Michael Segun Ogunmuyiwa
Olabisi Onabanjo University, Ago-Iwoye, Nigeria

Olasunkanmi Akeem Amida
Olabisi Onabanjo University, Ago-Iwoye, Nigeria

The nexus between electronic payment system and entrepreneurial activities in rural areas of Ogun State, Nigeria

Abstract: Electronic payment systems have become the new channels for financial transactions driving business operations globally. However, the extent to which electronic payment systems influence entrepreneurial activities in rural areas is still a major concern for development analysts. Hence, the purpose of the paper is to examine the impact of electronic payment systems on entrepreneurial activities in rural areas of Ogun State, Nigeria. Survey research design method was employed in the study. Three hundred and eighty-five (385) respondents who are owners of micro and small enterprises were sampled. Purposive sampling technique was employed to administer the questionnaire to the respondents. The data were analysed using the Ordinary Least Square (OLS) regression technique. The findings revealed that electronic payment system via automated teller machine (β = .148; t = 2.587; P = .010), point of sales systems (β = .173; t = 3.461; P =.000) and mobile banking (β = .170; t = 2.949; P = .003) significantly drive entrepreneurial activities in rural areas. The findings further establish that point of sales system is the most significant measure of electronic payment system driving entrepreneurial activities in rural areas. The study recommends that micro and small enterprises' owners should leverage more on the point of sales system in driving their activities while also taking advantage of automated teller machines and mobile banking platforms.

Keywords: ATM; electronic payment; entrepreneurial activities; mobile banking POS; rural areas

Introduction

Electronic payment system is critical to the automation of Nigeria's banking industry, with beneficial effects regarding the sustainability of financial inclusion, efficiency in facilitating banking transactions, and to the safety of these transactions in electronic channels, most of

which would contribute to growth (Mazini, Hozori, 2017). Business vendors of electronic payments facilities can utilise a more comprehensive promotional strategy to convince a rapidly growing middle customer base to use an existing and new electronic payments system or facilities while using a less market expansion technique to entice low-income and underprivileged customer base to use new or established mobile devices or facilities if they presume they may not afford the former (Oyelami, Adebiyi, Adekunle, 2020).

According to Agbaje and Ayanbadejo (2013), most financial institutions are profit--seeking corporations utilising digital finance to maximise profits while reducing operational costs. Various studies have revealed that electronic payments are more beneficial to the institutions providing them than enhancing business opportunities in individuals or increasing the capacity of such businesses to leverage robust financial service (Altarifi, Al-Hawary, Al Sakkal, 2015; Ojulari, 2014).

All things being equal, the CBN projected that the revenue expenditure of cash would reach 192 billion in 2021, which includes cash in transit costs (27.3 billion), cash in processing costs (69.1 billion), as well as vault management costs (18.1b) (Central Bank of Nigeria, 2017). Aside from the overhead expenses of the cash economy to the financial system, other cash-based economy difficulties entail security risk and lack of accountability (Oyelami, Adebiyi, Adekunle, 2020). The majority of commercial transactions in Nigeria are conducted in cash. No doubt, more than 95 per cent of commercial payments in the country are cash-based. Thus, the Central Bank of Nigeria, which is in charge of the country's currency, should uphold its legal obligation by printing consistently to enhance economic activities and stimulate economic growth (Asaolu, Ayoola, Akintoye, 2011).

Mobile devices with modern facilities, functions, and applications that enable electronic payments, financial services, and products are examples of infrastructural facilities required to make electronic payments function correctly. Another factor is the possibility of educational prejudice in the facilitation of electronic payment systems (Zango, 2019). If the net economic value of adopting innovative electronic payments services to rural areas is minimal, electronic payments providers could choose to concentrate less on adopting innovative electronic payment services to such communities that lack the basic literacy skills to comprehend digital finance. The impact of electronic payment systems in rural communities is a concern as majority of past studies on electronic payment systems focused largely on its impact on the financial institutions and their operations. Equally, several studies also focused on the impact of electronics payment system on the entrepreneurial activities of major cities in Nigeria.

Meanwhile, the use of electronic payment systems which hitherto was limited to the cities, have been considerably adopted by rural entrepreneurs. There have been limited studies on the impact of the payment system on the entrepreneurial activities of the rural dwellers, hence the choice of research in this direction.

Based on the foregoing, the purpose of the paper is to examine electronic payments systems' influence on entrepreneurial activities in rural areas in Ogun State, Nigeria. Arising from the research objective, the under listed relevant questions become imperative:

1. How does automated teller machine influence entrepreneurial activities in rural areas in Ogun State, Nigeria?
2. To what degree does point of sales affect entrepreneurial activities in rural areas in Ogun State, Nigeria?

3. How does mobile banking influence entrepreneurial activities in rural areas in Ogun State, Nigeria?

The rest of the paper is divided into three (3) sections. Section II focuses on the literature review while section III centres on the methodology and empirical results. Section IV concludes the study with policy recommendations.

Literature Review

Electronic Payments

The numerous payment methods that are implemented by electronic means define the sophistication of electronic payment system. Its multi-functional characteristics have been presented incorrectly in the literature at times (Acha, Kanu, Agu, 2017). Electronic payments can be used for various purposes, including digital transactions, bank transfers, internet banking, and debit cards (Adu, 2016). Considering all of these, there are on-going studies to provide a comprehensive definition of electronic payment. Electronic Payment System is defined as sound financial ventures that make the customer and the trader converge and use an alternative opinion via electronic methods (Chemtai, 2016).

A payment made electronically entails any system that allows money to be exchanged over the online platform (Harelimana, 2018). Electronic payment is a system that allows payments to be made electronically for web-based services. Another way to explain e-payment is to refer to any payment or exchange carried out via electronic means. Furthermore, scholars see e-payment as a bilateral platform that exchanges money between two individuals via an online exchange (Adesanya, 2017).

In other words, e-payment includes any form of payment that involves an electronic exchange of data, such as online banking data, as an alternate solution method of payment to cash or a cheque. A demand for financial exchanges made by a customer to another entity as payment is referred to as an electronic payment system (Jelilov, Musa, 2016). E-payment describes the act of making payments electronically, via an automated payment processor, or via commercially implemented card mechanisms. It is any payment that does not necessarily involve cash, excluding paper cheques (Kabir, Saidin, Ahmi, 2015). E-payment is any digital exchange regarded as a payment method for services and products performed via e-payment means that provides customers with long-distance access to their accounts through processes done electronically.

Measures of Electronic Payment System
There are varieties of electronic payment systems established in payment resources around the globe, for instance, electronic cheques, fund transfers, bank transfers, card payment etc. There are two types of online transactions; the one that uses internet banking payment gateway (IBPG), and ones that use the platform's external payment method (Oyelami, Adebiyi, Adekunle, 2020). To begin with, the payment method is straightforward and precise because the customer is notified of transactions made online via an e-business platform linked to a financial institution. The second type of online payment involves transferring funds from the customer's account to the service's account through a transaction system based on the customer's account (Torki, Rezaei, Razmi, 2020).

a) **The card system** is one-of-a-kind transaction. Smartcards are polycarbonate cards with encoded computer chips that are used to resolve payment commitments. The influence of cards depends on their complexity and social acceptance to stockpile and manipulate information and their capacity to firmly manage large applications on a single card (Acha, Kanu, Agu, 2017). This card reader accepts debit cards, credit cards, and visa cards, among other things. This is an integrated circuits device that consists of a single silicon chip with circuit elements. Customers use it to execute balance inquiries, mini statements, cash withdrawals, and transactions using Automated Teller Machines (Adesanya, 2017). The card can also be used to transfer funds over the online platform.

b) **The Automated Teller Machine** (ATM) is a type of electronic payment channel that allows consumers to execute basic banking activities without the assistance of a bank employee. ATMs are commonly found in banks and financial institutions. Using an ATM is quick and straight forward since it enables people to do quick self-service activities such as transfers and cash transactions and bill payments and account transfers (Kung, 2018).

c) **Point Of sale Machine** (POS) is a transaction technology that allows credit/debit account holders to make payments at retail locations. Customers can use it to inquire about services, purchase airtime, redeem loyalty points, and print mini statements (Kung, 2018). This allows the bank to collaborate with higher education institutions and other educational establishments to control all academic-related activities.

d) **The Mobile Banking** is a platform that helps bank customers to access bank services while on the move (Jelilov, Musa, 2016). Customers can use this to conduct transactions such as checking account balances, transaction inquiries, stop cheques, account authentication, money transfers, and electronic payment from anywhere. This bank platform enables families and friends in the Diaspora to remit money back home for family maintenance, investment strategy, and living expenses. Financial institutions in various locations suffice as the recipient and depositing points for the involved parties. When a banking institution offers mobile banking, it enables its users to execute monetary operations online using a device such as a phone or a computer. This platform allows a bank customer to assess and connect the bank's virtual office via cellular networks (Kujur, Shah, 2015).

However, the dimensions of electronic payment systems adopted in this study are automated teller machines, electronic banking and point of sales system. This is because they are the most common and easily accessible financial technology tools in Nigeria (Zango, 2019).

Entrepreneurial Activities

Various entrepreneurial activities are typically connected as key components of an intrinsically motivating technique that can span extensive sequential actions before culminating in wealth creation (Galindo, Mendez, 2014). Entrepreneurial activities can be performed informally or through a methodical process encompassing an organised, systematic, and structured approach to evaluating opportunities for creating situations (García-Rodríguez et al., 2017).

Several activities with important contributions to entrepreneurship can be carried out for reasons other than innovation, such as creating economic value. Evidently, some businesses may be unaware of the potential for innovation in their operations. Entrepreneurial

activity includes entering new business opportunities, developing new services and products, and innovating in business operations (Sautet, 2013). Entrepreneurial activities are essential because they can raise living standards and generate wealth for entrepreneurs and related businesses. Entrepreneurs also help to drive change through innovation, where new and improved products enable the development of new markets (Asaolu, Ayoola, Akinkoye, 2011).

The Link between Electronic Payment System and Entrepreneurial Activities

It has been proposed that the stages of entrepreneurial activity in a nation are influenced by various impactful concepts that vary from one nation to the other, as the level of entrepreneurial exercise differs greatly across cultures. Oyelami, Adebiyi, Adekunle (2020) categorised these elements into different dimensions: culture, provision of financial assets, human resources accessibility, and sustainable growth, which have been used to clarify the wide range of entrepreneurial activity levels.

Previous studies on the availability of technology have primarily focused on business performance, organisational competitiveness, firm survival, and improved business performance (Torki, Rezaei, Razmi, 2020; Adesanya, 2017; Adu, 2016). The measures of technology used were not financial in nature. However, the work indicates that access to financial services credit (or other similar financing methods) could influence business creation and thus entrepreneurial activities because the economy's performance heavily influences credit availability. Studies also revealed that entrepreneurs could also use software to transform customer service by utilising call routing systems or and payment automation (Harelimana, 2018; Zango, 2019).

No doubt, more organizations in the developed countries are increasing their adoption of electronic payment to improve their business activities in foreign trade. Similar studies by Poon and Chau (2001) opined that payments in electronic forms would determine foreign trade in the future. This is because it has capacity to open up markets that are limited by national and regional barriers through global generic payment systems

In the words of Oni, 2010 the use of e-payment system has not been fully embraced among SMEs in Nigeria. This lag according has led to a gap in electronic business resulting in slow business development in Nigeria.

To solve this problem, the government needs to provide an environment that is conducive for SMEs to embrace in order to take advantage of the internet economy (Ayo et al., 2008). Poor infrastructural development resulting from low investment in social overhead capital has also culminated into SMEs in developing economies like Nigeria having small shares market and poverty of resources (Apulu, Lantham, 2009; Thong, Yap, 1995).

Apart from the perceived security challenges bedeviling e-payment systems in developing countries (Lin, Nguyen, 2011), SMEs also suffer from inadequate information about the expected benefits of e-payment. Similar studies which have shown relationship between electronic payment systems and entrepreneurial development in developing and developed countries include Davis (1989), Jelilov and Musa, (2016), Chemtai, (2016), Mazini and Hozori, (2017) and Oyelami, Adebiyi and Adekunle (2020).

In Poland, the study conducted by Blash and Klimontowicz (2021) on the determinants of PayTech's Success in the mobile payment market—the case of BLIK. Data for the study were obtained from the publications of National Bank of Poland (NBP), Central

Statistical Office (GUS), and Bank for International Settlements (BIS). In the study, the BLIK diffusion is measured by the number of entrants and acceptance, as well as the scope of transactions while the adoption is measured by the number of customers using BLIK in everyday transactions.

The results showed the market behavior of BLIK as an open business model and the key success factors of BLIK adoption, diffusion and determinants for further open payment innovations' development. The paper's contribution are in the areas of the new definition of PayTechs, the identification of the major components of PayTech open business model, and the indication of the key success factors of adoption and diffusion of m-payments.

Also in Poland, a study on the Institutionalization of Cashless Poland, Values, Norms, Sanctions and Grand Narrations in the SMEs' Perspective was conducted by Szalacha-Jarmużek, Polasik and Jakubowska in (2020). Empirical data was collected using Seventy-four (74) individual in-depth interview with SMEs owners in Poland. The study affirmed that the complex impact of financial sanctions, interlocked social interactions, narrations and norms are creating the matrix for SMEs' decision whether to implement cashless payments into their business.

Methodology and Empirical Results

The Method

The survey research design was employed in this study. The survey takes place in Ogun State, Nigeria. The choice of Ogun was because the state has the second-highest number of Micro Entreprenuers in Nigeria (SMEDAN, 2017). The total number of Micro Enterprises in the state is 1,167,538. The choice of Micro and Small Enterprises was premised on the fact most rural areas in Nigeria are characterised by Micro and Small Enterprises (Adu, 2016). Specifically the study took place in Odoyanta in Odogbolu Local Government and Irewon in Ijebu-ode Local Government areas in Ogun State. The Raosoft sample-size calculator was used to arrive at a sample size of 385, with a 5% margin of error. According Rigdon (2012), this sample size is sufficient because giving the correct answers to the issue at hand is more reliable than a wider sample size where the survey responds to only a small percentage of the population.

Data for the analysis was gathered using the questionnaire. Three hundred and eight-five (385) copies of the questionnaire were distributed to respondents who operate either a micro or small enterprise. For the study to capture the current and local dynamics, Asaolu, Ayoola and Akinkoye (2011) developed a questionnaire for electronic payment and this was adapted while the questionnaire for business activities was adapted from the study of Omotayo and Dahunsi (2015).

In the data collection, a seven-point Likert Rating Scale was used. The seven-point Likert scale provides a more precise, more substantial representation and accurate assessment of the respondents' views, according to Rigdon (2012). The 7-point Likert rating scale was designed from 1 = least agreed to 7 = firmly agreed. This was also intended to optimise the precision and reliability of the research instrument. The questionnaire achieved reliability with a (Cronbach Alpha) of 0.764, 0.828, 0.873 and 0.788 for automated teller machine, point of sales, mobile banking and business activities, respectively.

The questionnaire was taken to the respondents' business premises to effectively administer and retrieve the research instruments through the help of research assistants. Three hundred and two (302) copies (78.2%) were retrieved and considered usable for the analysis. According to Mugenda O.M. and Mugenda A.G. (2003), a sample size ≥ of 300 is sufficient for multivariate analysis. Thus, the partial least square structural equation model was applied to analyse the data.

Model Specification

The Technology Acceptance Model (TAM) created by Davis (1989) is among the most commonly used research models for predicting the peoples' behaviours and organisations in the adoption of technologies that would affect how they carry out their daily activities. There are two aspects in the TAM model that are critical in technologies use behavioural patterns: (i) perceived utility and (ii) perceived benefits of use. Davis (1989) sees perceived utility as a potential customer's subjective likelihood that utilising a particular platform application or technology will improve their performance.

Hence, in this study, it is believed that accepting the electronic payment systems (as proposed by TAM) would lead to better output in enterprises by increasing their performance in the long- run.

Hinged on the technology deterministic theory and the study of Oyelami, Adebiyi and Adelakun (2020), the model for the study was formulated with the a' priori expectation that the dimensions of electronic payment systems (automated teller machine, point of sales and mobile banking) will interact positively and directly with entrepreneurial activities.

$$ENACT = \beta 0 + \beta 1(ATM) + \beta 2(POS) + \beta 3(MB) + \mu \ldots \ldots \ldots \ldots . (1)$$

Where:
ENACT = Entrepreneurial Activities
ATM = Automated Teller Machine
POS = Point of Sales
MB = Mobile Banking
$\beta 0$ = Intercept
$\beta 1 - \beta 3$ = Coefficients of the independent variables
μ = Error Term.

In a-priori terms, a positive relationship is predicted between entrepreneurial activities and the explanatory variables (automated teller machine, point of sales and mobile banking). Hence,

$$\beta 0, \beta 1, \beta 2 \text{ and } \beta 3 > 0 \ldots \ldots \ldots . \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots . . \ldots \ldots (2)$$

From the above interactions between electronic payment systems and entrepreneurial activities, the following hypotheses were formulated
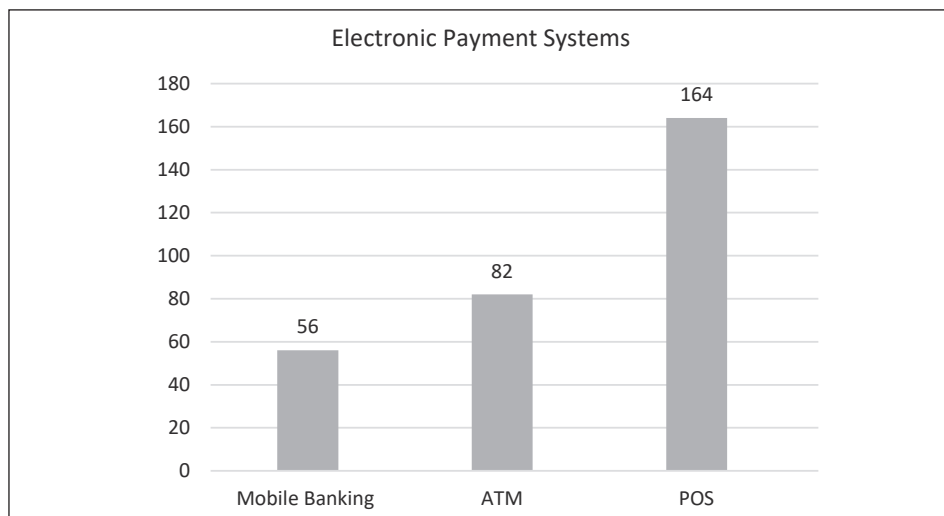
- Ho1: Automated teller machine does not significantly affect entrepreneurial activities in Ogun State, Nigeria
- Ho2: Point of sales system does not significantly affect entrepreneurial activities in Ogun State, Nigeria
- Ho3: Mobile Banking does not significantly affect entrepreneurial activities in Ogun State, Nigeria.

Results and Discussions

Descriptive Statistics

Figure 1 shows the analysis of the respondents' opinions on the use of e-payment systems. The result reveals that majority of micro and small business owners prefer the point of sales electronic payment more (164) compared to automated teller machines (82) and mobile banking (56). The reason for this could be the lack of infrastructural facilities such as electricity, which could have aided the use of the other sources of electronic payment systems and internet services necessary for their easy utilisation. The implication of this is that micro and small enterprises can leverage more on the point of sales electronic payment systems in expanding their business activities.

Figure 1. Electronic Payment Systems in Rural Areas of Ogun State, Nigeria

Source: Field Study (2021)

Test of Hypothesis

Table 1. Hypothesis 1: Automated teller machine does not significantly affect entrepreneurial activities. Coefficientsa

Model 1	Unstandardised Coefficients		Standardised Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	3.730	.285		13.082	.000
ATM	.170	.066	.148	2.587	.010
	R = .148a	R² = .022	Fc = 8.773	P = 0.000	

a Dependent Variable: ENACT

Source: Authors' Computation from Field Study (2021)

Table 1 indicates that the automated teller machine is a significant predictor (t = 2.587; P = .010) of entrepreneurial activities. Thus, the coefficient of ATM is correctly signed in line with the a-priori expectation and is equally significant at 5 per cent level. That is, the automated teller machine significantly affects entrepreneurial activities. The unstandardized beta (B = .170) indicates that when the automated teller machine increases by 1 unit, entrepreneurial activities increases by .17 units. Therefore, the null hypothesis is rejected and the alternative accepted. The f-statistics (F-stat = 8.773; P = 0.000) confirms the significance of the overall regression equation.

Table 2. Hypothesis 2: Point of sales system significantly affects entrepreneurial activities. Coefficientsa

Model 2	Unstandardised Coefficients		Standardised Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	4.071	.265		15.347	.000
POS	.173	.050	.184	3.461	.000
	R = .184a	R2 = .033	Fc = 13.746	P = 0.000	

a Dependent Variable: ENACT

Source: Authors' Computation from Field Study (2021)

Table 2 indicates that point of sales is a significant predictor (t = 3.461; P = .000) of entrepreneurial activities. The coefficient of POS is correctly signed in line with the a-priori expectation and is equally significant at 5 per cent level. That is, the point of sales system significantly affects entrepreneurial activities. The unstandardized beta (B = .173) indicates that when the point of sales machine increases by 1 unit, entrepreneurial activities increases by 17.3 units. Therefore, the null hypothesis is rejected. With the f-statistics (F-stat = 13.746; P = 0.000) the significance of the overall regression equation is confirmed.

Table 3. Hypothesis 3: Mobile Banking does not significantly affect entrepreneurial activities. Coefficientsa

Model 3	Unstandardised Coefficients		Standardised Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	3.813	.226		16.900	.000
MB	.170	.058	.168	2.949	.003
	R = .168a	R2 = .028	Fc = 8.342	P = 0.000	

a Dependent Variable: ENACT

Source: Authors' Computation from Field Study (2021)

Table 3 indicates that mobile banking is a significant predictor (t = 2.949; P = .003) of entrepreneurial activities. Thus, the coefficient of MB is correctly signed in line with the a-priori expectation and is equally significant at 5 per cent level That is, the mobile banking system significantly affects entrepreneurial activities. The unstandardized beta (B = .170) indicates that when mobile banking increases by 1 unit, entrepreneurial activities increases by 17 units. Therefore the null hypothesis is rejected. The f-statistics (F-stat = 8.342; P = 0.000) confirms the significance of the overall regression equation.

Table 4. Combined Effect of Dimensionsa

Model 4	Unstandardized Coefficients		Standardised Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	2.602	.436		5.971	.000
ATM	.159	.065	.138	2.447	.015
POS	.117	.053	.124	2.197	.029
MB	.168	.057	.165	2.928	.004
Adj R2	.421				
F-stat	8.712	(p = 0.000)			

a Dependent Variable: ENACT

Source: Authors' Computation from Field Study (2021)

Table 4 shows the interaction between the combined dimensions of e-payment systems (ATM, POS and MB) and entrepreneurial activities in the study area. All the variables exhibit the correct sign in line with the a-priori expectation. The coefficient of determination (R^2 = .421) reveals that the combined dimensions of electronic payment systems explain 42.1% variation in entrepreneurial activities in the rural area. The findings also indicate that all the dimensions are in use in the rural areas and mobile banking dimension is the most significant of all the variables (t = 2.928; P = .004). Thus, mobile banking is the most important driver of entrepreneurial activities. The f-statistics (F-stat = 8.712; P = 0.000) confirms the significance of the overall regression equation.

Discussion of Findings

The study examined the influence of electronic payment systems on entrepreneurial activities in rural areas specifically in (Odoyanta Community in Odogbolu Local Government and Irewon Community in Ijebu ode Local Government) of Ogun State, Nigeria. The descriptive statistics revealed that the point of sales system is the most used by micro and small businesses. For the test of hypotheses, point of sales is the most significant driver of entrepreneurial activities. That's, the more the point of sales payment system is utilised by micro and small enterprises, the more the entrepreneurial activities in rural areas. A reason for this could be the lack of infrastructural facilities such as stable electricity, which could have aided the use of the other sources of electronic payment systems and internet services necessary for their easy utilisation.

The implication is that micro and small enterprises can leverage more on the point of sales dimension of electronic payment systems in expanding their business activities. The result is in tandem with Oyelami, Adebiyi, Adekunle (2020) and Gholami et al. (2010) assertions that electronic payments systems are critical for the growth of SMEs and the expansion of the economy. This outcome supports the study of Blash and Klimontowicz (2021) in Poland on BLIK implementation for mobile payments.

The findings also indicated that automated teller machines and mobile banking are also significant in explaining changes in entrepreneurial activities in rural areas. That is, micro and small enterprises can also deploy these electronic payment systems to increase

their capacity to boot entrepreneurial activities. The findings support Torki, Rezaei, Razmi (2020) assertion that these technologies also strengthen the speed of operational activities, the precision, and the integrity of customer transactions while also increasing customer accessibility.

For the combined effect, the findings indicate that the mobile banking system is the most significant driver of entrepreneurial activities in rural areas where these three platforms are jointly used. This is in contrast with Jenevive and Anyanwaokoro (2017) position, who argued that the automated teller machine is the most significant driver of economic activities. A reason for this could be due to the environment in which the study was carried out.

The rural areas have their peculiarity, and activities are majorly influenced by culture and belief systems; hence, a contrasts in the findings. The position of Jenevive and Anyanwaokoro (2017) is in tandem with Szalacha-Jarmużek, Polasik and Jakubowska (2020) using a qualitative study of 74 in-depth interview on SME owners in Poland affirmed that the complex impact of interlocked social interactions, financial sanctions as well as narrations and norms are creating the matrix for SMEs' decision to embrace cashless policy.

Conclusion and Policy Recommendations

The study investigated the influence of electronic payment systems on entrepreneurial activities in rural areas. The study was anchored on the technology acceptance model. The findings revealed that electronic payment system dimensions are significant drivers of entrepreneurial activities in rural areas.

The study shows a need for entrepreneurs to introduce electronic payment system in their operations to become more viable and increase their overall performance. However, the acceptance or rejection of a cashless policy in the rural areas is a function of many factors including the environment and individual's peculiarities as opined by Jenevive and Anyanwaokoro (2017) and the Polish study of Szalacha-Jarmużek, Polasik and Jakubowska (2020).

This notwithstanding, there is a need for micro-enterprises to accept technologies that would drive their activities and operations. This will increase entrepreneurial activities and enhance their viability and visibility in rural areas. The study recommends that micro and small enterprise owners should leverage more on the point of sales system in driving their activities while also taking advantage of automated teller machines and mobile banking platforms.

References

Acha, I.A., Kanu, C., Agu, G.A. (2017). Cashless policy in Nigeria: The mechanics, benefits and problems. *Innovative Journal of Economics and Financial Studies*, *1*(1), 28–38.

Adesanya, O.O. (2017). Financial inclusion in Nigeria: the challenges of banks and mobile money operators (MMOs). Bank of Morocco CEMLA – IFC Satellite Seminar at the ISI. *World Statistics Congress on "Financial Inclusion"* Marrakech, Morocco, 1–5.

Adu, C.A. (2016). Cashless policy and its effects on the Nigerian economy. *European Journal of Business, Economics and Accountancy*, *4*(2), 81–88.

Agbaje, O., Ayanbadejo, K. (2013). *Electronic payment and economic growth in Nigeria.* A report by RTC Advisory Services Ltd.

Altarifi, S., Al-Hawary, S.I.S., Al Sakkal, M.E.E. (2015). Determinants of e-shopping and its effect on consumer purchasing decision in Jordan. *International Journal of Business and Social Scienc*e, *6*(1), 81–92.

Apulu, I., Lantham, A. (2009). Information and communication technology adoption: challenges for Nigerian SMEs, TMC. *Academic Journal*, *4*(2), 64–80.

Asaolu, T.O., Ayoola, T.J., Akinkoye, E.Y. (2011). Electronic payment system in Nigeria: implementation, constraints and solutions. *Journal of management and Society*, *1*(2). 16–21.

Ayo, C.K., Adebiyi, A., Fatudimu, T.I., Ekong, U.O. (2008), A framework for e-commerce implementation: Nigeria a case study. *Journal of Internet Banking and Commerce*, *13*(2), 1–12.

Ayo, C.K., Adewoye, J.O., Oni, A.A. (2010). The state of e-banking implementation in Nigeria: a post--consolidation review. *Journal of Emerging Trends in Economics and Management Sciences* (JETEMS), *1*(1), 37–45.

Blash, J., Klimontowicz, M. (2021). The Determinants of PayTech's Success in the Mobile Payment Market—The Case of BLIK. *Journal of Risk Financial Management*, *14*(9), 422–429.

Bransford, J., Cocking, R. (1999). *How people learn: Brain, mind, experience, and school*. Washington, D.C.: National Academy Press.

Central Bank of Nigeria. (2017; 7 september 2021). *Industry policy on retail cash collection and lodgement* (IITP/C/001). Retrieved from: https://www.cbn.gov.ng/OUT/2012/CIRCULARS/BSPD/ INDUSTRY%20POLICY%20ON%20RETAIL%20CASH%20COLLECTION%20AND%20 LODGEMENT.PDF/2022/01/22.

Chemtai, F. (2016). The effects of electronic plastic cards on the firm's competitive advantage: A case of selected commercial banks in Eldoret town, Kenya. *International Journal of Science Educational Stud*y, 2(2), 29–39.

Galindo, M.A., Mendez, M.A. (2014). Entrepreneurship, economic growth, and innovation: Are feedback effects at work?. *Journal of Business Research*, *67*, 825–830.

Davis, F. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, *13*, 319–340. https://doi.org/10.2307/249008

García-Rodríguez, F., Gil-Soto, E., Ruiz-Rosa, I., Gutiérrez-Taño, D. (2017). Entrepreneurial potential in less innovative regions: the impact of social and cultural environment. *European Journal of Management and Business Economics*, *26*(2), 163–179.

Gardener, E., Molyneux, P., Nguyen-Linh, H. (2011). Determinants of efficiency in South East Asian banking. *The Service Industries Journal*, *31*(16), 2693–2719.

Gholami, R., Hign, D.A. et al. (2010). Is ICT the key to development?. *Journal of Global Information Management*, *18*(1), 66–83.

Harelimana, J. (2018). The role of the electronic payment system on the financial performance of financial institutions in Rwanda. *Global Journal of Management and Business Research: 18*(1), 16–38.

Jelilov, G., Musa, M. (2016). The impact of government expenditure on economic growth in Nigeria. *Sacha Journal of Policy and Strategic Studies*, *5*(1), 15–23.

Jenevive, O., Anyanwaokoro, M. (2017). Electronic payment methods and profitability of banking irms in Nigeria: A panel data analysis. *International Journal of Finance and Accounting*, *6*(3), 67–74.

Kabir, M.A., Saidin, S.Z., Ahmi, A. (2015). *Adoption of e-payment systems: A review of literature.* Proceedings of the International conference on E-Commerce (ICoEC, 2015), 20-22 October 2015, Kuching Sarawak, Malaysia.

Kujur, T., Shah, M.A. (2015). Electronic banking: Impact, risk and security issues. *International Journal of Engineering Management*, *5*(5), 207–212.

Kung, O.Y. (2018). *E-payments for everyone.* Being keynote speech by Mr. Ong Ye Kung, Minister for education and MAS' board member, at the 45th annual dinner of the association of banks in Singapore on 20 June 2018 .

Mazini, A., Hozori, A. (2017). Evaluating the effect of electronic banking expansion on reducing operating costs of the banking system, *Journal of Banking*, *19*, 29–54.

McLuhan, M. (1964). *Understanding Media: The Extensions of Man*. New York: McGraw-Hill.

Mugenda, O.M., Mugenda, A.G. (2003). *Research Methods, Quantitative and Qualitative Approaches*. Nairobi: ACT.

Ojulari, T. (2014*). Electronic banking as an aid to commercial bank operations in Nigeria.* Research project submitted to the Department of Banking and Finance, Caritas University, Amorji – Nike, Enugu.

Omotayo, F., Dahunsi, O. (2015). Factors affecting adoption of point of sale terminals by business organisations in Nigeria. *International Journal of Academic Research in Business and Social Sciences*, *5*(10), 115–136.

Oyelami, L.O., Adebiyi, S.O., Adekunle, B.S. (2020). Electronic payment adoption and consumers' spending growth: empirical evidence from Nigeria. *Future Business Journal*, 6, 14.

Palgrave, J.P. (2003). *Learning about learning from a video game: Rise of nations*. University of Wisconsin Madison.

Poon, S., Chau, P.Y.K. (2001). Octopus: The Growing E-Payment System in Hong Kong. *Electronic Markets*, *11*(2), 97–106.

Rigdon, E.E. (2012). Rethinking partial least squares path modelling: in praise of simple method. *Long Range Planning*, *45*(5/6), 341–358.

Sautet, F. (2013). Local and systemic entrepreneurship: Solving the puzzle of entrepreneurship and economic development. *Entrepreneurship Theory and Practice*, *37*(5), 387–402.

SMEDAN. (2017). *National Survey Of Micro Small & Medium Enterprises (MSMEs)*. Retrieved from: http://smedan.gov.ng/images/NATIONAL%20SURVEY%20OF%20MICRO%20SMALL%20&%20MEDIUM%20ENTERPRISES%20(MSMES),%20%202017%201.pdf

Szalacha-Jarmużek, J., Polasik, M., Jakubowska, M. (2020). The institutionalization of cashless Poland". Values, norms, sanctions and grand narrations in the SMEs' perspective on the adoption of cashless payments. *SSRN Electronic Journal*. September. https://doi.org/10.2139/ssrn.3802643

Thong, J.Y.L., Yap, C.S. (1995). CEO characteristics, organizational characteristics and information technology adoption in small businesses. *International Journal of Management Science*, *23*(4), 429–442.

Torki, L., Rezaei, A., Razmi, S.F. (2020). The effects of electronic payment systems on the performance of the financial sector in selected Islamic Countries. *International Journal of Economics and Politics*, *1*(1), 117–125.

Zango, G.A. (2019). Volume and value of e-payment system. *Nigeria Banks in Perspective*, *3*, 190–201.

Michael Segun Ogunmuyiwa, PhD, is the Corresponding author and a Senior Lecturer in the Department of Business Administration, Faculty of Administration and Management Sciences at the Olabisi Onabanjo University, Ago-Iwoye, Ogun State. Nigeria. The research interest includes Marketing, Entrepreneurship and Small Business Finance.
ORCID: https://orcid.org/0000-0002-5966-9345

Address:

e-mail: msogunmuyiwa@oouagoiwoye.edu.ng

Olasunkanmi Akeem Amida, PhD candidate in the Department of Business Administration, Faculty of Administration and Management Sciences, Olabisi Onabanjo University, Ago-Iwoye, Ogun State. Nigeria. The research interest includes Marketing and Entrepreneurship.

Address:

e-mail: sunkanmi.amida@gmail.com