

# Analysis of Prospects and Challenges of E-Payment System in Nigeria

\* Igbekele Gavine BAGUDU

\*\* Ugo Chuks OKOLIE

## Abstract

E-payment is an electronic transfer of cash via online transaction for business -to- consumer (B2C), business-to-business (B2B), person -to- person (P2P), and most recently administration -to- consumer (A2C) purposes. Nigeria payment system has been predominately cash – based. However the cost of cash to Nigeria financial system is high and increasing. It is in this respect that the Central Bank of Nigeria (CBN) introduced the cashless policy with the objective of promoting the use of e-payment channels instead of cash. E-payment system apart from convenience and safety also have a significant number benefits which include faster access to capital, reduced risk of cash-related crimes, access to credit, reduced cash handling costs, increased tax collections, reduced revenue leakage, greater financial inclusion, more service options, encouraged financial deepening and promotes savings, reduced risk in payments and settlements, increased economic development.

**Keywords:** Challenges, E-payment, Nigeria, Prospects, System

**JEL:** G21, G20, G23

## Introduction

Nigeria is one of the developing economies of the world that is rasing to catch up with the global advancement in the e-payment system. Though, e-payment may not be an entirely new concept in the Nigeria business market, however a cursory look in the e-payment category in Nigeria will reveal an emphasis, on card-based solutions with little penetration into the web and mobile processes (Aborisade, 2014). At present, the use of the ATM is the most visible sign of the presence of e-payment methods in Nigeria. However, the ATMs are mostly used to collect cash over the ATM machines rather than being used for payment purposes. The use of ATM has been widely promoted by banks in the country because it affords the banks the opportunity to avoid the usual queues that characterizes the banking halls across the country.

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\* Department of Marketing Auchi Polytechnic, Auchi, Edo State, Nigeria. Email: bagudugavine@gmail.com

\*\* Chartered Institute of Personal Management of Nigeria, Edo State Study Centre, Benin City, Nigeria.  
Email: ugookolie3@gmail.com

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In Nigeria, as it in many developing countries, cash is the main mode of payment and a large percentage of the populations are unbanked. This makes the country to be heavily cash-based economy (Ajayi& Ojo, 2006). However, one of the prerequisites for the development of national economy is to encourage a payment system that is secure, convenient, and affordable. In consonance with the trend of development experienced in the global payment industry, the Federal Government of Nigeria in the year 2009 announced an e-payment regime for all transactions involving the Federal Ministries, Department and Agencies (MDAs). Under the new regime, the issuances and acceptability of cheques as a means of settlement was jettisoned, while the payment of all staff salaries and emoluments as well as government suppliers, vendors and contractors were to be remitted electronically into the beneficiary's accounts. This according to the Federal Government will enhance transparency and accountability as well as checkmate the activities of corrupt practices within the government structures.

In a nutshell, e-payment is a subset of e-governance which is the application of electronic means of affecting payments by government to contractors and civil servants. It is a form of direct payments and banking without appearance at the Ministries, Departments and Agencies (MDAs) or bank through the means of electronic interactive communication channels and other technology infrastructure (Ogedebe & Babatunde, 2012). The quest of the Federal Government of Nigeria to implement policies that will develop a change from the traditional payment into the new electronic payment method, which will place the nation at par with trends of international best practices and standards, using modern technologies have been faced with daunting challenges (Aborisade, 2014). The financial system strategies of the Federal Government were found to hold appreciable prospects for the development of the nation's economy. However, the implementation of the e-payment system lacks basic infrastructures needed to facilitate such systemic transition. Lack of adequate infrastructure, lack of political will, platform security, high rate of illiteracy, lack of uniform platform by banks and MDAs, lack of legal frame work, frequent power interruption, lack of seriousness by banks and resistance to changes in technology among customs were important factor that influenced the negative tendency of e-payment system in Nigeria. The encumbrance then fell on the commercial banks as major stakeholders within the payment system, to rise up to the occasion and support the Federal Government on its new policy. Therefore, this paper examined the prospects and the challenges limiting the implementation of the e-payment system and the ways of outmatching the deterrents.

### **The Concept of E-Payment**

E-payment provides means of transacting business and settling financial commitment electronically without necessarily touching cash in cashless society. The payment system is the infrastructure consisting of institutions, instrument, rules, procedures, standards and technical means established to affect the transfer of monetary value between parties discharging mutual obligations. It is also an operational network governed by laws, rules and standards that links bank accounts and provides the functionality of monetary exchange using bank deposits (Summers, 2012). What makes it a 'system' is that it employs cash substitutes with the use of electronic money and other information and communication technologies (ICT) related equipment in its operations. The traditional payment systems are negotiable instruments such as draft- cheques and documentary credits such as letter of credits. With the advent of electronic communications, a large number of alternative electronic payment systems have emerged. These include debit cards, credit cards, electronic funds transfers, direct credits, direct debits, internet banking and e-commerce payment (Okifo & Igbunu, 2015). E-payment systems are used in lieu of tendering cash in domestic and global transactions and consist of a major service provide by banks and other financial institutions.

According to Nwankwo and Eze (2013) e-payment system is an automated process of exchanging monetary values, among parties in business transaction and transmitting this value over the information and communication technology network. The Nigerian cashless system of payment has been evolving in line with the global payments evolution. Cashless system of payments and instruments are significant contributors to the broader effectiveness and stability of the financial system. However, innovations in technology and business models have implications for the efficiency and safety of cashless system of payments. Cashless system of payment is defined as “a society where transactions is functioning, operated, or performed without using coins or banknotes for money transactions but instead using credit cards or electronic transfer of fund” (Nwankwo & Eze, 2013: 141). The internet is perhaps one of the most useful tools to businesses and individuals in contemporary world economies. Its use has touched virtually every aspect of human endeavor especially banking. Technological breakthroughs and product designs have led to the emergence of e-banking services which, in recent time has become globally popular except in developing countries including Nigeria (James, 2012). E- Banking according to Daniel (1999) is the provision of banking services to customers through the internet. Services offered by banks using the internet include: Mobile banking (M-banking), video banking, fund transfers, e-payments and ATM cards. Of these entire e-banking services banks offer, ATM is by far the most popular in Nigeria. However, technological advancement keeps broadening the frontier of possibilities in all human endeavors and thus more e-banking services are being developed and introduced. As at today, all the deposit money banks in Nigeria offer e-banking services.

E-payment system involves the transfer of monetary value from one person to the other, meaning that the payment system consist of mechanism which include institution, people, rules and technologies that make the exchange of payment possible. In the Nigeria context, e- payment according to Agba (2010) is a method of effecting payments from one end to another and through the medium of the computer without manual intervention beyond inputting the payment data. It is also the ability to pay the suppliers, vendors and staff salaries electronically at the touch of a computer button.

### ***Types of E- Payment System***

The idea of e-payment to buy goods or services started in the late 1970 and early 1980; the first actual e-payment system was released in 1997 (Abdulla *et al.*, 2015). The availability of internet and technology in the form that allows accessing the information around the world, drive the e-payments and e- commerce simultaneously into a powerful and effective system. Generally, there are two types of e-payments, the first require physical payment device with internet access such as Electronic Point of Sale (EPOS) and the second does not require physical payment device such as e-cash and virtual credit cards which requires the internet only. Rachna and Singh (2013) has categorized e-payment system into eight categories which are e-cash, credit cards, debit cards, smart cards, secure electronic transaction, cyber cash, net bill and first virtual holdings. In Nigeria context, there are two types of e-payment system, namely:

- (i) **End to end processing:** Here, all the processes from approval to the receipt of value by the beneficiary are done electronically.
- (ii) **Manual e-payment or use of mandate:** It is the mixture of manual and electronic process where the available infrastructures cannot support the end to end processing. However, there are many forms of e-payments such as cards, internet mobile payments, financial services kiosks, biometric payments, electronic payment networks (Asaolu, Ayoola & Akinkoye, 2011).

### ***Prospects of E-payment System in Nigeria***

An effective and modern payment system is positively correlated with economic development and is key enabler for economic growth, though this has not been supported by empirical evidence in the case of Nigeria due to many problems impeding the smooth operation of the payment system. For centuries, cash has served the primary role in day-to-day commerce, helping ordinary people trade their labour and products for the goods and services they need without inept negotiations over bartering or exchanges. Yet slowly but surely, alternatives to cash have taken root and grown (Yaqub et al., 2013). The introduction and increased use of e-payment systems holds the promise of broad benefits to both consumers and businesses in the form of greater convenience and more secure or reliable means of payment and settlement for a potentially vast range of goods and services offered worldwide over the internet. One such benefit is that e-payments enable bank customers to handle their daily financial transactions without having to visit their local bank branch. E-payment products could save merchants time and expenses in handling cash (Appiah & Agyemang, 2007). E-payment system poses a lot of prospects for the nation. These prospects are highlighted below:

1. Easy tracking of payments to beneficiaries' account
2. It reduces cases of corruption.
3. It assists corruption fighting agencies like the EFCC and ICPC in cases of investigation.
4. It is the beginning of a cashless society.
5. Overall increase in the efficiency of operation.
6. Reduced transactions of very low value.
7. Increase convenience of payments.
8. Payment can be made swiftly and remotely using various devices.
9. Accountants will appreciate IT more and this will improve the quality of financial reports generated by MDAs.
10. Economic growth and development as transparency and accountability improve.
11. Real time reporting and elimination of writing cheques (Dankwamba, 2013; Shuaibu & Muhammad, 2016).

The risk connected with cheques being stolen, forging of signature and disparity between amount in words and figures has been totally eradicated.

### ***Benefits of E-Payment System in Nigeria***

1. Storage and validation of biometric data.
2. Reduce the over reliance on cash for transactions.
3. End to end supplier payment management system.
4. Efficient processing and payment of salaries.
5. Reduce risks in payments and settlements.
6. View consolidated bank balances on a single screen.
7. No additional investment in IT infrastructure.

8. Acts as a gateway into the banking sector and as a powerful engine for growth.
9. Promote financial inclusion by making it easier and more affordable for the unbanked and under-banked to access financial services.
10. One payment solution for personnel record management and payroll.
11. The process creates greater transparency and accountability, leading to greater efficiency and better economic performance.

### ***Challenges of E-payment System in Nigeria***

Despite the government's resolve to place the country in the map of global electronic markets, there are a number of factors that are militating against the effective migration of the country payment system in line with the government's new policy. The challenges militating against e-payment as identified by Summanject (2009) generally revolve around:

- i. **Integrity:** to ascertain that transmitted financial information is unchanged in transit.
  - ii. **Non- repudiation:** to ascertain that all parties have non-deniable proof of receipt.
  - iii. **Confidentiality:** to ascertain that transactions are protected from possible eavesdroppers.
  - iv. **Reliability:** to ascertain that there is reduced possibility of failure.
  - v. **Authorization:** to ascertain that individuals are recognized and granted the desire rights and privileges.
- a. **Security:** refers to a set of processes and methodologies that are applied to guarantee the integrity, privacy, availability, confidentiality, authorization, access control and authentication of the information exchanged during e-payment. As rightly pointed out by Atanbasi (2012), the major challenge of e-payment in the country is security. Security in terms of platform, hackers and virus attacks. Also, the automation of transaction without direct contact from payer and payee makes e-payment vulnerable and provide an environment for security leaks. To ensure that output from the system are reliable and accurate, e-payment system should provide all the necessary mechanism to deal with expected security breaches.
  - b. **Infrastructure:** lack of infrastructure is the most intimidating challenge that confronts e-payment system. Most e-payment systems depend on IT infrastructure such as laptop, desktop, scanners, good internet connectivity, global software, etc. the provision of basic IT infrastructure is a major problem in developing countries.
  - c. **Lack of Uniform Platform by Banks and MDAs:** there is no compelling law mandating the banks to use common software platform. Every bank is left to use whatever platform that they felt will perform the electronic services on behalf of the clients. There is the problem of switches in effacing transfer from one bank to another. Interconnectivity has been a problem.
  - d. **Society's Culture:** culture is a collection of characteristics, human capabilities, habits, belief, art, attitude, knowledge, morals, custom, law and any capabilities of an individual or group. The differences in culture of payment have direct reflections on the scope of establishing e-payment system (Abdulla et al., 2015).
  - e. **Lack of Legal and Regulatory Framework:** Nigerian current laws do not accommodate electronic contracts and signatures. For the pursuit and prudential supervision of e-payment, a set of laws and regulations have to be considered in order to provide financial integrity, stability, soundness and competitiveness. The most noticeable rules for e-payments are anti-money laundering, supervision of commercial banks and e-money insti-

tutions, central bank laws for payment systems, security and protection laws and cooperation and competition laws (Abdulla et al., 2015).

- f. **Lack of Seriousness by Banks:** some banks in Nigeria are very conservative; they use very few innovative products and marketing techniques. Imala (2009) attributed the slow pace of doing online business in Nigeria system to the failure of the banking sector. According to him, the inadequate enabling infrastructure in the nation's banking sector is largely responsible for the poor pace of growth that has been witnessed in the economy since the introduction of the new payment system. Therefore, the readiness of the commercial banks in the country to support the government on its new drive and policy become a source of major concern to social and financial analysis. The causes of the concern stems from the doubt over the capability of the banks to muster the financial muscle, strategic planning, technical knowhow and other logistic strength required for a meaningful hosting and implementation of an e-payment platform.
- g. **Lack of Political will:** the lack of understanding of the deliverables of e-payment systems to the economy by successive governments is responsible for the scrawny growth of e-payment in Nigeria. In addition, the MD of Interswitch Nigeria remarked that if government continues to fail to realize the importance of leveraging e-payment platforms to drive general administration and governance, it would be cumbersome for the gains of the technology that would be required to ensure penetration into the polity to be accessed. He further stated that in spite of the available channels to drive e-payment, several governments in the country do not possess the roadmap to leverage on the needs and demands of the populace.
- h. **Frequent Power Interruption:** lack of reliable power system supply and power outage is a key challenge for smoothly running e-payments and e-banking (Yaqub et al., 2013).
- i. **High Rates of Illiteracy:** majority of the people in the country are businessmen trying to squeeze out livelihood through struggling and hustling, to survive on their own despite the ugly nature of the economy. More so, a lot of Nigerians don't have access to bank accounts due to their illiterate nature and poor orientation (Ehiriudu, Ugwuta & Ani, 2016). Therefore, low literacy rate is a serious hindrance for adoption of e-payments as it impedes the accessibility of banking services. For people to fully enjoy the benefits of e-payments, they should not only know how to read and write but also possess basic ICT literacy. Worst still, majority of Nigerians are not oriented to save money in the bank.
- j. **Resistance to Changes in technology among customers and staff due to:**
  - (i) Lack of awareness on the benefits of new technologies.
  - (ii) Fear of risk
  - (iii) Lack of trained personnel in key organizations.
  - (iv) Tendency to be content with the existing structures.
  - (v) People may be resistant to new payment mechanism.

### ***Evaluation of E-Payment System in Nigeria***

Looking at the aims for introducing electronic payment system in Nigeria, it is crystal clear that only few of the objectives have been achieved. These include among others the following: "Elimination of many risks associated with carrying large sums of money such as armed robber, fraud, and others. At least government organizations no longer pay cash to "contractors" and civil servants. It eliminates the use of cash to facilitate speedy payments for all transactions. But to

a very large extent, the following objectives have not been meeting. It helps tracking the implementation of government policies through the elimination of delays in government payment system. There are instances of delay in payment to contractors who are not ready to play ball. There has been a complaint from some contractors handling projects in the rural areas over difficulties associated with the e-payment model. Minimize interaction of government officials and contractors to eliminate opportunity for corruptive tendencies. It will be difficult to eliminate this as interaction at which ever level will continue formally or informally if Nigerians are to be honest with them. In which ever case, there is need to ask the question. Who are the contractors? Is the due process of government working or not? Who are the officials subverting this and other laudable programmes of government? Can corruption really be stamped out of the system? It helps in achievement of economy and efficiency in government financial transactions. For as long as corruption remains within the polity, there can be no efficiency in the system. The EFCC and the judiciary will have to find a common ground to tackle this canker worm that has defiled all solution. China's example could be the best solution. However, this may also not work because of religious and tribal sentiment among some Nigerians. Enhancement of real time reporting and improve quality of financial reporting system in the public sector. It has been observed that since the implementation of the policy, there have been late returns or no response in respect of unapplied funds. The existing system cannot guarantee real-time reporting of finances; as a result, there can be no good financial reporting" (Ogedebe & babatunde, 2012:306).

### Policy Recommendations

The following were recommended for policy makers:

- i) The government of Nigeria should provide the much needed leadership and support for electronic payments.
- ii) Applicable rules and regulations including those for electronic approval processes, consumer protection and e-transactions should be developed and standardized as needed.
- iii) The migration of our payments system towards a cashless society would require some reform and a lot of effort and sensitization especially for low income customers, who are current deeply rooted in using cash and see it as a convenient and easy way of receiving and making payments. The sensitization exercise would require the combined effort of various stakeholders including government, financial institutions and non- bank providers of payment services.
- iv) The cashless system of payments idea was well received by the majority of Nigerians, but with some concerns challenges which can hamper its success and must be properly addressed by providers
- v) Government, financial institutions and non-bank providers should systematically expand the necessary infrastructure by promoting the development of necessary technologies, recruiting experts and expanding high speed information network to enhance e-payment system in the country.

### Conclusion

E-payment system has the prospect of helping to achieve economic and efficient government financial transactions and enhancement of real-time reporting and improvement of quality of financial reporting system in Nigeria. Despite the numerous benefits that e-payments bring to the nation, banks and individuals, it also has its challenges. The challenges as discussed in this paper can be categorized into four main groups. That is, security, infrastructure, legal and regulatory issues as well as socio-cultural issues. Also, the readiness of the commercial banks in the country to support the government on its new drive and policy has become a source of major concern to social and financial analysts. The causes of the concern stems from the doubt over the capability of the banks to muster the financial muscle, strategic planning, technical knowhow and other logistic strength required for a meaningful hosting and implementation of an e-payment platform in making Nigeria join the league of nations whose payment system conforms to internationally accepted regulatory, technical and operational standards.

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