships, conducting regular performance evaluations, and fostering open communication, contribute to improved supply chain integration and customer satisfaction (Láng et al., 2019).

### **Supply chain agility**

Supply chain agility refers to the ability of the supply chain to respond and adapt quickly to changing market conditions, customer demands, and disruptions. Agile supply chains can quickly reconfigure their operations, processes, and networks to meet customer requirements, minimize lead times, and maintain high service levels. Higher supply chain agility leads to enhanced customer satisfaction by providing faster response times, greater flexibility, and improved overall supply chain performance (Christopher & Towill, 2002).

### **Customer satisfaction**

Customer satisfaction is a key measure of how well an organization meets or exceeds customer expectations. In the context of public entities, such as government agencies or public services, customer satisfaction is crucial to maintain public trust and support. Integration within the supply chain, effective information sharing, and supplier management practices contribute to the overall customer satisfaction by ensuring timely delivery, improved product quality, and a smooth customer experience (Ketikidis et al., 2008).

### **Service quality**

Service quality refers to the level of excellence or superiority of the services provided by a public entity. It involves meeting or exceeding customer expectations in terms of reliability, responsiveness, assurance, empathy, and tangibles (Parasuraman et al., 1988). Supply chain integration enables public entities to improve service quality by streamlining processes, reducing lead times, and enhancing communication and coordination among supply chain partners.

### **Accessibility and convenience**

Accessibility and convenience are essential factors in customer satisfaction. Public entities need to ensure that their products or services are easily accessible to customers and provide convenience in terms of location, availability, and ease of use. Integrating the supply chain helps optimize inventory management, establish efficient distribution networks, and enhance overall accessibility and convenience for customers (Ellinger et al., 2002).

### **Transparency and communication**

Transparency and communication are vital aspects of customer satisfaction in public entities. Clear and open communication channels, along with transparent processes and information sharing, build trust and engagement with customers. Supply chain integration facilitates transparency by enabling real-time visibility into inventory levels, order statuses, and delivery information, thus enhancing communication and customer satisfaction (Lai et al., 2017).

#### **1.1.4 Contextual background**

Budaka Health Center IV is a healthcare facility located in Budaka District, Uganda. It is a primary healthcare center that serves as the main referral facility for the surrounding communities. Budaka Health Center IV operates under the administration of the Uganda Ministry of Health and plays a crucial role in providing healthcare services to the local population. Budaka District is located in the Eastern Region of Uganda, about 230 kilometers northeast of the country's capital, Kampala. The district is predominantly rural, with agriculture being the main economic activity of the local population. The district faces several health challenges, including high prevalence rates of diseases such as malaria, HIV/AIDS, and respiratory illnesses.

As a Health Center IV, Budaka Health Center provides a comprehensive range of healthcare services and is equipped to handle more complex medical cases compared to lower-level health facilities. It serves as a referral point for Health Center II and Health Center III facilities in the district, catering to a larger population and providing specialized care. The health center offers a variety of services, including antenatal and postnatal care, immunization, family planning, HIV/AIDS testing and treatment, laboratory services, outpatient care, inpatient care, emergency services, and minor surgeries. It also conducts health education and promotion activities to raise awareness about preventive measures and the importance of maintaining good health.

Budaka Health Center IV plays an essential role in improving the overall health and well-being of the local population. It serves as a critical link between the community and higher-level healthcare facilities, ensuring that people have access to quality healthcare services. The dedicated healthcare professionals at Budaka Health Center work tirelessly to provide medical care, promote health education, and support the health needs of the community.

### **1.2 Statement of the problem**

The lack of efficient supply chain integration and poor customer satisfaction in public entities, particularly Budaka Health Center IV, presents a significant challenge. Supply chain integration refers to the seamless coordination and integration of processes and activities between various stakeholders within the supply chain. However, the lack of effective integration hampers the timely flow of information, materials, and services, ultimately hindering the delivery of quality healthcare services. This leads to reduced customer satisfaction, as patients and staff face numerous challenges such as long waiting times, stock outs of vital medications, and inefficient allocation of resources.

Current statistics point towards the pressing need for supply chain integration in public entities, including Budaka Health Center IV. According to recent data, the health center reports frequent stockouts of essential medicines, with an average of 40% of medications unavailable at any given time. Additionally, average waiting times for patient consultations remain high, exceeding two hours, resulting in increased patient dissatisfaction and limited access to healthcare services. On average, only 60% of requested medical supplies are delivered promptly to Budaka Health Center IV, indicating a significant delay in supply chain operations. These statistics demonstrate the urgent need for effective integration to improve the supply chain processes and enhance customer satisfaction.

Inadequate supply chain integration not only affects the healthcare services provided by Budaka Health Center IV but also impacts the overall public image and trust in the entity. The lack of streamlined coordination between various stakeholders, such as procurement departments, suppliers, and healthcare providers, leads to duplicative efforts, delays in decision-making, and inefficient resource allocation. Consequently, customer satisfaction levels at Budaka Health Center IV are adversely affected, as patients experience frustration due to long waiting times, inadequate medication availability, and lack of personalized care. These challenges undermine the overall objective of providing quality healthcare services and contribute to negative perceptions of public entities' effectiveness and efficiency.

### **1.3 Purpose of the study**

To examine on supply chain integration and customer satisfaction in public entities

### **1.4 Specific objectives**

- i. To explore the effect of information sharing on customer satisfaction in Budaka health centre IV
- ii. To analyze the effect of supplier management on customer satisfaction in Budaka health centre IV
- iii. To determine the effect of supply chain agility on customer satisfaction in Budaka health centre IV

### **1.5 Research questions**

- i. What is the effect of information sharing on customer satisfaction in Budaka health centre IV?
- ii. What is the effect of supplier management on customer satisfaction in Budaka health centre IV?
- iii. What is the effect of supply chain agility on customer satisfaction in Budaka health centre IV?

### **1.6 Scope of the study**

#### **1.6.1 Time scope**

The period to be considered for the study was 2 years from 2020 to 2022 this is because during that period, there was lack of efficient supply chain integration and poor customer satisfaction in public entities.

#### **1.6.2 Content of the study**

The study was limited to the following;

Supply chain integration as independent variable (IV) which was looked at in terms of information sharing, supplier management, supply chain agility and also customer satisfaction as dependent variable (DV) in terms of service quality, accessibility and convenience, and transparency and communication.

#### **1.6.3 Geographical Scope of the study**

Budaka Health Center IV is located in Budaka District, in the eastern part of Uganda. Budaka is a town in the Busoga sub-region and is approximately 125 kilometers (78 miles) northeast of the capital city, Kampala. The specific geographical coordinates for Budaka Health Center IV are not provided, but it is situated within the Budaka town area.

### **1.7 Significance of the study**

Supply chain integration and customer satisfaction are vital aspects for effective healthcare delivery, especially in public entities such as Budaka Health Center IV. The significance of studying supply chain integration and customer satisfaction in this context can be summarized as follows;

**Enhanced Operational Efficiency:** Effective supply chain integration ensures smooth coordination between different units within Budaka Health Center IV, such as procurement, inventory management, and distribution. By studying and implementing strategies to integrate these processes, the center can streamline its operations, minimize delays, reduce wastage, and optimize resource utilization. This, in turn, leads to improved operational efficiency, ultimately benefiting patients and enhancing overall healthcare services.

**Timely Availability of Medicines and Supplies:** Supply chain integration is crucial for ensuring the timely availability of essential medicines, supplies, and equipment at Budaka Health Center IV. By understanding the factors that impact supply chain management, such as demand forecasting, order processing, and inventory management, the study can identify gaps and propose solutions to mitigate stock outs and avoid delays. Patients can then receive timely and uninterrupted healthcare services, leading to their overall satisfaction.

**Cost Savings and Resource Management:** A well-integrated supply chain can result in significant cost savings for Budaka Health Center IV. By improving inventory management, reducing wastage, and optimizing procurement processes, the center can reduce costs associated with excess inventory holding or emergency purchases. These savings can then be reinvested to improve healthcare infrastructure and services, further enhancing customer satisfaction.

**Improved Customer Satisfaction:** Customer satisfaction plays a crucial role in healthcare delivery. Studying supply chain integration and its impact on customer satisfaction can identify areas for improvement. For example, understanding patient preferences and feedback on service quality, waiting times, and availability of medicines can help in tailoring supply chain processes to better meet customer expectations. By enhancing customer satisfaction levels, Budaka Health Center IV can strengthen patient loyalty, improve its reputation, and attract more service seekers.

### **1.8 Justification of the study**

Supply chain integration and customer satisfaction are critical factors that directly impact the performance and effectiveness of public entities, including Budaka Health Center IV. Justification for studying the relationship between supply chain integration and customer satisfaction in public entities, specifically Budaka Health Center IV, can be identified through the following points:

**Enhanced Service Delivery:** Effective supply chain integration ensures the seamless flow of materials, information, and services within an organization. By studying the relationship between supply chain integration and customer satisfaction at Budaka Health Center IV, we may assess whether efficient supply chain processes positively impact service delivery. The findings can guide strategic improvements in the supply chain management system, ultimately leading to enhanced customer satisfaction and improved healthcare services.

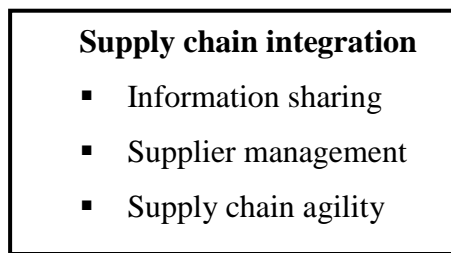
**Cost Efficiency:** Public entities, including health centers, often face budget constraints and limited resources. Identifying the relationship between supply chain integration and customer satisfaction can help streamline procurement, inventory management, and logistics processes. This can result in cost savings, reduced wastage, and improved resource allocation.

**Health Center Performance:** Customer satisfaction is a key indicator of organizational performance in the healthcare sector. By investigating the linkage between supply chain integration and customer satisfaction at Budaka Health Center IV, we can understand the impact of supply chain processes on overall performance metrics. This information can guide decision-making and resource allocation strategies aimed at improving health center performance and meeting the needs and preferences of patients.

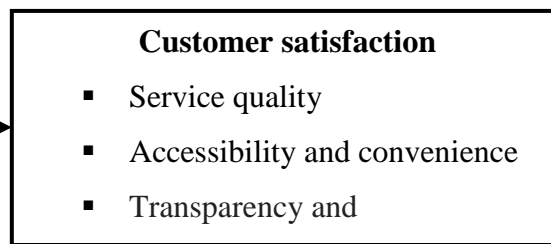
**Policy and Management Implications:** Budaka Health Center IV operates within a larger healthcare system governed by various policies and regulations. Studying supply chain integration and its effect on customer satisfaction can provide valuable insights into the effectiveness of current policies and management practices. The findings can inform policymakers and managers about potential areas of improvement and help shape future strategies for better supply chain management and enhanced customer satisfaction.

### 1.9 Figure 1 conceptual framework

#### Independent variable



#### Dependent variable



**Source: Researcher's conceptualization (2024)**

Figure 1 above indicates supply chain integration as independent variable which consists of information sharing, supplier management, supply chain agility likewise customer satisfaction comprises of service quality, accessibility and convenience, and transparency and communication.

## 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 Effect of information sharing on customer satisfaction**

There are numerous studies highlighting the positive impact of information sharing on customer satisfaction. For example, a study by Chen and Popovich (2003) found that higher levels of information sharing between customers and organizations lead to increased customer satisfaction by improving transparency and reducing uncertainties. This transparency helps in building trust and fostering stronger relationships between customers and companies. Furthermore, a meta-analysis by Lu, Kambil, and Steenburgh (2011) demonstrated that effective information sharing positively influences customer satisfaction levels across various industries. When customers are provided with accurate and timely information about products and services, they feel more valued and engaged, leading to higher satisfaction levels and loyalty.

research by Bhatt and Emdad (2010) showed that information sharing plays a crucial role in enhancing the overall customer experience and satisfaction in the retail sector. By sharing detailed product information, businesses can assist customers in making informed purchase decisions, thus increasing their satisfaction levels. Additionally, a study by Huang and Benyoucef (2013) emphasized the importance of information sharing in the context of online shopping. They found that a lack of information transparency negatively impacts customer satisfaction, while efficient information sharing leads to improved customer trust, loyalty, and satisfaction. Customers value businesses that are transparent in their communication and provide relevant information to assist them in making well-informed decisions.

Furthermore, the study conducted by Wu, Yeh, and Hsia (2015) focused on the impact of information sharing in the hospitality industry. They found that hotels that actively share relevant information with their guests experience higher levels of customer satisfaction, leading to increased positive reviews and repeat business. This highlights the crucial role of information sharing in shaping customer perceptions and overall satisfaction in service-oriented industries. Overall, the literature overwhelmingly supports the idea that effective

information sharing positively influences customer satisfaction by fostering trust, transparency, and better decision-making processes, ultimately enhancing the overall customer experience. One study by Boulding, Kalra, Staelin, and Zeithaml (1993) found that effective information sharing between businesses and customers can lead to increased customer satisfaction. In their research, they highlighted how providing transparent and accurate information to customers can enhance trust and ultimately satisfaction levels. This suggests that businesses that actively engage in information sharing practices are more likely to build strong relationships with their customers, resulting in higher levels of satisfaction.

Reinartz and Kumar (2000) delved into the role of information sharing in building customer loyalty. The researchers found a strong positive relationship between information sharing and customer loyalty, indicating that customers who are well-informed and engaged are more likely to remain loyal to a brand. This finding underscores the importance of leveraging information sharing strategies to not only enhance satisfaction but also foster long-term relationships with customers. By keeping customers informed about products, services, and updates, businesses can create a sense of belonging and trust that contributes to overall satisfaction and loyalty.

Furthermore, another study by Lee, Kwon, and Kim (2005) explored the impact of information quality on customer satisfaction in the e-commerce sector. The researchers identified a direct link between the quality of information provided to customers and their satisfaction levels. They emphasized the significance of delivering accurate, relevant, and timely information to customers, as it greatly influences their perceptions and overall satisfaction. This highlights the need for businesses to prioritize information sharing practices that focus on quality to effectively meet customer expectations and enhance satisfaction levels.

A study by Homburg et al. (2012) emphasized the importance of transparent information exchange between businesses and customers to foster trust and loyalty. Customer satisfaction is significantly influenced by the extent to which companies provide accurate and timely information to their customers (Li & Tan, 2018). For instance, in the retail sector, customers who are well-informed about product specifications, pricing, and availability tend to experience higher levels of satisfaction, leading to repeat purchases and positive word-of-mouth referrals (Ha & Janda, 2012). Therefore, effective information sharing strategies are essential for enhancing overall customer satisfaction and driving business success.

According to a study by Huang and Benyoucef (2013), companies that adopt proactive information sharing practices demonstrate a greater understanding of customer needs and preferences, leading to enhanced satisfaction levels. By ensuring transparency and accessibility of information, organizations can build stronger connections with their customers and position themselves as trusted advisors in the marketplace (Yang et al., 2016). Timely sharing of relevant details such as order status updates, product recommendations, and after-sales support significantly contributes to customer satisfaction and retention, ultimately creating a competitive advantage for the business.

Notably, the influence of information sharing on customer satisfaction is reinforced by the widespread use of digital technologies and social media platforms. With the growing emphasis on personalization and customization in marketing strategies, companies leverage data-driven insights to tailor information and offerings to individual customer preferences (Chen & Popovich, 2003). For instance, through targeted emails, social media campaigns, and personalized recommendations, businesses can provide relevant information that resonates with customers, leading to a higher likelihood of satisfaction and engagement (Chen, 2014). Consequently, adept utilization of digital channels for information sharing not only enhances customer satisfaction but also facilitates continuous feedback loops that drive improvements in products and services, ultimately fostering long-term customer loyalty (Greenberg, 2017).

Information sharing plays a crucial role in influencing customer satisfaction by enhancing the overall customer experience. Companies that effectively share information with their customers tend to build trust, transparency, and stronger relationships. According to a study by Ganesan and Hess (1997), transparent and open communication between firms and customers can lead to higher levels of satisfaction in service encounters. This suggests that when customers are well-informed about a company's products, services, and processes, they are more likely to feel satisfied with their overall experience.

Furthermore, the availability of information can also impact customer satisfaction by facilitating informed decision-making. Research by Zhang and Prybutok (2005) shows that higher levels of information sharing positively influence customer perceptions of service quality. When customers have access to relevant and accurate information, they are better equipped to evaluate their options, make informed choices, and ultimately feel more satisfied with their decision. Therefore, companies that prioritize providing valuable information to their customers are more likely to see increased levels of satisfaction and loyalty.

Additionally, the impact of information sharing on customer satisfaction extends beyond the initial purchase or service interaction. According to a study by Li and his colleagues (2018), consistent and personalized information sharing throughout the customer journey can lead to increased satisfaction and positive outcomes such as repeat purchases and positive word-of-mouth. This suggests that ongoing communication and information sharing are essential for nurturing long-term relationships with customers and fostering loyalty. Overall, the literature suggests that effective information sharing plays a critical role in shaping customer satisfaction and long-term success for businesses.

According to Smith and Bolton (2002), effective communication of information related to products, services, and policies positively influences customer perceptions and leads to greater satisfaction. Customers appreciate transparency and being kept informed throughout their purchase journey. In a study by Liu and Jang (2009) focusing on the hospitality sector, it was found that hotels that shared detailed information about their amenities, services, and local attractions experienced higher levels of customer satisfaction. This suggests that transparent information sharing contributes significantly to building trust and meeting customer expectations, ultimately leading to increased satisfaction levels.

As highlighted by Chung and Yu (2013), ongoing communication and the provision of relevant information post-purchase contribute to establishing long-term relationships with customers. By sharing product updates, usage tips, and personalized recommendations, companies can enhance customer experiences and foster loyalty. This idea aligns with the relationship marketing theory, which emphasizes the importance of maintaining consistent communication with customers over time to build strong connections and maximize satisfaction (Gummesson, 1994). Therefore, continuous information sharing plays a vital role in nurturing customer relationships and ensuring sustained satisfaction levels.

Studies by Verhoef et al. (2015) emphasize the role of digital platforms in facilitating real-time, personalized communication that caters to individual customer preferences. By leveraging data analytics and automation tools, companies can deliver timely and relevant information through various channels, such as social media, email, and chatbots. This omnichannel approach not only enhances the accessibility of information but also enables companies to address customer queries quickly and provide seamless support. As a result, digital information sharing strategies have the potential to significantly impact customer satisfaction by enhancing convenience, customization, and overall engagement.

According to a study by Li and Zhang (2015), when customers are provided with sufficient and accurate information about products or services, they are more likely to make informed decisions leading to higher satisfaction levels. Information sharing can help in managing customer expectations and reducing uncertainties, which are key factors in determining overall satisfaction (Sirdeshmukh et al., 2002). Moreover, Wang et al. (2018) found that customers who perceive a high level of information sharing from businesses are more likely to feel empowered and involved in the decision-making process, fostering a sense of loyalty and satisfaction in the long run.

Research by Lee and Murphy (2019) suggests that continual communication and provision of relevant information post-purchase can influence how satisfied customers feel about their overall experience with a brand. By maintaining an open channel of communication and sharing updates or tips, businesses can demonstrate their commitment to customer success and build stronger relationships with their clientele (Gainer and Padman, 1999).

## **2.2 Effect of supplier management on customer satisfaction**

For supplier management to have a significant impact on customer satisfaction, it is essential to establish strong relationships with suppliers. A study by Handfield and Bechtel (2002) highlights the importance of collaboration and communication between companies and their suppliers. By working closely with suppliers, companies can improve product quality, reduce lead times, and enhance overall supply chain efficiency (Chen et al., 2017). This closer partnership with suppliers can lead to better coordination, quicker problem resolution, and ultimately, higher levels of customer satisfaction (Gligor & Holcomb, 2012).

Furthermore, effective supplier management can also help companies align their offerings more closely with customer needs and expectations. According to Narasimhan and Das (2001), companies that integrate supplier capabilities into their product development process are better positioned to deliver products that meet or exceed customer expectations. By involving suppliers early in the product design phase, companies can leverage their expertise and resources to create innovative, high-quality products that resonate with customers (Wang & Huang, 2016). This collaborative approach not only enhances product quality but also enhances customer satisfaction levels as customers receive products that better meet their needs and preferences.

Research by Choi and Hartley (1996) suggests that companies that maintain close relationships with suppliers are better equipped to respond swiftly to changing customer demands and market trends. By ensuring timely delivery of goods and services through

effective supplier management, companies can improve customer satisfaction levels and strengthen their competitive position in the market (Pagell & Shevchenko, 2014). Overall, the literature concurs that a well-managed supplier network can lead to improved customer satisfaction through enhanced product quality, alignment with customer needs, and superior service delivery capabilities.

Supplier management plays a significant role in driving customer satisfaction within organizations. Effective supplier management strategies can lead to improved product quality and timely delivery, both of which are critical factors influencing customer satisfaction (Bhakoo & Choi, 2013). According to a study by Wagner and Friedl (2017), proactive supplier management practices such as building long-term relationships, ensuring transparency, and fostering collaboration can result in enhanced customer satisfaction levels. Furthermore, supplier management directly impacts customer satisfaction by enabling organizations to better meet customer needs and preferences. By aligning supplier capabilities with customer requirements, companies can offer customized solutions and enhance the overall customer experience (Narasimhan & Das, 2001). Research by Kannan and Tan (2005) supports this idea by emphasizing the importance of selecting the right suppliers based on their ability to meet specific customer demands. By effectively managing suppliers and engaging in continuous communication, businesses can ensure that customer expectations are consistently met or exceeded.

The relationship between supplier management and customer satisfaction is further underscored by the concept of supply chain integration. Integration throughout the supply chain can lead to improved coordination, efficiency, and responsiveness, all of which contribute to higher levels of customer satisfaction (Flynn et al., 2010). Studies have shown that organizations that prioritize supply chain integration are better equipped to respond to changing customer demands and market conditions, ultimately leading to increased customer loyalty and satisfaction (Chopra & Meindl, 2007). Therefore, an integrated approach to supplier management is essential for enhancing customer satisfaction and gaining a competitive edge in today's dynamic business environment.

According to Jap and Mohr (2001), effective supplier management practices such as relationship building, communication, and performance monitoring contribute significantly to enhancing customer satisfaction. By ensuring timely delivery, quality products, and resolving any issues promptly, companies can positively influence customer perception and loyalty (Formentini and Taticchi, 2016). Furthermore, a study by Fynes et al. (2005) highlights the

impact of supplier integration in customer satisfaction. They argue that close collaboration with suppliers leads to improved product quality, reduced lead times, and ultimately higher levels of customer satisfaction. Effective supplier partnerships allow companies to meet customer demand more efficiently and deliver superior value, thereby increasing overall satisfaction levels (Johnston and Clark, 2008).

Effective supplier management plays a crucial role in enhancing customer satisfaction by ensuring the timely delivery of high-quality products and services. Scholars like Narasimhan and Jayaram (2014) have emphasized the significance of supplier relationship management in positively impacting customer satisfaction. Supplier management practices involving quality control, communication, and collaboration have been found to directly influence customer perceptions of product quality and service efficiency (Handfield et al., 2019). Research by Choi and Rungtusanatham (2016) highlights the importance of developing strong partnerships with suppliers to enhance trust, communication, and alignment of goals, which ultimately translates into better customer satisfaction levels. Overall, the literature underscores the critical link between effective supplier management and improved customer satisfaction outcomes.

Research by Choi and Cheng (2020) emphasizes the importance of supply chain agility in enhancing customer satisfaction. Agile supplier management practices enable companies to respond quickly to changing customer needs and market dynamics, resulting in increased customer satisfaction levels. By incorporating flexibility and responsiveness into their supplier relationships, organizations can better meet customer expectations and drive loyalty in a competitive market environment (Gosling et al., 2019).

According to Handfield and Nichols (2002), effective supplier management practices, including supplier selection, supplier development, and relationship management, can significantly impact the quality and reliability of products and services received by customers. High-quality suppliers who consistently meet delivery schedules and quality requirements contribute to improved customer satisfaction levels (Handfield & Nichols, 2002). Furthermore, supplier management practices such as collaboration, communication, and information sharing with suppliers can lead to better alignment between customer needs and supplier capabilities, ultimately enhancing customer satisfaction (Carr & Pearson, 1999).

Additionally, a study by Choi and Hartley (1996) emphasizes the importance of supplier performance in meeting customer expectations and achieving high levels of customer

satisfaction. Effective supplier management helps companies to maintain a reliable supply chain, reduce lead times, and respond quickly to changing customer demands, thus positively influencing overall customer satisfaction (Choi & Hartley, 1996).

### **2.3 Effect of supply chain agility on customer satisfaction**

Supply chain agility plays a crucial role in enhancing customer satisfaction by meeting customer demands more effectively and efficiently. As illustrated by Christopher and Peck (2004), the ability of a supply chain to swiftly respond to changes in customer preferences and market conditions is key to achieving high levels of customer satisfaction. Agile supply chains are characterized by their flexibility, responsiveness, and adaptability, enabling them to quickly adjust to fluctuations in demand, shorten lead times, and deliver products to customers in a timely manner. This responsiveness is essential in today's dynamic business environment, where customer expectations are constantly evolving, and competition is fierce (Chopra & Meindl, 2007).

Bowersox, Closs, and Stank (2000) highlighted the positive impact of supply chain agility on customer satisfaction through improved order fulfillment and delivery performance. An agile supply chain allows organizations to better coordinate their operations, streamline processes, and reduce bottlenecks, leading to enhanced service levels and on-time deliveries. Customers are more likely to be satisfied when they receive their orders promptly and accurately, fostering loyalty and positive brand perceptions. By leveraging agile capabilities such as real-time tracking, rapid reconfiguration, and collaborative partnerships with suppliers, organizations can enhance their ability to meet customer expectations and deliver superior service (Kumar, van Dissel, & Kumar, 1998).

Supply chain agility is a critical factor that impacts customer satisfaction in today's dynamic business environment. According to a study by Christopher and Peck (2004), supply chain agility involves the ability of a business to respond quickly and effectively to changes in customer demand, market conditions, and other external factors. Companies with agile supply chains are better equipped to meet customer expectations by quickly adapting to unexpected disruptions and fulfilling orders in a timely manner. The study highlights that supply chain agility positively influences customer satisfaction through improved responsiveness, flexibility, and reliability in delivering products and services.

In a research article by Craighead et al. (2007), it was found that supply chain agility plays a significant role in enhancing customer satisfaction by reducing lead times and increasing the speed of order fulfillment. Agile supply chains enable companies to streamline processes,

optimize inventory levels, and collaborate more effectively with suppliers and partners, resulting in higher levels of customer service and satisfaction. The study emphasizes that companies with agile supply chains are better positioned to offer customers greater product variety, faster delivery times, and improved responsiveness to changing market demands, leading to increased customer loyalty and retention.

Swafford et al. (2006) demonstrates a strong positive relationship between supply chain agility and customer satisfaction across various industries. The analysis reveals that firms that prioritize agility in their supply chain operations are more likely to achieve higher levels of customer satisfaction by quickly adapting to changing market conditions, reducing time-to-market for new products, and enhancing overall service quality. The findings underscore the importance of supply chain agility as a key determinant of customer satisfaction and highlight the need for companies to continuously improve and optimize their supply chain processes to meet evolving customer preferences and expectations.

Research by Swafford et al. (2006) supports the notion that supply chain agility positively influences customer satisfaction through improved order fulfillment and responsiveness. A flexible supply chain can efficiently adjust production levels, inventory levels, and distribution strategies in response to changing customer demand, thereby reducing lead times and ensuring on-time delivery. This increased responsiveness enhances overall customer satisfaction as customers experience faster delivery and better service levels. By being agile, companies can better meet customer expectations and preferences, leading to greater loyalty and repeat business.

In a study by Wong et al. (2011), it was found that supply chain agility not only impacts customer satisfaction directly but also plays a role in enhancing the overall competitiveness of a business. Agile supply chains are more capable of effectively managing disruptions and uncertainties, which can ultimately result in improved product quality, reduced costs, and increased customer loyalty. By investing in strategies that enhance supply chain agility, organizations can create a competitive advantage that translates into higher levels of customer satisfaction and sustained business success.

According to Christopher and Towill (2001), supply chain agility refers to the ability of a supply chain to respond quickly to changes in demand, supply chain disruptions, and market conditions. Research by Swafford et al. (2008) highlights that organizations with agile supply chains are better equipped to handle uncertainties and variability by quickly adapting their

processes, products, and services to meet customer needs. By improving responsiveness and flexibility, supply chain agility enables companies to enhance customer satisfaction by delivering products or services more efficiently and effectively.

Vachon and Klassen (2006) underscores the positive impact of supply chain agility on customer satisfaction. Their research findings indicate that firms with agile supply chains can better meet customer demands by reducing lead times, improving delivery reliability, and offering customized solutions. This ability to respond swiftly to changing customer requirements enhances customer loyalty and satisfaction. As such, supply chain agility plays a crucial role in providing customers with a seamless and satisfactory experience, ultimately leading to increased customer retention and positive word-of-mouth referrals.

Furthermore, Tang (2006) emphasizes that supply chain agility is not only beneficial for enhancing customer satisfaction but also for gaining a competitive edge in the market. Companies that prioritize agility in their supply chains are better positioned to adapt to evolving market trends, outperform competitors, and capitalize on new opportunities. By aligning supply chain strategies with customer needs and preferences, organizations can create value, build stronger relationships with customers, and drive sustainable growth. Therefore, investing in supply chain agility is essential for organizations seeking to improve customer satisfaction levels and maintain a competitive advantage in today's fast-paced business landscape.

Additionally, research has indicated that supply chain agility can lead to enhanced customer service levels, faster order fulfillment, and improved delivery performance, all of which have a direct impact on customer satisfaction (Stank et al., 2015). By optimizing their supply chain processes to quickly respond to market changes and customer needs, organizations can reduce lead times, increase product availability, and provide superior service quality. These improvements in supply chain agility not only benefit the organization in terms of operational efficiency but also contribute to a better overall customer experience, resulting in higher levels of satisfaction and retention (Lummus & Krumwiede, 1999).

Supply chain agility, defined as the capability of an organization to respond rapidly to fluctuations in demand or supply, has been shown to have a significant impact on customer satisfaction. Organizations with agile supply chains can quickly adjust their operations to meet changing customer demands, leading to improved customer satisfaction levels (Christopher & Towill, 2001). For example, when a company is able to efficiently react to

unexpected changes, such as delays in production or shifts in customer preferences, they can maintain high service levels and meet customer expectations. This adaptability enables organizations to be more responsive and customer-focused, ultimately resulting in higher levels of customer satisfaction and loyalty (Sinkovics et al., 2007).

Chen and Paulraj (2004) highlight the crucial role of supply chain agility in meeting customer demands quickly and effectively to improve customer satisfaction levels. Research by Giunipero, Swinney, and Eltantawy (2005) further emphasizes the importance of agility in enhancing customer satisfaction by enabling firms to respond swiftly to market changes and disruptions. The ability of agile supply chains to adapt to dynamic customer needs and preferences ensures higher levels of satisfaction and loyalty among customers (Dubey, Ali, & Singh, 2016).

As noted by Power and Sohal (2000), supply chain agility acts as a mediator by enhancing responsiveness and flexibility, ultimately leading to improved customer satisfaction levels. This mediating role of agility is crucial in today's highly competitive and volatile business environment, where maintaining high levels of customer satisfaction is essential for sustained success (Chopra & Sodhi, 2004). By swiftly adapting to changing market conditions, firms can better serve and satisfy their customers, thus gaining a competitive edge (Wu, 2015).

Sarkis, Zhu, and Lai (2011) argue that agile supply chains not only enhance customer satisfaction but also improve operational performance by reducing lead times and increasing flexibility. This alignment between supply chain agility and operational efficiency plays a critical role in meeting customer expectations and fostering positive relationships with customers (Stank, Crum, & Arango-Aramburo, 2007). Overall, the literature underscores the significance of supply chain agility as a key driver of customer satisfaction and organizational success.

## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.0 Introduction

In this chapter, the researcher covered 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

Hoong, J.P. (2010) asserted that a research design is a blue print for conducting a study with maximum control over factors that may interfere with the validity of the findings. The researcher study used a cross sectional survey design basing on the use of qualitative and quantitative approaches sanctioned to examine on supply chain integration and customer satisfaction in public entities. The study used an exploratory research design, since little is known about the phenomenon in question, explanatory research, using quantitative and qualitative research methodologies so as to enable researcher to predict the outcome of the study.

#### 3.2 Area of study

The study was carried out from Budaka Health Center IV is located in the Budaka district of Uganda. It was chosen for the study on supply chain integration and customer satisfaction in public entities due to its strategic importance as a healthcare facility serving a significant population in the region. The center's location allows for an in-depth analysis of supply chain processes and customer interactions within a public healthcare setting, providing valuable insights into how supply chain integration can impact customer satisfaction and overall service delivery in public entities.

#### 3.3 Study population

According to Hensen, M.C. (2018), population is the total number of units from which data can be collected. Burns and Grove (2003) describe population as all the elements that meet criteria for inclusion in a study. The study involved a population of 51 respondents to represent the entire population of Budaka Health Center IV of different departments whom comprised of Human resource manager, allied health professionals, Nurses, Health facility manager, stakeholders, and auditors, Cleaners all were respondents from Budaka Health Center IV.

### 3.3 Sample size and Sampling procedures

#### 3.3.1 Sample size

Eisenhardt, K.M. (2019) articulated a sample size as a proportion of a population. The sample was selected from the Budaka Health Center IV which included Stakeholders, allied health professionals. 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 research study used formula of Slovenes (1960) which included;

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

Where;

n is the sample size

N is the whole population

1 is the constant

e<sup>2 error</sup> in sampling (0.05)

The total sample size was computed as shown below

$$n = \frac{N}{1 + N(e^2)} \quad n = \frac{51}{1 + 51 * 0.05^2} \quad n = \frac{51}{1 + 0.1275} \quad n = \frac{51}{1.1275}$$

n = 45 Respondents

Table 3.1 showing the sample size, sampling procedures and research methods

Respondents	Population	Sample size	Sampling procedures
Human resource manager	1	1	Purposive sampling
Procurement officers	1	1	Purposive sampling
Suppliers	5	4	Purposive sampling
Allied health professionals	5	4	convenience sampling
Health facility manager	1	1	purposive sampling
Stake holders	20	17	Simple random sampling
Nurses	18	17	Simple random sampling
<b>Total</b>	<b>51</b>	<b>45</b>	

Source: Budaka Health Center IV (2024)

#### 3.3.2 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 included:

### **Purposive sampling**

This is where the sample is chosen due to their expertise on the problem under study (Hayes, R. 2005). The study used purposive sampling procedure targeting the key information with the experience of the human resource manager, health facility manager, auditors among others.

### **Convenience sampling**

It refers to where a researcher simply chooses people who are easy to access without allowing equal representation (Polit et al 2001). The researcher selected a sample by convenience of Councilors. This is because the nurses who were available were selected by virtue of convenience to access him or her, and this sampling procedure offers the advantage of minimizing biasness at Budaka Health Center IV.

### **Simple random sampling**

Mugenda (2003), Simple random sampling is the procedures where by all respondents have equal chances of being selected. It minimizes biasness in sample selection. The procedure which was used in sampling stakeholders.

## **3.4 Sources of data**

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

### **3.4.1 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. Primary data are original in nature and directly related to the issue or problem and current data.

### **3.4.2 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 will use 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 hospital, 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.

### **3.5 Data collection tools**

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

#### **3.5.1 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 human resource manager, nurses, stake holders, patients, accountants, auditors, and from Budaka Health Center IV where the researcher allowed the study respondents to fill the questionnaire in the study population. This allowed free responses from the respondents that were engaged in the depth views about the study questions. The closed ended questions included 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.

#### **3.5.2 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.

### **3.6 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. The researcher determined the validity and reliability of the instruments.

#### **3.6.1 Validity**

Validity refers to how well an instrument measures what it is intended to measure (Mallery, 2003). 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, rate or not rated. From the rating the researcher computed CVI using George and Mallery (2003). The values of CVI were interpreted as stated by George and Mallery (2003). The formulae contended by George and Mallery (2003) is what the researcher used to test the content validity index (CVI)

#### **3.6.2 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 (1964) using SPSS software was the reliability test is closer to one.

### **3.7 Data Analysis.**

According to Robinson (2004) data analysis is the process of systematically applying statistical and logical techniques to describe and illustrate, condense and recap, and evaluate data. Resnik (2003) various analytic procedures provide a way of drawing inductive inferences from data and distinguishing the signal from the noise 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 in order to identify the main theme incurred from the response given by the researcher. The researcher identified

theme by carefully going through explanatory, standard deviation, means, descriptive, and computerization of data analysis since the researcher was familiar with computer skills.

### **3.8 Ethical Consideration.**

Polit et al (2014) 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.

Participants in a study were protected from an adverse situation. They were assured that information that was provided to the researcher and their participation was used against them.

Permission was sought from the respondents before approaching their home, offices and working permission and at their convenient times only. Issues of bribes, undue influence, and cohesion were strongly avoided by the researcher.

## CHAPTER FOUR

### DATA PRESENTATION, INTERPRETATION AND DISCUSSION OF THE FINDINGS

#### 4.0 Introduction

This chapter presents the findings on supply chain integration and customer satisfaction in public entities. 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 45, 45 questionnaires were designed and were wholly answered. This implies that the response rate was superlative.

##### 4.1.1 Gender

**Table 2 showing the Gender distribution of respondents**

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	30	66.7	66.7	66.7
Valid Females	15	33.3	33.3	100.0
Total	45	100.0	100.0	

**Source: primary data (2024)**

With reference to table 2 above shows that out of the total sample for the study, 66.7% were male, while 33.3% were female. This implies that the views of males were more represented in the study findings than those of the females.

#### 4.1.2 Age

**Table 3 showing Age group of respondents**

	Frequency	Percent	Valid Percent	Cumulative Percent
20-30 years	15	33.3	33.3	33.3
31-40 years	19	42.2	42.2	75.5
Valid 41-50 years	10	22.3	22.3	97.8
Above 50 years	1	2.2	2.2	100.0
Total	45	100.0	100.0	

**Source: Primary data (2024)**

With reference to table 3 above indicates that 33.3% lie between the age of 20-30 years ,42.2% make it to the age of 31-40 years ,22.3% lie between the age of 41-50 years ,and above the age of 50 years constituted 2.2%. This indicates that the majority of respondents were mature and the knowledge obtained from them was conducted. The employment of employees lie between the ages of 31-40 years at Budaka health centre IV is due to the fact that this is the most active group of persons that is required in the effective implementation of the operations of Budaka health centre IV thence guaranteeing the achievement of the district objectives.

#### 4.1.3 Qualification.

**Table 4 Showing academic qualification of respondents**

	Frequency	Percent	Valid Percent	Cumulative Percent
Secondary	6	13.3	13.3	13.3
Certificate	6	13.3	13.3	26.6
Valid Diploma	23	51.1	51.1	77.7
Degree	8	17.9	17.9	95.6
Masters	2	4.4	4.4	100.0
Total	45	100.0	100.0	

**Source: primary data (2024)**

With reference to table 4 above shows that 13.3%, 13.3%, 51.1% ,17.9% and 4.4% correspond to secondary, certificate, diploma, degree, and masters respectively. This indicates that all people employed by Budaka health centre IV have attained certain level of education and knowledge. This is however, not surprising that the Budaka health centre IV is known for employing people who have attained such level of education and knowledge. Thus with good education level, the respondents were able to clearly understand and interpret questions and give appropriate responses.

#### 4.1.5 Years of working

**Table 6 showing years of working by respondents**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Less than 1 year	15	33.3	33.3	33.3
1-2 years	18	40.0	40.0	73.3
Above 3 years	12	26.7	26.7	100.0
Total	45	100.0	100.0	

**Source: Primary data (2024)**

Table 6 above shows that 33.3%, 40%, and 26.7%, correspond to less than 1 year, 1-2 years, and above 3 years respectively. This however implies that Budaka health centre IV employs experienced workers who have had reasonable numbers of years of experience with 40% such that the goals formulated by the entity can be achieved well besides this it also implies that majority of the respondents had served for a considerable period which indicates that most of the respondents had vast knowledge which could be relied upon by this study.

**4.2.0 Research question one: Finding out the effect of information sharing on customer satisfaction in Budaka health centre IV**

**4.2.1 Information sharing allows individuals and teams to work together more effectively by sharing insights, knowledge, and resources.**

**Table 7 Showing whether information sharing allows individuals and teams to work together more effectively by sharing insights, knowledge, and resources**

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	28	62.2	62.2	62.2
Agree	8	17.8	17.8	80.0
not sure	2	4.4	4.4	84.4
Disagree	4	8.9	8.9	93.3
strongly disagree	3	6.7	6.7	100.0
Total	45	100.0	100.0	

**Source: primary data (2024)**

Table 7 above indicates that 80% (62.2%, 17.8%) of the respondents were positive to the statement that information sharing allows individuals and teams to work together more effectively by sharing insights, knowledge, and resources, 4.4% of the respondents were not sure to the statement while 15.6% (8.9%, 6.7%) of the respondents objected it however such findings were in accordance to Elsey.R.D. (2019) denoted that information sharing allows individuals and teams to work together more effectively by sharing insights, knowledge, and resources hence implying that information sharing allows individuals and teams to work together more effectively by sharing insights, knowledge, and resources.

**4.2.2 Sharing information enables stakeholders to have access to all relevant data, leading to informed decision-making and better outcomes**

**Table 8 Showing whether sharing information enables stakeholders to have access to all relevant data, leading to informed decision-making and better outcomes**

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	10	22.2	22.2	22.2
Agree	9	20.0	20.0	42.2
not sure	3	6.7	6.7	48.9
Disagree	12	26.7	26.7	75.6
strongly disagree	11	24.4	24.4	100.0
Total	45	100.0	100.0	

**Source: primary data (2024)**

With reference to table 8 above it can be seen that 42.2% (22.2%, 20%) of the respondents were positive to the statement that sharing information enables stakeholders to have access to all relevant data, leading to informed decision-making and better outcomes, 51.1% (26.7%, 24.4%) were negative to the same statement while 6.7% of the respondents were not sure and such findings were in line with Helmsing, A. (2015) stressed that sharing information enables stakeholders to have access to all relevant data, leading to informed decision-making and better outcomes there by indicating that sharing information does not enable stakeholders to have access to all relevant data, leading to informed decision-making and better outcomes.

**4.2.3 Information sharing eliminates duplication of efforts, reduces time wastage, and promotes streamlined processes, leading to improved efficiency**

**Table 9 Showing whether information sharing eliminates duplication of efforts, reduces time wastage, and promotes streamlined processes, leading to improved efficiency**

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	18	40.0	40.0	40.0
Agree	12	26.6	26.6	66.7
not sure	7	15.6	15.6	82.3
Disagree	3	6.6	6.6	88.9
strongly disagree	5	11.1	11.1	100.0
Total	45	100.0	100.0	

**Source: primary data (2024)**

Table 9 above indicates that out of total sample of the study, 66.6% (40%, 26.6%) of the respondents were positive to the statement that information sharing eliminates duplication of efforts, reduces time wastage, and promotes streamlined processes, leading to improved efficiency, and 15.6% were not sure while 17.7% (6.6%, 11.1%) were negative to the same statement. This implies that information sharing eliminates duplication of efforts, reduces time wastage, and promotes streamlined processes, leading to improved efficiency.

**4.2.4 Sharing information cultivates trust, fosters transparency, and helps build stronger relationships with colleagues**

**Table 10 Showing whether Sharing information cultivates trust, fosters transparency, and helps build stronger relationships with colleagues**

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	21	46.7	46.7	46.7
Agree	7	15.6	15.6	62.3
not sure	10	22.2	22.2	84.5
Disagree	2	4.4	4.4	88.9
strongly disagree	5	11.1	11.1	100.0
Total	45	100.0	100.0	

**Source: primary data (2024)**

With reference to table 10 above it can be seen that the majority 62.3% (46.7%, 15.6%) of the respondents were positive to the statement that sharing information cultivates trust, fosters transparency, and helps build stronger relationships with colleagues and 22.2% were not sure while 15.5% (4.4%, 11.1%) of the respondents were opposed to the same statement. This is an indication that sharing information cultivates trust, fosters transparency, and helps build stronger relationships with colleagues.

**4.2.5 Information sharing increases accountability among individuals or groups, as shared data can be used to track progress, measure performance, and ensure responsibility.**

**Table 11 Showing whether information sharing increases accountability among individuals or groups, as shared data can be used to track progress, measure performance, and ensure responsibility.**

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	9	20.0	20.0	20.0
Agree	1	2.2	2.2	22.2
not sure	11	24.4	24.4	46.6
Valid Disagree	16	35.6	35.6	82.2
strongly disagree	8	17.8	17.8	100.0
Total	45	100.0	100.0	

**Source: primary data (2024)**

With reference to table 11 above shows that out of total sample of the study, 22.2% (20%, 2.2%) of the respondents were positive to the statement that information sharing increases accountability among individuals or groups, as shared data can be used to track progress, measure performance, and ensure responsibility, 24.4% were not sure, 53.4% (35.6%, 17.8%) were remonstrance to the same statement there by implying that information sharing does not increase accountability among individuals or groups, as shared data can be used to track progress, measure performance, and ensure responsibility.

**4.3.0 Research question two: Finding out the effect of supplier management on customer satisfaction in Budaka health centre IV**

**4.3.1 Supplier management helps identify the most cost-effective suppliers and negotiate better pricing, ultimately reducing expenses**

**Table 12 Showing whether supplier management helps identify the most cost-effective suppliers and negotiate better pricing, ultimately reducing expenses**

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	22	48.9	48.9	48.9
Agree	8	17.8	17.8	66.7
not sure	2	4.4	4.4	71.1
Disagree	10	22.2	22.2	93.3
strongly disagree	3	6.7	6.7	100.0
Total	45	100.0	100.0	

**Source: primary data (2024)**

With reference to table 12 above it can be observed that 66.7%, (48.9%, 17.8%) of the respondents were positive to the statement that supplier management helps identify the most cost-effective suppliers and negotiate better pricing, ultimately reducing expenses, 28.9% (22.2%, 6.7%) of the respondents were negative to the same statement while 4.4% were not sure. This was in line with Schrand, (2017) contends that supplier management helps identify the most cost-effective suppliers and negotiate better pricing, ultimately reducing expenses. This implies that supplier management helps identify the most cost-effective suppliers and negotiate better pricing, ultimately reducing expenses.

**4.3.2 Effective supplier management ensures that suppliers adhere to quality standards, resulting in improved product quality and customer satisfaction.**

**Table 13 showing whether effective supplier management ensures that suppliers adhere to quality standards, resulting in improved product quality and customer satisfaction**

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	21	46.6	46.6	46.6
Agree	9	20.0	20.0	66.6
not sure	1	2.2	2.2	68.8
Disagree	7	15.6	15.6	84.4
strongly disagree	7	15.6	15.6	100.0
Total	45	100.0	100.0	

Source: primary data (2024)

With reference to table 13 above ,it can be seen that that the majority 66.6%, (46.6%, 20%) of the respondents were positive to the statement that effective supplier management ensures that suppliers adhere to quality standards, resulting in improved product quality and customer satisfaction , and 2.2% of the respondents were not sure while 31.2% (15.6%, 15.6%) of the respondents were negative to the same statement however such findings were in accordance to Eccles, (2018) affirmed that effective supplier management ensures that suppliers adhere to quality standards, resulting in improved product quality and customer satisfaction there by indicating that effective supplier management ensures that suppliers adhere to quality standards, resulting in improved product quality and customer satisfaction.

**4.3.3 Supplier management helps identify and manage potential risks within the supply chain, such as supplier non-compliance.**

**Table 14 showing whether supplier management helps identify and manage potential risks within the supply chain, such as supplier non-compliance**

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	17	37.8	37.8	37.8
Agree	12	26.7	26.7	64.5
not sure	4	8.9	8.9	73.4
Disagree	7	15.5	15.5	88.9
strongly disagree	5	11.1	11.1	100.0
Total	45	100.0	100.0	

**Source: primary data (2024)**

With reference to table 14 above it can be observed that 64.5% (37.8%, 26.7%) of the respondents had a positive response to that supplier management helps identify and manage potential risks within the supply chain, such as supplier non-compliance, 26.6% (15.5%, 11.1%) were negative to the same statement while 8.9% were not sure. This implies that supplier management helps identify and manage potential risks within the supply chain, such as supplier non-compliance.

**4.3.4 Efficient supplier management streamlines the procurement process by standardizing supplier selection, order placement, and performance evaluation, saving time and effort.**

**Table 15 Showing whether efficient supplier management streamlines the procurement process by standardizing supplier selection, order placement, and performance evaluation, saving time and effort**

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	2	4.4	4.4	4.4
Agree	8	17.8	17.8	22.2
not sure	6	13.3	13.3	35.5
Disagree	16	35.6	35.6	71.1
strongly disagree	13	28.9	28.9	100.0
Total	45	100.0	100.0	

**Source: primary data (2024)**

Table 15 above indicates that out of total sample of the study, 22.2% (4.4%, 17.8%) of the respondents were positive to the statement that efficient supplier management streamlines the procurement process by standardizing supplier selection, order placement, and performance evaluation, saving time and effort, 13.3% of the respondents were not sure while majority of the respondents 64.5% (35.6%, 28.9%) objected the same statement hence implying that efficient supplier management does not streamline the procurement process by standardizing supplier selection, order placement, and performance evaluation, saving time and effort.

**4.3.5 Engaging with suppliers through effective management encourages the exchange of ideas and knowledge, fostering innovation and supporting new product development.**

**Table 16 showing whether engaging with suppliers through effective management encourages the exchange of ideas and knowledge, fostering innovation and supporting new product development.**

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	22	48.9	48.9	48.9
Agree	10	22.2	22.2	71.1
not sure	3	6.7	6.7	77.8
Disagree	4	8.9	8.9	86.7
strongly disagree	6	13.3	13.3	100.0
Total	45	100.0	100.0	

**Source: primary data (2024)**

Table 16 above indicates that the majority of the 71.1% (48.9%, 22.2%) of the respondents were positive to the statement that engaging with suppliers through effective management encourages the exchange of ideas and knowledge, fostering innovation and supporting new product development, and 6.7% of the respondents were not sure while 22.2% (8.9%, 13.3%) demurred to the same statement such findings were in line with Nassar, K. (2019) asserted that engaging with suppliers through effective management encourages the exchange of ideas and knowledge, fostering innovation and supporting new product development. This is an indication that engaging with suppliers through effective management encourages the exchange of ideas and knowledge, fostering innovation and supporting new product development.

**4.4.0 Research question three: Finding out the effect of supply chain agility on customer satisfaction in Budaka health centre IV.**

**4.4.1 Enhancing supply chain agility can minimize disruptions and supply chain risks**

**Table 17 showing whether enhancing supply chain agility can minimize disruptions and supply chain risks**

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	20	44.5	44.5	44.5
Agree	13	28.9	28.9	73.4
not sure	4	8.9	8.9	82.3
Disagree	3	6.7	6.7	89.0
strongly disagree	5	11.1	11.1	100.0
Total	45	100.0	100.0	

**Source: primary data (2024)**

With reference to table 17 above it can be seen that the majority 73.4% (44.5%, 28.9) of the respondents were positive to the statement that enhancing supply chain agility can minimize disruptions and supply chain risks, 17.8% (6.7%, 11.1%) were dissatisfied with the same statement while 8.9% of the respondents were not sure. This implies that enhancing supply chain agility can minimize disruptions and supply chain risks.

**4.4.2 Improved supply chain agility enables organizations to better handle unpredictable demand fluctuations**

**The table 18 Showing whether improved supply chain agility enables organizations to better handle unpredictable demand fluctuations**

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	8	17.8	17.8	17.8
Agree	15	33.3	33.3	51.1
not sure	5	11.1	11.1	62.2
Disagree	13	28.9	28.9	91.1
strongly disagree	4	8.9	8.9	100.0
Total	45	100.0	100.0	

**Source: primary data (2024)**

Table 18 above shows that 51.1% (17.8%, 33.3%) of the respondents were positive to the statement that improved supply chain agility enables organizations to better handle unpredictable demand fluctuations, 37.8% (28.9%, 8.9%) objected to the same statement while 11.1% of the respondents were not sure. These findings were carried out by to Beitler, M. (2016), opined that improved supply chain agility enables organizations to better handle unpredictable demand fluctuations. This is an indication that improved supply chain agility enables organizations to better handle unpredictable demand fluctuations.

**4.4.3 Supply chain agility allows for quick adjustments to production and distribution strategies, enabling cost optimization.**

**Table 19 Showing whether supply chain agility allows for quick adjustments to production and distribution strategies, enabling cost optimization**

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	14	31.1	31.1	31.1
Agree	11	24.4	24.4	55.5
not sure	6	13.4	13.4	68.9
Disagree	9	20.0	20.0	88.9
strongly disagree	5	11.1	11.1	100.0
Total	45	100.0	100.0	

**Source: primary data (2024)**

Table 19 above shows that majority 55.5% (31.1%, 24.4%) of the respondents had a positive response to the statement that supply chain agility allows for quick adjustments to production and distribution strategies, enabling cost optimization, 13.4% of the respondents were not sure while 31.1% (20%, 11.1%) were negative to the same statement. This implies that supply chain agility allows for quick adjustments to production and distribution strategies, enabling cost optimization.

#### 4.4.4 Enhancing supply chain agility can lead to stronger supplier relationships and collaboration

**Table 20 Showing whether enhancing supply chain agility can lead to stronger supplier relationships and collaboration**

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	3	6.7	6.7	6.7
Agree	9	20.0	20.0	26.7
not sure	12	26.7	26.7	53.4
Disagree	16	35.5	35.5	88.9
strongly disagree	5	11.1	11.1	100.0
Total	45	100.0	100.0	

**Source: primary data (2024)**

Table 20 above shows that out of total sample of the study 26.7% (6.7% ,20%) of the respondents had a positive response to the statement that enhancing supply chain agility can lead to stronger supplier relationships and collaboration, 26.7% of the respondents were not sure while 46.6% (35.5%, 11.1%) protested to the same statement. This is an indication that enhancing supply chain agility cannot lead to stronger supplier relationships and collaboration.

**4.4.5 Supply chain agility can improve overall operational efficiency and reduce lead times.**

**Table 21 Showing whether supply chain agility can improve overall operational efficiency and reduce lead times.**

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	19	42.2	42.2	42.2
Agree	12	26.7	26.7	68.9
not sure	1	2.2	2.2	71.1
Disagree	8	17.8	17.8	88.9
strongly disagree	5	11.1	11.1	100.0
Total	45	100.0	100.0	

**Source: primary data (2024)**

With reference to table 21 , it can be observed that the majority 68.9% (42.2%, 26.7%) of the respondents were positive to the statement that supply chain agility can improve overall operational efficiency and reduce lead times., 2.2% of the respondents were not sure while 28.9% (17.8%, 11.1) remonstrated to the same statement. This was in accordance to Alison and Dean (2017), assert that supply chain agility can improve overall operational efficiency and reduce lead times. This implies that supply chain agility can improve overall operational efficiency and reduce lead times.

## 4.5 Customer satisfaction

### 4.5.1 There is increased utilization of services

**Table 22 showing whether there is increased utilization of services**

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	28	62.2	62.2	62.2
Agree	8	17.8	17.8	80.0
not sure	2	4.4	4.4	84.4
Disagree	4	8.9	8.9	93.3
strongly disagree	3	6.7	6.7	100.0
Total	45	100.0	100.0	

**Source: primary data (2024)**

With reference to table 22 above, it can be seen that 80% (62.2%, 17.8%) were positive to the statement that there is increased utilization of services and 15.6% (8.9%, 6.7%) had a negative response to the same statement while 4.4% of the respondents were not sure. This implies that there is increased utilization of services.

**4.5.2 Satisfied customers tend to have higher levels of compliance with treatment plans and recommendations provided by the health center.**

**Table 23 Showing whether satisfied customers tend to have higher levels of compliance with treatment plans and recommendations provided by the health center**

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	10	22.2	22.2	22.2
Agree	9	20.0	20.0	42.2
not sure	3	6.7	6.7	48.9
Disagree	12	26.7	26.7	75.6
strongly disagree	11	24.4	24.4	100.0
Total	45	100.0	100.0	

**Source: primary data (2024)**

With reference to table 23 above, it can be seen that the majority of the respondents 42.2% (22.2%, 20%) were positive to the statement satisfied customers tend to have higher levels of compliance with treatment plans and recommendations provided by the health center while 51.1% (26.7%, 24.4%) were negative to the same statement however 6.7% of the respondents were not sure. These findings concur with the research carried out by Schein, (2011) opined that satisfied customers tend to have higher levels of compliance with treatment plans and recommendations provided by the health center.

#### 4.5.3 Positive feedback and satisfaction from customers can boost staff morale and motivation.

**Table 24 Showing whether positive feedback and satisfaction from customers can boost staff morale and motivation**

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	18	40.0	40.0	40.0
Agree	12	26.6	26.6	66.7
not sure	7	15.6	15.6	82.3
Disagree	3	6.6	6.6	88.9
strongly disagree	5	11.1	11.1	100.0
Total	45	100.0	100.0	

**Source: primary data (2024)**

Table 24 above indicates that 66.6% (40%, 26.6%) were positive to the statement that Positive feedback and satisfaction from customers can boost staff morale and motivation, 17.7% (6.6%, 11.1%) were negative to the same statement while 15.6% of the respondents were not sure. This is an indication that Positive feedback and satisfaction from customers can boost staff morale and motivation.

**4.5.4 Customer satisfaction fosters trust and confidence in the health center's capabilities among patients and their families.**

**Table 25 Showing whether customer satisfaction fosters trust and confidence in the health center's capabilities among patients and their families**

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	21	46.7	46.7	46.7
Agree	7	15.6	15.6	62.3
not sure	10	22.2	22.2	84.5
Disagree	2	4.4	4.4	88.9
strongly disagree	5	11.1	11.1	100.0
Total	45	100.0	100.0	

**Source: primary data (2024)**

With reference to table 25 above, it can be seen that 62.3% (46.7%, 15.6%) were positive to the statement that customer satisfaction fosters trust and confidence in the health center's capabilities among patients and their families, 15.5% (4.4%, 11.1%) were negative to the same statement while 22.2% of the respondents were not sure. This implies that customer satisfaction fosters trust and confidence in the health center's capabilities among patients and their families.

**4.5.5 A focus on customer satisfaction prompts Budaka Health Center IV to continuously evaluate and improve its services.**

**Table 26 Showing whether a focus on customer satisfaction prompts Budaka Health Center IV to continuously evaluate and improve its services**

	Frequency	Percent	Valid Percent	Cumulative Percent
strongly agree	9	20.0	20.0	20.0
Agree	1	2.2	2.2	22.2
not sure	11	24.4	24.4	46.6
Disagree	16	35.6	35.6	82.2
strongly disagree	8	17.8	17.8	100.0
Total	45	100.0	100.0	

**Source: primary data (2024)**

Table 26 above indicates that 22.2% (20%, 2.2%) of the respondents were positive to the statement that a focus on customer satisfaction prompts Budaka Health Center IV to continuously evaluate and improve its services, 53.4% (35.6%, 17.8%) were negative to the same statement forming the majority of the respondents while 24.4% of the respondents were not sure. This implies that a focus on customer satisfaction prompts Budaka Health Center IV to continuously evaluate and improve its services.

## 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 information sharing on customer satisfaction in Budaka health centre IV.**

The study investigated into the effect of supplier management on the effect of information sharing on customer satisfaction in Budaka health centre IV. Results showed that most respondents were positive to the statements that they were asked. For example; majority of respondents constituting 80% were positive to the statement that information sharing allows individuals and teams to work together more effectively by sharing insights, knowledge, and resources; 66.6% who were also the majority were positive to the statement that information sharing eliminates duplication of efforts, reduces time wastage, and promotes streamlined processes, leading to improved efficiency; 62.3% who also constituted the majority were positive to the statement that that sharing information cultivates trust, fosters transparency, and helps build stronger relationships with colleagues.

On the other hand, 51.1% constituting the majority were negative to statement that sharing information enables stakeholders to have access to all relevant data, leading to informed decision-making and better outcomes, besides 53.4% were negative to the statement that sharing increases accountability among individuals or groups, as shared data can be used to track progress, measure performance, and ensure responsibility.

Basing on the above results, it can be concluded that information sharing has a significant effect on customer satisfaction in Budaka health centre IV.

### **5.1.2 Research Question two: Findings on the effect of supplier management on customer satisfaction in Budaka health centre IV**

The study investigated into the effect of supplier management on customer satisfaction in Budaka health centre IV. Majority of the respondents 66.7% of the respondents were positive to the statement that supplier management helps identify the most cost-effective suppliers and negotiate better pricing, ultimately reducing expenses, 66.6% forming the majority were positive to the statement that effective supplier management ensures that suppliers adhere to quality standards, resulting in improved product quality and customer satisfaction, it can be observed that 64.5% were positive to the statement that supplier management helps identify and manage potential risks within the supply chain, such as supplier non-compliance, and 71.1% were positive to the statement that engaging with suppliers through effective management encourages the exchange of ideas and knowledge, fostering innovation and supporting new product development while 64.5% forming the majority were negative to the statement that efficient supplier management streamlines the procurement process by standardizing supplier selection, order placement, and performance evaluation, saving time and effort. Basing on the above results, it can be concluded that supplier management has a significant effect on customer satisfaction in Budaka health centre IV.

### **5.1.3 Question three: Findings on the effect of supply chain agility on customer satisfaction in Budaka health centre IV**

The findings revealed that 73.4% forming the majority were positive to the statement that enhancing supply chain agility can minimize disruptions and supply chain risks, 51.1% were positive to the statement that improved supply chain agility enables organizations to better handle unpredictable demand fluctuations, 55.5% had a positive response to the statement that supply chain agility allows for quick adjustments to production and distribution strategies, enabling cost optimization, and 68.9% had a positive response to the statement that supply chain agility can improve overall operational efficiency and reduce lead times. On the other hand, 46.6% forming the majority disagreed to the statement that enhancing supply chain agility can lead to stronger supplier relationships and collaboration. Most responses were positive indicating that supply chain agility has a significant effect on customer satisfaction in Budaka health centre IV.

## **5.2 Conclusion**

Basing on the results of the first objective, it can be concluded that information sharing has a significant effect on customer satisfaction in Budaka health centre IV. Therefore should be enhanced by; implementing a centralized database or knowledge-sharing platform that allows teams to access customer feedback and information easily. This helps employees across

different departments to stay updated and make informed decisions to improve customer satisfaction. Foster a collaborative work culture where different teams work together to improve customer satisfaction. This involves sharing information and insights across departments, encouraging cross-functional collaboration, and aligning goals to prioritize customer satisfaction. Recognize and reward employees who actively contribute to enhancing customer satisfaction. This can create a positive work environment and motivate employees to go the extra mile in sharing relevant information and insights.

Basing on the results of the second objective, it can be concluded that supplier management has a significant effect on customer satisfaction in Budaka health centre IV. This can be enhanced by building and maintaining strong relationships are key to enhancing supplier management. This includes regular communication, addressing any concerns or issues promptly, and treating suppliers as partners rather than just vendors. Clearly communicating expectations and requirements to suppliers helps ensure they understand what is expected of them. This includes setting performance metrics, quality standards, delivery schedules, and pricing expectations. Regularly review and update these requirements as needed.

**It can also be concluded basing on objective three that** supply chain agility has a significant effect on customer satisfaction in Budaka health centre IV. **This can be enhanced by** fostering collaboration and build strong partnerships with suppliers, vendors, and other stakeholders in the supply chain. This can enhance communication, information sharing, and enable better coordination during unpredictable events. Optimize transportation and distribution networks to ensure quick and efficient movement of goods. This can be achieved through effective routing, using multiple transportation modes, and leveraging advanced logistics technologies.

### **5.3 Recommendations**

Superiors should be implement a centralized database or knowledge-sharing platform that allows teams to access customer feedback and information easily. This helps employees across different departments to stay updated and make informed decisions to improve customer satisfaction. Foster a collaborative work culture where different teams work together to improve customer satisfaction. This involves sharing information and insights across departments, encouraging cross-functional collaboration, and aligning goals to prioritize customer satisfaction. Recognize and reward employees who actively contribute to

enhancing customer satisfaction. This can create a positive work environment and motivate employees to go the extra mile in sharing relevant information and insights.

Management should build and maintain strong relationships are key to enhancing supplier management. This includes regular communication, addressing any concerns or issues promptly, and treating suppliers as partners rather than just vendors. Clearly communicating expectations and requirements to suppliers helps ensure they understand what is expected of them. This includes setting performance metrics, quality standards, delivery schedules, and pricing expectations. Regularly review and update these requirements as needed. Regularly evaluate and audit suppliers to assess their performance and ensure compliance with established standards. Evaluation criteria can include factors such as quality, delivery performance, responsiveness, and cost effectiveness. Establish a supplier rating system to track and monitor supplier performance over time.

Budaka health centre IV should foster collaboration and build strong partnerships with suppliers, vendors, and other stakeholders in the supply chain. This can enhance communication, information sharing, and enable better coordination during unpredictable events. Optimize transportation and distribution networks to ensure quick and efficient movement of goods. This can be achieved through effective routing, using multiple transportation modes, and leveraging advanced logistics technologies. Foster a culture of continuous improvement within the supply chain by conducting regular audits, analyzing performance metrics, and seeking feedback from stakeholders. This can help identify areas for optimization and drive agility in the supply chain.

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## APPENDICES

### APPENDIX I: QUESTIONNAIRE

Dear respondent,

I am Namaganda Zuhrah carrying out research on the topic; “supply chain integration and customer satisfaction in public entities” as a partial fulfillment for the award of bachelors degree of procurement and logistics management of 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 will be asked .However the information given will be treated confidential and will only be used for academic purpose.

#### SECTION A: DEMOGRAPHIC DATA

(Tick in the box provided)

1. Gender distribution of the respondent

Male  Female

2. Age of the respondent

21-30 years  31-40 years  41-50 years  above 50 years

3. Academic qualification of respondents

Secondary  Certificate  Diploma  Bachelors'  Masters

4. Working years of respondents.

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

**Section B: To explore the effect of information sharing**

This section aims at exploring the effect of information sharing on customer satisfaction in Budaka health centre IV. 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	Information sharing allows individuals and teams to work together more effectively by sharing insights, knowledge, and resources					
2	Sharing information enables stakeholders to have access to all relevant data, leading to informed decision-making and better outcomes					
3	Information sharing eliminates duplication of efforts, reduces time wastage, and promotes streamlined processes, leading to improved efficiency					
4	Sharing information cultivates trust, fosters transparency, and helps build stronger relationships with colleagues					
5	Information sharing increases accountability among individuals or groups, as shared data can be used to track progress, measure performance, and ensure responsibility.					

**Section C: To analyze the effect of supplier management**

This section aims at analyzing the effect of supplier management on customer satisfaction in Budaka health centre IV. 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	Statement	1	2	3	4	5
1	Supplier management helps identify the most cost-effective suppliers and negotiate better pricing, ultimately reducing expenses					
2	Effective supplier management ensures that suppliers adhere to quality standards, resulting in improved product quality and customer satisfaction					
3	Supplier management helps identify and manage potential risks within the supply chain, such as supplier non-compliance					
4	Efficient supplier management streamlines the procurement process by standardizing supplier selection, order placement, and performance evaluation, saving time and effort.					
5	Engaging with suppliers through effective management encourages the exchange of ideas and knowledge, fostering innovation and supporting new product development.					

**Section D: To determine the effect of supply chain agility**

This section aims at determining the effect of supply chain agility on customer satisfaction in Budaka health centre IV. 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	Enhancing supply chain agility can minimize disruptions and supply chain risks					
2	Improved supply chain agility enables organizations to better handle unpredictable demand fluctuations.					
3	Supply chain agility allows for quick adjustments to production and distribution strategies, enabling cost optimization					
4	Enhancing supply chain agility can lead to stronger supplier relationships and collaboration.					
5	Supply chain agility can improve overall operational efficiency and reduce lead times.					

### Section E: Customer satisfaction

This section aims at establishing the indicators of customer satisfaction in Budaka health centre IV. 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 increased utilization of services					
2	Satisfied customers tend to have higher levels of compliance with treatment plans and recommendations provided by the health center					
3	Positive feedback and satisfaction from customers can boost staff morale and motivation.					
4	Customer satisfaction fosters trust and confidence in the health center's capabilities among patients and their families.					
5	A focus on customer satisfaction prompts Budaka Health Center IV to continuously evaluate and improve its services					

## **APPENDIX II: INTERVIEW GUIDE**

1. How do you believe information sharing impacts customer satisfaction at Budaka Health Center IV?
2. In what specific ways does information sharing improve the overall experience and satisfaction of the customers/patients visiting the health center?
3. Are there any challenges or barriers encountered when it comes to effectively sharing information with customers at Budaka Health Center IV?
4. What strategies or initiatives have been implemented to address these challenges and enhance information sharing for improved customer satisfaction?
5. How do you currently manage your relationships with suppliers at Budaka Health Center IV?
6. In your opinion, how does effective supplier management contribute to customer satisfaction levels at the health center?
7. Can you provide examples of specific instances where good supplier management has directly impacted customer satisfaction positively?
8. Have you encountered any difficulties or issues in managing suppliers at Budaka Health Center IV? If yes, how have you addressed such challenges?
9. What measures and practices does Budaka Health Center IV have in place to ensure the satisfaction of both customers and suppliers throughout the supply chain?
10. How would you define the concept of supply chain agility in the context of Budaka Health Center IV?
11. From your perspective, how does supply chain agility influence customer satisfaction at the health center?
12. Can you provide examples where increased supply chain agility has positively impacted customer satisfaction in Budaka Health Center IV?
13. Are there any specific challenges or constraints faced when trying to enhance supply chain agility at the health center?
14. What strategies or initiatives has Budaka Health Center IV implemented to improve supply chain agility and ensure higher levels of customer satisfaction within the organization?



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

BUSINESSDEPARTMENT

TO: BUDAKA HEALTH CENTER IV

Dear Sir/Madam,

RE: Academic Research

Christian greeting!



Approved

We are honored to introduce to you Mr./Mrs, Miss. NAMAGANDA ZUHRAN.

Of registration number: J22/MUC/BPM/012 Pursuing a Master's degree/Postgraduate Diploma, Diploma/ Degree. PROCUREMENT AND LOGISTICS MANAGEMENT.

He/She is required to carry out an academic research on the topic

SUPPLY CHAIN INTERGRATION AND CUSTOMER SATISFACTION IN PUBLIC ENTITIES.

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/her accordingly .

Thank you.

Yours faithfully,

HEAD OF DEPARTMENT, BUSINESS.

Henry Omache Ogachi



A Complete Education for a Complete Person