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Exploring the Benefits and Challenges of Mobile Technology in Ghanaian Small-Scale Enterprises

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Abstract
This study explored the use of mobile technology among entrepreneurs and managers of micro and small-scale businesses in the Akuapem North district of Ghana. The key findings revealed that many entrepreneurs and business managers utilized more than one mobile phone or subscribed to multiple network providers. This behavior was driven by several factors, including the desire to make more affordable calls, access better service quality from various network providers, enhance business operations, ensure security, and manage their extensive contact lists effectively. These insights highlight the significant role of mobile technology in the business strategies of small-scale enterprises in the region. In addition to marketing and sales purposes, the managers and entrepreneurs in the study used mobile phones for a variety of other business-related activities. These included gathering information, managing product delivery and procurement, and handling internal affairs. A Chi-square test further confirmed that mobile phone usage had a positive impact on their businesses, helping to improve customer service, enhance communication with suppliers and customers, facilitate the opening of new branches, stay competitive, and ultimately increase profits. However, despite these benefits, respondents also identified several occasional challenges associated with mobile phone usage. These included issues such as poor reception, sound distortion or calls breaking up, and calls ending unexpectedly. These challenges highlight some of the limitations in the mobile infrastructure that can affect the efficiency of business operations.
Keywords: Mobile Technology, Small-Scale Businesses, Ghana
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1. INTRODUCTION

Micro and Small Enterprises have garnered significant attention in recent times from policymakers, politicians, and economic analysts due to their crucial role in economic development. According to Fan (2003), small-scale businesses are considered the engines of economic growth, essential for fostering a competitive and efficient market, and vital in reducing poverty. Roldan and Wong (2008) further emphasize that micro, small, and medium enterprises (MSMEs) play a key role in creating employment, generating income, and redistributing economic opportunities. Similarly, Mazumdar (2001) highlights that MSEs support non-agricultural household enterprises, showcasing their broad contribution to various sectors. In Ghana, the importance of MSEs is particularly well recognized, with Social Security & National Insurance Trust (SSNIT) reporting that about 90% of companies in Ghana fall into this category, employing fewer than 20 people. A notable trend in Ghana has been the increasing display of mobile contact numbers on the signage and shops of MSEs, a practice once associated primarily with medium and large-scale businesses, which typically listed fixed-line numbers. This shift indicates that owners and managers of MSEs are embracing the advancements in information and communication technology (ICT) that Ghana is experiencing. While there are numerous studies on MSEs and mobile phone usage, most of the existing research focuses on urban areas, leaving a gap in understanding how rural and semi-rural MSEs utilize mobile technology.

Key questions arise, such as: Do semi-rural MSEs use mobile phones? If so, how do they use them? What factors motivate their use of mobile phones, and how beneficial have they been to their businesses? What challenges do they face in using mobile phones? Addressing these questions is important for filling the gap in the literature and providing insights into the role of mobile technology in semi-rural business environments. Therefore, this study aims to explore these questions by focusing on a semi-rural district in Ghana, the Akuapem North district, as a case study. The findings from this research will help bridge the existing knowledge gap and shed light on the impact of mobile phone usage on MSEs in less urbanized regions.

2. LITERATURE REVIEW

The literature highlights several advantages enjoyed by mobile phone users, particularly in the context of business operations. Kakihara and Sorenson (2002) identify key characteristics of mobile phones, such as interactivity, spatial mobility, temporal mobility, and contextual mobility, which are not available when using traditional landlines. Mobile phone users also benefit from flexibility, connectivity, ubiquity (Barnes, 2002), and location awareness (Henfridsson and Lindgren, 2003), all of which can significantly enhance the operational efficiency of organizations (Barnes, 2002). Rayport and Jaworski (2004) further emphasize that mobile phones facilitate efficient production, aid in the distribution and marketing of products and services, and help businesses understand international markets (Hooper et al., 2010).

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Additionally, Madon (2000) and Khalil (2003) have highlighted the direct link between electronic communication, information access, and poverty reduction (Ojukwu, 2006). Earl (1988) argues that organizations that invest in ICT, including mobile technology, benefit from a competitive edge, improved productivity and performance, innovative management and organizational strategies, and the development of new business opportunities (Ojukwu, 2006). Esselaar et al. (2007) also note the ease of mobile phone usage, which requires minimal training, making it accessible to a wide range of users. Roldan and Wong (2008) underscore the importance of mobile phones for micro and small-scale businesses. They assert that mobile phones serve as productive tools, facilitating the gathering and dissemination of information and creating networking opportunities. Mobile phones allow business owners to conduct transactions, such as completing orders or bids, which helps save valuable time. Furthermore, by eliminating economic boundaries, mobile phones enable users to reach business partners or customers easily, thus expanding their market reach. The networking potential of mobile phones is also highlighted, as the use of mobile technology increases the likelihood of encountering new business opportunities. Jensen (2007) adds that mobile phones help achieve better prices for services and reduce price dispersion (Rabayah and Qalalwi, 2011).

Aker and Mbiti (2010) identify five key benefits of mobile phone usage for both consumers and producers. These include improved access to and use of information, which reduces search costs, enhances coordination among agents, and increases market efficiency. Mobile phones also improve productive efficiency and facilitate communication among social networks in response to shocks, thereby reducing households' exposure to risk. According to Corbett (2008), the recent surge in mobile phone usage in Africa has led policymakers to consider mobile technology as a transformative tool with the potential to alleviate poverty through innovative applications and services (Aker and Mbiti, 2010). However, it is important to note that several factors may influence the use of mobile phones by enterprises. Zhang and Yuan (2002) mention the costs associated with mobile phone usage, while Hooper and Zhou (2007) highlight the personal attributes of the user, the influence of others, and the motivation to use mobile technology. Additionally, Mehrtens et al. (2001) discuss the perceived organizational benefits and organizational readiness as factors influencing mobile phone adoption (Hooper et al., 2010). These factors underscore the complexities surrounding the adoption and utilization of mobile technology by businesses, particularly in developing economies.

Several empirical studies have confirmed the numerous benefits associated with mobile phone usage, particularly for small-scale entrepreneurs. One notable study by Samuel et al. (2005) found that around 60% of micro-entrepreneurs in South Africa, Tanzania, and Egypt reported increased business profitability as a result of mobile phone usage (Donner, 2006). Another significant study by Jensen (2007) examined the impact of mobile phones on the fishing industry in Kerala, India. The study observed that mobile phone coverage led to a reduction in the dispersion of fish prices across different markets and resulted in an 8% increase in the profits of fishermen (Rabayah and Qalalwi, 2011). Esselaar et al. (2007) conducted a survey across 14 African countries and found that entrepreneurs with mobile phones primarily used them to maintain contact with customers and clients more frequently than any other mode of communication. In Ghana, Boadi et al. (2008) studied the impact of mobile phone usage on farmers and fishermen, discovering that mobile commerce (m-commerce) helped reduce costs and offered opportunities for deepening both internal and external business relationships. Muto and Yamano (2009) explored the impact of mobile phones on agricultural markets in Uganda, using a panel dataset on farm households from 2003 to 2005. Their findings suggested that mobile phone coverage increased farmers' market participation probability for perishable crops, like bananas, by 10%, compared to crops like maize (Aker and Mbiti, 2010). This indicated that mobile phones are especially valuable for managing perishable goods in markets. In Palestine, Rabayah and Qalalwi (2011) conducted a study between 2007 and 2009 and found that mobile phone penetration surpassed other ICT indicators. They discovered that 84% of enterprises used mobile phones for information-related purposes that were valuable for their businesses. Additionally, 38% of respondents used their mobile phones to manage internal operations, while 84.4% reported an improvement in their responsiveness to customers. However, the study also highlighted that enterprises showed less concern for other potential benefits of mobile phones, such as lowering operational costs, improving product and service quality, staying competitive, or bypassing middlemen. These studies underscore the significant role that mobile phones play in enhancing business efficiency, profitability, and market participation, particularly in developing economies and sectors reliant on time-sensitive products like agriculture and fishing. However, they also suggest that some enterprises may underutilize mobile technology's full potential, particularly in areas like cost reduction and improving service quality.

3. METHODOLOGY

The Akuapem North District, established in 1988 by Legislative Instrument (LI) 1430, was previously part of the Akuapem District Council, which was formed in 1975. Akropong serves as the district capital, with other major towns including Mampong, Adukrom, Larteh, Abiriw, Awukugua, Mamfe, and Dawu. Located in the southeastern part of Ghana's Eastern Region, the district is approximately 58 km from Accra, the capital of Ghana. Covering an area of about 450 sq. km, it represents 2.3% of the total land area of the Eastern Region. Agriculture is the primary occupation of the district's population, with major crops such as cassava, maize, yam, plantain, potatoes, fruits, and vegetables being cultivated. In addition, non-traditional products like snails and mushrooms are gaining prominence, offering opportunities for investors to tap into emerging export markets and earn foreign currency. The arts and crafts industry also thrives in the district, with artisans excelling in ceramic production and wood carving. The manufacturing industry, which employs over 50% of those working in the industrial sector, is another significant contributor to the district's economy. This sector encompasses carpentry, bakery, pottery, and blacksmithing. The agro-industry sector includes activities such as oil palm production, rice milling, corn milling, flour milling, mushroom cultivation, beekeeping, and carbolic soap production.

For this study, three towns—Akropong (the district capital), Adukrom, and Mampong—were specifically selected. These towns were chosen because they are the largest in the district and have a relatively high concentration of Micro and Small Enterprises (MSEs), which would aid in the research. Since there was no official data on registered small-scale businesses in the district, the study targeted 100 respondents, focusing on business owners or managers. The primary data collection instrument used was a questionnaire, chosen for its ability to provide standardized responses. To ensure accuracy, the questionnaires were administered to business owners, managers, or individuals in positions that allowed them to answer the questions reliably. Two research assistants were deployed to the selected towns to collect data between December 20, 2011, and January 28, 2012. Out of the 100 targeted respondents, 94 completed and returned the questionnaires, which were used for the study's analysis. The data collected was analyzed using SPSS version 16.0, providing valuable insights into the research objectives.

4. RESULTS AND DISCUSSIONS

The study delved into several key aspects related to the use of mobile phones by micro and small-scale entrepreneurs/managers, including demographic characteristics, the number of mobile phones and networks registered, the uses and benefits of mobile phones for business, as well as the challenges encountered. The results provided valuable insights, helping to draw conclusions and offer policy recommendations regarding mobile phone usage among business owners in the district. In terms of gender distribution, the study revealed that 52.1% of respondents were female, while 47.9% were male, indicating that a majority of business owners or managers were women. Regarding age distribution, the largest group of respondents (44.7%) were between the ages of 26-35 years, followed by those aged 16-25 and 36-45, both at 19.1%. Respondents aged 46-55 made up 12.8%, and those aged 55 and above accounted for 4.3%. This suggests that most business owners and managers were relatively young and energetic. The study also examined the ages of the businesses themselves. The minimum age of a business was 7 months, while the maximum was 36 years, with an average business age of 8.37 years. A closer analysis showed that 41.3% of the businesses were less than six years old, 40.2% were between 6-12 years, 13% were between 13-19 years, and 5.5% were between 20 and 36 years old. Regarding the type of business, the largest group (39%) belonged to the tailoring/carpentry sector, followed by wholesale/retail at 23.4%, accommodation/catering at 19.2%, and printing/communication at 18.2%. The number of employees in the businesses ranged from one to 15, with an average of 2.76 workers.

The study further explored the duration of mobile phone usage among respondents. It found that 35.5% of respondents had been using mobile phones for 1-3 years, 46.2% had used them for 4-7 years, and 18.3% had been using mobile phones for over eight years. The research also investigated how many phones and SIM cards the entrepreneurs or managers used, as well as the number of network subscriptions they had. The findings revealed that the majority of respondents (73.4%) used one mobile phone, while 22.3% used two phones, and small percentages (2.1% each) used three or four phones. Regarding SIM cards or network subscriptions, 51.1% of respondents subscribed to one network, 37.2% subscribed to two networks, 6.1% subscribed to three networks, 4.3% subscribed to four networks, and 1.1% subscribed to all five networks available in the country at the time. At the time of the study, five mobile telecommunication networks were operational in Ghana: Tigo Ghana Limited, MTN Ghana, Vodafone Ghana, Expresso, and Airtel Ghana, while a sixth network, Glo Mobile, had been licensed but was not yet operational. Thus, the findings indicate that a majority of respondents used one or two of the available networks, with a few subscribing to more than three.

Table 1: Number of Mobile Phone and Sim cards usage

	Mobile Phones	
Number of Phones	Frequency	Percentage
1	69	73.4
2	21	22.3
3	2	2.1
4	2	2.1
	Sim Cards/network	
Number of sim cards/ network	Frequency	Percentage
1	48	51.1
2	35	37.2
3	6	6.4
4	4	4.3
5	1	1.1

Source: Field Survey

Table 1 presents data on the number of mobile phones and SIM cards/networks used by respondents, based on a field survey. The table is divided into two sections: one for mobile phone usage and another for SIM card or network usage, providing both frequency and percentage for each category. For mobile phones, the majority of respondents, 69 individuals (73.4%), reported using one phone. A smaller portion, 21 respondents (22.3%), uses two phones. A minimal number of respondents, 2 each (2.1%), use either three or four phones. This suggests that most respondents prefer to use a single mobile phone, with a smaller percentage opting for two or more devices. Regarding SIM cards or network usage, 48 respondents (51.1%) reported using one SIM card, making up just over half of the sample. 35 respondents (37.2%) use two SIM cards, indicating that a significant portion of respondents manages multiple network connections. A smaller

group uses three (6.4%) or four SIM cards (4.3%), and only 1 respondent (1.1%) uses five SIM cards. In summary, the data indicates that while most respondents use one mobile phone and one SIM card, a notable proportion of the population prefers to manage multiple SIM cards and even multiple phones, possibly for reasons related to coverage, cost, or personal and professional separation.

Table 2: Factors considered in the choice of a network

Indicator	Percentages
Coverage	61.7
Cost of using phone	44.7
Phone functionality	20.2
Business activity	45.5
Reception	74.5
Customer services	33.3

Table 2 presents the factors considered by respondents in their choice of a mobile network, based on percentages derived from a field survey. Each indicator reflects the importance of various factors influencing network selection. The most significant factor is reception, with 74.5% of respondents considering it a key aspect when choosing a network. This suggests that the quality of the network signal and clarity of communication are the highest priorities for most users. The second most important factor is coverage, with 61.7% of respondents identifying it as a critical criterion. This emphasizes the importance of having a network that provides widespread and reliable coverage in different geographical locations. Business activity is a factor for 45.5% of respondents, indicating that many users select a network based on how well it supports their business needs, such as reliability and cost-effectiveness for frequent calls or data usage. The cost of using the phone influences 44.7% of respondents. This suggests that affordability is also an important consideration for nearly half of the users, who are likely concerned with call rates, data plans, and overall expenses. Customer services is noted by 33.3% of respondents, reflecting that while not the top factor, the quality of customer support and responsiveness is still a consideration for one-third of users.

Lastly, phone functionality is considered by 20.2% of respondents. This suggests that while a smaller portion of users prioritize how well a network integrates with their phone's features, it remains relevant for those who seek compatibility between their device and the network's offerings. In summary, the most critical factors for network choice are reception, coverage, and business activity, with cost, customer service, and phone functionality playing secondary but still important roles in influencing decisions.

Table 3: Mobile Phone Usage relating to business activities

Usage	Percentage
Data Processing	7.4
Marketing/sales	56.4
Product delivery/procurement	47.9
Managing internal operations	39.4
Banking services	12.8
Gathering information	57.4
Internet access	27.7

Table 3 presents data on how respondents use their mobile phones in relation to business activities, based on percentages from a field survey. Each usage category reflects the extent to which mobile phones are integrated into various aspects of business operations. The most common use of mobile phones is for gathering information, with 57.4% of respondents using their devices for this purpose. This indicates that a majority of respondents rely on their mobile phones to obtain business-related information, whether it's market research, industry news, or other relevant data. Closely following this is marketing/sales, with 56.4% of respondents utilizing their phones for promoting and selling products or services. This highlights the importance of mobile phones in reaching customers, managing sales, and driving business growth. Product delivery/procurement is a function for 47.9% of respondents, suggesting that nearly half of the participants use their phones to coordinate logistics, track deliveries, or manage the procurement of goods.

Managing internal operations is a usage category for 39.4% of respondents. This indicates that mobile phones are also used to streamline or monitor internal business processes, such as communication with employees, scheduling, and workflow management. Only 12.8% of respondents use their mobile phones for banking services, such as managing business accounts, making transactions, or checking financial records. While this percentage is lower, it reflects the growing trend of mobile banking adoption in business contexts. Internet access is used by 27.7% of respondents, suggesting that over a quarter of participants access the web through their phones for various business purposes, such as research, communication, or cloud-based services. Finally, data processing is the least common activity, with only 7.4% of respondents using their phones for this purpose. This indicates that most respondents likely rely on other devices or systems for data-heavy tasks. The table shows that mobile phones are widely used for gathering information, marketing/sales, and product delivery/procurement, with less frequent use for banking services and data processing. This

highlights the critical role mobile phones play in customer engagement and operational efficiency, though their use in financial and data-heavy tasks remains limited.

Table 4: Frequency of services usage

Service	Frequently (%)	Occasionally (%)	Never(%)
Voice calls	96.8	3.2	0.0
Send text message	44.7	37.2	18.1
Access the internet	27.7	5.6	66.7
Access email	18.9	8.9	72.2
Video calls	6.7	10.0	83.3

Table 4 presents the frequency of various mobile phone service usages by respondents, divided into three categories: frequently, occasionally, and never. The data highlights how different services are used by respondents based on the percentages provided from the field survey. The most frequently used service is voice calls, with 96.8% of respondents using them frequently. Only 3.2% of respondents use voice calls occasionally, and no respondents reported never using this service, indicating that voice calls remain the primary function of mobile phones for nearly all users. Sending text messages is frequently used by 44.7% of respondents, while 37.2% use this service occasionally, and 18.1% never send text messages. This suggests that while a significant portion of respondents still rely on texting, its usage is more sporadic compared to voice calls. Accessing the internet is frequently used by 27.7% of respondents, while 5.6% use it occasionally. However, a notable 66.7% of respondents reported never accessing the internet via their mobile phones, indicating that mobile internet use is less common for this group, with a large majority not utilizing it.

Accessing email is even less common, with only 18.9% of respondents using it frequently, and 8.9% using it occasionally. A large majority, 72.2%, reported never using their mobile phones to access email, showing that email services are not a widely used feature for this group. The least frequently used service is video calls, with just 6.7% of respondents using it frequently, and 10.0% using it occasionally. A substantial 83.3% of respondents reported never using video calls, suggesting that this service is rarely utilized in this group. In summary, voice calls are the most commonly and frequently used service, while sending text messages remains popular but less frequent. A significant portion of respondents do not use the internet or email on their mobile phones, and video calls are rarely used. The data indicates that traditional services like voice calls dominate mobile phone usage, while advanced services such as internet access and video calls have lower adoption rates.

Table 5: Benefit from using mobile phones

Benefit	Percentages	Chi square test
Lower operational cost/increased savings	55.9	1.301
Improved customer services	39.8	3.882**
Improved communication with suppliers/customers	68.8	13.172***
Open up new branch	9.7	60.484***
Improved product/service delivery	16.1	42.677***
Keep up with competitors	20.4	32.527***
Increased profit	11.8	54.204***

, * indicate level of significance at 5% and 1% respectively

Table 5 presents the perceived benefits of using mobile phones for business purposes, along with the results of a Chi-square test to determine the significance of each benefit. The percentages represent the proportion of respondents who identified each benefit, while the Chi-square values assess the statistical significance of the association between mobile phone usage and these benefits. The most commonly cited benefit is improved communication with suppliers/customers, with 68.8% of respondents recognizing this advantage. The Chi-square test for this benefit yields a significant result (13.172*), indicating a strong association at the 1% significance level, meaning it is a key benefit of mobile phone usage for businesses. Lower operational costs/increased savings is identified by 55.9% of respondents as a benefit of using mobile phones. However, the Chi-square test result (1.301) is not significant, implying that while this is perceived as a benefit, the relationship between mobile phone usage and reduced operational costs may not be as statistically strong.

Improved customer services is acknowledged by 39.8% of respondents. The Chi-square test result (3.882) is significant at the 5% level, indicating a moderate association between mobile phone usage and enhanced customer service. A smaller proportion of respondents, 20.4%, believe that mobile phones help businesses keep up with competitors. However, the Chi-square value (32.527*), significant at the 1% level, indicates a strong statistical relationship between mobile phone usage and staying competitive. Only 16.1% of respondents see mobile phones as improving product/service delivery, but the Chi-square result (42.677*), significant at the 1% level, shows that those who do perceive this benefit experience a strong positive impact. Opening up new branches is considered a benefit by 9.7% of respondents, and the Chi-square test result (60.484*), significant at the 1% level, shows a highly significant relationship between mobile phone usage and expanding business operations by opening new branches.

Increased profit is identified by 11.8% of respondents, but the Chi-square test result (54.204*), also significant at the 1% level, suggests a strong association between mobile phone usage and profit growth.

The table shows that the most widely recognized benefits of mobile phone usage are improved communication with suppliers/customers and lower operational costs. However, the Chi-square tests reveal that benefits like opening new branches, increasing profit, and improving product/service delivery have statistically stronger relationships with mobile phone usage, even if fewer respondents identify them. Significant results at the 1% and 5% levels indicate that mobile phones are valuable tools for enhancing various business operations, with particularly strong links to profitability and competitiveness.

Table 6: Challenges in using mobile phone

Challenge	Over all percentage	Regular Percentage	Occasionally percentage
No reception	94.6	34.4	65.6
Calls end unexpectedly	82.6	19.2	80.8
Poor sound quality/breaking up of sound	88.0	18.3	81.7
Unable to send text message	65.9	16.9	83.1
Unable to receive text Message	60.4	27.0	73.0

Table 6 provides an overview of the challenges respondents face while using mobile phones, with percentages reflecting the frequency at which each issue occurs. The table breaks down the challenges into three categories: overall percentage of respondents who experience the issue, those who experience it regularly, and those who face it occasionally. The most common challenge is no reception, experienced by 94.6% of respondents. Of those, 34.4% face this issue regularly, while 65.6% encounter it occasionally. This highlights that signal problems are widespread, though they tend to occur more intermittently for most users. Poor sound quality or breaking up of sound is another major challenge, affecting 88.0% of respondents. Only 18.3% report this issue regularly, while the majority, 81.7%, experience it occasionally. This suggests that sound quality is often a problem, though it is more sporadic than constant.

The challenge of calls ending unexpectedly affects 82.6% of respondents, with 19.2% experiencing it regularly and 80.8% occasionally. Like sound quality issues, this problem occurs more often intermittently than regularly. For inability to send text messages, 65.9% of respondents face this issue, but only 16.9% encounter it regularly, while 83.1% experience it occasionally. This indicates that while it is a frequent issue, it tends to happen less consistently for most users. The inability to receive text messages affects 60.4% of respondents, with 27.0% experiencing it regularly and 73.0% occasionally. This challenge is relatively less common compared to the others but still affects a significant portion of users. The most prevalent issues are no reception and poor sound quality, followed closely by calls ending unexpectedly. Most challenges are experienced occasionally rather than regularly, indicating that while mobile phone issues are frequent, they do not tend to persist continuously for the majority of users.

5. CONCLUSION

This study examined the use of mobile technology among entrepreneurs and managers of Micro and Small Enterprises (MSEs) in the semi-rural Akuapem North district of Ghana. The findings revealed that the majority of respondents used a single mobile phone and had subscribed to only one network out of the five mobile telecommunication operators available in the country at the time. A smaller number of respondents used two, three, or even four mobile phones, or subscribed to multiple networks. These individuals cited reasons such as the need to make more affordable calls and to avoid poor service quality from certain network providers. This suggests that, while mobile technology is widely used, the quality of service and cost efficiency remain important factors influencing network and phone choices for MSEs in the district. In addition to affordability and service quality, respondents also cited business purposes, security concerns, and the need for sufficient phone storage to maintain contact numbers as reasons for using multiple mobile phones or subscribing to more than one network. When selecting a network, the top factors considered by the entrepreneurs and managers were reception, network coverage, and the nature of their business activities. Other factors that influenced their choice of network included the cost of using the phone, the quality of customer service provided by the network, and the functionality of the mobile phone itself. These insights highlight how practical business needs, alongside cost and service quality, shape mobile phone usage among MSEs in the Akuapem North district. In terms of business activities and mobile phone usage, more than half of the respondents reported using their phones for marketing and sales purposes, as well as for gathering information. Additional uses of mobile phones included facilitating product delivery and procurement, managing internal affairs, accessing the internet, conducting banking services, and processing data. The study also found that nearly 97% of respondents used their phones primarily for making voice calls, followed by sending text messages and accessing the internet. Video calling was the least utilized service among the respondents. Mobile phone usage has provided significant benefits to MSEs in the Akuapem North district of Ghana. The findings revealed that mobile phones have helped lower operational costs and increased savings for many businesses. Additionally, they have improved customer service, enhanced communication with suppliers and customers, facilitated the opening of new business branches, and enabled MSEs to stay competitive in their respective markets. Ultimately, the use of mobile technology has

contributed to increased profits for these businesses, underscoring its positive impact on their overall operations and growth. Despite the many benefits MSEs derive from mobile phone usage, respondents also reported several challenges. The top three issues identified were lack of reception, poor sound quality or breaking up of sound, and calls ending unexpectedly. Additional problems included difficulties in sending and receiving text messages. However, respondents noted that these challenges were experienced only occasionally. As a result, only 30.1% of respondents actively sought to address the issues they faced. Their strategies for tackling these challenges included contacting their network providers either by phone or through in-person visits to their offices, as well as switching to other networks they believed would offer better service quality. Given these findings, it is recommended that businesses not yet utilizing mobile phones should consider adopting the technology to take advantage of its numerous benefits. Furthermore, additional research could be conducted to explore how these occasional mobile phone challenges affect business activities and whether addressing these issues more proactively could enhance business performance.

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