

## Awareness and Utilization of Information Services Provision by Mobile Communication Networks among GSM Users in Zaria, Nigeria

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### Abstract

*The study was undertaken to determine the awareness and utilization of information services provision by mobile communication networks among GSM users in Zaria, Nigeria. Survey research was adopted for the study. Out of the 1534 GSM users that constitute the population of the study using 2.5 margin of error and 95% confidence level, 1269(82.72%) were randomly sampled for the study. Questionnaire were constructed and administered to GSM users and interview was conducted to those that cannot fill the questionnaire directly. Data were analyzed descriptively using frequency count, percentage and mode. The study revealed that GSM users are not fully aware and utilizing some services like M.M.S, Geographical services such as coverage map and location base services as they were rated below 40% average bench mark. The study recommend that Urgent step should be taken by the network providers to make their users aware (using advance channels) of some information services like the geographical services (coverage map and L.B.S) and M.M.S. Also they should create a mechanism for exhibition in network branches and other strategic areas along major cities in Nigeria (Zaria metropolis) demonstrating how to utilize complex mobile network technologies or by enriching the available channel like the media, mobile phone, and customer care.*

### Introduction

Information services everywhere in the world have been a strong demand to individual, organization and government. Services according to Bhattacharjee (2009) are the production of essentially intangible benefits and experience, either alone or as part of a tangible product through some form of exchange with the intension of satisfying the needs, want, desires of the users. However, Bitner and Zeithmal (2003)

define information services as the series of activities designed to enhance the level of users' satisfaction in any organization. These information services are part of information system which is a combination of information technology and peoples activities using that technology to support operation, management and decision making in any organization.

Mobile telecommunication according to Dunnewijk (2007) has become increasingly needed services with high penetration rate in most countries leading to extensive mobile communication network usage. Mobile communication networks have evolved to take advantage of the digital technology and they are designed to transmit information in a variety of forms e.g. voice, data, video and fax. These networks are enhanced to provide platforms that deliver a broad range of mobile network information services. A mobile communication network ensures the provision, understanding and utilization of information services most importantly the quality of information services to enable them to get a good market share, retain and generate users. However, Hashed, Salniza and Hamid (2012) note that delivering quality information services to users are essential to the well being of any mobile communication industries because it tend to retain their current users, getting the new ones, less users' lost, more protection from price competition and fewer mistakes require the industries to redo its services.

### **Literature Review**

Mobile network information services are the set of activities accessible with mobile phones through services provider

such as call service, S.M.S, M.M.S e.t.c that makes one's life easier, more convenience and changes social practice in many ways. These services enable users to keep in touch with love ones and help user to solve their daily activities during odd day and away from home. Awareness to these services is major factor that encourage continue use among people. Lack of proper awareness and knowledge to these services discourage users from using the different types of information services. Although various channels are available to users to understand the various network services. Media advertisement as opined by Garg (2011) plays a very significant role in understanding the various services provided by network operators. Also customer care for network providers advertizes their services to encourage usability as well as service awareness to love ones (Friends and colleques).Therefore an increase in awareness will increase usability of new information services been introduce by the network operators.

Varieties and efficient services provision will enable users to engage in frequent use of network services. Faziharudean (2011) is of the opinion that users are more likely to use services only if

they need the services and feel functionally efficient. Mobile services makes life easier and more convenient as time is fast becoming a limited resources people are not willing to waste time while waiting for something or someone or while sitting in traffic. Therefore usage of certain mobile services allows users to fill the gap. Complexity in technology as opined by Geordenetal (2004) discourage use of information services especially older generation (Mostly above 40). Also, users which are more conversant with technology struggle less and become easier for them to use the services. Users that are technological illiterate rely more on getting help from friends who are technically focus, call center and website to learn how to use the services. There are other factors that encourage potential and existing users to use these services like cost which is the major factor considered whether to use service or not where users perceive cost of mobile services as high. Other factors according to singh (2003) that leads to services usability are skill and knowledge, mobile phone compatibility, technically focus, poor design interface of the device e.t.c.

### **Objectives of the study**

1. To determine the level of awareness of GSM users in Zaria metropolis on the types of information services provided by mobile communication networks.
2. To determine the level of utilization of information services provided by mobile communication networks to GSM users in Zaria metropolis

### **Methodology**

Survey research design was adopted for the study. Out of the 1534 GSM users that constitute the population of the study using 2.5 margin of error and 95% confidence level, 1269(82.72%) were randomly sampled for the study. One set of questionnaire and semi structured interview were constructed and administered which were retrieved and used for data analysis after three weeks of follow-up. The data collected was analyzed descriptively using frequency count, percentage and mode.

### **Data Analysis and Discussion of Finding**

The aim of the first objective of this study is to find out the level of awareness of GSM users of the type of information services provided by MCN in Zaria metropolis. This is because as pointed out by

Garg and Gark (2011) that awareness of Information services encourages usability, an increase in services awareness will increase usability of new services been introduce by network operators.

It is interesting to note that majority of GSM users in Zaria metropolis are aware of all the types of information services provided by mobile networks except multimedia service (M.M.S), coverage map and location base services. The fact is that majority of respondents indicated no opinion

to these information services may means that they do not even understand the services. Hence, GSM users in Zaria may not have been using these information services.

After asking the level of awareness of GSM users on information services provided by mobile networks in Zaria metropolis, the researcher went further to find out the different channels through which the GSM users became aware. Table 2 shows their response rate.

**Table: 2. Distribution of GSM users according to channels of services awareness**

S/N	Channels	MTN	Airtel	GLO	Etisalat	Total	Percent
1	Friends	136(19.3%)	40(18.9%)	56(25.5%)	11(8.3%)	243	19.15%
2	Mobile phones	120(17%)	64(30.2%)	68(30.9%)	21(13.8%)	273	21.51%
3	Customer care	59(8.3%)	28(13.2%)	5(2.3%)	4(3%)	96	7.57%
4	Media advertisement	105(14.9%)	17(8%)	19(8.6%)	24(18%)	165	13.00%
5	All of the above	284(40.3%)	63(29.7%)	72(32.7%)	73(54.9%)	492	38.77%
	Total	704(100%)	212 (100%)	220(100%)	133(100%)	1269	100.00%

Although GSM users in Zaria metropolis are aware of the information services provided by mobile networks through all the channels indicated in the above table, Customer care as a channel received the least 96 (7.57%) overall

response. It is surprising to find out that customer care in all the network providers is not doing enough to make users aware of their services, despite the fastest channel with little or no cost that link users with their services provider. GSM users in Zaria

metropolis may not seem to be aware of information services due to the nature of customer care of the network industries as they seem not to respond immediately to users or sometimes a delay in connecting users with their customer care.

Objective two attempted to find out the level of utilization of information services from GSM users in Zaria metropolis using likert

scale of Very often, often, sometimes, rarely, never and no response. However in analyzing the data and subsequent discussion the likert scale was collapsed to three with Very often and often merged to often, sometimes and rarely merged to not often, and no response options using 40% average benchmark. Table 3 shows the response rate of level of utilization of GSM users in Zaria Metropolis.

**Table: 3. Level of Utilization of Information Services Provided by MCN to GSM Users in Zaria metropolis**

S/N	Information services	Network providers	RESPONSE CATEGORIES			
			Often	Not often	Never	No response
1	Call services	MTN	540(76.7%)	132 (18.7)	4(0.6%)	28(4.0%)
		Airtel	144(67.9%)	34 (16.0)	0(0%)	34(16%)
		Glo	180(81.8%)	16 (7.3)	0(0%)	24(11%)
		Etisalat	104(76.2)	20 (15%)	0(0%)	9(6.8%)
2	S.M.S	MTN	496(70.4%)	128(18.2%)	8(1.1%)	72(10.2%)
		Airtel	147(69.3%)	21(9.9%)	12(5.7%)	32(15.1%)
		Glo	180(80.8%)	24(10.9%)	0(0%)	16(7.3%)
		Etisalat	91(68.4%)	21(15.8%)	4(3%)	17(12.8%)
3	M.M.S	MTN	136(19.6%)	160(22.6%)	88(12.5%)	<b>320(45.5%)</b>
		Airtel	60(28.3%)	31(14.6%)	25(11.8%)	<b>96(45.2%)</b>
		Glo	<b>107(49.1%)</b>	25(11.3%)	12(5.5%)	76(34.5%)
		Etisalat	23(17.3%)	36(27.1%)	27(20.3%)	<b>47(35.3%)</b>
4	Mobile Internet (data)	MTN	408(57.9%)	169(23.9%)	23(3.2%)	104(14.8%)
		Airtel	128(63.6%)	5(2.3%)	20(9.4%)	59(27.8%)
		Glo	129(58.6%)	21(9.6%)	0(0%)	70(31.2%)
		Etisalat	89(66.9%)	29(21.8%)	10(7.5%)	5(3.8%)
5	Caller ring tone	MTN	180(25.6%)	184(26%)	71(10%)	<b>269(38.2%)</b>
		Airtel	58(27.3%)	41(19.4%)	21(9.9%)	<b>92(43.4%)</b>
		Glo	<b>92(41.8)</b>	35(15.9%)	17(7.7%)	76(34.5%)
		Etisalat	23(17.7%)	29(21.7%)	24(18%)	<b>57(42.8%)</b>
6	Coverage Map	MTN	102(14.4%)	123(17.5%)	123(17.5%)	<b>356(50.6%)</b>
		Airtel	32(11.3%)	12(5.6%)	56(26.4%)	<b>112(52.8%)</b>
		Glo	55(25%)	37(16.9%)	28(12.7%)	<b>100(45.5%)</b>
		Etisalat	9(6.6%)	23(17.3%)	<b>52(39.1%)</b>	49(36.8%)
7	SIM card	MTN	356(48.6%)	84(11.9%)	12(1.7%)	252(35.7%)
		Airtel	97(45.8%)	12(5.7%)	12(5.7%)	94(44.3%)
		Glo	116(52.7%)	32(14.6%)	0(0%)	72(32.7%)
		Etisalat	85(63.9%)	8(6%)	4(3%)	36(27.1%)
8	Call centers	MTN	223(31.6%)	212(30.1%)	21(2.9%)	<b>248(35.2%)</b>
		Airtel	73(34.4%)	41(19.3%)	20(9.4%)	<b>78(36.8%)</b>
		Glo	<b>105(47.7%)</b>	32(14.6%)	8(3.6%)	85(38.6%)
		Etisalat	33(24.8%)	<b>54(40.5%)</b>	25(18.8%)	21(15.7%)
9	Location services (LBS)	MTN	96(13.8%)	136(19.2%)	140(19.9%)	<b>332(47.1%)</b>
		Airtel	33(15.6%)	41(19.3%)	32(15.1%)	<b>106(50%)</b>
		Glo	48(21.8%)	48(21.8%)	28(12.7%)	<b>96(43.6%)</b>
		Etisalat	28(21.1%)	20(15%)	40(30.1%)	<b>45(33.8%)</b>
10	Promo (Bonus offers)	MTN	252(35.8%)	200(28.4%)	68(9.7%)	184(26.1%)
		Airtel	88(41.6%)	32(15.1%)	24(11.3%)	68(32.1%)
		Glo	132(60%)	23(10.5%)	5(2.3%)	60(27.3%)
		Etisalat	65(51.1%)	26(19.6%)	15(12.3%)	27(20.3%)

Looking at table 3, it shows that the most utilized information services by GSM users in Zaria metropolis is the call services. As indicated in the table, all GSM providers recorded not less than 65% with GLO recording the highest 180(82 %) level of utilization of call services. The level of utilization of mobile information services recorded by all the four GSM services providers shows that users in Zaria metropolis recorded the least utilized information services of Location Base Services (LBS) and coverage map. GSM users in Zaria metropolis may not often utilize these services due to complexity in

utilization or due to non familiarity of the geographical services. Because the more complex the services the less usage which can affect service satisfaction and the less complex the more usage of services as what Gordon (2004) observed that complexity in technology discourage the use of information services especially older generation (mostly above 40). Also, users that are more conversant with technology struggle less and become easier for them to use the services. The researcher further finds out the purpose of utilizing these services from the response rate in the table 4.

**Table 4. Purpose of Utilizing Mobile Networks Information Services**

S/N	Uses	MTN	Airtel	GLO	Etisalat	Total	Percent
1	Public use	115(16.3%)	36(16.9%)	32(14.5%)	13(9.8%)	196	15.4%
2	Business use	35(4.9%)	12(5.7%)	16(7.3%)	4(3%)	67	5.3%
3	Private use	296(42%)	115(54.2%)	92(41.8%)	69(51.9%)	572	45.1%
4	All of the above	258(36.6%)	49(23.1%)	80(36.4%)	47(35.3%)	432	34%
Total		704(100%)	212(100%)	220(100%)	133(100%)	1269	100%

Although as indicated in table 4 that GSM users in Zaria metropolis used mobile networks for public, business and private

use, majority of them 572 (45.1%) utilized network information services for private use. The reason why utilization for business used

recorded the least of 67 (5.3%) could be as earlier indicated there are less business people as compared to students in the study.

### **Summary of the findings**

Based on the analysis of the data collected, the following findings were summarized below:

1. The study revealed an appreciable level of awareness of all the types of information services provided by mobile networks in Zaria metropolis, however, GSM users in Zaria metropolis are not fully aware of M.M.S, coverage map and LBS, also the customer care are not doing enough to make users aware of their services in all the mobile networks.

2. It was discovered that GSM users in Zaria metropolis mostly utilized information services for private use in which calls service became the most utilized services among the information services provided by mobile communication networks. But hardly utilized coverage map and L.B.S by indicating a no response option to all the network providers.

### **Conclusion**

Considering the findings of this study, the study concludes that the mobile networks provide various information

services to GSM users in Zaria metropolis to maintain and generate users. With the entire attempt in creating value to GSM users, the GSM users were not fully aware and utilizing some of information services specially the geographical services such as L.B.S., and coverage map. As earlier discussed in the analysis that most GSM users in Zaria metropolis utilizes information services for private use, the geographical services are mostly applied to marketing and business activities. This leads to the non familiarity and utilization of the geographical services because the GSM users in Zaria metropolis are not business oriented.

### **Recommendations**

Base on the findings and conclusions, the following recommendations were raised:

1. Urgent step should be taken by the network providers to make their users aware (using advance channels) of some information services like the geographical services (coverage map and L.B.S) and M.M.S at little or no cost because awareness and low cost will make GSM users to utilized the information services frequently. There should be prompt response from customer care service of all the network providers.



2. Network providers should create a mechanism for exhibition in network branches and other strategic areas along major cities in Nigeria (Zaria metropolis) demonstrating how to utilized complex mobile network technologies or by enriching the available channel like the media, mobile phone, and customer care. e.t.c to GSM users on how services are been utilized.

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