

EMPIRICAL EVALUATION OF THE USE OF CELL PHONES AND CUSTOMER LOYALTY IN SMALL AND MEDIUM SCALE ENTERPRISES IN GHANA

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Abstract

Every business person looks at all directions for the best, and that should be the reason why they will employ every type of method (technology) in the operations of their business activities; and hence the use of mobile phones by small and medium scale entrepreneurs. The objective of this study is to examine and analyze customer base, customer relationship enhancement, and customer loyalty of the micro-entrepreneurs that use mobile phones in their business operations. The researchers used descriptive research design, specifically case study, which allowed the researchers to make detailed observations about the use of mobile phones and the effects the usage brings about. Simple Random Sampling Techniques was used in the selection of the sample size for the study. The researchers waited and collected the questionnaires

answered instantly from the respondents. This was done to have impartial judgment and individual views about the variables. Questionnaires and structured interview questions were used to collect data from the participants. The findings showed that customer base increased, there is improvement in the management of relationships created between customers and the organizations, and customers become loyal to the small scale organizations. It is recommended that SMEs must use mobile phones for business operations.

Keywords: Cell phone, Mobile telephony, Customer Loyalty, Micro-Enterprises, Customer Base

INTRODUCTION

Attracting and satisfying customers have become a hot issue, and desires presently shown by organizations are seen as the very reason for their existence. Customer loyalty has become more important to organizations in the sense that, they view it as gateway to their success and growth. In this era of rapid changes in the Information Communication Technology (ICT), many organizations are making frantic efforts to apply it in the operations of their businesses to improve customer services, which can lead to retaining them. Customers in most cases know what is available elsewhere because suppliers make maximum efforts to contact them directly in order to provide information to them in that direction.

The critical issue for the continued success of organizations is their capability to retain current customers and make them loyal to their brands (Dekimpe *et al.*, 1997). Loyal customers build businesses by buying more, paying premium prices and providing new referrals through positive word of mouth over time (Ganesh *et al.*, 2000). In telecommunications services, it is frequently pointed out that once customers have been acquired and connected to the telecommunications network of a particular operator; their long-term relations with the focal operator are of greater importance to the success of the company in competitive markets than they are in other industry sectors, (Gerpott *et al.*, 2001).

Various researches have already shown that companies need to focus on customer retention more than grabbing new customers, for it is always said that a bird in hand, worth more than two in the bush. It is more difficult retaining a customer than it is getting a new one (Hallowell, (1996). Increasing competition in the global market of production and distribution of goods and services, as well as challenges of globalization could create difficulty in obtaining customers, so therefore, the organizations must be able to care, satisfy, maintain customers, and make it easy for customers to become loyal to organizations. Building customer loyalty to a company is very important, as it is not just simple function for department of marketing, but it is a philosophy and a way of thinking about how to attract customers, satisfy them so that they can

buy more of company's products, and this is the responsibility of all members of staff in organization.

Statement of the Research Problem

Despite an increasing awareness in research literature on the importance of mobile technologies for Small and Medium Enterprises (SMEs) in the development context, there is still inadequate study on mobile phones adoption, usage and its impact on marketing activities within SMEs in Ghana as well as in other developing countries. There is a need to explore how their adoption and usage are improving economic development and the extent to which mobile phones usage is practiced within SMEs (Bugeja, 2005). Little is known about the impact of mobile phone usage on contemporary small and medium scale enterprises in Ghana and particularly in the Volta Region.

Small and medium scale business operators are commonly seen in the country holding at least two cell phones. Observation shows that they make voice calls many times in a day but one cannot judge instantly if calls are directed to customers, suppliers, employees or any other stakeholders of their business enterprises for the purpose of business operations. It is however noted with certainty that every user of mobile phones in the country communicates with friends, brothers, sisters, parents, as well as other family members. This could be referred to as usage of cell phones for social purposes.

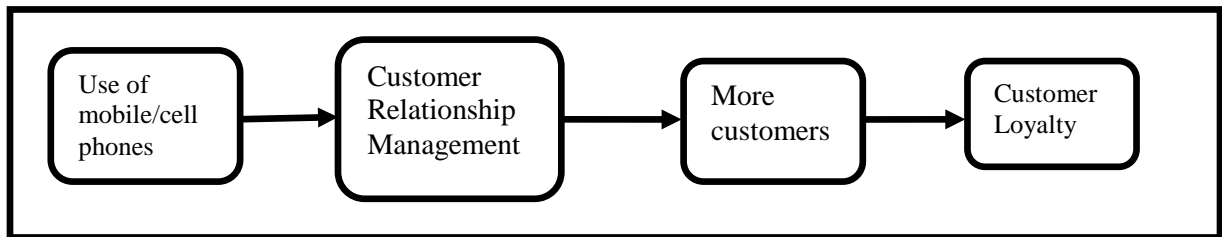
Mobile phones usage in the operations of SMEs is seen as catalyst for development because it has been seen as indispensable in the operations of business activities. The way business operations are carried out nowadays is changing with the use of cell phones because customers and suppliers can now transact business anywhere and anytime; thus making competition among customers and suppliers keener and keener.

The rate at which the number of users of cell phone is increasing indicates that there is some good benefit derived by them. Literatures from researchers mention some advantages users of mobile phone enjoy. For instance, Kakiara and Sorenson (2002) talked of the key characteristics of interactivity, spatial mobility, temporal mobility, and the contextual mobility associated with the use of mobile phones that are not available when using a landline.

According to Rayport and Jaworski (2004), mobile phones facilitate more efficient production, help in the distribution and marketing of products and services, and also help to gain an understanding of international markets (Hennig-Thurau, & Klee, (1997). Manish, (2001) highlighted that there is a direct link between electronic communication/information access and poverty reduction.

In most cases, people see the small scale enterprise operators only as mere users of cell phones; even they make voice calls with cell phones both at home and work but it is not clear to anyone the real purpose for which they use phones. It is again difficult to see or experience if the use of mobile phones contributes to customers becoming loyal to the enterprises. If phone communication is taking place, instant response is made and problems can be solved instantly. This can encourage customers to keep transacting business with the suppliers.

Figure 1. Mobile phones in CRM and Customer Loyalty



Every organization that commits itself to invest in ICT has the benefits of gaining competitive edge; improving productivity and performance; facilitating new ways of managing and organizing; and of developing new businesses (Goodwin, & Gremler, 1996).

Objectives of the Research

Since there is some amount of knowledge already existing with the use of mobile phones by Small and Medium Enterprises owners, this study is undertaken to examining and analyzing the effects of mobile phones usage on customer base, and customer loyalty of microenterprises. To achieve the above broad objectives, the study is to:

1. Establish the relationship between use of mobile phones in the operations of microenterprises and customer base
2. Evaluate customer relationship with the use of mobile phones
3. Analyze if the use of mobile phones in microenterprises make customers become loyalty to the enterprises

LITERATURE REVIEW

The issue of what constitutes a Small or Medium Enterprise (SMEs) is a major concern in many research literatures (Abor, et al, 2010). Different authors have usually given different definitions to this category of business. SMEs have indeed not been spared with the definition problem that is usually associated with concepts, which have many components.

The definitions of SMEs can be based on capital investment, the number of employees, economic, cultural and social dimensions (Ahmad, R. and Buttle, F. (2002); Abor, et al, (2010) said, the definition of SMEs varies from country to country and researcher to researcher, so is the situation in Ghana. Mead and Liedholm (1998) acknowledged the various definitions given for small scale enterprises in Ghana just as in other countries without losing sight of the most commonly used criterion for defining SMEs in Ghana; being the number of employees and the fixed assets of the enterprise.

In its industrial statistics, the Ghana Statistical Service (GSS) considers firms with fewer than 10 employees as small scale enterprises and their counterpart with more than 10 employees as medium and large size enterprises. Ironically, the Ghana Statistical Service in its national accounts considers companies with up to 9 employees as SMEs (Kayanula and Quartey, 2000).

However, the National Board for Small Scale Industries (NBSSI) in Ghana applies both the “fixed asset and number of employees” criteria in defining Small Scale Enterprises (SSEs). It defines an SSE as a firm with not more than 9 workers, and has plant and machinery (excluding land, buildings and vehicles) not exceeding 10 million Cedis (one thousand Ghana Cedis). In defining small-scale enterprises in Ghana, Steel and Webster (1991), used an employment cut-off point of 30 employees. Osei *et al* (1993), however, classified small-scale enterprises into three categories. These are: (i) micro - employing less than 6 people; (ii) very small - employing 6-9 people; (iii) small - between 10 and 29 employees.

A more recent definition is the one given by the Regional Project on Enterprise Development Ghana Manufacturing Survey Paper. The survey report classified firms into: (i) micro enterprise, less than 5 employees; (ii) small enterprise, 5 - 29 employees; (iii) medium enterprise, 30 – 99 employees; (iv) large enterprise, 100 and more employees (Teal, 2002). The Ghana Enterprise Development Commission (GEDC), on the other hand, used the value of fixed assets of a firm to define SME in Ghana. It quoted 10 million Cedis (one thousand Ghana Cedis) as the upper limit definition for plant and machinery. It is important to caution that the process of valuing fixed assets poses a problem. Secondly, the continuous depreciation of the local currency as against major trading currencies often makes such definitions outdated (Kayanula and Quartey, 2000).

From the various definitions across countries and across sectors, it is obtrusive to note that the number of employees and fixed assets have been used primarily as important measures in defining SMEs throughout the globe. However, the ambiguity lies in the arbitrary way of determining the cut-off point for number of employees that qualify a firm as micro, small, medium and large enterprises. In applying the definition of SMEs based on number of

employees in a firm, confusion arises in respect of the arbitrariness in cut of point used by the various official sources (Mead, and Liedholm, 1998). For instance, whereas Thailand considers a firm with 200 employees in manufacturing as SMEs, Malaysia considers firms with 150 employees in manufacturing as SMEs, some countries including Ghana consider firms with as low as '10 employees' cut-off for SMEs. The different cut-offs in the definition of small scale and medium enterprises all over the world, is creating problems for researchers in classifying these types of organizations. This makes it very difficult to reach one generalised definition of the term SMEs.

Although very little research has been done on SMEs usage of mobile telephone in Ghana, available researches ignored definitions based on different cut-off for different sectors such as manufacturing, services and commercial activities (wholesale and retail).

According to the Ghana Living Standard Survey (GLSS) 2000, the economy of Ghana is invariably dominated by the activities of enterprises (micro, small and medium) in the informal sector. It is estimated that, in terms of economic activities, about 86.3% is carried out by the self-employed sector mostly operating informal structures. This shows that SMEs dominate all other economic activities in Ghana and most probably in other African countries, although their individual incomes are very small. This is due to the way they are operated and the perception the owners have in their operations. For the purpose of this research, SMEs considered are those registered with the National Board for Small Scale industries (NBSSI) and those not registered but have characteristics that are similar to those registered.

Mobile Telecommunication Technology and Operations of SMEs

The growing knowledge and information base economies have not only imparted the social, economic and cultural lives of people, but also have positively affected corporate organizations in all spheres of their business operations, (Laudon & Laudon, 2006). For the last two hundred years, economists have recognised only two factors of production: labour, and capital; this is however changing presently. Information and knowledge are replacing capital and energy as the primary wealth creating-assets. Information has become a critical resource, a priceless product and basic input to progression and development. Information has become synonymous with power. Therefore, accurate, reliable, and timely as well as relevant information is considered to be essential for businesses particularly, SMEs (Combs, 1995). To take full advantage of the knowledge and information age of doing business, both large and SMEs must move in tune with the technologies and systems that are revolutionizing the operations of firms, industries and markets (Laudon & Laudon, 2006).

A combination of information technology, innovations, and the changing domestic and global business markets/environment make the role of IT in business even more important for owners and managers than just a few years ago. The internet revolution is not something that happened and then burst; instead, it has turned out to be an ongoing, powerful source of new technologies with significant business implications for much of the century. According to Laudon and Laudon (2006), there are five factors to consider when assessing the growing impact of IT in business firm both today and years to come. These factors include:

- Emergence of digital firm: firms are going digital to access business opportunities both within and outside the local environment,
- Growth of knowledge and information-base economies,
- Growth of globally connected economies,
- Transformation of the business enterprises, and
- Internet

Today, changing the global flows of information, trade and investment, and the competitiveness of the market does not only rest on the power of the internet technology, but also on other communication technologies such as the mobile telephones and landlines (Combs, 1995).

These challenges have been classified as business related (Frempong, 2009). Also, there are challenges related to quality of service provided by the service providers. The major challenge just stated above was the difficulties involved in getting telephone calls to go through at critical times due to network problems. Late delivery of text messages pose difficult situation for SMEs. Text messages are not delivered exactly at time they are needed to make important business decision, (Frempong, 2009).

Customers Base

With critical look at the survey made by Frempong, it is established that SME operators use mobile phones to communicate with their customers to check on their debtors, follow-up on goods delivered or services rendered to their customers and inform customers on the progress of their orders. This is to ensure that very strong relationship is being established between the SMEs operators and their customers; real Customer Relationship Management using mobile phones. This implies that customers' problems of all kinds could be addressed in the shortest possible time with the application of cell phone in the communication process.

Mobile phone usage gives SMEs operators easy access to link up with suppliers and customers, government agents, providers of credits, and any other group of persons who are concerned in the operations of their businesses. According a survey carried out by Frempong, respondents asserted that if for some time they had not heard about their customers, the use of

mobile phones helped them to get in touch and inform them of new products. This they said have improved their sales and customer relationship. The use of mobile phone reduced transportation cost leading to a reduction in overall business expenditure. Travelling and its associated risks are reduced and time is saved for other business activities. This eventually leads to increased profitability (Frempong, 2009). Also in Ghana, Boadi et al. (2008) studied the impact of the use of mobile phone on farmers and fishermen and found that mobile commerce or m-commerce facilitated cost reduction for farmers and fishermen, and offered them opportunities for deepening internal and external business relationships with the stakeholders.

Fishermen in India use mobile phones to collect information on availability of markets for their fish. The fishermen again use mobile telephony to gather information on prices of fish at different ports. This enables them to locate the place where price for the fish is high so that they can land their catch at that place, (Rai, 2001). According to Rai (2001), the flexibility of the mobile technology enables the fishermen to seek information while on the sea.

Similarly, the Chinese are using mobile phones for e-commerce, home shopping, and share trading (Laperrouza, 2002). Not too distant past, the only way to find out about market situation was to physically travel to national capitals to seek for such information (Frempong, 2009). Today, this has been made easier via the introduction and use of mobile technology, especially in areas where there are no landlines or there are but limited accesses (Frempong 2009).

Creating closer relationship with customers and effective management of customer relationship can increase the customer base. It is the desire of every organization to win and maintain customers in order to increase revenue and eventually boost profit. With the use of mobile phones, operations of SMEs become more or less easier, faster, and dynamic thus increasing productivity and number of customers a result of providing good and fast service to them. Wining and maintaining customers is possible with the use of mobile phones.

Customer Loyalty

Value is a thing that many people like to own. In most cases everybody looks for value in everything that he or she owns or does. It is the value that moves human beings to do things. For this reason, every supplier aims at providing value to customers. Value offered to a customer implies adding something to the core product that the customer perceives as important, beneficial and of unique value (Oliver, 2006). Most companies are concerned about providing value to customers and thoroughly understand customer's value chain and are able to reduce customer-perceived sacrifice (ibid). Maintenance and improvement of the acceptable value chain towards establishing and managing good relationship with the customers induces

them to remain with a particular supplier. It is therefore essential for business operators to offer something valuable to customers in the production of goods and services and in other processes especially interacting with them. Reward and promotional offers, which may aim at gaining customer satisfaction and trust, can be undertaken, purposely to augment customer loyalty. As noted by Zeithaml, (1988), customers will judge the value derived from the consumption of an organization's products after contrasting benefits gained from the goods and services with their costs. This behaviour of a customer can make him or her remains with the organization or leave to another. A customer can move to another organization if the value created by the first organization is not satisfying enough.

Customer loyalty is characterized by continuous purchasing of goods and/or services from one supplier for a longer period of time and not transferring by the fluctuation of the market. There are many factors that win customers to an organization and retain them in order to make them become loyal to the company. Customer relationship management, which quite recently have become very important to suppliers as part of creating value to customers emerge as a result of the use of the present technologies.

Customer loyalty is the most important goal of implementing relationship marketing activities. Oliver (1999) defined customer loyalty as a deeply held commitment to re-buy or re-patronize a preferred product or service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts have the potential to cause switching behavior.

Customers are the driving force for profitable growth and customer loyalty can lead to profitability (Hayes, 2008). For a customer, loyalty is a positive attitude and behavior related to the level of re-purchasing commitment to a brand in the future (Kuo-Ming, 2009).

Loyal customers are less likely to switch to a competitor solely because of price and they even make more purchases than non-loyal customers (Bowen and Shoemaker, 2003). Loyal customers are also considered to be the most important assets of a company and it is thus essential for vendors to keep loyal customers who will contribute long-term profit to the business organizations (Tor, & Bodil, 1998).

Attempt to make existing customers increase their purchases is one way to strengthen the financial growth of a company (Hayes, 2008). Furthermore, organization's financial growth is dependent on a company's ability to retain existing customers at a faster rate than it acquires new ones (Ibid). Managers must therefore note that the journey to sustainable expansion and existence moves through all customers not only attracting new ones but retaining existing customers, motivating them to spend more and getting them to recommend products and services to the other people.

There are research evidences suggesting that stronger relationship and commitment continuously offered to buyers, results into repeated patronage, (Wulf et al. 2003). Several factors have been identified to influence customer loyalty. Zins (2001) postulates that corporate image, service quality and customer satisfaction are some of the factors that influence customer loyalty. Nguyen and Leblanc (2001) discovered that corporate image relates positively with customer loyalty in three sectors (telecommunication, retailing and education).

RESEARCH METHODOLOGY

The descriptive research design technique employed for this research made it such that quantitative data was easily gathered, edited and analysed. The choice of this method was largely driven by the following factors: It allows for simple and easy interpretation to the ordinary person and is easy to apply. The quantitative nature of the data ensures easy analysis and mostly leads to conclusions that are logical.

As the name implies, descriptive research methods are used when a researcher wants to describe specific behavior as it occurs in the environment. This means that the research was set to describe the relationship between the use of mobile phones and customer base, and loyalty to small and medium scale enterprises. There are a variety of descriptive research methods available. Traditionally, descriptive research involves three main categories: observation, case studies, and surveys.

A case study is chosen for this study, since the study involved making detailed observations about the use of cell phones in the operations of businesses. The researchers' intention was to examine closely the qualities of an organization that uses cell phone communication systems. Many variables can be employed in the descriptive research for analysis. For example, a descriptive study might employ methods of analyzing correlations between multiple variables by using tests such as Pearson's Product Moment correlation, regression, or multiple regression analysis.

Good examples of this are, McKenna's (1993) study of the relationship between attributes of a radio program and its appeal to listeners, Orey and Nelson's (1994) examination of learner interactions with hypermedia environments, and Shapiro's (1991) study of memory and decision processes.

The area for the research was the central business areas of Ho, Aflao and Denu, and Hohoe. These locations are the capital towns of the Municipal, and District Assemblies, Ghana; but Ho serves as the Regional and as well as the Municipal Capitals. Ho and Hohoe are emerging urban centers with a population of about 2,099,876 (Ghana Statistical Service – available at www.statsghana.gov.gh, accessed: 2014-12-29) and predominantly inundated with

public servants, private business people mostly owning small and medium scale businesses, peasant farmers and a large number of unemployed youth.

Most of the formal SMEs within the study area are engaged in activities that range from hospitality and catering services, furniture manufacturing, dress-making, hairdressing, general repairs, wholesaling, retailing businesses, etc. The retailing business includes sale of food items, household appliances, pharmaceuticals and hardware – building materials, equipment and spare parts. Informally, petty trading is a dominant preoccupation in the towns selected for the study.

The population considered for the research covered small and medium scale enterprises operating in the Ho and Hohoe Municipalities, and Denu and Aflao towns. The business community was heterogeneous in terms of variety of operations but homogenous in nature. An enquiry made at the Internal Revenue Service (IRS) and the National Board for Small Scale Industries (NBSSI) revealed that there are over four hundred (400) registered Small and Medium scale Enterprises (SMEs) in the four study areas chosen. The estimated size of the target population was about 500.

A sample size of two hundred (200) Small and Medium scale Enterprises in the four study areas (where most of SMEs are located) were selected to represent a cross section of the entire population of business enterprises in the study areas. The sample size covered approximately 50% of the total number of such enterprises registered within the areas. Since the sample size constitutes about one half of the total number of officially recognised SMEs, it was deemed adequate enough as a basis for arriving at conclusions that could be applied to the entire SME population within the study areas and for that matter the entire Volta Region of Ghana. Three hundred (300) employees and managers of the Small and Medium Enterprises were selected to participate in the research.

Based on the research design and the availability of a list of SMEs in Ho, Hohoe, Denu, and Aflao which served as the sampling frame, the Simple Random sampling method was employed to select enterprises for the research. The names of the enterprises in the study area were arranged in an alphabetical order with code numbers (serial numbers from 001-200) assigned to them. The code numbers were written on pieces of paper and placed in a box, shuffled and a person was made to pick each number randomly without replacement until all two (200) enterprises were selected. In the case of choosing the respondents, they were then asked to willingly participate in the research. The Simple Random Technique was chosen due to the fact that it gives every member of the population a fair and equal chance to be selected to represent the population and therefore eliminated any discretionary practice and also reduced biasness.

The main instrument for the study was questionnaire which was designed with open and closed-ended questions. Open-ended questions were involved to create opportunity for the respondents to provide their independent views concerning certain issues. The questions set were simple to be understood by the respondents because their educational background was very much considered. In limited instances interview was conducted to supplement the data collected with the questionnaire.

Before the questionnaire was taken to the field, it was pre-tested. The essence of pre-testing was to find out if the questionnaire would elicit the appropriate responses. The pre-testing was done on three of the selected SMEs by asking them to fill in the questionnaire, after which a few short-comings that were detected had been addressed to perfect the questionnaire. In order to ensure that the pre-testing is valid and reliable, Cronbach's Alpha was used to analyse the result. This analysis of the pre-test is shown in Table 1 below:

Table 1: Validity and Reliability Test

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	TOTAL
1	3	2	5	3	4	3	5	6	7	8	5	4	5	6	66
2	5	5	6	4	6	5	3	3	4	3	6	3	3	2	58
3	7	2	4	5	2	6	5	6	5	4	3	0	2	3	54
4	2	4	4	4	3	4	3	5	4	3	5	1	1	1	44
5	7	5	3	3	2	3	0	4	3	1	3	4	3	2	43
6	4	5	5	6	5	4	5	3	4	3	2	3	2	2	53
7	2	4	2	5	4	5	4	2	6	2	1	2	2	0	41
8	3	5	6	6	6	2	3	6	4	3	3	1	1	2	51
9	7	3	5	7	4	3	6	4	3	4	2	3	1	1	53
10	6	0	4	3	3	4	1	2	4	3	2	2	0	3	37
11	6	4	4	3	2	3	2	0	2	1	1	1	0	2	31
12	2	3	0	2	8	5	3	5	1	3	2	1	2	0	37
13	4	6	2	3	2	1	4	2	2	2	3	1	1	2	35
14	5	7	3	2	3	2	0	1	3	3	1	3	2	1	36
15	3	4	4	5	4	3	2	2	1	4	0	0	5	1	38
TOTAL	63	57	52	58	54	50	41	51	53	47	39	29	30	28	677
var	3.39	3.1	2.6	2.3	3.1	1.8	3.3	3.5	2.4	2.6	2.3	1.5	1.6	2.1	35.54
k	14														
\sum var	35.54														
var	95.32														
α	0.68														

From Table 1 as shown above, the alpha (α) as calculated using the Cronbach's formula is 0.68. This means that the reliability test must be accepted.

The questionnaires were directly administered to the selected SMEs personally by the researcher. In view of the fact that the study required the participation of human respondents,

specifically operators and employees of SMEs, certain ethical issues were addressed as part of the data collection process prior to the administration of the questionnaires. The consideration of these ethical issues was necessary for the purpose of ensuring that the rules of confidentiality were not broken. Among the significant ethical issues that were considered in the data collection processes included obtaining respondents' consent prior to the exercise as a means of respecting the rights of respondents and also tagging no names to the responses.

Only relevant details that would help in answering the research questions were demanded by the researcher. Respondents were also informed that they were at liberty to withdraw midway into the exercise if they in anyway felt that the rules of confidentiality and privacy were being broken. This was done to encourage the respondents to willingly participate in the exercise.

In order to ensure successful data collection, the researcher explained all the important details of the study, including its aim and purpose to all the selected respondents. By relaying these important details to them, the respondents were able to appreciate their relevance to the entire exercise and the need for them to participate actively. It was evidenced from the above therefore that respondents were not on any occasion coerced to participate in the research.

EMPIRICAL RESULTS

Data collected were analysed using Statistical Package for Social Sciences (SPSS) and the main results obtained from the analysis are given below:

Table 2: Using Mobile Phones for Business Operations

		Do you have a mobile phone for your business		Total
		Yes	No	
Which services do you use your mobile phone for	Short Message System	42	0	42
	Voice Call	206	0	206
	Mobile Money	0	52	52
Total		248	52	300
Chi-Square Tests				
	Value	Df	Asymp. Sig. (2-sided)	
Pearson Chi-Square	300.000 ^a	2	0.000	

The table above shows that 248 respondents have cell phones for business use while 52 of them do not have cell phones for business use. This implies that the 52 respondents owned cell phones but not exclusively for business use; but may be for social interactions. Out of those

respondents who have phones for use in their businesses, 206 use the mobile phones for voice calls but 42 of them use their phones for Short Message Systems (SMS). Even though those who claim they do not have phones for business use said that they use phones for mobile money. This means that, they have different reasons for buying the cell phones but some of them however use them for some form of interaction with stakeholders for business operations. Chi-square was used to test the data with P value of 0.00 and this falls below the significance level of 0.05 showing that the data was significant with degree of freedom of 2.00 and Pearson Chi-square value of 300.000^a. This implies that all respondents use mobile phones for business operations and the usage is in different ways (voice call, SMS, and mobile money).

Table 3: Improvement in Customer Loyalty

		Have you experienced an improvement in customer relationship with the use of cell phones		Total
		Yes	No	
Has the use of mobile phone improved your communication with customers	Yes	208	8	216
	No	0	84	84
Total		208	92	300
Chi-Square Tests				
	Value	Df	Asymp. Sig. (2-sided)	
Pearson Chi-Square	263.768 ^a	1	0.000	

Total number of 216 participants in the research said that the use of mobile phones has improved their communications with stakeholders, but 84 of them also said that the use of mobile phones has not improved communications with customers and suppliers. But out the total number of 216 respondents who admit that the use of mobile phones has improved communications, 208 of them agree that there is improvement in customer relationship management in their organizations and 8 of them claim that they have not noticed any improvement in customer relationship management. Again this data was also tested with Chi-square Test with P-value of 0.00 which is lower than the significance level of 0.05, therefore the data can be said to be significant with the degree of freedom (df) 1, and the Pearson Chi-square of 263.768^a. The meaning of this, is majority of the respondents admit that mobile phone usage has improved communication with customers and suppliers, and has improved customer

relationship management with the organizations. This implies that improvement in communication with customers leads to better management of relationship with customer.

Table 3: Management of Customers Relationship

	Mean	Std. Deviation	Strongly Disagree		Disagree		Undecided		Agree		Strongly Agree	
			Frequency	Percent	Frequency	Percent	Frequency	percent	Frequency	percent	Frequency	percent
Created a closer link between you and your customers	4.5500	.72289	-	-	1	0.3%	38	12.7%	56	18.7%	205	68.3%
Has made customer relationship management more effective	4.6467	.69047	2	0.7%	1	0.3%	22	7.3%	52	17%	224	74.7%
Increased your customer base	4.6800	.76565	1	0.3%	6	0.2%	31	10.3%	12	4%	250	83.3%

With the mean of 4.5500 and standard deviation of 0.72289, 1(0.3%) respondent disagree that the use of mobile phones has created a closer link between the microenterprises and their customers, 38(12.7%) respondents are undecided, 56(18.7%) respondents agree while 205 (68.3%) strongly agree that the use of mobile phones creates closer link between customers and small scale enterprise operators

Furthermore, with a mean of 4.6467 and standard deviation of 0.69047, 2(0.7%) respondents strongly disagree with the statement that mobile phones usage has made customers' relationship management with the microenterprises more effective; 1(0.3%) respondents disagree with the statement. However, 22(7.3%) respondents are undecided. Again, the table shows that 51(17%) and 224(74.7%) agree and strongly agree that the use of mobile phones in the operations of small scale enterprises has substantially improved customer

relationship management in the organizations. This may be due to the closer link established between customers and small scale industry operators with the use of mobile phones.

Again, with a mean of 4.6800 and standard deviation of 0.76565, 1(0.3%) respondents strongly disagree that the use of mobile phones has increased customer base, 6(2%) respondents disagree with the statement, while 31(10.3%) respondents are undecided on the statement. Finally, 12(4%) and 250(83.4%) respondents agree and strongly agree respectively that the use of mobile phones increase the number of customers to the enterprises.

Table 4: Customer Retention and Loyalty

	Mean	Std. Deviation	Strongly Agree		Agree		Undecided		Disagree	
			Frequency	percent	Frequency	percent	Frequency	percent	Frequency	percent
Customer loyalty and retention have been enhanced	1.7133	1.03992	197	65.7%	12	4.0%	71	23.7%	20	6.6%
Saves a lot of time	1.1837	0.42862	250	83.3%	45	15.0%	5	1.7%	-	-
Increase in customer base	1.2183	0.6356	183	61.0%	76	25.3%	10	3.3%	31	10.4
Effective customer relationship management	1.3463	1.2518	206	68.7%	84	28.0%	-	-	10	3.3%
Expansion in business	1.6211	0.6482	185	61.7%	77	25.7%	17	5.6%	21	7.0%

From the table above, with a mean value of 1.7133 and standard deviation of 1.03992, 197(65.7%) respondents strongly agree that customers are retained and become loyal to the organizations with the use of mobile phones in the operations of business, 12(4%) of the respondents agree with the statement. However, 71(23.7%) are not certain, and 20(6.6%) of the respondents disagree. This implies that majority of the small scale business operators and their employees have retained their customers over longer periods (may be due to the fact that the use of mobile phones contributes to the way business transactions are carried out with the

customers). Also, with a mean of 1.1837 and standard deviation of 0.42862, 250 (83.3%) respondents strongly agree and 45 (15.0%) of the respondents agree that using cell phones in the operations of business, a lot of time has been saved, but 5 (1.7%) of the respondents do not know for certain if time has been saved with the use of cell phones. The study therefore shows that majority of the respondents agree that cell phone usage makes them save lot of time.

The analysis of data revealed a mean value of 1.2183 and standard deviation of 0.6356 leading to 183 (61.0%) of the respondents and 76 (25.3%) strongly agree and agree that the use of cell phones, customer base has increased in their organizations. However, 10 (3.3%) respondents are uncertain about increase in customer base, and 31 (10.4%) disagree the statement that customer base increased. The implication is that majority of the participants are sure of customer base increasing as a result of using cell phones in the operations of business.

For the mean value of 1.3463 and standard deviation of 1.2518, 205 (68.7%) strongly agree that effective customer relationship management have been achieved with the use of mobile phone, 84 (28%) agree with the statement that customer relationship is effectively maintained and only 10 (3.3%) disagree with the statement. This shows that majority of the participants agree that with the use of mobile phones in the operations of their businesses, customer relationship management has been carried out effectively.

In the analysis those participants who were not decided on the above statements would be the operators and employees of small and medium scale enterprises who do not use mobile phone for business operations.

DISCUSSION OF RESULTS

Results of the study show that most of the small and medium scale entrepreneurs own cell phones which they use for the operations of business in their respective organizations. Only few of them own cell phones but they do not use them for the purpose of their business. For them, the emphasis is on the usage for social interactions like calling friends, parents, and other relatives but in very few cases they send short messages to customers and suppliers; and because the study is not aimed at finding what social interactions cell phones are used for, researchers are silent on that issue. Many small scale business operators use the cell phone to make voice calls and very few of them use the phones for Short Message Systems (SMS) to their customers, suppliers, and other stakeholders. It is clear from the study that mobile phones are used in the operations of small and medium scale businesses, and the usage is for varied purposes but main usage is voice calls. This may be due to the fact that with the writing of short messages, few minutes may be consumed and they do not want to spend too much time on the usage of cell phones in the executing business transactions.

There is improvement in communication between small scale business operators and their stakeholders. Majority of the participants confirm this because they said that a two-way communication exists between them and they are continuously in contact with their customers and suppliers as well as debtors and creditors. As the suppliers communicate with the customers, debtors and other stakeholders, any problem that confronts either of them is solved in the shortest possible time. This two-way communication establishes good relationship between them.

Being in contact with customers and debtors, establishment of good and perpetual relationship between them is achieved. This leads to customers making repeated purchases from their suppliers. Many business operators who use cell phones see substantial improvement in customer loyalty. That means, customers remain with them for a considerable length of time. This is the result of the appreciable good quality of relationship existing between them as result of using the cell phone in the operations of business.

Customers always look for satisfaction from their suppliers. This satisfaction could be in terms of the product they buy and consume, services delivered to them toward effective utilization of the products purchased, the care provided to them, or otherwise. In this research, the participants confirm that their customers are satisfied with the relationship created and maintained between them. With effective communication leading to the establishment of good relationship between them, satisfaction is obvious. Small scale business operators have expectations for the use of mobile phone in their businesses. They claimed that their expectations are satisfied. The expectations for the use of mobile phones in the operations of business range from increase in the customers base, reduction in cost of operations, establishment of good and lasting relationship with customers, customer retention, good and fast service delivery to customers, and the others.

There is improvement in the services provided to customers as a result of the use of mobile phones. Mobile phones usage by the small scale entrepreneur enables managers to develop a closer link with their customers. With this closer link created between them, the small scale entrepreneurs are able to serve their customers well and this brings about effective management of the relationship established between the entrepreneurs and their customers. The entrepreneurs affirm that there is improvement in the management of customer relationship. Customer base (winning of new customers and retaining the existing ones) is also achieved when the entrepreneurs use mobile phones in making their business transactions. The increase in the customer base leads to increase in sales and revenue.

Retention of customers and customer loyalty are high in the small scale industries as a result of using mobile phone in carrying out business transactions. This is affirmed by majority of

the small scale business operators having claimed that they note that customers stay with them over longer period of time as far as they continue using the phone to serve them.

Profits of the entrepreneurs also increased over a period of time when they use cell phones to transact business with their customers, suppliers, creditors, and debtors. Increase in profit is possible because the production cost decreased, more customers are won and existing ones retained making it possible for the entrepreneurs to increase sales volume and value because of the use of cell phones in the running of business.

CONCLUSION

The data collected and analysed relates substantially to the objectives set to be achieved. All the specific objectives outlined to be achieved have been realized by the study. Small scale industry operators in the Volta Region of Ghana really become satisfied with the realization of their dreams for the use of mobile phones in the operations of their business.

With the findings of this research, it is in place to say that all small and medium scale entrepreneurs in Ghana must use mobile phones in the operations of their business activities. In the use of mobile phone to operate business transactions, there must be clear difference between the used cell phones for the operations of business and the use of cell phones for social interaction. If the cell phones are used solely for the operations of business, it will be notice the cost of the usage within specific period of time. This will enable the small and medium scale entrepreneurs note the volume of benefits derived from the use of phones in the operations of business and therefore be able to reap the benefits accrued thereon.

The limitation of the present study was inability to put in place a mechanism for the continuous tracking of definitions of customer base and the frameworks for measuring customer base. Continuous count of definitions and frameworks emerging would be highly appreciated. The possible area for research is the usage of cell phones and the creation of trusting behaviour for winning more customers.

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