# SELF-SERVICE DELIVERY AND SUBSCRIBERS' USAGE IN GLOMOBILE, ZARIA, NIGERIA

## Ofuonyebuzor, Daniel Chucks Glomobile Office, Zaria +2348051777999, +2349055577920 danchucks.o@gmail.com

& Auwal Yahya Ahmad, Ph.D Department of Business Administration, Ahmadu Bello University, Zaria, Nigeria +2348035922043, +2349097644100 auwalahmad11@gmail.com

## Abstract

The past decade has witnessed a rapid growth in self service that allows consumers to take on the traditional place of service agents in the provision of services. Business organizations are taking advantage of the advancement in technology to improve their service delivery performances. The study therefore assesses the impact of self service delivery and subscribers' usage in Glomobile, Gloworld with emphasizes on actual adoption and usage of self-service as proposed by Technology Acceptance Model. The study uses primary data from a close ended adapted questionnaire issued to 132 walk-in subscribers of Glomobile, Gloworld, Zaria. Descriptive analysis, simple linear regression, t statistics and f statistics, ANOVA and Durbin Watson was used to analyse the impact of convenience on usage of self-service technology on the sampled subscribers. The results indicated that convenience has positive and significant impact on usage of self-service delivery. It was recommended that subscribers should access available self-service options as rolled out by their organisations in order to reduce the pressure on both customer care help lines and face-to-face contacts. Also the organisations should go for technologies that will give them an edge in satisfying customers' demands.

**KEY WORDS:** Service Delivery, Self-Service, Convenience, Usage, TAM, Glomobile.

## Introduction

The ever-changing world of technology is making the world become smaller every day. Businesses and organizations are taking advantage of the advances in technology to improve their organizations. Self-service usage is spreading in a very broad manner both in developing and developed countries. Self-Service Technology (SST) has great potential for extending the provision of services to all the people through a technology that is both familiar and widespread.

Our daily schedules are all almost handled using electronics made gadgets because of the acceptance and the increase of information technology both at home and in our workplaces. Organizations are also enhancing their ability to service its customers thereby influencing the shape of the organization's service delivery system. As such, there is an increasing pressure to orchestrate the continuous and reliable delivery of services to meet increasing business and user

expectations with access to service at their own convenience, anywhere, and at any time of the day (NetScout System, 2010).

Research has shown that technology and its uses in today's business organization are becoming inevitable as a tool for profitability and excellent Customer Service Delivery. Therefore, technology is then essential in providing faster and more efficient services to customers, and must be acquired based on actual needs and the proven ability to deliver customer-friendly solutions. Ofuonyebuzor (2012) noted that the present scenario of the business world is characterised by a growing competitiveness, market globalisation and technological advancement in organisations.

Therefore, the survival of an organisation implies the application of sustainable competitive advantages which includes service delivery has been described to be one of the key performance indicators of an organization. The most efficient and effective way of product or service delivery to end users has become increasingly important to organisational performance, competitiveness and advancement.

Jennifer and Janis (2010) agreed to the fact that organisations use technology to reduce business customer uncertainty and equivocality, hence improving the quality of their service delivery. The shift from the traditional way of service delivery gave birth to the new order of self-service delivery approach which has been made possible via the deployment of simple to sophisticated technological tools (Hamid and Albert, 2010).

Further research has also shown that in the world of business, electronic commerce is the basis for which strategic-oriented business create relationship within their environment and more so strategized for new competitive edge. The explosion of new technologies is revolutionizing the retail environment. These dependent on information technology for effective service delivery in order to meet users' expectations is giving much attention to the new phase of service delivery known as self-service delivery.

Self-service delivery was adopted by service industries so as to improve their service delivery, decongest queues, enable customers make payments, or even carry out and track their personal transactions. Despite the high rate of investment on self-service delivery by Telecommunication Companies as technology advances, heavy traffic still bedevils the helpline and face-to-face representatives of these companies with enquiries and complaints on issues subscribers would have been able to resolve on their own. The question is; is it that subscribers are not using these self-service options powered by technology in Glomobile which will aid in self resolution of challenges while on Glomobile network? However, Meuter, Ostrom, Bitner, & Roundtree, (2003) argued that not all consumers will choose to use the new technologies nor do all consumers see these changes as improvements.

Service Delivery Research Model in the past divided the factors influencing the individual's decision to adopt self-service delivery into categories: convenience, security perception, prior internet knowledge, perceived risk and demographic characteristics. Wadie (2011) argued that many of these factors can be regarded as pertinent to the process of self-service delivery usage.

Therefore, this study tends to determine the convenience factors impacting on the usage of selfservice delivery in Glomobile customer service delivery system. In other words, self-service delivery will be studied using factors that are from the success point of view, referring to the notion that subscribers are using self-service technology directly as diverse technological

innovations flood the service industries. Hence, more knowledge on such factors that affect the usage of self-service technology is needed to better understand and facilitate the adoption.

Convenience factors such as time savings, easy to use and service quality has been considered to be associated with the adoption and usage of service delivery options including self-service technologies (Wadie, 2011). It should be noted that production and service delivery in the past has been tailored along this reasoning; which also in recent times is a major factor to consider before services are rolled out.

Hence, it would be better for organisations to gain an understanding of the key factors that influence consumers' self-service delivery usage. To achieve the aforementioned objective, the study hypothesized as thus 'convenience has no significant impact on usage of Self-Service Delivery in Glomobile'.

### **Review of Related Literature and Modelling**

Delivering the required service to the customer is challenging. Either interacting personally or through information processes, customers' perception concerning a market offering is built upon the ability of the service provider to convince their various target markets (Adekunle, Tajudeen and Sunday, 2013; Chang-Tseg, 2005). Self-service delivery also called self-help refers to technologies that enable customers to learn, receive information, train themselves, and provide their own services (Meuter, Ostrom, Roundtree, & Bitner, 2000).

It is viewed as the mechanism to activate the communication strategy (Dalené and Willem, 2007). Self service has long existed (think of do-it-yourself; that is home owners doing the work of professional contractors, or self-help, books substituting for therapists) but its importance has grown as IT has created many opportunities to leverage technology for large gains in efficiency and convenience.

In another development, Daniel, Robert and Stephen (2010), posited that the self-service economy is a vital component of the IT revolution; the principal driver of the economy and success with self-service technology is critical to creating a more intelligent and connected world. Furthermore, Shaun, (2007) believed that self-service delivery provide the customer with the ability to perform any service transaction any time of the day, expand the hours of cover for live service support (24/7); ensure self-service support available 24/7; ensure quality of cover consistent regardless of time of the day or day of the week.

Self-service usage requires perhaps the most subscribers' involvement, as it becomes necessary for the consumer to maintain a regular interaction with additional technology. Subscribers who use self-service technology use it on an ongoing basis and need to acquire a certain comfort level with the technology to keep taking its benefits. Subscribers who generally have less time to spend on activities such as phone-in or walk-in and want a higher degree of convenience and accessibility prefer self-service transactions with ease of use, reliability, responsiveness, security, and continuous improvement (Gabriel, Eugene & Daniel, 2015; Sandhya, 2014).

From the foregoing, Self-service delivery can be defined as the ability of customers to manage their affairs and enjoy certain privacy while interacting with their organisations. At this stage, customers are expected to do the job of a service representative in order to meet their own needs in their own time, anywhere and any day while on their organisations channel or service delivery system.

Overtime, the use of technology for service delivery has experienced and may still experience changes almost on a daily basis as technology and its uses advances. This may give consumers the ample opportunity to choose on the varying options to which they can be serviced by any organisation making use of technology as a means of service delivery. It is increasingly evident that these technological innovations and advances will continue to be a critical component of customer–firm interactions (Meuter, et al, 2003)

Scholars like Jennifer and Janis (2010) posited the mode of customer's contact with technology which includes Technology-Free, Technology-Assisted, Technology-Facilitated, Technology-Mediated, Technology-Only Mode and Technology-Generated. Technology-Free enables the customer to make contact with the service representative without involving technology in the process.

With Technology-Assisted, the service representatives have access to the technology in order to process customer's transaction, enquiry or complaint. Technology–Facilitated avails both the service representatives as well as the service customer access to the technological system. Technology-Mediated allows the service customer and service representative interact with technology while With Technology-Only; the computer systems at both companies interact with each other with no human involvement. Finally Technology-Generated allow the service customer interacts directly with the technology without the assistance of a service

representative. It is based on this, that the Self-Service delivery option is founded.

On the contrary, it has been argued by scholars that Technology-Generated mode of service delivery has deprived consumers of human contact and other relationships. Premalath, (2015) assert that unexpected outcome of computers and other technology is the loss of the "human moment." According to him, the human moment is a quality of interaction that you do not get through technology, not even phones. Face-to-face exchange appears to stimulate the attention and pleasure of hormones that reduces fear and worry. Lawrence & Kara (2011) opined that self-service delivery mortgages consumer's choice and denies individuals of human contact. However, in this study, aligns with the Technology-Generated Mode since it allows the service customer to interact directly with the technology (Self-Service) without the assistance of a service representative.

While some consumers may see self-service technologies to be easy to use or more convenient, others tend to be uncomfortable with the technologies and prefer a contact with service representatives (Dabholkar, Bobbitt & Lee, 2003).Thus, how perceived service quality will differ by consumers is determined by individual characteristics. As such, a deeper understanding of consumers' individual characteristics is necessary in order to justify the costs of self-service technologies decisions and implementation.

In his research work, Eastin (2002) discovered that convenience was one of the strongest factors in the usage of online banking. Convenience has been associated with various factors to include time and effort saving, 24-hour availability, access at anytime and anywhere within coverage zone, etc. Thus, it has been identified by various studies as an important factor when it comes to usage of self-service technologies (Wadie, 2011).

Numerous theories and models have been proposed in the time past. For at least thirty years, information system scholars have sought to identify factors that influence individual users' adoption and use of Information and Communication Technologies (Youngseek & Kevin, 2011). Technology Acceptance Model (TAM) can help properly in knowing how consumers

perceive use of technology in their daily transactions. It is an information system theory that models how users come to accept and use a technology (Sandhya, 2014).

The TAM proposes that system use is directly determined by behavioural intention to use, which is in turn influenced by users' attitudes toward using the system and the perceived usefulness (PU) of the system. Attitudes and PU are also affected by perceived ease of use (PEOU). PU was defined as the degree to which individuals believe that using a particular system would enhance their job performance (Davis, 1989). PEOU relates to the degree to which individuals believe that using a particular system would require no effort (Davis, 1989). It is an information system theory that models how users come to accept and use a technology.

Sandhya (2014) opined that PU is concern with what level of the technology use will go to enhance the performance of the user if he/she uses it, while PEOU is concerned with the level to which a person believes that using a particular system or technology will be free from efforts. These two factors (PU and PEOU) have been empirically proven as important factors determining the adoption and usage of new information technology (Sandhya, 2014; Wadie, 2011), including the usage of self-service delivery. They create a favourable behavioral intention toward using the Information Technology that consequently affects its self-reported use (Davis, 1989).

This research however aligns with TAM because it integrates the construct into main stream theories and its extended models which mainly focus on self-service technology usage as ICT advances (Youngseek & Kevin, 2011; Wadie, 2011& Sandhya, 2014). Venkatesh, Davis & Morris (2007) argued that TAM has become nearly a law-like model; its derived theories have been very popular for investigating user's e-learning adoption and post-adoption with its construct which are also readily extendable into cognate areas such as advertising, information adoption, and E-learning adoption rather than restricted to a single distinctive model (Najmul, Nasreen, Matti & Samiul, 2014).

## **Research Methodology**

The study used a survey research design and it is cross-sectional in nature adopting quantitative method. The questionnaire which is a closed ended structured questionnaire was adapted from Jeffery, (2009) measuring usage with 12-items in the area of Perceived Ease of Use and Perceived Usefulness and Wadie, (2011) and Poon, (2008) measuring convenience with 7-items in the area of time saving, quick access and ease of use.

The population of the study consists of two hundred and twenty (220) averaged daily walk-in subscribers on complaints and enquiry in Glomobile-Gloworld, Zaria (April - September, 2015) which is made up of different categories of customers from all works of life. One hundred and thirty-two (132) respondents were selected from the population size. The descriptive information of the sample is given in Table 1.

Convenience sampling method was used for the research. Copies of questionnaires were administered to the subscribers in Glomobile Gloworld as they waited for their turn and collected immediately or at the point of exit by volunteered personnel. The validity and reliability of this questionnaire was obtained through a pilot test of a small sample of thirty-five respondents and Cronbach's coefficient alpha was established at 0.78 and 0.74 for convenience and usage respectively.

As for data analysis, questionnaire responses were codified and entered into the database while descriptive statistic, correlation analysis and multiple regression analysis technique using statistical package for social science (SPSS) version 20. Subscribers' Usage of Self-Service Delivery being the construct was operationalised by the following dimensions: Convenience (CONV) being the independent variable was tested against Usage (US) being the dependent variable within the study period of April – September, 2015.

## **Results and Discussions**

## **Summary of Responses**

A total of 132 questionnaires were distributed by the researcher and had a 100% return rate with all valid and fully completed. This relatively high response rate was attributed to the self-administration approach undertaken in distributing copies of the questionnaire and direct approach to respondents. The descriptive information of the sample is given in the Table 1:

TABLE 1: Characteristics of the study sample					
ITEM	CATEGORY	FREQUENCY (%)			
Age		41 (31.1%)			
	18-24 years	68 (51.5%)			
	25-35 years	22 (16.7%)			
	36-45 years	1 (0.8%)			
	46-55 years				
	56 & above				
Gender	Male	80 (60.6%)			
	Female	52 (39.4%)			
Education	Undergraduates	46 (34.8%)			
	Graduates	45 (34.1%)			
	Post-Graduates	41 (31.1%)			

The sample consisted of more persons in the age group of 25-35 years. The male population of the study was 60.6% of the sample; undergraduates were 46 out of the total population of 132. There was no one between the ages of 56 & above in the study. The nature of the study environment (Zaria) may have contributed to the fact that those within this group already have those who run errands for them; hence will not visit the walk-in centres of the company.

## **Descriptive Statistics of the Variables**

The section presents the descriptive statistics of both the independent and dependent variables of the study. These variables include Self-Service Usage and Convenience. The rule for this analysis is that any mean responses of 1-2.49, 2.50-3.49 and 3.50-5.00 are rated below average, average and above average performance respectively.

The descriptive statistics for Self-Service Usage shows the mean average variable of all the questions from question one (1) to twelve (12) are all above average that is above the value of

4.26-4.43 with minimum score of 2.33 and maximum score of 5 of all the 12 items while the standard deviation with scores of low and high standard deviation of 0.897-1.263 respectively. The results indicate high level of Self-Service Usage because most respondents answered agree or strongly agree.

While the descriptive statistics for Convenience on Usage of Self-Service Delivery, shows the mean average variable of all the questions from questions one (1) to seven (7) are all above average with a value ranging from 4.17-4.36. The average minimum score of 2 and maximum score of 5 of all the 7 items while the standard deviation with scores of low and high standard deviation of 0.568-0.732 respectively. These results indicate high level of Convenience on the Usage of Self-Service Technology.

## **Regression Results**

Independent	Un-standard B	Standard error	Beta	Т	Significance
variable					
Convenience	.212	.061	.293	13.179	.001
Source: Resea	rchers' Computation	on (2015)			
R		.29	3 <sup>a</sup>		
R Square		.08	•		
Adjusted R S	quare	.07	-		
Std. Error of	-	.22	742		
F		12.	174		
Significance		.00	1 <sup>b</sup>		
<b>Durbin-Wats</b>	on	2.3	25		

		CONV	USAGE
CONV	Pearson Correlation	1	.293**
	Sig. (2-tailed)		.001
	N	132	132
USAGE	Pearson Correlation	.293**	1
	Sig. (2-tailed)	.001	
	Ν	132	132

Source: Researchers Field Work (2015)

A correlation analysis was performed to determine the direction and strength of the relationship among the variables of the study. In determining the strength of the relationship the following guideline was suggested (Pallant 2001): R=0.10 to 0.29 or r= 0.29 to 0.29 small, R = 0.3 to 0.49 or r= 0.30 to 0.49 medium and R=0.50 to 1.0 or r= 0.5 to 1.0 large. The correlation result that all variables of independent and dependent variables are significant at p<.05 was obtained between Convenience and Self-Service Usage which is statistically significant at r=0.293, p<0.1. The adjusted R square where the independent variable convenience (CONV) explaining the dependent variable Usage at the value of 0.079 which indicates 8% of the behavioural relationship of the two variables (that is dependent and independent). This actually implies a

low level of convenience in explaining self-service usage in Glomobile which is 8% while the remaining 92% is explained by other factors that are not captured in the regression model.

The ANOVA shows significant level of 1% which is far below the established significant level of this paper (0.05). Therefore, this Research rejects the hypothesis that convenience has no significant impact on self-service usage. The F statistics is as high as 12.174 and significant at 1%, implying that the model is well fitted. This is further attested to by the Durbin Watson result 2.325 (Table 5) which is within the range of acceptance region of 1.5 to 2.5. Thus, this study shows that the regression analysis between convenience and self-service usage in Glomobile-Gloworld, Zaria is significant (beta=0.293), (p=0.001 at 5% level) which shows that the p value is less than the established level of significance. Therefore, we reject the null hypothesis which states that 'convenience has no significant impact on self-service delivery'. This result is consistent with the findings of Eastin (2002), Poon (2008), and Wadie (2011).

#### **Conclusions and Recommendations**

Based on the research findings, the study concludes that convenience has a significant impact on Self-Service Usage. With the constant roll out of self-service options supported by technology, subscribers will maximize the use of their devices. Organisational intention to involve them in the service process if they are comfortable with such services and the role they are to play in the process will be enhanced. This will go a long way in reducing the pressure on the Customer Care Representatives, and will also allow the customer to satisfy his needs at his convenience.

Finally, the paper recommends that management should consider other factors that can affect consumers' usage of Glomobile Gloworld such as perceived risk, security, user's intention, demographics, trust, and awareness, not just convenience. Subscribers are also encouraged to access available self-service options as rolled out by their organisations as that will enable them enjoy the great convenience of service delivery at their own time. They will however enjoy services at the comfort of their homes/offices rather than making a journey or long queue calls to both the walk-in or phone-in helpdesk.

#### References

- Adekunle, A. I., Tajudeen, A. O., & Sunday, S. A. (2013). The Role of Information Technology in Customers' Service Delivery and Firm Performance: Evidence from Nigeria's Insurance Industry. *International Journal of Marketing Studies*, 5(4), 59-67.
- Chang-tseh, H. (2005). Implementing self-service technology to gain competitive advantages. *Communications of the IIMA*, 5(1):17.
- Dabholkar, P.A., Bobbitt, M., & Lee, E.J., (2003). Understanding consumer motivation and behavior related to self-scanning in retailing: implications for strategy and research on technology-based self-service. *International Journal of Service Industry Management* 14 (1), 59–95.
- Daniel, C., Robert, D. A. & Stephen, J. E. (2010). Embracing the Self-Service Economy (Information Technology and Innovation Foundation).

http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1590982.

- Dalené, P. & Willem S. (2007). Enhancing Service Delivery in Local Government: The Case Of A District Municipality. SA Journal of Human Resource Management, 5 (3):19-29.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use and user acceptance of information technology. *Management Information Systems Quarterly*, 13(3) 319-340.

- Eastin, M. S., (2002). Diffusion of E-commerce: An analysis of the adoption of four E-commerce activities. *Telematics and Informatics*, 19 (3), 251–267.
- Gabriel A. G., Eugene O. A. D. &, Daniel K. T. W. (2015) Assessing the Impact of the ATM in Delivering Service in the Banking Industry. A case of GCB Bank Ltd. *European Journal of Business and Management* 7, 20.
- Hamid, N. & Albert, L. (2010). Coping with Information Technology Challenges to Identity: A Theoretical Framework. *Computers in Human Behaviors, 26:* 618-629.
- Jennifer, E. G. & Janis, M. (2010). Offering Appropriate Information Technologies at Different Stages in the Customer Service Life Cycle for Improved Service Delivery. J. Service Science & Management, 3: 1-15.
- Jeffrey, B. C. (2009) The Influence of Perceived Usefulness, Perceived Ease of Use, and Subjective Norm on the Use of Computed Radiography Systems: A Pilot Study. *Radiologic Sciences and Therapy Division, 19-20.*
- Lawrence, J. T. and Kara, A. P., (2011). The Board's Responsibility for Information Technology Governance, *The John Marshall Journal of Information Technology & Privacy Law 3*(28), 313-341
- Meuter, M. L., Ostrom, A. L., Roundtree, R. I. and Bitner, M. J (2000). Self-service technologies: understanding customer satisfaction with technology-based service encounter. *Journal of Marketing*, 64:50-64.
- Meuter, M.L., Ostrom, A.L., Bitner, M.J., & Roundtree, R., (2003) The influence of technology anxiety on consumer use and experiences with self-service technologies. *Journal of Business Research* 56 (11), 899–906.
- Najmul Islam, A. K. M., Nasreen, A., Matti M., & Samiul-Islam, S. M. (2014) TAM & E-learning Adoption: A philosophical scrutiny of TAM, its limitation and prescriptions for e-learning adoption research (2014). *International foundation for information processing* 13E, 164-175
- NetScout System (2010). Netscout Products and Solution Reference Guide. www.itsoft.com.my/info/netscout/NetScout\_pg\_Quick\_Reference Guide, Accessed 28th July, 2015.
- Ofuonyebuzor, D. C., (2012). The Impact of Training and Development on Productivity.
- School Of Business And Human Resources Management, National Open University Of Nigeria Agidingbi, Ikeja Study Centre, Lagos.
- Venkatesh, V., Davis, F. D., and Morris, M. G. (2007). Dead or Alive? The Development, Trajectory and Future of Technology Adoption Research, *Journal of the Association for Information Systems; Atlanta* 8(4), 268-286.
- Pallant, J. (2001). SPSS: Survival Manual A Step by Step Guide to Data Analysis Using SPSS for Windows (3<sup>rd</sup> ed.). Sidney – Australia: McGraw Hill Open University Press; Ligare Book Printer.
- Premalath, R. J. (2015) Adoption of Internet Banking In Tamil Nadu, India. *The International Journal of Social Sciences and Humanities Invention* 2(1)1073-1089. Available Online At: http://valleyinternational.net/index.php/our-jou/theijsshi
- Poon, W.C., (2008). Users' adoption of e-banking services. Journal of Business & Industrial Marketing, 23(1), 59-69.
- Sandhya, R. (2014). Consumer Awareness and Usage In E-Banking Through Mobile Phones. International Research Journal of Commerce Arts and Science 5 (4), 234-238.
- Shaun, D. (2007) Self-service delivery and the growing roles of channels, *Journal of Database* Marketing & Customer Strategy Management (14) 150-159
- Wadie, N. (2011) Factors Influencing the Adoption of Internet Banking in Tunisia; International Journal of Business and Management 6(8) 143-160
- Youngseek Kim & Kevin Crowston (2011) Technology Adoption and Use Theory Review for Studying Scientists' Continued Use of Cyber-infrastructure. *School of Information Studies, ASIST*, October 9-13. 164-166