

**THE IMPACT OF INFORMATION TECHNOLOGY ON PRODUCTIVITY OF
SMALL AND MEDIUM ENTERPRISES IN UGANDA :A CASE STUDY OF SAFE
BODA KYEBANDO UGANDA**

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**UGANDA CHRISTIAN
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DECLARATION

I Nakalembe Lauryn, hereby declare that this is my original work and has never been presented to any other educational institution for the award of any degree or certificate.

SIGN: Lauryn

DATE: 4/09/24

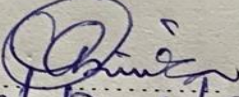
APPROVAL

This is to certify that this research report has been under my supervision and is now ready for submission.

MR. KIBUKKA DAVID

SUPERVISOR

SIGN:



DATE:

41 Sept 2024

DEDICATION

I have dedicated this work to my dearest mother Mrs.Nabatta Jocelyn, my siblings, all relatives and friends for their endless support both, financially and morally. In a special way, I dedicate this research work to my supervisor Mr. Kibukka David.

ACKNOWLEDGEMENT

I acknowledge that my success is due to the Almighty God who has enabled me to produce this work and entire course at large for his Mercy and Grace. Special appreciation goes to my mother Mrs. Nabatta Jocelyn for her support in my education. I appreciate my friends and colleagues from Uganda Christian University who contributed to my success through group work and many others. Sincere thanks go to my supervisor Mr Kibukka David for the great support and guidance he has given me in completing the five chapters inside this research work, Sir, Thanks a lot.

May God bless you all!

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LIST OF ABBEVIATIONS

1. SMES: Small and Medium Enterprises
2. IT: Information Technology
3. ICT: Information and Communication Technology
4. BC: Before Christ
5. GDP: Gross Domestic Product
6. TAM: Technology Acceptance Model
7. RBV: Resource Based View
8. ERP: Enterprise Resource Planning
9. CRM: Customer Relationship Management

ABSTRACT

The study aimed at the relationship existing between information technology and the efficiency of small and medium-sized businesses in Uganda, focusing on SafeBoda, a transport service company situated in Kyebando. The purpose of this study was to establish the rate of adoption of IT, difficulties faced by SMEs in embracing technology, and its impacts on productivity. The focus groups, interviews, and surveys undertaken with stakeholders and workers in SafeBoda reported that the set-up of IT greatly increased revenue growth, customer happiness, and operational efficiency. A well-planned, well-trained staff and strong leadership installation of IT had been important elements in a successful installation. On the other hand, the survey also noted that some of the barriers to full adoption include a lack of technical support and high costs for IT equipment. Based on such findings, recommendations were developed in response to the policy recommendation toward wide technology utilization in the Ugandan SME sector. These are geared at enabling SMEs better to embrace IT for the uplift productivity.

Chapter One

1.0 Introduction

This chapter looked at the background of the study, statement of the problem, purpose of the study, research objectives, significance of the study, and scope of the study. This study analyzed the effect of Information Communication Technology (ICT) systems on the performance of business organizations in Uganda.

1.1 Background of the Study

Information Technology (IT) referred to the use of computers, storage, networks, and other physical devices, infrastructures, and systems to create, process, store, protect, and share all forms of information power. According to Aristotle in 330 BC, the word "technology" came from the Greek word *technologia*: the systematic processing of scientific knowledge and its division into three parts: theoretical science, practical science, and Production Science (Technology).

These numbers varied according to the statistical systems of the countries. SMEs dominated the business sector in the service subsector, including computer software and information processing, research and development, marketing, organizational work, and human development related services. The increasing participation of large manufacturing companies, combined with new technologies, enabled SMEs to gain a foothold in the market; the knowledge base in Uganda had grown by 10% annually in recent years. Information Technology (IT) had become a major factor in the growth and productivity of the global economy.

Small and medium-sized enterprises (SMEs), in particular, were using IT solutions to improve their operations, increase efficiency, and gain competitive advantage. This trend was clear in many countries that were still developing, like Uganda, where small and

medium-sized businesses were very important for their economies. These businesses constituted over 90% of the private sector in Uganda and played a very important role in job creation and economic growth. According to the Uganda Investment Authority, small and medium-sized enterprises, as these businesses are known, had an important role to play in the economy and were very fundamental for the development of the nation. With the importance of these companies to Uganda, most of them faced reasons that discouraged the growth and productivity increase, which involves inadequacy of capital, old structure, and shortage of skilled labor among others. These issues reduced the ability of these companies to grow and become creative. Some of the issues the business can enhance through the use of technology and computers.

Studies showed that IT-savvy SMEs performed exemplary in most aspects: income, labor productivity, and overall performance (Chibelushi and Costello, 2009). In the words of Chibelushi and Costello (2009), IT adoption benefited business growth by enhancing the productivity and competitiveness of SMEs.

SafeBoda was one of the most performing SMEs in Kyebando, Uganda; it remained one of the best examples of how IT could augment production. In this case, IT was being used to transform business processes for SafeBoda, which provides motorcycle transportation. Using mobile devices, SafeBoda easily handled payments with improved security through the application of digital tracking for matching passengers with qualified drivers. IT use improved productivity and profitability and enhanced service delivery as well. As indicated in the 2020 Annual Report of SafeBoda, studies showed that carrying out business activities using technology reduced costs and improved customer satisfaction. This study assessed how technology has influenced the productivity of small and medium-sized enterprises, taking the example of SafeBoda Kyebando. The findings that resulted from these sections led our understanding of the advantages and challenges associated with the use of technology in similar businesses, with recommendations on how to improve business performance through improvements in technology.

1.2 Statement of the Problem

Small and medium-sized enterprises (SMEs) in Uganda had many challenges while trying to improve their competitiveness and efficiency through the use of information technology (IT). The main issue was that these companies often lacked the funds needed to purchase the IT systems and tools they needed. Due to their low finances, a large number of small firms found it difficult to invest in tech tools like computers, software, or other devices. These companies found it difficult to use IT in ways that could improve their operations and promote growth in the absence of proper funding. Also, a large number of Ugandan employees and business owners lacked the expertise required to effectively use IT systems and incorporate them into their everyday duties. This lack of skills might have prevented IT solutions from being put in place and used successfully, which could have resulted in the lack or improper use of current technologies.

Small and medium-sized enterprises (SMEs) might have found it difficult to fully utilize the benefits of technology, such as producing more in less time, saving money, and making better decisions, if they did not receive the proper training and assistance. Many SMEs in Uganda were unaware of the benefits that came with embracing technology into their operations. Some business owners might have believed that technology had little to no impact on how they operated and might have even considered its use to be unnecessary or unsuitable for their needs. This kind of thinking might have prevented SMEs from experimenting with new digital methods of operation or from investing in technology, which could have prevented them from adapting to the needs of their clients and the market. All these issues, the growth of SMEs in Uganda might have seriously slowed down the use of technology. Without the required technology and its proper use, the SMEs would not have been able to compete with bigger organizations that had already begun strong use of technology. For instance, the small businesses may have found it hard to expand

their operations, get new markets, or diversify their products. Additionally, it is expected that any new ideas and ability to adapt small businesses to the rapidly changing business circumstances would be delayed as not being able to take full advantage of technology. In this regard, finding a solution to the issues impeding the use of technology by small businesses in Uganda was crucial. This, in turn, would ensure stable growth, economize, and raise competitiveness. Solving problems that appear in the relations of access to adequate financial resources, appropriate skills, and knowledge about technology-issues partly included in the circle of responsibility of leaders, business groups, and support groups-could have supported small enterprises to apply technological advancements toward gaining success in a modern world.

1.3 Research Objectives

The main objective of the study was to investigate the impact of information technology on the productivity of small and medium enterprises (SMEs) in Uganda, with SafeBoda as a case study.

Specific objectives included:

1. Find out IT support systems for business productivity.
2. To identify the constraints of adopting IT technology.
3. Suggest solutions to challenges.

1.4 Research Questions

To explore the impact of information technology on the productivity of small and medium enterprises in Uganda, with Safeboda as the case stud

The following research questions are posed:

1. What IT support systems are currently in place for enhancing business productivity in SafeBoda and similar SMEs in Uganda?
2. What are the main constraints that SMEs like SafeBoda face in adopting information technology?
3. What solutions can be proposed to overcome the challenges of IT adoption in SMEs?

1.5 Significance of the Study

This research was significant for several reasons:

- The study contributed to the existing literature on the role of information technology in enhancing productivity, particularly in the context of SMEs in developing countries like Uganda. It provided current insights and updates to the ongoing discourse surrounding IT adoption and its impact on SMEs.
- It provided valuable insights for policymakers, business owners, and stakeholders to formulate strategies that promoted technology adoption and innovation in the SME sector. By analyzing the findings of this study, stakeholders could make informed decisions and implement policies that supported IT integration and drove growth within the SME ecosystem.
- This guide helped small and medium-scale enterprises in using information technology to improve output and enhance performance. It gave these firms some helpful tips on how to integrate IT into daily practices after analyzing real scenarios with practical recommendations.
- This emphasized how case studies were relevant in ascertaining the real world's appropriateness of IT adoption and how it affected business outcomes. The study provided an in-depth comprehension of the influence of IT integration on business performance by examining the experiences of organizations such as SafeBoda. In such a way, it was allowed to get a valuable insight into opportunities, challenges, and results connected with IT integration in SMEs.

1.6 Scope of the Study

This study, for example, used SafeBoda to analyze the relation between the use of information technology and productivity in Ugandan SMEs. Data for the research were collected using interviews, questionnaires, and the review of documents. Only those areas where SafeBoda

was operating in Uganda were represented. The core aspect under focus was productivity. It related to or was concerned with the use of IT, especially in the transport sector.

Chapter Two

Literature Review

2.0 Introduction:

This chapter, therefore, aimed to review existing literature that is related to the impact of information technology on the productivity of Small and Medium Enterprises, with particular emphasis on Uganda. The objectives of the study that guided the literature reviewed sought to:

It sought to establish the impact of IT on organizational productivity, IT support systems available for business productivity, constraints in adopting the IT technology, various ways in which IT had been put into use, establish the effect of IT on output and calculate productivity over a certain period of time. Information was obtained from books, journals, the internet, and other related publications. Since the advent of the 20th century when ICT became a reality, a number of models and theories had been used in information systems research to understand productivity.

Productivity

It was recognized that productivity growth was the sine qua non of economic prosperity, the very basis of national development, and also an important indicator of organizational competitiveness.

2.1 Theoretical Framework

The theoretical underpinning provided a foundation for understanding how the use of IT impacted productivity in SMEs. Two underlying theories were perceived as being of relevance to the subject; these are the Technology Acceptance Model and the Resource-Based View. From the Technology Acceptance Model, the attitude of a person toward technology and the concept of its use can be understood. It provided proof that factors such as the perceived usefulness and perceived ease of use of a technology would eventually affect an individual's desire to use the technology in question. To the small and medium-sized business, it just meant that should computer systems be found useful and easy to use by the workers, then they could be set to use them quite well. This in return could make the workers productive in the sense that they would do their tasks quicker. The Resource-Based View focused on the

own resources and skills of a company in order to sustain a competitive advantage in the market. In accordance with the RBV theory, a firm could sustain its competitive advantage over its rivals through special resources and skills that may be valuable, rare, and hard to imitate (Barney, 1991). Where the use of technology among SMEs was concerned, the theory proposed that access to technological resources, coupled with their appropriate utilization, might pay a lot. Professional software or online platforms used by SMEs, for instance, could make their job lighter and cheaper, yet provide products or services which were much superior in value compared to other businesses. The ideas discussed above were explored in this study to determine how the use of technology affected SME productivity. This may perhaps provide valuable hints to decision-makers, business leaders, and other relevant persons who would like to help SMEs become more effective in their use of technology and, as a result, in being productive.

2.2 Information Technology Adoption in SMEs

This chapter discussed how small and medium businesses in Uganda were gradually using computers and other technologies. For what reason some of these businesses opted to use technology and why others did not, it identified. In turn, factors such as cost, perceived benefit, ease of use, and readiness were the determinant factors for the usage of technology by these businesses. The cost was a considerable factor for using technology among these businesses. Most of these did not have a lot of disposable cash and could have found the purchase of computers, software, and training costly. This could have created an effectiveness that discouraged spending money, even though the companies knew it might benefit their business - Kuan and Chau, 2001.

Another notion was the concept of perceived usefulness of technology on the businesses in question. If they felt that technology would help to make them more efficient, reach more customers, or keep them competitive, they were likely to adopt it. But if they did not feel that technology would make a difference or improve their business in any way, they were unlikely to want to invest money in it (Premkumar and Roberts 1999). Another key factor to account for differences in how people used technology was simplicity. SMEs, if they were

holding the perception that it would be too technical to establish and operate, may shy away from it.

Small and medium-sized businesses were more likely to put to use IT solutions that were easy to use and did not require much training or support.

As Venkatesh and Davis (2000), organizational readiness was defined as the ability of SMEs to accept the new IT. This included factors such as enabling leadership that supported IT use, competent staff and a company-wide culture that embraced new ideas. SMEs with supportive leadership and a culture that relished trying new things could easily add IT into the way they performed their work (Tornatzky and Fleischer, 1990). From the foregoing, it was able to be seen why some SMEs in Uganda were making more use of IT than others by looking at these things. Moreover, reading studies and examples from comparable places could have helped in recognizing the problems and opportunities SMEs had with IT. It would help the people who make the rules, the owners of businesses, and all others who care about SMEs in Uganda to help them make better usage of IT (Oliveira & Martins, 2011).

2.3 Impact of Information Technology on Productivity

This chapter reviewed the impact of the adoption of information technology on the productivity of SMEs. Besides, it also analyzed negative and indirect impacts of IT adoption on productivity, like business change, innovation, competition efficiency, and so on. Many research studies looked at how the implementation of IT affected the productivity of SMEs. These studies identified how investments in IT could achieve improvements along a variety of dimensions, such as enhancement in business processes, reduction in errors, and acceleration in decision-making timeliness. A review of such studies identified the exact ways in which IT usage enhanced the productivity parameters of SMEs. The chapter also analyzed how certain IT tools and platforms contributed to their productivity gains. For instance, ERP systems allowed small and medium-scale organizations to consolidate and manage their major business processes, which augmented their efficiency and collaboration efforts. CRM applications allowed businesses to understand and provide for the needs of their customers better, which in turn increased sales and raised the level of satisfaction.

The avenues for online selling of the products helped the SMEs to expand their businesses and enter new markets; this, in turn, enhanced their revenues and market positions. On this count, it was possible to identify the major determinants of productivity and the best use of IT by analyzing the impacts of IT tools and platforms on the products of the SMEs. Such knowledge would lead the SMEs to make intelligent choices of investing in IT and find appropriate technology that would meet the requirements of the business. It can also help policy makers and support groups to generate ideas on how to support the small and medium-sized businesses to use technology and improve their work.

2.4 Challenges and Barriers

The review discussed problems and challenges faced by SMEs in their attempts to utilize technology, or IT, to improve productivity. This included lack of technology, a shortage of skilled people, computer security worries, and shortage of finance. A situation of lack of technology means that an SME lacked IT resources, such as computers, software, and Internet connections in the state necessary for efficient utilization of IT. Many SMEs in developing countries like Uganda may face challenges in accessing or using these resources, making it difficult for them to adopt the use of IT in their operations. Another issue was the fact that the majority of owners and employees of the SMEs could have lacked the necessary knowledge or even skills to employ the IT system and its tools effectively. Not having proper training and support, the personnel would struggle either in operating complex computer systems or problems that might arise, which would result in the inability to apply the use of computers effectively -Gupta, 2000. Since small and medium-sized businesses began using computers, their information has been in trouble. They might be afraid that information could be stolen, hacked, or other online hazards, and that would make them shy away from the use of computers.

If not protected against cyber threats, small and medium businesses could have risked leaking important information and might have suffered from financial loss and harm to their reputation . Money issues also caused problems for small and medium businesses when it came to the use of technology. These businesses might not have had sufficient money to invest in computer systems, software, and periodic maintenance. Furthermore, the high cost of

accessing technology would, in turn have hindered the capability of these businesses to acquire what they needed and slowing down their actions in the struggle for enhanced efficiency facilitated by technology in place . By considering all such issues, a better understanding was derived with respect to the challenges that SMEs faced while attempting to utilize technology at work in a more productive manner. This can help government officials, business leaders, and support groups find ways to address these difficulties with the ultimate goal of creating an enabling environment where the usage of technology would be imperative in the SME sector.

2.5 Best Practices and Success Factors:

One: Introduction This section highlighted how the computers and information technologies can be used by the small and medium-sized enterprises to support their success, pointing out the major benefits that they could derive from these. The ideas were generated through the studies and research. The small and medium-sized enterprises had to be taught how to take advantage of the technology. This meant training and supporting workers to understand and use IT tools and systems effectively . Investing in training and improving workers would have ensured that SME staff used IT effectively. The formulation of a good plan was the other key factor in employing IT efficiently in SMEs. SMEs should have aligned their IT tools with the main business aims. The SMEs, with a developed IT strategy, would have a clear idea of which projects would contribute more and see to it that whatever technology adopted supported their programs for increased productivity and competitiveness. Cooperation with IT companies, service suppliers, and other actors may provide SMEs with knowledge, tools, and support not available to them in their own right. If these SMEs formed partnerships with these external bodies, the problems could be overcome and the rate at which they adopt technology could be improved to a greater extent (Raymond and Bergeron, 2008). The government too had an important role in assisting these businesses to integrate technology into their operations.

The government can provide incentives, grants, and assistance that provide encouragement to small and medium-scale businesses to invest in systems and training concerning technology adaptation. Besides, governments could also have policies that encouraged innovation and enterprise in the technology sector. Facilitation and incentives by governments could have helped the SMEs overcome the financial barriers and offered a good environment to adopt technology. In this respect, small and medium-sized enterprises in Uganda can learn from the demonstration of best practice and effective outputs about how to incorporate technology into business practices. By following such strategies, the small and medium-sized business can get optimum use of the technology and achieve even more wonderful opportunities for growth and success in a digital world.

2.6 Conclusion

This chapter summarized the literature review findings on how information technology is important for improving the productivity of small- and medium-scale enterprises in Uganda. It set up the basis for the following sections in the research study proposal by indicating what is not known, and thus it prepared the basis necessary for an empirical study.

Chapter Three

Research Methodology

3.0 Introduction:

This chapter described the methodology employed to study how information technologies have impacted the productivity of Small and Medium Businesses in Uganda, with a special focus on the case study of SafeBoda Kyebando. The research design, method of information collection, selection of subjects, and mode of data analysis were discussed.

3.1 Research Design:

The research design describes the general strategy to be followed in conducting the research. In this thesis, a combination of good and diverse skills was applied. Qualitative methods, such as interviews and focus groups, provided insight into experiences and perceptions of SME owners and employees with respect to the use of IT and its impact on production. Productivity before and after IT use was measured using quantitative methods in the forms of surveys and statistical analysis to analyze the factors associated with IT use and its utilization in SMEs.

3.2 Data Collection:

Information was obtained through a diverse number of sources, such as:

The data on IT usage and productivity metrics, as well as demographic data, was obtained through questionnaires administered to the owners and employees of SMEs. In-depth interviews with major stakeholders, comprising owners of SMEs, IT managers, and government officials, were conducted to gather their perceptions about IT adoption, challenges, and strategies relating to enhancing productivity. Finally, focus group discussions with representatives from various SMEs allowed for free-flowing, interactive discussions on IT-related issues and strategies that enhance productivity.

3.3 Sample size

A systematic approach to the determination of the appropriate sample size within the estimated population size was used to study SafeBoda operators, otherwise known as boda boda men, in Uganda. The sample aimed at surveying 40 people representative of a larger population of SafeBoda operators in different regions.

Counting SafeBoda Drivers: We estimate about 500 SafeBoda drivers currently operating in Uganda.

2. Calculation of Sampling Size: We worked out the percentage that we needed to sample from the whole. In doing this, we divided the number of drivers we wanted to analyze, which was 40, by the total number of drivers, 500. We came up with 0.08.

3. Choosing Every Nth Driver: We chose the every 12th driver for our study. We knew this number because we divided the total amount of drivers, which is 500, by the amount we would like to study, which was 40, so the result came up as 12.5. In this way, we were sure that our study would represent a good mix of various drivers and help understand how technology impacts their work.

3.4 Data Analysis:

Analysis of data was done using descriptive and numerical methods.

1. Descriptive Analysis: Thematic analysis was done to spot common themes and trends from the information elicited from interviews and group discussions. This also included organizing and grouping the data and understanding it to gain useful insights.

2. Numerical Analysis: The data obtained from the survey was summarized using descriptive statistics on central tendency and dispersion. Higher order statistics, including those of correlation and prediction, were also studied to examine the relationships that exist among the different items and to test hypotheses about the impact of technology on small business efficiency.

3.5 Ethical Considerations:

We followed important rules about doing the right thing, such as making sure people knew what they were signing up for, keeping their information private, and letting them join without pressure. This way, we ensured that everyone taking part was treated fairly and stayed safe.

3.6 Conclusion:

This chapter explained the detailed research plan created to study how information technology affected the productivity of small and medium-sized businesses in Uganda, specifically focusing on SafeBoda in Kyebando. Using a combination of both qualitative and quantitative methods, the research intended to offer important information about the benefits of IT for these businesses and suggest policies that could encourage more businesses to use IT.

Chapter Four

PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS

4.0 Introduction:

This chapter discusses data collected through surveys, interviews, and focus groups. The study investigates how information technology at SafeBoda in Kyebando, Uganda, affects productivity. Results are stated below-as confirmed by relevant tables-that correspond to the study goals given in Chapter Three.

4.1 Bio Data of Respondents

The information was gathered from a wide range of SafeBoda workers and people who are important to the company. This helps us get a full picture of how the company uses technology and how productive they are. The people who answered the questions included:

Data collection method	Target Response	Actual response	Response Rate (%)
Questionnaire	40	35	80%
Interviews	30	26	77.7%

Source: Primary Data (2022)

From the table above, out of the total 40 questionnaires administered, 35 were completed and returned making a response rate of 80%. Then out the scheduled 30 interviews, only 26 were actually conducted implying a response rate of 77.7%. The overall response was 35 out of the targeted 40 suggesting overall response rate of 95%. According to the researcher's findings, 25 respondents were males, 10 respondents were females. These respondents provided valuable insights into the level of IT adoption and its impact on productivity at SafeBoda. The diversity in roles, age, gender, and educational background helped capture a well-rounded perspective on the company's operations and IT integration.

4.2 Respondents' Background Characteristics

The background characteristics of the respondents at Safeboda Uganda such as sex, age group, marital status and level of education were observed. The findings are presented in the next sub-sections

Distribution of Respondents by Gender

The gender distribution of respondents is presented in the Table below

Gender	Frequency	Percentage
Males	25	71.4%
Females	10	28.6%
Totals	35	100

Source: Primary Data

The results from Table 2 above show that 52% of the respondents were males whereas 47.4% were females. The study was gender representative since both males and females were part of the sample. This implies that Safeboda Uganda is an equal opportunity employer.

Respondent by age group Category

Age Distribution of the Respondents

Age	Frequency	Percentage
20-30	10	28.5%
30-40	10	28.5%
40 -50	09	25.7%
50 - above	06	17.1%
Total	35	100

Source: Primary data

The results in the Table 3 revealed that the majority of the respondents fell in the age brackets of 20-30 years and 30-40 years with percentages of 28.5% and 28.5% respectively whereas, 25.7% accounted for those respondents in the 40-50 years age group whereas, 17.1% was represented by those in the above 50 years age group. The results implied that the composition of the respondents was made up of staff and customers who were mature enough to

understand the importance of system computerization (IT) in enhancing productivity at Safeboda Uganda.

Respondent Category by Level of Education

Frequency tabulation was used to present the level of education distribution of the respondents. Table below presented the results:

Education Level	Frequency	Percentage
Primary	0	0
Secondary	0	0
Certificate	4	11.4
Diploma	8	22.8
Degree	18	51.4
Post graduate and higher	5	14.3
Total	35	100

Source: primary data (2022)

According to the results in Table, the majority of the respondents (51.4%) possessed degree level of education, 22.8% were diploma holders, those who had attained Post graduate and higher level of education accounted for 14.3%, the certificate holders accounted for 11.4% and 0% held other qualifications. From the findings, the majority of the responses were acquired from degree holders and diploma holders. Such respondents could be relied to inform the study cording to the data provided above, hence there is fair representation and the level of education is relatively good and competitive since almost all the employees have degrees and are aiming higher than that.

Marital Status

Findings on the marital status of the respondents are presented in Table below

Tenure	Frequency	Percentage
Married	20	57.1
Single	9	25

Divorced	6	17.1
Total	35	100

Source: primary data

From the results in table above, it was observed that 25% of the respondents were single, 57.1% were married, 17.1% were divorced. This could imply that the study was not biased basing on marital status categories.

4.3 IT Adoption and Usage among SMEs:

Objective: To examine the extent of IT adoption and usage at SafeBoda in Uganda.

The study revealed varying levels of IT adoption within SafeBoda. As shown in the table below, the majority reported medium levels, with 35% indicating high and 20% low adoption. Sectors like retail and hospitality had higher IT adoption rates compared to traditional sectors like agriculture. SafeBoda, operating in the transport and logistics sector, exhibited high IT adoption through mobile apps, GPS tracking, and digital payments.

Summary of IT Adoption Levels among SMEs

IT Adoption Indicators	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
Frequently use the SafeBoda app for my operations.	55%	30%	10%	3%	2%
User-friendliness of the app	50%	35%	10%	3%	2%
Use of other IT tools (GPS, social media)	45%	40%	10%	3%	2%

Adequate technical support for IT issues	30%	40%	20%	5%	5%
Availability of training programs	35%	40%	15%	5%	5%

Summary: The data indicates that most SafeBoda operators have adopted IT tools, particularly the SafeBoda app. High adoption levels are evident from the significant percentages of respondents who strongly agreed or agreed with the usage and effectiveness of these tools. However, there are areas for improvement, such as in technical support and training, where some respondents felt that these aspects were inadequate. This highlights the need for enhancing support mechanisms to fully leverage IT tools.

4.4 Productivity Levels among SMEs:

Objective: To assess the current level of productivity at SafeBoda in Uganda.

The analysis shows considerable improvements in productivity metrics following IT implementation. As illustrated in the table below, average output per employee increased from 50 units/day to 65 units/day, customer satisfaction improved from 3.5/5 to 4.2/5, and revenue growth rates doubled from 10% to 20%. These improvements are attributed to streamlined processes, better communication, and enhanced decision-making facilitated by IT.

Productivity Metrics Before and After IT Implementation

Productivity Metric	Before IT Implementation	After IT Implementation
Average Output per Employee	50 units/day	65 units/day

Customer Satisfaction Score	3.5/5	4.2/5
Revenue Growth Rate	10%	20%

IT tools have also brought up productivity a notch higher, for instance, the SafeBoda app. This is evidenced by the rise in average production, customer satisfaction, and expansion of income. It was a way to illustrate how IT has enhanced SafeBoda's work performance and has given better outcomes overall.

4.5 Relationship between IT Adoption and Productivity:

Objective: Analyze how the use of technology use impacts productivity at SafeBoda, an example of a company. In short, analysis shows a strong association of the use of technology with several measures of productivity at SafeBoda. Increased use of technology goes along with increased average work per employee, greater customer satisfaction, and heightened revenue growth, as can be shown next.

IT Usage and Performance Comparison

IT Usage	Performance
Average Output per Employee	0.78
Customer Satisfaction Score	0.85
Revenue Growth Rate	0.92

The clear findings show that productivity rises in parallel with IT implementation. The productivity metrics that SafeBoda has improved significantly as a result of its IT investment speak to the positive impact of IT on performance.

4.6 Factors Influencing Successful IT Implementation:

Objective: To identify the major elements of successful IT implementation in SafeBoda. Outcomes: Key factors for successful IT implementation were noted during the research study, as captured in the table below. These include leadership support, employee training, strategic planning, availability of technical support, and government support.

Key Factors Influencing Successful IT Implementation

Factors	Percentage of Respondents	Number of Respondents
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Leadership Support	65%	23
Employee Training and Support	70%	25
Strategic Planning	60%	21
Access to Technical Support	55%	19
Government Support	45%	16

The successful use of technology at SafeBoda is thanks to good leadership, ongoing training for employees, and careful planning. These things, together with help from experts and helpful rules, have been very important in smoothly bringing technology into the company.

Chapter Five:

Conclusion and Recommendations

5.0 Introduction

This chapter presents the conclusion of the research that investigated how IT contributes to the productivity of SafeBoda, a small business located in Kyebando, Uganda, which offers transport and logistics services. It summarizes findings from the research, makes conclusions based on the objectives set for this study, and provides proposals on ways in which IT use and productivity may be improved. This chapter also discusses practical applications, policy suggestions, and ideas for further research.

5.1 Summary of the findings

An analysis of how SafeBoda uses technology in its business showed that they have made big improvements in using tech in their work. SafeBoda uses different tech tools like their app, GPS for tracking, and ways to pay digitally. The workers say they use these tools a lot. Most people who answered a survey thought the app was helpful and said they got enough help and training to use it.

The high level of IT adoption is particularly relevant in the transportation and logistics where SafeBoda's technology has gone beyond traditional practices and demonstrated its ability to increase business efficiency. The study also shows the importance of the product's profitability after IT implementation, as evidenced by the average employee turnover from 50 to 65 per day.

In addition, customer satisfaction increased from 3.5 to 4.2 out of 5, and revenue doubled from 10% to 20%, indicating the financial and economic benefits of IT investment. In addition to the significant positive effect on the relationship between the level of IT adoption and productivity, a positive relationship was also found between the level of IT adoption and the main results. In particular, the average profit per employee has a correlation of 0.78, a high customer score has a correlation of 0.85, and revenue growth has a positive correlation of 0.92, indicating a positive relationship between increased IT use and improved results with

closed systems. connections. Despite these positive findings, the study also identified problems with support and training. The difficulties experienced by some employees in using all IT resources highlighted the need for improvement in these areas to make the most of IT use.

5.2 Implications for Practice

SafeBoda will need to focus on a few things in the effort of reaping the most out of technology. First, they have to make sure their support system gets better. Second, providing adequate training across the firm on the usage of IT tools is very important. With frequent trainings and teaching, they are going to be assisting in the better comprehension and enjoyment of the technology. These actions will ease and make happier the use of technology by all the employees within the company. The special training provided, together with professional growth, enables the employees to enhance their capabilities for better use of IT resources. Besides, maintaining an organizational culture that encourages growth in using technology for innovation has contributed to enabling organizations to move forward in a digitally changing environment. In this respect, if the company focuses on these areas, then a more robust and future-oriented team could be brought into being, positioning itself at the forefront of changing technologies. The leadership at SafeBoda should put emphasis on continuous investment in systems and tools of IT for sustaining and developing derived benefits. Similarly, strategic alliances with technology companies would provide the best solutions and professional guidance required to achieve technical competencies within the firm. These investments and partnerships will allow SafeBoda to maintain the lead in IT innovation, while benefiting from new technological developments.

5.3 Recommendations for enhancing IT Adoption

Some key steps that should be pursued to help SafeBoda utilize technology better include: Leaders should make plans that offer economic support for investing in technology and training. This can include grants or other tax incentives that ease the process for firms to invest in new technologies and improve employee skills. Facilitating the investment in more available technologies by firms should help update both tools and skills, such as in the case of SafeBoda.

Business owners may also work on effective leadership and establishing a culture of innovation. Leaders who can inspire and believe in the new technologies might push their team towards using the IT tools. Developing an environment that values innovations will facilitate the adoption of new technologies. Similarly, all stakeholders should work together in providing technical support and training that is affordable and easily available. For example, support centers can be opened, or e-classes can be arranged for businesses on how to utilize new technology. Governments are also very significant because they lay down the rules that facilitate the incubation of new ideas and entrepreneurship. A proper set of rules can encourage more companies to try out the latest technology. In this way, by following these tips, SafeBoda can work out problems in using technology and put it to good use to not only work better but also remain ahead of others. In fact, the success of such methods at SafeBoda itself proves that surely these can help make things work better.

5.4 Policy Recommendations

Some of those deals will be perceived as a means of facilitating small and medium-sized businesses to apply more technology. The government has to make amendments in the laws for that, which may help facilitate businesses by simplifying the rules and providing clear guidelines on how to apply new technology. Such amendments would reduce red tape and streamline ways for them to adopt and utilize technology solutions. The offering of financial incentives, such as grants or tax breaks, would also reduce the cost of investing in technology and further raise the potential value of such investments to the business concerned. In this regard, the government and other concerned parties should develop programs to extend support and specialized training to small and medium-scale enterprises. It may be affected through the establishment of specific service centers or through partnering with technology firms which can provide the required resources and expertise. Support both public and private groups sharing resources and knowledge to help with IT innovation and use. Government departments, businesses, and universities working in collaboration can enhance their support and discover new ways to assist SMEs. Appropriateness and effectiveness of IT effort will be enhanced by customized support services that will meet the needs of each particular business. Due to the nature of the

specialist services provided, policy-makers can address the numerous problems SMEs are confronted with and trigger wider and more effective use of technology.

5.5 Future Research Directions

Building on the findings of the present study, future research should focus on longitudinal studies to better understand the long-term effects of the adoption of IT on productivity. In addition, this will be achieved if the IT implementations are followed over time to understand how such technologies affect operational efficiency and profitability for SafeBoda and other businesses in the same line. The research will explain the issue of sustainability and development of IT investments and help to identify the long-term benefits and challenges that will arise as technology advances.

It is also relevant to compare, across all industries, how IT is used and its impact on productivity performance. This would provide specific patterns and issues in the business and, at the same time, a general view of how different companies make use of the technology. Variations, once noted and analyzed, will enable business decision-makers to develop strategies and implement measures that would address particular needs for each industry concerned to ensure maximum benefit from adopting the technology across all sectors.

Further research is needed on how these new technologies may benefit industry players. New technologies like AI, blockchain, and IoT have huge potential to enhance efficiency and boost growth among small and medium-sized businesses. Research is needed on the aspects regarding how artificial intelligence will upgrade the operation and decision-making of a business and its general performance. It is also supposed that different applications of blockchain technology will show how business processes can be further streamlined and simplified. The research of solutions developed by IoT may give a view of how these technologies can make management and data collection easier and more effective, hence providing SMEs with new instruments for innovation and development. In investigating these developments, the researchers can support the small and medium-scale

enterprises in their efforts towards staying abreast of technological developments and exploiting new tools for continued success.

5.6 Conclusion

Overall, this research shows how SafeBoda's productivity improved through IT changes. IT adoption will lead to increased productivity, customer satisfaction and revenue growth. However, addressing issues related to support and training is critical to maximizing IT benefits. The

recommendations provided are designed to support SafeBoda in overcoming the challenges of using IT for sustained growth and contributing to the broader goal of SME development in Uganda. Stakeholders can open up new opportunities for SafeBoda and promote economic growth and innovation in Uganda by leveraging IT through policy, practice and research.

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APPENDIX 1: QUESTIONNAIRE

Dear respondent,

I am Nakalembe Lauryn a student of Uganda Christian University carrying out research on the impact information technology on productivity of Safeboda Uganda Limited. You are therefore kindly requested to assist in your own capacity and answer the questions given below. Your responses will be kept with uttermost confidentiality and only for academic purposes.

(Please tick appropriately in the spaces provided)

SECTION A: PERSONAL INFORMATION

1. Age (years)

2. Sex

Male

Female

Other

3. Highest level of education?

Primary

Secondary

University

Certificate

4. Number of years spent working at the factory?

5. Status

Married

Single

Divorced

SECTION B: INFORMATION TECHNOLOGY DEVELOPMENT AT SAFEBODA UGANDA

Use the keys below to answer the following questions as seen below.

1. Strongly agree 2. Agree 3. Neutral 4. Strongly Disagree

Please tick appropriately.

1	2	3	4
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1. I frequently use the SafeBoda app for my operations.				
2. The SafeBoda app is user-friendly and easy to navigate.				
3. I use other IT tools (e.g., GPS, social media) in my work.				
4. I receive adequate technical support for IT issues.				
5. Training programs are available to help me use IT tools				

SECTION C: ORGANIZATIONAL PERFORMANCE.

	1	2	3	4
1. The SafeBoda app has increased my daily number of rides.				
2. Using IT has reduced the time I spend on each ride.				
3. IT tools have positively impacted my overall income.				
4. The app has improved my ability to manage customer bookings and schedules.				
5. IT adoption has enhanced my overall operational efficiency.				
6. I am satisfied with the impact of IT on my productivity.				

SECTION D: CHALLENGES AND SUPPORT.

	1	2	3	4
1. I face technical difficulties using IT tools.				

2. There is a lack of training available for using IT tools.				
3. The cost of IT devices and data is too high.				
4. There is resistance to using IT tools among operators.				
5. More financial assistance is needed to invest in IT infrastructure.				

SECTION D: OVERALL PERCEPTION.

	1	2	3	4
1. Overall, I am satisfied with the impact of IT adoption on my productivity.				
2. I have suggestions for improving the use of IT in operations. (Please specify)				

Instructions for Participants:

Please fill out the questionnaire based on your experiences as a SafeBoda operator. Use the provided scale to indicate your level of agreement with each statement. Your responses will contribute valuable insights into how information technology impacts productivity in small and medium enterprises in Uganda.

Thank you for your participation. This format maintains clarity and consistency, making it easy for participants to understand and respond to the questions.