The effect of automated teller machines, point of sale terminals and online banking transactions on economic growth in Nigeria

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Abstract

Despite the policies put in place by the Central Bank of Nigeria through innovative products intended at reducing to the barest minimum all problems relating to e-transactions through the use of payment channels, people still prefer to conduct their businesses with the use of cash. This research makes use of primary Data collected using descriptive statistics such as tables. The objectives of this study are to assess the effect of Automated Teller Machines, Point of Sale terminals and lastly Online Banking transactions value on economic growth. Furthermore, this study therefore concluded that cashless policy is very important to the Nigerian economy and therefore the ATM and POS platforms must be further promoted by stakeholders. The study recommends that The Central Bank of Nigeria should put in place additional regulations and strengthen guidelines to govern the activities of point-of-sale terminal operators in Nigeria to boost financial inclusion and economic growth.

Keywords: Automated Teller Machines; Point of Sale; Online Banking Transactions; Gross Domestic Product; Economic Growth

1. Introduction

There was a lot of financial recklessness and turbulence in the Nigerian economic space before the implementation of the cashless policy (Oginni, El-Maude, Mohammed & Michael, 2013). The pre-cashless policy era spelt doom for commercial Bank customers, who were vulnerable to armed robbery attacks because they were expected to carry large sums of money in order to complete their trade and other financial transactions. The pre-cashless policy era resulted in clumsiness as well as congestion of banking halls, as customers had to queue for hours just to deposit or withdraw money (Achor & Anuforo, 2013). As a result, the pre-cashless policy era was dubiously associated with low savings because people preferred to keep their money at home rather than in Banks, resulting in an excess of money outside the Banking system.

The African Banking Corporation was founded in 1883, and this was the formal establishment of the Banking industry in Nigeria. The founding of the British Bank for West Africa (now First Bank of Nigeria) followed shortly after in 1884. While the former failed shortly after set up, the latter has lasted up to this day, changing names through the years. Other international Banks were quickly founded to serve the interests of foreign organizations, resulting in discrimination against the country’s indigenous Banks. Following public outcry over foreign-owned Banks' dominance of the industry, the government established a commission, which then recommended the enactment of a law to regulate the industry.

In 2004, a major reform was implemented to strengthen Banks’ capital base so that they could fund large infrastructure projects. Part of these reforms resulted in the formation of large.
Banks, which necessitated operational efficiency in order to achieve good returns on capital. The investment and upgrades to the Information Technology infrastructure to enable new electronic Banking instruments were part of the efficiency models. To decongest Banking halls and increase financial inclusion, the introduction of Automated Teller Machines, Point of Sale terminals, and Instant electronic transfer is a way to go. (Ejoh, Adebisi, and Okpa, 2014).

Additionally, the money is spent without having to carry it from one area to another in a cashless economy (Adu, 2016). Information technology is crucial for any country’s long-term success. According to David (2012), no country can accomplish rapid social-economic growth and development without utilizing information technology to its full potential. Information technology is the way forward for business success and growth most especially for firms in the services industry; in fact, it is changing how businesses and Banks conduct business.

Information development includes the data that an organization makes and uses, similarly as a wider extent of more blended and composed advances that communication of data offers. Computerization of clients’ accounts/records and information recuperation, store and withdrawal through Robotized Teller Machines and framework organization to permit access to accounts from any Bank are generally examples of information advancement for Banks (Ikpefan, Akpan, Godswill, Elegance, and Chisom, 2018). In light of electronic clearances and settlements directed by Banks from one side of the planet to the other, the world is currently referred to as a global village. Accordingly, the significance of Banks couldn’t possibly be more significant in light of the fact that they are essential specialists for monetary advancement (Godswill, Ailemen, Osabohien, Chisom, and Pascal, 2018).

Nigeria's cashless payment system has progressed gradually with global payment trends. The use of cashless payment systems and instruments contributes significantly to the efficiency of monetary policy and determines stability and efficiency. The use of technological innovations and changes in the mode of doing business have implications for the efficiency and security of cashless payment systems, therefore the country's campaign to evolve from a cash to a cashless economy has been prioritized (Akara & Asekome, 2018).

To be effective, Nigeria’s cashless policy relies on technology-based tools (Chibueze, Maxwell & Osondu, 2013). Automated Teller Machines (ATMs), Points of Sale Terminals (POS), the internet (web), mobile phones, and other devices are examples of these instruments. The usage of these instruments make financial transactions more convenient (Itah, 2014). As a result, it is not a surprise that the use of these instruments have grown, as indicated by the value of transactions conducted with them. For example, in 2009, the total value of ATM transactions in Nigeria was N548.6 billion, and in 2019, the value of ATM transactions in Nigeria reached N6,512.61 billion (trillion) (CBN, 2019). The value of POS transactions was estimated to be N11.03 billion in 2009 and has progressively climbed to N3, 204.75 billion (trillion) in 2019. In 2009, the value of web transactions was N84.15 billion, although it fluctuated throughout the years, however, it eventually reached N478.14 billion in 2019. Finally, the value of mobile phone transactions began at N1.27 billion in 2009 and steadily increased to N5,080.96 billion (trillion) in 2019. (CBN, 2019).

Overall, the penetration of Nigeria’s cashless policy, as indicated by the value of transactions conducted with cashless policy instruments, may be considered to be impressive. One can wonder if financial inclusion in Nigeria has improved based on the value of transactions conducted utilizing cashless policy instruments. Previous studies have focused on the influence of Banking channels on Banks’ operational efficiency, but this study will concentrate on the positive effect that ATM machines, point-of-sale transactions (POS), and quick electronic transfers (online Banking) have had on Nigeria’s National Income.

1.1. Definition of terms

1.1.1. POS
Point of Sale terminal machines, which are used to receive payments into Bank accounts via the use of debit or credit cards either at the Bank or Agent location.

1.1.2. Agents
These are people who carry out basic Banking transactions/financial services on behalf of Banks most especially in areas where there is no Bank presence. They mostly make use of POS terminals to achieve this.

1.1.3. Agency Banking
This is the act of using agents to carry our Banking transactions or financial services.
1.1.4. ATM machines
These are machines which are pre-loaded with cash where people make withdrawal from via the use of debit or credit cards. They can be located within a Bank premises or any other public place like a shopping mall.

1.1.5. Cashless Nigeria
This is a strategic initiative introduced by the CBN to shrink the excessive use of cash transactions in the Nigerian economy and adoption of electronic forms of payment to enhance trade.

1.1.6. CBN
Central Bank of Nigeria is the government body that regulates all types of Banks and the financial sector in Nigeria. They also formulate the monetary policy of the government.

1.1.7. NIBBS
Nigerian Inter Bank Settlement Framework is claimed by all authorized Banks in Nigeria and it is the focal clearing and switch that guarantees all gatherings in the installment framework are settled.

1.1.8. Financial exclusion/excluded
This is the unavailability of Banking or financial services to people of low or no income.

1.1.9. EFT/electronic instant transfer
This is the movement of money or funds via the use of any known electronic channels like mobile apps or online Banking from one Bank to the other.

1.1.10. Internet/Web/Online Banking
This is an electronic payment system or channel usually via the internet that allows customer of a Bank to conduct a range of financial transactions from one Bank to another.

1.1.11. Channels
This is the medium via which movement of funds take place, it can be ATM, POS or Online Banking.

1.1.12. SANEF
Shared Agent Network Expansion Facility is an initiative of CBN supported by NIBBS and License Mobile Money operators with the aim to deepen financial inclusion in Nigeria.

1.1.13. GDP
Gross Domestic Product is the sum of the entire value of all services and goods produced in an economy within a period of time usually defined. This is a measure of economic growth in an economy.

2. Literature review

2.1. Concept of E-Banking
Electronic Banking is a compound word made up of the words "electronic" and "Banking," with electronic defined by the Oxford university press dictionary as "anything carried out through a computer, especially over a network," and Banking defined as "a financial institution tasked with carrying out Banking operations and channeling funds from a surplus to spend." Electronic Banking is the use of the internet to conduct various Banking activities (e-Banking).

E-Banking, often known as electronic fund transfer, is a method of providing customers with online access to information and other Banking services (Ojeka and Ikpefan, 2011). According to Abaenewe, Ogbulu, and Ndugbu (2013), electronic Banking comprises the use of information technology to meet the Bank’s immediate and long-term goals. It includes carrying out banking transactions on the internet.
The automation of conventional Bank products and services to Bank clients is known as e-Banking. It is a system that enables individuals, businesses, and even financial institutions to do business or get product or service information via the internet (Rifat, 2013). Shehu, Aliyu, and Musa (2013) define e-Banking as the electronic delivery of retail or low-value products as well as large or wholesale Banking items. This description is accurate for the services provided by Banks to their customers. Adewolo (2015) defines e-Banking as “creating opportunities in the digital age through infrastructure.” Electronic Banking, often known as cashless Banking, is a technical breakthrough that enables the economy to move less money. E-Banking, as previously said, provides users with services and information via electronic means.

E-Banking offers a variety of services, including account opening, balance enquiries, bill payment, and fund transfers. These are the most basic services that Banks provide. Brokerage services, loan requests, credit services, and a range of other features have all been added to Banks’ E-Banking services. Each Bank offers its own particular products to its clients. Electronic Banking, sometimes known as e-Banking, is a way of doing Banking transactions over the internet rather than visiting a physical location (Ombati et al, 2011). The delivery of financial services via electronic means, primarily the Internet, is known as e-Banking. Electronic financial transfers, ATMs, POS terminals, internet Banking, mobile Banking, and online Banking are all examples of the term.

2.2. Concept of Automated Teller Machines (ATM)

After detecting consumers with a personal identification number, a computer-controlled automated teller machine (ATM) provides the cash to the user. The physical movement of currency is being reduced, compared to regular Bank visits (Oyetade & Ofoelue, 2013). The fundamental benefit of this machine is that it can disburse cash twenty four hours, seven days a week as far as it has power and is loaded with cash. They can be found in stores, shopping malls, petrol stations, and other locations, as compared to the traditional method, which required customers to wait in long lines to withdraw cash or pay out funds. The most extensively used electronic payment mechanism in Nigeria is the ATM machine. An ATM’s popularity stems from its convenience. Using an ATM to withdraw money or check account balances is significantly easier (Ajayi, 2014).

According to Akara and Asekome (2018), ATM machines can perform extra functions such as money transfer and cell phone recharge. Nigerians continue to use the most popular applications for bill payment, cash withdrawals, and balance enquiries. Smart cards are used in the card system, which is a one-of-a-kind electronic payment mechanism. Smart cards are electronic cards with a built-in integrated circuit that are used to make payments and meet up with urgent financial needs. Smart cards can be issued as a credit, a debit, or a prepaid. The complexity and acceptance of these cards is based on their ability to securely store and alter data while also handling multiple applications on a single card. Credit cards, debit cards, and e-wallets make cashless buying a lot easier (such as mobile money). A push for credit cards, e-wallets, and debit cards should be made to make the country a cashless economy (Adu, 2016).

Bank customers with the use of cards can make withdrawals from their Bank accounts by inserting their cards and inputting their personal identification number (PIN) into the ATM machine. An Automated Teller Machine (ATM) (American, Australian, and Indian English), also known as an automated Banking machine (ABM) in Canada English and a cash machine, cash – point, cashing, or occasionally a hole in the wall in British English, is a device that allows a financial institution's client to conduct financial transactions without the assistance of a cashier, human clerk, or Bank teller (Wikipedia). Clients are identified solely at ATMs by plastic cards with embedded security features like a magnetic strip, smart chip or even a combination of both that contain a unique Bank identification number as well as some security information, such as the expiry date.

To obtain access to their Bank account, customers must provide a personal identification number (pin), which allows them to make account balance enquiry, cash withdrawal, purchase of electronic airtime vouchers for pre-paid mobile phones. In cases where the customer’s account currency is different from the currency of the country where the ATM is being used, there will be a currency exchange at the prevailing official rate, for example when making withdrawals in US dollars (at an American ATM) from a Bank account opened in Nigerian Naira, the ATM provides one of the best official exchange rates for international users.

A customer can perform Banking activities from virtually any other ATM machine in the world, according to Ogbuji (2012). However, because of the machines’ broad use, consumers may be irritated while attempting to use them; for example, the machine may not distribute cash but instead debit the account holder. ATMs, like any other technological advancement, have posed significant challenges and concerns for Nigerians who rely on financial services. ATMs are a vital component of every retail Bank's effort to exploit technology as a competitive advantage, according to Danlami and
Mayowa (2014). Automated Teller Machines (ATMs) are essential for offering convenient, fast, and round-the-clock Banking services (Chevan, 2013).

Several schools of thought have underlined the utility of ATMs, including Ogunkoya, Hassan, Eluma, and Karrem (2014). They recognized Automated Teller machines' investment potential in terms of cost reduction strategy for Banks, effective service delivery, shared network branding, customer satisfaction, and competitiveness as advantages to the Bank.

Additional services mentioned by Edojariogba include college fee payment, online application fee collections, mobile top-up, religious trust gift bill settlement, and insurance premium payment fund transfer card to account (2014). The exploitation and abuse of ATM fraud, on the other hand, has eclipsed the advances it has brought to the Nigerian financial institutions' service delivery systems, according to Mohammed (2015). Similarly, Ojokuku, R.M., and Sajuyigbe (2012) asserted that, even though the use of ATM terminals as a Banking channel was lauded by several customers as a viable substitute to the characteristic long queues in Banking Halls, the situation has drastically changed today and it has become a source of concern for both the users' financial institutions because the blackout state has become a source of concern to stakeholders.

2.2.1. Features of Automated Teller Machines (ATM)

The features of the automated teller machine include the following (Mbobua, 2007).

Card Reader
This enables the customer to insert his card which the machine has the ability to read and recognize if it actually belongs to the user

Keypad
This is the hardware used to input the personal identification number for the machine to read

Display Screen
This is the monitor that shows all the transactions being done.

Screen Buttons
The screen buttons allow the user to make navigation easily across all menus

Cash Dispenser
This is the part of the machine that counts the cash and dispenses same to the customer. It counts and after confirmation opens up like a window and releases the cash.

Deposit Slot
This is the opposite of a cash dispenser in a cash deposit ATM. It accepts cash, counts it and takes it into the ATM machine.

2.3. Concept of Point of Sale (POS) Terminal

Customers can check their account balances, make purchases for goods and services, and conduct electronic financial transfers using this sort of electronic payment at a specific point of sale (POS) terminal. Customers can use the device instead of cash to pay for things and services they have purchased. When a customer inserts his card into the POS, he enters his information, and his account is debited at that time, resulting in the transfer of funds to the service provider's account. A point of sale can be said to be the promise of a transaction occurring at a place (point of store). According to Woleola (2017), a POS terminal is the equipment and a programmed tool used for viewing or similar to an electronic sales register. At the point of sale, the selling process is controlled through a salesperson-accessible interface. The technology allows you to create and print receipts.

A POS device is just like a mobile phone, portable and effective payment device that enables customers to use their credit or debit cards at a retail or service facility. Retail payment, cashless payment, cash back (agency services), balance enquiries, air time vending, and loyalty redemption are just a few of the services they can offer. The point-of-sale (POS) is a computer terminal used in retail stores that enables for rapid transfers of funds from a customer's Bank account by
debiting the card that was used to pay for the item. The point of sale, also known as the point of service or POS, is the exact point in a transaction where products or services are provided to the customer and payment is made. While the complexities of a point-of-sale system vary based on the situation, the end result is consistent. Malcolm Tatum is a professional basketball player (Malcolm Tatum, 2010).

Retail stores utilize point of sale (POS) software to calculate sales and operate the cash drawer. Tally the sales and determine the change at the point of sale. During the purchase transaction at a store by any customer, the quantity of products sold in the inventory system is deducted or added at the register. At the very least, a POS system should be able to process sales and manage inventory information (Jane Harmon, 2010). Point of sale (POS) terminals are a type of e-Banking that includes cheque verification, cash deposit & withdrawal as well as credit authorization. It increases electronic fund transfers at the point of sale. As a result, the cost of a transaction done in a retailer such as a gas station or supermarket would be promptly taken from a customer's account.

As a result, payment for goods and services can be made without physically carrying cash because funds are deducted from the buyer's card account and credited to the seller's account. In fact, they are viable alternatives to dealing with or transacting cash for goods and service transfers and payments. Merchants can take card payments for commodities and services like recharge cards, bill payments, lottery tickets, and so on using POS machines. GSM/Mobile Banking is a type of e-Banking that primarily makes use of mobile phones as electronic equipment. Customers can manage their accounts with the Bank using their mobile phones as long as their phones and network services support SMS, which allows them to check account balances (Ajayi, 2014 and Acha, Kanu & Agu, 2017).

Supermarkets, on the other hand, are the most typical location for a point-of-sale system. The point-of-sale system consists of the checkout counter, bar code scanner, and cash register. Each time an item is scanned, the system calculates the cost; once all of the products selected by the customer have been scanned, the system calculates the overall cost of everything the customer wants to buy (Adewolo, 2015). The customer can pay using his credit, debit card, or cash. In a situation where cash is used, the cashier can input the amount paid and calculate the balance that should be given to the customer using the point-of-sale system. The Point-of-Sale system generates a receipt and logs it in the server when a transaction is completed.

2.3.1. Features of Point of Sale System

There were many features in the Point of Sale System, according to Taiwo, Kehinde, Aferohoho, and Agwu (2016). The proposed system will draw attention to the existing and significant features. One of them is simple to learn; the company will save money by using a user-friendly and simple-to-learn system. The second feature is that it is simple to use. During daily sales, an easy-to-use point-of-sale system should require the fewest keystrokes and the least amount of skill. Customers will not have to wait as long for a receipt as a result of this. Customers will wait while paying with a complicated Point of Sale system, and there will be a long line if the cashier takes too long to enter the data into the Point of Sale.

The automatic application feature is the third feature. Special customers should be able to receive automatic discounts or preferential pricing levels through their point-of-sale system. When there is a promotion going on, this will make it easier to speed up the cashier’s job.

The ability to apply loyalty/rewards is the fourth feature. To keep track of sales performance and commission, the point of sale system should be able to calculate total sales by each individual employee. This system ensures that employees receive their commissions in their pay stubs at every period and it will encourage them to sell more items in order to earn more money.

The fifth feature is the ability to accommodate hot-selling items that sell out quickly. Customers may have to wait until stocks arrive the next time they visit, but if the product is in high demand, it may be sold out before they can return. The point-of-sale system should be able to receive sales orders so that fresh stock can be reserved for customers when it arrives.

The receipt printout is the sixth aspect I would like to mention. This is the most important feature of a point of sale. Before the deal is complete, each customer receives a receipt. Customers must be able to print receipts from point-of-sale systems to confirm that they purchased things from a store, and these receipts will be utilized for warranty items. The receipt will also include the date of purchase.
2.4. Concept of Online Banking Transactions

This is a method of conducting financial transactions making use of smart technology devices such as a personal computer rather than visiting a brick and mortar Bank. Banking on the internet makes doing business on the internet a lot easier, and it’s widely used to do transactions. Web Banking, like mobile Banking, makes use of electronic card functions to carry out labor and product instructions and settlements between traders and clients through the internet (Woleola, 2017). The settlement of company invoices and the purchase of airline tickets through dealer sites are two of Nigeria’s most well-known web banking transactions. This device essentially lets a customer with a computer and phone to see his account, print his own statement of account, and make transfers from the comfort of his office or home (Gandy, 2017). This comprises completing financial transactions utilizing a mobile phone. Mobile Banking, as a result, can be described as the supply of Banking and financial services using mobile telecommunication devices. As a result, the recipient can immediately profit from the funds transfer process between consumers.

Internet enabled Banking, often known as web Banking or virtual Banking, is a system of payment through the use of electronic means that permits customers of financial institutions to make a variety of monetary and other transactions through the Bank or financial institution’s website. Rather than branch banking, which was the traditional method for clients to access banking services, the web-based financial platform will typically be linked to or integrated into a Bank’s core financial framework. To use a Banking institution’s web-based financial platform, a client with internet access must first subscribe for the service, set a unique username, create a secret word, and provide further client check accreditations. The certificates used for internet Banking are usually distinguishable from those used for phone or mobile Banking. Financial institutions now assign customers numbers (unique base numbers) upon the start of a relationship even when they have not expressed their desire for that particular service. Customer numbers and account numbers are not always the same because a single customer number can be linked to several customer accounts. Technically, a customer number can be linked to any account the customer has with the financial institution, albeit the financial institution may limit access to current, savings, loan, credit card, and similar accounts. Card infrastructure is used for the movement of payment instructions due to the high mobile phone penetration in the country, and secure SMS messaging to beneficiaries intended for receipt confirmation has become very popular as well as an exciting innovation for customers. This product provides features such as account enquiry, cash transfer, mobile recharge top up, password change, and bill payment. All the features listed above makes the product to seem exciting to customers, however the bulk of clients in Nigeria have yet to fully trust it. The Central Bank, as well as deposit money institutions, have been asked to enhance product awareness among the country’s savings population in this regard (Siyanbola, 2013). The extent of services given may include services for completing financial transactions like Banking or stock market, administering accounts, and accessing personalized information (Kennedy & Jacky, 2013). Mobile Banking is an electronic Banking service that allows users to use a dedicated telephone connection to access banking services from the comfort of their homes, companies, or other locations. Balance transfer, pin change, interbank funds transfer authorization, transaction alert (withdrawal or deposit), and enquiry are only a few of the services available (Adewoye, 2013). Other services, such as lifestyle (movie ticket purchases, client behavior patterns monitoring, and geolocation services) are increasingly commonly available. This is the most popular mode of telebanking. Users can do Banking transactions over the phone with it. It can be used as a substitute for traditional branch Banking or in addition to it (Agwu, Atuma Ikpefan, & Aigbiremolen, 2014). Phone lines serve as a link to the Banking institution’s basic financial architecture, allowing customers to access their records. Account balances, transfers, and pin changes are just a few of the accessible options. Due to a lack of client awareness and education on how to make the most of their phones to complete simple Banking transactions, this product has seen minimal use (Siyanbola, 2013).

2.4.1. Features of Online Banking Transactions

Both the provider and the customer benefit from internet Banking. It should be noted that the primary motivation for a Bank to develop online Banking technology is to save money on ‘brick and mortar’ infrastructure. Internet Banking is used by Banks because it is the most cost-effective method of delivering Banking products. This type of service can save the Bank time and money while also reducing the chances of Bank tellers making mistakes. Customers can use Internet Banking services whenever it is convenient for them (UKEssays, 2018). According to Robinson (2000), providing internet Banking services allows Banks to build and maintain relationships with their consumers. Users benefit from a variety of services, including convenience, lower transaction costs, and more regular account monitoring, among others. The basic features of internet Banking are:

- To help Banks to save infrastructural and overhead costs.
- To save time
- To minimize the likelihood of committing errors.
- To fulfill the desire of customers to experience convenience.
- To lower the transaction costs.
2.4.2. Challenges of Online Banking Services

Security and Technology Standards
Banks should hire a network and database administrator with well-defined performance indicators, according to the Group’s research. An information security strategy for the Bank should also be approved by the Executive Management team. The Data Innovation Division, which manages PC frameworks, and the Data Security Officials, who are solely responsible for framework data security, should have separate responsibilities. The Data Frameworks Reviewer should assess the data frameworks as well.

Legal Concerns
In view of the existing regulatory framework, Banks must not only verify prospective customers’ identities, but also enquire about their integrity and reputation. Despite the fact that account opening requests can be sent via the Internet, accounts should only be opened after a comprehensive introduction and physical verification of the customer’s identity.

Issues of Regulation and Supervision
According to the CBN, the current regulatory framework for Banks would be extended to Internet Banking as well. Nigerians would only be able to use Internet Banking services from Banks that are regulated and controlled in Nigeria and have a physical presence there. As a result, neither Banks nor virtual Banks created outside of Nigeria and without a physical presence in the country will be authorized to provide Internet Banking services to Nigerians for the time being. Thanks to the introduction of open Banking APIs, this may now be possible (application Programming Interfaces).

Vulnerabilities
E-Banking has its own set of risks when compared to traditional Banking. These risks are amplified in the case of online Banking. First and foremost, the threat of technological change must be carefully watched. This is required in order to remain cost-effective and customer-friendly while keeping up with technology.

Safety Concerns
People who utilize Online Banking are always concerned about programs that are unfriendly to social components when making online installments or shifting money from one account to the next. Hacking allows shady programmers to gain access to online Bankers’ records and misappropriate their funds.

Web Access is required
Customers can only enjoy the full benefits of web-based Banking where they have an uninterrupted access to the internet. Consequently, he should have a work space, a computer, or a PDA device.

Begin from the beginning.
Several Banks allow you to open accounts online without having to print or sign anything. You have to meet with an individual Investor within business hours previously. Learn how to open records on the internet.

Organize your finances
You can have your Bank send a cheque instead of issuing cheques to pay bills (or essentially move the cash to your payee electronically).

Transfer Funds
You’ll need to transfer funds from your transactional records to your investment account (or from one Bank to the other). What about putting more money into a fixed-store account (declaration of stored value)? In the past, you had to go to the branch or keep an eye out for the hold to finish this. It’s now easier thanks to web-based Banking.

Loan Advance Requests
Advances are a concentrated cycle of "administrative work" that does not have to be. You should be able to simply enter in your information and your Bank should provide you with a credit score and limit.

Rates
Online Banks have a reputation for offering better rates. In theory, you should be able to put more money into your investment accounts while paying reduced financing rates on loans. It’s always a good idea to shop around and compare internet banking rates to traditional rates, but you’ll almost always save money by using Online Banking.
Cheque Deposits
When you obtain checks, there are a few various ways to get money out of them. The quickest and easiest option is to use an online cheque deposit app, take a picture of the check, and send it to your Bank. There's no compelling incentive to go to a branch or mail a check. Figure out how to use your phone to store checks (by scanning and uploading it for clearance).

2.5. Economic Growth Concept
Economic development is not only quantitative but also qualitative changes that lead to a betterment of values, whereas economic growth is the continuous increase in the volume of production in a country, i.e. GDP growth, while the accumulation of capital, i.e. investments, is linked to economic progress. Changes in material output are included in economic growth, which occurs over a very little period of time, usually one year. In economic theory, the growth concept is defined as a yearly rise in the value of material output, or the rate of growth of GDP or national income. Growth is possible since it does not alter the economy's developmental trajectory (Mladen, 2015). As a result, economic development encompasses not only an increase in material production, but also all other socioeconomic processes and changes brought about by economic and non-economic forces.

For the vast majority of the people, economic growth entails progress in providing a sustainable living, access to education, and basic healthcare (Belshaw & Livingstone, 2002). With a better knowledge of the term "economic growth," the meaning of the term "development" becomes evident. Economists define economic growth as the rise in a country's real output per capita over time. Although alternative measurements can be employed, the gross domestic product is the most straightforward way to quantify output (GDP). This means that the rise in a country's total GDP divided by the population (GDP per capita) is used to measure economic growth.

As a result, economic growth is defined as a persistent expansion of production capabilities as measured by an increase in real GDP over time. Rapid economic growth over a long period of time can change a poor country into a wealthy one, as Nigeria has demonstrated (Bade & Parkin, 2002). Growth and development, according to Malizia and Feser (2000), are complimentary because one makes the other feasible. They're also consecutively occurring alternating processes.

Growth refers to a rise in output, while development refers to a structural trade, consisting of a technical or prison trade. Growth boosts the economy, however progress should lead to more equitable profits and wealth distribution. Growth and improvement, on the entire, cause a wider range of monetary options. The ability of a country to expand its output at a tempo better than the growth charge of its population is expressed through the fee of increase of income in keeping with capita or per capita GNP, which is a common opportunity for gauging monetary improvement (monetary increase of GNP in step with capita minus the charge of inflation). The GNP in line with capita is a degree of the populace's standard monetary well-being, representing the quantity of real goods and offerings to be had for intake and funding to the typical citizen (Todaro & Smith, 2003). However, in recent years, monetary progress has been characterized in terms of most of the people of the populaces satisfactory of residing. According to Todaro and Smith (2003), the experience of many growing countries failing to satisfy their economic growth targets whilst the high-quality of lifestyles of most people in their people remained in large part unchanged in the 1950s and 1960s indicated that something changed into very wrong with this slim definition of improvement.

In spite of the contentions for and against utilizing economic growth, or GNP per capita, as a marker of financial turn of events, there is a lot of proof in the formative writing. It has been exhibited that this pointer of financial development has various blemishes regarding government assistance (see Allen, and Thomas, 2000; Mohr and Fourie, 2004). The monetary development file, specifically, neglects to mirror the appropriation of pay or abundance between the rich, and poor people, just as which fragments of the populace are profited by the increment; or the level of government assistance got from the utilization of labor and products included. Therefore, utilizing GNP per capita as a file requires the goal of various issues.

Externalities, for example, encompass catching unrecorded monetary transactions from the casual region (pollutants, congestion and noise). In essence, it says nothing approximately the worth of these sports or their charges. Considering the diverse trade prices of country wide currencies, evaluating the GNP per capita of different nations is in particular tough.

In mild of all of these troubles, Thomas (2000) suggests that progress can be measured in phrases of better residing requirements, extra fitness and properly-being for all, and the attainment of something is considered a popular desirable for society as an entire. According to Belshaw and Livingstone (2002), one of the motives the GNP consistent with capita degree has grown so entrenched is the belief within the trickle-down impact. The fact that the advantages
of growth have now not always trickled down as expected from all sectors is, however, neither a seasoned nor a con for boom, as greater growth might also, after all, be what’s required.

2.6. Contribution of Cashless Policy in Nigeria

Because it provides multiple benefits for customers, corporate bodies, the government, and the Banking industry in Nigeria, the cashless policy has been acknowledged as an essential contributor to the growth of the Nigerian economy. Customers of commercial Banks benefit from the cashless policy since they don’t have to carry significant sums of money with them wherever they go to conduct financial transactions. This is despite the fact that a Bank customer only needs to use the Point of Sale (POS) platform, mobile phone platform, or ATM platform to pay for goods or services. Most importantly, the Nigerian government’s cashless policy has reduced the high incidences of risks associated with armed

With the execution of a cashless policy in Nigeria, Bank customers will no longer be required to carry large sums of money, removing the possibility of becoming easy targets for criminals and other miscreants. Furthermore, the expansion of Nigeria’s cashless policy gave Bank customers with easy and inexpensive access to banking services because they did not have to physically visit the Bank to conduct financial transactions. This is despite the fact that he may do his business electronically from the comfort of his own home (Oghojafor, Muo & Alaneme, 2013).

In the same way that cashless policies benefit Bank customers, they also benefit the government because they help the government achieve increased tax collection by recognizing taxable people through the financial system, increased financial inclusion, and increased economic prosperity (Ayoola, 2013). This is despite the fact that firms and individuals in the informal sector owe the government money. More innovations are enthroned as a result of the cashless policy, causing informal sector enterprises to be captured in the Banking net, giving the government more power to evaluate their earnings and impose the appropriate tax. As a result, tax collection efficiency in Nigeria has improved, and government revenue has grown (Osazevbaru & Yomere, 2010). (2015). In general, Nigeria’s cashless policy has aided the government’s financial inclusion efforts, as cashless policies have expanded Banking services to people and areas where Banks and Banking services would otherwise be unavailable. The cashless policy ushered in the era of ‘branchless Banking,’ in which individuals and businesses are still able to conduct financial transactions without having to physically visit a Bank. According to Yaqub, Bello, and Adenuga (2013), the government’s financial inclusion agenda has materialized, and the government’s monetary policy implementation has begun to have positive impacts because of the commencement of the policy discouraging the use of cash in Nigeria, which has resulted in increased economic growth and development in Nigeria.

The majority of businesses deal in large amounts of cash. As a result, implementing a cashless policy provides speedier access to money, minimizes income leakage, and even lowers the costs associated with cash handling (Ugwuanyi & Ugwuanyi, 2013). If a company has to borrow money from a Bank, the cashless policy makes the application and processing of Bank loans much easier because ICT is fully utilized. Unlike in the past, when cashless policies were not in place, loan applications were completed manually which resulted in wasting of precious time. The adoption of the cashless policy has made it possible for Banks to be more efficient to complete the loan application/request of big corporations, resulting in increased access to capital and performance. Furthermore, a cashless policy benefits businesses by reducing income leakages. This is because personnel handling of cash is reduced, lowering the risk of theft and embezzlement of corporate funds. The Central Bank of Nigeria (CBN) used a cashless policy to help it control inflation and other macroeconomic imbalances related with the country’s money supply (Olanipekun, Brimah & Akanni, 2013).

Banking services have been more efficient as a result of electronic payment platforms such as ATMs, POS machines, online Banking, and mobile phone Banking, to name a few. As a result, Banking offices have become less crowded, and customer satisfaction has increased. Second, with the execution of the cashless Nigeria (policy on the use of less cash) costs such as transportation costs to transport files from one branch to another, the cost of bullion vans for & security officers, staff costs, and other logistics are reduced. This is due to the fact that the majority of these procedures are now performed electronically, which eliminates the associated costs. Finally, the cashless policy has enhanced Banking penetration/financial inclusion because Banks do not have to set up physical presence everywhere and instead provide Banking services through multiple electronic platforms (Osazevbaru, Sakpaide & Ibubune, 2014).

2.7. Challenges of Cashless Policy in Nigeria

Cashless policy despite its various advantages has its own difficulties even in the developed economies. This part focuses on some of these difficulties with explicit spotlight on Nigeria;
2.7.1. Behavioral requirements
Nigeria is largely cash-based and individuals are used to making use of cash for majority of their transactions.

2.7.2. Banks' disposition
A few Banks in Nigeria are extremely traditionalist; they utilize not many inventive approaches. This has truly reduced the accomplishment of the cashless policy.

2.7.3. Lack of confidence in Bank's platforms
- This is an associated problem in the improvement of cash policy in Nigeria.
- Low level of internet penetration and inadequately created telecom block the smooth running and improvements in e-payments and online business.

2.7.4. Lack of appropriate laws and administrative structure for e-payments
- Nigeria’s current laws are obsolete to oblige electronic agreements. Despite the fact that there have been a few CBN rules to back the cashless policy, however the court system in Nigeria last stop for adjudication on any issues that may arise from such.
- Inadequate Banking products designed for the financially excluded and those at the lower part of the pyramid.
- Political and monetary unsteadiness in neighboring nations: Political flimsiness unavoidably upset smooth activities of business and hinder the free progression of goods and services.

2.7.5. High illiteracy
Low education rate is a genuine hindrance for the reception of electronic payments as it blocks residents to completely partake in the cashless process.

2.7.6. High cost of Internet
The expensive nature of access to of web services comparatively with per capita income is a basic factor. Comparing with developed nations, there are greater expenses for entry into the electronic payments space and online Banking business market. For example, cost of servers, switching system.

2.7.7. Frequent power interference
Absence of a solid power supply is really difficult for the smooth running of e-payments frameworks which need to be up and running 24/7k. Resistance to modifications in era amongst clients and personnel because of:
- Lack of recognition on the advantages of recent technologies
- Lack of trained employees in key organizations
- Tendency to be content with the present structures.
- Iv. People may be proof against new fee mechanism.

Furthermore, the cashless policy's objective is to put in place mechanisms to discourage to the barest minimum to the adverse results related with the high velocity of actual money in the economy, including:

2.7.8. Significant expense of money
The ecosystem bears the brunt of significant cost from the CBN and the Banks, to enterprises and merchants; everybody bears the significant expenses related to volume cash taking care of.

2.7.9. High danger of utilizing cash
Money encourages burglaries and other money related violations. It likewise can prompt monetary misfortune on account of fire and flooding occurrences.

2.7.10. High risk of using cash
CBN examination showed that 10% of day by day Banking transaction are above 150k, yet the 10 percent record for most of the biggest transactions.
2.7.11. Informal Economy

High money utilization brings about a truckload of cash outside the main economy, in this way restricting the adequacy of monetary policy in overseeing inflation and empowering monetary development.

3. Methodology

3.1. Introduction

The aim of this paper is to examine how the use of key e-payment platforms of ATM machines, POS terminals and Online Banking platforms transaction value ensure the enhancement of the cashless policy of Nigeria thus boosting thus affecting economic growth positively. This study makes use of primary data obtained by the administration of a questionnaire to 235 (two hundred and thirty-five) respondents.

The purpose of this research paper include:

- To investigate the effect of transactions done on automated teller machines on the Gross Domestic Product of Nigeria.
- To investigate the effect of point of sale terminal transactions on the Gross Domestic Product of Nigeria.
- To investigate the effect of online Banking transactions on the Gross Domestic Product of Nigeria.

3.2. Data analysis and presentation

Data presentation, analysis, and interpretation are the essential facets of any research effort. It gives meaning and shape to raw data obtained through the questionnaire administered during the field survey. In this section, an attempt will be made to present, analyze, and interpret the collected data from the survey. Data collected are presented with tables and simple percentages. Two hundred and thirty-five (235) were found suitable for analysis after data cleaning to remove those with incomplete filling and duplications.

3.2.1. Analysis of Demographic Information

The socio-demographic profile of respondents depicts the background knowledge of the respondents. It is important to place in proper perspective some demographic factors that could influence opinion. The distribution of the demographic profiles of the 235 respondents that participated fully in the study is presented. Table 4.1 summarizes the demographic profile of respondents.

**Table 1** Distribution of the respondents by Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>132</td>
<td>56.2</td>
</tr>
<tr>
<td>Female</td>
<td>103</td>
<td>43.8</td>
</tr>
<tr>
<td>Total</td>
<td>235</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Author's Fieldwork (2021)

Table 1 shows that out of two hundred and thirty-five (235) respondents sampled, 132 (56.2%) were males and 103 (43.8%) were female. This showed that higher number of males participated in the survey than females. Therefore, data collected is considered reliable for the purpose of this study. It implies that both genders were involved in this study, and thus the findings of the study did not suffer from gender bias.

Table 4.2 above revealed the age distribution of the respondents. 55 (23.4%) of the respondents were less than 29 years, 100 (42.6%) of the respondents were between 30-39 years of age, 66 (28.1%) of the respondents were between 40-49 years of age, while the remaining 14 (6.0%) of the respondents were above 50 years. It proves that most of the respondents were between the ages of 30-39 years. This is an indication that respondents were well distributed in terms of their age.
Table 2 Distribution of the respondents by Age

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-29 years</td>
<td>55</td>
<td>23.4</td>
</tr>
<tr>
<td>30-39 years</td>
<td>100</td>
<td>42.6</td>
</tr>
<tr>
<td>40-49 years</td>
<td>66</td>
<td>28.1</td>
</tr>
<tr>
<td>50 years &amp; above</td>
<td>14</td>
<td>6.0</td>
</tr>
<tr>
<td>Total</td>
<td>235</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Author’s Fieldwork (2021)

Table 3 Distribution of the respondents by Marital Status

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>86</td>
<td>36.6</td>
</tr>
<tr>
<td>Married</td>
<td>146</td>
<td>62.1</td>
</tr>
<tr>
<td>Divorced</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Widow</td>
<td>2</td>
<td>0.9</td>
</tr>
<tr>
<td>Total</td>
<td>235</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Author’s Fieldwork (2021)

The table also revealed the marital status of the respondents. It shows that more than half of the respondents surveyed are married with 146 (62.1%) while 86 (36.6%) of the respondents are single. Also 1 (0.4%) of the respondents are divorced and 2 (0.9%) of them are widows. It further implies that majority of the respondents are married. It was therefore very important that the study established the marital status of respondents as the information will be informative in the decision-making process.

Table 4 Highest Educational Qualification

<table>
<thead>
<tr>
<th>Educational Qualification</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSCE</td>
<td>3</td>
<td>1.3</td>
</tr>
<tr>
<td>OND/NCE</td>
<td>5</td>
<td>2.1</td>
</tr>
<tr>
<td>HND/BSc</td>
<td>143</td>
<td>60.9</td>
</tr>
<tr>
<td>MSc/PhD</td>
<td>71</td>
<td>30.2</td>
</tr>
<tr>
<td>Others</td>
<td>13</td>
<td>5.5</td>
</tr>
<tr>
<td>Total</td>
<td>235</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Author’s Fieldwork (2021)

The study sought to establish the highest educational level of the respondents and the response is presented in Table 4. The results indicated that respondents with bachelor’s degree and Higher National Diploma (HND) had the highest frequency of 143 (60.9%) which represents. This tally was followed by those respondents with MSc/PhD with a total of 71 (5.5%) respondents. Respondents with Other certificates followed with a frequency of 13 (5.5%) and Ordinary National Diploma (OND)/NCE were 5 (2.1%) respectively. Respondents with senior secondary school certificate (SSCE) were 3 (1.3%). Also, this shows that there is substantial evidence that one’s educational attainment is associated with the usage of the online Banking.
4. Results and discussion

4.1. Research Question 1

What is the effect of automated teller machines on Gross Domestic Product of Nigeria?

Table 5 Descriptive Analysis showing the effect of automated teller machines on Gross Domestic Product of Nigeria

<table>
<thead>
<tr>
<th>Statement</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
<th>M</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you think the introduction of e-banking such as automatic teller machines and others have increased the level of economic activities?</td>
<td>142</td>
<td>88</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1.4298</td>
<td>0.59049</td>
</tr>
<tr>
<td>Does the introduction/use of automatic teller machine causes you to spend more cash than before it was introduced?</td>
<td>67</td>
<td>71</td>
<td>38</td>
<td>38</td>
<td>21</td>
<td>2.4681</td>
<td>1.29844</td>
</tr>
<tr>
<td>Has the introduction of automatic teller machine caused a reduction in the number of customer transacting business inside the Banking hall?</td>
<td>135</td>
<td>86</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>1.5342</td>
<td>0.76463</td>
</tr>
<tr>
<td>Are ATM machines are faster to use than going to queue at the Banking Halls?</td>
<td>107</td>
<td>98</td>
<td>20</td>
<td>5</td>
<td>5</td>
<td>1.7362</td>
<td>0.86638</td>
</tr>
<tr>
<td>Have you been stranded because an ATM machine has power issues or could not dispense cash?</td>
<td>66</td>
<td>109</td>
<td>39</td>
<td>16</td>
<td>5</td>
<td>1.4298</td>
<td>0.59049</td>
</tr>
</tbody>
</table>

Key: SA = Strongly Agree, A = Agree, N = Neutral, D = Disagree, SD = Strongly Disagree, Std. Dev. = Standard Deviation

The results are presented in the Table above shows the respondent’s perspective on the effect of automated teller machines on Gross Domestic Product of Nigeria. The respondents were asked if the introduction of e-Banking have increased the level of economic activities, 142 (60.4%) of them strongly agreed, 88 (37.4%) merely agreed, 1 (0.4%) disagreed, 1 (0.4%) strongly disagreed, and 3 (1.3%) remained neutral. The implication here is that the introduction of e-Banking has made Banking and other economic activities easier.

Also, the respondents were asked if the use of automatic teller machine has led them to increased spending, 67 (28.5%) of them strongly agreed, 71 (30.2%) agreed, 38 (16.2%) disagreed, 21 (8.9%) strongly disagreed, and 38 (16.2%) neither agreed nor disagreed. This implies that there is slight increase in expenditure than before the introduction of ATMs.

135 (57.4%) of the respondents strongly agreed that introduction of automatic teller machine has instigated a reduction in the number of customers inside the Banking Hall, 86 (36.6%) merely agreed, 3 (1.3%) disagreed, 3 (1.3%) strongly disagreed, and 6 (2.6%) neither agreed nor disagreed. This implies that the introduction of the ATMs has a significant effect on the reduced number of customers inside the Banking Hall.

When asked if the usage of automatic teller machine provides faster approach than going to queue at the Banking Halls, 107 (45.5%) of the respondents strongly agreed, 98 (41.7%) only agreed, 5 (2.1%) disagreed, 5 (2.1%) strongly disagreed, and 20 (8.5%) remained neutral. This then implies that the usage of ATMs does provide a faster means of obtaining cash than going to queue at the Banking hall.

The respondents were asked if they have been stranded as a result of power outage at an ATM, 66 (28.1%) of the respondents strongly agreed, 109 (46.4%) agreed, 16 (6.8%) disagreed, 5 (2.1%) strongly disagreed, and 39 (16.6%)
remained undecided. This then implies that many of the respondents make use of the ATM even if power outage has been a problem.

4.2. Research Question 2
What is the effect of point of sale terminals on Gross Domestic Product of Nigeria?

Table 6 Descriptive Analysis showing the effect of point of sale on Gross Domestic Product of Nigeria

<table>
<thead>
<tr>
<th>Statement</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
<th>M</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will a rise in point-of-sale channels would imply an enhancement of the</td>
<td>108</td>
<td>99</td>
<td>25</td>
<td>3</td>
<td>0</td>
<td>2.0851</td>
<td>0.95250</td>
</tr>
<tr>
<td>business opportunities and convenient payments which directly raises</td>
<td>(46%)</td>
<td>(42.1%)</td>
<td>(10.6%)</td>
<td>(1.3%)</td>
<td>(0%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>the output of goods and services?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you agree that a point of sale is a digital payment option by an</td>
<td>120</td>
<td>98</td>
<td>12</td>
<td>5</td>
<td>0</td>
<td>1.6723</td>
<td>0.71543</td>
</tr>
<tr>
<td>account holder via the use of cards in other to maintain a cashless</td>
<td>(51.1%)</td>
<td>(41.7%)</td>
<td>(5.1%)</td>
<td>(2.1%)</td>
<td>(0%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>economy?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is a point of sale terminal is faster to use at a store for payment than</td>
<td>62</td>
<td>83</td>
<td>54</td>
<td>24</td>
<td>9</td>
<td>1.5830</td>
<td>0.68915</td>
</tr>
<tr>
<td>counting and sorting cash?</td>
<td>(26.4%)</td>
<td>(35.3%)</td>
<td>(24.3%)</td>
<td>(10.2%)</td>
<td>(3.8%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does the failure of point of sale terminals whilst doing transactions</td>
<td>21</td>
<td>65</td>
<td>42</td>
<td>92</td>
<td>15</td>
<td>2.3090</td>
<td>1.08229</td>
</tr>
<tr>
<td>reduced the rate of sale of goods and services in the economy?</td>
<td>(8.9%)</td>
<td>(27.7%)</td>
<td>(17.9%)</td>
<td>(39.1%)</td>
<td>(6.4%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key: SA = Strongly Agree, A = Agree, N = Neutral, D = Disagree, SD = Strongly Disagree, Std. Dev. = Standard Deviation

The results are presented in Table 4.6 shows the respondents perspective on the effect of Point-of-Sale on Gross Domestic Product of Nigeria. The respondents were asked if the rise in point-of-sale channels would imply an enhancement of business opportunities and convenient payments which will ultimately increase output, 109 (46%) of them strongly agreed, 99 (42.1%) only agreed, 3 (1.3%) disagreed, and 25 (10.6%) remained neutral. This then implies that the increased use of Point-of-Sale channels has facilitated enhanced business opportunities and convenient payments.

When asked if the Point-of-Sale channels are a digital payment option by an account holder in other to maintain a cashless economy, 120 (51.1%) of the respondents strongly agreed, 98 (41.7%) only agreed, 5 (2.1%) disagreed, and 12 (5.1%) remained undecided. This then implies that Point-of-Sale channels are a digital payment option to help drive a cashless economy.

The respondents were asked if a POS is faster to use at a store than sorting cash thus enhancing its adoption as a means of payments., 62 (26.4%) of the respondents strongly agreed, 83 (35.3%) agreed, 24 (10.2%) disagreed, 9 (3.8%) strongly disagreed, and 54 (24.3%) remained undecided. This could imply an increased use of POS in a store as a means of adopting electronic payments.

Also, the respondents were asked if the failure of POS terminals whilst doing transactions has reduced the rate of sale of goods and services in the economy, 21 (8.9%) of them strongly agreed, 65 (27.7%) agreed, 92 (39.1%) disagreed, 15 (6.4%) strongly disagreed, and 42 (17.9%) neither agreed nor disagreed. This implies that the failure of POS terminals has little to no effect in the upsurge or reduction in the rate of sales of goods and services in the economy.
4.3. Research Question 3

What is the effect of online Banking transactions on Gross Domestic Product of Nigeria?

The results are presented in Table 4.7 shows the respondents perspective on the effect of online Banking transactions on Gross Domestic Product of Nigeria. The respondents were asked if the introduction of online Banking transactions has increased the financial service patronage in Nigeria. 119 (50.6%) of them strongly agreed, 93 (39.6%) merely agreed, 2 (0.9%) disagreed, 4 (1.7%) strongly disagreed, and 17 (7.2%) neither agreed nor disagreed. This then implies that online Banking transactions have increased the financial service patronage.

Table 7: Descriptive Analysis showing the effect of online Banking Gross Domestic Product of Nigeria

<table>
<thead>
<tr>
<th>Statement</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
<th>M</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has the introduction of e-banking service products (online Banking)</td>
<td>119</td>
<td>93</td>
<td>17</td>
<td>2</td>
<td>4</td>
<td>3.0638</td>
<td>1.13236</td>
</tr>
<tr>
<td>has increased the financial service patronage in Nigeria in terms of turnover in sales transactions?</td>
<td>(50.6%)</td>
<td>(39.6%)</td>
<td>(7.2%)</td>
<td>(0.9%)</td>
<td>(1.7%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you adopt online Banking because of more of bulky cash transactions?</td>
<td>57</td>
<td>81</td>
<td>55</td>
<td>25</td>
<td>17</td>
<td>1.6340</td>
<td>0.79670</td>
</tr>
<tr>
<td>Will e-banking will not be fully embraced in the Nigerian Banking sector except it is made safe and secure for the customers' financial transactions?</td>
<td>(24.3%)</td>
<td>(34.5%)</td>
<td>(23.4%)</td>
<td>(10.6%)</td>
<td>(7.2%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has your online Banking account been hacked before due to system security breaches?</td>
<td>135</td>
<td>75</td>
<td>16</td>
<td>3</td>
<td>6</td>
<td>1.9362</td>
<td>1.02123</td>
</tr>
<tr>
<td>(57.4%)</td>
<td>(31.9%)</td>
<td>(6.8%)</td>
<td>(1.3%)</td>
<td>(2.6%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Will the adoption of anti-fraud technologies will improve the adoption level of e-Banking in Nigerian Economy?</td>
<td>112</td>
<td>82</td>
<td>12</td>
<td>6</td>
<td>23</td>
<td>2.6723</td>
<td>1.20144</td>
</tr>
<tr>
<td>(47.7%)</td>
<td>(34.9%)</td>
<td>(5.1%)</td>
<td>(2.6%)</td>
<td>(9.8%)</td>
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Key: SA = Strongly Agree, A = Agree, N = Neutral, D = Disagree, SD = Strongly Disagree, Std. Dev. = Standard Deviation

57 (24.3%) of the respondents strongly agreed that they adopt online Banking because they would otherwise carry out bulky cash transactions very often, 81 (34.5%) agreed, 25 (10.6%) disagreed, 17 (7.2%) strongly disagreed, and 55 (23.4%) neither agreed nor disagreed. This implies that the ease that comes with adoption of online Banking involves not having to carry out bulky cash transactions.

93 (39.6%) of the respondents strongly agreed that e-Banking will not be fully embraced in the Nigerian Banking sector except it is made safe and secure for the customers' financial transactions, 94 (40%) agreed, 16 (6.8%) disagreed, 7 (3%) strongly disagreed, and 25 (10.6%) neither agreed nor disagreed. This implies that the full acceptance of electronic Banking in Nigeria is hugely dependent on safety and security of customers.

When asked if their online banking has been hacked before due to security breaches 135 (57.4%) of the respondents strongly agreed, 75 (31.9%) agreed, 3 (1.3%) disagreed, 6 (2.6%) strongly disagreed, and 16 (6.8%) remained neutral. This then implies that a lot of people have experienced a breach of their online banking platforms due to cyber insecurity.

The respondents were asked if the adoption of anti-fraud technologies will improve the adoption level of e-Banking in Nigerian Economy, 112 (47.7%) of the respondents strongly agreed, 82 (34.9%) agreed, 6 (2.6%) disagreed, 23 (9.8%) strongly disagreed, and 12 (5.1%) remained undecided. This then implies that more people will make use of online Banking if anti-fraud technologies are adopted.
4.4. Summary of Findings

The major findings revealed in this study work are identified below:

- According to majority of responses (over 95%) in the table who agreed that automated teller machines have led to an upsurge in economic activities as people can make payments more seamlessly thereby encouraging economic activities and subsequently an effect on the Gross Domestic Product.
- Majority of respondents (88%) agree that point-of-sale channels would bring about an enhancement of the business opportunities and ensure convenient payments which directly raises the output of goods and services in the economy thus leading to economic growth.
- 89% of respondents agreed that the introduction of Online Banking has increased service patronage of businesses in Nigeria in terms of turnover in sales transactions. This has a multiplier effect on economic growth.

Conclusion

In the conclusion of this work; The effect of automated teller machines, point of sale terminals and online Banking transactions on the economic growth of Nigeria, where the research objectives were to examine the effect of the value of transactions done on these platforms and how they have had an effect on economic growth via the use of primary data obtained from questionnaire from 235 (two hundred and thirty-five) respondents. It was concluded that a well implemented cashless policy is essential to the growth of the Nigerian economy. Also, the platforms examined for implementing it, such as automated teller machines, point of sale terminals, and online Banking platform must be well promoted in other for them to gain more prominence and be viable options for households. According to the findings, the e-payment platforms have a significant effect on the progress of financial inclusion in Nigeria. Efforts to develop a cashless economy should be encouraged, and the government should provide an effective and sustainable structure for supporting and driving the full implementation of Nigeria’s cashless policy.

Policy recommendations

- The Central Bank of Nigeria (CBN) should establish guidelines to push Banks in Nigeria to locate more ATMs in major cities and rural areas, this will naturally drive the adoption of cashless. Households will no longer stack huge sums of funds under their beds or in their wardrobes but only make use of the ATM when funds are needed. Also efforts should be made to have an inter sector approach with the telecommunication sector to ensure availability of stable internet infrastructure, which when available in an effective and efficient manner will naturally drive down prices southwards, assuming the forces of demand and supply come to play. This will increase web transactions by citizens in the country. Nigeria’s financial inclusion would be improved greatly if this method is adopted.
- The Central Bank of Nigeria (CBN) should establish regulations and strengthen guidelines to govern the activities of point-of-sale (POS) terminal operators/agents in Nigeria so that they can limit the amount of service fees they charge users. This would boost the use of POS as an alternative method of payments to transact in Nigeria, hence further improving financial inclusion.
- The National Government through the Central Bank of Nigeria (CBN) should establish a regulatory framework to combat electronic banking fraud and educate Bank clients who use ATMs about the risks involved in the transactions. This enlightenment should be carried out by other government agencies who are stakeholders like the Nigerian Communications Commission, Telecommunication service operators National Orientation Agency, Bankers Committee all in conjunction with the Central Bank.

Compliance with ethical standards

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Disclosure of conflict of interest

The Authors declare that there is no conflict of interest.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.
References


