Determinants of Customer Loyalty among Mobile Telecom Subscribers in the Brong Ahafo Region of Ghana

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ABSTRACT
The purpose of this study is to investigate the determinants of brand equity among mobile telecom users in Brong Ahafo Region of Ghana. Mobile telecommunication providers have a great role in strengthening the economy and encouraging the efficiency among a large number of subscribers across the country. The success of any business depends on the strength of their brands, which attracts new and existing customers for continuous growth. In Ghana, there are six mobile telecom providers operating in the market (Vodafone, Airtel, MTN, Tigo, Glo, & Expresso). Primary data was obtained through a questionnaire and residents of Sunyani Municipality were targeted for the study. 200 questionnaires were self-administered by the researchers to the subscribers of all the mobile telecom providers and 194 questionnaires were returned. The questionnaires were analysed using SPSS 16 and pearson correlation was used to establish the relationship between the dependent and independent variables. The results identified call rate/quality, network coverage and sales promotion as having significant positive relationship to customer loyalty. In addition, brand image and prompt customer service were seen to have a less effect on customer loyalty.

1.0 Introduction
The spread of mobile technology has varied significantly between countries with majority of mobile subscribers in the developing countries, (ITU, 2013). In 2013, statistics from the International Telecommunication Union revealed that the penetration rate of mobile phone subscribers is 96.2 per 100 inhabitants globally and the report also suggests that there are now more mobile phone users in the developing world than in the developed world (ITU, 2013).

Moreover, customers are becoming harder to please, they are smarter, more price conscious, more demanding, less forgiving, and they are approached by many more with equal or better offers (Hamel, 1996, Kotler & Keller 2006). The challenge now is far beyond producing satisfied customers as competitors can do it too; the challenge is to produce delighted and loyal customers (Kotler & Keller 2006, Keller et al., 2011).

In a study of the overall customer satisfaction in Ghana’s mobile telecommunication networks, noted that, irrespective of the mobile telecommunication networks in Ghana, customer satisfaction is low (Nimako et al., 2010, Mahmoud & Hinson, 2012). Now, operators of the industry are faced with the challenge of demonstrating customer-focused and continuous service improvement than before, as a way to ensuring customer satisfaction, brand supremacy and ultimately customer loyalty (Boohene & Agaypong, 2011; Henry & Quansah 2013).

However, as the competitive environment increasingly becomes fierce, the most important issue the telecom providers face is no longer to provide excellent, good quality products or services, but also to keep loyal customers who will contribute long-term profit to organizations (Kotler 2009; Tseng, 2007). This research study seeks to investigate the factors that determine customer loyalty in the mobile telecom industry.

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1.1 State of the Telecommunication Industry in Ghana

In 1996, the telephone density of Ghana was 0.26 per cent; this translates to 2.6 telephone lines per every one thousand (1000) people, including thirty-five pay phones in the entire country out of which 32 were located in Accra. This was one of the lowest in Africa. Today there is one phone for every four Ghanaians (www.voanews.com/Report-Africa is the fastest growing). This tremendous increase in the telephone density has resulted from the establishment of the National Communication Authority (NCA) in 1997, and the subsequent deregulation of the telecommunication industry.

Deregulation and reduced entry barriers into the Ghanaian mobile industry have led to intense competition as the number of operators swell-up to contend for market shares (Frempong, 2002). Mobile Operators are engaging various marketing strategies to retain and attract new customers. There are already six competitors in the industry, namely, Mobile Telecommunications Network (MTN), Tigo, Vodafone, Glo, Airtel and Expresso.

NCA in 2011, introduced a project known as the mobile number portability, which means that a subscriber can move from one mobile network to another and still retain your existing telephone number if they are dissatisfied with any aspect of the services provided by their current mobile network or the customers just want to take advantage of offers, features or pricing available on a different network (www.nca.org.gh).

According to NCA, (2013) the number of data subscribers in Ghana increased to 10,564,180 at the end of August, 2013 from 10,344,322 at the end of July 2013, showing a growth rate of 2.1%. Also the overall penetration rate in the country increased from 40.0% to 40.7% as at the end of August 2013. While the subscriber base for mobile voice telephony has shown a growth rate of 0.1% from 27,244,579 subscribers recorded in July 2013 to 27,511,659 as at the end August 2013.

The market share of mobile operators (telecom voice) in Ghana for the month of August 2013 is MTN 46.31%, which is the market leader, followed by Vodafone 21.21%, Tigo 13.76%, Airtel 12.24% Glo 5.92% and at the bottom is Expresso 0.57% (NCA, 2013).

1.2 Statement of the problem

There has been significant growth in mobile telecom subscription in recent times in the country. According to the National Communication Authority, from as low as 250,000 in 1999, mobile phone subscribers increased to 3 million in 2005 and in 2007, the subscribers reached 7 million. As at August 2013, the number of data subscribers and the subscriber base for mobile voice telephony in Ghana is now 10,564,180 and 27,244,579 subscribers respectively (NCA 2013).

Also, statistics available from NCA shows that by the end of June, 2013, 702,008 unique phone numbers had been ported. It further stated that, 86.5% had been ported only once, 12.9% had been ported twice, and the remaining 0.6% had been ported between three and nine times. Of the 13.5% of numbers which had been ported more than once, 12.1% were ported back to their original network at the end of June, 2013, while 1.4% had been ported onward to a third network. Therefore the determining factors that makes users of mobile telecom services within Sunyani Polytechnic in the Brong Ahafo Region of Ghana is not adequately established.

The competition in the Ghanaian mobile telecom market is influenced by the lower switching costs among the subscribers of the various networks, which manifest in the frequency with which the subscribers freely enter and leave the networks (Sey, 2008; Nimako, 2012). Therefore, it costs subscribers only GHS1.00 to acquire SIM (Subscriber Identification Module) and this makes it cheaper for subscribers to move from one network to another.

A recent study by Boateng and Quansah (2013) in Ghana, indicate that an understanding of the drivers of brand choice by customers in the telecommunication industry is not clear. The major challenge confronting all the mobile operators in Ghana is the execution of various marketing initiatives that would not only lead to attraction of new subscribers, but retaining existing ones who would then become loyal customers (Olyere et al., 2011; Davidson & McCarty, 2011). Also there are overwhelming arguments supporting that it is more expensive to win new customers than to keep existing ones (Harmoniz and Giles, 2004; Pfeifer, 2005; Pine et al., 2010; Kotler & Armstrong, 2010).
1.3 Justification
Whereas the above analysis enriches our knowledge concerning subscription trend and mobile number porting trend, studies into customer loyalty determinants for mobile telecom services in the country are inadequate (Boahene & Agyapong 2010; Arthur et al., 2012). The study will review the previous research on customer loyalty determinants, in order to contribute to knowledge on what influence customers of mobile telecom to remain loyal.

1.4 Research Objectives
The general objective of the study is to access the determinants of customer loyalty among mobile telecom subscribers in the Brong Ahafo Region of Ghana.

The specific research objectives of the study are:
• To evaluate the relationship between customer satisfaction and customer loyalty
• To access the association between service quality and customer loyalty
• To access the relationship between price and customer loyalty
• To access the relationship between customer service and customer loyalty
• To evaluate the relationship between brand image and customer loyalty

1.5 Research Question
The study provides answer to this question;
• How is customer loyalty related to customer satisfaction, service quality, price, customer service and brand image?

1.6 Research Hypothesis
• H1. There is a correlation between customer satisfaction and customer loyalty among users of mobile telecom in Ghana.
• H1. There is a correlation between service quality and customer loyalty among users of mobile telecom services in Ghana.
• H1. There is a correlation between price and customer loyalty.
• H1. There is a correlation between customer service/care and customer loyalty among users of mobile telecom providers in Ghana.
• H1. There is a correlation between corporate image and customer loyalty among users of mobile telecom services in Ghana.

1.6 Significance of the study
This research provides both theory development for academics and practical implication for marketing managements. The result is expected to inform Mobile operators about their customers’ response to the variety of marketing strategies being deployed as it is helpful for marketers to understand the effectiveness of marketing tactics from consumer’s perspective. Marketers may take clues from this and improve their customer retention strategies. Other stakeholders are also expected to benefit from the output of this research study since this will serve as an information base which adds up to the existing body of knowledge in the Ghanaian Mobile industry. The academic world may also benefit from this study; it may serve as a basis for more research in this area, the telecom sector, as well as the rest of the service sectors.

1.7 Limitation/Scope of Study
The study is expected to cover only mobile telecom users within Sunyani Polytechnic in the Brong Ahafo Region of Ghana. This study is also limited to five (5) customer loyalty variables as well as other tactics and quality measurements are excluded in the study. In addition, the research and analysis is based only on customer's point of view, the service firms' perspective about this subject is not considered in the study.

2.0 Literature Review
Kotler and Keller (2006) hold that companies recognize the importance of satisfying and retaining customers. To them, the following are interesting facts about customer retention, acquiring new customers can cost five times more than the cost involved in satisfying and retaining current customers, the average company loses 10 percent of its customers each year, and the customer profit rate tends to increase over the life of retained customers.
Customer Loyalty

The need for customer loyalty in business has been recognized by many scholars. Customer loyalty is one of the most frequently discussed subjects in the marketing and service literature (Eshghi et al., 2007; Heskett & Sasser, 2010). There is a plethora of definitions of loyalty and/or customer loyalty in the extant literature. Customer loyalty is customer repeating purchase intention to some specific products or services in the future (Jones et al., 1995). It is making customers feel committed: When the benefits are meaningful to them, they will stay on (Grossman, 1998).

Customer loyalty is one of the key factors and can help a company achieve long-term success (Andres, 2007). Ndubisi (2005) and Pleifer (2005) point out that the cost of serving a loyal customer is five or six times less than a new customer. Walsh et al. (2005) state that it is better to look after the existing customer before acquiring new customers. From the above, it is evident that a mobile telecom firm that promotes customer loyalty has a lot to benefit from.

2.1.1 Customer satisfaction

Satisfaction is a consumer’s post-purchase evaluation and affective response to the overall product or service experience (Oliver, 1992). It is considered a strong predictor for behavioral variables such as repurchase intentions, word-of-mouth recommendations, or loyalty (Eggert and Ulaga, 2002). Consumer satisfaction is believed to mediate consumer learning due to prior experience and to explain key post-purchase behaviors, such as complaining, word of mouth, repurchase intention, and product usage (Oliver, 1980; Westbrook & Oliver, 1991). Anderson and Srinivasan (2003) suggested that “a dissatisfied customer is more likely to search for information on alternatives and more likely to yield to competitor overtures than is a satisfied customer.” In addition, past research has indicated that satisfaction is a reliable predictor of repurchase intentions (Wang et al., 2001).

2.1.2 Service Quality

Quality is the comparison of perceived performance and expected performance (Kang, 2006). Service quality is the customer’s overall impression of the relative inferiority/superiority of an organization and its service offerings (Bitner et al., 1990). The firm’s ability to create and sustain competitive advantage depends upon the high level of service quality provided by the service provider (Yoo & Park, 2007).

Theoretically, positive relationships between service quality, customer satisfaction, and customer loyalty are well documented in the extant literature. (Buzzell and Gale, 1987; Brown et al., 1992; Zeithaml et al., 1996). Also empirical findings have shown positive relationships existing between service quality and customer satisfaction, on one hand and between service quality and customer loyalty, on the other hand in a number of industries (Zeithaml et al., 2008; Venetis and Ghauri, 2004).

2.1.3 Price

Price is the amount of money charged for a product or service, or the sum of the values that customers exchange for the benefits of having or using the product or service (Kotler & Armstrong, 2010). Nowadays, due to breathtaking competition, the telecommunication service providers tend to offer innovative services as well as competitive prices just to attract and maintain a large number of customers (Hauea et al., 2011). Price plays a vital role in telecommunication market especially for the mobile telecommunication service providers (Kollmann, 2000; Nimako et al., 2012; Athanassopoulos, 2000; Varki & Colgate, 2001).

2.1.4 Customer Service/Care

Customer service is a system of activities that comprises customer support systems, complaint processing, speed of complaint processing, ease of reporting complaint and friendliness when reporting complaint (Kim et al., 2004). Customer service is one of the most important considerations in the evaluation of a supplier (Jackson et al., 1985) and the effectiveness of the level of customer service will enhance customer retention and reduce switching between and among service providers (Oyeniyi & Joachim, 2008; McDougall & Levesque, 2000; Wang & Shiek, 2006).

2.1.5 Brand Image

Images and perceptions are created through all the senses: sight, sound, smell, touch, tastes and feelings experienced through product usage, customer service, the commercial environment and corporate communications (Smith & Taylor, 2004). It is external perception of all human and physical resources of an organization, especially characteristics as employees’ behaviors, attitudes, communication levels, and
clothing (Pampaloni, 2006). Empirical findings have also shown the relationship between brand image and customer satisfaction and loyalty. Groholdt et al., (2000) reported that corporate/brand image is an important driver of customer satisfaction and loyalty in the industries of soft drinks, banking and telecommunications. Liu (2008) stated that corporate/brand image has a significant impression on services quality, customer value, customer satisfaction and customer loyalty in the Chinese telecommunication market.

2.1.6 Trust
In prior research, trust has been conceptualized in several ways; researchers have long acknowledged this confusion (McKnight et al., 2002; McKnight et al., 1998). Prior studies have viewed trust as either (a) trusting beliefs (Doney & Cannon 1997; Ganesan 1994; Gefen & Silver 1999) or (b) trusting intentions (Hosmer 1995; Mayer et al., 1995; Moorman & Zaltman 1992).

Although some researchers have treated trust as a unitary concept, most now agree that it is multidimensional (Rousseau et al., 1998). In addition, most researchers agreed that trusting beliefs directly influenced trusting intentions (Mayer & Davis 1999). Chiou (2004) found that perceived trust had direct and positive impacts on the overall satisfaction and loyalty of customers.

2.1.7 Other Variables influencing customer loyalty
The other variables includes advertising, sales promotion, promotion, network coverage, signal strength, value added services, the call rates / packages, call quality, SMS rates/ packages, SMS quality, GPRS Rates/packages and GPRS quality. All these factors play an important role in the building up of the loyalty among the customers of the company (Keller et al., 2011;Aaker, 2011; Kim et al., 2004;Blattberg, et al., 2001). All these variables play essential role in impacting the overall quality and performance of the cellular service providers. These variables also have some contribution in the building up of communicative relationship between the company of supplier that provides the cellular service and the customers. They are influencing the satisfaction of the customers that in turn have side effects on the loyalty of the customers. (Shahzad Khan, 2012). Therefore we formed the following hypothesis:

2.2 Conceptual framework

Based on the literature review, the study develops the conceptual framework given above to analyze the determinants of customer loyalty in the mobile telecom industry. Customer loyalty is the dependent
variable of this research this means that the primary or the main focus of the study is on this variable, while
customer satisfaction, service quality, price, corporate/brand image, promotion, customer care/service,
network coverage, signal strength, sales promotion, customers trust, switching barriers, call quality/call
rates, SMS quality/GPRS rates, GPRS quality/SMS rates and value added services are the independent
variables and those are the main factors that are playing the active role and participation in building a
relationship of customers with any of the service providers.

3.0 Methodology

This is a descriptive study into customer loyalty among users of mobile telecom services and the design is a
quantitative research. The research was studied from customers’ point of view and so the population was
expected to involve the people who are consuming mobile services from the six mobile telecommunication
operators in Sunyani the capital city of Brong Ahafo region in Ghana. The decision about the size of the
sample was taken considering time and cost, the need of precision and a variety of further considerations
(Bryman & Bell, 2003). Due to the limit of time and costs, the population was narrowed to mobile phone
users in Sunyani. The sample selected was not bias towards one particular group of users, the units included
people with diverse demographics and employment status, ranging from unemployed, traders, artisans,
professionals, students, public and civil servants, among others. The sample used was determined by
convenience sampling.

3.1 Data collection and questionnaire design

A self-completion questionnaire with closed questions was developed for primary data collection. According
to Bryman and Bell (2003), closed questions have some advantages: it is easy to process answers; it
enhances the comparability of answers, and makes them easier to show the relationship between variables.
The questionnaire was composed of two parts and total 24 statements. The first part was about individual
characteristics with two questions by asking respondents’ gender and the name of the mobile telecom
operator they are using currently. The second part contained all four constructs as suggested by Peng and
Wang (2006). Several items on each construct were developed and adopted from relevant literatures. All of
the items were measured by using a five-point Likert-type response scales, anchored at 5 strongly agree and
1 strongly disagrees.

The author and research assistants personally administered questionnaires to all participants and received
194 valid responses out of 200 questionnaires in September – October 2013. They helped those who needed
assistance in understanding the questions.

3.2 Questionnaire pretesting

Pre-testing was used as a valuable indicator to find out the effectiveness of the questionnaire. This involved
selecting, approaching and interviewing a small segment in the same manner which was followed in the full
scale operation. It helped the researcher to know whether the replies or questionnaire responses provided
the type of information needed or respondents were misinterpreting any of the questions. In addition,
results obtained in the pre-test could suggest new ideas or questions worthy of further examination.
Thirty(30) questionnaires were tested on a sample of 30 respondents in order to eliminate any ambiguities
and improve clarity in all questions.

3.3 Statistical Analysis

The field data was processed by editing; coding, classification and tabulation to present a clearer view for
analysis. The coding was necessary for efficient analysis of data. For this research, coding decisions were
taken at the designing stage of the questionnaire. All of the items under each of the 4 constructs were
measured by using a five-point Likert-type response scales, assigning numerals to question responses with
5 coded for strongly agree, 4 for agree, 3 for neutral, 2 for disagree and 1 for strongly disagree. Responses
for demographical questions (questions 1 and question 3) were also coded. Question 1 requested for
respondents’ gender information, numerals were assigned, 1 for male and 2 for female. Question 3 asked for
the mobile network respondents are connected to, responses were categorized and each assigned numeral
between 1 and 5.

The response categories in Likert scales have a rank order and therefore could be referred as ordinal
because ordinal scale of measurement is one that conveys order (Jamieson, 2004). There are many tools and
techniques appropriate for analyzing ordinal data. In this study, the research chose the software SPSS for Windows to do analysis. SPSS for Windows is probably one of the most widely used computer software for analysis of quantitative data for social scientists. SPSS (Statistical Package for the Social Sciences) has been in existence since the mid-1960 and over the years has undergone many revisions, particularly since the arrival of personal computers (Bryman and Bell, 2003).

4.0 Findings

Following the guidelines indicated in the research methodology section, we collected data during the period of October 2013; in following, we present the main findings achieved through an analysis of gathered data.

4.1 Demographic Information

Table 1 Analysis of respondents’ demography

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>109</td>
<td>56%</td>
</tr>
<tr>
<td>Female</td>
<td>85</td>
<td>44%</td>
</tr>
<tr>
<td>Mobile network</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTN</td>
<td>138</td>
<td>71%</td>
</tr>
<tr>
<td>GLO</td>
<td>3</td>
<td>2%</td>
</tr>
<tr>
<td>AIRTEL</td>
<td>15</td>
<td>8%</td>
</tr>
<tr>
<td>VODAFONE</td>
<td>32</td>
<td>16%</td>
</tr>
<tr>
<td>TIGO</td>
<td>6</td>
<td>3%</td>
</tr>
<tr>
<td>EXPRESSO</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Number of years on the network</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-4 years</td>
<td>74</td>
<td>38%</td>
</tr>
<tr>
<td>5-8 years</td>
<td>74</td>
<td>38%</td>
</tr>
<tr>
<td>9 years and above</td>
<td>37</td>
<td>20%</td>
</tr>
</tbody>
</table>

Source: fieldwork (Oct. 2013)

The demographic analysis in table 1 shows that 56% of the 195 respondents are male whereas the remaining 44% are females. In the case of mobile network used by respondents, 71% are on MTN, 16% are on Vodafone, 8% are on Airtel, 3% on Tigo and 2% on Glo network. As regard to the number of years on the network by respondents, 20% of the respondents have stay with their network for 9 years and above, 34% of them have been on their networks for between 5 and 8 years while 34% of them claim to have been with their networks for a period of 2 and 4 years.

4.2 Descriptive statistics

Table 2 Descriptive statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service quality (SQ)</td>
<td>193</td>
<td>2.7824</td>
<td>1.29273</td>
</tr>
<tr>
<td>Switching barriers (SB)</td>
<td>183</td>
<td>2.8962</td>
<td>1.34864</td>
</tr>
<tr>
<td>Customer trust (CT)</td>
<td>183</td>
<td>3.0164</td>
<td>1.33621</td>
</tr>
<tr>
<td>Customer satisfaction (CS)</td>
<td>192</td>
<td>3.0312</td>
<td>1.30206</td>
</tr>
<tr>
<td>SMS rate/quality (SRQ)</td>
<td>182</td>
<td>3.0549</td>
<td>1.34092</td>
</tr>
<tr>
<td>Promotion (P)</td>
<td>193</td>
<td>3.0570</td>
<td>1.39637</td>
</tr>
<tr>
<td>Price (P)</td>
<td>191</td>
<td>3.1257</td>
<td>1.43083</td>
</tr>
<tr>
<td>GPRS rate/quality (GRQ)</td>
<td>182</td>
<td>3.1319</td>
<td>1.31887</td>
</tr>
<tr>
<td>Signal strength (SS)</td>
<td>183</td>
<td>3.1639</td>
<td>1.35282</td>
</tr>
<tr>
<td>Value offered (VO)</td>
<td>192</td>
<td>3.3073</td>
<td>1.35150</td>
</tr>
<tr>
<td>Call rate/quality (CRQ)</td>
<td>181</td>
<td>3.3370</td>
<td>1.84758</td>
</tr>
<tr>
<td>Network coverage (NC)</td>
<td>190</td>
<td>3.3526</td>
<td>1.42794</td>
</tr>
<tr>
<td>Prompt customer service (PCS)</td>
<td>191</td>
<td>3.3979</td>
<td>3.09988</td>
</tr>
<tr>
<td>Sales promotion (SP)</td>
<td>181</td>
<td>3.5304</td>
<td>1.32724</td>
</tr>
<tr>
<td>Brand image (BI)</td>
<td>192</td>
<td>3.7240</td>
<td>4.67945</td>
</tr>
</tbody>
</table>

Source: fieldwork (Oct. 2013)
From table 2 it is observed that almost all the mean are the same and the highest mean was 3.7240 representing brand image whilst the lowest mean was 2.7824 representing service quality. Therefore this study relies on five (5) top means which are brand image (3.7240), sales promotion (3.5304), prompt customer service (3.3979), network coverage (3.3526) and call rate/quality (3.3370).

### 4.3 Correlation Analysis

#### Table 3 Correlation Analysis

<table>
<thead>
<tr>
<th></th>
<th>CL</th>
<th>CRQ</th>
<th>NC</th>
<th>PCS</th>
<th>SP</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL</td>
<td>1</td>
<td>.299* (.000)</td>
<td>.424** (.000)</td>
<td>.098 (.177)</td>
<td>.420** (.000)</td>
<td>.112 (.123)</td>
</tr>
<tr>
<td>CRQ</td>
<td>.299** (.000)</td>
<td>1</td>
<td>.289** (.000)</td>
<td>.174* (.020)</td>
<td>.311** (.000)</td>
<td>.024 (.749)</td>
</tr>
<tr>
<td>NC</td>
<td>.424** (.000)</td>
<td>.289** (.000)</td>
<td>1</td>
<td>.069 (.343)</td>
<td>.321** (.000)</td>
<td>.068 (.353)</td>
</tr>
<tr>
<td>PCS</td>
<td>.098 (.177)</td>
<td>.174* (.020)</td>
<td>.069 (.343)</td>
<td>1</td>
<td>.181* (.015)</td>
<td>.049 (.504)</td>
</tr>
<tr>
<td>SP</td>
<td>.420** (.000)</td>
<td>.311** (.000)</td>
<td>.321** (.000)</td>
<td>.181* (.015)</td>
<td>1</td>
<td>.057 (.451)</td>
</tr>
<tr>
<td>CI</td>
<td>.112 (.123)</td>
<td>.024 (.749)</td>
<td>.068 (.353)</td>
<td>.049 (.504)</td>
<td>.057 (.451)</td>
<td>1</td>
</tr>
</tbody>
</table>

*** Correlation is significant at the 0.01 level (2-tailed).
** Correlation is significant at the 0.05 level (2-tailed).

The correlation analysis is based on the null assumption that there is no statistical significant linear relationship between customer loyalty and the determinants against the alternative assumption that there is significant linear relationship.

**Relationship between CRQ and CL**

The null hypothesis is that there is no statistical significant relationship between CRQ and CL against the alternative hypothesis that there is statistical significant relationship between CRQ and CL. In table 3, the correlation coefficient between CL and CRQ is 0.299 and is significant at 1% level. The HO is rejected.

**Relationship between NC and CL**

In table 3, the correlation coefficient between NC and CL is 0.424 which is significant at 1%. The results indicate significant positive relationship between NC and CL; therefore the null hypothesis is rejected.

**Relationship between PCS and CL**

From table 3, the correlation between PCS and CL is 0.098 which is not significance and the null hypothesis is accepted and can be concluded that there is no relationship between PCS and CL.

**Relationship between SP and CL**

In table 3, the correlation coefficient between SP and CL is 0.420, which is significance at 1%. Therefore, the null hypothesis is rejected and the result indicates significant positive relationship between SP and CL.

**Relationship between BI and CL**

The correlation coefficient between BI and CL is 0.112, which is not statistical significant, therefore, the null hypothesis is accepted.

### 5.0 Discussion of findings

The study investigated the determinants of customer loyalty among users of mobile telecom in the Brong Ahafo region of Ghana. Following the outcomes of literature reviews and frameworks, five hypotheses were assessed. The result of the study show that three (3) of the five (5) constructs (call rate/quality, network coverage, and sales promotions) showed positive correlations with customer loyalty, whereas prompt customer service and brand image did not reveal any significant statistical relationship with customer loyalty.

The data from respondents showed that CRQ can significantly influence mobile telecom users to become loyal to their service providers and available research suggest that this is particularly predominant in the mobile telecom sector in many countries. Olatokun and Nwonne (2012) in a similar study in the Nigerian
mobile telecom market stated that price/rate has a significant positive impact on consumer perception in selecting telecom service providers. Rahman et al., (2010), in a study of the Malaysian telecommunication market, observed that price/rate is a significant contributor in the decision of mobile users in selecting a mobile operator. Also a study on factors affecting customer satisfaction, in Pakistan, revealed that there is a high correlation between price/rate fairness and customer satisfaction (Hanif et al 2010). Furthermore, the study confirms previous research which found a positive relationship between service quality and customer loyalty (Zeithaml et al.,2008; Turel & Serenko 2006; Boateng & Quansah, 2013).

Another determinant that showed a significant relationship with customer loyalty (CL) was network coverage (NC). As put forward by previous studies such as Loo (2004) and Shin and Kim (2008), most customers consider issues such as a network’s ability to cover a wider proportion of localities and getting strong signals at all places within the country. This empirically relates to recent studies that reliable network coverage and convenience have strong relationship to customer loyalty (Boateng & Quansah, 2013; Asiedu & Sarfo, 2013; Nimako, 2012).

The current study reveals no relationship between prompt customer service (PCS) and customer loyalty (CL) and imitates previous findings of McDougall & Levesque (2000) who found that all telecommunication service providers in Malaysia differentiate themselves a high level of customer service and this has become significant driver in customer satisfaction. It also differ from Wang & Shick (2006) who suggested that customer relationship has positive customer service as well as Lucas (2005)and Nimako (2012) who are of the opinion that by providing excellent customer service companies can ensure that customers remain loyal. The findings is worrisome because evidence in the literature show that there is a significant relationship between customer service and customer loyalty (Oyeniyi & Joachim, 2008; Nimako, 2012). However, respondents reported disappointment with quality of customer care they receive such as long delay in getting through to the customer care personnel to make their complaints.

Findings shows that SP has a significant relationship to customer loyalty and supports findings from studies such as Munnukka (2008), Lai et al, (2009), Rahman et al., (2010) and Asiedu and Sarfo (2013). These researchers suggested that the high levels of competition within the mobile telecom industry make the adoption of promotional activities such as raffles, customer loyalty schemes and regular discounts on calls made indispensable. These marketing activities tend to draw both existing and prospective customers into patronizing the services provided by the mobile telecoms (Nysveen et al, 2005; Eshghi et al, 2007).

Finally, this study differ from previous research (Groholdt et al 2000; Liu 2008; Chen 2002; Smith & Taylor, 2004; Kandampully, 2007; Adeleke and Aminu, 2012) who found that brand image (BI) is an important driver of customer loyalty (CL) in telecommunications. A large number of respondents reported that service quality of these mobile telecom providers was very bad and this has contributed to this unfavourable brand image.

6.0 Conclusion

Based on the research results, CRQ, NC, and SP significantly affects CL whereas BI and PCS have no statistical relationship with CL for the sample. Therefore, mobile telecom providers have to focus on CRQ, NC, and SP so as to build a long term relationship with their customers to become very competitive. From the data of respondents, mobile telecom providers should pay more attention to providing relevant quality service elements (wide network coverage, call clarity and low call failure rates) to meet customers’ needs. This is so because the study has shown that there is a significant relationship between call rate/quality and customer loyalty. It is also recommended that, mobile telecom service providers should ensure that their mobile service providers should ensure that their network is reliable and convenience so that their customers can remain loyal to them as the study has shown that customer loyalty depend on network availability. Future research could study the causal relationship posited by the theories, such as marketing mix, to explore other antecedents on loyalty for making long-term customer delight and should be conducted in other industries and different global regions.

References

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