

Analysis of Purchasing Efficiency of Young Entrepreneurs in Kenya: A Digital Banking Perspective

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Abstract: *The Kenyan government's push for a cashless economy has led to the adoption of digital banking services by businesses. In particular, the government has implemented policies such as the cashless payment system for service provision in various government departments, which has also encouraged the use of digital platforms in business transactions. However, young entrepreneurs in Kenya especially those in the medium size enterprises(MSE) still lack financial literacy and technical skills that would enable them to make informed financial decisions and take advantage of digital banking services. This, according to previous surveys, has contributed greatly to purchasing inefficiencies leading to increased costs and decreased productivity, affecting the profitability of the business. The purpose of this research was to investigate how digital banking impacts the purchasing efficiency of young entrepreneurs who manage medium-sized businesses in Kenya. The research employed a correlational design and covered all counties in the country. A structured questionnaire was developed using Microsoft Forms and was purposively administered to the target respondents. The results showed that digital banking practices adopted by medium size business enterprises positively and significantly contributed to firm's purchasing efficiency. The study recommends that the government should provide financial incentives to medium-sized enterprises such as tax rebates, subsidies and capacity building programs, to incentivize the adoption of digital banking services and optimize purchasing efficiency of the MSE's.*

Keywords: Purchasing efficiency, Mobile banking, Online banking, Medium size business enterprises.

1. INTRODUCTION

Efficiency in the purchasing process according to Hofmann and Rüsich (2017) is defined as the ability to provide goods or services, where each transaction is done accurately, quickly, and at a fair price. Efficient purchasing enables entrepreneurs to optimize their profits, reduce their costs, and save time. One of the major challenges that young entrepreneurs in Kenya face when it comes to purchasing efficiency is the lack of adequate infrastructures to support digital payments. The use of cash in transactions can be time-consuming and risky and tends to compromise business efficiency. Handfield, (2011) contends that efficiency in purchasing management refers to the ability to optimize the process of acquiring goods and services while minimizing costs and achieving set objectives. Purchasing managers are tasked with ensuring their organization's procurement processes are efficient, and this has far-reaching implications.

Digital banking represents an innovative solution to the challenge of conducting efficient business transactions (Rodriguez, 2018). It presents simple, fast, and affordable payment alternatives that eliminate the need for using cash. It offers young entrepreneurs with a platform where they can conduct transactions without having to worry about the physical currency, giving them the opportunity to focus on their businesses more. The rise of digital banking has had a profound impact on the purchasing efficiency of young entrepreneurs in Kenya. Traditional banking may have been the norm in the past, but digital banking has made transactions much more accessible and efficient for entrepreneurs who need to purchase goods or services quickly.

Digital banking has been transforming the way entrepreneurs in Kenya purchase and manage their financial transactions. Through the use of technology in banking, entrepreneurs have realized immense purchasing efficiency that has significantly impacted their businesses' growth. With the increasing digitization of banking services in Kenya, entrepreneurs now have access to a variety of digital platforms that allow them to automate their payment processes, prevent fraud, and reduce the risk of financial losses.

The introduction of digital payment solutions into Kenya has been a significant turning point concerning enhancing the efficiency in purchasing among young entrepreneurs. Banks such as Equity Bank, Kenya Commercial Bank and Co-operative Bank are among the financial institutions offering young entrepreneurs in Kenya digital payment solutions. These payment solutions include mobile banking, point of sale devices, and online banking solutions.

Mobile banking has quickly become the most popular digital payment service among young entrepreneurs in Kenya. It is convenient, accessible, and the cost of transaction is relatively low. With mobile banking, the young entrepreneurs can conduct transactions from the comfort of their phones without having to visit the banks physically. Point of sale devices offer similar convenience where entrepreneurs can conduct their transactions electronically while on the go; they are commonly used in retail businesses. Online banking platforms are effective, particularly for future payments; they allow entrepreneurs to manage their payments from any location provided there is internet connectivity.

According to Barasa, (2021), Kenya's youth entrepreneurship sector is experiencing a positive growth trend, with many young people venturing into entrepreneurship. The government of Kenya has shown a commitment to support and promote youth entrepreneurship by providing incentives and support to enable them to start and grow their businesses. However, one of the challenges faced by youth entrepreneurs in Kenya is the lack of access to formal financial services. This has made it difficult for them to access capital to start or expand their businesses, thus stunting their growth potential.

1.1 The Status of Digital Banking in Kenya

In Kenya today, mobile banking has become one of the most popular ways of sending and receiving money. With over 60 million mobile money accounts and over 200,000 mobile money agents, mobile banking has become the norm. According to a report by the Communication Authority of Kenya, during the first three months of 2021, mobile money transfer services recorded 1.15 billion transactions worth Kshs 3.52 trillion. This represents a 34.2% rise in the number of transactions and a 41.5% increase in the value of transactions, which demonstrates the growing reliance on digital banking in Kenya.

Companies like Jumia, Kilimall, and Masoko have made it easier and faster for Kenyans to purchase goods online. This has greatly eliminated the need for trips to the physical stores, saving time and money in the process. In fact, Jumia, one of the largest e-commerce platforms in Kenya, recorded a 21% increase in Gross Merchandise Value (GMV) from Kshs 15.3 billion in 2019 to Kshs 18.6 billion in 2020. This significant growth is a clear indication of the growing demand for online shopping in Kenya.

According to the communication authority in Kenya, Digital banking has also made it easier for customers to pay for goods and services. Through platforms like M-Pesa, customers can make payments for bills, airtime, and other purchases at any time of day or night, anywhere in Kenya. This convenient and reliable service has replaced the need for cash payments, which has greatly reduced the risk of theft and the handling of dirty notes. Furthermore, it has also enabled businesses to improve their cash flow management. For instance, businesses can pay and receive payments from their suppliers, partners, and customers without having to go through the long and tedious process of manual payments. This makes it easier for businesses to manage their finances and keep track of their transactions.

1.2 Measures of purchasing efficiency among entrepreneurs

In the world of entrepreneurship, measures of purchasing efficiency are crucial to the success of any business. Purchasing efficiency refers to the ability to buy goods and services at the lowest possible cost without sacrificing quality. This is particularly important for small businesses, as they often have limited resources and must be judicious in how they spend their money. In order to stay ahead of competitors, it is imperative that organizations implement strategies to maximize returns on investment through efficient purchasing practices.

According to Carr's (2019) research, purchasing efficiency has a significant impact on supply chain performance. In particular, businesses that are more efficient in purchasing tend to experience lower costs, higher quality, and better delivery times. Carr found that businesses that prioritize purchasing efficiency are more likely to have reliable suppliers, better contract terms, and stronger relationships with strategic partners. Benoit & Baker,(2018) contend that purchasing efficiency can be measured in various ways, including inventory optimization, purchasing cycle time, cost reduction/savings and vendor performance.

Inventory optimization is an essential measure of purchasing efficiency. Inventory carrying costs can place a considerable burden on businesses, especially if they're holding excess inventory. By implementing inventory optimization strategies, organizations can reduce inventory carrying costs while ensuring that they have adequate inventory levels to meet customer demand. This can be done by analyzing sales data, forecasting demand, and reviewing lead times to create a more effective inventory management plan.

Purchasing cycle time is a crucial measure of purchasing efficiency in any organization. It refers to the amount of time taken to complete a purchase order from the point of creation to the receipt of the goods or services. A shorter purchasing cycle time indicates a more efficient purchasing process, which can lead to cost savings, better supplier relationships, and higher customer satisfaction. Measuring and reducing purchasing cycle time can be challenging, but it is essential in maintaining a competitive edge in today's fast-paced business environment. Effective management of purchasing cycle time involves identifying and streamlining all stages of the purchasing process, from demand forecasting and requisition to negotiation, contracting, and delivery.

According to Monczka, Handfield, Giunipero & Patterson, (2015), one way to reduce purchasing cycle time is by implementing

electronic procurement systems. These systems can automate and streamline many of the purchasing processes, reducing the time it takes to complete tasks such as vendor selection, contract negotiation, and purchase order processing. Electronic procurement systems also allow for real-time tracking of purchasing orders, reducing delays and improving coordination between different departments and suppliers. The scholars argue that another way to reduce purchasing cycle time is by establishing strategic relationships with suppliers. They explain that close collaboration with suppliers can help to reduce lead times, improve delivery schedules, and enhance quality and reliability. It can also help to minimize the need for extensive negotiations and corrective action processes, further reducing cycle time.

Cost reduction initiatives are also crucial measures of purchasing efficiency. According to Kavadias, Loch,& Huchzermeier,(2004), companies should focus on cost-cutting strategies such as process improvement, waste reduction, and strategic sourcing. By improving processes and reducing waste, organizations can lower operating costs and improve efficiency. They posit that strategic sourcing is an essential component of cost reduction initiatives. It involves analyzing supplier relationships to identify opportunities for actionable cost savings, while maintaining critical supply chain requirements.

McLeod, (2020), argues that by buying in larger quantities, businesses can often negotiate lower prices with suppliers and distributors. This can result in significant cost savings over time, especially for businesses that use a lot of raw materials or regularly purchase large quantities of finished products.

Ability to source materials and products from multiple suppliers is also an important measure of purchasing efficiency according to Chen & Guo,(2019).This not only ensures that businesses are getting the best price for their purchases, but also reduces the risk of supply chain disruptions. By having multiple options for sourcing materials and products, businesses can more easily adapt to changes in the market and avoid costly delays in production.

1.3 Barriers to Purchasing Efficiency in the Retail Sector

According to Kavadias, Loch & Huchzermeier, (2004), efficient purchasing is a crucial component of any successful business. It involves selecting the right suppliers, negotiating the best deals, and managing relationships to ensure that all parties benefit from the transaction. However, there are various factors that can inhibit purchasing efficacy, causing delays, cost overruns, and in some cases, legal challenges.

1.3.1 Inadequate Knowledge of Procurement Trends

One of the most notable impediments limiting efficient purchasing practices is inadequate knowledge or awareness of procurement trends in the respective industry. Entrepreneurs need to stay informed about current trends and best practices to make informed decisions. To overcome this issue, entrepreneurs should consider investing significant time and resources in attending relevant industry conferences and networking with peers.

1.3.2 Lack of Collaboration

Collaboration is essential for successful purchasing. However, many organizations fail to integrate purchasing with other departments such as finance, legal, and operations. This leads to difficulties in sourcing, negotiating, and contracting. To overcome this barrier, it's crucial to establish a cross-functional team that includes members from all relevant departments. This team can then work together to establish purchasing objectives, identify suppliers, negotiate the best deals, and manage contracts.

1.3.3 Insufficient Market Knowledge

To make informed purchasing decisions, organizations need to have a deep understanding of the market. This includes knowledge of suppliers' pricing, quality, and delivery capabilities, as well as changes in the market landscape that could affect supply. However, many organizations operate with outdated or incomplete market information. To overcome this barrier, it's crucial to invest in market research. This can involve gathering information through industry reports, trade shows, and supplier meetings. Having current market data allows businesses to make informed purchasing decisions.

1.3.4 Lack of Standardized Processes

Purchasing is a complex process that requires a standardized approach. However, many organizations do not have defined purchasing processes, causing confusion and inconsistencies. This can lead to delays, missed opportunities, and even legal challenges. To overcome this barrier, companies need to define and document their purchasing processes. This involves establishing standard operating procedures (SOPs) for each step of the purchasing process. SOPs ensure consistency and provide a clear framework for purchasing activities.

1.3.5 Poor Communication

Effective communication is critical for purchasing efficiency. However, many organizations struggle with communication breakdowns, resulting in delays and misunderstandings. To overcome this barrier, it's important to establish an open communication

culture. This can involve regular meetings with suppliers, robust reporting mechanisms, and a centralized purchasing system. Having clear communication channels ensures that all parties are informed and on the same page, reducing the risk of errors and delays.

1.3.6 Resistance to Change

Change can be challenging, and many organizations struggle to adopt new purchasing practices. This can lead to inefficiencies, missed opportunities, and increased costs. To overcome this barrier, it's essential to have strong leadership and change management processes. This involves identifying key stakeholders, communicating the benefits of change, and providing support throughout the adoption process. Strong change management processes ensure that new practices are effectively implemented and integrated into existing processes.

Additionally, scarce resources and tight budgets can hamper efficient purchasing practices. Entrepreneurs should seek to leverage innovative approaches and embrace technology to optimize their purchasing processes. For instance, implementing digital procurement solutions that automate certain tasks and minimize the need for manual intervention can help streamline operations, reduce costs, and enhance efficiency.

1.4 Statement of the Problem

Kenya's youth make up a significant proportion of the country's population, with individuals aged between 15-34 years accounting for over 30% of the total population, according to the United Nations Development Program. Young people in Kenya are increasingly becoming entrepreneurs, running small and medium-sized enterprises (SMEs) and participating in the nation's economic growth. However, they face several challenges in accessing finances and appropriate financial products, including issues of purchasing inefficiency and limited use of digital banking. The purchasing process of goods and services is an essential aspect of business operations for SMEs, and inefficient procurement can cause several business challenges, including a loss of customers, stock shortage, financial loss, and poor quality goods.

Studies show that young entrepreneurs in Kenya are still struggling to access appropriate financial products that can support their business development and growth since financial institutions and investors often prefer established and high-growth companies rather than providing early-stage funding to start-ups and SMEs. This results in limited financing options, with young entrepreneurs primarily relying on personal savings or family loans to support their business activities. Moreover, young entrepreneurs lack financial literacy and technical skills that would enable them to make informed financial decisions and take advantage of digital banking services.

Young entrepreneurs in Kenya require a purchasing system that can provide them with competitive prices from suppliers, limit the possibility of stock outs, increase their operational efficiency, and enhance the cash management of their businesses. Financial experts suggest that digital banking with mobile and electronic payments can address purchasing inefficiency, facilitate online payments, and promote financial inclusion. Despite this, many young entrepreneurs still have trust issues in accepting the use of technology, lack awareness, and have limited access to appropriate banking services that cater to their specific needs. These issues have led to widespread purchasing inefficiencies resulting in the collapse of many businesses across the county, which requires immediate attention to enhance the profitability of medium-sized business enterprises.

2. Literature Review

This review provides a comprehensive account of the existing literature on the subject of purchasing efficiency and digital banking, highlighting major theories, empirical evidence, and perspectives that have influenced academic discourse.

2.1 Theories of the Study

The study was anchored on the transaction cost theory, Network effect theory and the theory of information asymmetry as discussed below:

2.1.1 Theory of Transaction Costs

The transaction cost theory is a concept in economics that explains how transactional costs can affect the efficiency of economic transactions (Williamson, 2008). It postulates that the overall costs of conducting a transaction can significantly impact its outcome and, as a result, the profitability of the business involved. This theory further posits that the cost of a transaction includes not only the price of the product or service but also the cost of the transaction itself. These costs include search costs, bargaining costs, monitoring costs, and enforcement costs. These costs limit the effectiveness and efficiency of financial transactions, and they are a significant factor in determining the success of digital banking, which seeks to minimize these costs. The theory is relevant to this study in the sense that with digital banking, customers can enjoy reduced transaction costs as they can transact from anywhere and anytime with ease. There is no need to physically visit a bank or store, and digital transactions are usually fast, with minimal paperwork and documentation, which translates to significant time and cost savings.

According to the World Bank (2021), digital banking has been able to capitalize on efficiencies inherent in online transactions which help to reduce transaction costs. By increasing speed and reducing transaction costs, it helps to provide superior financial services to consumers and to reduce transaction costs by implementing technologies that enable faster information dissemination, reducing search, monitoring, and enforcement costs.

Brynjolfsson, Hitt & Yang, (2002) proposed that with digital banking, purchasing efficiency is enhanced through the management of transaction costs. It offers the flexibility to conduct transactions anywhere and at any moment. Customers can use their smartphones or desktops to conduct transactions quickly and with minimal error rates. Such transactions cut down the bureaucracy and waiting time associated with traditional banking and also eliminate the need for physical travel.

2.1.2 Network Effect Theory

The Network Effect Theory suggests that the value of a product or service increases as more users adopt it. This principle is essential to consider when discussing the benefits of purchasing efficiency and digital banking. In this era of fast-paced technological innovations, companies that leverage network effects thrive better than those that don't. It applies to digital banking, where an increase in the number of users leads to more extensive coverage, better services, and reduced costs. As more banks and businesses adopt digital banking, the purchasing efficiency of users increases, as they can conduct transactions with a broader network of partners with ease.

The network effect in digital banking is the ability to leverage the number of customers who use a bank's services, thus leading to reduced costs on transaction fees and expanded financial product offerings. The intersection of purchasing efficiency and digital banking has further enhanced the benefits of network effect theory. For instance, when a company facilitates digital banking services, customers can obtain financing online and make digital payments, which enhances their purchasing efficiency. The more customers who adopt such banking services, the more merchants are willing to integrate them, thus increasing the number of users and value proposition. This then increases the demand for digital banking, which creates a positive feedback loop and drives growth in the industry.

2.1.3 Theory of Information Asymmetry

This theory suggests that one party to a transaction may have more information than the other, which can lead to inefficient outcomes. In traditional banking, such asymmetry could often be observed, with banks possessing more information about customers' financial history than customers themselves. Digital banking provides a solution to this problem. Customers can track their transactions, account balances, and other financial information in real-time, which ensures that they are always informed about their financial status. Furthermore, digital banking platforms provide access to detailed information about products and services, making it easier for customers to make informed purchasing decisions. It offers consumers the ability to compare prices and products across a range of platforms and providers, giving them a much broader and more informed view of the market. This, in turn, reduces the information asymmetry between buyers and sellers, and can help to increase the efficiency of purchasing. Additionally, digital banking can provide buyers with information about the availability of products, which can help them plan their purchases more effectively.

Busch, (2018) contend that digital banking can also provide sellers with access to information about the preferences of their customers. By analyzing customer data, sellers can gain insights into what their customers want and need. This can help them tailor their products and services to meet customer demand. Furthermore, it can help sellers manage their inventory more effectively, which can help them avoid stock outs and overstocks.

According to Adhikari, Dash, & Gunasekaran,(2019), digital banking allows consumers to make payments more easily and securely than before. Consumers can transfer payments directly from their bank accounts, without the need to visit a bank or other financial institution. This further helps to increase the efficiency of purchasing, as it reduces the amount of time and effort required to make payments.

2.2 Empirical Literature Review

Ma & Shi, (2018) explored the potential impact of mobile payment on the procurement process in enterprises. The researchers used a qualitative approach and gathered data through interviews with eight procurement professionals who worked in different industries in China. The responses were analyzed using thematic analysis, and the results showed that mobile payment has a significant positive impact on the efficiency of procurement processes efficiency in terms of reducing transaction costs, improving transaction speed, and enhancing information transparency. The study further found out that mobile payment allows for better tracking of payments, which leads to increased visibility and accountability in the procurement process. This helped to eliminate fraudulent activities and improve the quality of the procurement process. The study therefore offered insights into how mobile payment can be integrated into existing procurement systems for optimal efficiency.

Adewale, Ismail, and Tahir (2019) conducted a study on the adoption of digital banking in Nigeria. The researchers used a mixed-methods approach, combining both qualitative and quantitative methods to gather data from customers and staff of selected banks in

Nigeria. The study revealed that despite the growing appetite for digital banking, there are still challenges that hinder its widespread adoption. One key finding of the study was that there is a lack of awareness among customers about the benefits of digital banking and that Nigerians are still skeptical about using digital channels for banking transactions due to concerns about fraud and security.

Khatoon, Zhengliang, and Hussain (2020) conducted a study to investigate the impact of service quality on customer satisfaction and also examined the mediating effect of customer satisfaction on the relationship. They collected data from 350 customers of different restaurants in Pakistan through a self-administered survey. Their study found that service quality has a significant positive impact on customer satisfaction, which, in turn, mediates the relationship between service quality and customer loyalty. This finding highlights the importance of providing high-quality services to customers to enhance their satisfaction and ultimately influence their loyalty towards the business.

The study by Nguyen, Kim-Duc, and Freiburghaus, (2022), sought to understand the effect of digital banking-related customer experience on banks' performance. The study adopted a quantitative approach, and data was collected from 290 customers of various banks in Vietnam. The data collected was analyzed using structural equation modeling to test the study's hypotheses. The findings of the study indicated that there was a significant positive relationship between digital banking-related customer experience and banks' performance. The results also indicated that customer satisfaction mediates the relationship between digital banking-related customer experience and banks' performance.

The study conducted by Kanyingi, R. (2021) focused on the digital finance transformation that is taking place in Kenya. The study aimed to evaluate the current state of digital finance in the country, identify the major challenges facing the industry, and recommend solutions for improving the uptake of digital finance services. According to him, the adoption of digital finance tools such as mobile banking and digital payment systems helps to lower transaction costs and simplify payment processes for small businesses. This increased efficiency translates to higher profits and improved cash flow which can be channeled towards investment and expansion.

Anyango,(2020) examined the impact of mobile banking on the growth of SMEs in Kenya. The study analyzed data from over 300 SMEs in Kenya that had adopted mobile banking services. The results showed that these businesses experienced increased access to credit, reduced transaction costs, and improved financial management. The study also found that mobile banking encouraged SMEs to keep better records and adopt more formal financial practices, which can contribute to their long-term growth and success.

Ouma (2019) sought to investigate the perspectives of Kenyan digital banking users on financial inclusion. The research adopted a qualitative approach and used interviews to collect data from 12 digital banking users from Kenya. The data collected was analyzed and grouped into themes. The study found that digital banking has contributed significantly to financial inclusion in Kenya. The study also revealed that digital banking has significantly reduced the cost of accessing financial services.

2.3 Summary of Literature and Gaps

Based on the research conducted by Ma & Shi (2018), it was found that mobile payment has a considerable positive impact on procurement processes, specifically in reducing transaction costs and improving transaction speed. However, there has been no research conducted to validate this finding. Other reviewed studies have not attempted to link the purchasing efficiency of firms to digital banking, as some studies only focus on the challenges facing digital banking and provide solutions, while others solely focus on the advantages of adopting digital banking. Therefore, it remains unclear whether there is a correlation between digital banking and purchasing efficiency in Kenyan entrepreneurs. This study aims to fill the gap in existing knowledge.

3. Methodology

3.1 Research Design

The research employed a correlational study design to elucidate the association between the efficacy of purchasing and digital banking practices among entrepreneurs in Kenya. The investigation was carried out with the intent of uncovering the intricate interplay between these two variables. According to Croswell (2017), the correlation design's ability to measure the degree of association between variables enables researchers to explore and establish causal relationships. Moreover, its flexibility in the use of both quantitative and qualitative data makes it an ideal choice for researchers who aim to create a more in-depth understanding of their topic of interest.

3.2 Study Area

The investigation was carried out in Kenya's 47 counties and focused on registered medium-sized businesses owned by young entrepreneurs. These businesses were expected to have an established purchasing/procurement and finance departments and to have been operational for at least one year. Such businesses were targeted as they have developed discernible purchasing/restocking patterns that can be examined with certainty, and even precise predictions can be made about stock movements.

3.3 Target Population and Sample Size

The study selected two participants each from the procurement and finance departments in the medium-scale enterprise in every county, totaling 94 participants. This approach was deemed to be a reliable representation of the entire county due to the similarity in structured purchasing processes and the application of common online and digital banking practices in medium-sized businesses.

3.4 Method of data Collection

Prior to administration of the data collection instrument, the respondents were initially identified and informed of the survey's purpose. To conduct the survey, a structured Microsoft Forms questionnaire was disseminated electronically for the respondents to complete. The collected data was further analysed to generate the final output of the study. The Microsoft Forms was utilized according to González-Ramírez, *et al.*(2019) it enables the researchers to create and tailor surveys in numerous formats, such as multiple choice questions, rating scales, and open-ended responses. Also, it allowed the dissemination of the questionnaire via email or link, which facilitated reaching a vast audience in a limited time. The Microsoft Forms was also preferred for data collection due to its ability to capture and analyze data promptly and in real-time.

4. Results and Discussions

Table 1: Extent of application of Digital Banking by Young entrepreneurs in Kenya

	N		Very low	Low	Average	High	Very high	Mean
Mobile Banking	94	Count	1	5	22	34	32	3.9681
		%	1.1%	5.3%	23.4%	36.2%	34.0%	
Online Banking	94	Count	18	23	24	0	29	2.9894
		%	19.1%	24.5%	25.5%	0.0%	30.9%	
Agency Banking	94	Count	5	5	24	26	34	3.8404
		%	5.3%	5.3%	25.5%	27.7%	36.2%	
Automatic Teller Machine	94	Count	28	28	7	16	15	2.5957
		%	29.8%	29.8%	7.4%	17.0%	16.0%	

Source: Survey data,2023

From the survey of the 94 respondents in the Kenya's medium businesses in the 47 counties, it emerged that the most prominently used digital banking platform in the purchasing processes is the mobile banking with a mean of 3.9681. This was because mobile phones are readily available in every part of the country and the major mobile operators' networks have been made available in all major towns in every county in Kenya. Agency banking had a mean of 3.8404 falling slightly below mobile banking. It was established that agency banking is also preferred as a means of making payments by medium business enterprises as they are readily available within busy shopping centres and estates making it easier for businessmen/women to access financial services of their various banks without having to incur the risks of travelling long distances with cash to deposit money in the mainstream banks. This, according to the entrepreneurs, helped them mitigate the instances having to pay cash for large purchases thereby enhancing purchasing efficiency as there are retractable records of purchases made electronically.

Online banking, which had a mean 2.9894 according to the survey was a strategy adopted by the entrepreneurs in all the counties in Kenya but not preferred compared to agency and mobile banking. This was attributed to the complicated nature of the transactions which required that whoever engages in making purchases using this format must be computer savvy. At the same time, it requires strong internet connectivity which was found to be a limitation in some parts of the country. Finally, automatic teller machine which was the least preferred means of payment with a mean of 2.5957, was equally being used by the entrepreneurs to make payments but to a very low extent. This, according to the management of the medium business enterprises was attributed to the lack of cash deposit enabled ATM machines which are not equally distributed within the major towns in the country. This forces purchasing staff to resort to other available and secure means of payment within their reach and offered by their banks.

4.2 Analysis of the Effect Digital Banking on Purchasing Efficiency of Young entrepreneurs in Kenya

In this study, purchasing efficiency was measured in terms of inventory optimization, purchasing cycle time, cost reduction and ability to source from multiple suppliers. On the other hand, digital banking constructs that were looked into included mobile banking, online banking, agency banking and automatic teller machine (ATM). The study hypothesized that purchasing efficiency of the young entrepreneurs in Kenya would be enhanced if they adopted to the optimum the use of digital banking platforms available in Kenya.

A regression model was proposed where the independent variable was digital banking while the dependent variable was purchasing efficiency of the firms. A multiple linear regression was done after the average of the independent variables was calculated and standardized to reduce instances of multicollinearity. The results were as shown in the table below:

Table 2: Effect of Digital Banking on Purchasing efficiency

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	2.884	0.177		16.288	.000
Mobile Banking	0.345	0.029	0.658	0.859	.000
Online Banking	0.262	0.018	0.019	0.349	.001
Agency Banking	0.279	0.026	0.642	0.654	.000
Automatic Teller Machine	0.163	0.02	0.483	0.989	.000

a. Dependent Variable: Purchasing efficiency

Source: Survey data,2023

The results in the above table show that digital banking strategies adopted in Kenya are all positive and significant predictors of purchasing efficiency among young medium entrepreneurs in Kenya. The unstandardized beta (β) values represents the slope of the line between the predictor variable and the dependent variable meaning that that for every one-unit increase in mobile banking, purchasing efficiency of the firms increase by 0.345 in the positive direction. Similarly, for every one-unit increase in online banking, there is an increase in purchasing efficiency of the firms by 0.262. Moreover, a unit change in agency banking and automatic teller machine would lead to a change in the firms purchasing efficiency by 0.279 and 0.163 respectively.

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					
					R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.894 ^a	.799	.790	.22708238	.799	88.397	4	89	.000	.522

a. Predictors: (Constant), Automatic Teller Machine, Online Banking, Mobile Banking, Agency Banking

b. Dependent Variable: Purchasing efficiency

Source: Survey Data,2023

The model summary shows that the coefficient of determination (R) square was 0.0.799 while adjusted R square was 0.790 meaning that the shrinkage was 0.009, i.e. (0.799-0.790). This, according to Kuhn & Johnson, (2013) shrinkage below 0.5 indicate a good fit of the model and shows there is no multicollinearity hence depicting stability of the model. Similarly, the common rule of thumb is that the shrinkage should be less than 5% to indicate a good fit of the model. However, other researchers like Kutner, Nachtsheim, Neter & Li, (2004) suggest a shrinkage of less than 2%. R square was 0.799 implying that digital banking practices adopted by young entrepreneurs in Kenya can explain only 79.9% of their purchasing efficiency.

These results are in concurrence with the findings of the study by Ma & Shi, (2018) who explored the potential impact of mobile payment on the procurement process in enterprises and established that mobile payment had a significant positive impact on the efficiency of procurement processes in terms of reducing transaction costs, improving transaction speed, and enhancing information transparency. The scholars further found out that mobile payment allows for better tracking of payments, which leads to increased visibility and accountability in the procurement process. Similarly, Nguyen, Kim-Duc, and Freiburghaus, (2022), found a significant positive relationship between digital banking-related customer experience and banks' performance in Vietnamese banks.

5. Conclusion

The findings of this study unequivocally demonstrate that digital banking practices serve as crucial determinants of purchasing efficiency among medium-sized business enterprises, particularly those owned by young and dynamic entrepreneurs in the vibrant business landscape of Kenya. The insights provided by this research represent a valuable contribution to the rapidly-evolving domain of digital commerce, and underscore the importance of embracing emerging technological innovations for modern-day businesses to truly thrive and prosper. It can therefore be concluded that digital banking practices are significant predictors of purchasing efficiency of medium business enterprises owned by young entrepreneurs in Kenya.

6. Recommendations

Based on the findings, digital banking is a revolutionary advancement in the financial industry that offers unlimited possibilities for businesses to manage their finances effectively and efficiently. Medium enterprises in Kenya can take advantage of digital banking to enhance their purchasing efficiency, streamline operations, and ultimately grow their business. To optimize purchasing efficiency through digital banking, medium enterprises should consider the following recommendations:

- [1] Encouraging the adoption of digital banking services among medium-sized enterprises in Kenya, by creating awareness and educating them on its benefits.
- [2] Promoting innovative and tailored digital banking solutions that address the specific needs of medium-sized enterprises, in order to enhance their purchasing efficiency and overall performance.
- [3] Providing financial incentives to medium-sized enterprises such as tax rebates, subsidies and capacity building programs, to incentivize the adoption of digital banking services and optimize their purchasing efficiency.

By adopting these recommendations, medium-sized enterprises can harness the full benefits of digital banking to not only boost their purchasing efficiency but also stay competitive in the ever-changing business landscape.

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