An Evaluation of Customer Satisfaction Levels among the Various Mobile Telecommunication Networks in the Wa Municipality

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ABSTRACT

Globally, customer satisfaction has become a critical tool in attracting and retaining customers. It is so vital especially, to firms that produce similar products and services. The state of customer satisfaction with service delivery is not clear as there is scanty documentation on the issue. The problem of this study is therefore influenced by the need to empirically measure customer's satisfaction within the service delivery of mobile telecommunication networks in the Wa Municipality. Both primary and secondary data were used in this study. The sample size totaled two hundred and seventy-two mobile phone users across all networks in the study area. All the attribute-specific measures pointed out that customers were satisfied with the services provided by the Mobile Telecommunication Networks in Wa Township and therefore met the desires and expectations of their customers. The study however recommends that, efforts and resources should be channeled towards improving technical quality, empathy, reliability and economy of their service delivery.

Keywords: Customer Satisfaction, Service Delivery, Customer Care, Retention.

INTRODUCTION

For decades the mobile telecommunication sector had been operating in a relatively stable and regulated environment (Zineldin, 2005). Today the environment has changed and the sector is a highly competitive and fragmented marketplace (Durkin & Howcroft, 2003). To be able to face the fierce competition, telecommunication providers need to focus on creating a competitive advantage. Trends within the industry have been changed during the past years to put defensive marketing in focus in order to retain customers. There is a need to emphasize on increasing customer loyalty through defensive marketing rather than focusing on gaining new customers through offensive marketing. This is due to the difficulties of creating a good offensive marketing strategy in a dynamic (Harrison, 2000) and mature environment with high competition (Fornell & Wernerfelt, 1987). A determinant of the relationship commitment is the service quality a firm provides to the customer. Quality is based on customer needs, expectations and wishes (Zeithaml, Berry, & Parasuraman, 1996). However, there is no generally accepted operational definition of how to measure service quality; there is though a growing consensus that customers evaluate service quality by comparing their service quality expectations with their perceptions of the service they have received. When perceived service quality falls short of expectations, a service quality gap occurs. Management’s job is in essence is to prevent or eliminate service quality gaps (Brogowicz, Delene, & Lyth, 1990). Oliver (1980) defines satisfaction as the emotional reaction to a specific product/service experience; the emotional reactions come from disconfirmation of a consumers’ perceived performance of the product/service and the consumers’ expectations of the performance. When perceived performance exceeds expectations there is a positive effect and as a result, pleasure of the received performance is raised. If there is a negative effect the perceived performance is lower than the expected and dissatisfaction arises (Mano & Oliver, 1993). Within the communication services, managers are realizing the increasing importance of customer satisfaction in enhancing customer loyalty, which
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would in the long-term increase the firm’s profitability and success (Fornell, Ryan, & Westbrook, 1990). Satisfied customers would buy services more frequently, at higher prices, and tell their acquaintances of their good experiences with a high quality service provider (Hauser, Simester, &Wernerfelt, 1994). If a firm enhances customer satisfaction, they can potentially increase the number of services a customer buys as well as sell different services to them (Krishnan et al., 1999). If an organization’s service quality decreases, it is necessary for the firm to have customers that want to explain their dissatisfaction. By providing the company with feedback it triggers an attempt to recover the quality within the organization (Hirschman, 2008). Dissatisfied customers, if their problems are not solved, will leave their service provider. Within the telecommunication industry, many customers switch due to their perceptions of low service quality (Rust &Zahorik, 1993). Customer satisfaction with regards to service delivery of most organizations both private and public worldwide have assumed a different dimension leading to the abandoning of most of the antiquated marketing philosophies and strategies to the adoption of more customer driven initiatives that to understand, attract, retain and build intimate customer long relationship with profitable customers (Kotler 2006, Groonros, C. 1994, Naver and Slater 1990). Customer satisfaction has gained much attention from scholars and practitioners, as it has become one of the cardinal means for achieving quality improvement programmes and one of the crucial focuses of strategic marketing management in business organizations that have long term perspective of growth. Customer loyalty keeps levels of exit down. Keaveney (1995) created a model to categorize customers’ reasons to change a service provider, which proposes eight main causes for customers to leave a firm. These are pricing, inconvenience, core service failures, service encounter failures, failed employee responses to service failures, competitive issues, ethical problems, and involuntary factors. Findings have indicated that satisfied customers are more likely to remain loyal and committed to an organization which eventually leads to profit as opined by the popular service profit chain proponents (Heskett et al, 199, Reichheld and Sasser, 1990). In this regard, it is a fact that a very satisfied customer is more likely to be loyal and repurchase and or recommend a product than an unsatisfied customer. Organisations of late have attempted to adopt measures to find out whether customers are satisfied or dissatisfied. Some organizations traditionally rely on customers complaints to ascertain customer satisfaction. Unfortunately , the average business firm never hears from 96% of their dissatisfied customers and 91% never came back; when they get back only 4% of dissatisfied customers complain(SPSS white paper 1966). Mobile Telecommunication Network Worldwide, in the delivery of services to satisfy their customers have prompted organizations like American Customer Satisfaction Index (ACSI), to publish a work on customer satisfaction and service delivery of one of China’s mobile telecommunications network and also the International market Research Bureau to research into the service delivery and customer satisfaction of mobile telecommunication networks. The shift to devoting considerable attention and resources to customer acquisition and retention through customer satisfaction is no different with the five mobile telecommunication networks in Ghana, namely, MTN of Scancom Ghana Limited, Tigo of Millicom Ghana Limited, Vodafone Ghana Limited, Kasapa of Kasapa Telecom and Bharti Airtel Ghana Limited. Each of the telecom network companies is continually improving upon the quality of their service delivery in order to survive the high competition in the industry. Since survival and growth or financial outcome is driven by customers’ loyalty and retention which in turn is driven by customer satisfaction and value (Rust and Oliver, 1994, Wang and Hing-Polo, 2002), delivering quality service and customer satisfaction have been important goals and pursuits for each of the five expanding mobile telecommunication networks as well as the regulators of the mobile telecom industry. This issue about the mobile telecommunication networks is not in any way different in the Upper West Region of Ghana and Wa Township for that matter, our study area where four out of the five mobile telecommunication networks are in full operation, namely Vodafone Ghana, Airtel Ghana, MTN Ghana and Tigo Ghana Limited. The rationale of this study is to ascertain why customer satisfaction is low in the Wa Township despite the fact that various mobile telecommunication networks have attempted to improve the quality of service delivery to their customers.

THEORITICAL FRAMEWORK

The Concept of Customer Satisfaction

The term customer satisfaction has received much attention and interest among scholars and practitioners perhaps because of its importance as a key element of business strategy, and goal for all
business activities especially in today’s competitive markets (Anderson et al. 1994). It is therefore important to understand this concept in details as conceptualized in this study. Some of the definitions given by scholars for customer satisfaction are as follows: According to the World Trade Organization (WTO, 1985), customer satisfaction is a psychological concept that involves the feeling of well-being and pleasure that results from obtaining what one hopes for and expects from an appealing product and/or service. Customer satisfaction is “a customer post-purchase evaluation and affective response to the overall product or service experience” (Oliver 1992). Customer satisfaction “as an attitude-like judgment following a purchase act or a series of consumer product interaction” (Youjae Yi 1990 cited in Lovelock and Wirtz 2007). Customer satisfaction is an experience-based assessment made by the customer of how far his own expectations about the individual characteristics or the overall functionality of the service obtained from the provider has been fulfilled. (Bruhn 2003).

**Mobile Telecommunication Network**

This refers to the exchange of information, ideas and thoughts through the media of mobile phone, telephone or wireless network. According to the World International Property Organization, “a mobile communication system/network refers to any communication system that enables wireless communication when users are moving within the service area”. According to ITU, “a mobile phone network refers to an automatic public mobile telephone service that provides access to the Public Switched Telephone Network (PSTN) using cellular technology or portable telephone to subscribe. This can include analogue and digital cellular system but should not include non-cellular systems. In Ghana there are six mobile telecom networks, each operating its own mobile telecommunication network with its brand name. They are MTN of Scancom Ghana Ltd, tiGO of Millicom Ghana Ltd, Airtel Ghana Ltd, and Vodafone Ghana Ltd.

**DIMENSIONS OF CUSTOMER SATISFACTION**

**Customer Satisfaction as a Multi-Dimensional**

The object of customer satisfaction is varied and can be related to different dimensions of multiple experiences with product/service providers. For example, we can refer to satisfaction with ongoing business relationship or with price performance, satisfaction with the time or service delivery or the service experience, service context and satisfaction with entire reputation and outlook of an organization.

Satisfaction with Attribute-Specific

Satisfaction can be related to specific attribute of a product or service. For example with mobile telecommunication, satisfaction can be related to specific attribute of multimedia messaging service, short message sending, voice message sending, mobile TV or mobile internet, call charges per minute, network coverage.

**Customer satisfaction as a Process**

The process perspective presupposes that “customer satisfaction is a feeling of satisfaction that results from the process of comparing perceived performance and one or more predictive standards, such as expectation or desire” (Khalifa and Liu 2002). The customer is satisfied if the performance of a product/service is equal to his or her expectations and he or she is dissatisfied if the product or service performance is perceived to be below his or her expectations.

**APPROACHES TO DETERMINING CUSTOMER SATISFACTION**

Customer satisfaction can be determined by three broad approaches; Observational methods, data base methods and subjective methods.

Observational methods can be classified into observational studies and experimental studies. Data base methods can include customer complaints and suggestions and reports from field sales representatives etc. Subjective method has been widely used to determine customer satisfaction. This approach involves the use of questionnaire and interviews.

In this study, subjective methods would be used. This would involve mainly the use of questionnaire.

**DEVELOPMENT OF MOBILE TELECOMMUNICATION**

**Brief Historical Perspective**

Until the invention of modern technology, the use of flags, relay runners, riders andcriers, smoke signals, drum and light signals, message carrying pigeons and even the postal system were the
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traditional long-distance communication media. According to Balasubramanian et al (2002 p. 349) the first transmission involving a single mobile platform occurred in June 1898, when Marconi transmitted a radio signals over 48 miles between a French naval vessel and the Wimereux shore station. The first transmission between a mobile transmitter and a mobile receiver occurred in July 1898 when aboard the Royal Navy Warship “Juno”, Marconi received messages from the warship “Alexandra” and “Europa” at ranges of up to 45 miles. The first mobile telephone call occurred in June 1946 when a truck driver in St. Louis, Missouri, placed a telephone call using a handset from under his vehicle dashboard. The cellular phone concept that now enhances mobile communication was developed in 1947 at Bell Laboratories. Today, there are many different types and kinds of mobile phones that are used with supporting network for communication. These mobile have different features and powerful capabilities. Apart from the basic use of making and receiving calls and messages, some can be used to play music, video, games, store personal data, access banking services with internet capabilities (e-mails, e-order/procurement etc), among other uses.

World Telecommunication Trends

A careful study of the trend in the world telecommunication reveals that there is an increasing growth rate for global network subscribers, revenue and expenditure for the last decade. Available statistics published by the International Communication Union (ITU) on key Global Telecom Indicators for the World Telecommunication Service Sector (ITU, 2007) shows that, while total Telecom market revenue at current prices and exchange rate increased from 885 US Dollars in 1996 to 215 Dollars in 2006. Out of this, global telecom service revenue as at 2004 with a leading number of subscribers compared with main telephone lines and other wireless services. This therefore suggests that, the global mobile telecom industry is expanding rapidly.

Mobile Telecommunication Trends in Ghana

Until 1994, Ghana Telecommunication was monopolized the government corporation, Ghana Post, Telephone and Telegraph (PTT). Between 1994 and 2000, Ghana move from a government controlled PTT to a competitive Telecom environment that allowed strong internet and mobile network providers to operate. This was a result of the deregulation of Ghana’s telecommunication sector in 1994 under the Accelerated Development Program 1994-2000 (ADP 2000) where the government announced a five year comprehensive restructuring of the industry.

REGULATORY BODIES IN GHANA TELECOMMUNICATION INDUSTRY

The main regulatory bodies in Ghana Telecommunication industry are the National Communication Authority (NCA) of the Ministry of Communication in Ghana. The NCA was established by Parliamentary Act 1996 as a central regulatory body to regulate the Telecommunication sector and to promote a stable operating environment for all participants, while also promoting faire competition and efficiency. The Ministry of Communication was created in July 2003 by an Executive Instrument NO.E.I.6. It was created to facilitate the strategic development and the application of the use the various communications resources-human, material and technological for effective communication throughout the country.

MOBILE PHONE NETWORKS IN WA TOWNSHIP

There are four operational mobile telecommunication networks companies in Wa Township, each operating its own mobile telecommunication network and brand names. These networks are MTN of Scancom Ghana Limited, TIGO of Millicom Ghana Limited, VODAFONE Ghana Limited, and Bharti AIRTEL Ghana Limited

Mtn Ghana-Scancom Ghana Limited

Scancom Ghana Limited started operating in October 1996 using GSM technology and was branded Spacefon, with 15 sites and equipment from Ericsson. The company operated as Areeba 2006 and was taken over by Mobile Telecommunication Network (MTN) and is now renamed MTN Ghana Limited. MTN Ghana ltd is the market leader in Ghana’s Telecommunication industry with a market share of 53% and 50.04% with subscribers of 8,000,946 and 8,721,249 in 2009 and 2010 respectively.

TIGO of Millicom Ghana Limited

Millicom Ghana Limited, operators of TIGO cellular, is a subsidiary of Millicom International Cellular S.A (MIC) UK/Luxembourg, a leading global operator of cellular telephony service with
several investments across the world. The company started operations in 1991 and was the first cellular network operator. MOBITEL/Buzz was the brand name of TIGO but was changed in 2002. Millicom Ghana has a market share of 22.6% and 22.9% with subscribers of 3,420,534 and 3,999,262 in 2009 and 2010 respectively.

**VODAFONE Ghana Limited**

Vodafone Ghana Limited formerly OneTouch was the cellular arm of Ghana Telecom. Ghana Telecom started operations in 2000 providing nation-wide cellular services. It was however overtaken by the Telecommunication giant Vodafone in 2008. VODAFONE Ghana has a market share of 14.1% and 15.6% with subscribers of 2,132,119 and 2,722,364 in 2009 and 2010 respectively. This represents an increase of 3.5%.

**AIRTEL Ghana Limited**

Bharti Airtel is one of the new Mobile Telecommunication Networks in the Ghanaian telecom market and has relatively attracted many subscribers hence making the competition very keen. It was formerly ZAIN Ghana Limited before it was taken over by Bharti AITEL in 2010. It has a market share of 8.6% and 10.1% with subscribers of 1,293,238 and 1,754,259 in 2009 and 2010 respectively.

**METHODOLOGY**

**Research Design**

Methodology is an integral part of any research work. To carry out a credible research, appropriate methods, techniques and tools should be used to ensure accuracy and reliability of the work. This area covers the operationalization of concepts, sources of data, sample units, sample size, data sampling techniques, tools of data collection, and analysis and presentation of data.

**Sources of Data**

The two major sources of data: primary and secondary sources would be applied. Primary data will be collected from the study area, Wa Township. Secondary data would be collected from journals, magazines, newspaper publications, and operator of the Mobile Telecommunication Networks, Wa Municipal Assembly, the internet and other relevant sources.

**Sample Units**

The sample units involved only users of mobile phones in Wa Township who are literates.

**Sample Size**

The sample size was two hundred and seventy-two across all networks.

**Data Sampling Techniques**

Stratified random sampling would be used to classify the sample population into the four various networks which will each be a stratum. The simple random sampling will then be used to collect data, thus giving each sample unit a chance to be questioned.

**TOOLS OF DATA COLLECTION**

**Questionnaire**

Self-administered questionnaire would be used to obtain information from customers of the Mobile Telecommunication Networks.

**Interview**

Structured interviews would be used and this would limit respondents to some options within which they will choose. Semi-structured interviews would be employed to enable the respondents to express their feelings about the problem.

**ANALYSIS AND PRESENTATION OF DATA**

Data analysis will be based on descriptive statistics. Data would be analyzed using the Statistical Package for Social Scientists (SPSS). Presentation of data would be done using appropriate tables and charts.

**RESULTS AND DISCUSSION**

A total of one hundred and fifty (150) questionnaires were administered; 50 to each of the staff and customers of the telecommunication networks under study: MTN, Vodafone, Airtel, Tigo and Expresso. According to Saunders, Lewis &Thomhil (2009), the higher the response rate, the more
valid the results are so because of that care was taken to collect all the questionnaires administered representing a hundred percent response. The results of the data collected are analyzed under four broad sections. Section (A) discusses the demographic data of respondents. Section one of this study which is the introduction details the number of questionnaires and recovered and how they were administered. Section two covers the socio-demographic characteristics of respondents. Section three talks about the current situation of Mobile Telecommunication service in Wa Township. Section four deals with customer satisfaction with Mobile Telecommunication services in Wa Township while section five details customer expectations. The last section deals with the difference between current situations and expectations as well as customer decisions following expectations.

SECTION TWO
RESPONDENTS SOCIO-DEMOGRAPHIC CHARACTERISTICS

Table 4. Gender of Respondents

<table>
<thead>
<tr>
<th>Sex</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Valid Percentage</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>63</td>
<td>42</td>
<td>42</td>
<td>42</td>
</tr>
<tr>
<td>Females</td>
<td>87</td>
<td>58</td>
<td>58</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>150</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field data, 2013

The respondents’ sex as displayed in table 4 above indicates that males were 63 representing a percentage of 42 and females were 87 representing a percentage of 58. This implies that there was a good representation of both sexes in the sampled respondents.

Table 5. Respondents Occupations

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Valid Percentage</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>59</td>
<td>39.3</td>
<td>39.3</td>
<td>39.3</td>
</tr>
<tr>
<td>Civil Servant</td>
<td>36</td>
<td>24.0</td>
<td>24.0</td>
<td>63.3</td>
</tr>
<tr>
<td>Business</td>
<td>42</td>
<td>28.0</td>
<td>28.0</td>
<td>91.3</td>
</tr>
<tr>
<td>Others</td>
<td>13</td>
<td>8.7</td>
<td>8.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>150</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field data, 2013

Out of the respondents interviewed 59 representing 39.3 percent of the sampled data were students followed by a total of 42 business personnel representing 28 percent whiles civil servants were 36 in number representing 24 percent and other professionals being 13 giving a percentage of 8.7 as represented in the table above.

Table 6. Age of the Respondents

<table>
<thead>
<tr>
<th>Age Group(Yrs)</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Valid Percentage</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 20</td>
<td>20</td>
<td>13.3</td>
<td>13.3</td>
<td>13.3</td>
</tr>
<tr>
<td>20-29</td>
<td>82</td>
<td>54.7</td>
<td>54.7</td>
<td>68.0</td>
</tr>
<tr>
<td>30-39</td>
<td>30</td>
<td>20.0</td>
<td>20.0</td>
<td>88.0</td>
</tr>
<tr>
<td>40-49</td>
<td>11</td>
<td>7.3</td>
<td>7.3</td>
<td>95.3</td>
</tr>
<tr>
<td>50 and Above</td>
<td>7</td>
<td>4.7</td>
<td>4.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>150</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field data, 2013

From table 6 above it is obvious that most of the respondents sampled were between the age of 20-39 constituting 88 percent (below 20, 20-29 and 30-39). This could due to the fact that they belong to the young adult age and economically active group who are into various economic activities thus, the use of mobile phones becomes imperative. The rest made up of respondents between 40 and 49 and 50 years plus constitute the other 12 percent of the sampled data

Table 7. Respondents' Educational Level

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Valid Percentage</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>4</td>
<td>2.7</td>
<td>2.7</td>
<td>2.7</td>
</tr>
<tr>
<td>JHS/Middle School</td>
<td>24</td>
<td>16.0</td>
<td>16.0</td>
<td>18.7</td>
</tr>
<tr>
<td>SHS/Voc/Tech</td>
<td>43</td>
<td>28.7</td>
<td>28.7</td>
<td>47.4</td>
</tr>
<tr>
<td>Tertiary</td>
<td>79</td>
<td>52.7</td>
<td>52.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>150</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field data, 2013
All the respondents were literates. 2.7 percent had primary education and 16 percent were middle school leavers or had JSS/JHS education whiles 28.7 percent had technical/Vocational or had completed secondary school. 52.7 percent had tertiary education and they form the largest group with a total number of 79 out of the 150 respondents.

**Networks of Respondents**

Even though the national market percentage of the various mobile phone networks varies, an equal number of respondents were chosen to show a general and fair representing of the customer satisfaction of the various networks. A total of 150 respondents were chosen, 30 respondents for each mobile telecommunication network operating in Wa. Below is the table detailing the sampling.

**Table 8.**

<table>
<thead>
<tr>
<th>Respondents Category</th>
<th>Number</th>
<th>Percentage</th>
<th>Valid Percentage</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTN</td>
<td>30</td>
<td>20.0</td>
<td>20.0</td>
<td>20.0</td>
</tr>
<tr>
<td>Vodafone</td>
<td>30</td>
<td>20.0</td>
<td>20.0</td>
<td>40.0</td>
</tr>
<tr>
<td>Tigo</td>
<td>30</td>
<td>20.0</td>
<td>20.0</td>
<td>60.0</td>
</tr>
<tr>
<td>Airtel</td>
<td>30</td>
<td>20.0</td>
<td>20.0</td>
<td>80.0</td>
</tr>
<tr>
<td>Expresso</td>
<td>30</td>
<td>20.0</td>
<td>20.0</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>150</td>
<td>100.0</td>
<td>20.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field data, 2013

Table 8 therefore shows no biasness towards any network. A good and fair representation of the various networks will be available for good individual and general assessment.

**NATURE OF SERVICE PROVIDED BY THE MOBILE AND TELECOMMUNICATION COMPANIES**

**Current Situation of Mobile Telecommunication Services**

*The State of Network Reception of Telecommunication Networks*

The research also looked at the nature of network reception as perceived by the customers of the various telecommunication networks. Customers were asked to rate their network reception from a scale of very good to very poor. The customers for the individual networks were sampled and the general picture was given by combining the responses from all of the telecommunication networks under study. The results are analyzed and presented below.

**Table 9. Network Reception Level of Mobile Telecommunication Networks**

<table>
<thead>
<tr>
<th>Item</th>
<th>MTN</th>
<th>Vodafone</th>
<th>Tigo</th>
<th>Airtel</th>
<th>Expresso</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Good</td>
<td>11</td>
<td>14</td>
<td>9</td>
<td>10</td>
<td>8</td>
<td>52</td>
<td>34.7</td>
</tr>
<tr>
<td>Good</td>
<td>13</td>
<td>10</td>
<td>13</td>
<td>10</td>
<td>10</td>
<td>56</td>
<td>37.3</td>
</tr>
<tr>
<td>Poor</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>27</td>
<td>18.0</td>
</tr>
<tr>
<td>Very Poor</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>15</td>
<td>10.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>150</td>
<td>100.0</td>
</tr>
</tbody>
</table>

![Network Reception of Mobile Networks](Image)

**Fig 1. General Response of All Networks to Customer Complaints**

Source: Field data, 2013
The table shows the combined data and it is clear that the network reception ability of the telecommunication networks in Wa is encouraging (Between Very Good and Good). 52 respondents representing 34.7 percent said the reception of the networks is very good whiles 56 respondents representing 37.3 percent reveal that it is good. Only 18 percent complained that the reception is poor whiles 10 percent say it is very poor.

**Customer Satisfaction with Mobile Telecommunication Network**

**Satisfactory Conditions of Customers of Mobile Networks**

Respondents were asked to rate their networks based on the overall perception they have concerning the general service provision of their networks. The overall customer satisfaction measure had a four point scale; very satisfied, satisfied, dissatisfied and very dissatisfied.

![Fig2. Satisfaction Level of MTN Respondents](source)

**Source:** Field data, 2013

It is very clear on this chart that exactly 40 percent of the sampled MTN respondents are just satisfied with service provision of their network, 36.7 percent are very satisfied with the service provision whiles 6 respondents representing 20 percent are dissatisfied with their work. Only 1 person who represents only 3.3 percent is very dissatisfied with their service provision

**The Level of Satisfaction of Customers-Vodafone**

![Fig3. Satisfaction Level of Vodafone Respondents](source)

**Source:** Field data, 2013

It can be noticed from the chart that most of the customers of Vodafone in Wa see the service provision of their network very encouraging (43.3 percent for very satisfied and 36.7 percent for satisfied). 16.7 percent of the randomly sampled respondents are dissatisfied with the service provision whiles only 3.3 percent are very dissatisfied. This mean a total of 6 people representing 20
percent of the randomly sampled respondents see that the service provision of Vodafone network is not encouraging.

**The Level of Satisfaction of Customers-Tigo**

![Fig4. Satisfaction Level of Tigo Respondents](image)

**Source:** *Field data, 2013*

The sampling for Tigo respondents indicates that just a little above half of the customers (66.7 percent representing 20 percent for very satisfied and 46.7 percent for satisfied) see that the general service provision of Tigo network is encouraging. 6 respondents representing 20 percent are dissatisfied about the service provision whiles 4 respondents representing 13.3 percent are very dissatisfied about their general service provision. It can be seen that this is just about a fair representation of customers who say the network is good as against those who say the network is generally not encouraging.

**The Level of Satisfaction of Customers-Airtel**

![Fig5. Satisfaction Level of Airtel Respondents](image)

**Source:** *Field data, 2013*

From the chart, it is evident that most of the exactly half (50 percent) of the randomly sampled Airtel users see the service provision of the telecommunication network encouraging. 16.7 percent are very satisfied whiles 33.3 percent are just satisfied. 8 respondents representing 26.7 of the sampled respondents are dissatisfied with the service whiles 7 respondents representing 23.3 percent are very dissatisfied with the service provision of the network. Also there is just about a fair representation of customers who say the network is good as against those who say the network is generally not encouraging.
It is evident that less than half (40 percent) of the randomly sampled Expresso users see the service provision to be encouraging. Only 10 percent are very satisfied with the service whiles 30 percent are just satisfied with their service provision. 10 respondents representing 33.3 percent of the randomly sampled respondents are dissatisfied whiles 8 respondents representing 26.7 percent are very dissatisfied with the general service provision of the telecommunication network.

**General Satisfaction Level of Customers**

The above chart combines the responses received from the various respondents of the individual telecommunication networks operating in Wa. Out of the 150 respondents gathered, 38 representing 25.3 percent are very dissatisfied with the general service provision of the telecommunication networks. 56 representing 37.3 percent say they are satisfied, 35 respondents representing 23.3 percent are dissatisfied with their service provision whiles 8 respondents representing 21 percent say they are very dissatisfied with their service provision.

**CUSTOMER EXPECTATIONS**

**The State of Customer Satisfaction**

The research focused mainly on the attribute-specific measures of customer satisfaction; wider network coverage, success in calls completion, SMS, MMS and voice message sending, customer care services and efficiency in mobile internet. The overall satisfaction was also determined. Customers were asked to rate their network based on their expectations and desires. Therefore their satisfaction
Joseph Kofi Nkuah et al. “An Evaluation of Customer Satisfaction Levels among the Various Mobile Telecommunication Networks in the Wa Municipality”

was analyzed based on a broad dimension of network operation and services for the various operating telecommunication networks and later combined to reflect the general satisfaction of customers. The results are analyzed and presented below.

Table12. Response of Customer Care Unit to Customer Complaints-MTN

<table>
<thead>
<tr>
<th>MTN Respondents</th>
<th>Number</th>
<th>Percentage</th>
<th>Valid Percentage</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above My Expectations</td>
<td>9</td>
<td>30.0</td>
<td>30.0</td>
<td>30.0</td>
</tr>
<tr>
<td>Meet My Expectations</td>
<td>15</td>
<td>50.0</td>
<td>50.0</td>
<td>80.0</td>
</tr>
<tr>
<td>Below My Expectations</td>
<td>6</td>
<td>20.0</td>
<td>20.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field data, 2013

From the table, it is evident that most of the exactly half (50 percent) of the randomly sampled MTN users have their expectations being met by the customer care unit of their network-MTN, 9 respondents representing 30 percent feel that the customer care unit performs above their expectation while only 6 percent representing 20 percent said the customer care unit are performing below their expectation.

Table13. Response of Customer Care Unit to Customer Complaints-Vodafone

<table>
<thead>
<tr>
<th>Vodafone Respondents</th>
<th>Number</th>
<th>Percentage</th>
<th>Valid Percentage</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above My Expectations</td>
<td>8</td>
<td>26.7</td>
<td>26.7</td>
<td>26.7</td>
</tr>
<tr>
<td>Meet My Expectations</td>
<td>17</td>
<td>56.7</td>
<td>56.7</td>
<td>83.3</td>
</tr>
<tr>
<td>Below My Expectations</td>
<td>5</td>
<td>16.7</td>
<td>16.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field data, 2013

The sampling on Vodafone respondents reveals that 56.7 percent of the randomly sampled Vodafone users have their expectations being met by the customer care unit. 8 respondents representing 26.7 percent feel that the customer care unit performs above their expectation while only 5 percent representing 16.7 percent said the customer care unit are performing below their expectation.

Table14. Response of Customer Care Unit to Customer Complaints-Tigo

<table>
<thead>
<tr>
<th>Tigo Respondents</th>
<th>Number</th>
<th>Percentage</th>
<th>Valid Percentage</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above My Expectations</td>
<td>5</td>
<td>16.7</td>
<td>16.7</td>
<td>16.7</td>
</tr>
<tr>
<td>Meet My Expectations</td>
<td>17</td>
<td>56.7</td>
<td>56.7</td>
<td>73.4</td>
</tr>
<tr>
<td>Below My Expectations</td>
<td>8</td>
<td>26.7</td>
<td>26.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field data, 2013

Table 14 shows the expectation level of Tigo respondents from the customer care unit of their network. It reveals that 56.7 percent of the randomly sampled users have their expectations being met by the customer care unit. 17 respondents representing 16.7 percent feel that the customer care unit performs above their expectation while only 5 percent representing 26.7 percent said the customer care units are performing below their expectation.

Table15. Response of Customer Care Unit to Customer Complaints-Airtel

<table>
<thead>
<tr>
<th>Airtel Respondents</th>
<th>Number</th>
<th>Percentage</th>
<th>Valid Percentage</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above My Expectations</td>
<td>4</td>
<td>13.3</td>
<td>13.3</td>
<td>13.3</td>
</tr>
<tr>
<td>Meet My Expectations</td>
<td>16</td>
<td>53.3</td>
<td>53.3</td>
<td>66.6</td>
</tr>
<tr>
<td>Below My Expectations</td>
<td>10</td>
<td>33.3</td>
<td>33.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field data, 2013

The sampling on Airtel respondents reveals that those whose expectation level is above normal are 4 in number representing 13.3 percent of the sample. 16 representing 53.3 percent have their
expectations being met by the customer care unit and 10 respondents representing 33.3 percent feel that the customer care unit performs below their expectation.

Table16. Response of Customer Care Unit to Customer Complaints-Expresso

<table>
<thead>
<tr>
<th>Expresso Respondents</th>
<th>Number</th>
<th>Percentage</th>
<th>Valid Percentage</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above My Expectations</td>
<td>6</td>
<td>20.0</td>
<td>20.0</td>
<td>20.0</td>
</tr>
<tr>
<td>Meet My Expectations</td>
<td>13</td>
<td>43.3</td>
<td>43.3</td>
<td>63.3</td>
</tr>
<tr>
<td>Below My Expectations</td>
<td>11</td>
<td>36.7</td>
<td>36.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field data, 2013

From the table, it is evident that the customer care unit of Espresso either meets or performs below the expectation of its respondents. 43.3 percent said the customer have of the randomly sampled MTN users have their expectations being met by the customer care unit of their network-MTN, 9 respondents representing 30 percent feel that the customer care unit performs above their expectation while only 6 percent representing 20 percent said the customer care unit are performing below their expectation.

Table16. General Response of Customer Care Unit to Customer Complaints

<table>
<thead>
<tr>
<th></th>
<th>MTN</th>
<th>Vodafone</th>
<th>Tigo</th>
<th>Airtel</th>
<th>Espresso</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above My Expectations</td>
<td>9</td>
<td>8</td>
<td>5</td>
<td>4</td>
<td>6</td>
<td>32</td>
<td>21.3</td>
</tr>
<tr>
<td>Meet My Expectations</td>
<td>15</td>
<td>17</td>
<td>17</td>
<td>16</td>
<td>13</td>
<td>78</td>
<td>52.0</td>
</tr>
<tr>
<td>Below My Expectations</td>
<td>6</td>
<td>5</td>
<td>8</td>
<td>10</td>
<td>11</td>
<td>40</td>
<td>26.7</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>150</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field data, 2013

Table 16 shows the total response from all the respondents for the individual networks as well a general representation for all the networks. It indicates that most of the customer care unit of the mobile telecommunication networks in Wa meet their customers’ expectations. A total of 78 representing 52 percent have this experience. 40 respondents representing 26.7 percent have their expectations below normal while’s 32 respondents representing 21.3 percent indicates that the care units perform above their expectation.

DIFFERENCES BETWEEN CURRENT SITUATIONS AND EXPECTATION

Decision of Customers With Respect to Network Situation

The decision of customers following their satisfaction level of the telecommunication network they use determines the national market percentage of the various mobile phone networks from time to time. It is therefore imperative for the telecommunication networks operating in WA to place priority on customer satisfaction. A market survey on the possible decision of customers was also carried out as part of the research and below is the presentation of the outcome.

Switching Intention of Customers With Respect to Networks

![Switching Intention of Customers](image-url)
From the chart, it is evident that (50) out of possible three division of the total respondents would want to switch telecommunication network, whiles two (100) are unwilling to switch networks. This means 33.3 percent would like to switch networks whiles 66.7 percent would not like to consider switching their networks.

FINDINGS

The purpose of the study was to assess and analyzed customer satisfaction with service delivery in the Mobile Telecommunication Networks in Wa Township using the attribute-specific and overall satisfaction measures. The study also examined the switching intensions among the customers of Mobile Phone Networks in Wa Township. A total of 150 customer population was sampled, 30 for each of the five telecommunication networks operating in Wa Township. Special care was taken so that none was lost. All of the 150 sampled data were administered and this became necessary due to the fact that, a fair representation of the performance of the various networks as well as the general was really of special importance to the study. Based on an objective analysis of the data, the following are the major findings and conclusions of the study. All the attribute-specific measures pointed out that customer satisfaction is satisfactory irrespective of the Mobile Telecommunication Network in Wa Township and thus these networks meet the desires and expectations of their customers. Generally, a large number of the respondents of 94 (38-very satisfied, 56-satisfied) representing a total percentage of 62.6% (25.3% and 37.3%) were satisfied with the services delivery of their mobile phone network in Wa Township. Therefore the research conclusion is that, based on the specific attributes measures and the overall satisfaction measures used, customers were largely satisfied with the service delivery of the Mobile Phone Networks in Wa Township. Nevertheless, overall customer satisfaction was not the same among the five networks in Wa Township. Vodafone has its customers most satisfied (13 out of 30) followed by MTN (11 out of 30) Tigo was third with 6 out of 30, Airtel was fourth with 5 out of the 30 respondents whiles Expresso took the fifth position with only 3 out of the 30 respondents. However, there was generally a fair representation of customers who were just satisfied with the services of the various networks. (Respondents ranging from 9 to 14 out the 30 sampled for each network). It was noted that exactly two-thirds of the respondent were not ready to switch to other networks. 100 respondents representing 66.7% answered no indication that they were not ready to switch. Also, switching intentions of customers were not the same among the five Mobile Telecommunication Networks in Wa Township. MTN had the highest number of respondents (24 out of 30) who said they were not ready to switch to any of the other networks. The research realized that, a good number of customers of Tigo, Airtel and Expresso (respondents ranging from 10 to 13) were willing to switch to other networks. The most important attribute-specific measures to most respondents were call making and wider network coverage. Most respondents did not care about entertainment services, internet access and voice message sending.

IMPLICATIONS OF THE FINDING AND RECOMMENDATION

To Industry Regulators and Policy Makers

It had been found in this study that customer satisfaction in the Mobile Telecommunication Networks in Wa Township is satisfactory. This implied that. Policy makers and the industry regulators such as Ministry of Communication and the National Communication Authority in Ghana are doing well. However, they need to step up effort to ensure that Mobile Telecommunication operators improve upon their efficiency and effectiveness in the provision of telecommunication services that exceed customer needs, desires and expectations. This can be done by making the necessary legislation and enforcing them to promote healthy and positive competition in the mobile telecommunication industry. The Consumer Protection Agency (CPA) should also ensure that service providers offer value-for-money services to their customers.

To the Mobile Network Companies

Specifically, the findings of this study imply that the management of Tigo Ghana Ltd, Airtel and Expresso should seriously take notice of their customers switching intentions and work harder to develop effective strategies to retain them. The management of MTN and Vodafone should understand that generally their customer’s satisfaction only meets their desires and expectations and that, they ought to work towards exceeding the desires and expectations of their customers.
RECOMMENDATION

The study therefore recommends that, efforts and resources should be channeled towards improving technical quality empathy reliability and economy of their service delivery. Within these dimensions, management efforts and intensive strategies should be geared towards improving upon areas that are most important to customers specifically:

(i) Success in completion of calls, Network reception and call charge per minute/second.
(ii) Employees technological knowledge and skill in solving customer complaints
(iii) Customer care services
(iv) Wider network coverage.

Again operators should ensure that strategies are put in place to win customers and retain them. This would require a total transformation in operational efficiency and marketing strategies.

To customers of Mobile Phone Networks

The study implies that, customers are consciously becoming aware of the variety of services offered by their service providers. It is therefore recommended that customers demand services that are high quality. This can be done by trying to know more about the various services available as well as their inefficiencies. They should also will to compare different network services to be able to make rational choices.

REFERENCES

Joseph Kofi Nkuah et al. “An Evaluation of Customer Satisfaction Levels among the Various Mobile Telecommunication Networks in the Wa Municipality”


[20] Simon
