

PRINCIPAL COMPONENT ANALYSIS OF CUSTOMER SATISFACTION AND REPEAT PURCHASE BEHAVIOUR IN THE MOBILE TELEPHONY MARKET IN GHANA

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ABSTRACT: *The purpose of the current study was to establish the relationship mobile telephony customers in Ghana's repeat purchase behaviour and satisfaction. In order to achieve the aim of the study, principal component analysis was made to establish the principal components factors of customer repeat purchase behaviour, dimensions of customer satisfaction, and the relationship between repeat purchase and satisfaction. A sample of three thousand (3,000) mobile phone users was selected from the three major cities in Ghana of Accra, Kumasi and Takoradi for the survey, using Likert scale questions. The findings revealed that three variables: call rate, service reliability, meeting customer's expectation were the key underlying dimensions determining customer satisfaction of mobile telephone users in Ghana. Again it was found that change of mobile network is a permanent feature of mobile users in Ghana which might not necessarily reflect dissatisfaction. The results further indicated that customer satisfaction of mobile telephony users in Ghana is reflected by high or very high commitment to repeat purchase. Finally, the study showed that mobile users repeat purchase behaviour is influenced primarily by reference group influence rather than customer satisfaction. Thus no relationship was found between customer repeat purchase and satisfaction of mobile users in Ghana.*

KEYWORDS: Customer Satisfaction, Principal Component Analysis, Purchase Intentions, Repeats Purchase

INTRODUCTION

It is evidenced that companies have the duty to be market oriented if they would understand and provide the needs of customers. (Kohli & Jaworski, 1990; Pizam & Ellis, 1999; Zebal, 2003; Avlonitis 2007). Thus, firms may need to constantly generate appropriate information about customers as a means of investigating customer satisfaction, which is most crucial for effective customer service. Such a research could inform management on service attributes that are considered important for the customers, as well as to know to what extent is the company able to meet customer needs which is a means of company's survival (Svensson, 2001; Yuksel & Yuksel, 2002). In a recent study by Pont & McQuilken, (2005) it was admitted: "Perceived satisfaction maintains the customer loyalty which is described as a deeply held commitment to re-buy, or repatronise a preferred product consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behaviors" (p.347).

Contributing to the issue of perceived value and how it affects customer satisfaction, Kotler, (2006: p.17) states that "perceived value which is higher than the expectation of a customer for a product or service provides a higher satisfaction in the eyes of the customer." Thus, repeat purchase is considered to be a sign of customer satisfaction and customer loyalty

(Albayrak & Caber, 2007). Despite the fact that many studies have supported a positive linear relationship between customer satisfaction and repeat purchase, other studies have found that the relationship between customer satisfaction and repeat purchase is not linear but complex (Jones and Sasser, 1995). This suggests that companies cannot wholly rely on the customer current and future purchase behavior to draw better conclusions on customer satisfaction (Stauss & Neuhaus, 1997). This is because literature on customer satisfaction suggests that between 56% and 85% of customers defect to other companies, even though they are satisfied or very satisfied with their former company (Reichheld, 1993). Thus customers who are satisfied with the service will also switch companies if they see that there is a better alternative elsewhere. On the contrary dissatisfied customers might continue buying from the same company because they have little or no other choice (Tam, 2004). Therefore, companies in the mobile telephony industry in Ghana risk being deceived by the purchase behavior of their customers to mean satisfaction. They can only have a better picture through customer satisfaction research (Avlonitis 2001; Pont & McQuilken, 2005). Thus, repeat purchase behavior may not necessarily reflect customer satisfaction.

Many studies have been done to suggest a significant positive relationship between repeat purchase and customer satisfaction. For instance Gwinner & Wiertz (2009) investigated the relationship between satisfaction and repeat purchase. The results showed a positive link between customer satisfaction and repeat purchase. Young Han Bae (2012) also studied the relationship between customer satisfaction and customer loyalty and repeat purchase. Again, the findings suggested that customer satisfaction has direct association with customer loyalty and repeat purchase. Similarly, Ganiyu, Uche & Adeoti (2012) did a study to find out whether repeat purchase is an indicator of customer satisfaction and loyalty. The findings of the study supported the contention that strong relationship exist between customer satisfaction and repeat purchase (Moshan, Nawaz, Khan, Shaukat & Aslam (2011). Another study to investigate the relationship between customer satisfaction, and customer loyalty and intention to switch, showed a positive coloration between the variables (Wicks & Roethlein, 2009).

Though repeat purchase is assumed to be dependent on the consequences of the level of satisfaction (Saunders & Wong 2009; Agbor, 2011), it would be difficult to say that repeat purchase always mean customer satisfaction. There are some instances where repeat purchase is not a result of high levels of satisfaction. For instance, a study on 4 Australian big banks demonstrate that the banks have 23% - 32% dissatisfied customers but this did not seriously affect repeat business with the banks, as the banks were among the top six public companies in Australia (Bennett & Thiele, 2004). This implies that dissatisfied customers can even repeat purchase; and that a persistent buyer of a company's product may not necessarily be a satisfied customer (Pezeshki et al., 2005). Such repeat purchase without satisfaction might result from customer loyalty schemes which bring long term advantages and benefits through premium prices, decreasing costs, and increasing volume of purchases. Sometimes, a dissatisfied customer remains a repeat purchaser from the same company because he or she feels a stronger identification with the corporation (Bennett & Thiele, 2004). Other times, repeat purchase of dissatisfied customers may be influenced by factors such as price, demand experiences and habits (Humby et al., 2003)

LITERATURE REVIEW

Customer Satisfaction

Customer satisfaction has many definitions in the marketing literature. Kotler (2000) defined customer satisfaction as the feeling of pleasure or disappointment that a customer experiences from comparing a product's perceived quality or performance as compared to his or her expectations. If the relative quality performance falls short of expectations, the customer is dissatisfied; if it exceeds expectations, the customer is highly satisfied (Datta, Cuong, Nguyen, & Nguyen, 2007). Also, Keiningham, Aksoy, Perkins-Munn and Vavra (2005), aver that customer satisfaction relates with customer purchase intentions, which consequently impact firm's financial performance. Studies have suggested the relationship that customer satisfaction had with repeat purchases and brand loyalty (Churchill & Suprenant, 1982), decreased costs of attracting new customers (Fornell, 1992; Wilson et al. 1995), and lower costs of handling returns and complaints (Crosby, 1979; Garvin, 1988). Customer satisfaction has been identified as the primary determinant of a long term customer relationship (Oliver, 1997; Yi, 1990). A large body of literature exists that suggest a positive relationship between customer satisfaction and customer retention or repeat business.

Measurement of customer satisfaction has become a crucial issue for many companies. Several instruments have been tried in the measurement of satisfaction, including customer satisfaction and purchase intentions studies, analysis of complaints and suggestions, ghost shopping and lost customer analysis. In one of the customer satisfaction studies, Halstead (1989) makes the point that satisfaction is not desirable as an end but rather as a means to understand future customer responses. Thus, he linked interest in satisfaction to customer buying intentions. However, repeat purchase is a necessary condition but not a sufficient condition to measure satisfaction (Bloemer & Kasper, 1995; Van Looy et al., 1998). Satisfaction is typically measured as an overall feeling or as satisfaction with elements of the transaction in terms of its ability to meet customers' needs and expectations (Zeithaml & Bitner, 2000).

In marketing, customer satisfaction is measured by the level of customer contentment. That is to say, if the customer post-purchase reaction to a product or service is that of contentment rather than feeling of regret, the customer is said to be satisfied. According to Kotler & Keller (2009) this depicts the buyer's post purchase experience – being it feeling of joy or disappointment as he compares his purchases expectations with the service performance. Thus, if after using the services of a mobile telephony operator, the network user concludes that what he expects from the operator is what has been received, he is said to be satisfied. While in many cases this may lead to customer repeat purchase Gwinner & Wiertz, 2009; Young Han Bae, 2012; Ganiyu, Uche & Adeoti, 2012), in some cases it may not (Reichheld, 1993). On the other hand when the user feels cheated after using the mobile service because his expectations were not met the customer is said to be dissatisfied; which means the customer should switch purchase, but sometimes they may not (Tam, 2004).

Sometime, customer satisfaction is defined by the customer as he performs post-purchase assessment of any gap between service expectation and service performance after use of a product (Tse & Wilton, 1988). This post-purchase reaction is likely to affect customer current and future purchases behavior. Thus, if the mobile telephone user perceives mobile operator to provide just the right mobile reliability, cost efficiency and coverage scope (Keelson, 2012), he should be satisfied, otherwise he might be dissatisfied. This assertion is supported

by Kotler, Armstrong, Saunders & Wong (2002) who defined customer satisfaction as a customer's match between perceived service performance and the customer's expectations. Similarly, Schiffman & Kanuk (2004) defined customer satisfaction as "the individual's perception of the performance of the products or services in relation to his or her expectations" p. 14). All these literature suggest that customer satisfaction is usually better measured after use of a product or service, and therefore may receive post consumption reaction, which may include repeat purchase or customer switching.

Repeat Purchase

The buying of a service by a consumer of the same brand name previously bought on another occasion. A repeat purchase is often a measure of loyalty to a brand by consumers and is often taken into account by marketing research professionals to evaluate a business. Researcher have suggested that repeat purchase results when a customer experience benefits from previous use of a brand and, has a continuous need to voluntarily reuse it (Russel and Muehling 1993; Craig-Lees et al 1995). Repeat purchase behavior is suggested to be influenced by satisfaction with prior experience and the trust that consumers bestow in a product. Thus, customer satisfaction seems to have some relationship with repeat purchase in some purchase experiences.

Repeat purchase means a customer buys the service several times in a given time period. This behavior of repeat buying is culminated by internal factors such as consumer's attitude to the brand, need recognition, post-purchase experience of previous purchases. Repeat purchase behavior is also influence by some external factors including the 4Ps of promotion, price, differences in perceived services quality and service availability. Since all the factors so mentioned influence in one way or the other the consumers repeat purchase behavior, it stands to reason that consumer's would choose to buy the same service depending on the level of satisfaction. Nevertheless, it can also be concluded that consumer's purchase might sometimes be influenced by the strong attitude he holds toward a product or how the marketer is able to persuade consumers through promotional activities, or other situation buying factors. Thus, while repeat purchase may be a sign of customer satisfaction, repeat purchase behavior would not always justify consumer's satisfaction of using a particular service.

A critical review of the literature suggest that the state of satisfaction affect customer behavior but in varying ways (Reichheld, 1993; Tam, 2004; Gwinner & Wiertz, 2009; Ganiyu, Uche & Adeoti, 2012; Young Han Bae, 2012). Therefore, this paper conceptualizes that customer repeat purchase of particular mobile operators' network in Ghana might not necessarily reflect customer satisfaction. Rather it might be informed by some customer loyalty schemes (such as bonus credit, premium value services), which bring long term advantages and benefits through premium prices, decreasing costs, and increasing volume of purchases. Some customers might also be repeat purchasing mobile services even though dissatisfied because they feel loyal to the company (Bennett and Thiele, 2004), or just want to continue using the same network to ensure friends and business partners do not loss their contacts (Keelson, 2012). Other times, repeat purchase of dissatisfied mobile customers may be influenced by demand experiences habits (Humby et al., 2003). In view of this, it would be erroneous for a firm to absolutely conclude that customers are satisfied with its services that is why they are buying the same service more than once over a period of time. Until appropriate scientific investigation is conducted to establish the necessary reasons behind consumer's repeat purchase behavior to a particular service it could not be used as a

barometer for customer satisfaction. Repeat purchase should be viewed in a larger perspective than just being a sign of satisfaction.

Problem Statement

From the literature reviewed, it is worth saying that satisfied customers usually exhibit repeat purchase behavior (Albayrak and Caber, 2007; Gwinner & Wiertz, 2009; Young Han Bae, 2012; Ganiyu, Uche & Adeoti, 2012). However, it is also true that customers can switch even though they are satisfied with the company's services (Reichheld, 1993). Moreover, customers may continue buying from the same company despite the fact that they are dissatisfied (Tam, 2004). This study is to investigate which of the three scenarios is a reality for mobile telephony users in Ghana. Do they continue to use the services of the same operators because they are satisfied? Do they switch even when they receive satisfactory services? Or do they continue to use the services of the same operators even though they are dissatisfied? This study is significant because satisfied customers are more positive towards the organization and therefore are more likely to be loyal customers (Datta et al., 2007). Thus, when a customer is satisfied with a company's product or services, it results in long term relationship (Storbacka, Strandvik & Grönroos, 1994). On the other hand, the supplier-customer relationship comes to an abrupt end when dissatisfied customers defect (Storbacka et al., 1994). This suggests that repeat purchase in a dissatisfied state of the customer may not be sustainable, and companies do well to address such situations.

On the basis of the problem of the study and the conceptual framework the following specific objectives are outlined for the study: (1) to identify the principal component that measures customer satisfaction of mobile telephone users in Ghana (2) to determine the degree of customer repeat purchase of regular mobile network (3) to establish the principal component that determine customer repeat purchase of regular mobile network (4) to ascertain the principal components underline repeat purchase and customer satisfaction (5) to determine any significance differences between customer satisfaction and repeat purchase with regards to certain demographic variables.

METHODS

The study was conducted in the three major cities in Ghana: Accra, Kumasi and Takoradi. The basis for using these three cities for the study was supported by the fact that they have the largest population of mobile phone users, with most of the 'white color job' workers, which were the target sample unit for the study. Three thousand active mobile phone users selected from the three cities were surveyed for this descriptive and exploratory study. Due to the varying sizes of the population, 1500 customers were selected from Accra, 1000 from Kumasi and 500 from Takoradi. Using the stratified sampling method, the customers were grouped into: type of network used, business sponsored user and own sponsored user, single mobile phone user and multiple mobile phone user, long time user and short time user. This approach of sampling plan helped to measure any significant differences between repeat purchase and customer satisfaction based on certain demographic variables.

Before the choice of participants for the study, a preliminary investigation was carried out to ascertain sufficient information of the various customer classes of mobile telephony in Ghana. Likert scale questions were used to collect data from the respondents. The use of this

data collection method was to help measure variables with appropriate range to appreciate real weight of customers' responses. Due to the geographical and population sizes of the cities, and the fact that all the areas were to be covered as much as possible, research assistant were engaged to collect the data with the designed survey questions. The study used principal component analysis to test whether all or some of the variables measured customer satisfaction and customer repeat purchase. Principal Component Analysis is used to identify patterns in data, and it expresses the data in such a way as to highlight their similarities and differences. Since patterns in data can be hard to find in data of high dimension, where the luxury of graphical representation is not available, Principal Component Analysis is a powerful tool for analyzing such a data. The Statistical Package for Social Science (SPSS) was used as decision support for the analysis.

RESULTS

The tables below show the findings after the analysis of the data from the field of study. The first section shows the preliminary analysis of the data and the second section shows further analysis using principal component.

Table 1: type of mobile network respondents use regularly

Mobile Network	Frequency	Percentage (%)
MTN	610	30.5
Vodafone	360	18.0
Airtel	334	16.7
Tigo	403	20.2
Expresso	128	6.4
Glo	165	8.2
Total	2000	100.0

Table 1 shows the type of mobile network respondents of this study use regularly. The table reveals that Six Hundred and Ten (610) of the respondents constituting 30.5% of the total respondents uses MTN; Three Hundred and Sixty (360) also constituting 18.9% of the respondents uses Vodafone; Three hundred and Thirty Four (334) making 16.7% of these respondents uses Airtel; Four Hundred and Three (403) constituting 20.2% uses Tigo; One Hundred and Twenty Eight (128) making 6.4% uses Expresso and finally One Hundred and Sixty Five (165) which is 8.2% of the respondents uses GLO network.

The above findings show that the most preferred mobile network is MTN followed by Tigo, Vodafone, Airtel, GLO and Expresso respectively.

Table 2: sponsor of respondents regular mobile network

Sponsor	Frequency	Percentage (%)
Company Sponsored	279	14.0
Own Sponsored	1721	86.0
Total	2000	100.0

Table 2 shows who sponsors respondents' mobile network. The table reveals that Two Hundred and Seventy Nine (279) making 14.0% of the total respondents' mobile network is sponsored by companies. Mean while, One Thousand Seven Hundred and Twenty One (1721) constituting 86.0% of the total respondents sponsor their mobile network. These findings is a clear indication that most of the respondents own their mobile network.

Table 3: number of mobile networks respondents use regularly

Number of Mobile Network	Frequency	Percentage (%)
Single	1296	64.8
Multiple	704	35.2
Total	2000	100.0

The above table shows the number mobile network respondents use regularly. The table indicates that One Thousand Two Hundred and Ninety Six (1296) meaning 64.8% of the respondents uses single mobile network while Seven Hundred and Four (704) making 35.2% of the respondents uses multiple mobile network. This findings show that majority of the respondents own single mobile network.

Table 4: number of years respondents have used their regular mobile network

Number of Years	Frequency	Percentage (%)
under 3 Years	396	19.8
3 to 5 Years	743	37.2
6 to 8 Years	568	28.4
Over 8 Years	293	14.6
Total	2000	100.0

Table 4 shows how long respondents have used their regular mobile network. The table shows that Three Hundred and Ninety Six (396) of the respondents constituting 19.8% of the total respondents have used their mobile network for under three years; Seven Hundred and Forty Three (743) of the respondents making 37.2% of the total respondents have used their mobile network within three to five years; Five Hundred and Sixty Eight (568) of the respondents which makes 28.4% of the total respondents have used their mobile network

within six to eight years and finally, Two Hundred and Ninety Three (293) of the respondents making 14.6% of the total respondents have used their mobile network for over eight years.

In performing principal component analysis some basic test must be passed before the analysis can be proceed. The table below shows KMO and Bartlett's test.

Table 5: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.846
Bartlett's Test Approx. Chi-Square	0.007096
of Sphericity df	36
Sig.	.000

Table 5 shows the KMO measure and the results of the Bartlett's test, which are used to judge the adequacy of the sample size and whether or not the correlation matrix is suitable for principal component analysis respectively. Both the KMO value of 0.846 (which is greater than the minimum threshold of 0.50 (Sharma, 1996)) and the Bartlett's test *p* value of 0.000 suggest the sample size is adequate and that, at least, some of the variables are inter-correlated and therefore the data is suitable for Principal component analysis.

Table 7 : Extracted Principal Components Based on the Eigen value Criterion

Component	Initial Eigenvalues			Extracted Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.180	30.468	30.468	3.181	18.712	18.712
2	2.107	12.395	42.863	2.465	14.501	33.213
3	1.313	7.721	50.584	2.432	14.305	47.518
4	1.199	7.052	57.636	1.720	10.118	57.636
5	.998	5.869	63.505			
6	.917	5.393	68.898			
7	.729	4.289	73.187			
8	.679	3.997	77.184			
9	.604	3.553	80.736			
10	.561	3.302	84.038			
11	.477	2.803	86.841			
12	.459	2.702	89.544			
13	.428	2.518	92.061			
14	.412	2.425	94.486			
15	.344	2.021	96.507			
16	.314	1.844	98.351			
17	.280	1.649	100.000			

The table above shows the principal components extracted based on the eigenvalue criterion. From the table above, four (4) principal components were extracted, thus in extracting the principal component based on the eigenvalue, principal component having eigenvalue greater than one (1) are retained. The first component has the highest eigenvalue (5.180) and hence accounted for most of the variation in the data sets (variation in customer satisfaction and repeat purchase intentions in the mobile telephony market in Ghana) and the second component also explains the maximum of variance which was not accounted by the first component. The four principal components (factors) extracted account for 57.636 % in the customer satisfaction and repeat purchase intentions in the mobile telephony market in Ghana. This suggest that the four component extracted in this study are good enough to support the claim of customer satisfaction and repeat purchase intentions in the mobile telephony market in Ghana.

Table 8: loadings on the principal components

Variables	Component			
	1	2	3	4
Whether Call Rate on Regular Mobile Phone Number is Relatively good	.823			
Respondents are Happy about the Reliable Service of Their Regular Mobile Phone Number	.776			
Mobile Phone Service Providers Always meet Respondents Service Expectations	.682			
Whether Respondents Often Change Their Regular Mobile Networks to Other networks		.812		
Whether Respondents Occasionally Change Their Regular Mobile Network to Other Networks		.811		
Whether Respondents Sometimes Change Their Regular Mobile Network to Other Networks		.756		
Respondents Commitment to Continue Using Their Regular Mobile Network Shall be High if They are Satisfied With Their Services			.761	
Respondents Commitment to Continue Using Their Regular Mobile Network Shall be Very High if They are Satisfied With Their Services			.697	
Respondents Commitment to Continue Using Their Regular Mobile Network Will Not Change even If They are not Satisfied With Their Services			.594	
Respondents Would Continue to use Their Regular Mobile Network Because That is What Most Friends use				.760
Respondents Would continue to use Their Regular Mobile Network Because That is what people often use				.756

On the table 8 component 1, the three variables; call rate, service reliability, meeting customer's expectation were the variables loaded on the first component. The findings suggest the three variables are presumed to be the key underlying dimensions determining customer satisfaction of mobile telephone users in Ghana.

The table 8 also shows by component 2 that three variables were retained by the findings. These components measure the degree of customer repeat purchase of regular mobile network. The findings of the study show that variables that were loaded on the second component are that users often change their mobile network; they occasionally change and sometimes change their mobile network. This result suggests that change of mobile network is a permanent feature of mobile users in Ghana which might not necessarily reflect dissatisfaction.

Again, the table 8 shows that on the third component, three variables were retained, including customers willingness to use their regular network highly; or use their network very highly; or not ready to change the use of their regular network once they are satisfied. The results show that customer satisfaction of mobile telephony users in Ghana is reflected by high or very high commitment to repeat purchase. If nothing at all, once customers are satisfied they shall at least commit themselves to buying the same amount of service. Thus, the findings suggest a positive relationship between repeat purchase and satisfaction of mobile users in Ghana.

On the fourth components, two variables were retained. First customers would continue to use their mobile network because that is what most of their friends use. Second, customers would continue to use their mobile network because it has general acceptance and is used by majority of Ghanaian. The results indicate that two key reference groups influence affect the use of mobile network in Ghana. These reference groups are peer influence and the wider social community influence. Thus, all things being equal, a mobile user would choose and retain a mobile network that is very popular in the community in which he or she lives; and most especially mobile network that his peer group uses.

DISCUSSION

The first objective of this study was to identify the principal component that measures the satisfaction of mobile telephone users in Ghana. The findings identified three variables: call rate, service reliability and meeting customer expectation. Thus, all things held constant, these three variables should influence the purchase behaviour of mobile telephone users. The results suggest that the customer perception of network call rate, service reliability and how their expectation are met should determine the post - purchase reaction of mobile telephone users; whether post - purchase satisfaction or post - purchase dissonance. This is consistent with the studies by Keelson (2012) who found call rate and mobile network reliability as factors affect choice of mobile network.

The second objective of the current study was to determine the degree of customer repeat purchase of regular mobile network. The findings of the study show that mobile telephone customers hardly stick to a particular network without changing. Customer switch from one network to another as the need may be. Thus, the results suggest a relatively low degree of customer repeat purchase over time. Since, switching from one mobile network to another is

a common feature; the degree of repeat purchase might not necessarily be the best measure of customer satisfaction. This result is inconsistent with that of Albayrak and Caber (2007) who aver that repeat purchase is a sign of customer satisfaction. It is however consistent with the study by Reichheld (1993) who suggested that even satisfied customers can switch if they find better alternative Elsewhere; and Tam (2004) who found that dissatisfied customers may not switch if there is little or no choice.

The third objective of the study was to establish the principal components that determine customer repeat purchase of mobile network. The findings revealed that two social factors, including peer influence and community influence are the primary determinants of mobile network users repeat purchase. Thus, all other factors held constant, a mobile network user would switch the use of mobile network to reflect the usage behaviour of people around him especially, those of his peer group. This means reference group influence is a key determiner of mobile customers buying behaviour. This is in harmony with the study by Keelson (2012) who identified peer group influence as a factor determining choice of multiple mobile networks.

The fourth objective of this study aimed at ascertaining the relationship between repeat purchase and customer satisfaction. This results suggested positive relationship between repeat purchase and customer satisfaction. Thus, the rate at which customers continue to buy from a particular mobile network provider should provide a proof of the level of customer satisfaction.

CONCLUSION

The study suggests that repeat purchase is a sign of customer satisfaction and vice versa (Albayrak & Caber, 2007). This knowledge should provide a good research guideline for mobile network providers. These providers may need to conduct regular studies to measure the purchases behaviour of customers to know whether there is switching or repeat purchase since satisfaction is found to be tied with repeat purchase; this should help the providers to adopt the right marketing to remain competitive.

Mobile telephone providers should also be interested in knowing that reference group influence, especially those of customer's community and peer group have significant effect on customer purchases behaviour. This acknowledgement should go a long way to determine the promotional approach to selling and sustaining or even improving sales.

The low customer repeat purchase as suggested by the study is a reflection of regular switching. Switching might also be a sign of customer disloyalty (Albayarak & Caber, 2007). Thus, knowledge of this should help managers of mobile telephone companies to provide loyalty schemes to boast the loyalty level of their customer since they can hardly do so by just using customers buying behaviour.

The study basically focused on social factors and how they affect buyer behaviour and subsequently relate to social factors. While social factors are usually critical determinants of customers' purchase behaviour, especially in purchase of service, future studies may consider economic and other situational factors and their effect on repeat purchase.

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Appendix: Research Questionnaire*Respondent Profile*

1) Which time of phone do you use regularly?

MTN [] Vodafone [] Airtel [] Tigo [] Expresso [] Glo []

2) Who sponsor your regular mobile network?

Company sponsored [] Own sponsored []

3) How many mobile networks do you use regularly? Single [] Multiple []

4) How long have you used your regular mobile network?

Under 3 years [] 3 to 5 years [] 6 to 8 years [] Over 8 years []

Level of Customer Satisfaction

		strongly disagree	disagree	neutral	agree	Strongly Agree
5	I am happy about the reliable service of my regular mobile phone number					
6	The call rate of my regular mobile phone number is relatively good					
7	I can use my regular mobile phone number almost everywhere in Ghana					
8	My regular mobile phone service providers always meet my service expectations					

Degree of Customer Repeat Purchase of Regular Mobile Network

		strongly disagree	disagree	neutral	agree	Strongly Agree
9	I have never change my regular mobile network ever since I started using it					
10	I sometimes change my regular mobile network to other networks					
11	I occasionally change my regular mobile network to other networks					
12	I often change my regular mobile network to other networks					

Factors Determining Customer Repeat Purchase of Regular Mobile Network

		strongly disagree	disagree	neutral	agree	strongly agree
13	I continue to use my regular mobile network because that is what people often use					
14	I continue to use my regular mobile network because that is what most friends use					
15	I continue to use my regular mobile network because of their customer loyalty schemes					
16	I continue to use my regular mobile network because of special likeness I have for them					
17	I continue to use my regular mobile network because of their efficient services					

Relationship between Satisfaction and Repeat Purchase

		strongly disagree	disagree	neutral	agree	strongly agree
18	My commitment to continue using my regular mobile network shall be very high if I am satisfied with their services					
19	My commitment to continue using my regular mobile network shall be high if I am satisfied with their services					
20	My commitment to continue using my regular mobile network shall be average if I am satisfied with their services					
21	My commitment to continue using my mobile network will not change even if I am satisfied with their service					