

**The impact of technology on service delivery in non-governmental organizations: A case of
Kotirae Village, Kakamar Sub-County Under Karamoja Peace and Development Agency
(Kapda), Kaabong District**

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**UGANDA CHRISTIAN
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DECLARATION

I AYOO FAITH MERI hereby declare that this is my work and all the information given in this report is true and has not been submitted to any other institutions for any award.

Signature: 

Date: 14/09/2023.

APPROVAL

This is to approve that AYOO FAITH MERI carried out her research that commenced in May 2023 and ended in August 2023 with a case of Kotirae village, Kakamar sub-county under Karamoja Peace and Development Agency in Kaabong district, Karamoja Region. This report is ready for submission to the Faculty of Business and Administration of Uganda Christian University-Mukono Campus with my approval.

Signature: 

Date: 10/09/2023

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RESEARCH SUPERVISOR

DEDICATION

I would like to dedicate this work to GOD, the Almighty for His showers of blessings throughout my research work, to complete the research successfully.

This research is also dedicated to my parents Mrs. Margret Meri Akongo and the Late Meri Michael Moody, and my guardian Miss. Rose Lilly Akello to whom I am extremely grateful for their love, words of encouragement, optimism, guidance, comfort, prayers, care, and sacrifices for educating and preparing me for my future.

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Thanks also to all the people who have supported me in the completion of the research work both directly and indirectly. May God bless you in your distinguished areas of expectancy.

ABSTRACT

This study is a result of an academic research entitled “The impact of technology on service delivery in non-governmental organizations. A case study of Kotirae village, Kakamar sub-county, Karamoja Peace and Development Agency.” The purpose of this study was to understand the impact of technology on service delivery in NGOs. It bore objectives that aimed to assess the challenges faced while using technology to enhance service delivery, the relationship between technology and service delivery, and the benefits encountered while using technology in service delivery in KAPDA. Different tools and methods were used to collect data from respondents like primary and secondary sources. These include questionnaires, interviews, previous dissertations, and articles to mention but a few.

Findings on the objectives exposed the challenges, benefits, and relationship between technology and service delivery and also instigated the respondents being aware of technology impacts at large. A few identified benefits include improved efficiency, enhanced communication, competitive advantage, etc. In addition, some identified relationships between technology and service delivery are automation, efficiency, digital transformation, and data-driven decision-making. A few challenges that were identified include technical issues and downtime, digital divide, and inadequate knowledge of operating systems.

Furthermore, some recommendations were identified to fix the gaps, and challenges that were identified during the study held at KAPDA located in Kaabong district, Karamoja region of Uganda. These include adequate training availed to employees, disposing away of digital divide, regular update of systems, effective communication, provision of adequate ingredients to enhance technology, etc. KAPDA needs a strong adherence to technology in order to top the competition and avail the best quality of services to its clients in a short lead time while meeting its demand and supply levels.

ACRONYMS AND ABBREVIATIONS

APET – The African Union High-Level Panel on Emerging Technologies

GIRL–H – Girls Improving Resilience through Livelihood and Health

KAPDA – Karamoja Peace and Development Agency

ICT – Information and Communication Technology

IT – Information Technology

NGO – Non-Governmental Organization

M&E – Monitoring and Evaluation

NEPAD – New Partnership for Africa’s Development

RSSB – Rwanda Social Security Board

PBT – Peak Bandwidth Technologies

WASH – Water, Hygiene and Sanitation

EFT – Electronic Fund Transfer

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CHAPTER ONE

1.0 INTRODUCTION

This chapter presents the research topic, background study, scope of the study, problem statement, research questions, research objectives, and purpose of the study to mention but a few.

1.1 Background Study

Globalization, development of communication technologies, and international trade have facilitated smooth communication and collaboration among states of the world. Several technologies have been placed to effect and ease service delivery today. ‘The African Union High-Level Panel on Emerging Technologies (APET) supports the implementation of e-governance and services by harnessing innovation and technologies in Africa. APET notes that e-governance enables citizens to access services directly and timeously without excessive bureaucracy and minimizes corrupt practices; as quoted from NEPAD (<https://www.nepad.org>). It still encourages African countries to adhere to and strengthen their ICT rather technological infrastructure, bolster e-governance financing programs to enable effective implementation, and organize better communication mechanisms.

While NGOs and their leadership continue to modernize technology, they also work to leverage infrastructure within their different sectors in order to better information, internally and externally, thus delivering integrated and better services. The trend of technology looks at the provision of services at the front end, supported by integration, consolidation, and innovation in back-end processes and systems to achieve integrated, client-focused service delivery and greater efficiencies (United Nations 2008). Achieving this however requires ICT infrastructures, data, and business processes.

ICT for service delivery is being revisited to enable more effective inter-organizational linkages and consolidation of government systems to support the necessary collaboration (United Nations 2008:3) so as to deliver better services to clients in the end. Modern technology enables streamlining and integrating services across organizational boundaries and organizing public services holistically in more straightforward and transparent ways.

In developing countries like Uganda, the vital contribution that enhanced communication and access make to socioeconomic development as a result of improved technology is now established. Following a direct statement articulated in 2003 in Tunis, Tunisia where leaders of the world signed the world summit on the Information Society Declaration of Principles in which they declared the ‘common desire and commitment to building a people-centered, inclusive and development-oriented information society, where everyone can access, create, utilize and share information and knowledge, enabling individuals, communities, and people to achieve their full potential in promoting their sustainable development and improving their quality of life.’ (National Service Delivery Support, 2011).

In East Africa, Rwanda Social Security Board (RSSB) of Rwanda, V3locity Global, crystal Technologies Uganda, Pbt-Peak Bandwidth Technologies and Data Care(U) LTD of Uganda are emerging companies where technology and quality service delivery maybe needed for future survival in today's hyper-competitive environment because the institution faces many loopholes like data collection necessities, problem analysis, and effective data usage.

Basing on the fact that NGOs have governments and these governments constitute of leaders at different positions and from various departments, technology adoption by these governments is no longer viewed as only a provision of information or services via the internet but also as a way of transforming how citizens interact with governments and how governments interact with itself. (Rose and Grant 2009). Technology holds enormous potential as a whole of government perspective in the development and delivery of service and policy. The penetration of smart digital devices is bringing citizens and clients closer to organization services including those that are distant geographically.

KAPDA (Karamoja Peace and Development Agency), a non-governmental organization strives so hard to offer services to the community around its vicinity. Its operations department endeavors timely, qualitative, transparent, and accurate delivery of service to all its beneficiaries. Availance and proper adoption of technology eases the provision of service to beneficiaries and the community at large thus increasing efficiency and performance.

1.2 Statement of the Problem

Organizations should adhere to and advance with the ever-changing and growing phases of technology so as to embrace more productivity, efficiency, and effectiveness of service delivery to the community and beneficiaries in the end. Some organizations are not so much into internet usage which becomes another issue and makes everything hard like managing finances. Severin and Tankard (2001) defined the internet as a network of interconnected computers locked together, a worldwide system of interconnected networks using the telecommunication infrastructure that now supports large numbers of computer-based communication exchanges including consultation of databases, websites, homepage conversational interactions, emails, many kinds of electronic commerce of financial transition.

Today, organizations rely heavily on technology strategies. Unfortunately, many don't place so much focus on technology/IT problems that affect their functionality and security. In the researcher's opinion, technology is to solve a large number of issues and also fix the gaps and loopholes in the service delivery in NGOs rather than leave users at a dilemma or standstill.

Any organization that wants to streamline technology and its processes has to address the most common technology problems in the workplace first. Emerging and trending issues like Cyber data security, compliance requirements and Cyber insurance applications, backup and disaster recovery, lack of strategic IT planning, data sprawl and integration challenges, outdated software and equipment, and new technology integration are to be met by technology. This leaves and gives no chance to loopholes surfacing.

1.3 Purpose of the Study

To understand the impact of technology (ICT) on service delivery in non-governmental organizations.

1.4 Objectives of the Study

The objectives of the study are as unearthed below;

- To assess the challenges faced while using technology to enhance service delivery in KAPDA.

- To find out if there is a relationship between technology usage and service delivery in KAPDA.
- To find out the benefits encountered while using and adhering to technology in service delivery in non-governmental organizations.

1.5 Research Questions

- What are the challenges faced while using technology to enhance service delivery in KAPDA?
- Is there a relationship between technology usage and service delivery in KAPDA?
- What are the benefits encountered while using technology in service delivery in KAPDA?

1.6 Scope of the Study

1.6.1 Geographical scope

The study was conducted in Kotirae village, Kakamar sub-county, Kaabong district under Karamoja Peace and Development Agency, as an identified specimen of non-governmental organizations. It is located in Biafra South parish, Biafra ward on Kaabong-Kotido road in Kaabong district.

1.6.2 Subject scope

The focus of the study was to assess and expose the impact of technology on service delivery at KAPDA (Karamoja Peace and Development Agency).

1.6.3 Time scope

This research study was done from January to August 2023. For instance; research proposal was prepared between the months of January to April 2023 and the actual research was done from April to August 2023.

1.7 Justification of the Study

- The research findings are going to be used by KAPDA to improve the quality of services and information technology being used in the organization.
- The study is important to university students and researchers in a way that it will help in academic purposes thus making education easier.
- Government and policymakers shall use this information to know what should be done when some problems arise and require technology adherence and intervention in quality service delivery.
- Generally, non-governmental organizations shall benefit from this study since technology is increasingly becoming a necessity to enhance advanced performance.
- Future researchers shall use the findings extracted from this study as a reference in the future as they carry on with research on this topic and related topics.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents literature about the impacts of technology or ICT on service delivery at KAPDA (Karamoja Peace and Development Agency), the level of technology adoption on service delivery, and the benefits encountered while using technology in service delivery.

2.1 Definition of Key Variables

2.1.1 Technology

According to Ronald and William (2003), technology is a system of both simple and complete, electronic, hardware devices and informal communication chains or computer-based information systems that use hardware and software, internet, and other telecommunication networks that transform data resources into endless data of information products.

Technology is the application of scientific knowledge to the practical aims of human life or, as it is sometimes phrased to the change and manipulation of the human environment. (<https://www.britannica.com>)

Marcelle (2000) defines technology or ICT as a complex and heterogeneous set of goods, applications, and services used for producing, distributing, processing, and transforming information. Ngenge (2003) perceives them as technologies that enable the handling of information and facilitate different forms of communication between human actors, human beings, and electronic systems.

Furthermore, technology or ICT is grouped into two categories that is traditional and modern or new. Traditional ones constitute of non-electronic media such as analog technology for example radio, television, fixed line machines, etc. These have been gradually ingrained in the daily lives of people and communities. The new technology consists of computers in all their myriad manifestations and data processing applications accessible through their use (emails, internet,

word processing, cellular phones, wireless technologies, and other data processing applications.)
(Gurumurthy, 2004:6, 2008:8)

2.1.2 Service delivery

Service delivery is a set of principles, standards, policies and constraints to be used to guide the designs, development, deployment, operation, or retirement of services delivered by a service provider with a view to offering a constant service experience to a specific user community in a business context. (<https://en.wikipedia.org/wiki>)

According to the principles of service delivery in Uganda's local government (Handbook, 2013), service delivery refers to a relationship between policymakers, service providers, and consumers of those services, and encompasses both services and their supporting systems. It is a mechanism used by an organization to meet the needs and aspirations of the people it is meant to serve.

John Spacey (January 2023) defines service delivery as an end-to-end process of providing a service to customers or the internal clients of an organization. This typically includes processes to design, develop, deploy, and operate services.

Service delivery is therefore a system that provides products or services to customers in need. It is also a component of business that defines the interaction between providers and clients where the provider offers a service, whether that be information or task with the client bearing the end result of either value or loss.

Service delivery can be expressed as any contact with the general public administration during which customers' residents, citizens or enterprises seek or give information, handle their affairs, or fulfill their obligations. (Kelly, 2018)

2.2 Challenges faced while using technology to enhance service delivery in KAPDA.

Technology has numerous benefits like enhanced satisfaction for customers, consumers, clients, and beneficiaries. According to Delafrooz, Taleghani, and Taghinehad (2021) who explored on

the impact of service delivery on customer satisfaction, show that competition has drastically increased because of the internet which brings quite a number of choices where customers make preferences from. For that reason, they have enough power to negotiate and recognize all the information choices readily available to make meaningful choices but also quite a number of challenges as unearthed below.

- Data security and privacy. The usage of technology in service delivery involves the collection, storage, and processing of consumer data. Ennew (1993) exposes the bit that complex services require trust and confidence to efficiently get the delivery done with the help of technology. Protecting this information or data from unauthorized access, and breaches and ensuring compliance with data protection regulations can be a significant challenge. KAPDA must invest in robust cyber security measures and adopt appropriate data privacy practices to mitigate these risks.
- Technical issues and downtime. Technology systems are not immune to technical glitches, system failures, or downtime. Service disruptions can have a negative impact on customer satisfaction and lead to loss of revenue. Butcher (2010) emphasizes that technology requires sustained investment and strong alignment with systemic changes. Failure to deal with technical issues and systems poses a very big gap and challenge. Ensuring the reliability, scalability, and stability of technology infrastructure is crucial. KAPDA needs to have contingency plans in place to minimize the impact of technical issues and swiftly restore services.
- User adoption and training. Introducing new technology into service delivery may require users that may be employees or customers to adopt new systems and processes. Resistance to change, lack of technological literacy, and inadequate training can hinder successful adoption and utilization of technology. KAPDA must invest in comprehensive training programs and provide ongoing support to ensure smooth adoption and proficiency in the use of technology. Gregory, Ngo & Karavdic (2019) had kept in mind that in the world of business, e-commerce is the basis for which strategic businesses develop associations within their environment and much more so planned for a new

competitive edge. But not everyone is adapting to the new trends in competitiveness posing a hindrance.

- Digital divide. This refers to the disparity in access and adoption of technology among different groups or communities. Not all customers have equal access to necessary devices, internet connectivity, or digital skills required to engage with technology-driven services. This can create barriers and exclude certain segments of the population from accessing services. Ennew (1993) exposes the bit that complex services require trust and confidence to efficiently get the delivery done with the help of technology. KAPDA needs to be mindful of these inequalities and find ways and find ways to bridge the digital divide to ensure inclusivity.
- Integration and compatibility. Implementing technology in service delivery often involves integrating new systems with existing infrastructure, software, or third-party platforms. Compatibility issues between different technologies, legacy systems, or complex IT environments can be challenging. Butcher (2010) emphasizes that technology requires sustained investment and strong alignment with systemic changes. The systems should be compatible and easily integrated. KAPDA needs to carefully plan and execute integration strategies to ensure seamless interoperability and avoid disruptions to service delivery.
- Cost and return on investment. Adopting and maintaining technology in service delivery can involve significant costs including hardware, software, licensing, and ongoing maintenance expenses. Kumar et al (2007) categorizes service delivery as publishing, interacting, and publishing. All these categories require monetary terms to be effectively and efficiently done and adhered to which may either positively or negatively affect the cost and return on investments of the business.
- Ethical considerations. Using technology in service delivery raises ethical concerns related to privacy, transparency, and fairness. Automated decision-making processes and data analytics can potentially result in bias, discrimination, or unintended consequences.

Ennew (1993) exposes the bit that complex services require trust and confidence to efficiently get the delivery done with the help of technology. Trust and confidentiality are key ethical values that should be effectively put into consideration.

- Inadequate knowledge of how to access and operate the different technological appliances available becomes a challenge. Finding differences between technology and user needs requires extensive knowledge of the relevant stakeholders, partnership with the community, evaluation metrics, and a plan for sustainability. (Brewer et al, 2006; Dragon, 2001; Tongia & Subrahmanian, 2006)

2.3 The relationship between technology and service delivery in KAPDA.

According to Ephraim et al (2003), customer sophistication and expectations increase as customers become more knowledgeable about the availability and quality of the products and services. They are also knowledgeable about competitive products. The relationship between technology and service delivery is intertwined. Technology plays a crucial role in enhancing and transforming the way services are delivered to the clients, and beneficiaries of KAPDA. Here are some essential aspects of this relationship;

- Automation and efficiency. Technology enables the automation of iterative tasks or processes, reducing the need for manual intervention. This automation improves efficiency by streamlining workflows, eliminating errors, and speeding up. For example, check systems in stores automate track of the inventory levels in the stores reducing the need for manual work. Automation permits customer service representatives to work smarter and faster. (Froehle and Roth, 2020).
- Digital transformation. Technology facilitates the digital transformation of service delivery. KAPDA adopts digital platforms, online platforms or portals, and mobile applications to provide services to customers. The shift from traditional, physical interactions to digital interfaces enhances accessibility, and convenience and speeds up service delivery. For example online banking, and e-commerce platforms. IT has contributed and continues to contribute to enhanced performance and performance in service delivery (Bitner, Faranda, Hubbert & Zeithaml, 2008).

- Personalization and customization. Stiftung (2002) talks about the rapid growth brought by IT which transforms generations in the way they do things. This generation prefers so much branding, personalization, and customization in which technology enables service providers to personalize and customize their offerings according to individual customer preferences. Customer or client data and analytics help in understanding customer behavior, needs, and preferences. This knowledge can be utilized to tailor services, provide personalized recommendations, and create a more satisfying customer experience.
- Enhanced communication and collaboration. Dede (2020) argued that IT is vital for communication-based processes. Technology facilitates seamless communication and collaboration between service providers and customers. Various digital channels such as chatbots, messaging apps, video conferencing, and social media platforms allow instant messaging or interactions. This improves customer support, and real-time feedback and enhances collaboration between service teams leading to better service delivery.
- Service innovation. Kumar et al (2007) categorizes service delivery as publishing, interacting, and transacting. Technology acts as a catalyst for service innovation enabling the development of new service models and offerings. New technologies for example the use of virtual reality and AI-powered chatbots in customer service have transformed the way businesses handle inquiries and support.
- Data-driven decision making. Technology generates vast amounts of data throughout the service delivery process. By leveraging data analytics and business intelligence tools, KAPDA can gain valuable insights into customer behavior, market trends, and service performance. These help in informed decision-making, optimizing service delivery processes, and improving overall customer satisfaction. According to Tassabehji & Elliman (2006), e-governance through technology enhances decentralization reforms by bringing decision-making closer to the doorsteps of ordinary citizens through collaborative reasoning made possible. These decisions are based on the data at hand.

- Continuous improvement and adaptability. Technology allows for continuous improvement and adaptability in service delivery. KAPDA can collect feedback, analyze customer reviews, and monitor service metrics to identify areas of improvement. Necessary adjustments can be made, service offerings can be iterated and competition kept ongoing in a rapidly evolving environment. IT contribution in service delivery is on web services, computing services, business intelligence services, and information technology facilities. (Zhang, Zhang & Cai, 2017).

2.4 The benefits encountered while using technology in service delivery.

There are various benefits that NGOs can achieve once they cling to technology while carrying out not only service delivery but also its operations in general. The World Bank article (2013) states that the World Bank helps countries use ICT to improve access to affordable connectivity, transform the delivery of basic services, drive innovations and productivity gains, and improve competitiveness. This is an outstanding advocacy for NGOs in counties to take this opportunity up so as to improve efficiency and effectiveness.

- Improved efficiency in a way that technology automates manual tasks, streamlines processes, and reduces the need for human or manual intervention. This increases operational efficiency, and faster response times, and reduces errors in service delivery. According to Sofyani, Riyadh, and Fahlevi (2020), who discovered that efficient and effective service delivery remains the central part in many organizations. Their research focused on developing the effect of ICT or technology and finance accessibility on service delivery in organizations. Furthermore, it shows that once technology is adhered to, more effectiveness and efficiency in terms of costs, time, and operations is attained.
- Enhanced communication. Technology enables seamless communication between service providers and customers. Instant messaging emails to mention but a few allow effective communication resulting in customer satisfaction and faster issue-solving. According to Dede (2020), technology is vital for communication. He further exposed that the use of online-based interaction with customers can ease service delivery thus making it efficient.

- **Competitive advantage.** Embracing technology in service delivery gives organizations a competitive edge by offering innovative and technologically advanced services. They're able to differentiate themselves from competitors and attract tech-savvy customers or clients. According to Bovaird and Loffler (2020), when technology is used in the delivery of services, it can be very useful to all players in the company. This gives an upper hand to be ahead of competitors since the employees are electronically sensitized.

- **Enhanced collaboration.** Technology facilitates collaboration among service providers, employees, consumers, and stakeholders. Project management tools, cloud-based document sharing, and video-conferencing platforms enable real-time collaboration and efficient teamwork leading to improved service quality. According to Siddiquee (2018), collaboration is easily done when employees have a common understanding of their effectiveness and customer emphasis. This leads to increased goal and target achievement.

- **Scalability.** Technology offers the flexibility to scale services based on demand. Cloud computing, virtualization, and online platforms allow businesses to expand their service offerings without significant investments in infrastructure. Thus scalability ensures that service providers can meet growing customer demands efficiently. Lacity and Hirschheim (2019) state that service growth and delivery of services have been researched in various areas such as advertising, operations administration, business economics, and information systems. Once these areas are given attention and kept a close eye on, scalability can be achieved easily.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter explains in detail the research methodology used to collect the data that will be used to conclude the purpose and answer the research problem or question. It will include a research plan or design describing a systematic plan of collecting, sources of data, data collection procedures, data analysis, interpretation, presentation, validation, and reliability of the research instruments.

3.1 Research design

A research design is a strategy used to answer the research question using empirical data. Therefore the design is made after a decision on research objectives has been made, whether data collection will be based on primary or secondary research, sampling methods, and data collection and analysis methods. (Pritha, scribbr.com, 2023)

This research will use qualitative research design because it will be more flexible and inductive whereby it is easy to adjust the approach based on the data collected. This design will help in addressing the how and why questions that can't be expressed in numbers.

Therefore the research design will help the researcher to create an appropriate approach or plan for the study that will eventually provide a more accurate assessment and analysis of the cause-effect relationship of the independent variable and dependent variable. (Maria & Devin, 2021)

That is to say, a good research design must take into consideration the following aspects. It should consider participants that will be the sample that will be selected from KAPDA programs in Kaabong Town Council. It will also pay attention to validity, and reliability and also have the ability to conclude the results that will apply the answer to the research questions. (Maria & Devin, 2021)

3.2 Study population

This is the population of interest from which the researcher expects to collect data. We shall focus on Kaabong District especially Kakamar sub-county with a population of 4200 (Brinkhoff, 2020). It will focus more on KAPDA employees, adolescents, and youth from Kotirae village. The anticipated sample size was 30 from the different departments like Finance, Statistics, Procurement, etc.

3.3 Sampling techniques

A sample is a specific group that will be chosen to collect data from. This sample size will be taken from the population size of the area. (Pritha, scribbr, 2022). The researcher used a non-probability sampling technique and purposive sampling to be more specific. This was because the identified individuals had an advantage over others considering the questions that were asked and they helped the researcher best answer questions since the researcher already had some background information about the study and activities that they engage in under KAPDA programs.

3.4 Data collection sources

3.4.1 Primary sources;

It will be used to collect data to fill the gap within the literature. These will include interviews that will be carried out by the researcher and among the people, participant observation, and focus group discussions (Raimo, 2023). The reason for primary sources is that they will provide raw information and first-hand evidence. It gives direct access to the subject of the research.

3.4.2 Secondary sources;

These are created later by people who did not experience first-hand information or participate in the events that an author is writing about. (<https://www.google.com/search>). They often summarize, interpret, analyze, or comment on information found in primary sources.

3.5 Data collection methods and instruments

Data collection is establishing facts through the use of a given method of given method of inquiry into situations where available knowledge is adequate. In-depth interviews will be conducted with the project officer, field officers, local council leaders, community mobilizers, and finally the youth and adolescents to collect the desired information. This was because in-depth interviews would enable the respondents and the researcher to have a deeper engagement to reveal more information. The interview was recorded and data was later be transcribed.

A research instrument is a tool used to collect measure and analyze data that is related to the research being carried out. The research instruments must be valid and reliable that is they must be related to the conceptual framework, they must be able to answer the research questions during data collection, and must be free of bias and contain clear instructions on how they can be used. (Teachers & Columbia, 2022)

Interview guide. In qualitative interviews, an interview guide is a list of questions related to the topic of study that the researcher who is also an interviewer hopes to be answered during the course of the interview. In short, it is a list of questions posed to the participants by the researcher. (L. Mauldin, 2019) The main goal of the interviewer using the interview guide is to hear what is considered of importance about the topic at hand in the respondents' own words. The advantage of using this research methodology is that it gives first-hand information, it's affordable and information comes from people who have relevant knowledge and insight.

Questionnaire. It is where a researcher comes up with a list of questions about the topic of study and presents it to respondents to fill either online, physically, oral and virtually. This method is convenient for the researcher since it's affordable and easy to use.

3.6 Data collection procedure.

The researcher secured a letter of approval from the Research Ethics Committee of Uganda Christian University allowing her to conduct the study.

The researcher presented an introductory letter from the School of Business, Uganda Christian University to KAPDA informing them that she had been sent to conduct a study in their organization.

These letters were presented to the authorities in Kaabong District for the study to proceed and be conducted.

3.7 Data analysis, interpretation, and presentation.

This happened after data had been collected, the researcher had to analyze data and present it. It was done manually. It was done using pie charts, graphs, tables, figures, or diagrams. The data was presented according to the study objectives.

3.8 Limitations.

Limitations are weaknesses within a research design that may influence the outcomes and conclusions of the study and include;

3.8.1 Limited access to data.

Due to limited access to some information and top management which is lack of contact, renders research lacking. The researcher may have to redesign the research in a different way and this will definitely delay obligations to catch the deadline.

3.8.2 Insufficient sample size or statistical measurements.

During the study, it's important to consider that one has a sufficient sample size in order to draw valid conclusions, and due to the pastoral lifestyle of the Karamojong, this becomes a challenge thus limiting the study.

3.8.3 Lack of previous research studies on the topic.

Citing and referencing prior research studies constitutes the basis of the literature review for the study and these prior studies provide the theoretical foundations for research. It gets challenging to come up with the study on time.

3.8.4 Time constraints.

This is evident even now that there are various deadlines to meet up with the research needed on top of that. Basing on the insecurity in Karamoja, the researcher may be delayed to report early to the field to collect data and also leave early thus limiting time with interviewees.

3.8.5 Exhaustion.

Research is a whole exhausting process and step of education that has to be met and fulfilled so as to finish the undergraduate level of study. It requires so much devotion and time even with other responsibilities to be carried out.

3.9 INTERVIEW QUESTIONS

- What are the implications of using technology in service delivery in KAPDA?
- What is the relationship between technology and service delivery at KAPDA?
- How does poor technology adherence increase performance decline in terms of operations at KAPDA?
- How does performance measurement help KAPDA identify its strengths and weaknesses?

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION AND PRESENTATION OF FINDINGS

4.0 Introduction

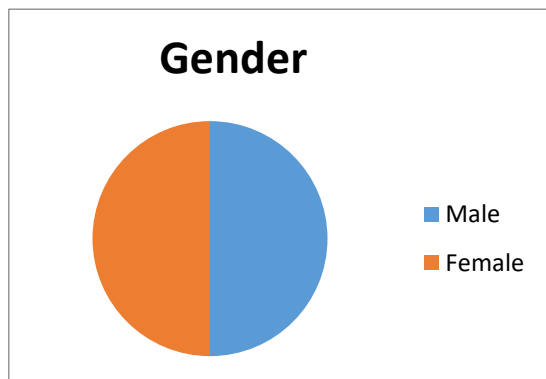
This chapter introduces findings concerning the bio-data of the respondents and the research objectives on challenges faced while using technology to enhance service delivery, the relationship between technology and service delivery, and the benefits encountered while using technology in service delivery at KAPDA.

4.1 FINDINGS ON BIO-DATA OF THE RESPONDENTS.

4.1.1 Findings on the Gender of the Respondents.

Gender	Frequency	Percentage /%
Male	15	50
Female	15	50
Total	30	100

Source: Primary data, August, 2023



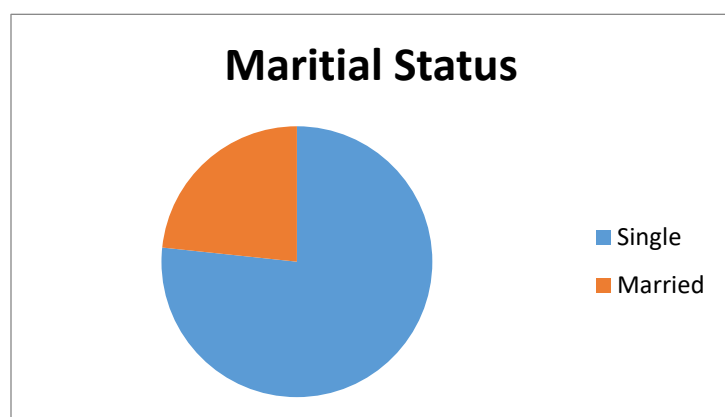
Source: Primary data, August 2023

From the information provided on findings on the respondents' gender, the distribution of respondents according to their gender was equal. The males were 15(50%) and so were the females 15(50%). This means that there is gender equality and sensitivity through women emancipation, instigation, and empowerment in KAPDA.

4.1.2 Findings on Marital Status of the Respondents

Marital Status	Frequency	Percentage /%
Single	23	50
Married	7	50
Total	30	100

Source: Primary data, August 2023.



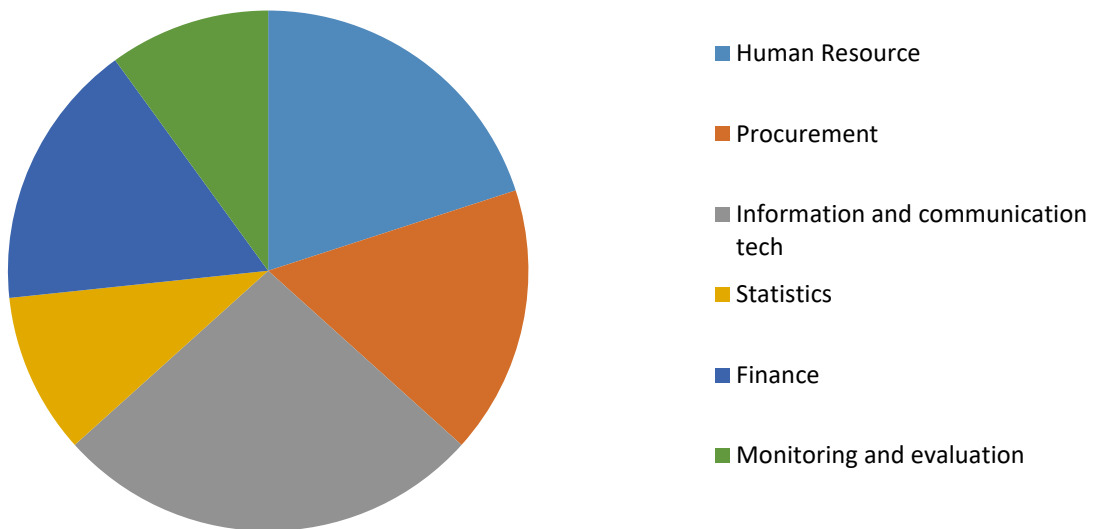
Source: Primary data, August 2023.

Basing on the information availed on the marital status of respondents within KAPDA, singles are 23(77%) and marrieds are 7(23%). This shows that singles are taken in bigger numbers so as to increase the efficiency of work being done and reduce on risks of absenteeism due to other responsibilities that the married would be attached to besides work at KAPDA.

4.1.3 Findings on departments in which respondents work in.

Departments	Frequency	Percentage /%
Human resource	6	20
Procurement	5	17
Information and communication technology	8	27

Departments



Statistics	3	10
Finance	5	17
Monitoring and evaluation	3	10
Total	30	100

Source: Primary data, August 2023.

Source: Primary data, August 2023

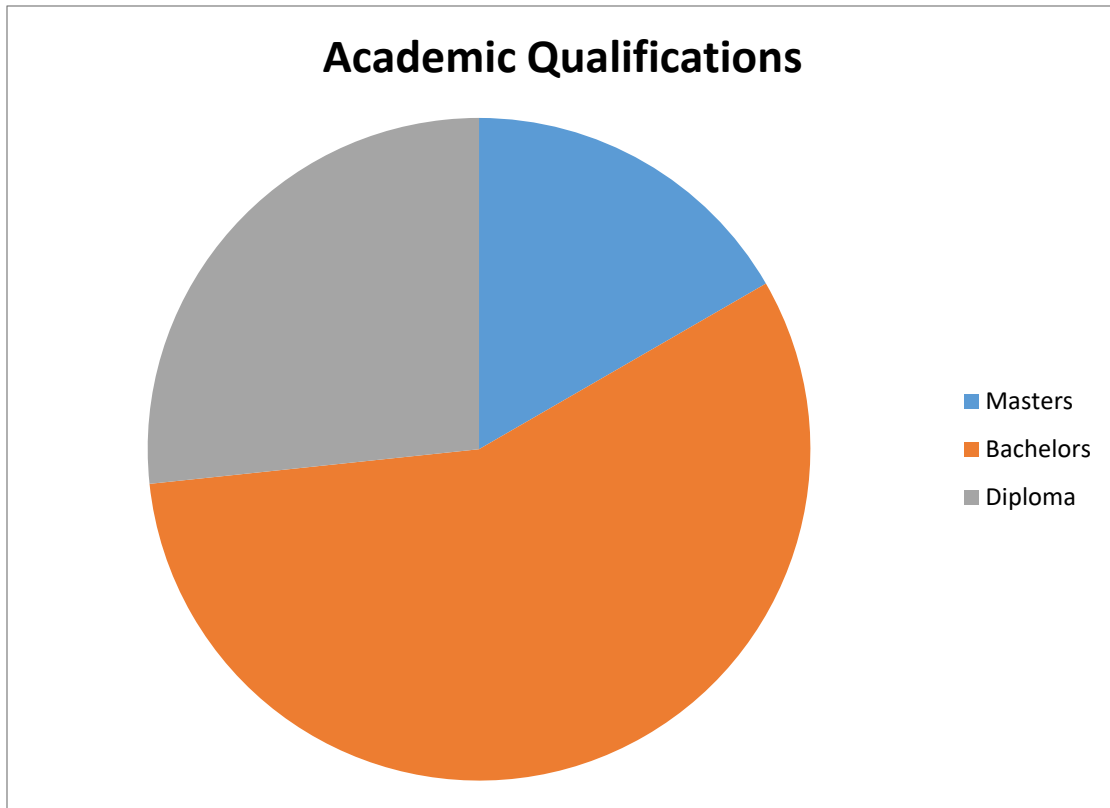
From the information analyzed and presented on findings on departments in which respondents work in, there is a vivid picture of some departments having more people attached to them, unlike others. For instance, Human Resource has 6(20%), procurement has 5(17%), finance has 5(17%), statistics has 3(10%), monitoring and evaluation has 3(10%) and information and communication technology has 8(27%) as shown on the chart. This is because of the workload and presence of internship students and volunteers who are attached to those departments thus reducing the workload at hand and promoting more efficiency.

4.1.4 Findings on Academic Qualifications of the Respondents.

Academic Qualifications	Frequency	Percentage/%
Masters	5	17
Bachelors	17	57

Diploma	8	27
Total	30	100

Source: Primary data, August 2023.



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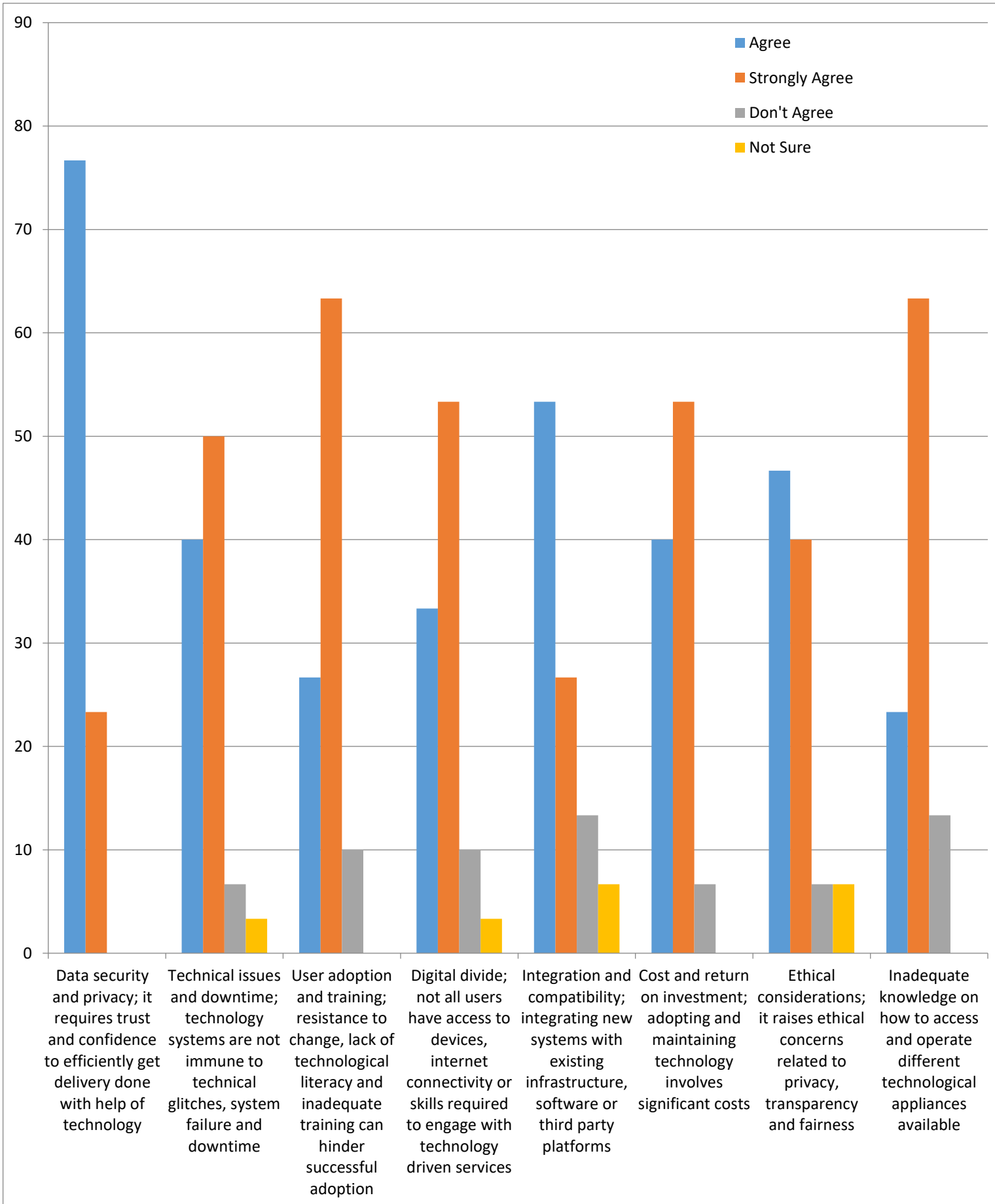
From the information shown above on academic qualifications of respondents, it is clear that respondents at master's level are 5(17%), bachelor's level are 17(57%) and diploma level are 8(27%). The implication is that KAPDA hires for competency in that knowledgeable and skillful people are taken in to avail the best of their abilities and produce quality output since they have experience and are good at what they do. It also shows a high level of hiring for diversity in that people at all levels are taken up to ensure productivity and efficiency at the workplace besides having internship practice ongoing within KAPDA.

4.2 FINDINGS ON THE CHALLENGES FACED WHILE USING TECHNOLOGY TO ENHANCE SERVICE DELIVERY IN KAPDA.

Below are responses from respondents in relation to the challenges faced while using technology to enhance service delivery in KAPDA. It is categorized in A=Agree, S/A=Strongly Agree, D/A= Don't Agree, and N/S= Not Sure.

S/N	Challenges faced in using technology to enhance service delivery	A		S/A		D/A		N/S		TOTAL	
		F	%	F	%	F	%	F	%	F	%
A	Data security and privacy; it requires trust and confidence to efficiently get delivery done with the help of technology	23	77	7	23	0	0	0	0	30	100
B	Technical issues and downtime; technology systems are not immune to technical glitches, system failure, and downtime	12	40	15	50	2	7	1	3	30	100
C	User adoption and training; resistance to change, lack of technological literacy, and inadequate training can hinder successful adoption	8	27	19	63	3	10	0	0	30	100
D	Digital divide; not all users have access to devices, internet connectivity, or skills required to engage with technology-driven services	10	33	16	53	3	10	1	3	30	100
E	Integration and compatibility; integrating new systems with existing infrastructure, software, or third-party platforms	16	53	8	27	4	13	2	7	30	100
F	Cost and return on investment; adopting and maintaining technology involves significant costs	12	40	16	53	2	7	0	0	30	100
G	Ethical considerations; it raises ethical concerns related to privacy, transparency,	14	47	12	40	2	7	2	7	30	100

	and fairness										
H	Inadequate knowledge of how to access and operate different technological appliances available	7	23	19	63	4	13	0	0	30	100



Basing on the above analysis and presented data on findings on challenges encountered while using technology to enhance service delivery, it is clear that the majority of the respondents agreed to the challenges encountered while using technology whereas a minority disagreed and were not sure. In relation to the above information, the challenges faced while using technology to enhance service delivery in KAPDA were measured in responses of agree, strongly agree, disagree, and not sure as elaborated below.

It was revealed that 77% of the respondents agreed, and 23% strongly agreed that data security and privacy is a challenge. 40% of the respondents agreed, 50% strongly agreed while 7% disagreed and 3% were not sure of technical issues and downtime being another challenge. 27% of the respondents agreed that user adoption and training is also a challenge with 63% who strongly agreed and 10% disagreed.

In addition, 33% of the respondents agreed, 53% strongly agreed, 10% disagreed and 3% were not sure of digital divide being a challenge. 53% of the respondents agreed to integration and compatibility being a challenge, 27% strongly agreed, 10% disagreed and 3% were not sure. 40% of the respondents agreed that cost and return on investment was a challenge, 53% strongly agreed, and 7% disagreed.

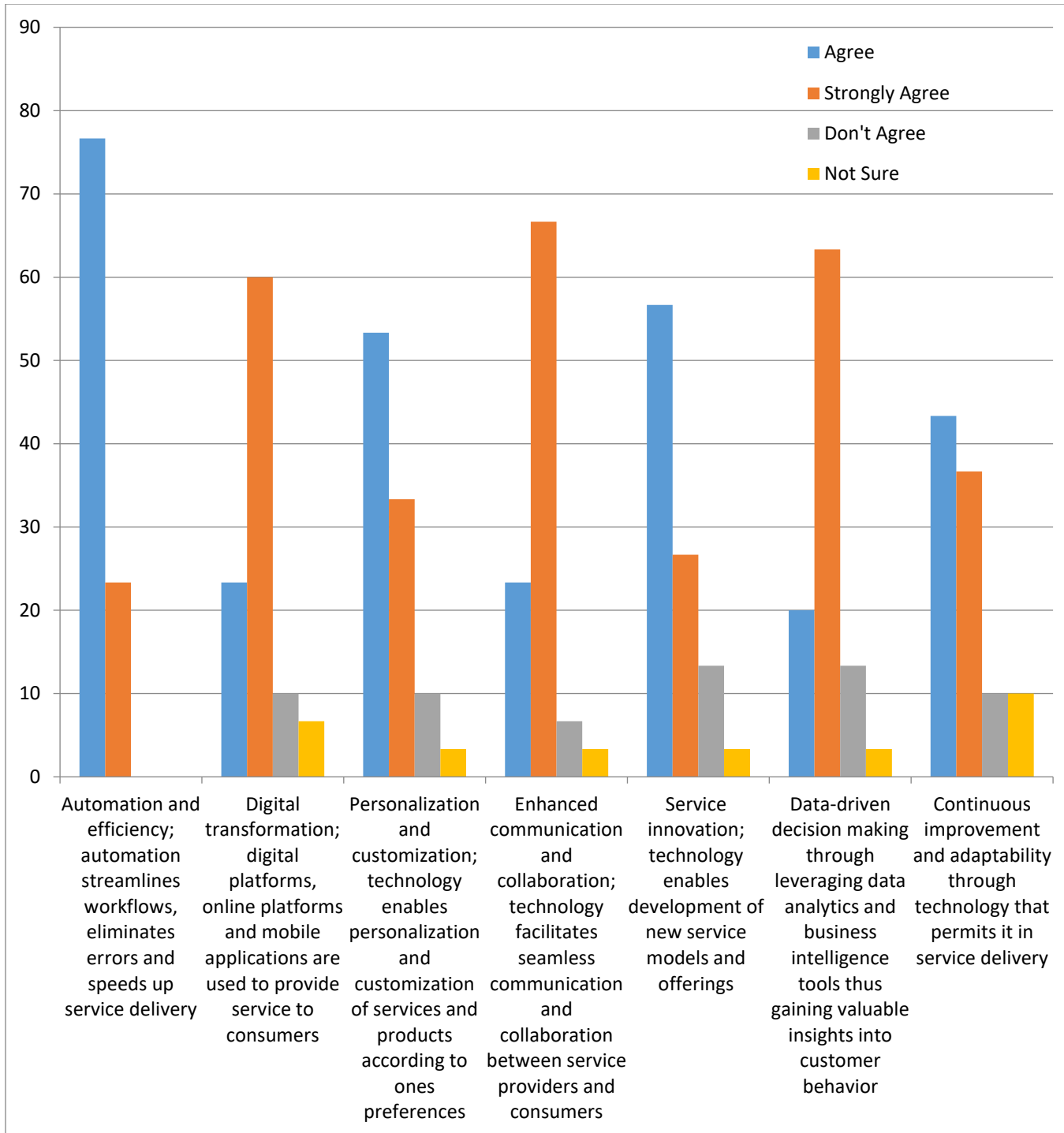
Furthermore, 47% of the respondents agreed that ethical considerations was a challenge, 40% strongly agreed, 7% disagreed and 7% were not sure. 23% of the respondents agreed that inadequate knowledge was a challenge, 63% strongly agreed and 13% disagreed. This indicates that the employees in KAPDA require regular sensitization and training on aspects of technology so as to eradicate the levels at which challenges are encountered. With proper and regular sensitization and training of employees, more efficiency and productivity in the service delivery bit will be increased and achieved effectively since the required skills and knowledge will be availed in abundance at the employees' exposure.

4.3 FINDINGS ON THE RELATIONSHIP BETWEEN TECHNOLOGY AND SERVICE DELIVERY IN KAPDA

Below are the responses as per the information collected from respondents whereby, A=Agree, S/A=Strongly Agree, D/A= Don't Agree, N/S=Not Sure.

S/N	The relationship between technology and service delivery	A		S/A		D/A		N/S		TOTAL	
		F	%	F	%	F	%	F	%	F	%
A	Automation and efficiency; Automation streamlines workflows, eliminates errors, and speeds up service delivery	23	77	7	23	0	0	0	0	30	100
B	Digital transformation; digital platforms, online platforms, and mobile applications are used to provide service to consumers	7	23	18	60	3	10	2	7	30	100
C	Personalization and customization; technology enables personalization and customization of services and products according to one's preferences	16	53	10	33	3	10	1	3	30	100
D	Enhanced communication and collaboration; technology facilitates seamless communication and collaboration between service providers and consumers	7	23	20	67	2	7	1	3	30	100
E	Service innovation; technology enables the development of new service models and offerings	17	57	8	27	4	13	1	3	30	100
F	Data-driven decision-making through leveraging data analytics and business intelligence tools thus gaining valuable insights into customer behavior	6	20	19	63	4	13	1	3	30	100
G	Continuous improvement and adaptability through technology that permits it in service delivery	13	43	11	37	3	10	3	10	30	100

Source: Primary Data, August. 2023.



Source: Primary Data, August. 2023.

The data collected above shows that in relation to the relationship between technology and service delivery at KAPDA, below are some of the responses based on agreement parameters of agree, strongly agree, disagree, and not sure

The study exposed that 77% of the respondents agreed to automation and efficiency being a relationship between technology and service delivery and 23% strongly agreed. 23% of the respondents agreed to digital transformation being a relationship between technology and service delivery, 60% strongly agreed, 10% disagreed and 7% were not sure. 53% of the respondents agreed that personalization and customization was a relationship between technology and service delivery, 33% strongly agreed, 10% disagreed and 7% were not sure.

In addition, 23% of the respondents agreed to effective communication and collaboration having created an existence of a relationship between technology and service delivery, 67% strongly agreed, 7% disagreed and 3% were not sure. 57% of the respondents agreed that service innovation was another relationship between technology and service delivery, 27% strongly agreed, 13% disagreed and 3% were not sure.

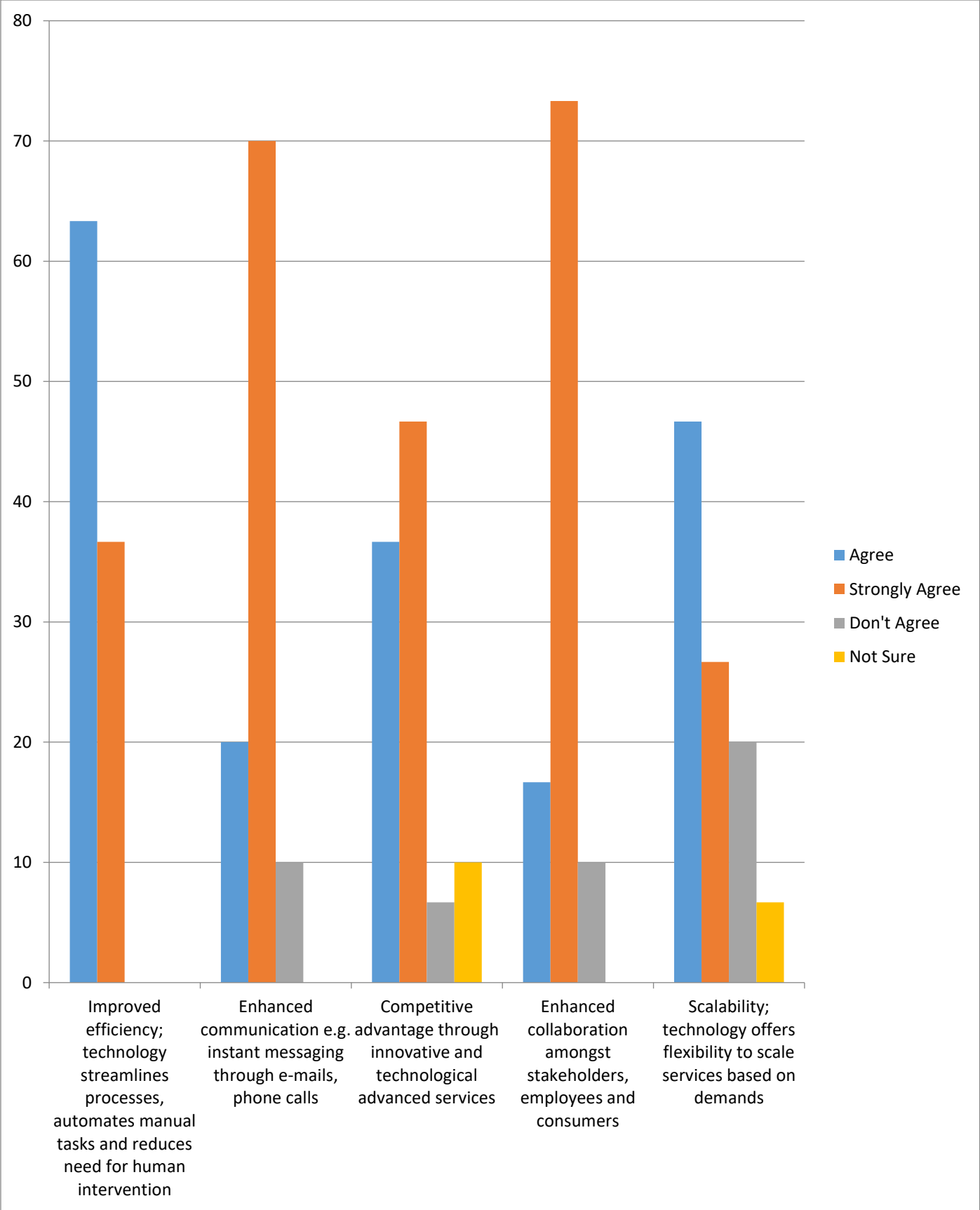
Furthermore, 20% of the respondents agreed that data-driven decision-making was another relationship between technology and service delivery, 63% strongly agreed, 13% disagreed and 3% were not sure. 43% of the respondents agreed to the existence of a relationship between technology and service delivery created by continuous improvement and adaptability, 37% strongly agreed, 10% disagreed and 10% were not sure. The implication from the above responses is that there is a great possibility and potential of technology improving service delivery despite the fact that it is a complex kind of relationship. Technology can improve accuracy, improve efficiency, increase convenience, customer satisfaction, and personalization if adequately adhered to in the delivery of services since the relationship is a promising one.

4.4 FINDINGS ON THE BENEFITS ENCOUNTERED WHILE USING TECHNOLOGY IN SERVICE DELIVERY AT KAPDA.

Below is data availed as collected from respondents whereby, A=Agree, S/A=Strongly Agree, D/A=Don't Agree, N/S=Not Sure.

S/N	Benefits encountered while using technology in service delivery	A		S/A		D/A		N/S		TOTAL	
		F	%	F	%	F	%	F	%	F	%
A	Improved efficiency; technology streamlines processes, automates manual tasks, and reduces the need for human intervention	19	63	11	37	0	0	0	0	30	100
B	Enhanced communication e.g. instant messaging through e-mails, phone calls	6	20	21	70	3	10	0	0	30	100
C	Competitive advantage through innovative and technological advanced services	11	37	14	47	2	7	3	10	30	100
D	Enhanced collaboration amongst stakeholders, employees, and consumers	5	17	22	73	3	10	0	0	30	100
E	Scalability; technology offers flexibility to scale services based on demands	14	47	8	27	6	20	2	7	30	100

Source: Primary Data, August. 2023.



The data collected above shows that in relation to the benefits encountered while using technology in service delivery at KAPDA, below are some of the responses based on agreement parameters of agree, strongly agree, disagree, and not sure.

It was revealed that 63% of the respondents agreed to improved efficiency being a benefit and 37% strongly agreed. 20% of the total respondents agreed to enhanced communication being a benefit, 70% strongly agreed, and 10% disagreed.

In addition, 37% of the respondents agreed to competitive advantage being a benefit, 47% strongly agreed, 7% disagreed and 10% were not sure. 17% of the respondents agreed that enhanced collaboration is another benefit, 73% strongly agreed and 10% disagreed.

Furthermore, 47% agreed to scalability being a benefit of using technology in service delivery, 27% strongly agreed, 20 % disagreed and 7% were not sure. The implication is that the respondents were not strongly adhering to technological usage in service delivery but rather opted for manual means other than automated ones as per the results. Technology adherence and usage should be considered more so as to enhance productivity and efficiency thus improving performance operationally and strategically while eradicating absenteeism from work since technology offers opportunities of virtual working, e-commerce, and e-performance to mention but a few.

4.5 FINDINGS ON THE INTERVIEWS HELD WITH RESPONDENTS.

Mass interviews were held with the majority of the respondents to this study on the impact of technology on service delivery in KAPDA. Below are some of the responses unearthed as per the questions presented.

4.5.1 Qn. What are the implications of using technology in service delivery in KAPDA?

Introducing technology in service delivery within KAPDA, an organization in Karamoja, can have several implications:

- **Access and Infrastructure:** Karamoja not excluding KAPDA, might have limited technology infrastructure and internet connectivity. Basing on the fact that not all employees have access to devices within the organization. Implementing technology could also be challenging due to inadequate access to power, internet, and devices.
- **Skill Development:** Training local staff to effectively use and maintain the technology is crucial as cited from the study that not all employees have adequate knowledge on how to operate different technological appliances. This can lead to skill development and potentially better employment opportunities for the local workforce within KAPDA.
- **Efficiency and Accuracy:** Technology can improve efficiency by automating processes and reducing manual tasks if automation is enhanced. This can result in quicker service delivery and fewer errors to KAPDA customers and its employees too.
- **Data Management:** Proper use of technology can lead to better data collection and analysis, allowing KAPDA to make not only informed but also data-driven decisions based on accurate information that is availed as a result of proper data management.
- **Cost and Sustainability:** Initial costs for technology implementation can be high, but if managed well, technology can lead to long-term cost savings and improved service quality. Through proper, ongoing maintenance and support for the technology infrastructure, breakdowns and disruptions in service delivery can be easily dealt with.

- **Economic Growth:** Integrating technology, its various systems with existing infrastructure, and software could attract investments, create job opportunities in the technological sector, and stimulate economic growth not only in KAPDA but also in the region.
- **Digital Divide:** Introducing technology may inadvertently widen the digital divide if not carefully managed, leaving marginalized groups further behind. Thus, digital divide should be dealt with by giving every employee a fair stand in terms of access to devices, internet connectivity, or skills required to engage with technology-driven services.
- **Security and Privacy:** Implementing technology requires ensuring the security of data and protecting individuals' privacy. Different security ways may be used for example biometrics, encryption, and coding could be taken into consideration in order to secure very important information from leakage.

4.5.2 What is the relationship between technology and service delivery at KAPDA?

A relationship occurs when two parties or aspects are intertwined or interdependent as below.

- **Access to information.** Technology provides access to vital information related to services offered by KAPDA for example data of projects like GIRL-H, and APOLOU, which uplifts female education, emancipation, and development as a whole are stored with the help of technology.
- **E-learning.** Technology enables online education and e-learning platforms to overcome geographical barriers and offers educational opportunities to KAPDA. Other activities like e-meetings and e-conferences are held easily with technology involvement reducing on costs attached.
- **Digital financial services.** Mobile banking and digital payment systems facilitate financial transactions, reducing the need to travel and increase economic inclusion. KAPDA will easily make payments and transactions from anywhere.

- Sustainable development. Integrating technology into service delivery contributes to KAPDA's sustainable development by improving livelihoods and overall quality of life. Through programs like GIRL-H and APOLOU, people are able to uptake easier development sessions online instead of moving long distances to access them.
- Performance and environmental conservation. Technology aids in tracking activities as well as environmental changes, helping in disaster preparedness and natural resource management. Weather can be forecasted in advance to avoid disruptions.

4.5.3 How does poor technology adherence increase performance decline in terms of operations at KAPDA?

Poor technology adherence in the operations of KAPDA can lead to a decline in performance for several reasons as explained below.

- Lack of automation. Automation can streamline repetitive tasks but poor technology adherence prevents the implementation of such solutions which could otherwise free up human resources for strategic work within KAPDA.
- Poor resource management. This can be viewed as resource mismanagement. Without proper technological tools, it becomes challenging to track and manage resources effectively, leading to a waste of resources, time, effort, and cost increment in KAPDA. Manually kept data is always at high risk of being lost, unlike e-data.
- Missed market opportunities. The inability to access digital markets or online platforms due to poor technology adoption can limit KAPDA's ability to reach broad markets and expand its business opportunities.
- Slow decision-making. Without timely access to accurate, complete, concrete data and information, decision-making processes are slowed down making it difficult to respond to changing conditions swiftly.

- Disputes may emerge as a result of poor communication. Inadequate technology can hamper communication between different stakeholders resulting in misunderstandings, delays, and lack of coordination in operations within KAPDA.
- Insufficient processes. Poor technology adoption can lead to manual and time-consuming processes, reducing operational efficiency and delaying tasks thus hindering the overall productivity of KAPDA.

4.5.4 How does performance measurement help KAPDA identify its strengths and weaknesses?

- Objective Evaluation: Performance measurement provides an unbiased and objective way to assess the organization's achievements, helping to identify areas of strength and weakness based on actual outcomes. KAPDA can adopt this to ease the performance monitoring process.
- Strategic Alignment: It helps align KAPDA's set goals with actual results, allowing it to identify where its strategies are successful and where adjustments are needed. It also identifies areas of improvement and possible threats to KAPDA.
- Data-Driven Decision Making: By collecting and analyzing performance data, KAPDA can make informed decisions about resource allocation, process improvements, and strategic planning.
- Identification of Best Practices: By comparing different aspects of the organization's performance, it becomes possible to identify practices that are contributing positively to KAPDA's success, which can then be replicated or scaled.
- Early Warning System: Performance measurement can act as an early warning system to KAPDA in that it helps in highlighting declining performance or negative trends, enabling the organization to take corrective action promptly.

- Resource Optimization: It helps the KAPDA allocate resources effectively by identifying areas of inefficiency, leading to cost savings and improved resource utilization. Chances of resource waste are therefore optimized.
- Stakeholder Engagement: Performance measurement results can be shared with KAPDA's stakeholders including employees, donors, and the community, fostering transparency and accountability.
- Continuous Improvement: Regularly measuring performance encourages a culture of continuous improvement, as KAPDA strives to enhance its strengths and address weaknesses over time. It is therefore easier to monitor and identify potential areas of improvement.
- Benchmarking: Performance measurement allows KAPDA to compare its performance against industry standards or competitors, offering insights into where it stands relative to others. Thus giving KAPDA an opportunity to find and come up with better measures.
- Goal Setting: Clear performance metrics help in setting realistic and achievable goals, and tracking progress towards these goals, leading to a more focused and effective organizational strategy. KAPDA can therefore set SMART goals that are specific, measurable, accurate, realistic, and time-bound goals.

Incorporating these points into a performance measurement framework can greatly assist KAPDA in understanding its strengths and weaknesses in fostering growth and development not only in areas of its existence and occurrence but the whole region.

CHAPTER FIVE

DISCUSSION, SUMMARY, CONCLUSION, AND RECOMMENDATIONS OF THE FINDINGS.

5.0 Introduction

This chapter presents the discussion, summary, conclusion, and recommendations of the findings on the challenges faced while using technology to enhance service delivery, the relationship between technology and service delivery, and the benefits encountered while using technology in service delivery at KAPDA.

5.1 Discussion of the findings

5.1.1 Discussion of the findings on the challenges faced while using technology to enhance service delivery in KAPDA.

It was revealed that 77% of the respondents agreed, and 23% strongly agreed that data security and privacy is a challenge. This is in agreement with Ennew (1993) who exposes the bit that complex services require trust and confidence to efficiently get the delivery done with the help of technology. 40% of the respondents agreed, 50% strongly agreed while 7% disagreed and 3% were not sure of technical issues and downtime being another challenge. Butcher (2010) emphasizes that technology requires sustained investment and strong alignment with systemic changes. Failure to deal with technical issues and systems poses a very big gap and challenge thus being in agreement with the above scholar.

Furthermore, 27% of the respondents agreed that user adoption and training is also a challenge with 63% who strongly agreed and 10% disagreed. Gregory, Ngo & Karavdic (2019) had kept in mind that in the world of business, e-commerce is the basis for which strategic businesses develop associations within their environment and much more so planned for a new competitive edge. The fact that not everyone in KAPDA was adapting to the new trends in competitiveness posed a hindrance and highlighted a strong agreement that user adoption and training became a big challenge if not planned for adequately. 53% of the respondents agreed to integration and compatibility being a challenge, 27% strongly agreed, 10% disagreed and 3% were not sure. Kumar et al (2007) categorizes service delivery as publishing, interacting, and publishing. All

these categories require monetary terms to be effectively and efficiently done and adhered to which may either positively or negatively affect the cost and return on investments of the business. In agreement with the scholar, it brought about negative impacts for instance more costs were incurred in integrating different systems.

In addition, 23% of the respondents agreed that inadequate knowledge was a challenge, 63% strongly agreed and 13% disagreed. In agreement with the scholar, finding differences between technology and user needs requires extensive knowledge of the relevant stakeholders, partnership with the community, evaluation metrics, and a plan for sustainability (Brewer et al, 2006; Dragon, 2001; Tongia & Subrahmanian, 2006) thus posing a challenge. 40% of the respondents agreed that cost and return in investment was a challenge, 53% strongly agreed, and 7% disagreed. Kumar et al (2007) categorizes service delivery as publishing, interacting, and publishing. In agreement with the above scholar, all these categories require monetary terms to be effectively and efficiently done and adhered to which may either positively or negatively affect the cost and return on investments of the business.

5.1.2 Discussion of the findings on the relationship between technology and service delivery in KAPDA.

It was revealed that 77% of the respondents agreed to automation and efficiency being a relationship between technology and service delivery and 23% strongly agreed. Automation permits customer service representatives to work smarter and faster. (Froehle and Roth, 2020). In agreement with the above scholar, existence of automation proves a relationship between technology and service delivery. 23% of the respondents agreed to digital transformation being a relationship between technology and service delivery, 60% strongly agreed, 10% disagreed and 7% were not sure. IT has contributed and continues to contribute to enhanced performance and performance in service delivery (Bitner, Faranda, Hubbert & Zeithaml, 2008). In agreement with the scholars cited, digital transformation is proof that technology and service delivery bear a relation based on the outcome which is performance.

In addition, 53% of the respondents agreed that personalization and customization was a relationship between technology and service delivery, 33% strongly agreed, 10 disagreed and 7%

were not sure. In agreement with Stiftung (2002), rapid growth brought by IT transforms generations in the way they do things. This generation prefers so much branding, personalization, and customization in which technology enables service providers to personalize and customize their offerings according to individual customer preferences. Customer or client data and analytics help in understanding customer behavior, needs, and preferences. 23% of the respondents agreed to effective communication and collaboration having created an existence of a relationship between technology and service delivery, 67% strongly agreed, 7% disagreed and 3% were not sure. In agreement with Dede (2020), IT is vital for any communication-based process. Technology facilitates seamless communication and collaboration between service providers and customers. Various digital channels such as chatbots, messaging apps, video conferencing, and social media platforms allow instant messaging or interactions. This improves customer support, and real-time feedback and enhances collaboration between service teams leading to better service delivery.

Furthermore, 57% of the respondents agreed that service innovation was another relationship between technology and service delivery, 27% strongly agreed, 13% disagreed and 3% were not sure. Kumar et al (2007) categorizes service delivery as publishing, interacting, and transacting. In agreement with Kumar et al (2007), technology acts as a catalyst for service innovation enabling the development of new service models and offerings. New technologies for example the use of virtual reality and AI-powered chatbots in customer service have transformed the way businesses handle inquiries and support.

5.1.3 Discussion of the findings of the benefits encountered while using technology in service delivery at KAPDA.

It was revealed that 63% of the respondents agreed to improved efficiency being a benefit and 37% strongly agreed. In agreement with Sofyani, Riyadh and Fahlevi (2020), who discovered that efficient and effective service delivery remains the central part in many organizations, many wastes like excess costs, and misuse of resources can be dealt with if technology is strongly adhered to at KAPDA. 20% of the total respondents agreed to enhanced communication being a benefit, 70% strongly agreed, and 10% disagreed. According to Dede (2020), technology is vital for communication. In agreement with the above scholar, important and crucial delicate

information can be shared virtually through different platforms like Skype, Instant messaging, WhatsApp, etc.

In addition, 37% of the respondents agreed to competitive advantage being a benefit, 47% strongly agreed, 7% disagreed and 10% were not sure. In agreement with Bovaird and Loffler (2020), when technology is used in the delivery of services, it can be very useful to all players in the company. This gives an upper hand to be ahead of competitors since the employees are electronically sensitized and vital information is easily shared with automation in place.

Furthermore, 17% of the respondents agreed that enhanced collaboration is another benefit, 73% strongly agreed and 10% disagreed. In agreement with Siddiquee (2018), collaboration is easily done when employees have a common understanding of their effectiveness and customer emphasis. This leads to increased goal and target achievement that comes as a result of mutual trust, rapport, and understanding among employees.

5.2 Summary of the findings

The first objective which was intended to examine the challenges faced while using technology to enhance service delivery in KAPDA showed that the majority of the total respondents of 89% agreed to the challenges faced while using technology to enhance service delivery. 11% of the total respondents disagreed and were not sure of the challenges faced while using technology to enhance service delivery. The implication is that most of the total respondents were aware of the challenges and their implications like technical issues, inadequate knowledge, and increased costs, to mention but a few.

The study which was driven to examine the relationship between technology and service delivery in KAPDA exposed the majority of the total respondents of 87% who agreed that there is a relationship between technology and service delivery in KAPDA whereas 13% disagreed and were not sure. This hinted and highlighted that the respondents were informed on the usefulness of having a relationship between technology and service delivery. Some of these benefits include improved efficiency, enhanced communication, competitive advantage, etc.

The study which was driven to examine the benefits encountered while using technology in service delivery at KAPDA showed that the majority of the total respondents of 87% agreed to the benefits encountered while using technology in service delivery in KAPDA whereas 13% of the total respondents disagreed and were not sure. This instigates that the respondents were fully aware of the pros and cons of using technology in service delivery thus striving to attain more benefits.

5.3 Conclusion

There is an impact of technology in service delivery in KAPDA (Karamoja Peace and Development Agency) which is increasing and becoming very essential and important. Technology, also known as ICT, is viewed as a very essential necessity and a great resource that is vital for not only operational but also strategic tasks within KAPDA and consequently to its overall ability to ascertain selected objectives. Despite the fact that it is faced with challenges like data privacy, digital divide, inadequate knowledge, and technical issues to mention but a few, it also has solutions to these challenges. If remedies are properly cited and implemented, the chances of the occurrence of challenges are way too low. In addition, there are benefits that do come along with the use of technology in delivering service to various people, for example, improved efficiency, enhanced communication, etc. Technology does not only cultivate efficiency by improving operational activities but also generates valuable data and analysis that can be shared within KAPDA. Basing on the fact that technology is a resource, it is indispensable which means it is crucial for all virtual occurrences which can be attained through its relationship with service delivery. For example, communication and collaboration, automation, and improved efficiency.

5.4 Recommendations

- KAPDA should consider technology as an important aspect and tool to enhance service delivery and use it as an enabler in the pursuit of efficiency. It will be possible to deal with the uncertainties and contradictions in a more efficient way to do away with barriers; issues on digital divide and inadequate knowledge can easily be eliminated.

- Regular update of systems in KAPDA. Valuable information resources need to be looked out for, and areas of improvement, need to be examined, explored, and developed. Once areas of improvement are identified, solicitations on measures for improvement should be recognized and implemented for effectiveness and efficiency. Technical issues, downtime, integration, and compatibility of new systems will easily be adhered to.
- Effective communication should be encouraged among the employees, management, and top management as well as participation by senior management in information management decisions. This encourages vital information sharing that further enhances proper resource allocation. It also improves mutual trust and understanding in problem-solving and issues and also contributes to decisions being made. Chances of sharing confidential information with outsiders will easily be eradicated if effective measures of communication are installed.
- Staff to be trained on ICT or technology tools usage so as to avail relevant skills and knowledge that are required for activities to be efficiently and effectively carried out. Staff who are not sure of the challenges, benefits, and relationship between technology and service delivery will acquire more skills and knowledge. These tools include e-mails, Google Talk, Skype, Yahoo Messenger, and video messaging.
- Provision of adequate and essential ingredients that enhance technology or ICT for example infrastructures, rules, and policies that encourage ICT improvements within KAPDA. These policies guide employees on the rightful conduct to be observed while utilizing ICT. The use of EFT reduces on chances of absenteeism and labour turnover in that employees are easily paid thus reducing time waste since the systems are automated and not manual.
- Adequate funding in the ICT or technological sector on ICT initiatives for successful implementation of the activities related to technology. Once there is adequate funding, all the necessary requirements are put in place to ensure success in the technology

department. It reduces the chances of high cost and low return on investment if properly adhered to.

- Promoting creativity and innovation in KAPDA through having a more free and fair environment where different ideas are shared through brainstorming and having a decentralized system of leadership. It will provide comfort to employees who may feel valued by the organization once their ideas and matters raised are taken and put into consideration.

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RESEARCH QUESTIONNAIRE

Dear sir/ madam,

I am **AYOO FAITH MERI - J21B12/030** from Uganda Christian University, pursuing a Bachelor's degree in Procurement and Logistics Management in year three, second semesters. You have been selected as one of the respondents in this research entitled **“THE IMPACT OF TECHNOLOGY ON SERVICE DELIVERY IN NON GOVERNMENTAL ORGANISATIONS,** using **KARAMOJA PEACE AND DEVELOPMENT AGENCY (KAPDA)** as my case study. All responses given are for educational purposes and will be considered confidential.

INSTRUCTION

Tick and fill in where necessary.

SECTION A: BIO DATA

1. Gender

a) Male

b) Female

2. Marital status

a) Married

b) Single

c) Any other,

Specify.....

.....

3. Department in which you work

a) Human Resource

- b) Procurement
- c) Information and communication technology
- d) Finance
- e) Any other,

4. Academic qualifications

- a) Masters
- b) Bachelors
- c) Diploma
- d) Others,.....

SECTION B: The challenges faced while using technology to enhance service delivery in KAPDA.

Respond by ticking where necessary whereby, A=Agree, S/A=Strongly Agree, D/A= Don't Agree, N/S= Not sure.

S/N	Challenges	A	S/A	D/A	N/S
A	Data security and privacy; it requires trust and confidence to efficiently get delivery done with help of technology				
B	Technical issues and downtime; technology systems are not immune to technical glitches, system failure and downtime				
C	User adoption and training; resistance to change, lack of technological literacy and inadequate training can hinder successful adoption				
D	Digital divide; not all users have access to devices, internet connectivity or skills required to engage with technology driven services				
E	Integration and compatibility; integrating new systems with existing infrastructure, software or third party platforms				
F	Cost and return on investment; adopting and maintaining technology involves significant costs				
H	Ethical considerations; it raises ethical concerns related to privacy, transparency and fairness				
I	Inadequate knowledge on how to access and operate different				

S/N	Categories	A	S/A	D/A	N/S
A	Automation and efficiency; automation streamlines workflows, eliminates errors and speeds up service delivery				
B	Digital transformation; digital platforms, online platforms and mobile applications are used to provide service to consumers				
C	Personalization and customization; technology enables personalization and customization of services and products according to ones preferences				
D	Enhanced communication and collaboration; technology facilitates seamless communication and collaboration between service providers and consumers				
E	Service innovation; technology enables development of new service models and offerings				
F	Data-driven decision making through leveraging data analytics and business intelligence tools thus gaining valuable insights into customer behavior				
G	Continuous improvement and adaptability through technology that permits it in service delivery				

I) In case there is any other relationship between technology and service delivery in KAPDA apart from those mentioned above, please specify;.....

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APPENDICES



SCHOOL OF BUSINESS

1st Aug 2023

TO WHOM IT MAY CONCERN

Name: FAITH MARI KYOO Reg. No. J21B12/030

A bachelor's student who is seeking permission from your office to collect data for his/her dissertation titled

"Impact of technology in service delivery in NGOs"

We shall be grateful if you could render assistance to him/her in collecting the necessary data for his/her dissertation

The Uganda Christian University School of Business thanks you in advance



Mukisa Simon Peter
Research coordinator