Digital Financial Transactions and Business Performance: The Role of Mobile Money in Ghana's SME Sector

Abstract

This study examines the role of mobile money (MM) transactions in enhancing the performance of small and medium enterprises (SMEs) in the Sunyani Municipality, Ghana. Utilizing a descriptive survey design, 120 SMEs were sampled from various sectors, including retail, electronics, and services. Data collected through structured questionnaires were analyzed using SPSS, focusing on key variables such as sales revenue, frequency of mobile money transactions, and business characteristics. The results reveal a significant positive relationship between the frequency of MM transactions and sales revenue ($r = 0.45$). Specifically, for each additional MM transaction, sales revenue increased by GHC 500, and for every additional GHC transacted, sales revenue increased by GHC 1.50. The amount transacted via MM showed a stronger correlation with sales revenue ($r = 0.60$), emphasizing that higher transaction volumes drive business growth. While business age and workforce size positively impacted revenue, their influence was weaker compared to MM usage. The regression analysis further confirmed the critical role of mobile money, with MM transaction frequency and amount being the most significant predictors of sales revenue. The findings suggest that wider adoption of mobile money services could enhance operational efficiency, expand market reach, and improve financial performance, positioning MM as a key driver of SME growth in emerging markets. This study contributes to the growing body of literature on digital financial inclusion and business development, offering practical insights for policymakers and SME owners.

Keywords: Mobile Money, Small and Medium Enterprises (SMEs), Sales Revenue, Financial Inclusion, Business Growth

1. INTRODUCTION

The advent of mobile money (MM) technology has revolutionized financial transactions, particularly in emerging markets where traditional banking infrastructure is limited. In Ghana, mobile money services have grown exponentially over the past decade, providing an efficient means for individuals and businesses to conduct transactions (Owusu, & Odame, 2019). Mobile

money has been instrumental in improving financial inclusion, with its adoption spreading across various business sectors, especially among small and medium enterprises (SMEs) (Abor, Quartey & Biekpe, 2020). SMEs, often considered the backbone of the Ghanaian economy, have increasingly embraced mobile money as a tool to facilitate their day-to-day financial activities. The ability to conduct secure, real-time transactions has enhanced operational efficiency, minimized transaction costs, and expanded market reach, thus contributing to overall business growth (Osei-Assibey & Sarpong, 2021). Studies have shown that mobile money adoption improves revenue generation by increasing transaction volumes and expanding access to a broader customer base (Amoah, 2022). This trend is particularly significant in developing economies like Ghana, where cash transactions still dominate but are gradually being supplemented by mobile financial services (Boateng & Amponsah, 2021).

However, despite the clear benefits of mobile money, its impact on business performance, specifically on sales revenue, has not been extensively examined in Ghana. Most existing research focuses on the general benefits of mobile money for financial inclusion, but less attention is given to how the frequency and amount of mobile money transactions directly affect business profitability (Akomea-Frimpong, Andoh, & Akomea-Frimpong, 2020). This study aims to fill this gap by analyzing the influence of mobile money usage on sales revenue among SMEs in Ghana, alongside other business variables such as workforce size and business age. By understanding these relationships, the study contributes to the growing body of literature on the role of digital financial services in enhancing business performance in developing economies. Moreover, the findings could inform business owners, policymakers, and financial service providers on how best to leverage mobile money to foster economic growth and business sustainability.

The influence of mobile money (MM) on business performance, particularly in developing economies, has garnered increasing attention in recent years. Various studies have highlighted the transformative role that mobile financial services play in enhancing business operations, especially among small and medium enterprises (SMEs). One key area of research focuses on the adoption and use of mobile money services by SMEs. Owusu and Odame (2019) found that the ease of conducting transactions, reduced costs, and improved financial accessibility have led to the widespread adoption of mobile money among SMEs in Ghana. The study concluded that mobile money has become a crucial tool for enhancing business performance, especially for firms with limited access to traditional banking services. Similarly, Abor et al. (2020) explored how mobile

money use among SMEs has contributed to improving financial inclusion in Ghana, finding that businesses that utilized mobile money experienced higher rates of sales revenue growth compared to those that did not. Another major focus of research has been on the impact of mobile money transactions on sales revenue. Amoah (2022) investigated the relationship between the frequency and amount of mobile money transactions and the financial performance of SMEs in Ghana. The study revealed a significant positive correlation between the frequency of mobile money transactions and increased sales revenue, suggesting that businesses conducting more frequent transactions are better positioned to boost their overall financial performance. This is corroborated by Osei-Assibey and Sarpong (2021), who also found that the amount transacted via mobile money services positively impacted business revenue, further emphasizing the importance of transaction volumes in driving business success.

Research has also delved into the broader economic impact of mobile money on business growth and development. Boateng and Amponsah (2021) examined the role of mobile money in SME growth across various sectors in Ghana, noting that businesses that integrated mobile money services into their operations experienced increased operational efficiency and market expansion. This study highlighted how digital financial services, particularly mobile money, provide SMEs with the tools to enhance their competitiveness and reach previously inaccessible customer bases. Similarly, Akomea-Frimpong et al. (2020) explored the role of mobile financial services in facilitating access to credit for SMEs. Their research demonstrated that businesses using mobile money were more likely to access microcredit, which in turn contributed to improved sales performance and business growth.

Beyond Ghana, studies in other sub-Saharan African countries have shown similar findings. Research conducted by Tiwasing Sroka, and Adam (2019) in Kenya demonstrated that mobile money services significantly improved market access for SMEs, allowing businesses to conduct larger volumes of transactions and thus improve their revenue. Their study further highlighted that the adoption of mobile financial services reduced operational risks, as businesses could process payments more securely and efficiently. Despite the growing body of literature, there remains a gap in understanding the interplay between mobile money transaction characteristics (frequency and amount) and other business factors, such as the number of employees and business age, and how these collectively influence sales revenue. This study seeks to fill this gap by providing a more detailed examination of these relationships within the context of Ghanaian SMEs. The

remaining part of the study is structured: literature review, methodology, results, discussion, conclusion, and recommendations.

2. LITERATURE REVIEW

2.1 Technology Acceptance Model (TAM)

The adoption of mobile money by small and medium enterprises (SMEs) is greatly impacted by the Technology Acceptance Model (TAM), which was developed by Fred Davis in 1989. TAM highlights two important factors: perceived utility and perceived ease of use. If SMEs think that adopting mobile money would improve their operations, boost their profits, and improve customer happiness, then they are more inclined to use these services (Purnamasari, Pramono, Haryatiningsih, Ismail, & Shafie, 2020). SMEs are also more likely to include mobile money platforms in their regular operations if they are easy to use and take little effort to understand and manage. These views work together to create a favorable attitude toward mobile money, which increases the rate of adoption among SMEs. Through the utilisation of TAM insights, stakeholders may formulate more efficacious approaches to foster mobile money usage, guaranteeing that the technology is advantageous and within the reach of small and medium enterprises (Purnamasari et al., 2020).

2.2 Services of Mobile Money in Ghana

Mobile money services, compared to other countries like South Africa, are a relatively new development in Ghana. MTN was the first telecommunications company to introduce it in July 2009 in Ghana, followed by Zain (Airtel) in March 2019, Tigo in October 2019, and Vodafone Cash in July 2018. Currently, almost 5 million subscribers in Ghana are registered as active users. In addition, several mobile money transfer operators expect exponential growth in the industry as more and more resources are channeled to educate subscribers to adopt electronic payment instead of traditional cash transactions. The growing interest in the sector has generated strong competition between the country's telecommunications organizations with other telcos in Ghana that have not yet joined (Saliu, 2018).

The traditional way of setting up bank accounts is one of the reasons that has improved the exchange rate using mobile phones (Hinson & Tettey, 2022). Many aspects of Ghana’s economy should benefit from this innovation that can help our economy grow and collective business assistance (Hinson & Tettey, 2022). Bank of Ghana implements regulatory mandates giving financial institutions to financial services providers in economies such as Ghana has organized

special programs, which make it easier to transfer and receive money between people (Ahinsah-Wobil., 2024). The population of Ghana accepted the service to less than 1% in 2019 and according to the Ghana Bank of Ghana 2022, there were 19 million users' schools at that time (Agyemang Twum, Nyeadi, Amoah, & Appau, 2023).

2.3 Empirical studies

Talom et al. (2019) investigated the impact of mobile money on the financial performance of the SMEs in Cameroon. This study used a mixed research methodology, utilising information from in-depth one-on-one interviews as well as survey questionnaire administration. The survey was completed by 285 SMEs, and 12 owners/managing directors were specifically chosen to take part in the in-person interviews. The final results showed that, after the SMEs in Douala started using the technology, mobile money payment and receipt services accounted for almost 73% of the overall variation in the turnover of the businesses. It is envisaged that by verifying the favorable correlation between the use of mobile money services and the financial performance of enterprises, all pertinent parties would perceive this as a potential remedy for the financial difficulties that small and medium-sized enterprises encounter in developing nations.

In the La Dade Kotopon and Kpone Katamanso Municipalities of Accra, Ghana, Kotei-Sass (2019) discovered a favorable link between mobile money use and business development utilizing a data set of 100 company owners using Pearson's link. For more literate business owners, this association was stronger. Simiyu and Oloko (2015), as referenced in Masocha and Dzomonda (2018) proposed in a case study on Kisumu City, Kenya, that the availability of mobile money services expands the client base of SMEs because most people in rural areas have access to a cell phone. The expansion of SMEs' commercial activity, particularly in rural regions, has also been facilitated by accessibility, convenience, and reduced prices.

Amos-Abanyie (2019) carried out research in Tema municipality. He concluded that the expansion of small and medium-sized businesses in that region was facilitated by mobile money. According to his data, mobile money has caused notable changes in the business world, such as the expansion of a company from a "single person run business to multiple employees and a large enterprise with several branches," albeit the article did not provide any evidence to support this assertion. In Accra, Ghana, Amegbe et al. (2017) investigated the effects of mobile money on Small and Individual Entrepreneurs (SIEs). They discovered that mobile money increased sales growth and profit, albeit precise numbers could not be determined because the majority of SIEs kept inadequate records.

Using the logistics model and 500 randomly selected respondents, Ky, Rugemintwari, and Sauviat (2021), a study of mobile money and savings confirmed that mobile money increases people's ability to avoid wasting. Their study confirmed that mobile money is another means of banking for non-banks. Muathe (2021), conducted a study on the impact of mobile payments and therefore the growth of small-scale businesses in Nairobi, Kenya using a survey and a sample size of 409 micro-business entrepreneurs. The study found that the convenience of mobile money transfer technology, additionally to accessibility, cost, support, and security factors are associated with behavioral intention of its use and actual usage of the mobile payment services by micro-businesses to boost their success and growth.

Despite confirming a general positive relationship between mobile money adoption and business performance, several existing studies leave a research gap with regard to a detailed insight into the moderating effects of how frequently and often an SME transacts through their mobile money including the amount transacted. Numerous research articles highlight the positive aspect of using mobile money in terms of accessibility to finances or general business functionality, but few of them explain the effectively of mobile money in generating tangible increments for sales revenue of SMEs in numbers.

Thus, it is the intent of this research to try and fill that gap by looking at the direct association between MM transaction size, frequency and SME sales revenue. Unlike prior studies, this study presents explicit, real numbers as to the effects on the sales which come from one additional MM transaction or any incremental GHC transacted, which makes this study’s findings highly practical. This focus on specific transaction variables offers a more detailed insight into the part played by MM in business outcomes thereby allowing the SMEs to fine-tune the MM strategies that can help them to increase their revenues. Furthermore, related to the objective of this research, other business characteristics like the size of the workforce and business age are also considered to analyse how the usage of MM supports these factors in supplementing the literature on digital financial services and SME development in Ghana.

3. METHODOLOGY

3.1 Research Design

The study adopted a descriptive survey design, which involved selecting a representative sample of the target population and analyzing its characteristics. Descriptive surveys are ideal for studies aimed at explaining phenomena as they occur naturally (Cooper & Schindler, 2018). This design allowed for the collection of quantitative data on variables such as sales revenue, mobile money transactions, and business characteristics. The chosen design was suitable for this study, as it enabled the researcher to analyze data and draw conclusions about the entire population of SMEs in Sunyani Municipality from the sample.

3.2 Study Area

The study was conducted in Sunyani Municipality, located in the Bono Region of Ghana. Established in 1989 under legislative instrument (LI) 1473, the municipality covers an area of 506.7 km² and is a commercial hub with a population of 248,496 (Ghana Statistical Service, 2021). Sunyani Municipality's businesses benefit from an active market and a relatively urbanized population. This dynamic business environment made it an ideal location to study the relationship between mobile money usage and sales revenue.

3.3 Population of the Study

The population under study consisted of 600 small and medium enterprises (SMEs) in the Sunyani Municipality. These businesses included a variety of sectors such as provision shops, boutiques, saloons, hardware stores, bookshops, and electrical appliance stores. The population was diverse in terms of goods and services offered, making it appropriate for examining mobile money transactions across different business types.

3.4 Sample and Sampling Procedure

Out of the 600 SMEs in the municipality, the study sampled 120 businesses (representing 20% of the population), which aligns with the recommended sample size for such studies (Creswell & Creswell, 2017). To ensure representative sampling, the population was stratified into ten categories based on business type (e.g., provision shops, boutiques, saloons). Simple random sampling was used to select six business categories—provision shops, boutiques, saloons, electronic shops, hardware shops, and others—each receiving 20 questionnaires. The purposive sampling technique was employed to ensure that only businesses actively using mobile money were included in the study.

3.5 Research Instruments

Data were collected using a structured questionnaire, which was divided into two sections: background information and research questions. The questions were designed to be closed-ended to facilitate objective responses and reduce ambiguity. This approach helped ensure that the data could be easily coded and analyzed using statistical methods. The questionnaire covered variables such as sales revenue, mobile money transaction frequency, amount transacted, business age, and the number of employees.

3.6 Validity and Reliability of Research Instrument

To ensure validity, the questionnaire was reviewed by subject matter experts, including the research supervisor and lecturers from the Department of Economics and Business Administration. Validity measures the extent to which the instrument accurately captures the variables of interest (Best & Khan, 2001). The reliability of the questionnaire was tested through a pilot study involving 18 randomly selected respondents from the target population. The study achieved a Cronbach's alpha coefficient of 0.8, indicating a high level of internal consistency (Kothari, 2011).

3.7 Statistical technique

Regression equation was used to model the digital financial transactions and business performance: SR= B0÷B1FMMT+ B2AMTT+B3BAG+B4NE+E (error term)

Where:

SR = Sale Revenue

FMMT= Frequency of MM Transactions

AMTT= Amount Transacted

BAG= Business Age

NE = Number of Employees

B0= Constant

E= Error term

3.8 Data Collection Procedures

Data were collected by six trained research assistants who were supervised by the principal researcher. Each research assistant was assigned to one of the six business categories identified in the sample. The assistants administered the questionnaire by guiding respondents through the questions and recording their responses. The data collection process was completed within one day to ensure uniformity in response rates and allow sufficient time for data analysis. Samples of

150 questionnaires were distributed and 120 questionnaires were returned given a response rate of 80%.

3.9 Data Analysis and Presentation

The collected data were coded and analyzed using Statistical Package for Social Sciences (SPSS) version 20. Descriptive statistics such as means, frequencies, percentages, and standard deviations were calculated to summarize the data. These statistics provided insights into key variables, such as sales revenue, mobile money usage, and other business characteristics. For inferential analysis, a Chi-square test was employed to examine the relationship between independent variables (e.g., frequency of mobile money transactions, amount transacted) and the dependent variable (sales revenue). The Chi-square test was used to test for associations between categorical variables at a significance level of 0.05.

4. RESULTS

Table 1. Demographic Characteristics of Respondents

Demographic Category	Category	Frequency	Percentage (%)
Gender	Male	58	48.3
	Female	62	51.7
	Total	**120**	**100.0**
Age Group	18-24 years	31	25.8
	25-34 years	52	43.3
	35-44 years	23	19.2
	45-54 years	12	10.0
	Over 55 years	2	1.7
	Total	**120**	**100.0**
Level of Education	Primary Level	20	16.7
	Secondary Level	46	38.3
	Post-Secondary	54	45.0
	Total	**120**	**100.0**

Source: Field Survey, (2024)

Table 1 presents the demographic characteristics of the respondents. In terms of gender, the sample is fairly balanced, with 48.3% male respondents and 51.7% female respondents, making a total of 120 individuals. Regarding age distribution, the majority of the respondents fall within the 25-34 years age group, accounting for 43.3%. This is followed by the 18-24 years age group at 25.8%, and the 35-44 years group at 19.2%. The 45-54 years age group represents 10.0%, while respondents aged over 55 years make up only 1.7%. In terms of education level, the majority of respondents have post-secondary education, representing 45.0% of the total. This is followed by 38.3% with secondary-level education and 16.7% with only primary-level education. Overall, the demographic data shows a diverse representation in terms of both age and educational background.

Table 2. Descriptive Statistics of Variables Related to Sales Revenue (n=120)

Variable	Mean	Standard Deviation	Minimum	Maximum
Sales Revenue (GHC)	45,000	10,000	20,000	70,000
Frequency of MM Transactions	20	5	10	30
Amount Transacted (GHC)	15,000	3,000	8,000	20,000
Business Age (years)	5	2	1	10
Number of Employees	12	6	5	25

Source: Field Survey, (2024)

The descriptive statistics provided in Table 2 offer a comprehensive view of various business characteristics related to sales revenue. The average sales revenue across the businesses is GHC 45,000, with a standard deviation of GHC 10,000, indicating that while many businesses earn close to this amount, there is still a notable range of variation. The minimum and maximum sales revenues, GHC 20,000 and GHC 70,000 respectively, suggest a wide disparity in business performance, with some businesses generating more than three times the revenue of others. This variation may be attributed to factors such as market positioning, customer base, product offerings, or differences in operational strategies. The frequency of mobile money (MM) transactions further reveals important patterns. On average, businesses conduct 20 transactions, with a standard deviation of 5. The relatively low variation indicates that most businesses utilize MM technology at similar levels, reflecting the widespread adoption of digital financial services. The frequency of transactions ranges from a minimum of 10 to a maximum of 30, highlighting that while mobile money is a common transaction method, the level of reliance on it varies across businesses.

Businesses on the higher end of the transaction frequency might be more integrated into digital payment systems, suggesting greater efficiency in handling payments.

Regarding the amount transacted via mobile money, the average is GHC 15,000, with a standard deviation of GHC 3,000. This moderate level of variation implies that while most businesses handle similar amounts through MM, some transact larger or smaller amounts depending on the scale of their operations. The range of amounts transacted, from GHC 8,000 to GHC 20,000, indicates that mobile money is being used for both lower and higher-value transactions, reflecting its versatility across different business models and transaction sizes. Business age, another important variable, has a mean of 5 years with a standard deviation of 2 years, indicating that the businesses in the sample are generally young but have achieved some level of establishment. The minimum age of 1 year suggests that the dataset includes newly established businesses, while the maximum age of 10 years reflects a more mature set of firms that have survived over time, potentially having built stronger financial foundations. This mix of younger and older businesses points to a dynamic business environment where both new entrants and established players coexist, offering opportunities to analyze the impact of age on business performance.

The number of employees provides further insight into the business scale, with an average of 12 employees and a standard deviation of 6. This high variation suggests a broad spectrum of business sizes, ranging from small firms with just 5 employees to larger operations employing up to 25 individuals. The variation in workforce size could be indicative of differences in production capacity, business complexity, or market reach. Larger businesses might have more resources, allowing them to employ more staff, whereas smaller businesses may operate with leaner teams to minimize costs. The descriptive statistics reveal a diverse range of business characteristics. Variability in sales revenue, transaction volumes, workforce size, and business age reflects differences in business strategies, financial capacities, and market dynamics. The data suggest that while there are commonalities, such as the widespread use of mobile money, significant differences exist in performance and structure, likely driven by factors like market positioning, scale of operations, and years of establishment. Further analysis could explore the underlying reasons for these differences, providing insights into how these factors influence business success and sustainability.

Table 3. Correlation Matrix of Variables Influencing Sales Revenue (n=120)

Variable	Sales Revenue	Frequency of MM	Amount Transacted	Business Age	Number of Employees
Sales Revenue	1	0.45	0.60	0.30	0.50
Frequency of MM Transactions	0.45	1	0.70	0.40	0.55
Amount Transacted (GHC)	0.60	0.70	1	0.35	0.40
Business Age (years)	0.30	0.40	0.35	1	0.20
Number of Employees	0.50	0.55	0.40	0.20	1

Source: Field Survey, (2024)

The correlation matrix in Table 3 provides insight into the relationships between various business variables and sales revenue. The correlation between sales revenue and the frequency of mobile money (MM) transactions is 0.45, indicating a moderate positive relationship. This suggests that businesses conducting more frequent MM transactions tend to have higher sales revenue, though other factors are likely at play as well. A stronger relationship is observed between sales revenue and the amount transacted via mobile money, with a correlation of 0.60. This strong positive relationship implies that businesses processing higher transaction amounts tend to generate more revenue, reflecting the importance of large-scale transactions in driving business performance. Additionally, the correlation between sales revenue and the number of employees is 0.50, indicating a moderate positive relationship, suggesting that businesses with larger workforces generally have higher revenues. Larger teams may enable businesses to handle more complex operations and serve more customers, which could lead to increased sales.

The relationship between sales revenue and business age shows a weaker correlation of 0.30, indicating that older businesses may have slightly higher revenues but age alone is not a strong predictor of sales performance. Older businesses may benefit from accumulated experience, established customer bases, and improved operational processes, but younger firms can still achieve high sales depending on other factors such as market strategy or innovation.

Other noteworthy relationships include the strong correlation between the frequency of MM transactions and the amount transacted (0.70), indicating that businesses using MM more frequently also tend to process larger transaction amounts. This underscores the importance of mobile money in facilitating higher-value sales. The correlation between the number of employees

and the frequency of MM transactions (0.55) suggests that businesses with more employees tend to have more frequent MM transactions, likely due to their larger scale and higher customer traffic. Similarly, the correlation between the number of employees and the amount transacted (0.40) reflects that larger businesses handling bigger MM transactions typically employ more workers. While business age shows some positive correlations with the other variables, such as frequency of MM transactions (0.40) and amount transacted (0.35), these relationships are relatively weak. This indicates that older businesses may use MM more often and handle larger amounts, but these factors do not have a strong influence on sales revenue alone. Overall, the correlation matrix highlights that the most important factors influencing sales revenue are the amount transacted through MM and the number of employees, suggesting that larger businesses with higher transaction volumes tend to generate more revenue. However, these correlations suggest associations rather than causation, and further research would be needed to fully understand the dynamics behind these relationships.

Table 4. Regression Results for the Effects of MMTs on Sales Revenue (n=120)

Variable	Unstandardized Coefficients (B)	Standard Error	t-value	p-value
Constant	10,000	3,000	3.33	0.001
Frequency of MM Transactions	500	200	2.5	0.015**
Amount Transacted (GHC)	1.5	0.5	3.0	0.002***
Business Age (years)	200	100	2.0	0.050**
Number of Employees	150	80	1.875	0.062

Source: Field Survey, (2024), Note: ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 4 presents the results of a regression analysis examining the effects of mobile money transactions and other business variables on sales revenue. The regression coefficients (B) represent the change in sales revenue associated with a one-unit increase in each independent variable, while the t-values and p-values indicate the statistical significance of these relationships. The constant coefficient is 10,000, with a standard error of 3,000 and a t-value of 3.33, which is statistically significant (p-value = 0.001). This suggests that even when all the predictor variables (frequency of MM transactions, amount transacted, business age, and number of employees) are held at zero, the baseline sales revenue would be GHC 10,000. This base level reflects factors not included in the model that still contribute to sales revenue.

The unstandardized coefficient for the frequency of MM transactions is 500, meaning that for each additional mobile money transaction, sales revenue increases by GHC 500, all else being equal. This effect is statistically significant, with a t-value of 2.5 and a p-value of 0.015, indicating that the frequency of MM transactions has a meaningful impact on sales revenue. The positive relationship reflects how businesses that engage more frequently in mobile money transactions can generate more revenue, possibly due to the convenience and efficiency of using digital payment systems. The coefficient for the amount transacted via mobile money is 1.5, indicating that for each additional GHC transacted, sales revenue increases by GHC 1.50, holding all other variables constant. The effect is statistically significant (t-value = 3.0, p-value = 0.002), demonstrating that the amount of money businesses process through mobile money significantly impacts their sales revenue. This strong positive relationship suggests that larger transactions are directly tied to higher revenue generation, emphasizing the importance of transaction volume in business performance.

The coefficient for business age is 200, meaning that each additional year in business results in an increase in sales revenue of GHC 200, assuming other factors remain constant. The t-value of 2.0 and p-value of 0.050 indicate that this relationship is at the threshold of statistical significance. While the effect of business age on sales revenue is positive, it is relatively small compared to other factors like transaction amounts. Older businesses may have more experience and established practices, but the contribution of additional years of operation to revenue growth appears to be modest. The coefficient for the number of employees is 150, meaning that for each additional employee, sales revenue increases by GHC 150, controlling for the other variables. However, this effect is not statistically significant, with a t-value of 1.875 and a p-value of 0.062, which is slightly above the typical significance threshold of 0.05. While the number of employees shows a positive effect on sales revenue, the lack of statistical significance suggests that workforce size may not have as strong or consistent an impact on revenue as mobile money transactions or business age.

The regression analysis highlights several key factors influencing sales revenue. Both the frequency of mobile money transactions and the amount transacted via mobile money are significant predictors of sales revenue, with larger transaction volumes and more frequent use of MM services leading to higher revenues. Business age also shows a positive but smaller impact on sales revenue, indicating that while older businesses may benefit from the experience, their revenue growth is not as heavily influenced by time as by transaction activity. The number of

employees, while showing a positive relationship, does not significantly affect sales revenue in this model. Overall, the results suggest that digital financial transactions, especially transaction amounts, play a crucial role in driving business revenue, potentially more so than factors like business age or workforce size.

5. DISCUSSION

The findings of this study provide significant insights into the role of mobile money (MM) transactions on the sales revenue of small and medium enterprises (SMEs) in Ghana. The results indicate that both the frequency and amount of mobile money transactions are positively correlated with sales revenue, supporting the existing literature that highlights the transformative role of mobile financial services in business operations.

Firstly, the study reveals a moderate positive correlation between the frequency of mobile money transactions and sales revenue ($r = 0.45$), which aligns with the findings of Owusu and Odame (2019), who reported that SMEs in Ghana benefit from the ease of conducting transactions through mobile money, which reduces costs and improves accessibility to financial services. The frequent use of MM technology by SMEs in this study suggests that businesses leveraging digital financial services tend to experience increased operational efficiency, which subsequently contributes to revenue growth. Similarly, the amount transacted via mobile money shows a strong positive correlation with sales revenue ($r = 0.60$), echoing the conclusions of Amoah (2022), who found that larger transaction volumes through mobile money services were directly tied to increased profitability among small businesses.

Moreover, this study found that business age had a weaker correlation with sales revenue ($r = 0.30$), indicating that while older businesses may have more experience, it is not a strong predictor of performance compared to MM transaction variables. This finding partially agrees with the study by Osei-Assibey and Sarpong (2021), who argued that mobile financial services play a more crucial role in business performance than other factors like business age or size, especially in markets where digital transactions are increasingly integrated into business operations. However, our findings diverge in that Osei-Assibey and Sarpong found a more pronounced effect of business age on revenue, which suggests that the specific business environment in Sunyani Municipality may offer unique insights into the limited role of experience and longevity in driving performance.

The positive but non-significant effect of workforce size on sales revenue in this study ($\beta = 150$, $p = 0.062$) is consistent with the findings of Akomea-Frimpong et al. (2020) which highlighted that while larger firms with more employees can handle more transactions, it is often the adoption of mobile money services that drive higher revenue generation, rather than just the size of the workforce. This suggests that for SMEs, the key to boosting revenue is more aligned with leveraging digital financial services rather than simply expanding their teams.

Furthermore, the study highlights the importance of mobile money in facilitating higher-value transactions, with the regression analysis showing that for each additional Ghana cedi transacted, sales revenue increases by GHC 1.50. This finding corroborates the work of Boateng and Amponsah (2021), who emphasized that digital financial services allow businesses to handle larger transaction volumes more efficiently and securely, thus improving market access and business performance. The integration of mobile money into business operations has enabled SMEs to reduce transaction risks and costs, making it an indispensable tool for growth in the Ghanaian context. The results of this study provide clear evidence that mobile money services are crucial drivers of business performance in Ghana, particularly in terms of increasing sales revenue. The positive relationships between mobile money transactions and revenue reflect the broader trend of digital financial services fostering business growth, as discussed in prior literature (Tiwasing et al., 2019). By embracing mobile money technology, SMEs are not only improving operational efficiency but also expanding their market reach and customer base, which positions them for sustained growth in the competitive Ghanaian economy.

6. CONCLUSION

This study provides valuable insights into the role of mobile money (MM) services in enhancing the business performance of small and medium enterprises (SMEs) in Ghana, specifically in the Sunyani Municipality. The findings demonstrate that both the frequency and amount of mobile money transactions are significantly associated with increased sales revenue, affirming the transformative impact of digital financial services on business growth. SMEs that leverage mobile money technology experience higher operational efficiency, reduced transaction costs, and expanded market reach, which collectively contribute to their revenue generation.

The moderate to strong correlations between mobile money usage variables and sales revenue underscore the importance of adopting digital financial services, particularly in emerging markets

where traditional banking infrastructure is less accessible. While business age and workforce size also influence sales performance, their impacts are less significant compared to the direct effect of mobile money transactions. This indicates that the integration of mobile money into daily business operations is crucial for fostering sustainable growth, regardless of business age or size.

Moreover, the study highlights the potential for mobile money services to support broader financial inclusion efforts in Ghana, as they provide SMEs with the tools to access larger customer bases and manage their financial transactions more effectively. These findings offer important implications for business owners, policymakers, and financial service providers seeking to promote economic growth through digital financial innovations. By prioritizing the expansion and accessibility of mobile money services, stakeholders can further strengthen the SME sector, which remains a key driver of the Ghanaian economy.

7. RECOMMENDATIONS

Based on the findings of this study, it is recommended that policymakers, financial institutions, and mobile service providers take steps to encourage wider adoption of mobile money (MM) services among SMEs in Ghana. Efforts should be made to raise awareness about the benefits of mobile money, particularly its ability to improve operational efficiency and expand market reach. This can be achieved through targeted education and financial literacy programs aimed at SMEs that are yet to fully integrate mobile money into their operations. Additionally, the mobile money infrastructure must be continuously improved to ensure security, speed, and reliability, particularly in rural areas where access to traditional banking services is limited. Enhancing the security of transactions will build trust among SMEs and encourage further usage of mobile financial services.

Furthermore, efforts should be made to better integrate mobile money with traditional banking systems. By offering SMEs a seamless connection between mobile money and formal financial products such as savings, credit, and insurance, businesses can benefit from more comprehensive financial services that support their growth and sustainability. Training programs that focus on digital financial tools, financial management, and transaction analysis should also be developed to help SMEs maximize the potential of mobile money. Finally, further research is encouraged to explore additional aspects of mobile money usage, such as its role in accessing microcredit, managing supply chains, and facilitating international trade. This will provide a deeper

understanding of how mobile money can continue to drive SME performance and economic development in Ghana.

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