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Prioritising Service Quality Dimensions in Ghana's Mobile Telecom Industry: Implications for Strategic Management and Policy

Simon Gyasi Nimako
Department of Management Studies Education, University of Education, Winneba, Kumasi Campus, Ghana

Abstract: This study, which was part of a larger study, empirically examines customer priority regarding dimensions of Service Quality (SQ) delivered by Mobile Telecommunication Networks (MTNs) in Ghana. The study involved a cross-sectional survey that used a structured questionnaire administered to 1000 individual subscribers from four mobile telecom networks. The findings indicate that Technical Quality is the most important SQ dimension to the customers, followed by Empathy, Reliability, Economy, Responsiveness, Image, and Assurance, while Tangibles dimension was rated the least important in Ghana's MTNs. The study also found that customer priority regarding SQ dimensions is significantly similar across MTNs. Moreover, it was found that age, occupation and income significantly influence customer priority in SQ dimensions, and could thus be important variables for market segmentation and targeting in Ghana's MTNs. It is recommended that the National Communication Authority, the regulator and policy makers provide effective monitoring and collaborative effort to ensure that Ghana's MTNs improve upon their SQ to meet customers' priorities. The management of Ghana's MTNs would need to focus considerable attention on improving the most important SQ dimension. The study contributes to the body of knowledge in managing service quality.

Keywords: Customer satisfaction, market segmentation, Ghana mobile telecom industry, Service quality, Service quality dimensions, customer priority

INTRODUCTION

Modern organisations are increasingly being customer-centric and are embracing customer-driven initiatives that seek to understand, attract, retain and build intimate long term relationship with profitable customers (Grönroos, 1984; Kotler and Keller, 2006). This is achieved by delivering customer value through superior service quality (SQ) which in turn culminates into positive financial outcomes as opined by the popular Service-Profit Chain (Heskett *et al*., 1994; Heskett *et al*., 1997; Reichheld and Sasser, 1990).

SQ has been a difficult-to-define concept that has aroused considerable interest and debate in the research literature. One definition that is adopted for this study defines SQ as the extent to which a service meets customers' needs or expectations (Asubonteng *et al*., 1996). SQ is the key to competitive advantage and customer retention in modern organisations (Voss, 2003; Voss *et al*., 2004). In a competitive marketplace where businesses compete for customers, delivering quality service is seen as a key differentiator and has increasingly become a key element of business strategy (Heskett *et al.*, 1997; Kotler and Keller, 2006).

The priority customers attach to different dimensions of SQ is of paramount importance for organisation seeking to achieve long-term relationship with its customers. The need for continuous quality improvement by modern business organisations has long been recognised as the pivot of sustainable growth and development for firms in today's competitive marketplace and marketspace (Grönroos, 1990; Heskett *et al.*, 1997; Kauppinen-Räisänen *et al*., 2007). Total and continuous quality improvement nevertheless needs to be focused on customers' own perceptions and preferences as to which aspects of SQ they deem important. The task of business organisations is, therefore, to be able to explore and get into the minds of their customers regarding the priority customers place on different dimensions of SQ delivered by the organisation.

Until 1994, Ghana's telecommunication industry was monopolised by the incumbent-government corporation, Ghana Post, Telephone and Telegraph (PTT). Between 1994 and 2000, Ghana moved from a government controlled PTT to a competitive telecom environment that allowed strong internet and mobile telecom network providers to operate. This was as a result of the deregulation of Ghana's telecommunications sector in 1994 under the Accelerated Development Program (ADP) 1994-2000 (Addy-Nayo, 2001) when the Government announced a five-year comprehensive restructuring of the industry. As of the time of the study, there were four

cellular (mobile) phone networks in Ghana, namely: Millicom Ghana Ltd, Onetouch GSM Services – Ghana, MTN Ghana – Scancom Ghana Ltd and Kasapa Telecom Limited. Over the last decade, Ghana telecom industry has experienced some tremendous increase in subscriber growth rate (ICT Statistics Newslog, 2008). The quality of the service delivery of these networks has been monitored by the National Communications Authority (NCA) and other industry regulators consistently in order to improve upon the SQ delivered to customers. However, as far as the researchers know, no empirical study has been conducted to explore customer priority of SQ dimensions in Ghana's Mobile Telecom Networks (MTNs). There is, therefore, the need to empirically explore the importance that customers attach to the different dimensions of SQ of MTNs in Ghana in order to provide direction for policy makers and managerial strategy. In view of the above, the main question addressed by this study is: What is the relative importance of SQ dimensions to customers of MTNs in Ghana? The purpose of this sub-study, therefore, is to examine the priority customers place on different dimensions of SQ in the context of Ghana's Mobile Telecom Industry. Specifically, the objectives of this study are:

- To identify and prioritise service quality dimensions in Ghana's MTNs.
- To examine whether customer priority of service quality dimensions in Ghana's MTNs differs according to mobile network company, and customer demographic data (gender, age, occupation, income and educational level).

Prioritising the SQ dimensions offers organisations the value of identifying areas to concentrate for greater customer value. This allows practitioners to effectively redirect their focus and re-allocate resources toward improving more important SQ dimensions. Many previous studies seem to agree that rankings of importance of SQ attributes may vary across service types. Parasuraman *et al*. (1988) found that Reliability was the most important dimension and while empathy was the least important across various service types. In *Zeithaand el al.* (1990), tangibles proves to be consistently unimportant. In the work of Chowdhary and Prakash (2007), empathy and responsiveness were found to be more important for labor intensive industry while tangibles and reliability affected the assessment of quality dimensions in case of capital intensive services.

In the empirical work of Chowdhary and Prakash (2007), on prioritising dimensions of SQ and consistent with Chowdhary and Prakash (2007), they found that "...no simple generalization of relative importance of determinants of SQ is possible. Thus, it must be noted that importance of determinants of quality for customers would vary across different service types." They however, found that some generalizations within the service types were possible for different services. In view of this, the study explores the relative importance of dimensions of SQ from customer perspective in Ghana's mobile telephony industry, and hypothesises that:

H1: Customer priority of SQ dimensions will not significantly differ among Ghana's MTNs.

H2: Customer rating of priority of SQ dimensions in Ghana's MTNs will differ according to demographic variables.

H2a: Customer rating of priority of SQ dimensions in Ghana's MTNs will differ according to gender of respondents.

H2b: Customer rating of priority of SQ dimensions in Ghana's MTNs will differ according to age of respondents.

H2c: Customer rating of priority of SQ dimensions in Ghana's MTNs will differ according to occupation of respondents.

H2d: Customer rating of priority of SQ dimensions in Ghana's MTNs will differ according to income of respondents.

H2e: Customer rating of priority of SQ dimensions in Ghana's MTNs will differ according to education of respondents.

METHODOLOGY

Population and sampling: The target population comprised 7.6 million mobile telecom individual subscribers as of December 2007 from four mobile telecom networks in Ghana, namely: Scancom Ghana Limited operators of MTN, Millicom Ghana Limited operators of Tigo, Ghana Telecom operators of Onetouch, and Kasapa telecom. A sample size of one 1000 respondents was selected based on researchers' judgment because of cost and time constraints. The selection of sample size for each identified stratum of mobile network was guided by the available statistics of 2007 subscribers from each network (ICT Statistics Newslog, 2008). For the purpose of anonymity, each of the four companies used in this study is represented by a letter: A, B, C and D.

Instrument development and administration: Customer priority for each SQ dimension was measured using self-administered structured questionnaire. Since this was part of a larger study, the variables for measuring customer priority of each SQ dimensions are presented in Table 1. The dimensions of SQ were derived from previous study (Grönroos, 1984; Parasuraman *et al*., 1988 These included the five functional quality dimensions of

Table 1: Variables for SQ dimensions

Codes	Dimension Measures
TAN	TANGIBLES (The appealing nature of physical environment, company building ,reload cards, employee uniforms, and so on)
ASS	ASSURANCE (assurance of security, efficiency and variety of services)
RES	RESPONSIVE (attending to customers needs and complaints promptly every time)
EMP	EMPATHY (showing of respect, care and understanding for customers)
REL	RELIABLE (competence to give timely, reliable services and truthful to promises)
ECO	ECONOMY (providing affordable rates/prices for services to custemers)
TEQ	TECHNICAL QUALITY (having good network clarity and coverage for call completion/ services)
IMG	IMAGE (being socially responsible company, having good company reputation , and brand name)

(Parasuraman *et al*., 1988), Tangibles, Reliability, Responsiveness, Assurance and Empathy, and technical and image quality dimensions of Grönroos (1984) as well as "economy" dimension-value for money which was derived from the preliminary focus group interview and supported by previous studies (Hume and Mort, 2008; Rust and Oliver, 1994) as an important SQ dimension that affects customer satisfaction in the context of Ghana's MTNs.

The respondents were asked to rate the importance of the SQ dimensions on a five-point Likert scale. The responses were: very important (5), important (4), neither important nor unimportant (3), unimportant (2) and very unimportant (1). The purpose of the questionnaire was to find out how important the various SQ dimensions were to customers in using the services of a mobile telecom service provider. It had five items for respondents' bio data, and eight items for Importance of SQ dimensions. Content validity was established by a panel of two marketing experts; construct validity was ensured by critically developing it within established theoretical framework; criterion validity was ensured by carefully comparing it to existing developed instruments (Gi-Du and James, 2004; Parasuraman *et al*., 1988). Cronbach alpha reliability test for the eight items yielded a high value of 0.856. The questionnaire was pre-tested using a sample of 20 subscribers to identify any ambiguous items. Afterwards they were refined and administered to the respondents through personal contact with the assistance of trained research assistants.

Methods of data analysis: The main statistical methods included descriptive statistics, ranking of the dimensions ranked according to their means to determine the relative importance of the SQ dimensions and a non-parametric measure, Chi-square tests analysis, was also used to analyse priority of SQ dimensions with respect to customer demographic data since the demographics are categorical data. To test the hypothesis, a non-parametric measure, the Kruskal-Wallis one-way analysis of variance was used since it uses the rankings of scores on variables rather than the actual observations to test for differences across different sample of respondents for each network operator within the industry. All data were analysed using SPSS 16.0 version.

RESULTS

Response rate: Out of the one thousand questionnaires that were administered, 937 constituting 93.7% overall response rate were returned. Out of this, there were 601 customers of Company A, 140 customers of Company B, 40 of Company C and 156 customers of Company D. These numbers were deemed adequate since a minimum sample of 30 is considered a large sample size for statistical analysis (Cooper and Schindler, 2006; Saunders, 2000).

Demographic data: The characteristics of the respondents are presented in Table 2. In terms of gender, 55% of the respondents were males and 45% were females. 50% of the respondents were within the ages of 20-39 years and 13% were between 40 and 49 years, implying that majority of them were in the economically active population. Occupation-wise, most of them (63%) were students, 24% were public servants, 4% were business persons, while 9% belong to other professions.

Table 2: Respondents' Characteristics (n = 937)

		Frequency	%	$\bar{x}$	SD
Gender	Male	520	55.5		
	female	417	45.5		
Occupation	Cival/Public	222	23.7		
	Student	592	63.2		
	Business Person	35	3.7		
	Other	88	9.4		
Age	<20	16	1.7		
	20-29	470	50.2		
	30-39	316	33.7	31	0.8
	40-49	121	12.9		
	≥50	14	1.5		
Income	<100	93	9.9		
	101-200	277	29.6		
	201-300	195	20.8	130.8	1.4
	>300	79	8.4		
	Non-income Eamer	293	31.3		
Education Level	SHS	74	7.9		
	Post SHS	162	17.3		
	Teriary	701	74.8		

Table 3: Prioritised SQ Dimensions in MTNs in Ghana

	Ranking (R) of Means (in ascending order)									
	All MTNs n = 937		Company A n = 601		Company B n = 140		Company C n = 40		Company D n = 156	
SQ Dimensions	$\bar{x}$ *	R	$\bar{x}$	R	$\bar{x}$	R	$\bar{x}$	R	$\bar{x}$	R
Technical Quality	4.299	1	4.273	1	4.336 sd. .70	1	4.475	1	4.321	2
Empathy	4.264	2	4.235	2	4.221	5	4.400 sd. . 70	2	4.378	1
Reliability	4.237	3	4.218	3	4.250	4	4.250	6	4.295	4
Economy	4.206	4	4.181	5	4.271	3	4.400 sd. .77	3	4.192	6
Responsiveness	4.202	5	4.188	4	4.043	7	4.350	4	4.359	3
Image	4.197	6	4.155	6	4.336 sd . 75	2	4.125	7	4.256	5
Assurance	4.061	7	4.030	7	4.093	6	4.325	5	4.083	7
Tangibles	3.934	8	3.925	8	3.993	8	4.050	8	3.885	8

*Mean ratings for all sample used irrespective of their firms

Table 4: Relationship between Respondents' Demographics and Priority of SQ Dimensions

	Respondents' Background Characteristics																	
	Gender			Age (yrs)			Occupation			Income (GH¢)			Educational Level			Analysis of variance Among MTNs		
	x^2 value	df	p-value	x^2 value	df	p-value	x^2 value	df	p-value	x^2 value	df	p-value	x^2 value	df	p-value	x^2 value	df	p-value
Tangibles	7.211	4	0.125	21.246	16	0.169	12.928	12	0.374	17.382	16	0.361	9.298	8	0.318	2.342	3	0.505
Assurance	5.907	4	0.206	29.204	16	0.023*	17.096	12	0.146	14.218	16	0.582	6.756	8	0.563	4.475	3	0.215
Responsiveness	1.683	4	0.794	27.497	16	0.036*	27.086	12	0.008*	13.461	16	0.639	6.944	8	0.543	13.168	3	0.004*
Empathy	4.082	4	0.395	22.355	16	0.132	21.581	12	0.042*	15.531	16	0.486	7.355	8	0.499	5.928	3	0.115
Reliability	2.212	4	0.697	23.092	16	0.111	25.815	12	0.011*	13.346	16	0.647	3.881	8	0.868	0.982	3	0.805
Economy	3.934	4	0.415	32.130	16	0.010*	21.135	12	0.048*	44.126	16	0.000*	8.484	8	0.388	3.693	3	0.297
Technical Quality	7.917	4	0.095	41.806	16	0.000*	39.895	12	0.000*	30.762	16	0.014*	9.584	8	0.295	2.956	3	0.398
Image	8.030	4	0.090	22.916	16	0.116	11.494	12	0.487	21.365	16	0.165	8.073	8	0.426	6.529	3	0.089

*: Significant at 0.05($p<0.05$)

In terms of income, 98% of respondents earned monthly income below GH¢300 of which 31% earned between GH¢100 to ¢200 while 30% earned virtually no monthly income indicating that most of them earned considerably lower incomes. All respondents were educated with 75% of them having tertiary level of education, while 25% had Senior High School (SHS) and post-SHS education levels.

Relative importance of SQ dimensions: A summary of relative importance of customer priority of SQ dimensions is presented in Table 3 with respect to and irrespective of MTNs. The table shows that all the 8 dimensions had means that exceed the theoretical mean of 3.5 (assuming normal distribution of responses).

Table 3 indicates that, generally without regard to customer MTNs, Technical Quality is the most important SQ dimension to the customers, followed by Empathy, Reliability, Economy, Responsiveness, Image, and Assurance respectively, while Tangibles dimension was rated the least important. This picture is slightly different within cases of MTNs. Apart from Tangibles which was rated least within all cases and Technical Quality that was rated first within most cases, the other six dimensions appear to be differently rated within each case. The following section analyses whether the different ratings were significantly different across MTNs.

Differences in priority among MTNs: For the hypothesis that Customer priority of SQ dimensions does not significantly differ among Ghana's MTNs, the Kruskal-Wallis tests (Table 4) show that seven of the eight dimensions were similarly prioritised by customers from different samples of MTNs (p-value < 0.05). Therefore, the hypothesis is supported, so the all respondents could be treated as from one population. In view of that, it is empirically valid to use the ratings of all the 937 respondents collectively to conclude that Technical Quality is the most important SQ dimension in Ghana's MTNs, followed by Empathy, Reliability, Economy, Responsiveness, Image, Assurance, and Tangibles.

Customer demographics and priority for SQ Dimensions: A summary of the Chi-square tests is presented in Table 4 indicating the relationship between customer demographics (gender, age, occupation, income and educational level) and their priority for SQ dimensions.

For Tangibles, the results indicate that there is no significant difference in customer ratings among different groups of gender, ages, occupations, and income levels ($p > 0.05$). For Assurance, there is no significant difference in customer ratings among different groups of gender, occupations and income levels ($p > 0.05$), but different age groups differ in their rating for Assurance ($p = 0.023$). For Responsiveness, respondents' priorities of SQ differ among various age groups ($p = 0.036$) and occupation groups ($p = 0.008$). For Empathy, the only variable that influences customer rating is respondents' occupation level ($p = 0.042$). For Reliability, respondents' ratings differ significantly according to only their occupational groups ($p = 0.011$). For Economy, respondents' priorities of SQ differ among various age groups ($p = 0.010$) and occupation groups ($p = 0.048$). For Technical Quality, ratings differ significantly according to respondents' age ($p = 0.000$), occupation ($p = 0.000$) and income ($p = 0.014$). Lastly, for image dimension, none of the demographics (gender, age, education level and income) significantly influences respondents' priority of it.

DISCUSSION AND POLICY IMPLICATIONS OF THE STUDY

Relative importance of SQ dimensions in Ghana's MTNs: Among the important SQ dimensions to the customers, Technical Quality is the highest rated dimension, followed by Empathy, Reliability, Economy, Responsiveness, and Image. Technical Quality, empathy and reliability were similarly found among the strongly rated SQ dimensions in Iran Mobile Telecom Market (IMTM) in the work of Satari (2007), but Technical Quality and reliability were found to be more important than the others in Iran Aseman Airline (IAA) by Bozorgi (2007). However, "tangibles" which Bozorgi (2007) found to be more important in IAA was less important in MTNs in Ghana and also received lower rating in Iran's Mobile Telecom Market. Again, while assurance was less important in Ghana's MTNs, it received strong rating in IMTM. Image and responsiveness dimensions that were found among low rated dimensions in Ghana's MTNs received similar ratings in IAA and IMTN, respectively.

The trend in these comparative findings are consistent with the conclusion of Chowdhary and Prakash (2007) that "... no simple generalization of relative importance of determinants of SQ is possible ...that importance of determinants of quality for customers would vary across different service types." Again, consistent with Chowdhary and Prakash (2007), the present study also found that some generalizations within the same service type (mobile network services) were possible for different MTNs in Ghana, since customer priority was similar for seven of the eight SQ dimensions in Ghana's mobile telephony industry.

Policy implications: First, the policy implication of the findings is that the most important SQ dimension that Ghana's MTNs need to constantly improve upon is the Technical Quality. According to Grönroos (1984), technical quality involves the quality of what consumer actually receives as a result of his/her interaction with the service firm and is important to him/her and to his/her evaluation of the quality of service. In the context of mobile telecom service, it includes network quality, use of appropriate technology to solve customer problems, quality of access, maintenance, repair and speed of internet and information technology. Technical quality is the basic reason for using service products.

Service providers should, therefore, ensure that delivery of Technical Quality is at its optimal level. It should form the focus of all strategic management functions and the pivot of operational management/ marketing planning. In this regard, the management of MTNs in Ghana need to effectively plan and re-engineer their delivery processes to provide and improve network quality that ensures success in completion of calls, SMS, MMS, mobile internet downloading, VoIP and other services they provide to customers. Improvement in network quality should also aim at clarity and speed for calls and other services to prevent undue interruptions and obstructions in accessing other network services. Other Technical Quality issues that must be seriously considered include ability of employees to possess and use technical knowledge and skills in solving customer problems, ability to adopt relevant current technology (network innovativeness) to improve service delivery and above all providing adequate network coverage for customers nationwide.

Second, the next most important SQ dimension is Empathy. Parasuraman *et al*. (1988) have long noted Empathy as a critical functional quality dimension. Empathy entails effective customer care activities and systems, and could be crucial for influencing customer behaviour intentions (Wang and Hing-Po, 2002) and positive word of mouth communication of the service provider (Voorhees *et al*., 2006). Therefore, the management of MTNs in Ghana should ensure that customers are given convenient periods and terms for activation, recharge, accounts suspension, and free call times. Again, to take care of customers' expectations and needs, there should be a system that aims at having operating hours convenient to all customers, having sound loyalty programme to recognise loyal customers, having the customer's best interest at heart, giving individual customer attention by employees, employees' efforts to understand specific and different customer needs and apologising for inconveniences caused to customers in the case of technical network problems that disrupt effective service delivery. This calls for effective training of staff,

and management activities that communicate to the customers a sense of empathy from the service providers.

The third important dimension is Reliability. Reliability is so crucial that without it, there could not be a mutually beneficial long term relationship with customers (Wang and Hing-Po, 2002). A firm's reliability communicates trust to customers, which is a strong determinant of customer loyalty (Bell *et al*., 2005). In this regard, mobile telecom network operators need to be very reliable and ensure that they deliver on time services like: SMS, MMS, Voice message and other services of the networks. Again, the companies must be perceived as truthfulness in keeping to promises to customers, being dependable and consistent in solving customers' complaints, having the ability of the networks to perform services right the first time, and more importantly, ability of the service providers to insist on error-free records.

Economy of the service comes fourth in importance. Economy of the service refers to the extent to which the cost of the product to the customer matches the value or benefit of the product to the customer. Previous studies have established that customers expect to pay for service products at least amount equal to the benefits they receive (Hume and Mort, 2008; Rust and Oliver, 1994). Where the services are too expensive customers tend to switch to use substitutes from competitors. This might explain why Economy has been found to be the fourth important dimension of SQ in Ghana's MTNs. This dimension appears to be critically important for customers in developing economy, like Ghana, which are faced with the challenge of high unemployment rate coupled with high dependence ratio and relatively low per-capita income. These factors have probably necessitated high rating of economy aspect of SQ in Ghana MTNs as very important to customers. In this regard, the management of MTNs in Ghana must ensure that the prices/charges of their services are affordable in terms of rates for local and international calls, and for reloading/recharging cards. Customers should be offered various smaller denominations of reloading card to enable all income groups afford to recharge with the minimum amount of money. Thus, customers need to get real value for their money spent on the service/product offerings of MTNs in Ghana.

Responsiveness is fifth important dimension. Responsiveness has to do with willingness to help customers and provide prompt service (Parasuraman *et al.*, 1988). This is a key functional quality item that can affect service quality, customer satisfaction and switching intentions of customers (Bansal and Taylor, 1999). The management of MTNs should ensure that they are responsive to customers in several areas including: ability to tell customers exactly when services will be performed, ability to give prompt customer services in attending to customers' needs/problems, employees' willing to help customers in emergency situations, how employees are approachable and easy to contact by customers, and employees' ability to communicate clearly and effectively with customers all the time.

The sixth important SQ dimension is Image. Image plays an important role in creating customer loyalty as customers would be more willing to be identified with networks that have favourable image in the communities and society in which they operate (Grönroos, 1990; Parasuraman *et al*., 1988). In this regard, management of MTNs in Ghana need to ensure that their organisations do not just offer quality products but also they are socially responsible, operate with sound ethical principles, have good brand image, high corporate reputation, and are financially successful mobile network companies.

The seventh important dimension is Assurance. It has been found that firms need to communicate a assurance in the mind of customers of the firm's competence and ability to solve customer problems (Chowdhary and Prakash, 2007; Grönroos, 1990). This dimension includes such issues as ability to provide variety of value added services- Music, access to internet, SMS, MMS, etc., sincerity and patience in resolving customers' complaints/problems, and ability of employees in instilling confidence in customers.

Tangibles dimension is the least important SQ dimension to the customers. Tangibles dimension, according to Parasuraman *et al.* (1988), refers to the physical facilities, equipment, and appearance of personnel. This means that the management of MTNs in Ghana need to rather maintain and not significantly increase their strategic effort and resources on building more tangibles elements of their organisation, which include provision of visually attractive, offices, equipment and materials like starter packs and reload cards, ability to give customers access to information, SIM card (chip), reload cards, ability to providing variety of entertainment facilities, etc. and the appealing nature of employees' appearance and uniforms.

It is also recommended that the National Communication Authority (NCA), the industry regulator, and other relevant policy makers that regulate Ghana's mobile telecom industry should intensify efforts to monitor service quality of MTNs in Ghana and encourage the companies to give due attention to strategic investments that enhance the Technical Quality, empathy and economy which are on top of customer priority. In this regard, consumer forums organised by the NCA in the capital of Ghana, Accra, should be extended to all the regions in Ghana to increase the scope of customer feedback and suggestions on service quality of the networks to the NCA.

Influence of demographic variables on customer priority of SQ dimensions: First, the findings (Table 3) indicate that various age groups differ significantly in their priority for Assurance, Responsiveness, Economy and Technical Quality dimensions of SQ. This implies that the more youthful groups (20-39 years) respond more differently from the teens (below 20 years) and adult groups (40-59 years and above) regarding their priority for these SQ dimensions.

Second, different occupation groups significantly differ in their priority for Responsiveness, Empathy, Reliability, Economy and Technical Quality dimensions. Thus, priority for these dimensions varies among students, civil/public servants, business persons and other professionals respectively in Ghana's MTNs.

Third, various income groups differ significantly in their response/priority for Economy and Technical Quality of the SQ. Thus, priority for these dimensions vary significantly among non-income earners, lower income earners (below GH¢100), moderate (between GH¢100 and 300) and above moderate income groups (GH¢300).

Finally, gender and education appear not to have any significant influence on customer priority of SQ dimensions; all p-values are greater than 0.05. This does not mean that gender and education of respondents are not important to consider in understanding customer priority of SQ dimensions but rather it means that customer priority of SQ dimensions may not be significantly different based on the two variables.

Policy Implications: The implication for policy makers and the management of MTNs is that since age groups, occupation groups and income levels significantly influence customers' preference for different SQ dimensions, these demographic variables are important for market segmentation and targeting. In this regard, different mobile telecom service offerings – Calls, SMS, MMS, Internet services, Conference calls, among others – with different pricing strategies (economy), different delivery process (Assurance, Responsiveness, Empathy, Reliability functional qualities) and unique quality (Technical Quality) could be tailored and delivered to various distinct groups of customers based on their age, occupation and income levels. This could provide empirical basis for effective positioning strategies for various mobile telecommunication service offerings. It is recommended, therefore, that the specific age groups, occupation groups and income levels used in this study could serve the purpose of market segmentation in Ghana's MTNs.

CONCLUSION

This paper sought to assess and analyse the importance of SQ dimension to customers in Ghana's MTNs. One major conclusion of this study is within the mobile telecom industry in Ghana, customer priority for SQ dimensions is similar and that the most important SQ dimension is Technical Quality, followed by Empathy, Reliability, Economy, Responsiveness, Image and Assurance, while Tangibles is the least important. Improvement in areas of Technical Quality, Empathy, Reliability, and Economy be the focal points of strategic management effort in service improvement strategies and programmes. Relatively, less attention and efforts should be devoted to Assurance and Tangibles, management should maintain such areas, but not necessarily increase greatly investment in them as they are of less importance to the customers. Age, occupation and income significantly influence customer priority for SQ dimensions, and could thus be important variables for market segmentation and targeting in Ghana's MTNs. The industry regulator, NCA and the management of MTNs in Ghana would find it useful to consider the strategic implications and recommendations of this study.

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