

**FACTORS AFFECTING CUSTOMER SATISFACTION AND  
PREFERENCE IN THE TELECOMMUNICATIONS  
INDUSTRY: A CASE STUDY OF MTN GHANA**

by

KNUST

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## DECLARATION

I hereby declare that this submission is my own work towards the Executive Masters of Business Administration and that, to the best to my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

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## ABSTRACT

This study examines factors affecting customer satisfaction with MTN mobile telecommunications network. Specifically, it seeks to uncover the factors accounting for the level of customer satisfaction, identify the factors considered by subscribers in choosing MTN mobile telecommunications network, and ascertain the areas subscribers want MTN mobile telecommunications network to improve. The study reviewed major theoretical leanings to develop a conceptual framework which suggests that customer satisfaction in the mobile telecommunications industry would be a function of service quality, service recovery, price fairness, brand image, and customer orientation of service employees. Data for the study came from a systematic random sample of 165 MTN mobile telecommunications customers, and the data were analysed through descriptive statistics, correlation analysis and ordinary least squares regressions. The descriptive statistics results indicate that customer satisfaction with MTN network appears to be very low. The correlation analysis resulted in the confirmation of the study's conceptual framework, but the results of least squares regression suggest that significant positive relationships exist only between customer satisfaction and service quality and between customer satisfaction and price fairness, but not for other variables such as service recovery, brand image, and customer orientation of service employees. The descriptive statistics indicate that when choosing MTN the main factors respondents considered included widest use by family and friends and widest network coverage, with respondents scoring MTN relatively higher on network coverage and sales promotion, but they think that MTN offers relatively non-competitive prices and low quality services, leading to their recommendations that improvement is needed urgently from quality of services and competitive pricing.

## DEDICATION

I dedicate this work to my dear wife Alberta Esinu Yawa Yirenkyi and my lovely kids: Nana Akua Yirenkyi and Kofi Ampomah Yirenkyi Jnr.

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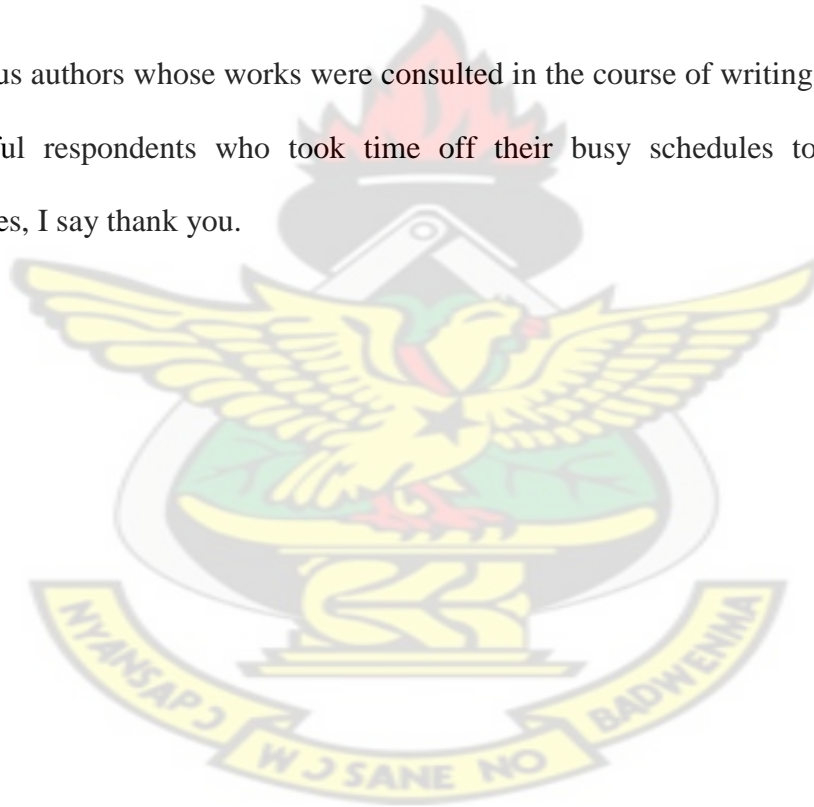
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## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 BACKGROUND TO THE STUDY**

Following decades of poor service performance, especially by the state-owned enterprise in charge, i.e. Ghana Post & Telecommunications (P&T, see Frempong and Henten, 2004), the telecommunications industry in Ghana was deregulated. Prior to the deregulation exercise, the industry, as dominated by P&T, was characterised by deficient telecommunications infrastructure and operational inefficiencies, and services provided by P &T were very poor with low penetration rates (Frempong and Henten, 2004). However, this trend would be partly mitigated by the deregulation exercise, which has no doubt encouraged a few new entrants into the industry promoting a stable operating environment for all participants as well as promoting fair competition and efficiency (Boohene and Agyapong, 2011).

In the now competitive era, innovation has been brought to sharper focus, with introduction of several services such as international roaming, mobile money, internet facilities, and teleconferencing facilities giving customers a range of choices apart from merely making and receiving calls (Mahmoud and Hinson, 2012). This notwithstanding, mobile telecommunications networks in Ghana are buffeted with frequent interconnectivity problems and customers continue to raise eyebrows about the service quality delivered by these companies (see, e.g., Nimako et al., 2010). Thus, Adjetey (2012) doubted whether Ghanaian telecommunications companies have policies in place to ensure total satisfaction of their customers. But it would seem that competition and advancement in information communications technology is likely to exert pressure on managers in this industry to

demonstrate customer-centric and continuous service improvement as a way to ensuring customer satisfaction.

Indeed, the marketing concept recognises that the key to achieving organisational goals consists of determining the needs and wants of target markets and delivering the desired satisfactions more effectively and efficiently than competitors (Hinson and Mahmoud, 2011). It recognises the understanding of customer wants as the starting point of an organisation's business operations. According to this view, the successful organisation is the one that directs all its business activities towards satisfying the needs, wants and aspirations of its target market for a profit (Mahmoud et al., 2010). Indeed, the idea of treating customer satisfaction as the basis for the existence of the business organisation has long been debated in organisational studies (see e.g., Drucker, 1954), but has recently received growing attention from management scholars (Olorunniwo et al., 2006; Sivadas and Baker-Prewitt, 2000; Boohene and Agyapong, 2011) in their quest to explain the basis for achieving sustainable competitive advantage.

Advocates of customer satisfaction stress that customers who are satisfied with the products provided repurchase the product resulting in better market share and profitability for the firm (Day, 1994; Drucker, 1954). In this context, Day (1994) argues that statements such as “stay close to the customer”, “put the customer at the top of organisation chart”, and “define the purpose of a business as the creation and retention of satisfied customers” indicate that companies that offer superior customer value are “expected to enjoy superior long run competitive advantage and profitability” (p. 37). Because customer satisfaction represents the consumer's judgments regarding a firm's success or failure in meeting expectations (Oliver, 1999), satisfied customers are likely to spread the good word to other potential customers and

keep coming back to the organisation providing it with more business (Argawal et al., 2003). Therefore, high customer satisfaction leads to an acceleration of cash flows, an increase in the volume of cash flows, and a reduction in risk associated with those cash flows (Bennett, 2005; Rust et al., 2004).

Clearly, scholars in general management and marketing management in particular view customer satisfaction as a root construct of growing importance. Therefore, the need to understand the factors that drive customer satisfaction is an important research task not only for scholars but also for organisational executives who now face increasingly sophisticated customers. A drastic increase in the numbers of better-educated and quality-conscious consumers in Ghana, coupled with the capabilities of new technology, has placed increasing pressures on telecommunications service providers in their attempt to build a base of satisfied customers. Due to the important role of customer satisfaction in engendering superior financial performance, the need to measure and track customer satisfaction is considered a must-do for every firm.

## **1.2 PROBLEM STATEMENT**

Nimako et al. (2010, p. 36) state that there is a widespread dissatisfaction with the general telecom development in Ghana among users as well as policy decision makers and administrators. The National Communications Authority (NCA) reported there has been more customer complaint about poor service quality in recent years (BIZ Community.com, October 19, 2007) and this has been attributed to the fact that the goals set by government have only partly been met and the quality of service is still low and has even deteriorated on some indicators (Frempong and Henten, 2004, p.3). Therefore, the question that begs the

present study's attention is what factors affect customer satisfaction in the telecommunications industry in Ghana.

Present reports about the increasing customer dissatisfaction due to poor service quality suggest that service quality would be a major determinant of customer satisfaction among Ghanaian telecommunications consumers. These findings are not surprising to SERVQUAL theorists, who have long argued that service quality has a strong effect on behavioural intentions such as subjects' loyalty to the company, propensity to switch, willingness to pay more, and external response to problem (Parasuraman et al., 1988; Cronin et al., 2000; Zeithaml et al., 1996).

However, with respect to the Ghanaian telecommunications industry, most of the evidence provided to support this thesis is largely anecdotal in nature. If practitioners are to take the issue of customer dissatisfaction seriously, then more scientific findings based on customers' perspectives are needed. Moreover, beyond the concept of service quality, there might be other issues that are causing dissatisfaction among Ghana telecommunications consumers. For instance, marketing theory postulates that customer orientation (see Mahmoud et al., 2010), service recovery (see Michel and Meuter, 2008), and price fairness or justice (see Herrmann et al., 2007), for example, play central roles in engendering customer satisfaction. It may be that Ghanaian telecommunications companies exhibit low degrees of customer orientation, or are unable to recover completely from their service failures, or are charging unfair prices on their services.

Unfortunately, to date, studies on customer satisfaction in the telecommunications industry in Ghana have overlooked the disposition of telecommunications companies on these issues and

in particular how they impact the level of customer satisfaction. In short, a comprehensive study is needed that examines the full range of factors affecting customer satisfaction of telecommunications companies in Ghana.

### **1.3 OBJECTIVES OF THE STUDY**

The purpose of this study is an investigation of customer satisfaction in the telecommunications industry in Ghana. In particular, the present study has four objectives which are to:

- 1) Examine the extent to which mobile telecommunications subscribers in Ghana are satisfied with the services delivered by MTN Ghana.
- 2) Determine the factors accounting for the level of customer satisfaction among mobile telecommunications subscribers in Ghana.
- 3) Identify the factors considered by mobile telecommunications subscribers in Ghana when choosing between networks.
- 4) Ascertain the things mobile telecommunications subscribers in Ghana want their network providers to do differently in order to meet and exceed their expectations?

### **1.4 RESEARCH QUESTIONS**

This study is set out to address the following questions:

1. What is the satisfaction level of MTN subscribers in Ghana?
2. What factors account for the level of customer satisfaction among mobile telecommunications subscribers in Ghana?
3. What are the factors considered by mobile telecommunications subscribers in Ghana when choosing between networks?

4. What will consumers want their network provider to do differently in order to meet and exceed their expectations?

### **1.5 SIGNIFICANCE OF THE STUDY**

This study develops a model of the determinants of customer satisfaction in the telecommunications industry in a developing African country context (Ghana) thereby making significant contribution to both marketing theory and practice.

For the study's contribution to marketing theory, despite the widespread recognition given to customer satisfaction as the goal of service organisations, research on the factors leading to customer satisfaction in the telecommunications industry in Ghana is sparse. Past studies have hinted at the role of service quality provision but in the process overlooked other potential factors such as the level of customer orientation of the firm. The present research integrates all potential factors into a single model (see Figure 2.1 on page 27) and tests their determining power in driving the level of customer satisfaction in the Ghanaian telecommunications industry, a context where report of customer dissatisfaction has been endemic. In this way, the present research extends research on service quality (Parasuraman et al., 1988), corporate marketing (Aspara and Tikkanen, 2011), market orientation (Narver and Slater, 1990), and service recovery (Anderson and Sullivan, 1993), among others.

With respect to contribution to marketing practice, it is hoped that managers would be informed (through the results of the research) about the ways to achieving higher levels of customer satisfaction in the telecommunications industry. More specifically, by making reference to the study's results, managers can attain and retain customers without much dissonance. Thus, this study is expected to assist in the understanding of practices in telecommunications industry requiring urgent and sustained managerial attention. In



particular, the study is expected to expose network providers' strengths and weakness in terms of engendering customer satisfaction to deliver continuous superior business performance. Good practices are observed in a particular network provider and are coupled with insight from the existing literature to advance insightful recommendations and suggestions that can be outlined by network providers to counter any bad practices. This would no doubt provide the grounds for management to provide world class telecommunications service to Ghanaian consumers. Ultimately, the present research is positioned to making the Ghanaian telecommunications subscribers enjoy quality service on a sustainable basis.

## **1.6 METHODOLOGY**

A quantitative case study research design is adopted for the purpose of this study. While there are six mobile telecommunications companies in operation, namely MTN, Tigo, Airtel, Expresso, Vodafone and Glo, MTN has been chosen for the study for the following reasons: First, it is the largest mobile telecommunications network in the country, controlling over 50 percent of the industry market share (see Mahmoud and Hinson, 2012); Second, consistent with Yin's (1994) observation, "a multiple-case study can require extensive resources and time beyond the means of a single student or independent research investigator" (p. 45); Third, because all telecommunications service providers retail intangible products with similar characteristics such as intangibility, inseparability, perishability and variability (Parasuraman et al., 1988), the results relating to the study of one network provider is likely to have a high level of external validity.

The population of the study consists of all subscribers of MTN. A "resource effective" sample size of 200 mobile subscribers was drawn from this population and through the use of

a systematic random sampling, and with help from the front-desk staff or customer contact personnel at the company's head office in Accra and three of its customer service centers also located in the Greater Accra Region, the researcher administered a questionnaire to every third customer that reported on the front-desk for a business transaction. Following the research guidelines of Hair et al. (1995), correlation analysis, regression analysis, and descriptive statistics were utilised to analyse the research data. Chapter three of the dissertation will elaborate on the methodological issues of the study.

### **1.7 SCOPE OF THE STUDY**

This study is focused on the level of customer satisfaction in the telecommunications industry and examines the determinants of customer satisfaction by considering the factors that influence consumer preferences among telecommunications companies in Ghana. The study is not interested in the consequences of customer satisfaction. Rather, its main focus is on the factors that cause satisfaction or dissatisfaction among mobile telecommunications subscribers in Ghana. Therefore, the study is designed to report specifically on the perspectives of mobile telecommunications service consumers. Since mobile subscribers are the ultimate recipients of the products that are being rolled out by mobile telecommunications companies, then (compared to managers) they are in a much better position to give insightful feedback regarding the level of customer satisfaction in the industry and in particular the factors that drive customer satisfaction. The scope of mobile telecommunications subscribers studied is restricted to only those that are resident in the Accra metropolitan area. Only subscribers resident in the Accra metropolitan area because time and financial constraints preclude the researcher from carrying the study across multiple geographical areas in Ghana.

## **1.8 ORGANISATION OF THE STUDY**

This dissertation is organised into five chapters. Chapter one forms the introduction, describing key areas such as background of the study, statement of the problem, research questions and research objectives. It also includes issues such as significance of the study, methodology and scope of the study.

Chapter two presents a review of the literature, tracing the development in the Ghanaian telecommunications industry and the characteristics and challenges of network service providers. Furthermore, the study's conceptual definition is presented by conceptualising the notion of customer satisfaction. Next, the author builds on research in five important theoretical spins to propose a model of determinants of customer satisfaction.

Chapter three describes the study's methodology in more detail by elaborating on the research paradigm, the research method, data collection procedures and data analysis techniques. Chapter four provides an in-depth analysis of data and discusses the research findings in relation to the research questions the study is set out to address.

Chapter five is the final chapter and it contains a summary of the major findings of the study. Also, a number of recommendations are made to practitioners, future research directions are suggested, and then finally the study's major conclusions are drawn.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

This chapter reviews related literature and thus seeks to position the work within the scholarly context. It first presents development in the Ghanaian telecommunications industry, drawing the lines between observed phases in this development and noting the service delivery performance of telecommunications service providers under each phase. Second, major theoretical leanings are illuminated, bringing out those constructs which are of importance to the research. Thirdly the chapter theorises the relationship between customer satisfaction and its determinants, and ends with the presentation and explanation of the conceptual framework for the study.

#### **2.2 GHANA'S TELECOMMUNICATIONS INDUSTRY: PAST, PRESENT AND FUTURE**

Telecommunications has been the means through which all daily transactions and activities are undertaken, aiding decision making, organising, influencing, activating, instructing, providing feedback, promoting interpersonal and business relationships as well as exchange of information (Boohene and Agyapong, 2011, p. 229). Telecommunications provide a means for undertaking social, economic, political, cultural, trade and commercial activities. Hence, the nature of a country's telecommunications industry affects its pace of commercial and domestic activities. Of course, the telecommunications industry plays a key role in the Ghanaian economy. Mahmoud and Hinson (2012) observe that direct and indirect employment by the sector continue to increase with over 4,000 of Ghana's labour force being absorbed into the mobile telecommunications companies. Also, telecommunications

companies make enormous contributions towards tax revenues with government bagging 26 million US dollars from communication service tax alone in the first quarter of 2010 (Ghana News Agency, 2010). In 2008, 222.80 million Ghana cedis (\$148.5 million) in tax revenues was paid by MTN Ghana, which constituted five percent of Government's total tax revenue for the year (Mahmoud and Hinson, 2012).

Tracing back from 1957 when Ghana attained its political independence from British colonial rule, development in the telecommunications sector can be broken into two distinct phases (see Haggarty et al., 2002). The two phases are the pre-reform era and the post-reform era. In this section, these two distinct phases are discussed and the service delivery performance of the telecommunications providers under each phase is illuminated.

### **2.2.1 THE PRE-REFORM ERA**

In this phase, the provision of telecommunications service was heavily regulated with Ghana Post and Telecommunications (P&T) as the sole service provider for both fixed and mobile networks. P&T was particularly inefficient and offered considerably poor services than were available in other African countries. During this era, telephone penetration rates in Ghana were low and stagnant, compared to other countries in sub-Saharan Africa. It was the case that only three out of every 1,000 inhabitants in Ghana had access to phones in their homes or businesses. Services were highly skewed towards Accra and other major urban areas like Kumasi and Takoradi. Over 80 percent of all phone lines were in urban areas, with 53.6 percent in Accra alone (Haggarty et al., 2002). The northern part of the country, which accounted for about 40 percent of the country's population at that time had only about one percent of the nation's telephone. The large part of the country was not connected to the

communication grid at all, as only 37 out of the 110 district capitals were connected (Haggarty et al., 2002).

According to Haggarty et al. (2002), the stagnant growth recorded in the communication sector then was not due to lack of demand. Some reports indicate that demand as at 1993 was three times the existing number of lines, giving way for the emergence of “communication centers” in the urban areas who sold the use of phone and fax line services to the public at prices as much as ten times P&T’s tariffs (Ampah, 1997). Ampah (1997) further underscores that the range of value-added services offered by P&T was limited because the company had not invested in the necessary infrastructure. Phone lines offered by P&T were unreliable and incapable of supporting fax machines. Anderson (1993) also reported that nearly 20 percent of all machines were not functioning at any time, while a World Bank (1997) report indicated that only 47 percent of all outgoing international calls were completed and just 21 percent of incoming calls went through. Thus, many companies invested heavily in their own private communication networks, mainly telex machines.

The litany of poor telecommunication services, including lack of access, poor quality, and high international tariffs, according to Haggarty et al. (2002), made the incumbent provider – P&T– unpopular. Agitations for increased competition grew larger as public sympathy for the P&T waned. Meanwhile, privatisation at this stage became an attractive option for the government due mainly to the fact that P&T had become highly unprofitable and heavily reliant on government subsidy. Taken as a whole, this trend of affairs led to the launch of the Telecommunications Sector Reform in 1994 with the aim of improving performance. The reform has been referred to as the “Accelerated Development Programme” (for a detail description of the reform, see Frempong and Henten, 2004). This reform led to the

incorporation of Ghana Telecom to replace P&T and the subsequent creation of the National Communication Authority (NCA) in 1996 to, among other things, regulate the sector, promote a stable operating environment for all participants, and promote fair competition and efficiency (Mahmoud and Hinson, 2012; Frempong and Henten, 2004). The next section elaborates the industry trends after this reform.

### **2.2.2 THE POST-REFORM ERA**

A considerable body of studies has found that competition in the telecommunications sector has improved performance as against monopoly provision around the world (see, e.g., Boohene and Agyapong, 2011; Fink et al., 2002). In Ghana, the deregulation of the industry attracted a few new entrants into the market, including Westel, Celltel, and Mobitel. While many problems characterised this embryonic stage of the post-reform era, the reforms put the sector in a much better shape than it was before. According to Haggarty et al. (2002), the reforms produced a rapid growth of fixed lines from Ghana Telecom, attributed in large part to three factors, namely access to donor funds, possibility of being sanctioned for non-performance, and competition from rapidly growing mobile services. As a result of this expansion, mainline services more than doubled in just three years, from 50 thousand in 1994 to 105.5 thousand in 1997, and by 2002 Ghana Telecom had had about 240,000 lines installed. Ghana not only caught up with its neighbours but outperformed them (Haggarty et al., 2002).

Cellular services have accounted for most of the dramatic growth taking place in the Ghanaian telecommunications industry. The mobile sector grew from a single provider in 1993 to four providers in 2002 with about 300,000 subscribers in total. Subscriber base for the four companies topped the seven million mark by the end of 2007, with a total of

7,604,053 subscribers (Nimako et al., 2010). Five years later, the number of mobile telecommunications providers reached six and currently mobile subscribers have reached fifteen million (Mahmoud and Hinson, 2012).

Despite the progress made so far, the literature is replete with reports indicating increasing complaints about the operations of telecommunications companies in Ghana. Customers are increasingly complaining about poor services, especially interconnectivity problems, and higher tariffs. In fact, the argument goes that “the goals set by government have only been partly met...and the quality of service is still low and has even deteriorated on some indicators. There is, therefore, a widespread dissatisfaction with the general telecom development in Ghana among users as well as policy decision makers and administrators” (Frempong and Henten, 2004, p.3). Therefore, at this juncture, it is important to ask: What are the causes of this lack of satisfaction among mobile telecommunications subscribers in Ghana? This study seeks to tackle this apparent lacuna in the literature. The remainder of this chapter would theoretically explicate the concept of customer satisfaction, review the theoretical and empirical literature on its determinants, and then, finally, presents a model for understanding the route to customer satisfaction in mobile telecommunications industry.

### **2.3 THEORETICAL BACKGROUND**

The study of customer satisfaction hardly requires any justification as renowned management scholar, Peter Drucker, posits that “There is only one definition of business purpose: to create a customer (Drucker, 1954, pp. 39–40). Although this quote captures the challenge any company or organisation faces, it is particularly apt for service-based companies, due to the greater interaction between service providers and their customers in the service-profit chain



(see Heskett, Sasser, and Schlesinger, 1997). Indeed, “high customer satisfaction ratings are widely believed to be the best indicator of a company's future profits” (Anderson and Sullivan, 1993, p. 125). Due to its importance, therefore, customer satisfaction is rooted in several fields of management, including but not limited to total quality management (TQM), performance management (PM), and marketing theory. In the ensuing, these three theoretical bases are explored in terms of how they relate to the concept of customer satisfaction.

### **2.3.1 CUSTOMER SATISFACTION FROM TQM PERSPECTIVE**

Total quality management, with its historical route from quality inspection to quality assurance to quality control, represents a total organisational approach for meeting customer needs and expectations that involve all managers and employees in using quantitative methods to continuously improve the organisation’s processes, products and services (Psychogios and Pripora, 2007, p. 41). The essence of TQM has been to ensure mutual co-operation of everyone in an organisation and associated business processes to produce products and services that meet and, hopefully, exceed the needs and expectations of customers (Dale, 2003, p.26). As evidenced clearly in the preceding sentence, exceeding the needs and expectations of customers is one of the central anchors of TQM and has been in recognition since the first publication on quality assurance by Deming dating back in the 1940’s.

TQM’s view on customer satisfaction is that it is the driving force for an organisation to improve its performance (Zairi and Youssef, 1995). Theorists in this area (see, e.g., Tsang and Antony, 2001), state that understanding, satisfying and surpassing customer needs and expectations on a continuous basis should be the key goal of TQM. They argued that the needs and expectations of consumers should always be in the mind of all employees, noting

that it is necessary to identify these needs and expectations and their level of satisfaction. Thus, to realise customer satisfaction, organisations need to make an inventory of customers' data, customers' complaints, and benchmarking in order to improve the customer orientation (Tsang and Antony, 2001). In short, the TQM literature sees customer satisfaction as identifying the needs of customers and then exceeding their expectations. The next section turns to performance management.

### **2.3.2 CUSTOMER SATISFACTION FROM PERFORMANCE MANAGEMENT PERSPECTIVE**

The suggestion that financial and other aspects of organisations' performance concerns by stakeholders should be weighted equally has a long history in the management discipline, and that a stakeholder approach to performance measurement emerged as a response to the criticism of overvaluing a group of shareholders (Clarke, 1998, pp. 182-3). The original perspective of performance measurement was heavily regarded as imbalanced because it represents the short-term oriented and financially-focused performance that narrows the scope of performance measures to only shareholder interests (Srimai et al., 2011). Clarke (1998) acknowledged that other groups of stakeholders, besides the professional managers, make significant contributions to the performance of the company, calling for a management agenda that recognises, and not alienates, other stakeholders, such as customers. To that end, a number of performance measurement systems have evolved, broadening their focus on the stakeholder's requirements rather than only reflecting shareholder's economic-profits (Garengo et al., 2005).

The Balanced Scorecard, for example, seeks to address the value that firms produce beyond simple profit by proposing a unified vision and strategy for viewing performance as a balance

among (1) satisfying financial shareholders through a maximization of profits, (2) satisfying customers, (3) increasing organisational capacity, and (4) promoting professional and organisational growth (Kaplan and Norton, 1992). The fundamental tenet of the Balanced Scorecard is that if employees receive adequate training about products (learning and growth), then they will be more knowledgeable about the full range of products they can sell (internal processes); if employees are more knowledgeable about products, then their sales effectiveness will improve (customer satisfaction); If their sales effectiveness improves, then the average margins of the products they sell will increase (financial).

In essence, the Balanced Scorecard, or performance management (PM) in general, also emphasizes understanding of the customer and meeting his/her expectations, which is regarded as the main mechanism for achieving superior profitability (Kaplan and Norton, 1992). Marketing's theory on customer satisfaction is presented next.

### **2.3.3 CUSTOMER SATISFACTION FROM MARKETING PERSPECTIVE**

Simply defined, marketing involves the task of creating, promoting, and delivering goods and services to consumers. According to McNamara (1972), the marketing concept is:

“a philosophy of business management based upon a companywide acceptance of the need for customer orientation, profit orientation, and recognition of the important role of marketing in communicating the needs of the market to all major corporate departments” (p. 51).

Clearly, this definition indicates a paradigm shift in focus from an emphasis on transaction marketing to a marketing orientation, involving understanding and building long-term mutually beneficial relationship. Kotler (1998) posits that the key to achieving organisational

goals consists in determining the needs and wants of target markets and delivering the desired satisfactions more effectively and efficiently than competitors. Similarly, Walker et al. (1992) assert that the marketing concept initiates the planning and coordinating all activities for satisfying customer needs and wants.

It is apparent that customer orientation, reflecting a set of beliefs that puts the customer's interest first, leading to developing a sufficient understanding of customers to create products or services of superior value (Narver and Slater, 1990), is marketing's most central construct. According to this view, an organisation must be customer-centric, focused only on delivering products/services of superior value to customers. The term "superior value" could be viewed from at least two different angles. First, it could mean one that is of superior quality relative to products/services delivered by all competitors. Second, it could mean one in which the perceived quality of the product or service is greater than what the customer had expected.

Indeed, scholars such as Kholi and Jaworski (1990) have pioneered research on market orientation, arguing that a market-oriented organisation is one that successfully implements the marketing concepts. Kholi and Jaworski (1990) outline the key behaviours of the market-oriented organisation as follows: organisation-wide generation of market intelligence pertaining to current and future needs of the customer; dissemination of intelligence within the organisation; and taking responsive actions based on the market intelligence.

This orientation is expected to result in higher performance in business because it facilitates clarity of focus and vision in an organisation's strategy and generates pride in belonging to an organisation that results in higher employee morale and greater organisational commitment. The result is customer satisfaction that indicates repeat purchases and draws

new customers to the business (Hinson and Mahmoud 2011; Mahmoud et al., 2010; Mahmoud and Hinson, 2012). In short, marketing theory regards meeting and exceeding customer expectation as the most reliable means of achieving sustainable competitive advantage in business. In the next section, customer satisfaction is defined for use in this study.

#### **2.3.4 CONCEPTUALISING CUSTOMER SATISFACTION**

Despite the widespread recognition attached to customer satisfaction, researchers have not yet agreed on one global definition for it. Although the constructs have been thoroughly explored, one theoretical model has not and likely will not be accepted due to the complex process involved in arriving at a customer's judgment of satisfaction or dissatisfaction. Swan and Combs (1976) defined satisfaction as a post-purchase attitude. Westbrook (1980) introduced the notion that customer satisfaction involves cognitive and affective aspects in pre-purchase, purchase, and post-purchase phases of buying goods and/or receiving services. Rust and Oliver (1994) suggest that customer satisfaction or dissatisfaction emerges as a response to a single or prolonged set of service encounters. Giese and Cote (2000) argue that consumer satisfaction comprises three basic components including the type of response; the centre of interest or the subject on which the response is focused; and the moment in time at which the evaluation is made.

In this study, customer satisfaction refers to the consumer's judgments regarding a firm's success or failure in meeting expectations, with met expectations resulting in satisfaction and unmet expectations resulting in dissatisfaction (Oliver, 1999). This definition suggests that satisfaction is a "post consumption" experience which compares perceived quality with

expected quality (Anderson and Fornell, 1994; Parasuraman et al., 1985). As well, satisfaction is a judgment a customer makes following a service encounter, and that this evaluation is highly heterogeneous. It differs from customer to customer, encounter to encounter, and firm to firm, supporting the need for new insights in customer satisfaction between and across industries. Finally, the satisfaction is a process spanning the consumption period and that research of the post-purchase phase is critical to new knowledge development. In the next section, this chapter turns to the drivers of customer satisfaction that have been identified in previous studies, both theoretical and empirical.

## **2.4 DETERMINANTS OF CUSTOMER SATISFACTION**

What are the determinants of customer satisfaction? Given the significance attached to customer satisfaction by marketing theory and practice, understanding the antecedents or determinants of customer satisfaction have long been a subject of study for consumer research. In reviewing the existing literature (see among others: Anderson and Sullivan, 1993; Saeed et al., 2011; Michel and Meuter, 2008; Nimako et al., 2010; Herrmann et al., 2007; Minkiewicz et al., 2011), a number of research streams have been identified, including but not limited to (1) service quality, (2) service recovery, (3) reputation, (4) price, and (5) customer orientation. In this section, these research streams are explored to develop a framework of the potential determinants of customer satisfaction in mobile telecommunications industry.

### **2.4.1 SERVICE QUALITY**

Since the early 1980s when research began to identify the determinants of customer satisfaction in the service sector, numerous studies have examined the link between customer satisfaction and service quality. Until recently, most researches focused on customer satisfaction and quality in the manufacturing sector, paying limited attention to service sectors such as telecommunications (Mandhachitara and Poolthong, 2011). Service quality is a consumer's overall impression of the relative inferiority or superiority of an organisation and its services (Bitner and Hubbert, 1994). Mackay and Crompton (1990) define service quality as "the relationship between what customer's desires from a service and what they perceive that they receive" (p. 47). Oliver (1980) developed the theory that there exists a direct relationship between a customer's satisfaction and what his/her expectations are. Subsequent research revealed that satisfaction is determined by how positive a customer perceives the performance of particular service to be.

In particular, it has been observed that if a customer perceives service quality to be high, he/she will have high levels of satisfaction (Ganesh et al., 2000; Caruana, 2002). Ganesh et al. (2000) reported that if a business performs a service that surpasses customer expectations, the customer will be satisfied and is likely to be a repeat customer at the establishment that provided the service. This perspective suggests that poor service delivery would be a major cause of dissatisfaction among consumers. Chou and Chang (2006, p.175), in a case study of Chine Mobile, found that "perceived expectations, perceived quality, perceived value, perceived usefulness, and perceived ease of use were critical factors for customer satisfaction with mobile services." More recently, a cross-sectional survey of 1,000 individual

subscribers selected from four mobile telecom networks indicates that service quality is the leading cause of dissatisfaction among mobile subscribers (see Nimako et al., 2010).

The preceding findings resonate with the long-held assertion by SERVQUAL gurus, Parasuraman, Zeithaml, and Berry, who concluded that if a service is provided within an acceptable quality range, a customer will likely be satisfied with both the service and the service provider (Parasuraman et al., 1985). In this connection, the present research would postulate that in the Ghanaian telecommunications industry, customer satisfaction level among mobile subscribers would be fueled at least in part by the quality of services delivered by telecommunications providers.

#### **2.4.2 SERVICE RECOVERY**

Service recovery refers to the actions an organisation takes in response to a service failure (Gronroos, 1988). A service failure is defined as any service-related mishaps or problems (real and/or perceived) that occur during a consumer's experience with the firm (Maxham, 2001). Michel and Meuter (2008, p. 441) argue that service failures can lead to negative disconfirmation and ultimately dissatisfaction, though appropriate service recovery efforts may restore a dissatisfied customer to a state of satisfaction. Although some researchers have argued that the best strategy is to fail-safe the original service delivery, it is nearly impossible to eliminate all failures. Thus, firms with the ability to react to service failures effectively and implement some form of service recovery will be in a much better position to retain profitable customers (Michel and Meuter, 2008).

Indeed, Smith et al. (1999, p. 357) have treated service recovery as “a ‘bundle of resources’ that an organisation can employ in response to a failure.” Both complaint management and



service recovery are based on service encounter failures. However, complaint management is based on the firm's reaction to a customer complaint, whereas service recovery also addresses the firm's ability to react immediately to a failed service encounter, pleasing the customer before he or she finds it necessary to complain (Miller et al., 2000). According to Smith et al. (1999, p. 356), recovery management is considered to have a significant impact on customer evaluations, because customers are usually more emotionally involved in and observant of recovery service than in routine or first-time service and are often more dissatisfied by an organisation's failure to recover than by the service failure itself. Keaveney (1995) finds that service failures and failed recoveries are a leading cause of customer switching behaviour in service organisations.

Therefore, well-executed service recoveries are important for enhancing customer satisfaction, building customer relationships, and preventing customer defections (Smith, Bolton, and Wagner, 1999). Effective service recovery increases not only overall satisfaction, but also positive word-of-mouth (Swanson and Kelley, 2001). That is, successfully recovered customers recommend the company to others or "demonstrate a strong propensity to share positive information about the experience" (Swanson and Kelley, 2001). Therefore, in this study service recovery is posited as one of the key determinants of customer satisfaction with mobile telecommunications services in Ghana.

### **2.4.3 PRICE FAIRNESS**

As an important factor in the marketing mix, the role of product or service price in the formation of customer satisfaction has not been studied extensively in previous customer satisfaction research (Herrmann et al., 2007, p. 49). When price has been included, it has been one of several product/service attributes considered relevant (Fornell et al., 1996; Voss

et al., 1998); however, the unique influence of product/service price on satisfaction judgments remains unclear. Price fairness could be seen as representing a direct attempt to establish consumers' willingness to patronize a product/service due to a feeling that price commensurate product/service's performance. In other words, it represents the maximum price which a consumer should pay for the product, given the benefits that come with the product. In this research, consumers' price perception is included as an important factor influencing overall satisfaction judgments.

According to Herrmann et al. (2007), this influence is both direct and indirect via price fairness perceptions. Voss et al. (1998) argue that satisfaction is a function of price, proposing that perceived price fairness might be the dominant determinant of satisfaction. Their empirical results suggest that when there was a perceived price performance inconsistency (i.e., an inequitable or unfair outcome), it had a stronger effect (negative) on satisfaction judgments. Recent research in marketing and psychology has shown that satisfaction is positively correlated with fairness perceptions (Bowman and Narayandas, 2001; Huffman and Cain, 2001). Oliver and Swan (1989) found that customers' fairness perceptions depended on a supplier's commitment and the quality of the goods and services relative to the price paid.

To that end, this study would posit that price perceptions influence consumers' overall satisfaction judgments directly and indirectly through price fairness perceptions. Accordingly, it is believed that price fairness perceptions of mobile telecommunications consumers in Ghana would influence their satisfaction with the services that are being retailed by mobile telecommunications providers in the country.

#### **2.4.4 BRAND IMAGE**

In recent times, corporate-level marketing, referring to a broad managerial philosophy whereby the corporate image, identity, or brand of a company is seen to be the central anchor or driver for its strategies and management, has attracted considerable interest from scholars (e.g., Balmer, 2009; Brown et al., 2006). What these corporate marketing-related perspectives share as a basic assumption is the notion that the various constituencies or stakeholders of a company essentially orient their behaviours towards the company according to what they perceive about the company's identity and how they evaluate it – that is, according to perceived corporate brand image (see Aspara and Tikkanen, 2011).

Notably, consistent with the inter-disciplinary work in the area, the role of the perceived corporate identity as a driver of stakeholders' behaviours is seen to be the case with the company's customers in particular. Brown et al. (2006) provide further support for this view, construing image as consumer perceptions of the brand and what individuals know or believe about an organization. Balmer (2009) highlights the importance of corporate image, asserting that a link exists between an individual's image of the organisation and that person's behaviour towards it. In line with this, Minkiewicz et al. (2011), in their quantitative study in the leisure services sector, found positive image to be related to customer satisfaction. Drawing on the disconfirmation paradigm (see Churchill and Surprenant, 1982), Minkiewicz et al. (2011) suggests that satisfaction will occur when individual expectations are confirmed and that it is reasonable to expect that a positive image and expectation of a leisure experience prior to consumption, if met or exceeded, would result in customer satisfaction.

On the other hand, the possibility that a positive corporate image may negatively influence satisfaction cannot be discounted, particularly where the image has created unrealistic expectations for customers. Where these expectations are not met, customers are likely to be very dissatisfied (Minkiewicz et al., 2011). On the basis of the above submissions, this study conjectures that a mobile telecommunications provider's brand image would impact the level of mobile subscriber satisfaction.

#### **2.4.5 EMPLOYEE CUSTOMER ORIENTATION**

As a result of the intangible and interactive nature of services, customers often rely on the behaviour of service employees when judging the quality of a service. Consequently, the employees' level of customer orientation is considered an important leverage for service firms' economic success (Hennig-Thurau, 2004, p. 460). A customer orientation is defined as a selling behaviour in which salespeople assist customers to satisfy their long-term wants and needs versus a sales orientation, which places the selling organisation and/or salespersons before the customers (Jones et al., 2003, p. 323). Hennig-Thurau (2004, p. 460) has argued that despite its important position in the value chain, only few studies have addressed the construct of customer orientation of service employees and its impact on service firms' success.

Indeed, the behaviours and attitudes of a firm's boundary-spanning employees (e.g., salespeople) should significantly influence the customers' perceptions of the firm's service delivery (Heskett et al., 1997). The behaviours and attitudes of salespeople are, in turn, influenced by their perceptions of the firm's market orientation and their interaction with sales managers, thus, highlighting the importance of examining market orientation from the sales force's perspective. Customer orientation of service employees is characterised by

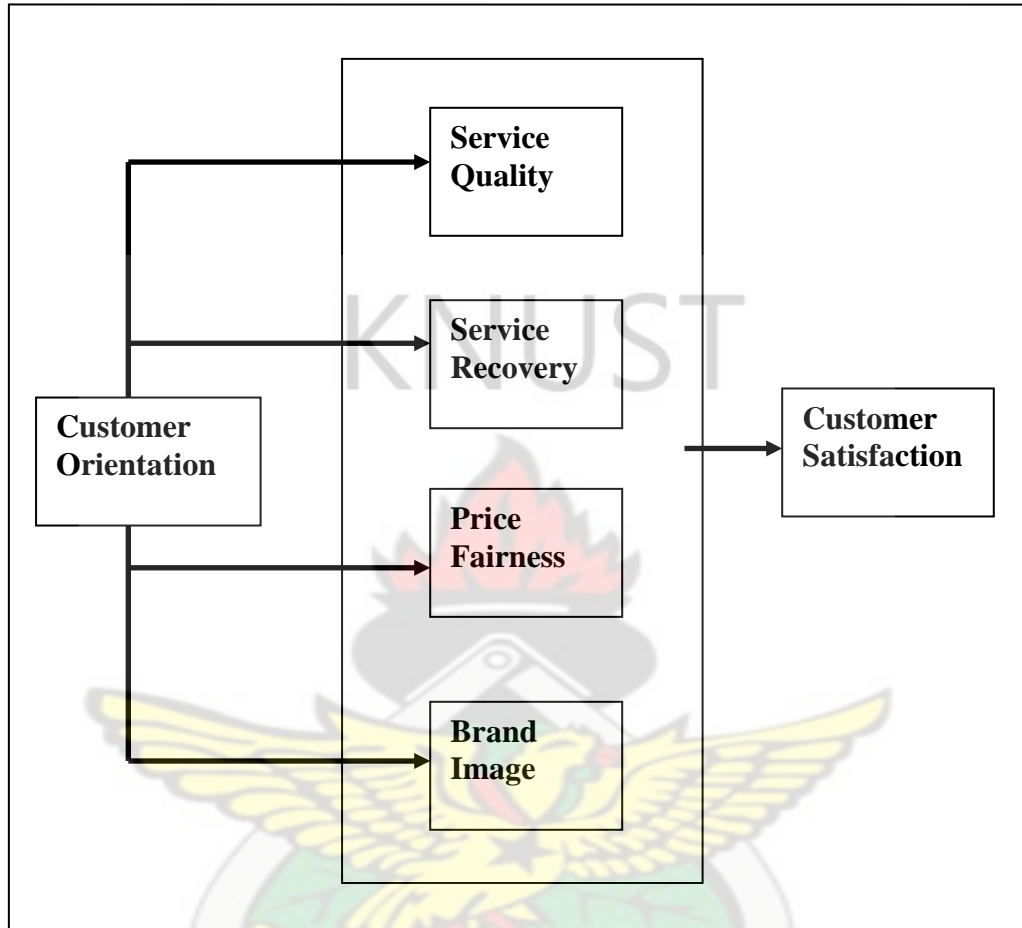
employees' recognition of such things as the "need to pamper", "need to read the customer", "need for personal relationship", "need to deliver", and "need to communicate" (Brown et al., 2002).

Drawing on the disconfirmation paradigm of customer satisfaction (see also Churchill and Surprenant, 1982), this study postulates that customers have expectations with regard to the behaviour of telecommunications provider employees in interaction situations and that, when these are under-delivered, the level of customer satisfaction with the service provider is negatively influenced (Hennig-Thurau, 2004; Jones et al., 2003).

## **2.5 CONCEPTUAL FRAMEWORK**

Figure 2.1 below presents the study's conceptual framework, which essentially stipulates that customer satisfaction in the mobile telecommunications industry would be a function of mobile telecommunications provider's service quality, service recovery, price fairness, brand image, and customer orientation of service employees. According to the framework, a direct relationship exists between customer orientation of service employees and service quality, service recovery, price fairness, and brand image. This view is consistent with marketing theory (see, e.g., Kholi and Jaworski, 1990; Narver and Slater, 1990) indicating that market orientation, be it at the firm or individual level, greatly influences organisational performance across a diverse range of parameters, including but not limited to employee esprit de corps, organisational commitment, product quality, premium price, customer-company identification, business profitability, and corporate reputation, among others. In this sense, the framework suggests that the influence of employees' customer orientation on customer satisfaction would be mediated by service quality, service recovery, price fairness, and brand image. This framework would be tested in the remainder of this dissertation.

**Figure 2.1: A Framework of Determinants of Customer Satisfaction in the Service Industry**



**Source:** Designed by the Author

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 INTRODUCTION**

This chapter discusses the various steps that were followed in undertaking the research and achieving its objectives. The chapter starts with an indication of the research paradigm, whereby ontological assumptions governing the study are articulated. Then, consistent with the study's ontology or epistemology, the research method or strategy is described, leading to a description of the unit of analysis, population, sample size, and sampling design. Thereafter, variable construction is highlighted, data collection process is presented, and then finally data analysis techniques are illuminated.

#### **3.2 RESEARCH PARADIGM**

Paradigms shape the way researchers perceive the research methodology adopted and the techniques to be used (Krauss, 2005). A paradigm is defined as *a research perspective or view (a school of thought) that holds views about what research goals and methods are appropriate (how research should be conducted) and has its own values and assumptions* (Bailey, 1987, italics added). In social science related research like this one, Bailey (1987) identified two main research paradigms in popular use, namely positivism and interpretivism.

##### **3.2.1 POSITIVISM**

Positivism is taken up by positivist philosophers, and this group of people articulate assumptions that are consistent with the ones held by quantitative purists (Bailey, 1987). Specifically, quantitative purists utilise objective measurement and statistical analysis of numeric data –often requiring relatively large sample size –to understand and explain phenomena (Ary, et al., 2002).

### **3.2.2 INTERPRETIVISM**

Interpretivists reject the quantitative ideology, and argue for the superiority of constructivism, idealism, relativism, humanism, hermeneutics, postmodernism or more formally qualitative philosophy (Bailey, 1987). These classists or researchers study phenomena in their natural settings, without a predetermined hypothesis (Ary, et al., 2002).

### **3.2.3 THE RESEARCH PARADIGM ADOPTED**

In this study, the research objectives required that the procedures followed to address the research questions be informed largely by the conceptual framework articulated under section 2.5. In other words, the literature is supposed to inform the kind of theory being generated. Such a deductive approach (for a clever discussion on induction versus deduction in social science research, see Yin, 2003) to the theory building process, on reflection, dovetails with the positivists' ontology, in which case a quantitative approach appears to be more appropriate. Consistent with the conceptual framework (see Figure 2.1 on page 28), therefore, this study intends to collect numerical data to draw conclusions regarding the determinants of customer satisfaction in mobile telecommunications companies in Ghana. Notwithstanding any potential limitations of quantitative logic in estimating behavioural measures (Ary, et al., 2002; Bailey, 1987), there is reasonable evidence to suggest that it has over the years stood the test of time and might therefore be appropriate for this research as well. Therefore, and also for the purposes of establishing methodological reliability (see sections 3.5.1 and 4.3) for the type of research being undertaken, the quantitative paradigm was adopted.



### **3.3 RESEARCH METHODS**

In social science research, scholars (see e.g., Yin, 2003; Newman, 2007) have made distinction among several methods including: experiment, grounded theory, ethnography, action research, operational research, case studies, and surveys. Meanwhile, in quantitative studies, three particular methods stand out: experiments, surveys and case studies (Yin, 2003). Although the study's research questions (mainly "What's" questions) can fit in either survey or case study strategy (see Yin, 2003), the latter is preferred to surveys because of the following reason: All telecommunications service providers retail intangible products with similar characteristics such as intangibility, inseparability, perishability and variability (Parasuraman et al., 1988), making it possible for findings relating to the study of one network provider to mirror happenings in other network providers.

#### **3.3.1 THE CASE STUDY**

At present, there are six mobile telecommunications companies operating in Ghana. Table 3.1 below presents the various brands and their associated market share as reported in Mahmoud and Hinson's (2012, p. 330) study. The six companies are MTN, Tigo, Airtel, Expresso, Vodafone and Glo. The case study research method focuses on understanding the dynamics present within single settings (Eisenhardt, 1989), especially when the boundaries between phenomenon and context are not clearly evident (Yin, 2003), as is the case with most services (see Heskett, Sasser, and Schlesinger, 1997). The use of the case study method will allow the investigator to explore the thesis "within its real-life context" (Yin, 2003), which is particularly important in the service sectors because of the interaction between service providers and service consumers (Mandhachitara and Poolthong, 2011). This study adopts a single case study design at the expense of a multiple design (where multiple design

means using two or more telecommunications companies), because using “a multiple-case study can require extensive resources and time beyond the means of a single student or independent research investigator” (Yin, 1994, p. 45). Focusing on a single case design, MTN Ghana has been chosen for this study since it is the largest mobile telecommunications network in the country, controlling over 50 percent of the industry market share (see Table 3.1).

**Table 3.1: Profile of telecommunications companies in Ghana**

Company	Brand Name	Subscriber base	Market share
Vodafone Plc	Vodafone	2,134,119	14.12%
Millicom	Tigo	3,420,354	22.64%
Expresso Telecom (Kassapa Telecom in the original study)	Expresso	262,259	1.74%
MTN Ghana	MTN	8,000,946	52.96%
Airtel (Zain Ghana in the original study)	Airtel	1,291,238	8.55%
Globacom	Glo	N/A	N/A

**Source:** Mahmoud and Hinson (2012, p. 330)

### 3.3.2 UNIT OF ANALYSIS

Yin (2003) views unit of analysis as the fundamental problem of defining what the case is. In this study, the case is MTN Ghana, but within MTN Ghana one can identify various stakeholder groups, which include shareholders, management, employees, and customers. These stakeholder groups, according to Yin (1994), “often add significant opportunities for extensive analysis, enhancing the insights into the single case” (p. 44). However, given the present study’s focus on customer satisfaction, it is believed that the most appropriate unit to study is customers of MTN Ghana. Indeed, marketing scholars (see, e.g., Ganesh et al., 2000; Saeed et al., 2011; Michel and Meuter, 2008; Herrmann et al., 2007; Minkiewicz et al., 2011) who have in the past attempted to measure customer satisfaction or its determinants have all

used consumers as the unit of analysis. This has been so because service quality, recovery from service failure, and customer complaint handling, for example, are customer-related constructs (Chou and Chang, 2006).

### **3.3.3 POPULATION, SAMPLE SIZE AND SAMPLING TECHNIQUE**

Some anecdotal reports from the National Telecommunications Authority (NCA) indicate that in total MTN Ghana has 8,000,946 mobile subscribers (see Mahmoud and Hinson, 2012). From this large population of MTN Ghana mobile subscribers, this study drew a “resource effective” sample size of 200 mobile subscribers. The use of a “resource effective” sample size is not without theoretical backing. For instance, Bordens and Abbott (1988) provide support for this technique, arguing that the researcher should “try to select an economic sample that includes enough subjects to ensure a valid survey, and no more” (p. 192). With respect to the sampling technique, a systematic random sampling technique was used (Newman, 2007). By this procedure, a series of visits was made to the company’s head office in Accra and three of its customer service centers also located in the Greater Accra Region. With help from the front-desk staff or customer contact personnel, the researcher approached every third customer that reported on the front-desk for a business transaction. The use of this sampling technique may help to enhance the generalisability of findings to all MTN Ghana mobile subscribers in that it ensures to some extent that all customers in the population visiting these particular service centers have an equal chance of being included in the sample (Newman, 2007). This sampling technique draws largely on a recent work by Adjetey (2012) about TQM practices in Airtel, which has proven to be highly successful.

The entire sampling process took off on 20<sup>th</sup> June 2012, ending on July 9<sup>th</sup> 2012 at exactly 4:35 pm when the 200<sup>th</sup> customer had been approached. It took the researcher between two to

seven minutes to explain the purpose of the research to a customer and why his/her input was necessary, and on the average, it took each respondent twenty (20) minutes to complete a questionnaire. About 35 out of the 200 customers that were approached refused to take part in the study, with most of them claiming tight schedule or lack of interest, which is normal in survey administration (see Newman, 2007). Once a customer refused to take part, he/she was counted as having being approached, and there was no need to look for another customer to replace such a disinterested respondent (see also Newman, 2007).

### **3.4 DATA COLLECTION PROCESS**

The process of data collection began with the variable construction. As soon as the measures were developed, they were pre-tested in a pilot study involving a few MTN Ghana mobile subscribers. The pre-testing of the questionnaire is intended to help shape the instrument before final administration to the sample of 200 MTN Ghana mobile subscribers (see e.g., Yin, 2003). In this section, each stage of the data collection process is described in detail separately.

#### **3.4.1 VARIABLE CONSTRUCTION**

A well-designed questionnaire was used as the instrument for primary data collection. In designing the questionnaire, a number of procedures were applied. First, the researcher conducted a search for all published work in the existing management literature using customer satisfaction as the key word. This search generated a vast array of studies, which were reviewed, focusing on instrument development. On the basis of this review, the researcher identified valid and reliable measures for some of the research constructs that are the focus of this investigation. Second, new questions were developed after a thorough brainstorming session with a number of people, enabling the researcher to acquire various

points of view. In particular, with the help of an expert (i.e., the researcher’s supervisor), the questionnaire for this research was designed and his ideas or concepts incorporated. The questionnaire includes two types of questions, variable questions and ranking questions. The use of Likert scale rather than a simple yes/no type of question in the questionnaire helped to have a better perspective of customer satisfaction in and its determinants in mobile telecommunications (see Neuman, 2007).

**Table 3.2: Summary of Measures and their Sources**

<b>Variable</b>	<b>Measure</b>	<b>Measure Features</b>	<b>Source</b>
Customer Satisfaction	Satisfaction Scale	Likert scale, From 1=Strongly disagree to 5=Strongly agree	Martin-Consuegra et al. (2007)
Service Quality	SERVQUAL	Likert scale, From 1=Strongly disagree to 5=Strongly agree	Parasuraman et al. (1991)
Service Recovery	Service Recovery Experimental Design Questions	Likert scale, From 1=Strongly disagree to 5=Strongly agree	Smith et al. (1999)
Price Fairness	Price Fairness Scale	Likert scale, From 1=Strongly disagree to 5=Strongly agree	Darke & Dahl (2003)
Brand Image	Corporate Character Scale	Likert scale, From 1=Strongly disagree to 5=Strongly agree	Davies et al. (2004)
Employee Customer Orientation	<i>MKTOR</i>	Likert scale, From 1=Strongly disagree to 5=Strongly agree	Naver and Slater (1990)

**Source:** Compiled by the Author

The question type that was used is the closed-ended question, with no open ended questions. The researcher avoided using open questions because they have been found to often lack reliability and validity, yield irrelevant responses, often fail to produce responses that indicate the intensity of an attitude, and it is much easier for researchers to make coding or interpretation errors with open responses (see also Neuman, 2007). Table 3.2 presents all the

measures and their source, where applicable. Finally, for the purpose of establishing credibility for the type of research being conducted, demographic variables were also collected, including for example, the network being used, educational qualification, monthly income, and age.

### **3.4.2 PILOT STUDY**

In order to minimize response bias and to reinforce the questionnaire's content validity, most of the items were reverse-coded and then pre-tested on 20 MTN Ghana mobile subscribers. These respondents were asked to complete the questionnaire and indicate any ambiguity or difficulty that they experienced in responding to the questions. Based on their recommendations, some slight modifications were made on the final questionnaire.

### **3.4.3 MAIN STUDY**

In the main study, questionnaires were administered to the systematic random sample of 200 MTN Ghana mobile subscribers. In order to facilitate receptiveness to the research process, a formal letter of introduction was sent to MTN Ghana's head office in Accra to secure management's approval for using the organisation's customer service centers to identify customers. The letter was later approved by management and a request was made for three copies of the approved letter, which were sent to three customer service centers of the MTN Network in the Greater Accra Region. These service centers are located at Circle, Osu, and Madina. These centers were chosen because of the level of their customer traffic on a daily basis. Once these service centers agreed to cooperate with the researcher, arrangements were made for the researcher to approach any customer who walked in to conduct business with MTN Ghana. Following the sampling technique explained under section 3.3.2 above, the questionnaires were administered to all the 165 customers who agreed to take part in the

study. All these respondents filled their questionnaires completely, allowing the researcher to obtain an effective response rate of 82 percent.

### **3.5 DATA ANALYSIS TECHNIQUES**

Returned questionnaires were checked initially to find out whether they had complete answering. The analysis was done using the Statistical Package for the Social Science (SPSS Version 19). This study utilized Cronbach's reliability analysis, correlation analysis, and regression analysis to analyse the research data. These techniques were complemented with a descriptive statistics involving the computation of frequencies, percentages, means and standard deviations often presented graphically. Brief explanations of the main data analysis techniques used would suffice.

#### **3.5.1 RELIABILITY ANALYSIS**

Reliability is defined as the extent to which a scale is free from random errors and thus yields consistent results (Hair et al., 1995). Calculating Cronbach's alpha is the most commonly used procedure to estimate reliability, and Nunnally (1978) recommends 0.7 as the accepted benchmark for Cronbach's alpha. According to Nunnally (1978), if the coefficient alpha is too low, the indication is that the items measuring the scale have very little in common. He noted that, in such a case, the researcher must return to the domain of the concept under investigation and select other items.

#### **3.5.2 CORRELATION ANALYSIS**

Correlation analysis is used to measure linear association between two variables (Hair et al., 1995). In a situation where the correlation between two variables is positive and close to 1, it is assumed that the variables have a strong positive linear correlation. If the correlation

between two variables is positive but close to zero, then the variables have a weak positive linear correlation. On the other hand, if the correlation between two variables is negative and close to  $-1$ , then the variables are assumed to have a strong negative correlation. Again, if the correlation between variables is negative but close to zero, that means a weak negative correlation exists between the variables.

### **3.5.3 REGRESSION ANALYSIS**

Regression analysis is a statistical technique that is used to analyse the relationship between a dependent variable and one or more independent variable (Hair et al., 1995). A multiple regression analysis provides an equation to predict the magnitude of the dependent variable, providing values for the independent variables that explain the largest proportion of variation in the dependent variable. The Pearson coefficient of determination, or simply “R-squared” in terms of computer output, is usually used to gauge this explained variation. An “R-squared” of ‘0’ indicates that there is no relationship between the independent variables and the dependent variable. This “R-squared” tells the researcher about the perfectness of the multiple regression model and also how well the independent variables included in the model explain the dependent variable.

The significance of “R-squared” can be tested through the ‘F’ statistics and its associated probability. The ‘F’ statistics is a test of the null hypothesis that there is no linear relationship between the dependent and independent variables that is ‘R’ squared equals to 0.0 (Hair et al., 1995). The null hypothesis can be rejected if the ‘F’ statistics is high and the level of significance is close to zero. This rejection of the null hypothesis suggests the acceptance of an alternative hypothesis that there is a linear relationship between the dependent and



independent variables. The general equation of the linear multiple regression analysis is of the following form:

**Equation 3-1**

$$Y' = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_n X_n$$

Where:  $Y'$  is the predicted value of the dependent variable;  $\alpha$  is the value of the dependent variable when all the independent variables are zero, that is the Y intercept;  $\beta$  represents the regression coefficient; and the Xs are the independent variables. The intercept and the regression coefficients are constants during the examination of a particular sample, but different values for the dependent variable are predicted for each case by substituting the corresponding values for independent variables (Hair et al., 1995).



## CHAPTER FOUR

### ANALYSIS AND RESULTS

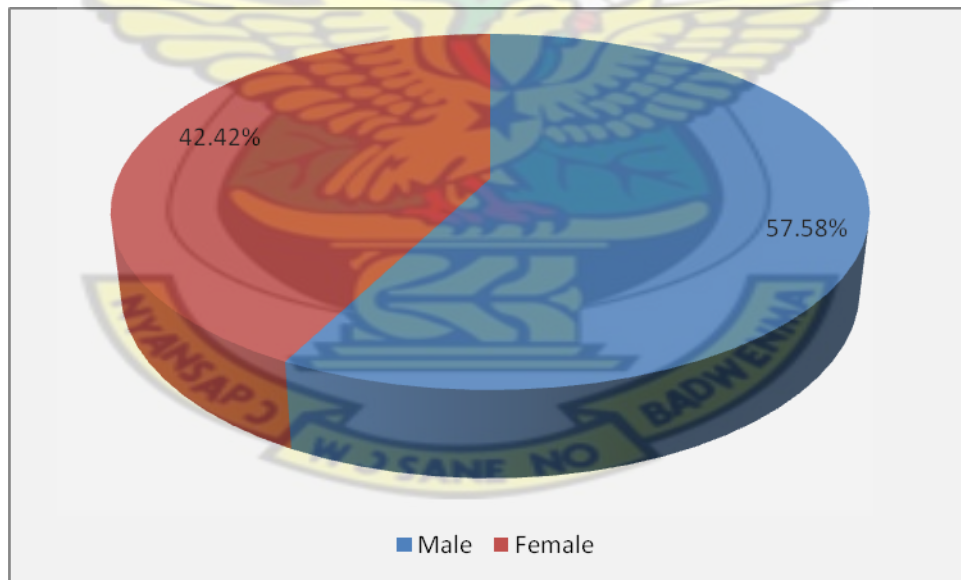
#### 4.1 INTRODUCTION

This chapter presents the main analysis of the research data and the results emanating from the analysis. On the basis of graphs, the first section presents the profile of respondents. The second section conducts reliability analysis to validate the multi-item scales used in collecting research data for the study. Subsequently, on the basis of descriptive statistics, correlation and regression analysis, the results are presented.

#### 4.2 PROFILE OF RESPONDENTS

Gender distribution of respondents is presented in Figure 4.1 below.

**Figure 4.1: Gender of Respondents**



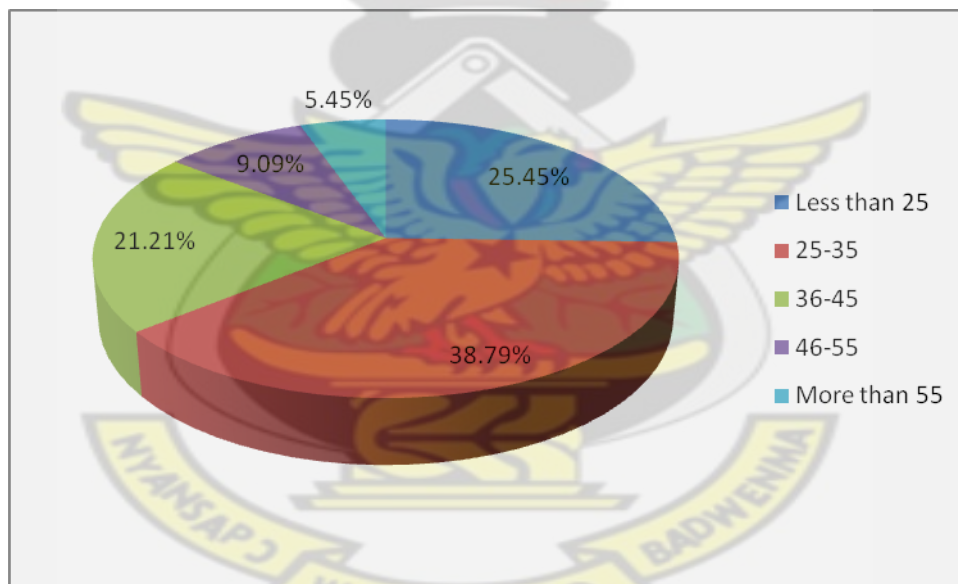
**Source:** Field data, July 2012.

In general, the majority (i.e., 58 percent) of the respondents were male with the remaining 42 percent representing the female counterpart. Perhaps this is an indication that in Ghana

although the ratio of men to women is 95/100 (see Population and Housing Census, 2010), with respect to the use of mobile phone men appears to dominate their female counterpart.

Figure 4.2 presents the age distribution of respondents. About 39 percent had their ages ranging from 25 to 35 years; those whose ages ranged from 36 to 45 years constitute around 21 percent of the sample; and six percent were more than 55 years old. Taken as a whole, the sample is quite youthful (45 years downward constitutes over 60 percent of the sample), which is consistent with the overall age structure of the Ghanaian population (see also Population and Housing Census, 2010).

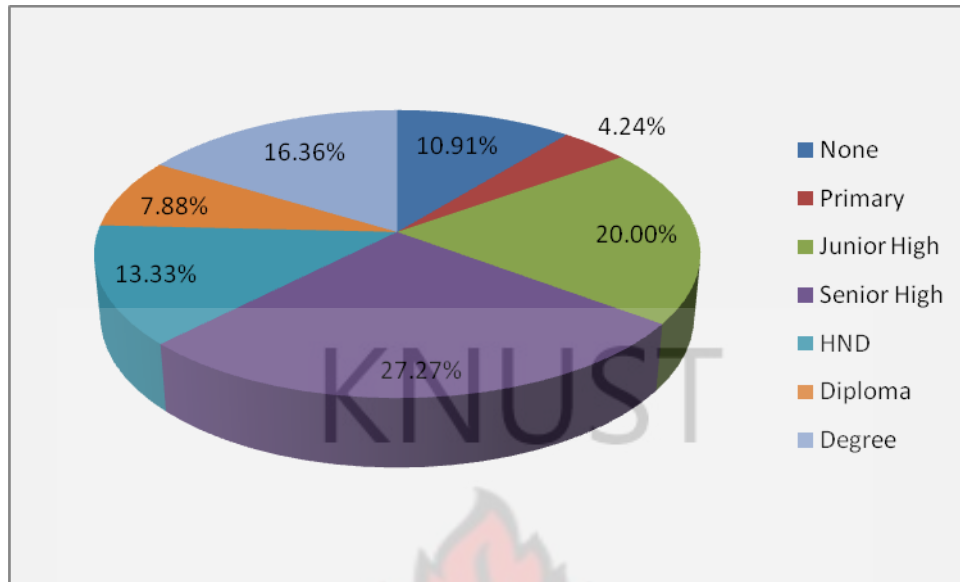
**Figure 4.2: Age of Respondents**



**Source:** Field data, July 2012.

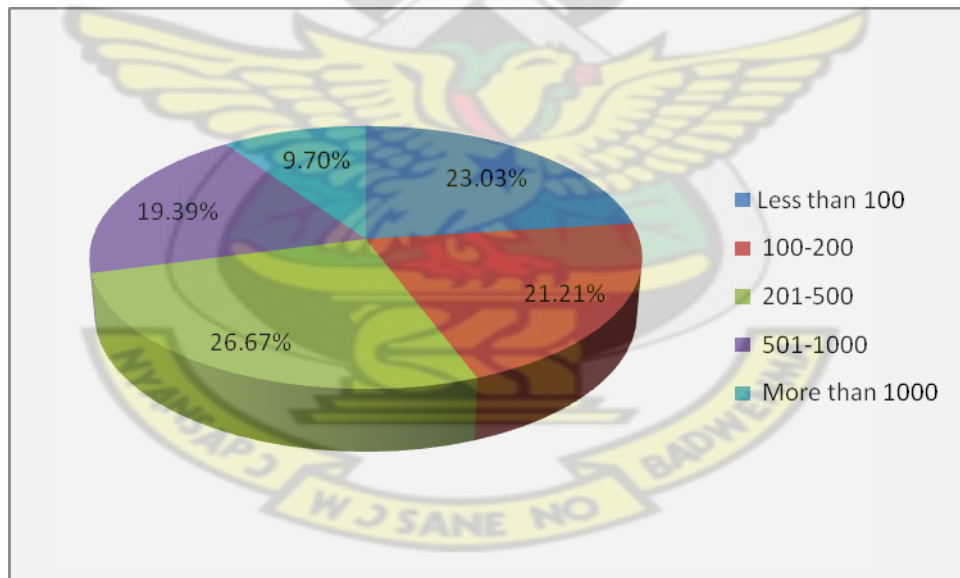
Figure 4.3 presents the educational qualification of respondents. According to the results, 38 percent of the respondents were educated to the tertiary level (HND, 13 percent; Diploma, 8 percent; Degree, 17 percent); 47 percent were educated to the high school level (Senior High, 27 percent; Junior High, 20 percent); four percent had primary education as their highest qualification, while 11 percent had no educational qualification.

**Figure 4.3: Respondents' Highest Educational Qualification**



Source: Field data, July 2012.

**Figure 4.4: Income Distribution of Respondents in Ghana Cedis**

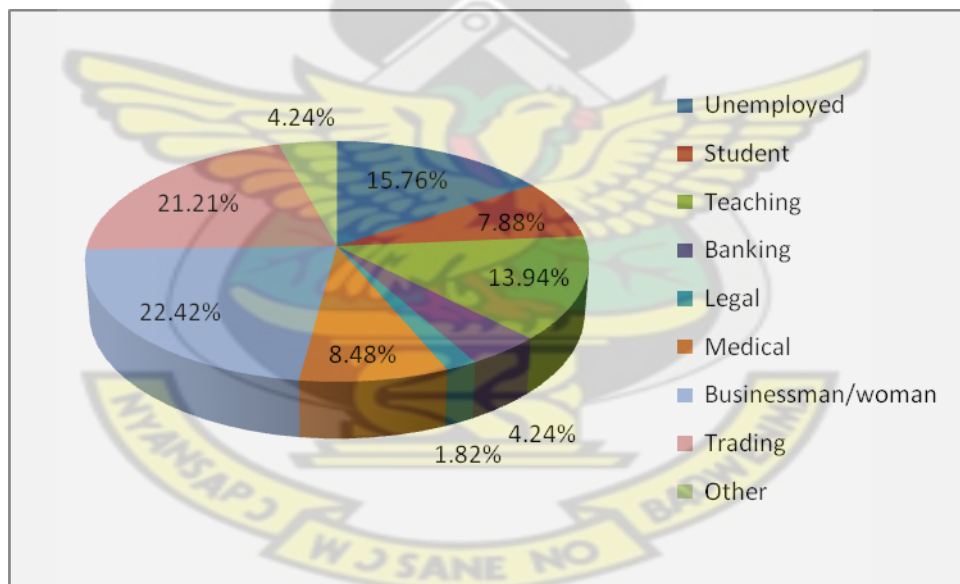


Source: Field data, July 2012.

The monthly income distribution of respondents is presented in Figure 4.4 above. The results suggest that 23 percent earned less than GHC100; 21 percent earned between GHC100 and GHC200; 27 percent earned between GHC200 and GHC500; 19 percent earned between

GHC500 and GHC1,000; and 10 percent earned over GHC1,000. Furthermore, information was collected on the type of employment, and the results are presented in Figure 4.5 below. About 16 percent were unemployed, and eight percent were students. For the employed respondents, observed employment types included teaching (14 percent), banking (4 percent), legal (2 percent), medical (9 percent), businessman/woman (22 percent), trading (21 percent), and other (4 percent). With most of the employed respondents being traders or businessmen and women, this distribution appears to mirror the structure of economic activities in Ghana, in which most economic activities are concentrated in the informal sector.

**Figure 4.5: Respondents' Type of Employment**

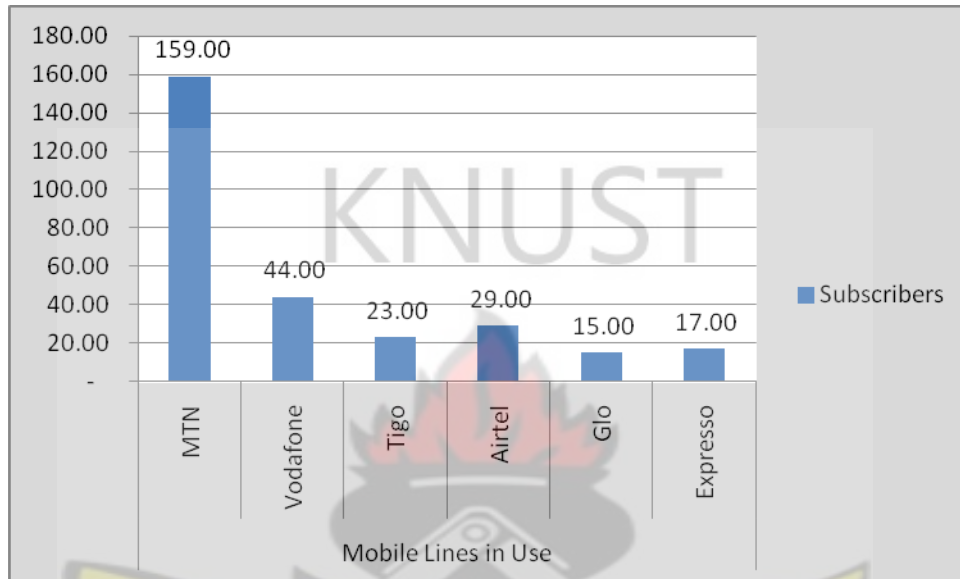


**Source:** Field data, July 2012.

With respect to the mobile networks used by respondents, Figure 4.6 indicates that up to 159 out of the 165 mobile subscribers who filled the survey were using MTN. About 44 used Vodafone, 29 used Airtel, 23 uses Tigo, 17 used expresso, and 15 used Glo. This indicates that many respondents used multiple networks. Therefore, respondents were asked whether

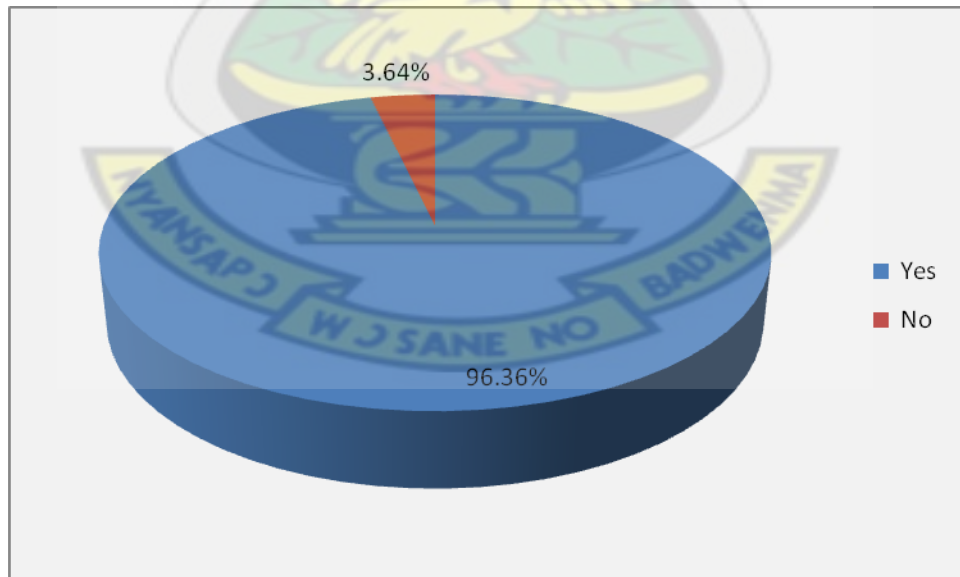
MTN was their number one mobile network, and according to the results 96 percent of the sample had MTN as their main mobile network (see Figure 4.7).

**Figure 4.6: Mobile Networks Used By Respondents**



Source: Field data, July 2012.

**Figure 4.7: Whether MTN is Respondents' Number One Mobile Network**



Source: Field data, July 2012.

### 4.3 VARIABLE RELIABILITY

In order to construct meaningful indices of determinants of customer satisfaction in mobile telecommunications, separate reliability analysis were conducted of items pertaining to customer satisfaction, service quality, service recovery, price fairness, brand image, and employee customer orientation (see Table 4.1). The customer satisfaction scale and the five determinants of customer satisfaction were assessed for reliability. The Cronbach's alpha coefficient was used to gauge scale reliability, resulting in coefficients which ranged from 0.760 to 0.971 (see Nunnally, 1978). The high coefficient scores and the finding that deleting certain items would merely reduce the coefficient (see Cronbach's alpha if item is deleted), led to the conclusion that the scales were acceptably reliable.



**Table 4.1: Reliability Estimates**

<i>Scale</i>	Mean	SD	Item-Total Correlation	$\alpha$ if Item Deleted	$\alpha$
<i>Customer Satisfaction:</i>					0.940
I am satisfied with my service experience	2.6303	1.22586	0.929	0.870	
I think I selected the right network	2.9576	1.09518	0.800	0.970	
I am happy with my service experience	2.8182	1.24584	0.910	0.887	
<i>Service Quality:</i>					0.971
I feel that it is a reliable network	2.8000	1.17494	0.953	0.963	
There are competent persons to deal with connectivity and network issues	2.7697	1.19768	0.968	0.963	
I can always depend on it for uninterrupted services	2.5394	1.00303	0.913	0.966	
Employees are always willing to help	3.0788	.94345	0.911	0.966	
I can trust the employees of the company	2.8727	1.08293	0.924	0.965	
They keep all my information secret and confidential	3.4061	.87581	0.615	0.980	
Employees have my best interest at heart	2.9515	.99269	0.914	0.966	
I get individual attention from employees	2.7152	1.17290	0.895	0.967	
<i>Service Recovery:</i>					0.868
The organisation recognises the problem without your having to complaint	2.7576	.75830	0.650	0.862	
I am offered an unconditional apology	2.7394	1.16293	0.857	0.774	
The organisationis successful at fixing problems associated with its services	3.0000	.93051	0.652	0.857	
I get free rechargeable credits	2.6121	.97897	0.767	0.811	
<i>Price Fairness:</i>					0.865
The price I am paying is fair	2.7152	.80248	0.714	0.830	
The price I am paying is unquestionable	2.3030	.77636	0.670	0.847	
The price I am paying is justified	2.5818	.96318	0.885	0.751	
The price I am paying is competitive	2.9515	.90261	0.617	0.869	



<b>Table 4.1 Continues</b>					
<i>Scale</i>	Mean	SD	Item-Total Correlation	$\alpha$ if Item Deleted	$\alpha$
<i>Brand Image:</i>					0.760
I feel that MTN is socially responsible	3.2606	0.80317	0.529	0.718	
I am convinced that MTN is a leader in its field	3.8970	0.88775	0.427	0.782	
I am convinced that MTN is very innovative	3.0970	0.80565	0.736	0.600	
I am convinced that MTN is committed to gender equality	3.1030	0.69514	0.576	0.699	
<i>Employee Customer Orientation:</i>					0.816
I am often met by employees who learn about my current and potential needs	3.3333	0.53343	0.556	0.796	
Employees have a thorough knowledge about emerging customers and their needs	3.2848	0.51568	0.637	0.771	
Employees integrate information about customers in their plans and strategies	3.2121	0.43879	0.670	0.767	
Employees have developed effective relationship with me	3.3152	0.55001	0.579	0.789	
Employees are courteous in dealing with me	3.3818	0.53503	0.610	0.779	

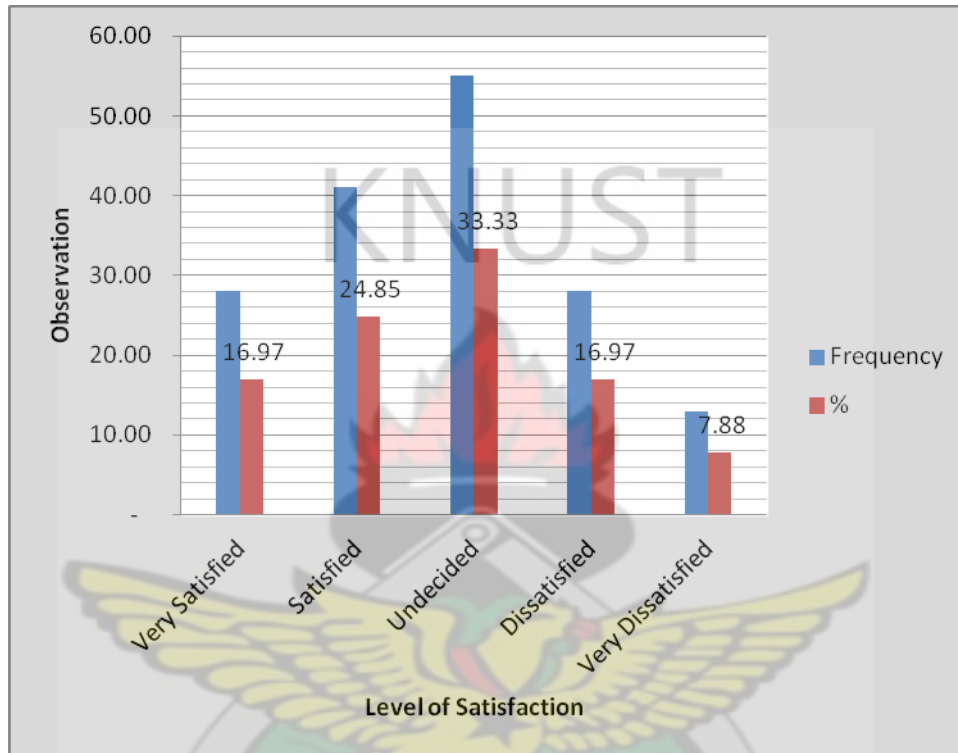
**Source:** Field data, July 2012.

#### **4.4 DESCRIPTIVE STATISTICS**

Still from Table 4.1, the mean for the customer satisfaction scale items range from 2.6303 to 2.8182, and the standard deviations range from 1.09518 to 1.24584. On the five point Likert scale, 3 is the scale midpoint, with values below it approximating disagree and values above it approximating agree (see Field, 2005). Therefore, on the basis of the Likert scale customer satisfaction with MTN network appears to be very low. This is confirmed by asking respondents to indicate their overall satisfaction with MTN, and as the results in Figure 4.8

indicates, 17 percent are very satisfied, 25 percent are satisfied, 33 percent are undecided, 17 percent are dissatisfied, and 8 percent are very dissatisfied.

**Figure 4.8: Overall Satisfaction with MTN**

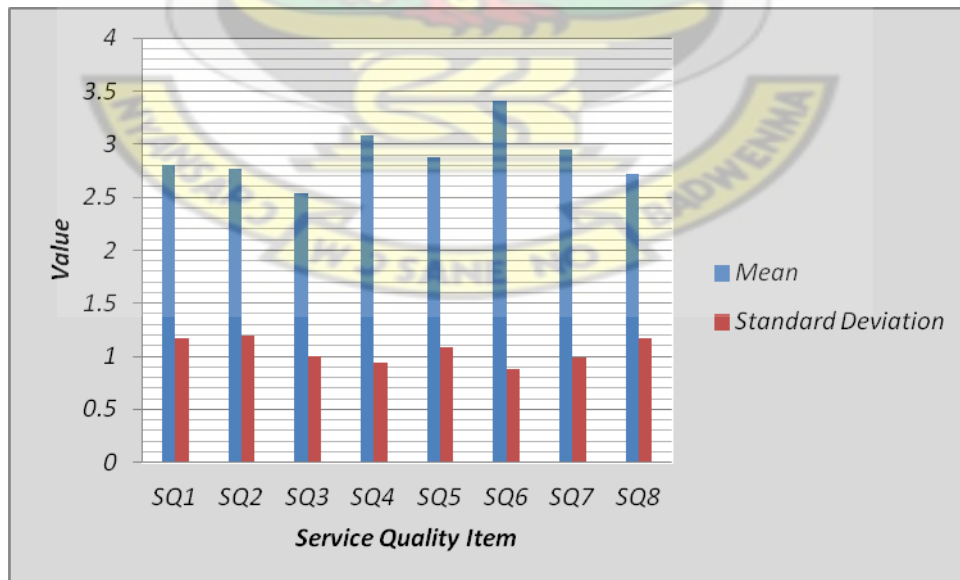


**Source:** Field data, July 2012.

Using the expectation-disconfirmation paradigm, Nimako et al. (2010) compared the customer satisfaction rating of four mobile telecommunications companies in Ghana, namely MTN, Tigo, Onetouch, and Kasapa, finding evidence that although overall customer satisfaction ratings among customers of these Ghanaian mobile networks significantly differ, relatively customers of MTN rated it with the lowest satisfaction score. Nimako and colleagues reported that overall satisfaction with MTN services ranged from 2.04 to 2.69 (see Nimako et al., 2010, p. 43), which apparently mirror the present study's results (Mean values range from 2.6303 to 2.8182).

Table 4.1 also suggests that mean values for the service quality scale items range from 2.5394 to 2.9515, indicating that the level of service quality associated with the MTN network is quite low. The standard deviations for all service quality items range from 0.8581 to 1.19768, which indicate large variability (see Figure 4.9 below). In other words, respondents differ in terms of how they perceive service quality of MTN. As all standard deviations are close to or above 1, it means that whereas some respondents are of the view that MTN is doing well, others think that service quality is very low at MTN. Yet, taken together, with mean values close to or a little above the scale midpoint, it seems that service quality is quite low. In his study of TQM practices in Airtel, Adjetey (2012) used a similar five point-Likert scale to gauge service quality of the Airtel network, reporting mean values ranging from 3.401 to 4.101, indicating that unlike the present study where customers perceive service quality of MTN to be low, customers perceived Airtel as offering high quality service (see Adjetey, 2012, p. 42).

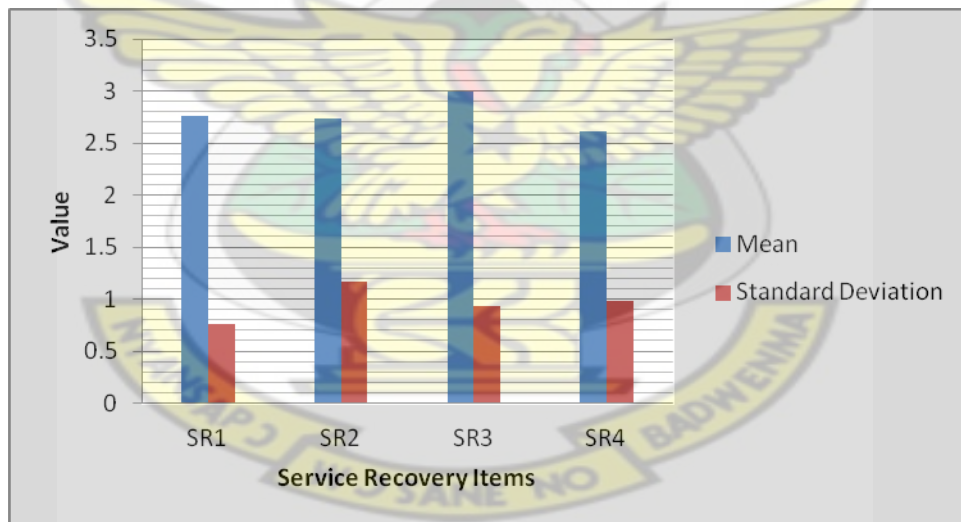
**Figure 4.9: Service Quality on the MTN Network**



**Source:** Field data, July 2012.

Again, Table 4.1 highlights that mean values for the service recovery scale items range from 2.6121 to 3.000. This suggests that recovery from service failure associated with the MTN network is rather low. Item standard deviations range from 0.75830 to 1.16293, indicating large variability (see Figure 4.10 below). That is, responses on the service recovery items are not always consistent. It is important to add that, a similar research by Adjetej (2012) using the Airtel mobile network concluded that “although measures are taken by Airtel to rectify or recover from service failures, these measures are nonetheless below customers’ expectations” (p. 43). Likewise, it seems from the present study’s findings on service recovery that recovery efforts to rectify service failures associated with MTN mobile network are barely satisfactory, at least from customers’ perspective.

**Figure 4.10: Recovery from Service Failures Associated with MTN Network**

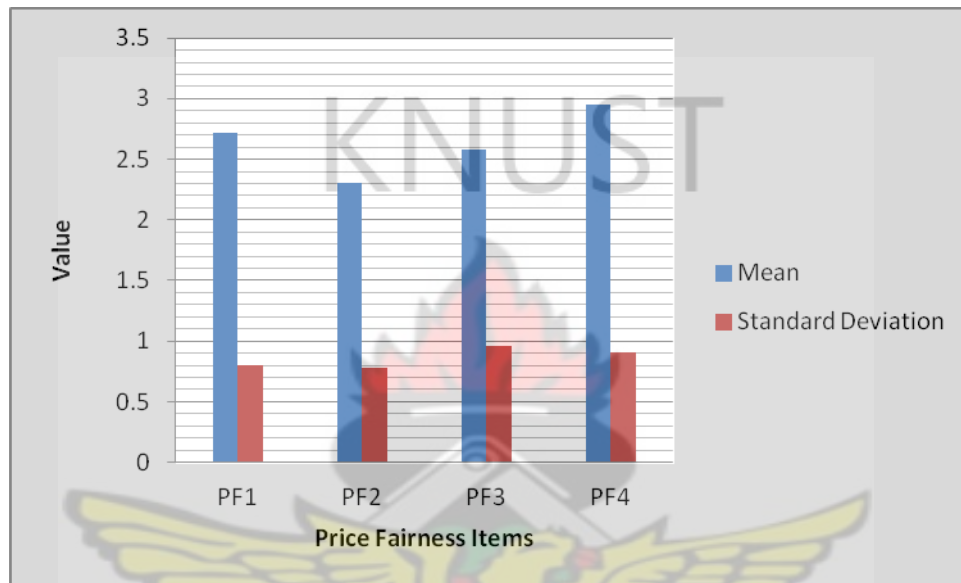


**Source:** Field data, July 2012.

The items on price fairness record mean values in the range of 2.3030 and 2.9515 and standard deviations ranging from 0.77636 to 0.96318. First, the mean values are all below the scale midpoint, indicating that customers do not agree that MTN offers fair prices for its products. Second, the standard deviations, which are all below 1, suggest that this

observation is somewhat consistent across all the respondents (see Figure 4.11). To the author's knowledge, this finding on price fairness does not echo any existing study on telecommunication companies in Ghana.

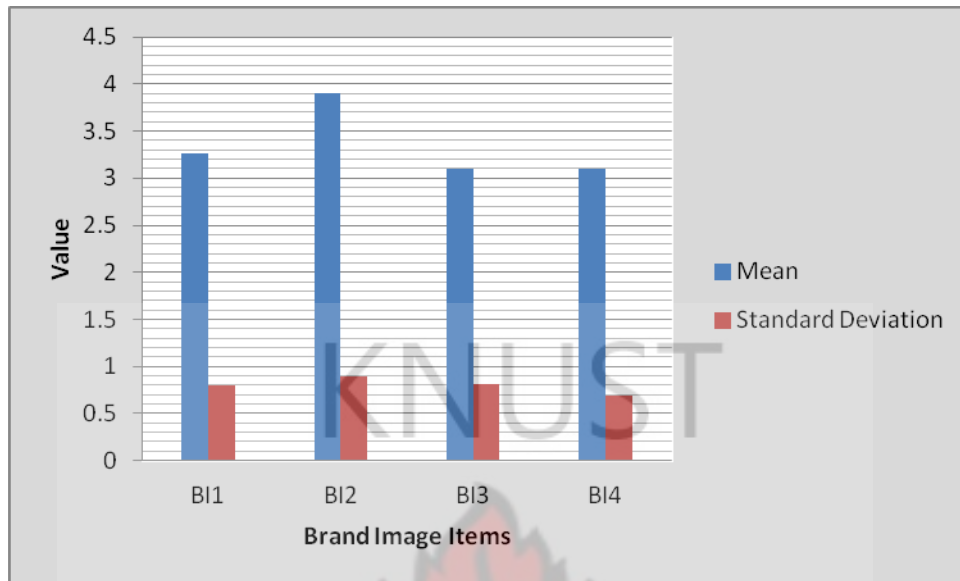
**Figure 4.11: Price Fairness of MTN Network**



**Source:** Field data, July 2012.

Figure 4.12 presents means and standard deviations for items measuring brand image. The mean values range from 3.0970 to 3.8970. Clearly, the means for the brand image items are all above the scale midpoint, indicating that MTN has a high image in the eyes of respondents. Standard deviations ranging from 0.69514 to 0.88775 suggest responses with respect to brand image are consistent across all the respondents. Like the price fairness, there is no any existing study on telecommunications companies in Ghana measuring the incidence of brand image (to the best knowledge of the author) to facilitate any comparison.

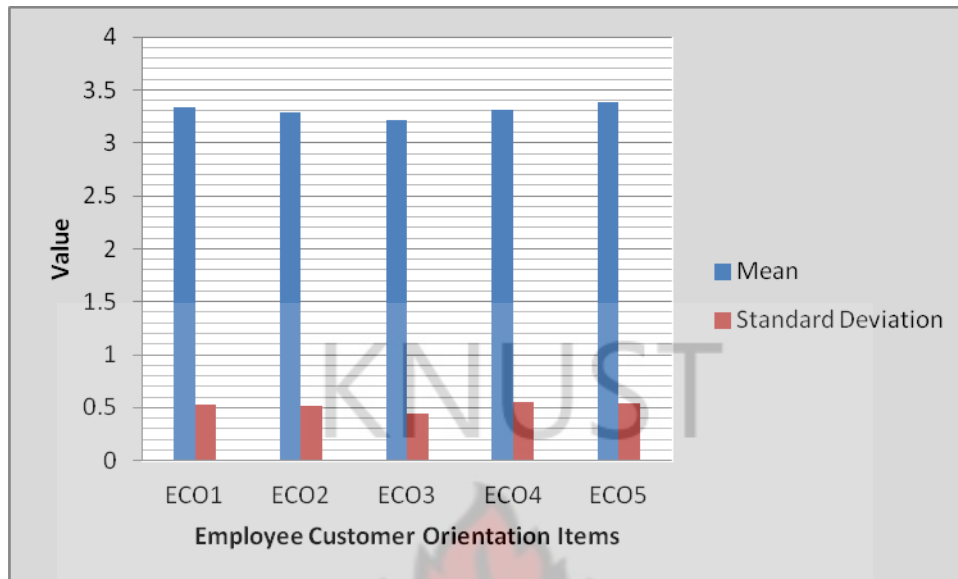
**Figure 4.12: Brand Image of MTN Network**



**Source:** Field data, July 2012.

Mean and standard deviations for all items measuring employee customer orientation are presented in Figure 4.13. All the mean values exceed the scale midpoint, ranging from 3.2121 to 3.3818, and all standard deviations are below 1, ranging from 0.43879 to 0.55001. On the basis of mean values exceeding the scale midpoint and lower standard deviations, it can be asserted that customers think that the employees at MTN are moderately customer oriented. Mahmoud and Hinson (2010) examined the incidence of market orientation in five mobile telecommunications networks in Ghana, reporting mean and standard deviation scores of 4.0380 and 0.5294 respectively for market orientation (or customer orientation).

**Figure 4.13: Employee Customer Orientation in MTN**



**Source:** Field data, July 2012.

The descriptive statistics clearly demonstrates that the sampled mobile subscribers perceive customer satisfaction to be very low, services quality to be quite low, service recovery to be quite low, price to be a little unfair, brand image to be fairly high, and employee customer orientation to be fairly high as well. So how are these variables related? The answers to this question are the focus of the next section.

## **4.5 RELATIONSHIP BETWEEN CONSTRUCTS**

### **4.5.1 CORRELATIONS**

The testing of the study's conceptual framework was initiated via the calculation of Pearson product-moment correlation coefficients between customer satisfaction and its determinants, namely service quality, service recovery, price fairness, brand image, and employee customer orientation. Table 4.2 presents the results of this test.

**Table 4.2: Correlation Metric**

		Mean	SD	1	2	3	4	5	6
1.	Customer Satisfaction	2.8020	1.1255 2	–					
2.	Service Quality	2.8917	0.9685 0	0.950**	–				
3	Service Recovery	2.7773	0.8194 6	0.902**	0.914* *	–			
4.	Price Fairness	2.6379	0.7296 0	0.860**	0.855* *	0.898* *	–		
5.	Brand Image	3.3394	0.6104 7	0.661**	0.692* *	0.604* *	0.545* *	–	
6.	Employee Customer Orientation	3.3054	0.5145 9	0.244**	0.252* *	0.254* *	0.233* *	0.305**	–

Notes: \*\* Indicates that Correlation is significant at the 0.01 level (2-tailed).

**Source:** Field data, July 2012.

All the determinant variables are positively correlated with customer satisfaction at the 0.01 level of significance. Likewise, all the determinant variables are positively correlated to one another at the 0.01 level of significance. The direction and strength of these associations indicate preliminary support for the conceptual framework. If the results of zero-order correlation analyses were to be taken in isolation, the conceptual framework should hold such that customer satisfaction in the mobile telecommunications industry would be a function of mobile telecommunications provider's service quality, service recovery, price fairness, brand image, and customer orientation of service employees. But, Harris (2000) citing Hair et al. (1995) opined that while correlation analysis provides a strong indication of association, zero-order correlation analysis may over-estimate the strength of associations between measures. To this end, further analysis is needed to validate the conceptual framework, which gives the impulsion for a regression analysis.



## 4.5.2 REGRESSION

Table 4.3 shows the results of the ordinary least squares multiple linear regression analysis indicating unstandardised Coefficient (B), standard errors, standardised regression coefficients (beta), and *t*-statistic. The regression analysis presented in Table 4.3 shows results which cast doubt upon the reliability of preliminary correlation analysis findings. Whereas the correlation analysis reported a significant positive relationship among all the variables, the regression results suggest that only two variables have significant positive relationship with customer orientation and that not all relationships are positive.

In particular, service quality ( $\beta = 0.717$ ,  $p < 0.01$ ) and price fairness ( $\beta = 0.135$ ,  $p < 0.05$ ) are positively and significantly related to customer satisfaction. This indicates that a one unit decrease in service quality can result in a corresponding decrease in customer satisfaction by 0.717 units. That is, the level of customer satisfaction is decreased significantly following any negative perception regarding the quality of the services that are being delivered. Likewise, with a one unit increase in agreement from mobile subscribers that price is unfair, they also agreed that their level of satisfaction with the service experience reduced significantly by 0.135 units. Analysis of the standardised regression coefficients ( $\beta$ ) suggests that while service quality ( $\beta = 0.717$ ) and price fairness ( $\beta = 0.135$ ) are both strongly linked to customer satisfaction, the impact of service quality is relatively greater. In their analysis of the determinants of customer loyalty of Vodafone telecommunications company in Ghana, Boohene and Agyapong (2011) found significant positive relationships between service quality and customer loyalty, concluding that

“providing quality service is critical for customers to stay with a brand or a telecommunication provider” (p. 236).

**Table 4.3: Coefficients<sup>a</sup>**

Model	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.700	.248		-2.820	.005
Service Quality	.833	.076	.717	10.944	.000
Service Recovery	.152	.095	.111	1.598	.112
Price Fairness	.208	.084	.135	2.486	.014
Brand Image	.048	.061	.026	.787	.432
Employee Customer Orientation	-.012	.071	-.004	-.167	.868

Notes: a. Dependent Variable: Customer Satisfaction

**Source:** Field data, July 2012.

The regression analysis, presented in Table 4.3, supported the preliminary correlation analysis indicating positive link between service recovery and brand image and customer satisfaction. Specifically, the results indicate that both service recovery ( $beta = 0.111$ ,  $p > 0.1$ ) and brand image ( $beta = 0.026$ ,  $p > 0.1$ ) are positively related to customer satisfaction; yet such relationships are not significant at the 0.1 level of significance. The regression analysis, presented in Table 4.3, did not lend support to the preliminary correlation analysis on customer satisfaction and employee customer orientation, as employee customer orientation ( $beta = -0.004$ ,  $p > 0.1$ ) is found be negatively related to customer satisfaction, although this is not significant at the 0.1 level of significance.

**Table 4.4: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.956 <sup>a</sup>	.913	.910	.33683

Notes: a. Predictors: (Constant), Employee Customer Orientation, Price Fairness, Brand Image, Service Quality, Service Recovery

**Source:** Field data, July 2012.

Table 4.4 reports the model summary, with the calculated value of  $R^2 = 0.913$  confirming that the two main factors, namely service quality and price fairness, reaching significant level explain 91 percent of the variation in the level of customer satisfaction of the sample. The value for Adjusted  $R^2 = 0.910$  is the value of the coefficient of multiple determination adjusted for degrees of freedom. It ensured that when adjusted for degrees of freedom, the two variables, namely service quality and price fairness, explain 91 percent of the variation in the level of customer satisfaction of the sample. The ANOVA results presented in Table 4.5 report the F Statistic = 334.43, Degree of Freedom = 159, and the P value = 0.000. Taken together, these figures provide evidence of model fit, indicating particularly that the regression model fitted the data reasonably well.

**Table 4.5: ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	189.715	5	37.943	334.430	.000 <sup>a</sup>
	Residual	18.040	159	.113		
	Total	207.755	164			

Notes: a. Predictors: (Constant), Employee Customer Orientation, Price Fairness, Brand Image, Service Quality, Service Recovery

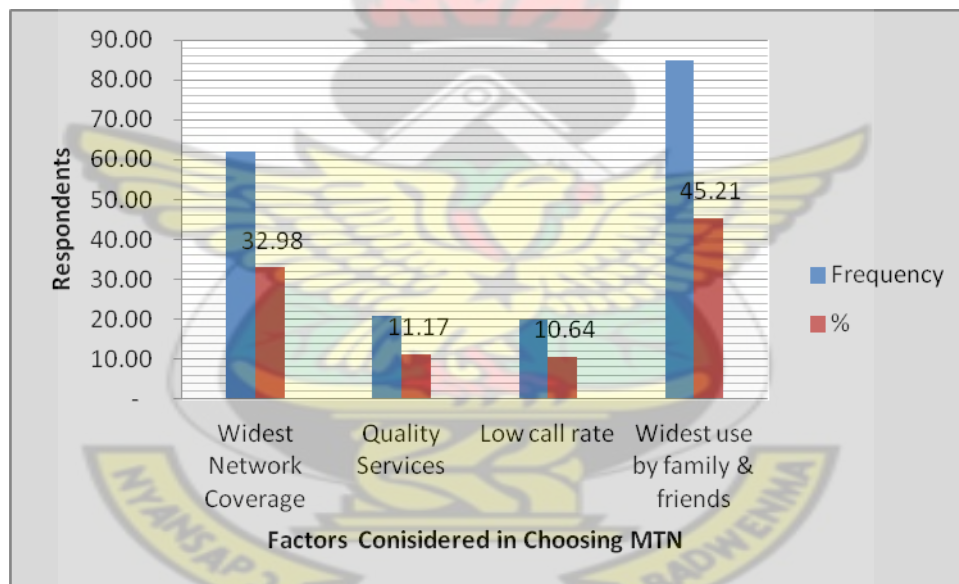
b. Dependent Variable: Customer Satisfaction

**Source:** Field data, July 2012.

#### 4.6 FURTHER RELATED ANALYSIS

What are the factors considered by subscribers in choosing a mobile network (i.e., MTN)? Which areas is MTN doing better than other network providers? and Where does MTN needs to improve? This section is intended to address these important managerial and research questions. Figure 4.14 addresses the first question, Figure 4.15 answers the second question, and Figure 4.16 answers the third question. The analysis is based on the responses of the sample, and that total observation may be more than the effective sample size in view of the fact that respondents were given the allowance to select multiple choices.

**Figure 4.14: Factors Considered in Choosing MTN**

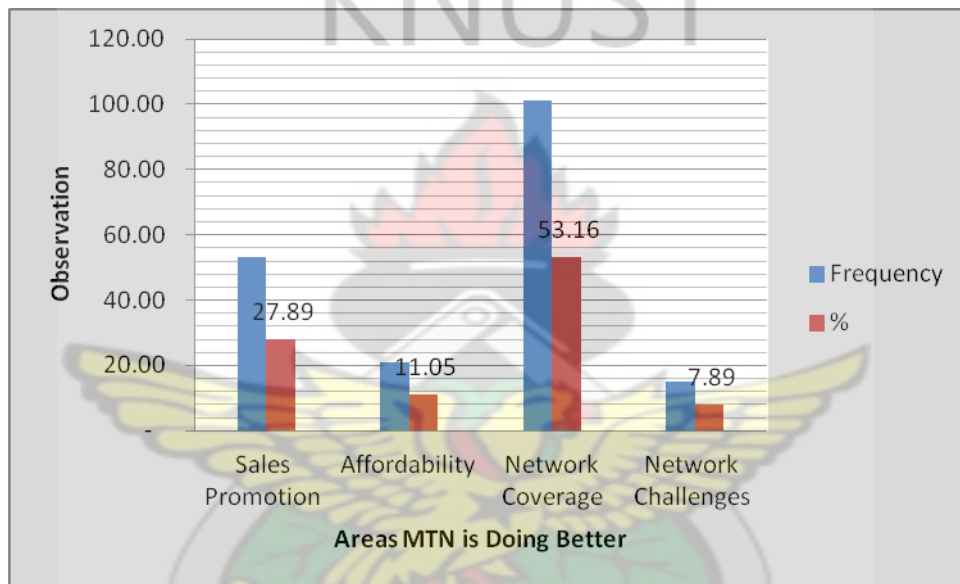


**Source:** Field data, July 2012.

According to the results (see Figure 4.14 above), when respondents were asked to rank the factors they considered in choosing MTN, widest use by family and friends was ranked first, marshalling 45 percent of the observations. Widest network coverage came second with 33 percent of the observations, while both quality services and low call rate each recorded 11 percent of the observations, to finish joint third. Again, respondents were asked to indicate the

areas they think MTN does better than other network providers, and the results are presented in Figure 4.15. The majority of the observations are attributable to network coverage (53 percent). The second most chosen area is sales promotion, recording 28 percent of the observations. Affordability came third with about 11 percent of the vote, while network challenges was ranked last with just eight percent of the observations.

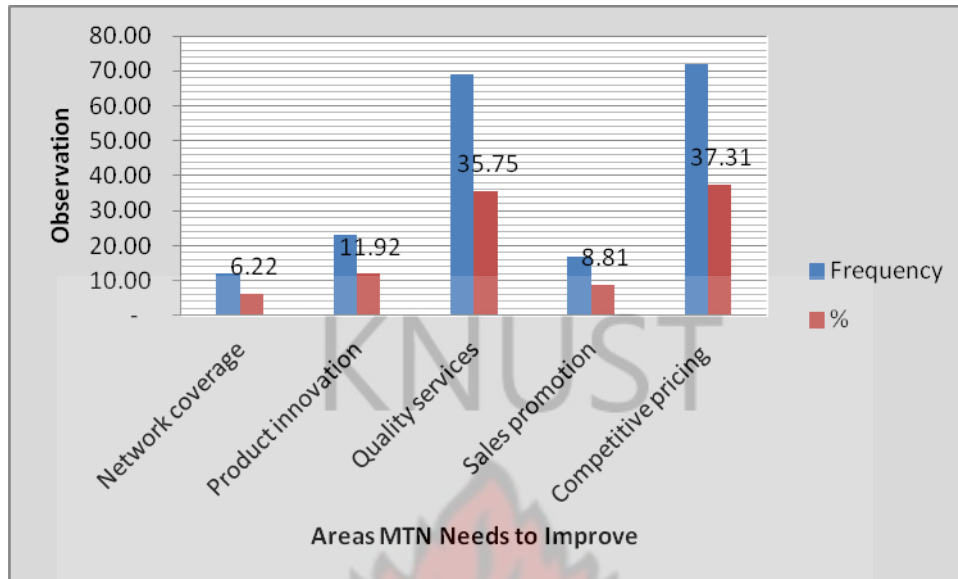
**Figure 4.15: Areas MTN is Doing Better than Competitors**



**Source:** Field data, July 2012.

When asked to indicate the areas MTN needs to improve, competitive pricing was ranked first, recording 37 percent of the observations. Followed closely is quality services, recording 36 percent of the observation, just one percent less than competitive pricing. Product innovation recorded 12 percent of the observation to stay at third place, with sales promotion and network coverage coming forth (nine percent) and fifth (six percent) respectively.

**Figure 4.16: Areas MTN Needs to Improve**



**Source:** Field data, July 2012.

Essentially, what the findings in this section are suggesting is that the results on the determinants of customer satisfaction in mobile telecommunications in Ghana are largely consistent. In particular, MTN appears to have overemphasized expanding network coverage, enabling it to win most customers who were interested in connecting with family and friends from distant geographical areas. Indeed, a recent service industry study in Ghana by Hinson et al (2009, p. 396) conclude “that most Ghanaians rank accessibility and proximity to a...service as the most important and crucial factor”. In this case, MTN provides subscribers with proximity and accessibility by enabling them to connect with family and friends irrespective of their location. This has given MTN an edge over other network providers, perhaps enabling it to price its services above industry averages.

Yet, service quality does not seem to match the relatively high cost of accessing the services, leading to lowering level of customer satisfaction. Thus, while customers have scored MTN

high on areas such as network coverage and sales promotion, they think that improvement is needed urgently from two particular areas, namely quality of services and competitive pricing, a reinforcement of the regression results indicating that service quality and price fairness are the most important determinants of customer satisfaction in mobile telecommunications in Ghana, altogether explaining 91 percent of the variance in the level of satisfaction of mobile subscribers sampled in this study.

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## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 INTRODUCTION**

This chapter brings the study to a close by, first, summarising all the major themes addressed from chapters one through to chapter four. Then, on the basis of the empirical findings highlighted under chapter four, and consistent with the existing literature, relevant conclusions are drawn. In the final part of this chapter, recommendations for managers and future researchers alike are suggested.

#### **5.2 SUMMARY OF FINDINGS**

This section provides a highlight of the main findings, but before that, it is important to, first, reflect on the procedures went through to address the research agenda.

##### **5.2.1 PROCEDURE**

This study sought to examine the level of customer satisfaction with MTN mobile telecommunications network, determine the factors accounting for the level of customer satisfaction with MTN mobile telecommunications network, identify the factors considered by subscribers in choosing MTN mobile telecommunications network, and finally ascertain the areas subscribers want MTN mobile telecommunications network to improve. To address these research agenda, major development in the Ghanaian telecommunications industry were reviewed, drawing the lines between observed phases in this development and noting the service delivery performance of telecommunications service providers under each phase. In short the review suggested that while progress has been made such as increasing mainline in services, a growing number of mobile subscribers, and the introduction of more innovative products and services (see Mahmoud and Hinson, 2012; Haggarty et al., 2002),



increasingly customers (i.e., subscribers) continue to complain about the operations of telecommunications companies in Ghana (Nimako et al., 2010).

On the basis of a comprehensive review of major theoretical leanings (see Anderson and Sullivan, 1993; Saeed et al., 2011; Michel and Meuter, 2008; Nimako et al., 2010; Herrmann et al., 2007; Minkiewicz et al., 2011), this study developed a conceptual framework which suggested that customer satisfaction in the mobile telecommunications industry would be a function of mobile telecommunications provider's service quality, service recovery, price fairness, brand image, and customer orientation of service employees. Again, the framework conjectured that direct relationships exist between customer orientation of service employees and service quality, service recovery, price fairness, and brand image. Cast in a quantitative case study mode, data for the study came from a systematic random sample (see Newman, 2007) of 165 MTN mobile telecommunications customers. With the aid of the SPSS, the collected data were analysed through descriptive statistics (frequencies, percentages, means and standard deviations), correlation analysis and ordinary least squares regressions.

### **5.2.2 MAIN FINDINGS**

The empirical results indicate that on the basis of the Likert scale customer satisfaction with MTN network appears to be very low. In particular, when asked to indicate their overall satisfaction with MTN, only 42 percent noted that they are satisfied. These results appear to reinforce Nimako et al.'s (2010) specific findings indicating that relatively customers of MTN rate it with lowest satisfaction score, compared to other network operators. Moreover, it rekindles Frempong and Henten's (2004, p.3) earlier assertion that there is a widespread dissatisfaction with telecommunications network providers in Ghana among users. Likewise, taken on the basis of the Likert scale, this study found customers' perceived service quality to

be very low and recovery from service failure associated with the MTN network to be rather unimpressive.

The finding relating to service recovery is hardly surprising in that Adjetey's (2012) study of TQM in Airtel mobile network has pointed to how the network provider has often failed to impress customers despite taken measures to rectify or recover from service failures. Similarly, it has been found that customers do not agree that MTN offers fair prices for its products, which resonates with Frempong and Henten's (2004) anecdotes that customers are increasingly complaining about higher tariffs. On the contrary, brand image and employee customer orientation of MTN mobile telecommunications network were given relatively better ratings by customers, with the findings on customer orientation lending additional support to Mahmoud and Hinson's (2012) study of market orientation in the telecommunications industry, which has shown that the average telecommunications provider is moderately customer-oriented.

In trying to understand which of these factors contributed to the low level of customer satisfaction with the MTN mobile network, a correlation analysis was first performed, which resulted in the confirmation of the study's conceptual framework that customer satisfaction in the mobile telecommunications industry is positively and significantly associated with network provider's service quality, service recovery, price fairness, brand image, and customer orientation of service employees. However, following the recommendations of Hair et al. (1995), ordinary least squares regression was performed to establish the true nature of these relationships.

According to the results, significant positive relationships exist only between customer satisfaction and service quality, which is in line with the many literature on SERQUAL (see e.g., Ganesh et al., 2000; Caruana, 2002; Chou and Chang, 2006), and between customer satisfaction and price fairness. While the conjectured positive relationships between customer satisfaction and service recovery and brand image have also been supported, these relationships were not significant at the 0.05 level of significant. Again, the present research did not found significant relationship between employee customer orientation and customer satisfaction, which is quite surprising in view of the plethora of western country studies highlighting a positive relationship between market orientation and customer satisfaction (see Jones et al., 2003; Hennig-Thurau, 2004; Kohli and Jaworski, 1990; Narver and Slata, 1990). In particular, the study recorded a negative insignificant relationship between customer satisfaction and customer orientation, which appears to throw support for Ellis' (2005) hypothesis that companies operating in developing countries should focus on marketing practice instead of market orientation.

The validity of the latter assertion should be analysed in light of the fact that what the mobile subscribers are suggesting is that MTN should focus on its price competitiveness and service quality (all of which are aspect of marketing practice, see Ellis (2005)) if they want to engender customer satisfaction. The empirical evidence indicates that MTN appears to score relatively better in network coverage and sales promotion. It seems that network proximity and accessibility due to a wide geographical coverage enable MTN win most customers interested in connecting with family and friends from distant geographical locations, given MTN an edge over other operators, and thereby enabling it to price its services above industry averages. Unfortunately, there appears to be a mismatch between service quality and

tariffs (see also Frempong and Henten, 2004), with customers opining that improvement is needed urgently from two particular areas, namely quality of services and competitive pricing.

### **5.3 CONCLUSIONS**

The present study attempted at synthesizing the literature on the factors affecting customer satisfaction to develop a conceptual model which theorise about the determinants of customer satisfaction in mobile telecommunications companies. Building and extending on five theoretical traditions in the management literature, this study posited that in the telecommunications industry, service quality, service recovery, price fairness, brand image, and customer orientation of service employees could potentially impact the level of mobile telecommunications subscriber (customer) satisfaction (see also Figure 2.1 on page 28). Nevertheless, based on the empirical results, this study concludes that service quality and price fairness are the most important determinants of customer satisfaction in a mobile telecommunications company. In particular, the lower the service quality, the lower the level of customer satisfaction, and that the greater the perception of price unfairness, the greater the level of dissatisfaction among customers.

While it is difficult to understand why customer orientation affected customer satisfaction negatively, albeit insignificantly, it may be that customers in developing countries such as Ghana are more interested in marketing practices, focusing on key elements of the marketing mix, including product (i.e. service quality), price (i.e. price fairness), place (i.e. network coverage), and promotion. Therefore, high customer orientation (as MTN appears to be), until complemented with the right balance among service product, service price, distribution, and promotion, could have little, if any, impact on the level of customer satisfaction.

Finally, this study would like to infer that, because the relationship between customer satisfaction and service recovery and brand image was positive, the lack of statistical significance hints at an intriguing conceptual question: Whether the relationship between customer satisfaction and service recovery and brand image are direct? Perhaps there could be some mediating and/or moderating factors (see Baron and Kenny, 1986, p. 1177). For example, the service landscape may mediate the relationship between corporate/brand image and customer satisfaction (see Minkiewicz et al., 2011, p. 191).

#### **5.4 RECOMMENDATIONS**

What practical implications can be discerned from the above findings? In this section, this question is addressed by making some suggestions to MTN and to telecommunications industry practitioners in general.

##### **5.4.1 RECOMMENDATIONS SPECIFIC TO MTN**

To the researcher's knowledge, this is about the second empirical study in Ghana to report low customer satisfaction score for MTN Ghana limited. The first one was in 2010 by Nimako et al. (2010) who found that overall satisfaction with MTN services ranged from 2.04 to 2.69, which was considerably lower than other operators in the sample. In this new millennium when the industry is becoming more and more competitive, MTN can certainly not afford to lose a customer.

From a managerial perspective, first, the results of the direct significant relationship between service quality and customer satisfaction reinforce the need for MTN to prioritise the delivery of quality, uninterrupted services to customers. At times, in the midst of much competition for mobile subscribers, initiatives that achieve more immediate goals are often

prioritised. However, the result implies that a reliable, uninterrupted services drives customer satisfaction, one of the ultimate goals of any service organisation.

Second, the result of the direct significant relationship between price fairness and satisfaction judgments indicates that price is an important element in consumers' purchases; therefore, it has a large influence on consumers' satisfaction judgments. This result implies that MTN should not only avoid exploiting their customers but should also anticipate consumers' potential feelings of being exploited. Being sensitive to the buyers' psychological state and assuring buyers of fair treatment will enhance perceptions of price fairness without changing the price offer.

Taken together, managers of MTN need to put measures in place to swiftly tackle connectivity problems and to deliver quality, reliable services at reasonable prices which are especially fair to consumers considering the level of services that are been delivered.

#### **5.4.2 RECOMMENDATION GENERAL TO INDUSTRY PRACTITIONERS**

The results of this study have stimulating managerial implications for telecommunications companies in Ghana. In managing relationships with subscribers and consumers in general, companies should consider perceptions of price fairness, especially when quality has deteriorated. Most industry practitioners have over the years focused on corporate marketing, sponsoring sporting events, entertainment, and sometimes education and health programmes in Ghana in an endeavour to enhance their reputation. Acting on the premise that companies can “do well by doing good” (see Mahmoud and Hinson, 2012, p. 327), telecommunications companies, especially MTN, Vodafone, and Tigo, tend to overemphasis on building brand image, hence overlooking important questions about price fairness or justice and quality of

services. Yet the present study did not find any significant relationship between brand image and customer satisfaction, the goal of any service company.

It is recommended on the basis of the empirical evidence that to understand customer satisfaction better, managers must survey customers about both perceived service quality and perceptions of price fairness. The research indicates that when customers have negative perceptions about prices fairness and service quality, notwithstanding high investments into corporate reputation building and sales promotion, and even high level of customer orientation of service employees and any effort made to recover from service failures, customers will be dissatisfied with a network operator. And the consequences of customer dissatisfaction are well documented (Anderson and Sullivan, 1993; Saeed et al., 2011; Michel and Meuter, 2008; Nimako et al., 2010; Herrmann et al., 2007; Minkiewicz et al., 2011): the dissatisfied customer can spread the bad word to other potential customers and will keep avoiding the company, a situation which could potentially lead to revenue contraction and subsequent lowering of profits. These are serious implications for management of telecommunication companies in Ghana. But can any research implication be inferred from the present study? This issue is more closely addressed next.

#### **5.4.3 DIRECTIONS FOR FUTURE RESEARCH**

This study has investigated the determinants of customer satisfaction in the Ghanaian mobile telecommunications industry using a case study of MTN mobile network. The study has contributed to the existing body of knowledge on the topic by integrating five research streams to arrive at a synthesized model of customer satisfaction (see Figure 2.1 on page 28). Although the present study did not find full support for the model, the theorised relationships in the model have been implicated individually in their respective research streams, which

include service failure and service recovery (e.g., Maxham, 2001; Michel and Meuter, 2008), price fairness or justice (e.g. Herrmann et al., 2007; Voss et al., 1998), market orientation (e.g. Narver and Slater, 1990; Kholi and Jaworski, 1990), corporate marketing (e.g. Aspara and Tikkanen, 2011; Brown et al., 2006), and service quality (e.g. Parasuraman et al., 1985; Mackay and Crompton, 1990). Nevertheless, although the study has no doubt enriched the literature with further empirical evidence from a developing country context, improvement is required from the following areas.

First, the use of the case study approach could limit the external validity of the study, making the results unlikely to be generalisable to other firms within the same industry. The logic for future researchers is to use a survey to sample subscribers from across all companies operating the industry. Second, related to the first suggestion, further attempts at validating the conceptual model could be carried out in other services sectors of the Ghanaian economy such as banking and insurance, hotel and restaurant, and consulting services. Third, during the sampling process, some of the respondents who were approached were illiterates (this is about 11 percent) and the researcher had to take his time to translate the English worded questions into Twi or Ga whichever is most understandable to these people. Consequently, even though the researcher took steps to reduce problems associated with the interpretation – the translation was not systematic –the process does not guarantee perfect translation. In future works, researchers might consider focusing on only the educated subscribers.



## REFERENCES

- Adjetey, E.R.A. (2012), "Total Quality Management in the Telecommunication Industry in Ghana: A Look at Customer Satisfaction with the Airtel Network", Master's Dissertation, University of Ghana, Legon, Ghana.
- Agarwal, S., Erramill, M. and Dev, C. (2003), "Market orientation and performance in service firms: role of innovation", *Journal of Services Marketing*, Vol. 17 No 1, pp. 68-82.
- Anderson Management International A/S (1993), Report on the Future Development of the Telecommunications Sector in Ghana.
- Anderson, E.W. and Fornell, C. (1994), "A customer satisfaction research prospectus", in Rust, R.T. and Oliver, R.L. (Eds), *Service Quality: New Directions in Theory and Practice*, Sage, Thousands Oaks, CA.
- Anderson, E.W. and Sullivan, M. (1993), "The antecedences and consequences of customer satisfaction for firms", *Marketing Science*, Vol. 12 No. 2, pp. 125-43.
- Ary, D., Jacobs, L., and Razavieh, A. (2002), *Introduction to Research in Education*, 6<sup>th</sup> Ed., Belmont, CA: Wadsworth/Thomson Learning.
- Aspara, J. and Tikkanen, H. (2011), "Corporate marketing in the stock market: The impact of company identification on individuals' investment behaviour", *European Journal of Marketing*.
- Bailey, D.K. (1987), Conlier Macmillan Publishers, London, *Methods of Social Research*.
- Balmer, J.M.T. (2009), "Corporate marketing: apocalypse, advent and epiphany", *Management Decision*, Vol. 47 No. 4, pp. 544-572.
- Baron, R. and Kenny, D.A. (1986), "The moderator-mediator distinction in social psychological research: conceptual, strategic, and statistical considerations", *Journal of Personality & Social Psychology*, Vol. 51 No. 6, pp. 1173-82.
- Bennett, R. (2005), "Competitive environment, market orientation, and the use of relational approaches to the marketing of charity beneficiary services", *Journal of Services Marketing*, Vol. 19 No.7, pp. 453-469.
- Bitner, M.J. and Hubbert, A.R. (1994), "Encounter satisfaction versus overall satisfaction versus quality", in Rust, R.T. and Oliver, R.L. (Eds), *Service Quality: New Directions in Theory and Practice*, Sage, London.
- Boohene, R. and Agyapong, G.K.Q. (2011), "Analysis of the Determinants of Customer Loyalty of Telecommunication Industry in Ghana: The Case of Vodafone (Ghana)", *International Business Research*, Vol. 4 No. 1, pp. 229-240.
- Bowman, D. and Narayandas, D. (2001), "Managing customer-initiated contacts with manufacturers: the impact on share of category requirements and word-of-mouth behaviour", *Journal of Marketing Research*, Vol. 38, August, pp. 281-97.

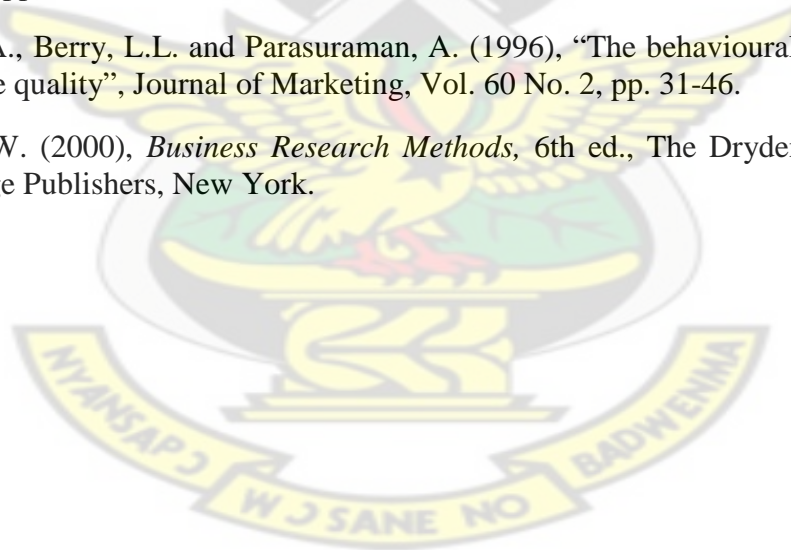
- Brown, T.J., Dacin, P.A., Pratt, M.G., and Whetten, D.A. (2006), "Identity, intended image, construed image, and reputation: An interdisciplinary framework and suggested terminology", *Journal of the Academy of Marketing Science*, Vol. 34 No. 2, pp. 99-106.
- Brown, T.J., Mowen, J.C., Donavan, D.T. and Licata, J.W. (2002), "The customer orientation of service workers: personality trait influences on self and supervisor performance ratings", *Journal of Marketing Research*, Vol. 39 No. 1, pp. 110-19.
- Caruana, A. (2002), "Service loyalty: the effects of service quality and the mediating role of customer satisfaction", *European Journal of Marketing*, Vol. 36 Nos 7/8, pp. 811-28.
- Chou, C.M and Chang, S.C. (2006), "Factors affecting China Mobile Customer satisfaction", available at: <http://www.decisionsciences.org/Proceedings/DSI2008/docs/17-9824.pdf> (Accessed: July 15<sup>th</sup> 2012).
- Churchill, G.A. and Surprenant, C.F. (1982), "An investigation into the determinants of customer satisfaction", *Journal of Marketing Research*, Vol. 19, November, pp. 491-504.
- Clarke, T. (1998), "The stakeholder corporation: a business philosophy for the information age", *Long Range Planning*, Vol. 31 No. 2, pp. 182-94.
- Cronin, J.J. Jr, Brady, M.K. and Hult, T.M. (2000), "Assessing the effects of quality, value, customer satisfaction on consumer behavioural intentions in service environment", *Journal of Retailing*, Vol. 76 No. 2, pp. 193-216.
- Day, G.S. (1994), "The capabilities of market driven organisations", *Journal of Marketing*, Vol. 58, October, pp.37-52.
- Drucker, P. (1954), *The Practice Of Management*, Harper & Row Publishers, New York.
- Eisenhardt, K.M. (1989), "Building theories from case study research", *Academy of Management Review*, Vol. 14 No. 4, pp. 532-50.
- Ellis, P.D. (2005), "Market orientation and marketing practice in a developing economy," *European Journal of Marketing*, Vol. 39 No. 5/6, pp. 629-645.
- Field, A. (2005), *Discovering Statistics, Using SPSS for Windows*, Sage Publications, London.
- Fink, C., Aaditya, M. and Randeep, R. (2002), *Liberalizing Basic Telecommunications: Evidence from Developing Countries*", World Bank, Working Paper.
- Fornell, C., Johnson, M.D., Anderson, E.W., Cha, J. and Bryant, B.E. (1996), "The American customer satisfaction index: nature, purpose and findings", *Journal of Marketing*, Vol. 60, October, pp. 7-18.

- Frempong, G. and Henten, A. (2004), "Telecom developments and investments in Ghana ", Discussion Paper, The World Dialogue on Regulation for Network Economies.
- Ganesh, J., Arnold, M. and Reynolds, K. (2000), "Understanding the customer base of service providers: an examination of the difference between switchers and stayers", *Journal of Marketing*, Vol. 64 No. 3, pp. 65-87.
- Garengo, P., Biazzo, S., and Bititci, U. S. (2005), "Performance measurement systems in SMEs: a review for a research agenda", *International Journal of Management Reviews*, Vol. 7 No. 1, pp. 25-47.
- (The) Ghana News Agency (GNA) (2010), Communication tax bags ₵26m for first quarter, available at: <http://www.modernghana.com/news/279250/22/communication-tax-bags-26m-for-first-quarter.html> (accessed: 09/06/2012).
- Gronroos, C. (1988), "Service quality: the six criteria of good perceived service quality", *Review of Business*, Vol. 9, pp. 10-13.
- Haggarty, L., Shirley, M.M. and Wallsten, S. (2002), "Telecommunications Reforms in Ghana", World Bank, Working Paper.
- Hair, J.F. Jr., Anderson, R.E., Tatham, R.L. and Black, W.G. (1995), *Multivariate Data Analysis*, 4<sup>th</sup> ed., Prentice-Hall, Inc., Englewood Cliffs, New Jersey.
- Hennig-Thurau, T. (2004), "Customer orientation of service employees: Its impact on customer satisfaction, commitment, and retention", *International Journal of Service Industry Management*, Vol. 15 No. 5, pp. 460-478.
- Herrmann, A., Xia, L., Monroe, K.B. and Huber, F. (2007), "The influence of price fairness on customer satisfaction: an empirical test in the context of automobile purchases", *Journal of Product & Brand Management*, Vol. 16 No. 1, pp. 49-58.
- Heskett, J.L., Sasser, W.E. and Schlesinger, L.A. (1997), *The service profit chain*, Free Press, New York.
- Hinson, R., Dasah, J. and Owusu-Frimpong, N. (2009), "Key motivations for bank patronage in Ghana", *International Journal of Bank Marketing*, Vol. 27, No. 5, pp 381-399.
- Hinson, R.E. and Mahmoud, M.A. (2011), "Qualitative Insights into Market Orientation in Small Ghanaian Businesses", *International Journal of Marketing Studies*, Vol. 3 No. 1, pp. 36-44.
- Huffman, C. and Cain, L.B. (2001), "Adjustments in performance measures: distributive and procedural justice effects on outcome satisfaction", *Psychology & Marketing*, Vol. 18 No. 6, pp. 593-615.
- Jones, E., Busch, P. and Dacin, P. (2003), "Firm market orientation and salesperson customer orientation: interpersonal and intrapersonal influences on customer service and retention in business-to-business buyer-seller relationships", *Journal of Business Research*, Vol. 56, pp. 323- 340.

- Kaplan, R. S., and Norton, D. P. (1992), “The Balanced Scorecard – measures that drive performance”, *Harvard Business Review*, Vol. 70 No. 1, pp. 71-9.
- Keaveney, S.M. (1995), “Customer Switching Behaviour in Service Industries: An Exploratory Study”, *Journal of Marketing*, Vol. 59, April, pp. 71-82.
- Kohli, A.K. and Jaworski, B.J. (1990), “Market Orientation: The Construct, Research Propositions, and Managerial Implications”, *Journal of Marketing*, Vol. 54, No. 2, pp. 1-18.
- Kotler, P. (1998), *Marketing Management*, Prentice-Hall, New Jersey.
- Krauss, S.E. (2005), “Research Paradigms and Meaning Making: A Primer”, *The Qualitative Report*, Vol. 10 No. 4, pp. 758-770.
- MacKay, K.J., and Crompton, J.L. (1990), “Measuring the quality of recreation services”, *Journal of Park and Recreation Administration*, Vol. 8 No. 3, pp. 47-56.
- Mahmoud, M.A. and Hinson, R. (2012), “Market orientation, innovation and corporate social responsibility practices in Ghana’s telecommunications sector”, *Social Responsibility Journal*, Vol. 8 No. 3, pp. 327 – 346.
- Mahmoud, M.A., Kastner, A. and Yeboah, J. (2010), “Determinants, environmental moderators and consequences of market orientation: A study of pharmaceutical firms in Ghana”, *Journal of Medical Marketing*, Vol. 10 No. 3, pp. 231–244.
- Mandhachitara, R. and Poolthong, Y. (2011), “A model of customer loyalty and corporate social responsibility”, *Journal of Services Marketing*, Vol. 25 No. 2, pp. 122–133.
- Maxham, J.G.I. (2001), “Service recovery’s influence on consumer satisfaction, word-of-mouth, and purchase intentions”, *Journal of Business Research*, Vol. 54, pp. 11-24.
- McNamara, C.P (1972), “The present status of the marketing concept”, *Journal of Marketing*, Vol. 36 pp.50-7.
- Michel, S. and Meuter, M.L. (2008), “The service recovery paradox: true but overrated?”, *International Journal of Service Industry Management*, Vol. 19 No. 4, pp. 441-457.
- Miller, J.L., Craighead, C.W. and Karwan, K.R. (2000), “Service recovery: a framework and empirical investigation”, *Journal of Operations Management*, Vol. 18 No. 4, pp. 387-400.
- Minkiewicz, J., Evans, J., Bridson, K. and Mavondo, F. (2011), “Corporate image in the leisure services sector”, *Journal of Services Marketing*, Vol. 25 No. , pp. 190–201.
- Narver, J. and Slater, S. (1990), “The effect of a market orientation on business profitability”, *Journal of Marketing*, Vol. 54, pp. 20-35.
- Neuman, L. (2007), *Basics of social research: qualitative and quantitative approaches*, Pearson Education Inc., Boston, USA.

- Nimako, S.G., Azumah, F.K., and Donkor, F. (2010), "Overall Customer Satisfaction in Ghana's Mobile Telecommunication Networks: Implications for Management and Policy", *ATDF Journal* Vol. 7 No. 3/4, pp. 35-49.
- Nunnally, J. C., (1978), *Psychometric Theory*, 2nd Edition, Sydney, McGraw-Hill, Australia.
- Oliver, R.L. (1980), "A cognitive model of the determinants and consequences of satisfaction decisions", *Journal of Marketing Research*, Vol. 17, pp. 460-9.
- Oliver, R.L. (1999), "Whence consumer loyalty?", *Journal of Marketing*, Vol. 63, pp. 33-44.
- Oliver, R.L. and Swan, J.E. (1989), "Consumer perceptions of interpersonal equity and satisfaction in transactions: a field survey approach", *Journal of Marketing*, Vol. 53, April, pp. 21-35.
- Olorunniwo, F., Hsu, M.K. and Udo, G.J. (2006), "Service quality, customer satisfaction, and behavioural intentions in the service factory", *Journal of Services Marketing*, Vol. 20 No. , pp. 59-72.
- Parasuraman, A., Zeithaml, V. and Berry, L. (1985), "A conceptual model of service quality and its implications for further research", *Journal of Marketing*, Vol. 49, Autumn, pp. 41-50.
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1988), "SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality", *Journal of Retailing*, Vol. 64 No. 1, pp. 12-40.
- Psychogios, A.G. and Priporas, C.V. (2007), "Understanding Total Quality Management in Context: Qualitative Research on Managers' Awareness of TQM Aspects in the Greek Service Industry", *The Qualitative Report*, Vol. 12 No. 1, pp. 40-66.
- Rust, R., Katherine L. and Zeithaml, V.L. (2004), "Return on marketing: Using customer equity to focus marketing strategy", *Journal of Marketing*, Vol. 68, January, pp.109-124.
- Sivadas, E. and Baker-Prewitt, J.L. (2000), "An examination of the relationship between service quality, customer satisfaction, and store loyalty", *International Journal of Retail & Distribution Management*, Vol. 28 No. 2, pp. 73-82.
- Smith, A.K., Bolton, R.N. and Wagner, J. (1999), "A Model of Customer Satisfaction with Service Encounters Involving Failure and Recovery", *Journal of Marketing Research*, Vol. 36 No. 3, pp. 356-372.
- Swan, J. E. and Combs, L. J. (1976), "Product Performance and Consumer Satisfaction: A New Concept", *Journal of Marketing*, Vol. 40 (April), pp. 25 - 33.
- Swan, J. E. and Combs, L. J. (1976), "Product Performance and Consumer Satisfaction: A New Concept", *Journal of Marketing*, Vol. 40 (April), pp. 25 - 33.
- Swanson, S.R. and Kelley, S.W. (2001), "Service recovery attributions and word-of-mouth intentions", *European Journal of Marketing*, Vol. 35 Nos 1/2, pp. 194-211.

- Tsang, J.H.Y. and Antony, J. (2001), "Total quality management in UK service organisations: some key findings from a survey", *Managing Service Quality*, Vol. 11 No. 2, pp. 132 -141.
- Voss, G.B., Parasuraman, A. and Grewal, D. (1998), "The role of price, performance and expectations in determining satisfaction in service exchanges", *Journal of Marketing*, Vol. 62, October, pp. 46-61.
- Walker, O.C., Boyd, H.W. and Larreche, J.C. (1992), *Marketing Strategy: Planning and Implementation*, Irwin, Homewood, Illinois.
- Westbrook, R. A. (1980), "Intrapersonal Affective Influences on Consumer Satisfaction with Products", *Journal of Consumer Research*, Vol. 7, pp. 49-54.
- Yin, R. K., (1994), *Case Study Research – Design and Methods*, 2nd Edition, Thousand Oaks, CA, Sage Publications.
- Yin, R.K. (2003), *Case Study Research: Design and Methods*, 3<sup>rd</sup> Edition, Sage Publications, Thousand Oaks, CA.
- Zairi, M. and Youssef, M. (1995), "Benchmarking critical factors for TQM, Part 1: theory and foundations", *Benchmarking for Quality Management and Technology*, Vol. 2 No. 1, pp.
- Zeithaml, V.A., Berry, L.L. and Parasuraman, A. (1996), "The behavioural consequences of service quality", *Journal of Marketing*, Vol. 60 No. 2, pp. 31-46.
- Zikmund, G.W. (2000), *Business Research Methods*, 6th ed., The Dryden Press, Harcourt College Publishers, New York.



## APPENDIX “A”

### KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI COMMONWEALTH EXECUTIVE MASTERS IN BUSINESS ADMINISTRATION (CEMBA)

#### QUESTIONNAIRE FOR DATA COLLECTION

**INTRODUCTION:** This instrument is designed to collect data on customer satisfaction in mobile telecommunications focusing on MTN Ghana. You are invited to complete the questionnaire bearing in mind that your honest responses will go a long way to determine the overall success of this exercise. This work is strictly for academic purposes and so information given be treated with confidentiality.

Please indicate your response by ticking [  ] the response category or by writing in the space(s)

#### SECTION A

1. Gender

- |   |        |                              |
|---|--------|------------------------------|
| 1 | Male   | [ <input type="checkbox"/> ] |
| 2 | Female | [ <input type="checkbox"/> ] |

2. Age group

- |   |              |                              |
|---|--------------|------------------------------|
| 1 | Less than 25 | [ <input type="checkbox"/> ] |
| 2 | 25-35        | [ <input type="checkbox"/> ] |
| 3 | 36-45        | [ <input type="checkbox"/> ] |
| 4 | 46-55        | [ <input type="checkbox"/> ] |
| 5 | More than 55 | [ <input type="checkbox"/> ] |

3. Highest educational qualification

- 1 None [ ]
- 2 Primary [ ]
- 3 Junior High [ ]
- 4 Senior High [ ]
- 5 HND [ ]
- 6 Diploma [ ]
- 7 Degree [ ]
- 8 Other .....[Please state]

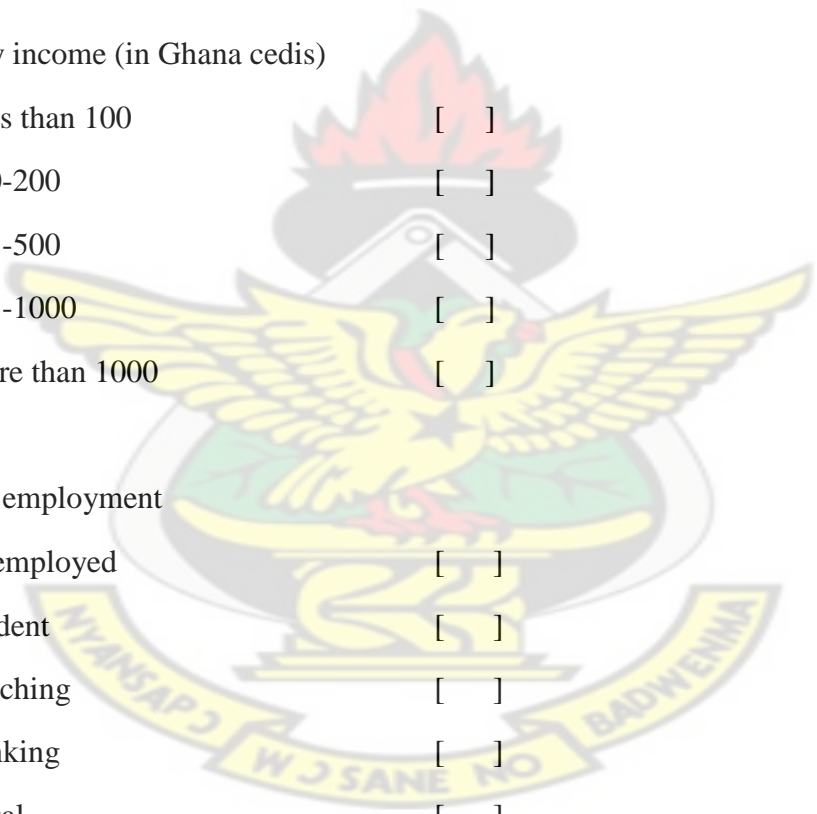
KNUST

4. Monthly income (in Ghana cedis)

- 1 Less than 100 [ ]
- 2 100-200 [ ]
- 3 201-500 [ ]
- 4 501-1000 [ ]
- 5 More than 1000 [ ]

5 Type of employment

- 1 Unemployed [ ]
- 2 Student [ ]
- 3 Teaching [ ]
- 4 Banking [ ]
- 5 Legal [ ]
- 6 Medical [ ]
- 7 Businessman / woman [ ]
- 8 Trading
- 9 Other.....(please state)





6 How many mobile lines (operators) do you use (please tick all that apply)

- 1 MTN
- 2 Vodafone
- 3 Tigo
- 4 Airtel
- 5 Glo
- 6 Expresso

KNUST

7. Is MTN your number one (1) mobile network?

- 1 Yes
- 2 No

8. Please indicate your area of residence.....

**SECTION B**

In this section, you are given series of statement in the affirmative. Please rank each statement by ticking [ √ ] using the scale given below:

- 1= Strongly disagree      2=Disagree      3=Neither agree nor disagree
- 4=Agree      5=Strongly agree

ITEM	RESPONSE				
	1	2	3	4	5
9. I am satisfied with my service experience with MTN.	[ ]	[ ]	[ ]	[ ]	[ ]
10. I think I selected the right network.	[ ]	[ ]	[ ]	[ ]	[ ]
11. I am happy with my service process.	[ ]	[ ]	[ ]	[ ]	[ ]

*Service Quality* 1 2 3 4 5

Throughout my experience with MTN:

12. I feel that it is a reliable network. [ ] [ ] [ ] [ ] [ ]
13. There are competent persons to deal with connectivity and network issues. [ ] [ ] [ ] [ ] [ ]
14. I can always depend on it for uninterrupted services. [ ] [ ] [ ] [ ] [ ]
15. Employees are always willing to help. [ ] [ ] [ ] [ ] [ ]
16. I can trust the employees of the company. [ ] [ ] [ ] [ ] [ ]
17. They keep all my information secret and confidential. [ ] [ ] [ ] [ ] [ ]
18. Employees have my best interest at heart. [ ] [ ] [ ] [ ] [ ]
19. I get individual attention from employees. [ ] [ ] [ ] [ ] [ ]

*Service Recovery* 1 2 3 4 5

Anytime there is problem/failure:

20. [ ] [ ] [ ] [ ] [ ]
- The organization acknowledges the problem without your having to complain.
21. I am offered an unconditional apology. [ ] [ ] [ ] [ ] [ ]
22. The organization is successful at fixing problems associated its services. [ ] [ ] [ ] [ ] [ ]
23. I get free rechargeable credit. [ ] [ ] [ ] [ ] [ ]

*Price Fairness* 1 2 3 4 5

My experience tells me that:

24. [ ] [ ] [ ] [ ] [ ]
- The price I am paying is fair.
25. The price I am paying is unquestionable. [ ] [ ] [ ] [ ] [ ]
26. The price I am paying is justified. [ ] [ ] [ ] [ ] [ ]

27. The price I am paying is competitive. [ ] [ ] [ ] [ ] [ ]

*Brand Image* 1 2 3 4 5

28. I feel that MTN is socially responsible [ ] [ ] [ ] [ ] [ ]

29. I am convinced that MTN is a leader in its field. [ ] [ ] [ ] [ ] [ ]

30. I am convinced that MTN is very innovative. [ ] [ ] [ ] [ ] [ ]

31. I am convinced that MTN is committed to gender equality. [ ] [ ] [ ] [ ] [ ]

*Employee Customer Orientation* 1 2 3 4 5

Throughout my experience with MTN:

32. I am often met by employees who learn about my current and potential needs. [ ] [ ] [ ] [ ] [ ]

33. Employees have a thorough knowledge about emerging customers and their needs. [ ] [ ] [ ] [ ] [ ]

34. Employees integrate information about customers in their plans and strategies. [ ] [ ] [ ] [ ] [ ]

35. Employees have developed effective relationships with me. [ ] [ ] [ ] [ ] [ ]

36. Employees are courteous in dealing with customers [ ] [ ] [ ] [ ] [ ]

37. Please indicate three (3) factors that you considered in choosing MTN

1 Widest network coverage [ ]

2 Quality of service [ ]

3 Low call rates [ ]

4 Widespread use by my family and friends [ ]

5 Other.....(please state) [ ]

38. Please indicate three (3) areas you think that MTN is doing better than other network providers

- 1 Sales promotions [ ]
- 2 Affordability [ ]
- 3 Network Coverage [ ]
- 4 Network Challenges (e.g. call drops, echoes) [ ]
- 5 Others .....(please state)

39. Please indicate three (3) areas you think MTN needs to improve on its service delivery

- 1 Network coverage [ ]
- 2 Product innovation [ ]
- 3 Quality of service [ ]
- 4 Run sales promotions [ ]
- 5 Competitive pricing [ ]

40 On the whole, indicate your overall satisfaction with MTN.

- 1 Very Satisfied [ ]
- 2 Satisfied [ ]
- 3 Undecided [ ]
- 4 Dissatisfied [ ]
- 5 Very dissatisfied [ ]

***End of Instrument. Thank you for your responses.***