QUALITY SERVICE DELIVERY AMONG TELECOMMUNICATION SERVICE OPERATORS 
IN GHANA: A CASE OF VODAFONE-Ghana

Ibrahim, Masud
Department of Management Studies Education, University of Education; College of Technology Education, Kumasi, Ghana
imasud10@gmail.com

Nyame, R. K
Department of Management Studies Education, University of Education; College of Technology Education, Kumasi, Ghana

Kumah, Aaron
Department of Management Studies Education, University of Education; College of Technology Education, Kumasi, Ghana

Abstract
This study examined quality service delivery in the telecommunication industry in Ghana with Vodafone Ghana as the case company. The study adopted a single case study design. Data for this study was obtained through a structured questionnaire with some selected customers of Vodafone Ghana at the University of Education, Winneba. The study found that telecommunication customers in Ghana expect in order of importance reliability, responsiveness, assurance, tangibles and empathy with regards to quality of service provided by telecommunication service operators. The study further found a significant relationship between the service quality dimensions (assurance, tangibles, responsiveness, empathy and reliability) and customer satisfaction. The study also revealed a wider gap on all the five service quality dimensions with regards to customers’ perception of quality service delivery as against customer service expectations.

Keywords: Service Quality; Telecommunication; Vodafone; Ghana

INTRODUCTION
Quality service delivery in the telecommunication industry in Ghana has become a priority both to service providers and customers. Delivering service quality is recognized as so important that businesses not only require it for success but in some cases, for survival. Thus achieving and
maintaining customer-perceived service quality is regarded as an essential strategy for the successful provision of overall customer satisfaction and customer retention (Taylor & Baker, 1994; Reichheld & Sasser, 1990). Therefore, measuring perceived service quality is considered to be fundamental in developing a customer-oriented strategy that ensures the long-term survival of the firm (MacStravic, 1997).

Studies regarding service quality have been conducted in a multiplicity of contexts and in different countries. In Asia Wang & Lo (2002); In Africa, Negi (2009) and Van der Wal & Pampallis (2002). In Ghana however, most of the studies on service quality bother on issues like banking (Hinson & Frimpong, 2009); Determinants of bank service quality (Hinson & Amidu 2006); just to mention a few. However, studies with regards to the issue of service quality in the telecommunication industry in Ghana have received little attention. This study therefore aims at breaching this research gap by looking at the correlation between customer expectation of mobile phone services and the actual service delivered to them by their service providers. From the foregoing discussions, the study seeks to fulfill the following objectives:

1. To ascertain the service expectations of Vodafone customer with regards to quality service delivery
2. To find out the impact of quality service delivery on customer satisfaction
3. To find out the gap between service expectations of customers and actual service delivery

The rest of the paper is structured as follows; the next section reviews relevant literature on service marketing, quality service delivery and a conceptual framework of the study. This is followed by some explanations of the research methodology. In the fourth section, the study's findings are presented and discussed. The final section outlines the main conclusions of the study and puts forward the implications of the findings on management.

LITERATURE REVIEW

Service Defined

There is no universal definition of service. According to Hinson (2006), a service is an activity or series of activities of a more or less intangible nature that normally take place between the customer and the service employee or systems of the provider which are provided as solutions to consumer needs or problems. Zeithaml & Bitner (2000) define service as deeds, processes and performances. Following from this, services is represented to the client through problem analysis activities, meetings with the client, follow up calls, and reporting, which constitute a service of deeds, processes and performance. By this, it can be observed that the core offerings of courier also comprise deeds and actions performed for customers. Services are very integral to the offering rendered by firms in the courier industry. For Kotler (2003) services comprise of “any act or performance that one party can offer to another that is essentially intangible and
does not result in the ownership of anything. Its production may or may not be tied to a physical production”. Grönroos (2001) viewed service as processes or activities that are essentially intangible in nature. He noted that intangible nature of services is the main differentiating factor between a service and physical goods. This definition places greater emphasis on the importance of the interaction between the service provider and the customer as well as the role customers play during service delivery process.

An Overview of Service Quality
Service quality has been a frequently studied topic in the services marketing literature. Efforts to understand and identify service quality has been undertaking over the last three decades. Service quality is a consumer’s overall impression of the relative inferiority or superiority of an organization and its services (Bitner & Hubbert, 1994). Mackay & Crompton (1990) defined service quality as “the relationship between what customer’s desires from a service and what they perceive that they receive” (p. 47). Additionally, service quality is also a way of thinking about how to satisfy customers so that they hold positive attitudes toward the service they have received (Ostrowski, O’Brien& Gordon, 1993). Parasuraman, Zeithaml & Berry (1988) assert that “service quality is an all over evaluation of an entity’s excellence or superiority and this judgment or evaluation is similar to attitude and relate to, but not equivalent to, satisfaction”. In an earlier study, Parasuraman, Zeithaml & Berry (1985), after their examination of previous write-ups on the topic, made the following remarks about service quality: Evaluating quality of service is sometimes difficult for the consumer as compared to goods. While consumer employs tangibles cues such as style, hardness, colour, label, feel, package, fit, etc. to judge quality of goods, few such cues exist for the consumer when making judgment on the quality of service. Moreover, because of intangibility a firm may find it more difficult to understand how consumers perceive services and service quality (Gronroos, 1982).

Service quality perceptions result from a comparison of consumer expectation with actual service performance. In the words of Lewis & Booms (1983): Service quality is a measure of how well the service level delivered matches customers’ expectations. Delivering quality service means conforming to customer expectations on a consistent basis. In line with this thinking, Gronroos (1982) developed a model in which he contends that consumers compare the service they expect with perceptions of service they receive in evaluating service quality.

Quality evaluations are not made solely on the outcome of a service; they also involve evaluation of the process of service delivery. This notion implies that service quality is also affected by the level of material, facilities, and personnel as part of the process or manner in which the service is delivered (Sasser, Olsen & Wyckoff, 1978). In this regard, Gronroos (1982) posits that two types of service quality exist: technical quality, which involves what the customer
is actually receiving from the service, and functional quality, which involves the manner in which the service is delivered. The basic premise here is that service quality is produced in the interaction between a customer and elements in the service organization (Lehtinen & Lehtinen, 1982).

One of the earliest and most influential service quality works was by Grönroos (1983). It was based on the principle that perceived service quality (the dimension representing an organization’s reputation) was shaped by two interrelated dimensions: “technical” and “functional” quality. He defined technical quality as what the customer receives; for example, a meal at a restaurant or a hotel room with a bed to sleep in. Functional quality was defined as how the customer receives the service; for example, the appearance and behaviour of waiters, travel agency representatives or bus drivers. Thus, customers evaluate service quality by comparing their expectations of these quality dimensions against their actual perceptions during service encounters. Grönroos (1983) believed that while both quality dimensions are important, functional quality has the most impact on perceived service quality. While Grönroos (1983) and others sought to further develop their service quality models, another stream of theory emerged as a result of a landmark article by Parasuraman, Zeithaml & Berry (1985). They proposed, after conducting a series of focus groups and executive interviews, that perceived service quality was a function of four gaps, all of which were shown in their “Service Quality Model” (p. 44). The next section discusses the four gaps in brief.

Dimensions of Service Quality
Parasuraman, Zeithaml & Berry (1985) identified ten dimensions of service quality: Reliability, Responsiveness, Competence, Access, Courtesy, Communication, Credibility, Security, Understanding/knowing the customer and Tangibles. Similar to the six criteria Grönroos (1988) had outlined, Parasuraman, Zeithaml & Berry (1985) felt their ten dimensions represented what “consumers use in forming expectations about and perceptions of services” (p. 49). Likewise, they recognized that overall quality evaluations involve assessing processes as well as outcomes. Grönroos (1983) had earlier labelled this technical and functional quality. The ten dimensions of service quality became five when Parasuraman, Zeithaml & Berry (1988) developed SERVQUAL—a multi-item testing scale for measuring consumer perceptions of service quality. The authors presented evidence of the scale’s reliability, factor structure and validity, while explaining the rationale behind downsizing their dimensions. They proposed that the five specific dimensions of service quality including reliability, responsiveness, assurance, empathy, and tangibles exist and apply regardless of the service industry.

The most important service quality dimension to customers is reliability. Reliability is defined as the ability to perform the promised service dependably and accurately. In other
words, it means doing what you say you will do. Customers have consistently stated that a company’s ability to deliver promises is the most vital factor to providing service quality. Responsiveness is the willingness to help customers and to provide prompt service. Customers judge a company’s responsiveness by assessing the amount of time it takes and the attentiveness that is offered in response to their requests, questions, complaints, and problems. Companies that use automated phone systems, regularly put customers on hold, or consistently have long wait times or long lines tend to be rated low on the responsiveness dimension. Responding quickly to requests or complaints leads to a higher rating on this dimension.

The third dimension of service quality is assurance. Assurance is defined as employees’ knowledge and courtesy and the ability of the firm and its employees to inspire trust and confidence. The assurance dimension is particularly important in service industries offering high levels of credence qualities, such as auto repair and medical services. The importance of the assurance dimension increases in proportion to the risk and the greater the inability for a customer to evaluate the service. The expertise of an endorser or a particular service provider for a cruise vacation may affect the level of confidence and trust a customer has toward that service.

Empathy is the caring, individualized attention the firm provides its customers. Customers perceive the level of a company’s empathy by the degree of personalized service offered. Customers want to be known on an individual basis and feel that the company understands and addresses their individual needs. When competing with companies that enjoy economies of scale, small companies can earn greater market shares by focusing on empathy.

The final dimension of service quality is tangibles. Tangibles refer to the appearance of physical facilities, equipment, personnel and communication materials. These customers judge the overall service quality by looking at its five dimensions during all interactions with service providers. Companies need to perform well on all dimensions of service quality to ensure a positive overall evaluation.

**Relationship between Service Quality and Customer Satisfaction**

As a critical measure of organizational performance, service quality remains at the forefront of both the marketing literature generally, and the service marketing literature specifically. Practitioners and academic alike are keen on accurately measuring service quality in order to better understand its essential antecedents and consequences, and, ultimately, establish methods for improving quality to achieve competitive advantage. Research in the area of service marketing has recently began to address whether or not service quality affects customer satisfaction, loyalty, costs, profitability, word-of-mouth marketing, and post-purchase behaviour.
(Crosby, 1979; Cronin & Taylor, 1992; Caruana, 2002; Santos, 2003; Jabnoun & Al-Tamimi, 2003). For the purpose of the present study, this section reviews the congruence between service quality and customer satisfaction and customer loyalty.

**Service Quality vs. Customer Satisfaction**

Customer satisfaction and service quality have been defined by marketing researchers in different ways. Oliver (1997, p. 28) defined satisfaction as “the consumer’s fulfilment response, the degree to which the level of fulfilment is pleasant or unpleasant”. Zeithaml & Bitner (2000, p. 75) defined customer satisfaction as the “customers’ evaluation of a product or service in terms of whether that product or service has met their needs and expectations”.

Customer satisfaction and service quality are two distinct, though highly correlated, constructs (Bansal & Taylor, 1997; Dabholkar, Shepherd & Thorpe, 2000). In marketing literature several studies have found positive relationships of service quality and customer satisfaction with customer behavioural intentions (Anderson & Sullivan, 1993; Parasuraman, Zeithaml & Berry, 1988). Further, studies have also shown that customer satisfaction mediates the effect of service quality on behavioural intentions (Gotlieb, Grewal & Brown, 1994). It is recommended that customer satisfaction should be measured separately from service quality in order to understand how customers evaluate service performance (Dabholkar, Shepherd & Thorpe, 2000).

Service quality prior to the mid-1980s tended to focus on the operational aspects of customer satisfaction as well as the evaluation of what actually motivated customers to be satisfied with the service they received at different establishments (Oliver, 1980; Lehtinen & Lehtinen, 1982). Oliver (1980) developed the theory that there exists a direct relationship between a customer’s service satisfaction and customers’ expectations. Subsequent research revealed that satisfaction is determined by how positive a customer perceives the performance of particular service. If customers perceive service quality to be high, this would translate into high levels of customer satisfaction (Bryant, Kent, Lindenberger & Schreiher, 1998; Vavra, 1997; Ganesh, Arnold & Reynolds, 2000; Caruana, 2002). According to recent study, if a business performs a service that surpasses customer expectations, the customer will be satisfied and is likely to be a repeat customer of the service firm (Oliver, 1997; Ganesh, Arnold & Reynolds, 2000).

Parasuraman, Zeithaml & Berry (1988) conceptualized customer evaluations of overall service quality as the gap between expectations and perceptions of service performance levels. They developed the SERVQUAL instrument for measuring service quality offered by service firms. SERVQUAL has five dimensions: reliability, responsiveness, assurance, empathy, and tangibility. However, their gap theory does not explain the fact that confirmation of high expectations would result in positive evaluation of services but the confirmation of low
expectations is less likely to cause positive assessment of service quality. Opponents of the gap theory suggest that perceptions of service performance directly determine service quality (Cronin & Taylor, 1992; Tse & Wilton, 1988). Consequently, SERVPERF has been proposed for measuring service performance (Cronin and Taylor, 1992). In this regard, Rust & Zahorik (1993) and Trubik & Smith (2000), for example, reported that high levels of service quality results to customer retention through its influence on customer satisfaction, especially in markets that are highly competitive and saturated.

Zeithaml, Berry & Parasuraman (1996) showed how outstanding levels of service quality stimulated customer satisfaction and favourable customer intentions, which in turn stimulated retention, which in turn stimulated decreased expenses, increased profits and customer referrals. Customers’ positive intentions are usually demonstrated through admiration of the business, increased purchases, payment of price premiums without hesitation, and referral of the business to others. The link between these customer satisfaction and service quality is bolstered by additional research from Anderson & Sullivan (1993) and Cronin & Taylor (1992). Since the mid-1990s, researchers in various parts of the world have undertaken studies to better understand which of the ten determinants of service quality identified by Parasuraman, Zeithaml & Berry (1985) are most likely to lead to high levels of customer satisfaction in the services industry. In their analysis of the US and Latin American private banking sector, Lassar, Manolis & Windsor(2000) concluded that financial institutions could only achieve high levels of customer satisfaction by providing consistently high levels of reliability. In South Africa, Bick, Brown & Abratt (2004) also discovered that customers perceived reliability (which they called operational excellence) to be the most important contributor to customers’ satisfaction.

In a study by Cronin & Taylor (1992) they tested among other things, the causal relationship between service quality and customer satisfaction. The authors assert that, perceived service quality leads to customer satisfaction. In a more recent study also addressing the relationship between service quality and customer satisfaction, Sprend & Mockoy (1996) tested the model developed by Oliver (1993), and suggests, among other things, that perceived service quality is an antecedent to customer satisfaction. Their results indicate that, as predicted, service quality leads to satisfaction.

CONCEPTUAL FRAMEWORK
This section proposes a model of the relationship between service quality and customer satisfaction. The two concepts making up the conceptual framework are service quality and customer satisfaction, adapted from Caruana (2002) (see figure 1).
Figure 1 relates to the conceptual model developed for this study. The model is adapted from Caruana’s (2002) model. The model consists of two main blocks; service quality dimensions and customer satisfaction. These concepts, as indicated in the preceding sections, are related to each other with service quality as an antecedent construct and customer satisfaction as an outcome variable. Service quality has a direct effect on customer satisfaction (Cronin & Taylor, 1992; Sprend & Mockoy, 1996).

Based on this framework of customer evaluation of response to service failure, the following hypotheses are tested:

Hypothesis 1: Customer expectations has a positive effect on quality service delivery

Hypothesis 2: Quality service delivery will lead to customer satisfaction

METHODOLOGY

Saunders, Lewis & Thornhill (2007) identify seven research strategies; these are experiment, survey, case study, action research, grounded theory, ethnography, and archival research. For the purpose of this study, the survey research design was adopted. Survey is a common strategy in business and management research. It allows for the collection of data from a population in an economical way. Using a survey strategy yields more control over the research process and the sampling method used (Saunders, Lewis & Thornhill, 2007).

This study therefore adopts the survey as a research tool to collect data from the sample to answer the research questions as well as the objectives stated in this study.
Research design
The research adopts a cross-sectional design which allows the researcher to draw one or more samples from the population at one time period. Since it is a correlational type of design, it establishes a relationship between two variables in each case, i.e. one dependent and the other an independent variable. The quantitative approach was used to quantify incidences, current conditions and to investigate the relationship between the independent and dependent variables using information gained from the questionnaire.

Study Population
The research population of the current study involves all customers of Vodafone Ghana. The sampling frame from which data was collected was tertiary students from the various university campuses in Ghana. The selection of students as the sampling frame was largely due to convenience and accessibility. Also, the sample was selected due to their rich understanding on the issue of service quality as most of them are business students and business owners/managers and so have rich understanding regarding service delivery issues.

Sampling method and sample size
The sample size was determined using the Krejcie & Morgan's table (1970) as cited in Amin (2005) and Gay & Diehl (1992), method that states that at least 30 subjects are required to establish a relationship. The sample size selected for the study is 50 MBA students from the University of Education Winneba, Kumasi Campus.

The study used a simple random sampling method and followed by purposive sampling method to select respondents for the study. Purposive sampling was used to pick only those respondents who have special knowledge and experience on service quality.

Source of data
Data for the study comprised both primary and secondary data sources. The secondary data gathered includes relevant documents and reports obtained from the archives and other research work on the topic. Primary data gathered from respondents was collected via questionnaire filled by the respondents. The selection of these tools was guided by the nature of data to be collected, the time available as well as the objectives of the study.

Instrumentation
The quantitative measure was administered using structured questionnaire. The SERVQUAL model developed by Parasuraman, Zeithaml & Berry (1985) was used as the instrumentation for
this study to collect relevant data to answer the studies questions. The SERVQUAL model represents service quality as the discrepancy between a customer’s expectations of service offering and the customer’s perceptions of the service received (Parasuraman, Zeithaml & Berry, 1985). The SERVQUAL model consists of five dimensions of service quality when created; tangibles, reliability, responsiveness, empathy and assurance. Ladhari, (2009), recommended that the SERVQUAL model is a good scale to use when measuring service quality in various specific industries. In this regard, we will use this model because it takes into account customer’s expectation of a service as well as perceptions of the service which is the best way to measure service quality in service sector.

The structured questionnaire was adopted since it elicits specific responses that are easy to analyse. It is also economical in terms of time because it is easy to fill in, which takes little of the respondent’s time and that of the researcher in administering and analysing them. (Amin, 2005)

**Data Quality Control**
For quality control, a pre-test of the research instrument was done to test its face validity from experts and reliability. The questionnaires accuracy and completeness was checked using the Cronbach’s $\alpha$ (alpha) test. The cut off points was ≤ 6 weak; 7 minimum acceptable; and ≥ 8 good since Likert scale measures are fundamentally at the ordinal level of measurement because responses indicate a ranking only.

**Validity**
Validity refers to the appropriateness of the instrument, while reliability refers to the consistency in measuring whatever it is meant to measure (Amin, 2005). Validity also refers to quality, that an instrument used in research is accurate, correct, true, meaningful and right. The valid instrument is supposed to produce true results that reflect the true situation in the conditions of the environment it is supposed to measure (Gravetter & Forzona, 2011). In this study, validity was established through content validity by ensuring that the content of the instruments corresponded to the contents of the theoretical concept it is designed to measure.

**Reliability**
Reliability refers to the consistency of the research instrument. Reliability gives a measure of stability or dependability or trustworthiness of an instrument in order to obtain information. International consistence was used during which Cronbach’s alpha reliability coefficients greater than 0.7 was considered significant (Collis & Hussey 2009). Reliability also refers to the degree with which an instrument consistently measures whatever it is measuring. The instrument produces the same results whenever it is used to measure what is intended from the
respondents (Amin, 2005). Reliability of questionnaires was assured through pre-testing as explained above.

DATA ANALYSIS & FINDINGS
The data collected was analysed using quantitative analysis. A quantitative analysis is adopted for data analysis because the information gathered is quantitative in nature. Inferential statistics (confidence intervals and tests of hypotheses) are used for the data analysis. The purpose of making statistical inferences is to generalize from sample results to the population characteristics. The analysis included correlation and regression to establish the strength and direction of the relationship between the variables.

Profile of Respondents
A total of 50 responses were collected from the survey, of which 33 (66%) were males and 17 (34%) were females. The age of the respondents were in the category 18-24 (30.0%), 25-30 years (45.0%), 31-40 years (15.0%) and 41 years and above (10.0%). With regards to the level of education, 80.0% were final year MBA postgraduate students and 20.0% were first year MBA postgraduate students.

Inferential Statistics
With inferential statistics, we are trying to reach conclusions that extend beyond the immediate data alone. We used inferential statistics to make judgments of the probability that an observed difference between groups is a dependable one or one that might have happened by chance in this study. Thus, we are using inferential statistics to make inferences from our data to more general conditions.

Pearson’s Correlation analysis
Pearson’s Correlation analysis was used to determine the nature (direct or inverse) and the degree of association between two or more variables in this study. Pearson’s Correlation analysis was preferred since it is a common measure of the relationship between numerical variables measured on Likert scale (Tull & Hawkin, 1987).

Relationship between Service Quality and Customer Satisfaction
According to the results in Table 1, the correlation results indicate a significant positive relationship exists between service quality (assurance, tangibles, responsiveness, empathy and reliability) and customer satisfaction ($F = 1.430E3$, $P < 0.05$). The value of the adjusted $R$
Square (0.993) shows that 99.3% of the total variations in customer satisfaction is explained by assurance, tangibles, responsiveness, empathy and reliability.

Table 1: service quality (assurance, tangibles, responsiveness, reliability and empathy) vs. customer satisfaction on Vodafone's service delivery.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>44.506</td>
<td>5</td>
<td>8.901</td>
<td>1.430E3</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>.274</td>
<td>44</td>
<td>.006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>44.780</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-Square= 0.994, Adjusted R-Square =0.993, S.E. =0.07889

Customer Satisfaction vs. Service Quality (Coefficients)

Results from Table 2 shows that the biggest contributing factors to customer satisfaction are reliability and tangibles. This is followed by responsiveness, assurance and empathy respectively. Comparing the five factors, reliability (P < 0.05), tangibles (P < 0.05), and responsiveness (P < 0.05) contribute significantly to customer satisfaction; whereas assurance (P > 0.05) and empathy (P > 0.05) do not significantly contribute to service quality according to this research. Ideally, it is fair to conclude that the service quality dimensions (reliability, tangibles and responsiveness) are significant with customer satisfaction; but assurance and empathy do not significantly contribute to customer satisfaction. Hence, when constructing a model for service quality in the telecommunication industry; assurance and empathy can be dropped.

Table 2: Customer Satisfaction vs. Service quality (assurance, tangibles, responsiveness, reliability and empathy) (Coefficients)

<table>
<thead>
<tr>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficient</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>B Std. deviation Beta</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-0.243 0.078 -0.119</td>
<td>-3.140</td>
<td>0.003</td>
</tr>
<tr>
<td>Reliability</td>
<td>0.467 0.064 0.476</td>
<td>7.325</td>
<td>0.000</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>-0.183 0.085 -0.194</td>
<td>-2.156</td>
<td>0.037</td>
</tr>
<tr>
<td>Empathy</td>
<td>0.012 0.073 0.013</td>
<td>0.159</td>
<td>0.471</td>
</tr>
<tr>
<td>Tangibles</td>
<td>0.667 0.056 0.598</td>
<td>11.974</td>
<td>0.000</td>
</tr>
<tr>
<td>Assurance</td>
<td>0.093 0.069 0.119</td>
<td>1.340</td>
<td>0.187</td>
</tr>
</tbody>
</table>
Service Gap Analysis
Parasuraman, Zeithaml & Berry (1994) suggested that the gap analysis is accurate in identifying service shortfalls in an operation. Addressing these identified shortfalls is the foundation for planning strategies to ensure customer experiences that are consistent with their expectations and thus increasing the probability of satisfaction. According to Parasuraman, Zeithaml & Berry (1985, p.48) the higher (more positive) the perception (P) minus expectation (E) score, the higher the perceived service quality and thereby leading to a higher level of customer satisfaction. In this regard, the gap scores were calculated based on the difference between the consumers' perceptions and expectations of services offered by mobile service provider that is Vodafone Ghana.

Table 3: Perception (P), expectation (E) and service quality (SQ) gap scores

<table>
<thead>
<tr>
<th>SERVQUAL Dimensions/Items</th>
<th>Mean (P)</th>
<th>Mean (E)</th>
<th>SQ Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangibles</td>
<td>5.6</td>
<td>6.16</td>
<td>-0.56</td>
</tr>
<tr>
<td>T1</td>
<td>1.82</td>
<td>2.0</td>
<td>-0.18</td>
</tr>
<tr>
<td>T2</td>
<td>1.8</td>
<td>1.84</td>
<td>-0.04</td>
</tr>
<tr>
<td>T3</td>
<td>1.98</td>
<td>2.32</td>
<td>-0.34</td>
</tr>
<tr>
<td>Reliability</td>
<td>7.24</td>
<td>9.88</td>
<td>-2.64</td>
</tr>
<tr>
<td>RL1</td>
<td>1.84</td>
<td>2.26</td>
<td>-0.42</td>
</tr>
<tr>
<td>RL2</td>
<td>2.04</td>
<td>2.68</td>
<td>-0.64</td>
</tr>
<tr>
<td>RL3</td>
<td>1.72</td>
<td>2.56</td>
<td>-0.84</td>
</tr>
<tr>
<td>RL4</td>
<td>1.64</td>
<td>2.38</td>
<td>-0.74</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>5.68</td>
<td>7.42</td>
<td>-1.74</td>
</tr>
<tr>
<td>RS1</td>
<td>1.8</td>
<td>2.16</td>
<td>-0.36</td>
</tr>
<tr>
<td>RS2</td>
<td>2.04</td>
<td>2.66</td>
<td>-0.62</td>
</tr>
<tr>
<td>RS3</td>
<td>1.84</td>
<td>2.6</td>
<td>-0.76</td>
</tr>
<tr>
<td>Assurance</td>
<td>5.54</td>
<td>6.72</td>
<td>-1.18</td>
</tr>
<tr>
<td>A1</td>
<td>1.78</td>
<td>2.54</td>
<td>-0.76</td>
</tr>
<tr>
<td>A2</td>
<td>1.92</td>
<td>2.08</td>
<td>-0.16</td>
</tr>
<tr>
<td>A3</td>
<td>1.84</td>
<td>2.1</td>
<td>-0.26</td>
</tr>
<tr>
<td>Empathy</td>
<td>3.76</td>
<td>4.64</td>
<td>-0.88</td>
</tr>
<tr>
<td>E1</td>
<td>1.84</td>
<td>1.94</td>
<td>-0.1</td>
</tr>
<tr>
<td>E2</td>
<td>1.82</td>
<td>2.32</td>
<td>-0.5</td>
</tr>
</tbody>
</table>

From the results of the service gap score in Table 2, it is evident that in general, customers' perceptions of Vodafone's services quality did not meet their expectations (perception minus expectation gap scores being negative). While the larger mean gaps were reported for the
dimensions of reliability (-2.64), responsiveness (-1.74) and assurance (-1.18); the dimensions with the least gaps are tangibles (-0.56) and empathy (-0.88). These values show that the perception of mobile service customers is less than the expected level of service quality.

DISCUSSION
This study sought to explore the effect of quality service delivery on satisfaction of Vodafone customers in Ghana. The study sought to address three main objectives i.e. to ascertain the service expectations of Vodafone customer with regards to quality service delivery; to find out the gap between service expectations of customers and actual service delivery; and to find out the impact of service quality delivery on customer satisfaction.

With regard first objective concerning the expectation in a service delivery, the findings revealed that customers expect in the order of importance reliability, responsiveness, assurance, tangibles and empathy. This suggests that customers of Vodafone expect nothing from the mobile service provider except reliable service. That is, they expect the service provider to keep to their deadlines and promises made to customers. Customers also expect the service provider to be responsive to their needs by giving them prompt services. Additionally, customers of Vodafone expect them to be empathetic by showing concern to their problems and taking steps to solve customer problems.

The second research objective revealed a positive correlation between service quality and customer satisfaction. Service recovery had a strong influence on Word of Mouth (WOM) and overall firm satisfaction had a strong influence on purchase intention. This finding suggests that customers who are satisfied with service quality efforts are willing to recommend the firm to friends and are likely to make repurchase intentions. Thus, satisfaction with the level of service received may increase the likelihood that customers will recommend a particular telecom firm to friends and family. Similarly, though overall satisfaction with a firm affects purchase intent, it may not affect WOM intent. Still, given the importance of WOM intent in creating new customers and the importance of repurchase intention in retaining existing customers it seems beneficial for service providers to consider how both satisfaction with the recovery and overall firm satisfaction affect these different types of intent (Hart, Heskett & Sasser, 1990; Kelley, Hoffman & Davis, 1993).

Furthermore, the third objective relates to the service gap between what customers expect and the actual service delivered to them. Findings with regards to the service gap show that customers’ perceptions of Vodafone’s services quality did not meet their expectations. That is, perception minus expectation gap scores all recorded negative scores. All the five service quality dimensions recorded negative scores. Reliability dimension recorded the biggest gap followed by responsiveness, assurance, tangibles and empathy. This suggests that customers of Vodafone are not satisfied with the overall service they receive from the mobile service.
operator. Consumers not satisfied with the service provider could be because of the poor interaction between the customer and service provider or also because the consumer is becoming more and more demanding and does not tolerate any shortfalls in the quality of services offered by the mobile service provider (Douglas & Connor 2003).

CONCLUSION

The primary objective of the study is to identify the overall quality associated with mobile services in Ghana with Vodafone Ghana as a case study. The results concerning overall service quality, as measured using a five-point Likert type scale, revealed that service quality has a significant effect on customer satisfaction. The other part of the study concerned with identifying service quality gap(s) using modified SERVQUAL dimensions. Perception minus expectation scores of the scale dimensions indicated wider gaps with reliability (-2.64) followed by the dimensions of responsiveness (-1.74), assurance (-1.18), tangibles (-0.56), and empathy (-0.88). This shows that customer perceptions of mobile service quality performance fell below their expectations as evidenced by the negative gap scores for all the SERVQUAL dimensions.

However despite these findings, the study had some limitations which are first and foremost the sample size chosen as compared to the number of Vodafone customers in Ghana appears insignificant. Secondly, there are about 6 network providers and choosing one might affect the generalizability of the research findings. Finally, the geographical location of some customers might also influence the research findings.

Managerial Implications and Recommendations

Management of Vodafone have been able to satisfy customers on the service quality dimensions that is, reliability of service, empathy, responsiveness, tangibles and assurance. However, there is a gap in service i.e. discrepancy between what customers expect and the actual service delivered to customers which they need to work on in order to ensure customer satisfaction and retention.

Since perception minus expectation scores on all the service quality dimensions were obtained as negative and significantly wider, it is important to manage all the dimensions while enhancing perceptions of service quality. Additionally, Vodafone should also concentrate on providing superior reliable service, particularly, accuracy and dependable services. This will help in lifting the overall level of service quality. Also, the company should under promise customers even if they have the capacity to deliver on the promise. This would help the company to breach the service gap that might arise.
Recommendations for Future Research

With respect to the future research, several avenues can be explored such as the usage of large sample to further test the applicability of the SERVQUAL model. Also, it is desirable to collect data on the expectation scale before customers encounter the service i.e. before subscription, and after their experience so as to measure accurately the service performance. Additionally, since most quality features in the SERVQUAL are related with customer handling, further items should be incorporated and investigated for their applicability to telecommunications and specific to mobile services.

REFERENCES


