Electronic Financial Solutions and Performance of Small Scale Enterprises (SSEs) in South West, Nigeria

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Original Research Article

ABSTRACT

The study examined the effect of electronic financial solutions on performance of small scale enterprises (SSEs) in Southwest, Nigeria. Data were sourced from management and employees of SSEs operating within the Southwest geographical region of Nigeria. The study found that SMS transaction alerts channels, automated teller machine services, mobile banking applications and point of sale terminals have significant positive relationship with the performance of SSEs in Southwest, Nigeria. Implications of the findings from the study was that ease in terms of usage, cost effectiveness, convenience, assurance of website security, and accessibility has enabled SSEs to adopt electronic financial solutions for various business transactions. The study concluded that electronic financial solutions have significant effect on the performance of SSEs in Southwest, Nigeria. The study recommended that banks should strengthen the security of electronic payment system in order to reduce possible threat to users especially those within the SSE space. Also, there should be increased awareness of consumers which will accelerate adoption of the electronic payment platforms.

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1. INTRODUCTION AND PROBLEM STATEMENT

The use of effective and efficient payment systems by financial institutions in this technological age cannot be over emphasized. The pursuit of global relevance, increased market share, growth and sustainability by financial institutions have resulted in the adoption of information and communication technology platforms in providing financial solutions [1]. Beyond the financial industry, a nation's economic growth could be driven by affordable, secured, efficient and convenient payment system [2]. Most developing countries in African however have continued to depend on the usage of physical cash for monetary transactions within the economy. Nigerian economy is not an exception as majority of the population are unbanked especially in the rural areas [3,4]. This was corroborated by Yaqub et al. [5] noting that the Nigerian payment system is driven largely by cash making the economy to be cash-based [6-8].

Although, cash based transactions are advantageous in terms of convenience, yet it could be risky since only bank related transactions are subjected to regulatory oversight [5,9]. The apparent risk that comes with heavy cash handling includes; robberies, pilferage, revenue leakage, inefficient cash management, money laundering etc. [10,11]. Moreover, excess cash in circulation as huge cost implication. In Nigeria particularly, the cost of cash to the financial system is high with estimated direct cost to reach NGN 192 billion by the end of 2012 (Central Bank of Nigeria (CBN), 2011; [12]). Omotayo and Dahunsi [12] further noted that various costs incurred by apex regulatory body of financial institutions in Nigeria comes from printing of currency notes, sorting, cash movement, security related expenses etc. indicating that that cash as a mode of payment can be considered expensive for the Nigerian government. In addressing the issue of large cash holding, banks have thus adopted the use of internet technology to facilitate electronic payment and customer services [13,14]. These services are offered through platforms and devices such as; phone banking, mobile banking, internet payment systems and electronic financial solutions [15]. Electronic financial solutions are a welcome development for improving transaction processes within the economy in terms of efficiency and value of service to individual customers, institutions and business owners especially the small and medium scale enterprises (SMEs) [16-18]. SMEs are drivers of economy growth where adequately supported [19-20]. The acceptability and adoption of electronic financial solutions goes a long way in aiding transaction processes at the grass root while equally impacting on the performance and sustainability of SMEs. This was corroborated by Mutinda [21] noting that development of mobile money transfer services influences the development of market; enhance efficiency in service delivery in business; access to information and convenience and reliability.

The electronic financial solutions considered in the study are, automated teller machines (ATMs), mobile banking applications, SMS transaction alerts channels and point of sale terminals. Aliyu and Tasmin [22] noted that point of sales which is a form of electronic financial solution, is expected to affect the operations and performance of small scale enterprises in terms of transactional convenience, saving of time, quick transaction alert and cost saving. Notwithstanding the stated benefits of electronic financial solutions, there are issues of concern with regards to adoption of the various electronic platforms namely; online theft and fraud, poor network service, high online transaction costs, difficulty in making offshore payments. Matthew and Mike [10] particularly identified infrastructural deficits, erratic power supply, prevalence of e-fraud, high illiteracy level among others as part of the challenges faced by cashless policy while recommending the need for cyber-safety. This study was therefore prompted by the question of how the adoption of electronic financial solution channels has influenced the performance of SSEs in Southwest Nigeria. Specifically, the study examined the effect of each component of financial solutions namely; automated teller machine services, mobile banking services, SMS transaction alerts channels and point of sale service; on performance of SSEs in Southwest, Nigeria.

The study adopted southwest geographical region because it has large number of Small Scale Enterprises (SSEs) with huge volume of commercial transactions. Findings from the study would prove useful to business owners, researchers, and policy makers towards the growth and sustainability of SSEs in Nigeria.

2. LITERATURE REVIEW

Several studies have been conducted on the use of various components of electronic financial

solutions and performance of SMEs. For instance, the study conducted by Mutinda [21] on the effect of mobile phone based money transfers on the financial performance of small and medium enterprises in Nairobi, Kenya revealed a positive correlation between SMEs financial performance and business growth, efficiency in service delivery as well as access to information and convenience and reliability. The study employed descriptive survey method whereby copies of questionnaire were administered to elicit information from respondents. The results of the study were analyzed using descriptive and inferential statistics. The study recommended a comprehensive technology-to-performance model. Chuwa [23] on the other hand investigated the factors influencing the adoption of internet banking by small and medium enterprises (SMEs) within Nyamagana District of Mwanza-Tanzania. Survey research design was adopted by conducting interviews to elicit information from sampled respondents. 425 were interviewed and the responses were analysed and interpreted using graphs, tables and figures. The study found that psychological factors such as; perceived relative advantage, compatibility, complexity, risk, and cost greatly influence the adoption of internet banking while social influences including opinions of friends, parents and colleagues were not found to be significant factors towards the adoption of internet banking in Tanzanian.

The study carried out by Al Nahian Riyadh, Akter, and Islam [24] on the factors that affect SMEs' adoption of e-banking in Bangladesh adopted Technology Organization-Environment (TOE) framework, Technology Acceptance Model (TAM), Institutional Theory and Institutional Intervention Theory to develop an integrated conceptual framework for SMEs' e-banking which incorporates both the rationalistic goal oriented behavior of firms and the external forces of technology adoption. The study identified seven variables affecting e-banking adoption by SMEs. The variables identified were; organizational capabilities, perceived credibility, perceived regulatory support, ICT industries readiness, lack of financial institutions readiness and institutional influence. Additionally, Monge-Gonzalez [25] conducted a study on the impact of internet banking adoption by Banco Nacional de Desarrollo's micro and small enterprise (MSE) clients in Costa Rica on productivity, increase in sales, and cost reduction. The study sampled 41,702 firms and found that Internet use is limited in MSEs' daily operations because of limited access to computers and the relatively low penetration of Internet services in employees' activities and that most firms have limited knowledge about the uses of the Internet as a business development tool. The findings does not agree with expected benefits of adopting internet technology in terms of reduced costs, higher sales, and improved customer service delivery. Also, the study conducted by Nkwede [26] on financial inclusion and economic growth in Africa. The study employed time series financial inclusion data from Nigeria over 32 years from 1981 to 2013 which were analysed using Ordinary Least Square technique. The study noted that an inclusive financial system promotes economic growth. Morever, Matthew and Mike [10] noted that financial sector reform is an essential ingredient in the economic growth and developmental process of every nation with benefits such as increased convenience; reduced risk of cash related crimes; reduced cash handling cost, reduced revenue leakages among others.

3. RESEARCH METHODS

The study employed survey research design. Data for the survey conducted were sourced from primary sources. Primary data was obtained from selected SSEs in Southwest, Nigeria. The study population consisted of owners/managers and staff members of selected SSEs in Southwest, Nigeria out of which 370 respondents were purposively selected. A probabilistic sampling technique was employed in administering the survey questionnaire which allowed every respondents equal opportunity of being selected for the study. Copies of structured 5-likert scale questionnaire were administered to elicit information from the sampled respondents which were properly filled and returned valid. Descriptive and inferential statistics were employed in analyzing the data obtained. Reliability test was conducted using Cronbach-Alpha to ascertain the internal consistency of questions indicated in the questionnaire. The result of the alpha coefficient value was satisfactory (0.951), which showed that there was high degree of internal consistency of questions indicated in the questionnaire.

4. MODEL SPECIFICATION

The study variables consisted of one dependent variable and four independent variables. The independent variables are components of

electronic financial solutions which include: SMS transaction alerts channels (SMS_{TAC}), automated teller machine services (ATM_{SERV}), Mobile Banking applications (MB_{APP}) and Point of Sale terminals (POS_{TERM}). The dependent variable is the performance of SSEs (SSE_{PERF}).

The model adopted for the study followed that of Mbah and Obiezekwem [27] specified as follows:

$$Y = α + β1X1 + β2X2 + β3X3 + βnXn + ẹ \qquad (1)$$

The model for this study was then specified in a functional form as follow;

$$SSE_{PERF} = f(SMS_{TAC,} ATM_{SERV}, MB_{APP}, POS_{TERM}) \qquad (2)$$

$$SSE_{PERF} = α + β_1SMS_{TAC} + β_2ATM_{SERV} + β_3MB_{APP} + β_4POS_{TERM} + μ \qquad (3)$$

Where:

SSE_{PERF}	= Performance of SSEs
SMS_{TAC}	= SMS Transaction Alerts channels
ATM_{SERV}	= Automated Teller Machine Services
MB_{APP}	= Mobile Banking applications
POS_{TERM}	= Point of Sale terminals
α	= Constant Term
$β_1, β_2, β_3, β_4$	= Beta coefficients
μ	= Error Term

5. RESULTS AND DISCUSSION OF FINDINGS

5.1 Descriptive Statistics

Table 1 depicted the demographic information of respondents. The responses showed that respondents below 30 years constituted 11.9%, respondents from 31 to 40 years were 30.8%, respondents from 41 to 50 years were 40.5% and 51 & above years were 16.8%. Majority (73.2%) of the respondents are involved in SSEs, with only 26.8% of the female respondents. With respect to the academic qualifications of the respondents, 43% had OND/NCE, 38.9% had first degree, while 18.1% of the respondents had postgraduate degree. Also, 17.3% of the respondents were single, 78.4% were married while 4.3% were separated/divorced. This implies that majority of the respondents are matured and would provide reliable responses.

The descriptive statistics depicted in Table 2 that the average value for ATM_{SERV} is 18.39, with a minimum and maximum values of 13 and 25

respectively. The standard deviation of 2.972 has a lower risk because it is far from the mean figure. Furthermore, the mean value of MB_{APP} is 18.98, with minimum and maximum values of 13 and 25 respectively while the standard deviation is 3.085 indicating that the risk is lower as it is far from the mean figure. Also, the mean value of SMS_{TAC} is 18.07 with minimum and maximum values of 13 and 25. The standard deviation is 3.085 which is lower than the mean figure. Additionally, the mean value of POS_{TERM} stands at 17.71 with minimum and maximum values of 13 and 24 respectively while the standard deviation is 2.536 which is lower than the mean value indicating a lower risk. The mean value of SSE_{PERF} is 20.13, with minimum and maximum values of 13 and 25 respectively. The standard deviation which is 3.184 indicates a lower risk as it is far from the mean value.

Table 1. Demographic information of respondents

	Frequency	Percentage (%)
Gender		
Male	271	73.2
Female	99	26.8
Total	**370**	**100.0**
Age		
20-30 years	44	11.9
31-40 years	114	30.8
41-50 years	150	40.5
51years and above	62	16.8
Total	**370**	**100.0**
Marital status		
Single	64	17.3
Married	290	78.4
Separated/ divorced	16	4.3
Total	**370**	**100.0**
Academic qualifications		
OND/NCE	159	43.0
First degree	144	38.9
Postgraduate degree	67	18.1
Total	**370**	**100.0**

Source: Field survey, 2022

5.2 Test of Hypotheses and Discussion of Findings

The study examined the effect of electronic financial solutions on performance of Small Scale Enterprises in Southwest in Nigeria. Data were sourced from owners/managers and staff

Table 2. Descriptive statistics of the variables of the study

	N	Min	Max	Mean	Std. dev.
ATM_{SERV}	370	13	25	18.39	2.972
MB_{APP}	370	13	25	18.98	3.085
SMS_{TAC}	370	13	25	18.07	2.516
POS_{TERM}	370	13	24	17.71	2.536
SSE_{PERF}	370	13	25	20.13	3.184

Source: Author's computation, 2022

members of SSEs operating within the Southwest geographical region of Nigeria. The study revealed that ease of use, cost effectiveness, convenience, security of the service, and accessibility has enabled SSEs to adopt electronic financial solutions for various business transactions. The test conducted on study hypotheses revealed that automated teller machine services (ATM_{SERV}) had significant effect on performance of SSEs in Southwest, Nigeria (t = 4.848, $p = 0.000 < 0.05$), mobile banking services (MB_{APP}) had significant effect on performance of SSEs in Southwest, Nigeria (t = 3.089, $p = 0.000 < 0.05$), SMS Transaction alerts channels (SMS_{TAC}) had significant effect on performance of SSEs in Southwest, Nigeria (t = 2.387, $p = 0.007 < 0.05$), and point of sale service terminals (POS_{TERM}) had significant effect on performance of SSEs in Southwest, Nigeria (t = 2.131, $p = 0.000 < 0.05$).

Summarily, findings of the study indicated that SMS transaction alerts channels, automated teller machine services, mobile banking applications and point of sale terminals have significant positive relationship with the performance of SSEs in Southwest, Nigeria. This agreed with the findings of Mutinda [21] on the effect of mobile phone based money transfers on the financial performance of small and medium enterprises in Nairobi, Kenya. It also confirmed the findings of Chuwa [23] on adoption of internet banking by small and medium enterprises (SMEs) within Nyamagana District of Mwanza-Tanzania. Additionally, findings from the study agreed with the study of Mbah and Obiezekwem [27] which noted that there is positive relationship between automated teller machine, point of sale services, transaction alerts via short message services (SMS), mobile banking and performance of SMEs in Anambra State, Nigeria.

6. CONCLUSION AND RECOMMENDA-TIONS

Based on the findings of the study, the study concluded that electronic financial solutions have

significant effect on the performance of SSEs in Southwest, Nigeria. Implications of the findings from the study was that ease in terms of usage, cost effectiveness, convenience, assurance of website security, and accessibility has enabled SSEs to adopt electronic financial solutions for various business transactions. The study recommended that financial institutions should strengthen the security of electronic payment system in order to reduce possible threat to users especially those within the SSE space. Government should provide adequate regulatory framework that will ensure customer protection, and security of transaction. This would consequently impact on the activities of SSEs. User interface of electronic payment platforms should be more friendly and easy to use for customers. Further study can be conducted on comparative analysis of adoption of electronic financial solutions by small scale enterprises across the six geographical zones in Nigeria.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Author has declared that no competing interests exist.

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