

# Effect of Cashless Economy on the Performance of Micro, Small and Medium Scale Enterprises in Anambra State, Nigeria

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**Abstract:** *The study examined the effect of cashless policy of the government on the performance of MSMEs in Anambra State, using the cashless channels of internet/online banking services, automated teller machine services and the mobile banking services as the independent variables. The literature of the study was segmented into four main sections namely; conceptual review, theoretical framework, theoretical exposition and empirical review. The study adopted descriptive survey design. Major statistical tools of analysis include summary statistics of percentages, Pearson correlation and multiple regression analysis. All tests were conducted at 0.05 level of significance. Preliminary results showed that F-Statistic is 23.516 and it is significant because 0.000 is less than 0.05. Regression coefficient of 0.627 shows that 62.7 percent relationship exists between the dependent and independent variables. Also, coefficient of determination  $R^2$  is 0.678 and it shows that 67.8 percent variations in the dependent variable can be explained by the independent variables. Major findings are that internet/online banking services, automated teller machine services and mobile banking services have positive and significant effect on the performance of MSMEs in Anambra State. The study concludes that technological innovations have brought about unprecedented achievement in the banking industry which has led to enhanced performance in the MSMEs sector. However, only those with the capacity to access the services will benefit more. It was recommended among others that there should be awareness creation and sensitization about the usefulness of cashless channels so that businesses and the general public can avail themselves of the opportunities.*

**Keywords:** Cashless policy, MSMEs, Performance, Anambra State

## 1. Introduction

The rate of rapid development at global level has been so dynamic that it touches all aspects of human venture (Latifat and Alhassan 2015). Policymakers and development practitioners acknowledge the leading role of information and communication technologies (ICTs) for development (Dutta and Mia, 2009). Today, the world is becoming a global village, given the growing complexity of business portfolios and expansion of business groups, and the increase in decentralization in response to these changes (Tasmin. Abubakar & Josu, 2012). Thus, cashless policy services have been gaining ground around the globe. This offers banking industry a new leading edge of opportunities and challenges in the global banking market. Hence, the success of cashless economy services depends on the rate at which the new technology is adopted by the small and medium scale enterprises. Consequently, the factors that affect the small and medium scale enterprises will certainly be of concern to both bankers and policy makers (Shaukat and Zafarullah, 2010). The rapid changes in business operations in contemporary times in the form of technological improvement require banks in Nigeria to serve the small and medium scale enterprises. Cashless policy products are increasingly gaining ground as many small and medium scale enterprises receive them as panacea to problems of poor service delivery that has been bedeviling many banks for a long time (Dogarawa, 2005). However, experts posit that the rate at which Nigerians accept the products is far below expectation. This, according to some research findings, is due to lack of awareness about the products, inadequate legal framework and low technology.

Therefore, this study evaluated the effect of cashless policy on the performance of small and medium scale enterprises in South-East, Nigeria.

### 1.1 Statement of the Problem

All banks compete with each other to attract their customers in different ways by providing convenient, accessible and acceptable services or/and products to their customers. One of the most important of these services is cashless economy (electronic services) which have contributed significantly to reduction in the distance between costumers and the banks (Kannabira & Narayan, 2005). Today's banking situation demands continuous innovation in order to meet the yearnings and aspirations of the ever-demanding customers. Hence, banks need to roll out new products and services quickly and effectively, using latest cutting edge technology (Augusto, 2002). Cashless policy enable banks to improve their service delivery, decongest queues in the banking halls, enable customers withdraw cash 24/7, aid international payments and remittances, track personal banking transactions, request for online statements, or even transfer deposits to a third party account. Those services will undoubtedly impact significantly on the overall performance of small and medium scale enterprises. The small and medium scale enterprises on the other hand, stand to enjoy the benefit of quick service delivery, reduced frequency of going to banks physically and reduced cash handling, which will give rise to higher volume of turnover (Fagbuyi, 2003). However, these developments in the Nigerian banking industry seem not to have achieved their aims. Despite the effort of banks to ensure that customers reap the benefits of

e-banking, the bank is met with complaints from customers as regards, online theft and fraud, non-availability of financial services, payment of hidden cost of electronic banking like Short Message Services (SMS), for sending alert, mandatory acquisition of ATM cards, non-acceptability of Nigerian cards for international transaction, malfunctioning Automated Teller Machines (ATMs) and network downtime. Other problems observed that are associated with Nigerian's cash-based economy, which include: delays in financial transactions which can be caused by queue in the bank or ATM to collect cash, lack of network which affect mobile banking and Web, banking Spread of bacteria through handling physical cash, high rate of crime, terrorism and corruption. "People are always faced with the challenges of violent crimes (insecurity) such as, bank and ATM robberies" (Okafor, 2012). Based on the foregoing, the study examines the effect of cashless policy on the performance of small and medium scale enterprises in Anambra State, Nigeria.

## 1.2 Objectives of the Study

The main purpose of this study is to examine the effect of cashless policy on the performance of small and medium scale enterprises in Anambra State, Nigeria. The specific objectives are to:

- Examine the influence of internet banking on the performance of small and medium scale enterprises in Anambra State, Nigeria.
- Determine the effect of automated teller machines on the performance of small and medium scale enterprises in Anambra State, Nigeria.
- Evaluate the influence of mobile banking on the performance of small and medium scale enterprises in Anambra State, Nigeria.

## 1.3 Research Questions

In lines with the objectives of the study, the following research questions were raised to guide the study.

- How does internet banking influence the performance of small and medium scale enterprises in Anambra State, Nigeria?
- To what extent does an automated teller machine service affect the performance of small and medium scale enterprises in Anambra State, Nigeria?
- How does mobile banking services influence the performance of small and medium scale enterprises in Anambra State, Nigeria?

## 1.4 Statement of Hypotheses

The following null hypotheses were formulated to guide the study and strengthen the analysis.

- Internet banking services do not have positive significant effect on the performance of small and medium scale enterprises in Anambra State, Nigeria?
- Automated teller machine services do not have positive and significant influence on the performance of small and medium scale enterprises in Anambra State, Nigeria?
- Mobile banking services do not have positive and significant effect on the performance of small and medium scale enterprises in Anambra State, Nigeria?

## 1.5 Significance of the Study

The study has both theoretical and empirical significance. From the perspective of theoretical significance, the study will add to the existing stock of literature thereby expanding the frontiers of knowledge in the area of study. On the other hand, the empirical significance of the study stems from the fact that different categories of people will actually benefit from the findings. Those that will benefit include but not limited to the management of the banks who would be sufficiently enlightened on how to make the system more efficient; the operators of micro, small and medium scale enterprises (MSMEs) who would be given insight on how they can make effective use of the services and the students/researchers who will find the report very useful for starting further studies in the area.

## 1.6 Scope of the Study

The study took place in Anambra State, Nigeria covering the micro, small and medium scale enterprises (MSMEs) in the state. The variable scope is the effect of cashless economy on the performance of the MSMEs sector, using cashless policy delivery channels (Automate Teller Machine (ATM), Mobile Banking (MB) and Internet/Online Banking (OB) as the independent variables.

## 2. Review of the Related Literature

### 2.1 Conceptual Review

#### 2.1.1 Cashless Policy

Conceptually, cashless policy entails a drastic reduction in the handling of cash for transaction purposes, but relies heavily on the sending of electronic signals to banks for the payment and receipt of money on one's behalf in the process of exchange (Yusuf, Adedina and Egbekube, 2015). The cashless policy concept aims at reducing (not eliminating) the amount of physical cash circulating in the economy and encouraging more electronic based transactions (payment for goods and services as well as other transfers). It equally aims at preventing banks runs (Sloman, 2006). Nweke (2012) describes cashless policy to mean a situation where countries, especially developing ones would transit from a cash-based economic model to a cashless economic model. In other words, cashless policy is a combination of the cash-based payment system and electronic payment systems with the latter exceeding the former in terms of utilization (Ajayi, 2014).

#### 2.1.2 Online Internet Banking

Online/internet banking can be defined as an internet portal, through which customers can use different kinds of banking services ranging from bill payments to making investments online. It refers also to systems that enable small and medium scale enterprises to get access to their accounts and general information on bank products and services through bank's website, without the intervention on inconvenience of sending letters, faxes, original signatures and telephone confirmations (Simon and Thomas, 2016). It involves conducting banking transactions on the internet (www) using electronic tools such as the computer without visiting the banking hall. It is one of the cheapest service delivery for

bank products (Pikkarainen, Pikkarainen, Karjaluoto and Pahnla, 2004).

### 2.1.3 Automated Teller Machine (ATM)

Automated Teller Machine (ATM) has been defined by Abubakar and Tosmin (2012) as a computerized telecommunications device that provide the customers of a financial institution with access to financial transactions in a public space without the need of a human clerk or bank teller. Ali and Emenike (2016) perceive it as a computerized telecommunication's device that provide clients of a financial institution with access to financial transactions in a public space without the need for a cashier, human clerk or bank teller. Fenuga (2010) states that it is a machine where cash withdrawals are made over the machine without going into the banking hall. According to him, it also sells recharge cards of all networks as well as make transfers across all banks; it can be accessed 24 hours/7 days with account balance enquiries.

### 2.1.4 Mobile Banking (MB)

Olayemi (2002) defines mobile-phone banking as a service provided by a financial institution which allows its customers, micro, small and medium scale enterprises, persons and other business ventures to perform transactions over the mobile telephone. He further states that it enables the customer to check his/her account balances, give instruction for bill payment, transfer money between accounts in the same bank and other banks, make payment for goods purchased or services rendered. Mobile banking (also known as M-banking) is a term used for performing balance checks, account transactions, payments, credit applications and other banking transactions through a mobile device such as mobile phones or personal digital assistant (PDA). According to Worku, Tilahun and Tafa (2016), the earliest mobile banking services were offered over SMS, a service known as SMS banking. Mobile banking is used in many parts of the world with little or no infrastructure, especially remote rural areas.

### 2.1.5 Micro, Small and Medium Scale Enterprises

In the opinion of Ekpenyong (1992) in Osetimehin, Jegede, Akinlabi and Olajide (2012), there is no universally single accepted definition for MSME. This, according to him, is because classification of business into small and large scale is a subjective judgement. Furthermore, definitions of MSMEs vary both between countries and continents (Egbuogu, 2003). However, for the purpose of coherent national policy, the standard definition in order to provide a common objective of reference in Nigeria, SMEDAN (2007) gave a standard definition of the concept as presented in Table 2.1. The National Policy Document states that where there exist a conflict in classification/definition between employment and assets criteria (for example, if an enterprise has assets worth seven million naira (₦7m) but employed 7 persons), the employment based classification will take precedence and the enterprise would be taken as micro (Eubomwan, Ikpi, Okoruwa and Akinyosoye, 2013). This choice, according to them, is informed by the fact that employment-based classification tends to be relatively a more stable definition given that inflationary pressure may compromise the asset-based definition.

**Table 2.1:** Classification of MSMEs in Nigeria

Size Category	Employment (in persons)	Assets (₦ Million) (excluding cost of land and building)
Micro enterprises	Less than 10	Less than 5
Small enterprises	10 – 49	5 less than 50
Medium enterprises	50 – 199	50 less than 500

Source: Small and Medium Enterprises Development Agency of Nigeria (SMEDAN, 2007), Abuja.

### 2.1.6 Performance

Performance as a concept is perceived as being multidimensional in meaning (Obeja, 2008). Rarick (2011) defines performance as a measure of effectiveness in one's contribution against a set of standards set in response to organizational goals. To Basil (2010), it is a statement of the results that will exist when a job is satisfactorily performed in the eyes of the team leader. However, within the context of this study, performance would be measured in terms of the extent that micro, small and medium scale enterprises sector have been able to fulfill the expectations of being the major source of employment generation, poverty alleviation and economic empowerment (Eniola, 2014).

## 2.2 Theoretical Framework

The study was anchored on Diffusion of Innovation Theory (IDT). The process of adopting new innovations has been studied for over 30 years and one of the most adaptation models is described by Rogers in his book "diffusion of innovation" (2003). He offered the following description of an innovation. An innovation is an idea, practice or project that is perceived as new by an individual or other unit of adaptation (Roger, 2003). An innovation may have been invented longtime ago, but if individual perceive it as new, then it may still be an innovation for them. The newness characteristics of an adoption are more related to the three steps (knowledge, persuasion and decision) of the innovation-decision process. In addition, roger claimed there is a lack of diffusion research on technological clusters. For Roger (2003), "a technology cluster consists of one or more distinguishable elements of technology that are perceived as being closely interrelated. In general (IDT) explains individuals' attention to adopt a technology as a modality to perform a traditional activity. The critical factors that determine the adoption of an innovation at the general level are the following: relative advantage, compatibility, complexity, trialability and observability (Moga, 2010). Many banks have found it advantageous to adopt ICT in their operation in order to improve their efficiency. This is achieved through development of websites and mobile applications that suit the customer needs. Customers are therefore able to access their accounts anywhere as long as they are connected to the internet. This theory is concerned with the manner in which a new technological idea, artifact or technique, or a new use of an old one, migrates from creation to use. According to IDT, technological innovation is communicated through particular channels, over time, among the members of a social system.

The stages through which a technological innovation passes are: knowledge (exposure to its existence, and understanding of its functions); persuasion (the forming of a favourable



attitude to it); decision (commitment to its adoption); implementation (putting it to use); and confirmation (reinforcement based on positive outcomes from it) (Arnaboldi & Claeys, 2008). In the same way internet banking has been enhanced due to cyber threats and fraud. Early users generally are more highly educated, have higher social status, are more open to both mass media and interpersonal channels of communication, and have more contact with change agents. Mass media channels are relatively more important at the knowledge stage, whereas interpersonal channels are relatively more important at the persuasion stage. Innovation decisions may be optional (where the person or organization has a real opportunity to adopt or reject the idea), collective (where a decision is reached by consensus among the members of a system), or authority-based (where a decision is imposed by another person or organization which possesses requisite power, status or technical expertise). Barnes and Corbitt (2013) advice that managers need to understand the capabilities of any particular technology and the benefits that ensue from its use in considering what technology to use with their operations, as well as understand associated costs and limitations of operating that technology. He advises the general issues to consider as the volume and variety of output that the technology can achieve, the fit with existing technology used with the organization and the level of maturity of the technology. The IDT theory explains the necessity of adopting technology in an organization to replace the traditional system of management and administration as well as model of service provision if it is service orientated. A theory is normative in nature as it aims to establish structures. Electronic banking heavily relies on the ICT since it is carried out on the internet. Customers are able to access their accounts remotely without having to physically visit the bank.

### 2.3 Theoretical Exposition

Globalization and competition in business environment across the globe has made internet banking very attractive to businesses, including the operators of MSMEs. Consequently, Nigerian banks and other financial institutions cannot but key into the trend of technological improvement of the contemporary times. Cashless policy idea of the Nigerian Government aims at reducing a person's power to keep his/her purchases in paper currency. It aims further to curb some of the negative consequences associated with the high usage of physical cash in the economy, including: high cost of cash; high risk of using cash in transactions; high subsidy; informal economy and inefficiency and corruption that goes with it (CBN Website, 2013). According to Olu (2011), cashless society is the one in which physical cash as a transaction medium is reduced to the barest minimum. A situation where money is spent without carrying it (physical cash) from one person to another. The system does not suggest in anyway, total elimination of cash as money will continue to be a medium of exchange for goods and services in the foreseeable future. Rather, it is a financial environment that minimizes the use of physical cash by providing alternative channels (internet banking, automated teller machine and mobile banking) for making payments (Ajayi, 2014).

On line/internet banking, with the exception of cash withdrawals, at the click of a mouse gives micro, small and medium scale enterprises as well as other categories of businesses access to almost any type of banking transactions. Its use as a new alternative channel for the distribution of banking services has become a competitive necessity instead of just a way to achieve competitive advantage with the advent of deregulation, globalization, technological innovation and competition (Abubakar and Tasmin, 2012). By this innovation, operators in the MSMEs sector are better off because transactions and business management has been made a lot more easy. A business owner can stay within the comforts of his/her bed room and carry out a transaction that could have consumed an hour or more to complete in just few minutes. Online/internet banking has brought about tremendous improvement in the management of business enterprises among the operators of MSMEs in the state.

On the other hand, Automated Teller Machine (ATM) is a machine where cash withdrawals are made without going to the banking hall. It is available for use 24 hours every day. In today's business environment, globalization and international experience have become critically important hence Ayo, Adewoye and Oni (2011) posit that banking industry can no longer get away with operating loosely connected groups of businesses that happen to be located around the world, but must tactically synchronize their operations to suit their clients or customers. They maintained further that it is only the banks, businesses, industries and any other segment of the community that clearly understand the new rules of doing business in a global business economy that will succeed. In view of this, global competition in the banking sector has compelled management and executives to recognize that they must think differently about banking and management operations, especially of the MSMEs. Today, ATMs are not placed only in the banks or inside their premises but also in locations such as shopping malls, airports, grocery stores, petrol/gas stations, restaurants, cinema houses, clubs, hotels, churches, mosques, train and bus stations and any such place large enough for people to gather and carry out different kinds of transactions (Hazlina et al, 2011). ATM services have become a great facilitator of quick small cash withdrawals and transfers and it has brought a lot of ease in business operations, especially for the small businesses in Nigeria.

Concerning the effect of mobile banking (MB) on MSMEs sector operations, the benefits are numerous. Personal mobile phone banking provides quality and efficient banking services through the combination of self-services, voice system and call center representatives (Martila and Martila, 2005). They listed some benefits of personal mobile-phone banking services to MSMEs to include balance checks, account transactions, payments, credit applications and other formal banking transactions which have brought so much efficiency in business operations. As a form of electronic banking, mobile phone banking prevents transaction friction that often occur during the use of physical cash in transactions (Ajayi, 2014). Therefore, cashless banking is that banking system which aims at reducing, but not eliminating totally, the volume of physical cash in

circulation. In other words, it is a combination of e-banking and cash-based system (Ajayi, 2014).

## 2.4 Empirical Review

In a study, Okeke (2017) investigated the effect of cashless policy on the development of small and medium scale enterprises in Anambra State. The study used descriptive survey method. Major statistical tools of analysis were Pearson correlation and multiple regression analysis. The result of the analysis showed that automated teller machine, point of sale and mobile banking have positive and significant effect on the development of small and medium scale enterprises in Anambra State. The study concluded that with more awareness being created about the usefulness of cashless practices, SMEs will perform better. In a related study, Chuwa (2015) investigated the factors influencing the adoption of internet banking by small and medium enterprises (SMEs) in Nyamagana District, Mwanza-Tanzania. The study adopted descriptive survey design. The result of the analysis showed that demographic factors such as age, income, education, etc influences the adoption of internet banking. It was also revealed that perceived relative advantage, compatibility, complexity, risk and cost also affect the rate of adoption of internet banking by SMEs in the state. The study concludes that social influence, including the opinion of friends, parents and colleagues negatively affects the use of internet banking by SMEs in Tanzania.

Kirigano, Muturi and Atandi (2016) examined the effect of mobile phone transfer applications on performance trend of MSMEs in Kitale Town, Nairobi. Descriptive survey design was used for the study. Statistical tool of analysis was Pearson product moment correlation. The result showed that positive and strong relationship exists between mobile phone transfer service innovation and enterprises performance. The study concludes that when such innovations are used, they help to bring customers leading to more business income. In a similar study, Kombe and Wafula (2015) investigated the effects of internet-banking on financial performance of financial institutions in Kenya. The study adopted descriptive survey design. The results indicate that the impact of ICT adoption on the performance of banking sector mainly reflected on time reduction and quality of service rather than cost reduction as reported by other authors in past studies. In the same vein, Ali and Emenike (2016) carried out a study on the impact of automated teller machine on banking service delivery in Nigeria. The design for the study was descriptive survey method. Regression analysis was used in the analysis and the result showed that ATM transactions positively and significantly impacts private demand deposits in Nigeria but not private sector savings deposit and private sector time deposits.

Okereke (2016) conducted a study on the impact of automated teller machine (ATM) transaction values, point of sales terminal, internet banking and mobile banking transaction value on economic growth of Nigeria. The study used descriptive survey design and the result indicates that only point of sales terminal was significant to economic growth. The study concludes that ignorance, on the part of the users was responsible for insignificant contributions of

other instruments as well as inability of the banks to distribute the instruments to user across the country. In a related study, Njenga and Shale (2017) examined the role of electronic point of sales on supply chain performance in the retail sector of Kenya among selected supermarket chain in Nairobi county. Descriptive survey method was adopted for the study. The finding indicates that there is a positive and significant effect on supply chain performance.

Similarly, Omotayo and Dahunsi (2015) conducted a study to determine the factors affecting the adoption of POS by organizations in Lagos and Ibadan metropolis, Nigeria. The study adopted survey design and the results revealed that subjective norms and perceived ease of use have significant relationship with the adoption of POS machine by the organizations. Finally, Famiran and Odumeru (2015) investigated the determinants of mobile banking adoption in Nigeria, using a modified version of Technology Acceptance Model (TAM). The study used survey method and found from the analysis of data that perceived usefulness, ease of use, risks, facilitating conditions, age, education and income were significant determinants of mobile banking adoption.

## 3. Methodology

### 3.1 Research Design

The study adopted descriptive survey design because the result would be generalized for the entire population of interest. Ikeagwu (1997) cited in Ebebe (2019) observes that surveys of this nature would use survey method to look for information on facts, attitudes, practices and opinion of the respondents. Similarly, Nworgu (2006) notes that the adoption of survey method in studies enable the researcher to generalize the results of the study for the entire population of interest.

### 3.2 Area of the Study and Population

The study is carried out in Anambra State covering the MSMEs located in the industrial zones of Awka, Onitsha and Nnewi and environs. The following figures were obtained from the directory of MSMEs domiciled in the Ministry of Commerce and Industry, Anambra State: Awka, 237; Onitsha, 281 and Nnewi, 243 thus showing a population of 761 of firms that employed 5 persons and above that are document with the above authorities.

### 3.3 Sample Size Determination and Sampling Technique

Sample size for the study was determined through the application of a statistical formula developed by Borg and Gall in 1973. The estimation procedure is as follows:

$$n = (Z_{(\alpha)})^2 (e) [N]$$

Where:

- n = Sample size to be determined
- $Z_{(\alpha)}$  = Confidence level (1.960) at 0.05
- e = Error margin (0.05)
- N = Entire population of interest
- $\alpha$  = Significance level ( $\alpha$ )

Substituting in the formula, we have:

$$\begin{aligned} n &= (1.960)^2 (0.05) [761] \\ &= 3.8416 (38.05) \\ &= 146.17288 \\ n &= 146 \text{ (Nearest whole number).} \end{aligned}$$

Thus the sample size for the study is 146 MSMEs operators. However, in order to determine sample allocation to each zone, we applied proportionate sampling method given as follows:

$$n_i = \frac{nh_i}{N} \times n$$

Where:

- $n_i$  = Sample size for  $i$ th zone  
 $nh_i$  = Population of the  $i$ th zone  
 $N$  = Entire population of interest  
 $n$  = Sample size of the study

Substituting, we have:

1. Awka:  
 $n_1 = \frac{237}{761} \times 146 = 45$   
 2. Onitsha:  
 $n_2 = \frac{281}{761} \times 146 = 54$   
 3. Nnewi:  
 $n_3 = \frac{243}{761} \times 146 = 47$

**Table 3.1:** Population and Sample Distribution

S/N	Zone	Population	Sample Allocation	Percentage of Total
1.	Awka	237	45	31.2
2.	Onitsha	281	54	36.9
3.	Nnewi	243	47	31.9
	Total	761	146	100.0

Source: Field Survey, 2020

As could be seen from Table 3.1, the samples were allocated across the zones proportionately, depending on the population of interest in the zone. As regards the sampling technique, we adopted the systematic method in selecting the units of observation in the zones.

### 3.4 Instrument for Data Collection

We used an item structured instrument which was validated both in content and face as well as tested for reliability, for collecting the data. The reliability test which made use of test re-test, returned coefficients of 0.90, 0.80 and 0.83 with an average coefficient of 0.84, meaning that the instrument is 84 percent reliable and it was considered to be very adequate for the study.

### 3.5 Method of Data Collection and Analysis

The researcher made use of direct questionnaire distribution technique. In the process, she was able to assess whether the respondents actually understood the questionnaire items so that explanations or further clarifications may be made. The approach also reduced the non-response rate which often associate with surveys of this nature. Out of the 146 copies of the questionnaire that were issued out, 143 were completed and returned thus showing a response rate of 97.9

percent. With respect to method of analysis, frequency tables, correlation and multiple regression analysis were the major statistical tools used for the study. All tests were carried out at 0.05 level of significance.

### 3.6 Model Specification

The functional relationship between the dependent and independent variables is specified as follows:

$$\text{MSMEs } P = f(\text{IB, ATM, MB}) \quad (1)$$

Specifying econometrically, we have:

$$\text{MSMEs } P = \alpha_0 + \alpha_1 \text{ IB} + \alpha_2 \text{ ATM} + \alpha_3 \text{ MB} + \mu_t \quad (2)$$

Where:

MSMEs P= Micro, Small and Medium Scale Enterprises Performance

$\alpha_0$  = The intercept

$\mu_t$  = Stochastic error margin

IB = Internet banking

ATM = Automated Teller Machine

MB = Mobile banking

While  $\alpha_1, \alpha_2, \dots, \alpha_n$  are the coefficients of the variables to be estimated. The *a priori* or expected signs of the coefficients are as follows:

$$\alpha_1 > 0, \alpha_2 > 0 \text{ and } \alpha_3 > 0$$

or

$$\alpha_i > 0$$

The functional equation (model of estimation) shows that performance of MSMEs would depend on IB, ATM and MB.

## 4. Data Presentation and Analysis

### 4.1 Demographic Characteristics of the Respondents

Background information of the respondents such as gender, age, educational qualification, organizational tenure, etc, were analyzed in this section to determine the suitability of the respondents in terms of capacity to effectively respond to and discuss all issues relating to cashless concept and MSMEs performance in the state.

**Table 4.1:** Demographic Features of the Respondents

S/N	Demographic Feature	Frequency	Percentage of Total
1	Gender: Male	91	63.5
	Female	52	36.5
	<b>Total</b>	<b>143</b>	<b>100</b>
2	Age Interval:		
	18 – 27 years	12	8.1
	28 – 37 years	26	18.5
	38 – 47 years	51	35.7
	48 – 57 years	25	17.3
	58 and above years	29	20.1
	<b>Total</b>	<b>143</b>	<b>100</b>
3	Educational Attainment:		
	WAEC	19	13.3
	OND/NCE	45	31.5
	HND/First Degree	56	39.3
	Professional Cert.	13	9.2
	Masters degree	10	6.7
	Ph.D	-	-
	<b>Total</b>	<b>143</b>	<b>100</b>
4	Length of Time in Business:		

Below 5 years	24	16.9
5 – 10 years	48	33.2
11 – 15 years	59	41.3
16 and above years	12	8.6
<b>Total</b>	<b>143</b>	<b>100</b>

Source: Field Survey, 2020

The analysis of the demographic features of the respondents presented in Table 4.1 shows that male respondents are 91 (63.5 percent) and female respondents are 52 (36.5 percent) thus showing that the sample consists of more males than females. The table shows also that respondents within the age bracket of 28 years and above are 131 (91.9 percent). In

terms of level of education of the respondents, 124 representing 86.7 percent of the sample have qualifications ranging from Ordinary National Diploma (OND) or National Certificate of Education (NCE) to Masters Degree thus showing that the sample is fairly literate. Concerning the organizational tenure, 119 (83.1 percent) of them have been in business for upward of 5 years and above, thus indicating that they have gathered sufficient experience in their various sectors. The implication of the above result is that the respondents are in a position to effectively discuss all issues relating to the effect of cashless policy on the performance of their businesses.

**Table 4.2: Correlation Matrix**  
Correlation Analysis

Variables		MSMEs Performance	Internet Banking	Automated Teller Machine	Mobile Banking
MSMEs Performance	Pearson Correlation	1	.778**	.411**	.329*
	Sig. (2-tailed)		0	0.001	0.003
	N	143	143	143	143
Internet Banking	Pearson Correlation	.775**	1	.217*	.446*
	Sig. (2-tailed)	0		0.01	0
	N	143	143	143	143
Automated Teller Machine	Pearson Correlation	.411**	.217*	1	.505**
	Sig. (2-tailed)	0.001	0.01		0
	N	143	143	143	143
Mobile Banking	Pearson Correlation	.329*	.446*	.505**	1
	Sig. (2-tailed)	0.003	0	0	
	N	143	143	143	143

\*\* Correlation is significant at 0.05 level (2-tailed).

\* Correlation is significant at 0.01 level (2-tailed).

As could be seen from Table 4.2, positive relationship exists between and among the variables. However, some relationships are strong while others are weak but they are good enough to permit further analysis on the data as there are no multicollinearity or orthogonal relationship.

**Table 4.3: Summary of Analysis of Variance (ANOVA) for the Model, ANOVA<sup>b</sup>**

Source of Variation	df	Sum of Squares	Mean Square	F-ratio	Sig.
Regression	4	159.631	39.908	23.516	.000 <sup>a</sup>
Residual	70	118.765	1.697	-	
Total	74	278.396	-		

a. Predictor: (constant), internet banking, automated teller machine and mobile banking

b. Dependent variable: MSMEs Performance

Table 4.3 shows that F-Statistics is 23.516 and it is statistically significant because 0.05 is greater than 0.000. Therefore, the model is significant and valid for predictions.

**Table 4.4: Summary of Regression Results**

Model	R	R <sup>2</sup>	Adjusted R-Square	Standard Error of the Estimate	Durbin Watson
1	0.627 <sup>a</sup>	0.678	.581	3.749	1.709

a. Predictor: (constant), internet banking, automated teller machine and mobile banking

The regression results presented in Table 4.4 shows that regression coefficient represented by 'R' has a value of 0.627 and it means that 62.7 percent relationship exists between the dependent and independent variables. Similarly, the coefficient of determination represented by 'R<sup>2</sup>' with a

value of 0.678 shows that 67.8 percent variation in the dependent variable can be explained by the predictors. In the same vein, the Durbin Watson Statistic of 1.709 is an indication that the model does not contain autocorrelation.

**Table 4.5: Summary of Regression Coefficients, t-value and Probability Level**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	β	Std. Error	Beta		
1(Constant)	7.209	1.817	-	4.147	.000
Internet Banking	.615	.074	.461	4.752	.001
Automated Teller Machine	.058	.098	.603	3.097	.000
Mobile Banking	.085	.053	.618	2.483	.002

a. Dependent Variable: MSMEs Performance

Table 4.5 shows the coefficients of the individual variables, the t values and their corresponding probability levels. They would be used to take decisions on the null hypotheses in subsequent sections of the study.

### 4.3 Test of Hypotheses

The hypotheses were restated and tested in this section of the analysis. The tests were conducted at 0.05 level of significance.

1. H<sub>0</sub>: Internet banking services do not have positive and significant effect on the performance of MSMEs in Anambra State.



- H<sub>1</sub>: Internet banking services have positive and significant effect on the performance of MSMEs in Anambra State.
2. H<sub>0</sub>: Automate teller machine services do not have positive and significant effect on the performance of MSMEs in Anambra State.
- H<sub>1</sub>: Automated Teller machine services have positive and significant effect on the performance of MSMEs in Anambra State.
3. H<sub>0</sub>: Mobile banking services do not have positive and significant effect on the performance of MSMEs in Anambra State.
- H<sub>1</sub>: Mobile banking services have positive and significant effect on the performance of MSMEs in Anambra State.

### Interpretation of Regression Results

We interpreted the regression results in this section based on the coefficients, t-values and the corresponding probability levels as presented in Table 4.5. At the same time, decisions on null hypothesis were equally presented as follows:

The coefficient of internet banking services is represented in the model by  $\alpha_1$  and it has a value of 0.461 and it means that when internet banking services are increased by one unit, performance of the MSMEs will increase by 46.1 percent if other variables in the model are held constant. The t-value of 4.752 and its corresponding probability level of 0.001 shows that the coefficient is significant because 0.001 is less than 0.05. Consequently, the null hypothesis was rejected while the alternative which suggests that internet banking services have positive and significant effect on the performance of MSMEs in Anambra State was accepted.

In the same vein, the coefficient of automated teller machine services is represented by  $\alpha_2$  in the model and it has a value of 0.603 and it means that when it is increased by one unit, performance of the MSMEs will increase by 60.3 percent if other factors in the model are held constant. The t-value of 3.097 and its corresponding probability level of 0.000 shows that the coefficient is significant because 0.000 is less than 0.05. Therefore, the null hypothesis was rejected while the alternative which suggests that automated teller machine services have positive and significant effect on the performance of MSMEs in Anambra State was accepted.

Finally, the coefficient of mobile banking services is represented by  $\alpha_3$  in the model and with a value of 0.618, it means that when mobile banking services are increased by one additional unit, performance of the MSMEs sector will increase by 61.8 percent when other variables in the model are held constant. Similarly, the t-value of 2.483 and the corresponding probability level of 0.002 indicate that the coefficient is significant because 0.05 is greater than 0.002. Consequently, the null hypothesis was rejected given the weight of evidence against it, while the alternative which suggests that mobile banking services have positive and significant effect on the performance of MSMEs in Anambra State was accepted.

### 4.3 Discussion of Research Findings

From the result of the first test of hypothesis, it was revealed that internet/online banking services have positive and significant effect on the performance of MSMEs in Anambra State. The result is consistent with that of Okeke (2017) when he found from his study that internet mobile banking services have positive and significant effect on the development of SMEs in Anambra State. The result is also in line with that of Simon and Thomas (2016) when they found that the convenience of mobile and internet banking services affect performance of small and medium scale enterprises to a great extent. The results, as could be seen underscored the need for the operators in the MSMEs sector to intensify the use of internet/online banking as a platform of cashless policy in the management of their businesses in the state because it has shown to be useful.

The result of the second test of hypothesis shows that the use of automated teller machine services by the operators of MSMEs have positive and significant effect on their performance. The result is once more in line with that of Ali and Emenike (2016) when they found from their study that the use of automated teller machine services positively and significantly enhanced the transactions of the MSMEs in Nigeria. The automated teller machine services are quick services that enhance transactions at the bank because it makes it easy for the business operators and the banking public at large to skip many banking protocols if such transactions were to be carried out in the banking hall. The efficiency that goes with such service provision when aggregated, increases the employee as well as organizational productivity.

The result of the third test of hypothesis showed that the use of mobile banking services have positive and significant effect on the performance of the MSMEs in Anambra State. The result like others before it is equally consistent with that of Kiringano, Muturi and Atandi (2016) when they found that positive and significant relationship exists between mobile phone transactions innovations and the performance of enterprises. The new technology in banking services has made transactions a lot more easy for those that know the application. From all indications, the new innovation in banking services favour the micro, small and medium scale enterprises greatly because many of their transactions do not necessarily require physical presence in the banking hall. Therefore, for all the operators in the sector that can conveniently navigate through the platforms, it is indeed a great deal for them. Today, the world has become a global village given the supersonic technological breakthroughs achieved in past few years. It is note worthy however that it is only those who can use the platforms that can use the opportunities and benefit from the services that they offer to the businesses and the general public.

## 5. Summary of Findings, Conclusions and Recommendations

### 5.1 Summary of Findings

Preliminary results suggest that F-Statistic of 23.516 is an indication that the model is significant and therefore could



be used for predictions. Regression coefficient represented by 'R' has the value of 0.627 and it shows that 62.7 percent relationship exists between the dependent and independent variables. Similarly, the coefficient of determination 'R<sup>2</sup>' with a value of 0.678 shows that 67.8 percent variation in the dependent variable can be explained by the independent variables. The rest of results are as summarized below:

- 1) Internet/online banking services have positive and significant effect on the performance of the MSMEs in Anambra State.
- 2) The study revealed also that automated teller machine services have positive and significant effect on the performance of MSMEs in Anambra State.
- 3) The result of the study shows also that mobile banking services have positive and significant effect on the performance of MSMEs in Anambra State.

## 5.2 Conclusion

The study examined the effect of cashless policy on the performance of micro, small and medium scale enterprises in Anambra State. The cashless economy channels used in this study such as internet/online banking, automated teller machine and mobile banking were found to have positive and significant effect on the performance of the MSMEs in Anambra State. Cashless economy has become a necessary survival and efficient weapon and it is fundamentally changing the services of the banking industry worldwide for good. The new technological innovations in the banking industry is a revolution and only the MSMEs operators who have the capacity to avail themselves of the opportunities will benefit and grow their businesses based on the services provided under the platforms.

## 5.3 Recommendations

Based on the findings made from the study and the conclusion drawn from the study, the following recommendation were made:

- 1) There is need to create awareness and sensitize small business owners and the general public more on the usefulness of internet/online banking to increase the utilization and enhance business performance.
- 2) The result of the study in this section underscores the need for the management of the banking industry to increase the service points of the ATM to make them more accessible to those who want to use them as well as try to reduce the unethical issues that associate with its use.
- 3) Mobile banking has brought a lot of ease to businesses as the result in this section has indicated. Banks should work hand in hand with the MSMEs to collaborate more and work on how to increase the service outlets of point of sales (POS), reengineer them to make them more reliable in service delivery so as to win the banking public's confidence in them.

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## APPENDIX I

### Research Instrument

#### SECTION A: Personal Data

Instruction: (Please tick [✓] as appropriate in the boxes provided)

1. Gender: Male [1] ; Female [2]
2. Age Bracket:
  - (a) 18 – 27 years [1]
  - (b) 28 – 37 years [2]
  - (c) 38 – 47 years [3]
  - (d) 48 – 57 years [4]
  - (e) 58 years and above [5]
3. Educational Attainment:
  - (a) OND/NCE [1]
  - (b) HND/First Degree [2]
  - (c) Professional Cert. (ICAN, ANAN, CIB, etc) [3]
  - (d) Masters Degree [4]
  - (e) Ph.D [5]
4. Organizational Tenure:
  - (a) Below 5 years [1]
  - (b) 5 – 10 years [2]
  - (c) 11 – 15 years [3]
  - (d) 16 years and above [4]

## APPENDIX II

### Reliability Test for the Instrument

Reliability test was carried out to determine the adequacy of the research instrument for the study. The test procedure is as stated below:

$$r = 1 - \frac{6 \sum d^2}{n(n^2 - 1)}$$

Where:

r = the coefficient of correlation to be determined

n = number of response options

d = difference in rank order

1 and 6 = Constant

Volume 9 Issue 5, May 2020

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The value of the coefficient ranges between -1 to +1

#### Estimation of Reliability for Research Question I

Response Option	Result of 1 <sup>st</sup> Interview (x)	Result of 2 <sup>nd</sup> Interview (y)	R <sub>x</sub>	R <sub>y</sub>	R <sub>x</sub> – R <sub>y</sub> (d)	d <sup>2</sup>
Strongly agree	6	7	1	1	0	0
Agree	5	5	2	2	0	0
Disagree	4	3	3	4	-1	1
Strongly disagree	3	4	4	3	1	1
Undecided	2	1	5	5	0	0
Total	20	20				2

$$r = 1 - \frac{6(2)}{5(5^2 - 1)}$$

$$r = 1 - \frac{12}{120}$$

$$r = 0.90$$

#### Estimation of Reliability for Research Question II

Response Option	Result of 1 <sup>st</sup> Interview (x)	Result of 2 <sup>nd</sup> Interview (y)	R <sub>x</sub>	R <sub>y</sub>	R <sub>x</sub> – R <sub>y</sub> (d)	d <sup>2</sup>
Strongly agree	6	5	1	2	-1	1
Agree	5	7	2	1	1	1
Disagree	4	4	3	3	0	0
Strongly disagree	3	1	4	5	-1	1
Undecided	2	3	5	4	1	1
Total	20	20				4

$$r = 1 - \frac{6(4)}{5(5^2 - 1)}$$

$$r = 1 - \frac{24}{120}$$

$$r = 0.80$$

#### Reliability Estimation for Research Question III

Responses	Result of 1 <sup>st</sup> Responses (x)	Result of 2 <sup>nd</sup> Responses (y)	R <sub>x</sub>	R <sub>y</sub>	R <sub>x</sub> – R <sub>y</sub> (d)	d <sup>2</sup>
Strongly Agree	6	7	2	1	1	1
Agree	7	5	1	2.5	-1.5	2.25
Disagree	4	5	3	2.5	0.5	0.25
Strongly Disagree	2	2	4	4	0	0
Undecided	1	1	5	5	0	0
	20	20				3.5

$$r = 1 - \frac{6(3.5)}{5(5^2 - 1)} = 1 - \frac{21}{120} = 0.83$$