

## A Survey of Customer Acceptability of MTN Self-Service Delivery in Kogi State Nigeria

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### ABSTRACT

Despite the available MTN self-service options (i.e. MTN web self-service, MyMTN App and the interactive voice response IVR on its customer centre channel known as 180), MTN walk-ins and customer care helpline are constantly flooded by subscribers. This results in long queues and waiting time problems. Therefore, the study investigates the factors that influence subscribers' adoption of online self-service by MTN subscribers in Kogi State of Nigeria. The specific objectives of the study were to investigate: the extent to which perceived usefulness (PU) affect the adoption of MTN online self-service, and the effect of perceived ease of use (PEOU) on adoption of MTN online self-service. Cross sectional descriptive survey was adopted in the study to solicit data from 381 MTN customers. Structured questionnaire was used in obtaining data. Data obtained were analyzed and presented in tables (Frequency, percentage and mean). Regression analysis was used to test hypotheses. The results following the analysis indicate that: Perceived usefulness of service significantly affected usage of MTN online self-service in the area ( $t = 24.406, p < 0.05$ ). Perceived ease of use significantly affected usage of MTN online self-service in the area ( $t = 17.695, p < 0.05$ ).

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**KEYWORDS:** Self-Service, adoption, customer relationship, internet and telecommunications

### I. INTRODUCTION

A global survey, statistics showed that China, India, United States, Indonesia, Brazil, Russia, Japan, Pakistan, Germany, and Nigeria are the top 10 countries in the world with over 100 million mobile subscriptions (mobiThinking: 2013). In less than decade another survey puts Nigeria as sixth having the highest number of telephone subscriptions (Statista: 2020). Although, according to the World Bank (2021) Nigeria's population is estimated at 211.4 million people. Nigeria is reported to have active mobile subscribers' base estimated at 206.4 million and tele-density of 108.15 percent based on a national population estimate of 190 million people (Nigerian Communications Commission: 2022). Nigeria's telecommunications industry market is shared among four network providers namely: Mobile Telephone Networks (MTN), Globacom Nigeria Limited (GLO), Buharti Airtel Limited (AIRTEL), and Emerging Markets Telecommunications Services Ltd. (EMTS), (9mobile). Statistics show that among the network providers of mobile services in the country, MTN tops the list with over 79 million subscribers. This figure represents 38.36 percent of the total GSM subscribers in the country. AIRTEL is second with subscribers' base of over 58 million which is 28.21 percent of the total market share. Next and close in rank is GLO with over 56 million subscribers which is 27.28 percent of the total

subscribers in the country. The last is 9mobile, least subscribed with a total of about 12 million customers or 6.14 percent of the total market share (Nigerian Communications Commission: 2022).

In order to appreciate the concept of self-service, a throwback to a traceable and earlier attempt to involve customers is imperative. Self-service is not new but dates back to a century ago. According to Espacenet (2015), the US Patent Office awarded Clarence Saunders, a patent for a "self service store" in 1917. The system was such that allowed customers to collect the goods they wanted to buy from the store, presented them to the storekeeper, as opposed to the initial arrangement, where the store's employee consulted a list presented by the customer, and collected the goods for the customers. Saunders, following wide acceptance of the system, licensed other independent grocery stores; the term used to describe the system was "Piggy Wiggly". Though all consumers need some support throughout the customer lifecycle, many prefer to tackle certain parts of the journey alone. For those telecommunications customers opting to answer their questions and resolve their problems, self-service channels offer an opportunity to obtain agent-level solutions without ever talking to a physical agent. In the past, according to Papachristos (2013), traditional self-service options only offered basic frequently asked questions (FAQs) and site

search functionality. She explained that while these tools helped identify potentially relevant content, they did little to assist consumers in determining which piece of content contained the answer they needed. However, she acknowledged that the telecommunications industry has continued to evolve alongside these promising technologies, and that service providers have begun to expand the scope of their self-service options.

Retrospectively, the Nigerian Communications Commission (NCC) imposed a fine of ₦1.04 trillion on MTN on account of unregistered SIM cards. Although the parties await court verdict on the fine, this squabble may be as a result of poor customer relationship management (CRM). The penalty, according to NCC, represents ₦200,000 (\$1,000) for each of the unregistered 5.1 million SIM cards (Daily Trust: 2015). Curled from a press release: ‘Following a negotiated reduction of the N1.04 trillion fine on MTN Nigeria to N330 billion and in line with the staggered payment arrangement, MTN has, so far, paid N275 billion to the Federal Government...’ (Nigerian Communications Commission on the: 2019). Could it be that this misfortune that befell the country’s telecommunications leader would have been averted had MTN encouraged its customers to use the web self-service (WSS)? Obviously, the web-self service has provision for customers to update their profile information. Advances in Information and Communication Technology (ICT) and the stiff competitive landscape of the telecommunications industry in Nigeria led to the introduction of several online touch-points by network providers. In 2012, MTN launched the web self service (WSS) and Mobile self-care App, although the MTN interactive voice response (IVR) had been in operation since 2006. And most recently and trending is the availability of MTN Customer Service on social media such WhatsApp, Twitter, and Facebook. Only just recently in 2016, the firm launched a new application called myMTN application. These channels allow for personalized services. Amidst these developments, MTN walk-ins and customer care helpline are still flooded by subscribers and queues continue to exist in these channels. Could it be that subscribers are yet to fully accept the online self-service options? Service providers need to know the factors that may be responsible for acceptance of self-service technology (SST), and with the knowledge, they can find ways to adjust or reposition the systems to better serve the multi-facet target market.

### 1.1 Statement of the Problem

Unfortunately, the presence of queues at MTN walk-in centres and the heavy traffic on the customer care lines for online representatives are indicators that perhaps subscribers are not disposed to use any of the self-service options. The self-service options available to MTN subscribers include the web self –service (WSS), the mobile self-care applications, and the interactive voice response (IVR). These platforms allow subscribers to do most of things they seek from the

contact staffers by themselves. Perhaps, most of the queries and complaints customers bring to MTN representative would have been resolved by the customers themselves without the contact staffers had they embraced the self-service platforms rolled out by the firm. 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.

Regrettably, the adoption of self-service delivery on the MTN network has not been studied empirically. Since the advent of self-service MTN platform, there has not been any empirical investigate to assess the adoption among customers. This gap is what the study sought to fill. The empirical study on correlates of self-service adoption in Nigeria was by Ofuonyebuzor and Auwal (2016) which was discovered long after this study was embarked upon. They explored customers’ acceptance of self-service delivery on the Glomobile network in Zaria, a major city in Kaduna state. Therefore, the research attempts to break the ground for others to follow as effort was directed towards exploring the adoption of self-service options by customers of MTN network which is the market leader in the telecommunications industry in the country.

### 1.2 Objectives of the Study

The main objective of the research is to investigate some factors that influence adoption of online self-service by MTN subscribers in Kogi State of Nigeria. The specific objectives are:

- i. To ascertain the extent to which perceived usefulness (PU) affects the adoption of MTN online self-service by subscribers in the area.
- ii. To highlight the extent to which perceived ease of use (PEOU) affects the adoption of MTN online self-service by subscribers in the area.

### 1.3 Research Questions

The following research questions guided the researcher in the course of the work:

1. To what extent does Perceived Usefulness (PU) affect the adoption of MTN online self-service by subscribers in the area?
2. To what extent does Perceived Ease of Use affect the adoption of MTN online self-service by subscribers in the area?

### 1.4 Research Hypotheses

Therefore, the following hypotheses are proposed and would-be tested.

- i. Perceived usefulness does not significantly affect individual’s decision to use MTN online self-service in the area.
- ii. Perceived ease of use does not significantly affect individual’s decision to use MTN online self-service in the area.

### 1.5 Scope of the Study

This research area is broad being a topical issue; temptations abound for digression. The study focused on some areas, and attempt was made to give complete picture of the topic. Basically, the focus of this research is on electronic and internet based customer services provided by MTN Nigeria devoid of face-to-face and person-to-person interaction. The self-service options considered in this work are the web self-service (WSS), the mobile self-care application and the interactive voice response (IVR) on the online assistance centre. Although there a number of possible factors that influence the adoption of those self-service platforms, this study investigated a few of them. Therefore, this study was limited to unravelling effects of some external variables on the adoption of MTN online self-service. Moreover, this study is focused on customers' point of view, and so no attention would be given to the company's perspective.

### 1.6 Significance of the Study

The outcome of the study is expected to be beneficial to telecommunications firms, their customers and programmers of online self-service.

The telecommunications firms, especially MTN would find the findings of the research useful in that; they would be better informed about dispositions of customers regarding the online self-service platforms. Equipping themselves with this knowledge, the firms would be in a better position to improve their online self-service.

The telecommunications customers would benefit because of the improved service delivery on the self-service platforms which would directly translate into greater customer satisfaction and reduction of complaint behaviour. This is not only desirable to customers, but also to the network providers in that complaint reduction usually translates into greater patronage.

Experts in the area of self-service design or programming would be better informed about how to make the self-service option more user-friendly.

### 1.7 Limitation of the Study

There seems to be limited number of literatures that address adoption of online self-service; however the researcher made judicious use of the available ones. Given the tight schedule of the supervisor, there was need to employ emailing to ensure continual and smooth communication between the student researcher and the supervisor.

## II. REVIEW OF RELATED LITERATURE

### 2.1 Conceptual Framework

#### 2.1.1 Self-Service

Self-service is a form of electronic support platform that allows customers to access information and perform routine tasks, in most cases via internet. Recently, more than ever before businesses are implementing self-service applications

to improve their customer service and reduce costs. Preda, Ivănescu, and Furdui (2009) cited Amanda (2007), asserting that self-service technologies refer to services that are performed by customers themselves using various types of technological innovations, such as ATMs, the internet, touch screens, and interactive kiosks. According to them, this paradigm shift represent an alternative way of service delivery using innovative technologies for complementing or even replacing personal services. Self-service strikes the balance between customers, in their quest for convenience, consistency and self-control and companies in their quest for wider coverage, low cost of service delivery and reliability of automated transactions. There are instances when customers encounter inexperienced salespeople, long lines and companies that are closed when you want to do business. Self-service presents companies and customers opportunities to conduct transactions online. Therefore, using self service technologies have become a welcome alternative to most consumers. All interactions and transaction between businesses and customers over the internet can be described as electronic marketing. Such interfaces between firms and their customers are results of the technological advancement and facilitated by internet-enabled mobile gadgets and emergence of web 2.0.

#### 2.1.2 Electronic Marketing

Bose (2010:280), defined electronic marketing (e-marketing), also referred to as internet marketing, web marketing and cyber-marketing by various authors, as a strategic process of creating, distributing, promoting, and pricing products for targeted customers in the virtual environment of the internet. Bose went further to state that electronic marketing entails building and maintaining customers relationship through on-line activities to facilitate exchange of ideas, products and services that satisfy the interest of both parties.

Citing Case (2004), Kotler and Keller (2013:562) agreed that the newest and fastest growing channels for communicating and selling directly to customers are electronic, asserting that the internet provides customers and marketers with opportunities for much greater interaction and individualization; according to them, “soon few marketing programme will be considered complete without a meaningful online component”. They enumerated various interactive marketing communication options available to organisation and market as follows:

- i. Web site
- ii. Search ads
- iii. Display ads
- iv. E-mail
- v. Mobile marketing
- vi. Social media
- vii. Word-of-mouth effect

**2.1.3 Internet-enabled Customer Relationship Management**

Understanding customers requires that firms through their contact staffers gain and maintain relationship with their customers and overtime achieve database rich enough to enable lifetime patronage. Consistent e-CRM provides a firm with competitive advantage as it furnishes the marketing team with vital information about target market. Industries that tend to be more e-CRM ready are aware of distinct contacts with customers, are very competitive and are constantly seeking differentiation (Ragins and Greco, 2003).

According to Wisner, Tan and Leong (2008:360), web sites act as support mechanism for call centres by making commonly requested information (also known as frequently asked question (FAQ) available to visitors of the sites. They added that customers , among other things, access their account information and get flight schedules, operation hours, contact information, locations (such as MTN Nigeria walk-ins and branch offices addresses), directions and product information (such as tariff plans) or return policies. They observed that on most sites of organisations are space for emailing questions and complaints; some sites even offer online chat capabilities with company personnel or with other customers who are currently visiting the site.

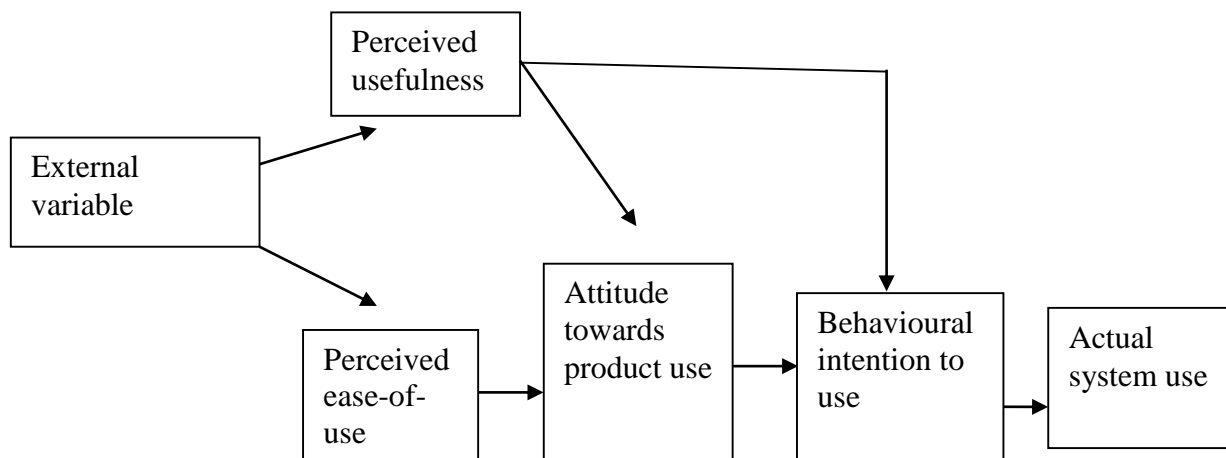
**2.2 Theoretical Framework**

**2.2.1 Technology Acceptance Model (TAM)**

In an effort to predict users’ acceptance and explain influences of their behaviour towards use of new Information System (IS) or new Information Technology (IT), Davis (1989), propounded the Technology Acceptance Model (TAM). The model is an adaptation of Theory of Reasoned Action (TRA), a model earlier developed by Ajzen and Fishbein (1980) to investigate individual performance and to explain behavioural intention which, according them, are

jointly determined by individual attitude and subjective norms. TRA is a modification of the Theory of Planned Behaviour. According to Shih (2004a), TRA was derived by including behavioural control as determinant of behaviour. Both theories (TRA and TPB) have been extensively studied in social psychology. Overall, TAM is superior to both TRA and TPB in predicting information system user’s behaviour (Davis et al., 1989; Shih, 2004b).The original TAM which incorporates the following constructs namely: external variables, perceived usefulness, perceived ease of use, attitude towards using, behavioural intention to use and actual system usage. According to Mulero (2012), the original idea of the theory is that perceived usefulness and perceived ease of use directly influence the users’ intention to use a new information technology (IT). Figure 2.5 below gives a precise account of TAM in its original state.

Explaining the two main beliefs of the model namely: perceived usefulness (PU) and perceived ease of use (PEOU), thus Davis (1989) description. According to him, PU refers to the degree which a prospective user believes that a particular information system would enhance his or her job performance. That is a system high in perceived usefulness is one for which a user believes in the existence of a positive use-performance relationship. That is s/he believes that using the system would improve his or her performance. On the other hand, still from figure 2.5, PEOU refers to the degree to which a prospective user believes that using a particular system would be free of effort (Dave, 1989). Effort in this context refers to the finite resources that a person may allocate to various activities for which he or she is responsible. It is most likely that an application perceived be easier to use than another will be accepted by users. In the past decades, this model has been employed to predict users’ acceptance of information systems.



**Fig. 2.5 Technology Acceptance Model**

**Source:** Davis (1989), Perceived usefulness, perceived ease of use, and user acceptance of information technology’, MIS Quarterly, Vol. 13, No. 3, pp. 319-40.

### 2.3 Empirical Review

Most recently was the study by Ofuonyebuzor and Auwal (2016), to assess the impact of self service delivery and subscribers’ usage in Glomobile, Zaria, Nigeria, with emphasizes on actual adoption and usage of self-service using the Technology Acceptance Model (TAM). Primary data from a close ended adapted questionnaire issued to 132 walk-in subscribers of Glomobile, Gloworld, Zaria were subjected to descriptive analysis, simple linear regression, t statistics and f statistics, ANOVA and Durbin Watson to measure 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 organisation should go for technologies that give them an edge in satisfying customers’ demands.

A study on the psychology of customer self-service, Curran, Meuter, and Supernant, (2003) observed there are multiple factors driving customers to use specific SST, including overall attitude towards service related technologies, global attitudes towards the specific firms and attitude towards its employee. It was also observed that consumers view services encounter as social experience and prefer to deal with people instead, given these diverse and disassociated behaviours of customers, there is need, therefore for firms to take that into cognizance. According to Lovelock and Wirtz (2011), self service technologies (SSTs) pose both advantages and disadvantages for their customers. According to Dabholkar (1996), Bitner et al., (2000), and Dabtolker (2003), using SSTs brings about benefits such as time saving, cost saving, flexibility, convenience, location, greater control, on service delivery and higher perceived level of customization which would lead to fun, enjoyment and spontaneous delight. On the other hand, Mick and Fournier (1998), explained that usage of SSTs could lead to anxiety as some consumers feel uncomfortable using them. They observed that some customers see the introduction of SSTs into the service encounter as something to worry about, causing further anxiety and stress.

## III. RESEARCH DESIGN AND METHODOLOGY

### 3.1 Research Design

The cross-sectional survey method was employed in this study. Survey method, according to Anyanwu (2000), is the investigation of the behaviour or other manifestations of a group of people by questioning them. Onodugo, Ugwuonah and Ebinne (2010) described the survey method as that aimed at examining the current opinions, behaviours, and other characteristics of a group of people. According to Anyanwu (2000), a cross-sectional survey design involves studies

which are done at one or more points in time as against a longitudinal study where time is considered a factor responsible for changes in the independent variables. This study investigates the opinion of a group of people at particular point in time, hence the choice of the cross-sectional survey research design. The group of people in this study to be questioned are MTN customers in Kogi State, Nigeria.

### 3.2 Study Area

The area of this research is Kogi State of Nigeria. Kogi State is selected as the study area because, in the opinion of the researcher, the state is “strategic sample point” sharing boundaries with 10 other states including the Federal Capital Territory (FCT). Kogi State has a land mass of 30,354.74 km<sup>2</sup>, and is situated between latitude of 6°30’N and 8°50’N and longitude 5°51’E and 8°00’E. The state is the 15<sup>th</sup> largest state in the country with a total population of 3,314,043 based on 2006 census figure. The state consists of 21 local government areas. Based on the last population the Kogi state population forecast is 3,727,347 (Population Council and National Bureau of statistics, 2016)

### 3.3 Population of the Study

The total population of the study comprises of all MTN’s customer in Kogi State of Nigeria. Available data of the industry review of market share for the month of April, retrieved from the official website of National Communications Commission on 20th of August 2022, was used to estimate total MTN’s subscribers in Kogi State based on the state’s forecast population by Population Council and National Bureau of statistics in relation to the other 36 states and the FCT. Therefore, estimated number of active MTN’s subscribers in Kogi State is 1,522,605.

### 3.4 Sample Size Determination.

The sample size for MTN’s subscribers in Kogi State was determined or computed using an equation known as Stat Trek’s Sample formula. The formula is given by:

$$n = \frac{z^2pq + e^2}{e^2 + (z^2pq/N)} \quad (\text{Bartlett, Kotrlik and Higgins, 2001})$$

Where,

- n = sample size
- z = desired confidence level 95% (1.96) from z-distribution table
- p = proportion of the population likely to be included in the sample (50% or 0.5).
- q = proportion of the population not likely to be included in the sample (50% or 0.5)
- e = level of significance (assumed to be 5% or 0.05)

N = population size (established at 1,522,605).

In statistics alpha (α) is known as the level of significance or alternately, the level of error the decision maker is willing to tolerate in terms of rejecting a null hypothesis when it should not be rejected (Gujarati, 2006:109, Berenson and Levine, 1983: 284) cited in Ogbonna (2011:242).

Applying this formula to a population of 1,522,605 being the total of MTN’s subscribers in Kogi State at 5% level of precision (level of tolerable error, 0.05) to get the sample size. Substituting in the formula, we obtain:

$$\begin{aligned}
 n &= \frac{(1.96^2 \times 0.5 \times 0.5) + 0.05^2}{0.05^2 + (3.8416 \times 0.5 \times 0.5 / 1,522,605)} \\
 n &= \frac{(3.8416 \times 0.5 \times 0.5) + 0.0025}{0.0025 + (3.8416 \times 0.5 \times 0.5 / 1,522,605)} \\
 &= \frac{0.9604 + 0.0025}{0.0025 + (0.9604 / 1,522,605)} \\
 &= \frac{0.9629}{0.0025 + 0.0000007134} \\
 &= \frac{0.9629}{0.002500630} \\
 &= 385.062846
 \end{aligned}$$

**IV. PRESENTATION AND ANALYSIS OF DATA**

In chapter three on methodology and research design the framework for data collection and hypotheses testing was presented. Chapter two captured the review of related literature in three segments (the conceptual framework, the theoretical framework and the empirical review). The introductory part, chapter one, offered directions for this work with a set research objectives. This chapter is about the presentation, analysis and interpretation of data generated through structured questionnaire instrument administered to the respondents in line with the set objectives and research questions. Descriptive statistical tool was used to produce tables, with simple percentages and parametric inferential statistical was used for analysis and interpretation. The chapter spans opinions of MTN subscribers in Kogi state on the self-service platforms available to them; and attempt was made to use such responses to measure how the two (2) constructs, identified in the adopted model to predict adoption behaviours of respondents.

**4.2 Descriptive Statistics**

This section reports response rate, demographical characteristics of respondents, preferred MTN online self-service options, MTN online self-service usage, also presented are reports on the perception of respondents in terms of MTN online self-service usefulness, and ease of use.

**Table 4.1:** Usefulness of MTN Self-Service

Options	Frequency	Percentage	Cumulative Percent
Not useful	36	9.4	9.4
I don’t know	24	6.3	15.7
Useful	321	84.3	100.0
Total	381	100.0	

Source: Field Survey, 2022.

Table 4.1 shows that out of 381 participants, 36 (9.4%) mentioned that MTN self-service is not useful while 24(6.3%) are undecided and the majority 321(84.3%)

mentioned that MTN self-service is useful. This result indicates that MTN self-service is useful to its customers.

**Table 4.2:** MTN Self-Service Ease of Use

Options	Frequency	Percentage	Cumulative Percent
Not Easy	34	8.9	8.9
I don’t know	40	10.5	19.4
Very Easy	307	80.6	100.0
Total	381	100.0	

Source: Field Survey, 2022.

From table 4.2, the result shows that 34 (8.9%) participants mentioned that MTN self-service is not easy to use while 40 (10.5%) are undecided and 307(80.6%) mentioned that it is

easy to use. This therefore implies that MTN self-service is easy to use.

S/N	ITEMS	VL	L	SH	H	VH	TOTAL	W/MEAN	SD
PU1	To what extent do you find MTN online self-service useful for your purpose?	0	2	20	69	290	381	4.70	.59
		0	.5	5.2	18.1	76.1	100		
		0	4	60	276	1450	1790		
PU2	To what extent does MTN online self-service help you save time?	0	0	22	64	295	381	4.72	.57
		0	0	5.8	16.8	77.4	100		
		0	0	66	256	1475	1797		
PU3	To what extent do you derive benefit using MTN online self-service?	0	1	21	99	260	381	4.62	.60
		0	.3	5.5	26.0	68.2	100		
		0	2	63	396	1300	1761		
PU4	To what extent does MTN online self-service allow you access to telecommunications services at the time you want?	0	1	21	75	284	381	4.69	.59
		0	.3	5.5	19.7	74.5	100		
		0	2	63	300	1420	1785		
PU5	To what extent does MTN online self-service allow you access to telecommunications services at the place you want?	0	1	26	68	286	381	5.50	.61
		0	.3	6.8	17.8	75.1	100		
		0	2	78	584	1430	2094		

**Table 4.3:** Frequencies on Items of Usefulness  
**Source: Field Survey, 2022.**

**Table 4.4:** Frequencies On Items Of Ease Of Use

**Table 4.5 Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.782 <sup>a</sup>	.611	.610	.48161	1.931

a. Predictors: (Constant), PU

b. Dependent Variable: MTN ONLINE SELF-SERVICE

**Source: Field Survey, 2022.**

**Table 4.6 ANOVA**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	138.156	1	138.156	595.639	.000 <sup>b</sup>
	Residual	87.907	379	.232		
	Total	226.063	380			

a. Dependent Variable: MTN ONLINE SELF-SERVICE

b. Predictors: (Constant), PU

S/N	ITEMS	VL	L	SH	H	VH	TOTAL	W/MEAN	SD
PEOU1	To what extent is MTN online self-service easy to operate?	0	2	27	70	282	381	4.66	.63
		0	.5	7.1	18.4	74.0	100		
		0	4	81	280	1410	1775		
PEOU2	To what extent are the terms and conditions on MTN online self-service clear?	0	3	29	64	285	381	4.66	.65
		0	.8	7.6	16.8	74.8	100		
		0	6	87	256	1425	1774		
PEOU3	To what extent is learning to use MTN online self-service is easy?	1	3	25	87	265	381	4.61	.67
		.3	.8	6.6	22.8	69.6	100		
		1	6	75	348	1325	1755		
PEOU4	To what extent are the interactions or navigation on MTN online self-service platform made easy?	1	2	28	97	253	381	4.57	.68
		.3	.5	7.3	25.5	66.4	100		
		1	4	84	388	1265	1742		
PEOU5	To what extent do you find it easy to do what you want to do on the MTN online self-service platform?	1	3	26	75	276	381	4.63	.68
		.3	.8	6.8	19.7	72.4	100		
		1	6	78	300	1380	1765		

**Table 4.7** Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	7.786	.268		29.064	.000
PU	1.334	.055	.782	24.406	.000

a. Dependent Variable: MTN ONLINE SELF-SERVICE



**Result Summary**

R = .782  
 R<sup>2</sup> = .611  
 F = 595.639  
 t = 24.406  
 DW = 1.931

**Table: 4.8 Model Summary**

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate	Durbin-Watson
1	.673 <sup>a</sup>	.452	.451		.57152	1.971

a. Predictors: (Constant), POEU  
 b. Dependent Variable: MTN ONLINE SELF-SERVICE

**Table: 4.9 ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	102.269	1	102.269	313.100	.000 <sup>b</sup>
	Residual	123.794	379	.327		
	Total	226.063	380			

a. Dependent Variable: MTN ONLINE SELF-SERVICE  
 b. Predictors: (Constant), POEU

**Table: 4.10 Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.067	.272		22.276	.000
	POEU	.992	.056	.673	17.695	.000

a. Dependent Variable: MTN ONLINE SELF-SERVICE

## Result Summary

R	= .673
R <sup>2</sup>	= .452
F	= 313.100
t	= 17.695
DW	= 1.971

## 4. DISCUSSION OF MAJOR FINDINGS

The result of the study shows that perceived usefulness significantly affect individual's decision to use MTN online self-service in the area ( $r = .782$ ;  $F = 595.639$ ;  $T = 24.406$ ;  $p < .000$ ). This study agree with previous findings by Mulero (2012) which reported that perceived usefulness are the strongest determinants in predicting user's intention to use social network marketing (SNM). This findings is due to the fact that, individuals would always choose to engage in profitable activities. In other words, the customers of MTN will only utilize effectively various self-service plate forms available in MTN network if only it meet the demand at hand. Also, customer of MTN would see the need to actually use self-service when such service could be accessed at their convenient time. This finding is also supported by Ofuonyebuzor and Auwal (2016) in their report.

Also, the result of the study shows that perceived ease of use significantly affect individual's decision to use MTN online self-service in the area ( $r = .673$ ;  $F = 313.10$ ;  $T = 17.695$ ;  $p < .000$ ). In the modern era, with intense competition, customers utilization of a service or product is great been determined by the simplification of such services or product. It therefore stands according this findings that MTN online self-services terms and condition, easy of learning and easy of navigation//interaction determining its adoption. According Dabholkar (1996), Bitner et al., (2000), and Dabtolker (2003), the use of self services brings about benefits such as time saving, cost saving, flexibility, convenience, location, greater control, on service delivery and higher perceived level of customization which would lead to fun, enjoyment and spontaneous delight. The study is also supported by Yi and Hwang (2003) which revealed that perceived usefulness and perceived ease of use influenced the decision to accept through behavioural intention.

## 5. MAJOR FINDINGS CONCLUSION AND RECOMMENDATION

### 5.1 Summary of Findings

It was established that:

- Perceived usefulness has a significant and positive effect on adoption of MTN online self-service in the area. This finding is consistent with previous findings by Mulero (2012), Ofuonyebuzor and Auwal (2016), in their report. However, the finding is inconsistent with

Gefen and Straub (2000) and Folorunso, Ateji and Awe (2010).

- Perceived ease of use significantly and positively influences the adoption of MTN online self-service in the area. Dabholkar (1996), Bitner et al., (2000), Dabtolker (2003), and Yi and Hwang (2003) all support the finding.

### 5.2 Conclusion

Diffusion of innovation ultimately determines the pace of economic growth and more directly, the rate of improvement in service delivery through value creation. According to Hall and Kahn (2002), until many users adopt a new technology it may contribute little to economic development and well-being of a society. Recently, the telecommunications industry has witnessed proliferation of applications for mobile phones, some of which are designed for self-service delivery that links the mobile users and their network providers and even third-parties. Therefore, the network providers facilitate online mobile transactions however complex. The MTN online self-service options constitute the totality of the firm's self-service delivery system which is supported by new technologies in the telecommunications sector. This study was on adoption of MTN online self-service by subscribers in Kogi state. The model formulated attempted to explain the following constructs as antecedents to customers intention to use the MTN online self-service options (i.e. the MTN interactive voice response option of its online assistance centre, the MTN web self-service and the MTN self-care App): perceived usefulness, perceived ease-of-use. Following the interpretation of the results, the findings of the study infer that perceived usefulness and perceived ease-of-use are antecedents of MTN online self-service adoption by subscribers in Kogi state of Nigeria.

### 5.3 Recommendations

Based on the conclusions drawn from the findings of the study, the following recommendations are made to guide managerial decisions.

- ❖ MTN and other related firms should consider the two antecedents of online self-service adoption (i.e. perceived usefulness, and perceived ease-of-use.
- ❖ Since perceived usefulness has a higher influence on MTN online self-service adoption, telecommunications firms, MTN in particular

should consider it paramount and ensure that efforts are directed towards broadening the minds of customers about the importance of using the self-service options.

- ❖ Since perceived ease-of-use also determines the adoption of MTN online self-service, telecommunications firms, MTN in particular should ensure that adequate product information is made available on the MTN online self-service options to subscribers and that updates are communicated timely to educate on how to effectively use the platforms. This could be achieved through design and print of leaflets, and pop-up menu designed purposely to guide new users. Also self-service programmers in the telecommunications should endeavour to come up with more user-friendly and easy to operate self-service applications.

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Appendix I

QUESTIONNAIRE

SECTION A: BIO-DATA

1. Sex: (a) Male [ ]  
(b) Female [ ]
  
2. Age: (a) less than 20 year [ ] (b) 20 – 29 years [ ]  
(c) 30 – 39 years [ ] (d) 40 – 49 years [ ]  
(e) 50 years and above [ ]
  
3. Educational qualification:  
(a) Secondary school [ ] (b) Undergraduate (ND/HND/B.Sc) [ ]  
(c) Graduate (ND/HND/B.Sc) [ ] (d) Masters [ ] (e) Ph.D [ ] (f) Others [ ]  
Please specify .....
  
4. Occupation ( for the purpose of this study, I am primarily)  
(a) A student [ ] (b) Member of business/corporate organization [ ]  
(c) Member of a government organization [ ] (d) An entrepreneur [ ]  
(e) Others [ ] Please specify .....

SECTION B: MAIN QUESTION

5. Which of this MTN self-service option do you know?  
(a) Online customer assistance centre (self-service option) [ ]  
(b) Web self-service (WSS) option [ ]  
(c) Self-care Application [ ]
  
6. Do you use any of the self-service options?  
(a) Yes [ ]  
(b) No [ ]
  
7. How long have been using the MTN online self service?  
(a) Below one year [ ]  
(b) One year [ ]  
(c) Two years [ ]  
(d) Three years and above [ ]
  
8. How often do you use the MTN online self-service?  
(a) Very often [ ]  
(b) Often [ ]  
(c) Sometimes [ ]  
(d) Never [ ]

**“A Survey of Customer Acceptability of MTN Self-Service Delivery in Kogi State Nigeria”**

Note: PU = Perceived usefulness; PEOU = Perceived ease of use; SA = Strongly agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly disagree

S/N	ITEMS	PROPOSITIONS	SA	A	N	D	SD
8.	<b>PERCEIVED USEFULNESS</b>	I find MTN online self-service useful for my purpose.					
9.		Using MTN online self-service helps me save time.					
10.		There is enough benefit derived using MTN online self-service.					
11.		Using MTN online self-service allows me access to telecommunications services at the time I want.					
12.		Using MTN online self-service allows me access to telecommunications services at the place I want.					
13.	<b>PERCEIVED EASE-OF-USE</b>	The MTN online self-service is easy to operate.					
14.		Instructions on MTN online self-service are clear and unambiguous.					
15.		Learning to use MTN online self-service is easy for me.					
16.		Interactions or navigation on MTN online self-service platform does not require a lot of mental effort.					
17.		I find it easy to do what I want to do on the MTN online self-service platform.					
19.		On MTN online self-service my complaints enquiries are promptly addressed.					
20.		Generally, MTN online self-service platforms have no hidden charges.					
21.		I believe my personal information which I provided on MTN online self-service is kept confidential.					