Effects of Mobile Money Services on the Performance of Small and Medium Size Enterprises

Abdul Waris¹*, Srafaraz Nazir¹, Sher Khan², Mir Zeeshan Ali³, Muhammad Sarmad Raza Gorsi³

¹Department of Economics, University of Pisa, Pisa, Italy
²Department of International Management, Faculty of Management, Comenius University, Bratislava, Slovakia
³School of Economics and Finance, Henan University, Kaifeng, China
Email: *waris@aup.edu.pk

Abstract
This study aimed to find whether electronic banking improves financial services accessibility in Ghana and allows banks to cut costs while providing banking services more quickly, effectively, and with fewer employees. For the analysis, the Statistical Package for the Social Sciences (SPSS) was used and the descriptive statistics such as percentages and means were computed to evaluate the data. The outcomes of this research showed that the emergence of mobile money services has seriously impacted the performance of many SMEs. Since this started, there has been an increase in the number of businesses utilizing the form of payment when it comes to financial performance. The service’s accessibility and affordability, particularly for those with low incomes, have played a significant role in its rise. Mobile money services have, however, faced several difficulties, including a lack of agents in rural areas to provide quick access to cash when needed, increased fraud cases, and a lack of trust among customers who deposited money for savings purposes, among others. Users of mobile money appear to be making every effort to overcome these difficulties. Nevertheless, despite these difficulties, mobile money services have had an impact on small and medium-sized businesses.

Keywords
Small Businesses, Mobile Money, Electronic Banking Services, Performance, Medium Businesses

1. Introduction
Mobile money, also known as mobile payment, mobile money transfers, and
mobile wallet, broadly refers to services that may be accessed and used through a mobile device, such as a credit or debit card, mobile phone, or another portable device. It can also be defined as the point at which telecommunications and banking services converge. It involves a wide range of parties, including financial service providers and mobile phone operators. Electronic money accounts that are accessed through a mobile phone are what are referred to as mobile money services (Skogqvist & Ranjula, 2019). People with and without bank accounts can send and receive money using mobile phones at home and abroad thanks to mobile money services, which are safe and practical. According to World Bank (2016), with the advancement in technology, more individuals and businesses ought to use using mobile money services as they are fast and convenient compared to traditional modes of payment. Through the development of payment methods, technology entrepreneurship, and innovation program, approximately three-quarters of the world’s population now have access to a mobile phone (World Bank, 2016). The mobile communications story is moving to a new level that is less about the phone than it is about how it is used. Pre-paid and post-paid mobile subscriptions are now used worldwide in excess of 6 billion times more than they were in 2000, with approximately 5 billion of those subscriptions being in developing nations. Ownership of multiple subscriptions is becoming more and more prevalent, indicating that they will soon outnumber people.

Mobile money has become the ideal solution for banks and numerous FinTech companies to address the problems. It has lessened the need for cash and enabled users to access financial services with the greatest ease. Additionally, it has put pressure on the banks to guarantee that their consumers have a seamless transactional experience while using their mobile banking apps (Gundaniya, 2022). Many financial services are now available to users by simply sitting at home and pressing a few buttons. Mobile money is a significant part of the future of banking due to its simplicity and convenience.

The objectives to be addressed in this study are, to find out whether SMEs are currently aware of and using different mobile money services, to find out if the use of mobile money services affected SMEs’ ability to grow through higher sales, savings, and loan accessibility, and to determine whether the accessibility, affordability, and convenience of mobile money services contributed to an improvement in SMEs’ performance.

Back to the convenience that mobile money brings, it also has effects that are either positive or negative in nature. Many people and households in developing nations, where financial inclusion is very low, rely on informal savings methods like “saving under a mattress,” saving in jewelry or livestock or saving in groups of friends or relatives using merry-go-rounds, where participants come together and contribute a set amount of money in a rotating system (Steinert et al., 2018). However, by giving households and individuals the ability to save, spend, and transfer money through short messaging service (SMS) without having official bank accounts, the adoption of mobile financial services (MFS), also known as
mobile money, has revolutionized, and strengthened the financial infrastructure and services (Hove & Dubus, 2019). SMEs create and promote a range of different competencies in addition to embracing creative techniques to ensure sustainable growth in a cutthroat environment. Therefore, this study has significantly added to the experience, knowledge, and theoretical foundation of the literature on sustainable growth of small and medium firms. For micro, small, and medium-sized businesses, the rising use of mobile devices in developing nations and the potential of the mobile platform to address business difficulties are very exciting. Different facets of life in the developing countries have been affected by the mobile phone revolution.

Most of the research focuses on how commercial banks’ performance is impacted by electronic banking. Numerous research found a connection between bank performance and electronic banking to be favorable. A number of those research found that using electronic banking had a short-term negative impact on the performance of mobile banking services but a long-term favorable impact. According to several studies, using electronic banking has a negative impact on the performance of commercial banks but a good impact on SMEs. For instance, the accessibility of financial services in commercial banks was a factor in how electronic banking affected financial services in Ghana (Asare & Sakoe, 2015). This study aims to find whether electronic banking improves financial services accessibility in Ghana and allow banks to cut costs while providing banking services more quickly, effectively, and with fewer employees. The introduction of electronic banking services will enhance the delivery of financial services, but there were knowledge and security concerns that raised questions about its use. As a result, there are no much research on electronic banking and the accessibility of financial services. Most of the studies on electronic banking have focused on measuring performance as the dependent variable, ignoring the financial services component, which is crucial and significantly boosts the performance of SMEs.

2. Literature Review

Since its launch in 2007 in Kenya, the emerging mobile money service has experienced a resounding uptake in SMEs. The service’s accessibility and affordability, even for people with modest incomes, are credited with its success. Most banked and unbanked people use it as a deposit account because they can keep track of account balances on their mobile devices. The bank can now escape lengthy bank lines thanks to it (Rice, 2007). Technology advancement is seen as user-friendly, dependable, and efficient, with the potential to expand financial services to individuals who are unbanked or choose less expensive financial services. Because of this, most Kenya’s microbusiness owners use it for daily tasks, including paying suppliers for goods and services, paying bills, transferring money to friends and family, withdrawing cash, and topping off airtime accounts. They can effortlessly manage their accounts and keep track of their balances. “Firms that employ ICT (information and communication technology)
expand quicker, invest more, and are more productive and lucrative than those that do not,” the World Bank (2016) stated. There are, however, only a few studies on the use of digital technology to boost SMEs’ performance.

Performance is assessed in two ways: as a means to obtain results and as results. The capacity to recognize the results of organizational efforts is called performance. Performance may be both monetary and non-monetary. Financial performance is a purely arbitrary indicator of how effectively a company can utilize the resources generated through its basic business operations and subsequent revenue production (Tengeh & Gahapa Talom, 2020). Financial performance is frequently employed as a broad indicator of a company’s long-term financial health. It can be used to contrast businesses in the same sector. Accounting’s main performance indicators, such as return on assets (ROA), return on equity (ROE), and net interest margin (NIM), are used to gauge a company’s financial performance (Ngaruiya, 2014). It measures the revenue relative to the total assets. It gauges an institution’s management’s capacity to make a profit from all of its resources, to enhance speed and safety.

Research conducted by Higgins et al. (2012), examined how SMEs in Kenya used mobile devices. In total, 865 SME enterprises in urban and semi-urban locations were studied by the three. They demonstrated that any activity or transaction carried out by the owners of SMEs using mobile money is always done so in substantial amounts, such as when paying for supplies, bills, and salaries, among other purposes. According to the findings, only 861 (99.5%) of the 865 SME owners used mobile money services for both company and personal efforts, with 67% using them only for business. The fundamental flaws in the systematic evaluation of mobile money’s effects, particularly on SMEs, exist. Even if recent studies indicate that mobile phone use and coverage have a favorable impact on risk reduction, market improvements, business coordination, and the labor market. This has been facilitated by the ability of technology to influence numerous company activities in a positive manner (Islam & Muzi, 2020). For micro, small, and medium-sized businesses, the rising use of mobile devices in developing nations and the potential of the mobile platform to address business difficulties are very exciting. Different facets of life in developing countries have been affected by the mobile phone revolution.

Most of the research focuses on how commercial banks’ performance is impacted by electronic banking. Numerous researches found a connection between bank performance and electronic banking to be favorable. A number of those research found that using electronic banking had a short-term negative impact on the performance of mobile banking services but a long-term favorable impact. According to several studies, using electronic banking has a negative impact on the performance of commercial banks but a good impact on SMEs. For instance, the accessibility of financial services in commercial banks was a factor in how electronic banking affected financial services in Ghana (Asare & Sakoe, 2015). This study found that electronic banking improves financial services accessibility in Ghana and allows banks to cut costs while providing banking ser-
services more quickly, effectively, and with fewer employees. The introduction of electronic banking services will enhance the delivery of financial services, but there were knowledge and security concerns that raised questions about its use. As a result, there are no much research on electronic banking and the accessibility of financial services. The majority of studies on electronic banking have focused on measuring performance as the dependent variable, ignoring the financial services component, which is crucial and significantly boosts the performance of SMEs. According to Talom & Tengeh (2019), small and medium-sized businesses (SMEs) in many developing nations have discovered a viable alternative to mobile money services (MMS), which are frequently financially excluded by the traditional banking system. Mobile money (MM) has largely not been used or adopted by SMEs in developing countries, despite its potential to promote inclusive growth. One of the reasons for this is the depth of data supporting the impact of MM on financial performance. The turnover of the SMEs was attributable to mobile money payment and reception services.

The variables that are currently known from a study done by other academics include improved accessibility, affordability, convenience, security, contentment, and support. Data shown and discussed in part prior to these ones have demonstrated increased accessibility. Given the critical mass that mobile money services have reached, it seems likely that users are enticing non-users to join the system. Any alternative is thought to have a lower transaction cost. The most obvious direct advantages of mobile money are increased convenience, increased speed, and decreased cost of financial transfers (Nyaga, 2017). This is clear when compared to more conventional ways of sending and receiving money, like via public transportation, friends, or Posta Pay Services. Compared to mobile money systems, which are typically less expensive than these alternatives and provide both the sender and the receiver with rapid transaction information, all the old techniques mentioned above have significantly higher dangers.

Money transfers may now be done quickly and easily thanks to the speed and security of mobile money services. This has stimulated the expansion of several economic activities, particularly in rural regions, by encouraging local consumption through increased money circulation. It’s possible that lower costs and improved system efficiency and dependability have made it easier for more individuals to transmit money to remote areas, boosting the local economy there (Mohamed & Nor, 2021). For instance, a farmer might be able to get money to buy seeds without making needless trips during planting season. Current data, however, is insufficient to substantiate such flow.

It was clear that everyone who participated in this survey had a thorough understanding of how mobile money services worked. The use of mobile money services increases sales. It is as result of efficiency and dependability that are more important to the use of mobile money and the expansion of SMEs. It is important to note that most respondents expressed skepticism about the service’s pricing and convenience due to issues with its functionality. The respondents were very concerned about delays, although few of them had encountered
them. Additionally, there is a significant market opportunity for mobile money because many players in the SME sector do not use the service for savings, to get loans, or to have bank accounts. It is clear from the results that users of mobile money are unfamiliar with mobile banking operations related to loan applications and repayment and prefer traditional banking to mobile banking when it comes to loans and advances.

In summary, the topic of the effects of mobile money services on the performance of small and medium-sized enterprises is lacking, particularly in Ghana. There are only a few related studies around the world particularly on Africa such as (Islam & Muzi, 2020; Tengeh & Gahapa Talom, 2020; Ngaruiya, 2014; Higgins et al., 2012; Talom & Tengeh, 2019) have been carried out and still there severely need to conduct such study, particularly to find whether electronic banking improves financial services accessibility in Ghana and allows banks to cut costs while providing banking services more quickly, effectively, and with fewer employees. Therefore, this study fills the above gap by describing and exploring the effects of mobile money services on the performance of small and medium-sized enterprises.

3. Research Design and Methodology

The study aims to address the improvement of financial services with the use of electronic banking. With this it can be able to effectively get the much-needed feedback when it comes to matters of how they perform while making use of mobile money services. Hence, the entire group or subjects that the researcher was interested in examining are referred to as the study’s population. This definition guarantees the homogeneity of the population of interest. Because everyone has an equal chance of being included in the final sample, population studies are more representative. Aggarwal & Ranganathan (2019), states that descriptive studies can use samples of 10 – 20 percent, but the researcher chose 25 percent to make the sample more typical of the entire population. The SMEs’ managers/owners, clerks, and accountants will respond to the questionnaire. This is so because these people are primarily responsible for the financial operations of SMEs.

Primary and secondary data collection methods were used for this study. Structured questionnaires designed to capture relevant information on the impact of mobile money services on the performance of SMEs were used to collect primary data. The questionnaires were distributed to a representative sample of SMEs in the study area, and the responses were analyzed to draw conclusions and make recommendations. Secondary data sources were consulted in addition to primary data sources. Academic articles, books, and reports on mobile money services, SMEs, and related topics were among the sources used.

3.1. Sample Design

To determine the sample design, it would be recommended when it comes to
determine the size of the population, when it comes to the scope of the study. Remembering that the study involves small and medium-sized enterprises, to get the much-needed data on how using mobile money services affects the performance of the businesses. It will utilize the formula described below.

\[ n = \frac{Z^2pq}{d^2} \]  

(1)

where the “n” represents the desired sample size (in this case, the number of businesses which will be use but should not be more than 1000); in addition, the “Z” will represent the standard normal deviation at the required confidence level of (1.96), and finally the “P” represents the proportion which will be utilized when it comes to the targeted population, and have different characteristics being measure (0.5). The “q” is represented as 1 − p (1 − 0.5), and the “d” represents the level of statistical significance set (0.05).

3.2. Methodology and Interpretation of Results

Data gathered in the field were used in the study. To fill in any gaps, I gathered primary data. Data from respondents was gathered through surveys and questionnaires. To ensure that errors were removed in the field and to boost response rates, the questionnaire included instructions on how to respond to each question and was presented with specific instructions on how to fill and answer. When the application was approved, the study’s inquiries were transformed into questionnaires for collecting research data. Since the questions were mostly exploratory in nature, the questionnaire was shared to data collecting officer who helped the respondents understand any that they found challenging. And identify the targeted respondents to this research. The goal was to gather 10 to 15 responses every day from the field.

3.2.1. Data Evaluation

Data from sampled respondents was gathered and securely kept in google spreadsheet that could only be accessed by me for this study. All data must be kept confidential by being kept in a secure area as a necessity. Most of the approaches employed to analyze the data were quantitative. Both descriptive and inferential statistical techniques were used in these procedures. To find and correct mistakes and omissions, the data was first revised after collection. This procedure was carried out concurrently with field data collection. After that, it was coded in accordance with categorization to be entered into computers for data analysis. Microsoft Excel statistical Soused for the analysis.

3.2.2. Interpretation of Results

When the application approved, the study’s inquiries were transformed into questionnaires for collecting research data. For gathering data in the field using the sample codes, trained data collection officers were hired. Since the questions were mostly exploratory in nature, the use of data collecting officers was intended to help the respondents understand any that they found challenging. The study used of a data analyst to create the SPSS data entry templates under his or
her supervision. The questionnaires were then entered into the created database for later analyses after being reviewed for accuracy and completeness. To make sure data was entered appropriately, the researcher regularly checked entries to validate them. After finishing with all the entries, data cleaning was done.

Furthermore, for most of the findings, descriptive measures like percentages, means, and averages were used to summarize the study’s findings, which were then displayed in tables and graphs. Model tables, formulas, and an explanation of the findings were used to display the results of the multiple regression analysis and coefficient of correlation. In-depth discussions of the study results served as a foundation for the conclusions and study suggestions.

3.2.3. Data Reliability and Variability
The consistency of study findings is a challenge with reliability. The instrument’s dependability guarantees the internal consistency of the questionnaire. It is concerned with estimates of how much a measure is free from random error and how confidently a trustworthy instrument can be used without interference from temporary or situational influences. Data from sampled respondents was gathered and securely kept in research folders that could only be accessed by the researcher for this study. All data must be kept confidential by being kept in a secure area as a necessity.

3.3. Statistical Methods
After collection, the data was revised and corrected. For the analysis, the Statistical Packages for the Social Sciences (SPSS) and Microsoft Excel statistical were used. Descriptive statistics such as percentages and means were used to evaluate the data. To examine the significant effect and identify the significant relationships between the study variables, inferential statistics such as correlation and regression were used. The research hypotheses were tested using a correlation analysis. The questionnaire for the study was designed to collect pertinent information on the impact of mobile money services on the performance of SMEs. The questionnaire was composed of structured questions and was distributed to a sample of SMEs in the study area. The responses were examined to reach conclusions and make recommendations.

4. Findings and Discussion
4.1. Data Analysis and Presentation
The actual mobile money transactions used by SMEs in Nairobi are discussed including frequency and reasons they prefer the use of these services over other financial services available in Nairobi County. This is followed by the results of financial accessibility and the perceived reliability of financial providers.

4.2. Data Analysis
This section seeks to present the demographics of the respondents relevant to this study, the type of business, the length of time it has been in operation in
years, and the size of the business with respect to the estimated annual turnover and number of employees of those surveyed are also presented here. The aim is to provide a clear understanding of what criteria were used to assign or exclude businesses from the characterization of SMEs.

### 4.2.1. Respondents Demographics

There were more female respondents to this survey (60%) compared to male respondents (40%). The study sought to know the position of the respondent in business and found that a significant 70% of the respondents were business owners. The target of the study was to have more owners as opposed to employees responding to the questionnaire, and this was achieved. However, 15% of the respondents were employees whereas 7% were business partners. **Figure 1** displays the distribution of the findings.

### 4.2.2. Types of Business

The study sought to find out the form of business operated by SMEs within the locality, and it was found out that only one business had been registered as a company. It was further found that 16% of the businesses surveyed were partnerships while the majority of the businesses were sole proprietorships topping the list at 85% of the sample. **Table 1** shows most of the businesses in the study were sole proprietorships.

### 4.2.3. Business Operations

To obtain a more detailed understanding of the SME sector in the locality, the research looked at specific aspects of each business. It was found that 88% of the businesses have been in operation for between 1 - 5 years with only 12% having exceeded 5 years of business operation. The survey further established that 30% had more than one business while 70% were single branch operations concentrating on a single business line. Further querying of those who owned more

![Figure 1](chart.png)

**Figure 1.** Position held in the business. Generated by authors on collected data or author-created own source.
than one business established that 83% of the respondents ran 1 - 3 businesses, 26% ran 4 - 6 closely related businesses and 4% ran more than seven businesses. The greater the number of businesses ran by one person, the more diverse the business lines. The data is presented in Table 2.

4.2.4. Cost Related to Mobile Money Services
The research noted that cost was not a major concern for the businesses surveyed. Many perceived the service as cheap and did not mind the cost involved in using it. To show this the study established that 51% praised the service for having an affordable SIM card, 60% indicated that the service providers easily replaced a lost SIM card, and a significant percentage were of the opinion that the transnational cost was reasonable.

4.2.5. Reliability Cost and Convenience of Mobile Money
The study was to establish the perceived reliability of mobile money transfer services in business. A diverse view on the issue was obtained. This is because, the majority of the respondents have a moderate to negative view about the reliability of the system. However, even with most of the respondents of the opinion that the service is not very reliable, they are still confident about using it.

4.2.6. Importance of Commonly Utilized Mobile Money Services to SMEs
I further analyzed the responses of those who utilized mobile money services and their rating on the importance of the various services they were using in their business.

Figure 2 demonstrates that those who used a particular mobile money service

Table 1. Type of business in data sample.

<table>
<thead>
<tr>
<th>Type of business</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Partnership</td>
<td>16</td>
<td>14%</td>
</tr>
<tr>
<td>Sole proprietorship</td>
<td>96</td>
<td>85%</td>
</tr>
<tr>
<td>Totals</td>
<td>113</td>
<td>100%</td>
</tr>
</tbody>
</table>

Note: Source own work.

Table 2. Year of operations of data sample (source: own work).

<table>
<thead>
<tr>
<th>Year of operations</th>
<th>Percentage</th>
<th>No. of businesses</th>
<th>Percentage</th>
<th>one more business</th>
<th>frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 5 years</td>
<td>76%</td>
<td>1 - 3</td>
<td>73%</td>
<td>No</td>
<td>70%</td>
</tr>
<tr>
<td>6 - 10 years</td>
<td>16%</td>
<td>4 - 6</td>
<td>23%</td>
<td>Yes</td>
<td>30%</td>
</tr>
<tr>
<td>11 - 15 years</td>
<td>5%</td>
<td>Above 7</td>
<td>4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Above 15 years</td>
<td>3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td></td>
<td>100%</td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>
Figure 2. Mobile money services and their ratings. Note: Generated by authors on collected data or author-created own source.

Table 3. Mobile money service and importance to SMEs.

<table>
<thead>
<tr>
<th>Mobile money service and importance to SMEs</th>
<th>Usage Frequency</th>
<th>Respondents Frequency</th>
<th>Importance to business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase Airtime</td>
<td>Daily and weekly</td>
<td>91%</td>
<td>69%</td>
</tr>
<tr>
<td>Purchase supplies</td>
<td>Monthly or weekly</td>
<td>51%</td>
<td>95%</td>
</tr>
<tr>
<td>Receive Money</td>
<td>Monthly</td>
<td>31%</td>
<td>83%</td>
</tr>
<tr>
<td>Deposit money</td>
<td>Daily and weekly</td>
<td>31%</td>
<td>86%</td>
</tr>
<tr>
<td>Withdraw Money</td>
<td>Daily and weekly</td>
<td>62%</td>
<td>62%</td>
</tr>
<tr>
<td>Pay bills</td>
<td>Monthly/weekly</td>
<td>35%</td>
<td>75%</td>
</tr>
<tr>
<td>Repay loans</td>
<td>Monthly</td>
<td>19%</td>
<td>59%</td>
</tr>
</tbody>
</table>

were more likely to rate the service as important to their business. For example, 65% of those surveyed were using mobile money services to purchase business supplies and out of those, 95% rated that service as important to the business as shown in Table 3.

5. Summary Conclusion and Recommendations

5.1. Summary of Research Findings

This study had 100% response rates as a result of well-chosen interview methodology used. There were more male respondents compared to female respondents. The majority of the respondents were business owners which was desirable for this study. All the responses regarding knowledge of currently available mobile money services were positive, an indication of widespread knowledge of mobile money services available in the locality. The study established that 99% of the respondents had correct information on buying airtime, sending money, re-
ceiving money, viewing mobile transactions, depositing cash, and understanding deposit notifications. All respondents had enrolled for mobile money services for their business. However, only 84% of the respondents had a detailed understanding of how to pay bills using mobile money, 81% were able to check bank balances on the phone and only 75% could understand a bank deposit notification.

M-pesa service was the most widely used service followed by Airtel money. The very low penetration rates of other mobile money services providers like YU-Cash and Telkom Kenya were a unique finding amongst this group.

The study established that a majority 71% of the businesses had no bank account whereas 25% had accounts with equity bank and 4% banked with Kenya commercial bank. However, 9% had accounts with other banks not included in the survey. A simple majority of 51% strongly agreed that mobile money has a positive impact on sales. Considering most of the SMEs are small businesses, majority of transactions are in cash but are slowly changing to cashless. Mobile money is new and has penetrated the market which account for 27% of the respondents strongly disagreeing with the concept of mobile money as a mode of payment and 16% being against the idea of mobile money as a model for paying suppliers.

This study demonstrated increased use of mobile money services for various financial transactions in Nairobi County. For those using a particular mobile money service, respondents were likely to rate the transaction cost as reasonable. However, those using any mobile money service were likely than those not using the service to rate it as important to the business. Inferential statistics failed to prove that mobile money had a positive impact to business growth.

5.2. Conclusion

The research found high knowledge of currently available mobile money services surveyed. Additionally, this study demonstrated increasing use of mobile money services for various financial transactions in Nairobi city county. Majority of the respondents agreed that mobile money had a positive impact on their sales even though fewer respondents are using the service as savings facility or to access loans services. Some business owners are using the mobile money service for business related transactions like to pay bills, pay salaries, deposit or withdraw money from their banks, and to buy or sell business related goods. Majority of SMEs were utilizing this service for traditional functions like sending and receiving money for the business.

Noteworthy, mobile money has a positive impact on sales amongst SMEs in Nairobi and the biggest reason for this is due to convenience of the mobile money services. There is a positive correlation between SME performance and transaction cost, transaction time and convenience, financial accessibility and efficiency and reliability even though this is weak relation. Efficiency and reliability contribute more to the mobile money usage.
Mobile money was viewed as not very reliable even though respondents were confident of using the services. Communications and quality of service was rated as reliable, while customer support was rated as reliable, while customer support was rated as reliable. The study revealed that various challenge contributing to reduced reliability included delays in completing a transaction and loss of floats.

The study concludes that the mobile money has made a positive contribution to the SME sector since majority of the traders rely on it as opposed to the formal banking sector for their day-to-day transactions. Secondly, it is evident that all the respondents in this study have a deep understanding of the basic functions of mobile money. However, it’s worth noting that majority of the respondents have reservations on the convenience and cost of the service as a result of problems associated with the functionality of the service. Delays were a major concern amongst the respondents followed by lack of flotation. Thirdly, many of the players in the SME sector do have bank accounts hence creating a huge potential for mobile money.

From the findings, it is evident that, mobile money users are not conversant with mobile-bank transactions on loan applications and repayment and possibly prefer the normal banking system to mobile banking when it comes to loan advances or other forms of business loans applicable to SMEs.

5.3. Recommendations

The study recommends an awareness campaign on the services offered by the mobile money services with bias toward loan applications and repayment. Further, given the recent launch of the M-Shwari, Lipa na M-pesa, (pay with mobile money service), Fuliza (completing a transaction with an overdraft on you mobile money account) and Hustler Fund mobile money services, the study recommends enlightening campaigns of their benefits to SMEs as these services offer short credits and saving plans.

Kenya is used as a model of an economy rapidly moving toward cashless transactions. The amount transacted in 2021/2022 fiscal year was close to the country national budget (Aibast, 2017) with Safaricom creating partnerships with 25 banks in Kenya to provide these services, mobile money will become a progressively more convenient method of financial transaction for SMEs. Educating SMEs on such benefits will lead to increasing use of the service thereby reaping the benefits previously not accessible to them.

Of greater importance are the increasingly user-friendly support services that target SMEs. For example, increased support services have resulted in use of mobile money and mobile internet services on some transport services. These are just some of the examples of the critical role service providers play with respect to increased use of products that could benefit consumers. Therefore, increasing the service provider and SMEs collaborations and the support of available products is recommended to increase the use of currently available products like M-Shwari and help in the design of more SMEs directed services.

Simple measures to evaluate SME performance is still a critical area that re-
quires dedicated attention. Financial measures adopted by larger businesses have not been widely adopted by SMEs. Bookkeeping is erratic, yet it which could be a source of useful information on business turnover, employee information and business growth. Other practical tools may have to be thought of to bridge the gap that exists when looking for data on SMEs. In this respect, the service from Safaricom Lipa na M-Pesa could have a built-in function to undertake simple analyses like total income and total expenditure in each time.

To minimize the current risks, it is recommended that mobile money service providers identify platforms capable of minimal delays and fast responses to increase adoption rates in other urban towns in Kenya. Of particular interest are systems that minimize the risk of losing money, such as providing a method to confirm the business identity one has registered on their systems, verification using business name as opposed to the business mobile number and a faster method of cancelling a faulty transaction when it arises. Current local area networks can be developed to boast internet work connectivity within certain zones even though the cost benefits of such interventions need to be further evaluated.

The study recommends further research on the causes of inconveniences associated with mobile money and reasons why mobile-bank services (accessing bank account via mobile phone) are not popular among SMEs. Further follow-up studies on the same topic could identify changes over time especially with services like “Lipa na M-Pesa” rapidly gaining popularity. This study can be replicated in the same setting at different time, or in other countries. A study to explore factors that have made M-Pesa achieve high uptake despite other cheaper providers like Airtel money and other competitors like the banking sector and wire transfer services like western union will give more knowledge into the competitive of M-Pesa.

**Authors Contributions**

Abdul Waris: Writing-original draft (lead), collected data (equal) and literature; Methodology, Formal analysis (lead); Srafaraz Nazir: Methodology, structuring and writing-review & editing (equal); Sher Khan: formatting, and review and editing; Mir Zeeshan Ali: collected data (equal), Writing literature and Introduction. Muhammad Sarmad Raza Gorsi: Writing literature and Introduction.

**Data Availability**

Data from the corresponding author will be available upon reasonable request.

**Compliance with Ethical Standards**

**Ethical Approval**

Not applicable.

**Consent to Participate**

All authors agree.
Conflicts of Interest
The authors declare that they have no conflict of interest.

References

Abbreviations

SMEs—Small and Medium Enterprises
IT—Information Technology
MMSs—Mobile Money Services
GDP—Gross Domestic Product
MFS—Mobile Financial Services