DEPOSIT MONEY BANKS' ELECTRONIC FRAUD: THE NIGERIAN EXPERIENCE.

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ABSTRACT

In recent years, the volume and frequency of fraudulent practices on E-banking products have been on the increase and this obviously has implication on banks' survival. The acceptability of the e-channel eco-system increased the incidence of electronic frauds; therefore, this study examines the impact of electronic banking fraud on deposit money banks in Nigeria. Data used for the study were extracted from Nigeria Inter-bank Settlement System (NIBSS) 2016 E-payment fraud Landscape in Nigeria. Statistical methods such as frequency tables and percentage averages were used in the evaluation of the data. The study revealed that fraud cases had been on the increase every year, and this is a serious threat to the stability of the banking sector. It is recommended that there should be periodic review of the policy of e-banking as well as the cyber crime (prohibition and prevention) Act 2015 by the National Assembly. Security operatives should constantly undergo ICT training in order to be able to nip e-fraud in the bud whenever it rears its ugly head.

Keywords: E-fraud, Cyber Fraud, Internet Banking, E-payments.

INTRODUCTION

E-fraud is fast becoming a potent threat to the Nigerian banking industry. E-fraud is the apparent abuse of e-banking in Nigeria. The adoption of e-payment channels and the rapid evolution of the e-channel eco-system increased the incidence of electronic fraud. According to Fasua (2017), the financial industry has been immensely impacted by the power of creative destruction inherent in technology and innovation. Technology innovations such as E-commerce, Web, POS, ATM and Mobile devices have changed the way people relate with their financial institutions. No business thrives without effective deployment of ICT to gain efficiency and competitive edge. It appears that the more ICT promises to revolutionize the way financial services are created, offered and delivered, the more risks businesses are exposed to. The challenges to the twenty-first century bankers in managing fund for its customers are not just in maximizing profit but in ensuring the safety of customer funds while enhancing returns through ICT enabled products and services.

The growing importance of electronic platform to banking is buttressed by the increasing volume of transaction conducted on those platforms. In a report released by the Central Bank of Nigeria #19.77billion was lost to cases of e-fraud in the first six months of year 2018. Similarly data released by Nigeria Information Technology Development Agency (NITDA, 2016) affirmed that there were 3,500

cyber attacks with 70% success rate and a loss of \$450million in 2015, while #2.19billion was lost to payment fraud in 2016. The electronic payment space transaction fraud rose by 82% in 2016. This is contained in the Nigeria Electronic Fraud Forum (NeFF) annual report 2016. As shocking as that may be, there is still a perception that the unreported cases surpass the reported cases of e-fraud perpetrated in the system. Over #30 trillion in transactions is reportedly carried out on different e-payment channels by businesses and individual in the country. Electronic platforms had the highest level of fraud with 77% while the non-electronic platforms witnessed 23% fraud cases.

Deloitte (2012) warned that phishing and insider dealings continue to pose the biggest cyber threats to the Nigerian banking industry, especially as crude oil prices continue to fall in the global market. Nigeria Electronic Fraud Forum (NEFF) annual report 2016 released the report title "A change payments ecosystem: the industry recorded 82% increase in the reported fraud case, when compared to 2015 and over 1200% compare to 2014".

A breakdown of the fraud according to various payment channels revealed that #511.1million fraud occurred across the counter, #464.5million through internet banking and 243.3million through POS. A further breakdown also shared that mobile banking saw #235.1million fraud, e-commerce #132.2million, web-fraud #190.9million, kiosk #10.1million, cheque #4.5million and #190.0million through other platforms not

categorized. The level of fraud in the present day Nigeria has assumed an epidemic dimension. Fraud is the number one enemy of the business world, no company is immune to it and it is in all works of life.

According to Nwankwo (1991) the fear is now rife that the increasing wave of fraud in the financial institutions in recent years, if not controlled might pose certain threats to the stability and the survival of financial institutions.

Real Time Gross Settlement (RTGS) a core infrastructure was implemented by the Central Bank. The RTGS created opportunities for further enhancement of retail payment with the introduction of central switch, instant payments, mobile payment and cheque truncation system. These development led to increased electronic payment channels and led to the growth in electronic payments transactions was boosted by the cash-less policy initiative by the Central Bank of Nigeria in 2011 on the back of revamped infrastructure.

Definition of Fraud

According to CBN (2017), fraud literarily means a conscious and deliberate action by a person or group of persons with the intention of altering the truth or fact for selfish personal gain is now by far the single most veritable threat to the entire banking industry. According to Musa (2008) fraud includes negligence due to improper entry of transactions, inadequate control and management, lack of training or orientation, absence of operational rules and regulations. irregular balances of accounts, absence of audit exercise. Oyetunji (2017) stated that the ATM fraud is not the sole problem of banks alone. It is a big threat. The ATM fraud does not only cause financial loss to banks, but also undermine customers' confidence on the use of ATM. Wikipedia (2008) defines bank fraud as whenever a person knowingly executes or attempts to execute, a scheme or artifice (i) to defraud a financial institution; or (ii) to obtain any of the moneys, funds, credits, assets, securities, or other property owned by or under the custody or control of a financial institution by means of false or fraudulent, subterfuges, representations or promises.

Emperical Review

Akinyele (2015) conducted a study on financial innovation and fraud risks in Deposit Money Banks in Nigeria, using desk survey and exploratory designs. Secondary data on frauds and forgeries, deposit liabilities and

financial innovation contribution in all the 21 Deposit Money Banks were sourced from CBN, NDIC, NIBSS and KPMG. Data were analyzed by trend analysis to determine the relationship between fraud risks and financial innovation. Descriptive statistics such as frequency tables and percentages were used to present the data. The study concluded that there is need to create more awareness on the benefits of technology in minimizing fraud losses to banking industry as fraudsters are now targeting countries with slightest opportunity.

Ahmed (2014) conducted a study on the effect of electronic banking on growth of Deposit Money Banks in Nigeria. Secondary data were used through annual reports and statistical bulletin of the Central Bank of Nigeria. Multiple regression method of analyzing data was employed. The study revealed that positive relationships exist between mobile banking and total deposits and between internet banking and total assets.

Idolor (2010 stressed that the spate of fraud in the banking industry has become an embarrassment to the nation as apparent in the seeming inability of the law enforcement agent to successfully track down culprits. Oseni (2006), stated that the incessant frauds in the banking industry are getting to a level at which many stakeholders in the industry are loosing their trust and confidence in the industry. Archibong (1993) noted that the long-term survival and growth of an organization depends on how the issue of fraud and fraudulent practices in such organization is handled.

Oio (2008) classifies the causes of fraud and forgeries in banking transactions into two generic factors namely: the institution or endogenous factor and exogenous factors. The institutional factors or causes are those that can be traced to the in-house environment of the banks when the institutional factors of the banks are weak such as accounting system, internal control system. Inadequate supervision of subordinates disregard for "know your customers KYC", poor information technology and data base management. Poor human resources management, employees fail to abide by laiddown procedure without any penalty, inadequate infrastructure, inadequate staff training and retraining, and poor book-keeping. According to CBN (2018), it was recorded that 20,768 electronic fraud related cases gulped #19.77 billion in the first six months of year 2018. Van Loon (2008) corroborates that cyber criminal can now acquire advanced malware capability for as little as \$300 in the open market. Guerra (2009) research work emphasized on one important indicator which could best explain what may likely happen to spatial interaction. He opined that more people are likely to become vulnerable because of the continued complexity of cyber crime environment. Diamond (1984) posited that a special feature of banking activities is to act as delegated monitors of borrower's on behalf of the ultimate lenders (depositors). In this special relationship with depositors and borrowers, banks need to secure the trust and confidence of their numerous customers.

Overview of E-Payment Fraud in Nigeria

Across all payment channels in the financial industry; including electronic and non-electronic based platform, Nigeria has experienced a massive rise in the value and volume of transactions processed yearly.

Table 2: Transactions for Year 2015 and 2016: Transaction Volume and Value (2015 & 2016) Processed by NCS Categorized by Payment Types

me and value (2013 & 2016) Processed by INCS Categorized by Payment Type				
	Volume 2015	Volume 2016	Value 2015	Value 2016
Instant payments	17,967,646	42,540,034	11,674,496,434,771	21,148,614,937,311
POS	11,258,846	24,607,497	229,903,237,909	447,459,739,698
EFTs	30,134,545	30,203,908	14,218,018,800,813	14,536,388,062,398
Cheque	14,698,538	16,070,494	8,069,550,477,646	7,725,215,739,533
Total	74,059,575	113,421,933	34,191,968,951,139	43,857,678,478,940

Source: NIBSS – 2016 E-payment Fraud Landscape in Nigeria.

Table 3: Electronic Payments by Transaction Value

Channels	2015	2016	% change
Instant payment	11,674,496,434,771	21,148,614,937,311	81.15%
POS	229,903,237,909	447,459,739,698	94.63%
EFTs	14,218,018,800,813	14,536,338,062,398	1.14%
Total	26,122,418,473,493	36,132,462,739,407	
% transaction processed	76.40%	82.4%	

Source: NIBSS – 2016 E-payment Fraud Landscape in Nigeria.

Table 4: Non-Electronic Payments by Transaction Value

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Table 5: Electronic Payments by Transaction Volume

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Source: NIBSS – 2016 E-payment Fraud Landscape in Nigeria.

Table 1: Total Transaction Volume and Value Processed by the NCS (Nigeria Central Switch).

Transaction Value and Volume

Year End	Value	Volume
2015	34,191,968,951,140	74,059,575
2016	43,857,678,478,941	113,421,933
% change	28.27% increase	53.15%
		increase

Source: NIBSS – 2016 E-payment Fraud Landscape in Nigeria

In the year 2016, the Central switch (NIBSS) alone processed over 100million transactions in terms of volume with a corresponding value of over #43trillion (over USD 208 billion). Furthermore, the volume of transaction grew by over 53.15% between 2015 and 2016 with its value also growing by 28.27%.

Table 6: Non-Electronic Payments by Transaction Volume

Channels	2015	2016	% change
Cheque	14,698,538	16,070,494	9.33%
Total	19.8%	14.2%	

Source: NIBSS – 2016 E-payment Fraud L landscape in Nigeria.

Table 6 shows that electronic payment constitutes a very significant and growing percentage of transactions processed by NIBSS. POS transactions increased by 118.56% and 94.63% respectively; instant

payments increased by 136.75% and 81.15% while electronic fund transfer (EFTs) increase marginally in the period. Table 7: Total fraud volume, attempted value and actual loss value across all channels.

Reported Fraud by Volume and Value

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Source: NIBSS – 2016 E-payment Fraud Landscape in Nigeria.

Although the volume of fraud cases reported in 2016 increased by 77.7% relative to cases reported in 2015, the value of attempted fraud cases reported in 2016 decreased by 59.5%. The actual loss associated with fraud

cases reported in 2016 increased by over 1000% relative to 2015 loss. It is clear from table 8 and 9 above that electronic channels as evidenced by actual loss arising from fraud, will increasingly by targeted by fraudsters.

Table 8: Distribution of Actual Loss Amount by channel

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 $\textbf{Source:} \ NIBSS-2016 \ E\text{-payment Fraud Landscape in Nigeria}.$

Table 9: Distribution of Fraud Volume by Channel

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Source: NIBSS -2016 E-payment Fraud Landscape in Nigeria.

Fraud by Value and Volume

Technology is viable, though when there is fraud it is meaningless. Companies must keep pace with technology to grow their businesses, but they also face greater threats associated with increased use of these technologies. Organizations' reputation can be dented faster than ever. There is a huge risk in across the counter fraud and internet banking fraud as the nation grows in the use of mobile banking, ATMs, E-commerce, POS, Cloud computing and social media.

Fraud by Platform Electronic Platform

Channels	Volume 2015	Volume 2016	% change
POS	2	166	8200%
ATM	147	491	234%
Internet banking	287	287	0%
E – commerce	78	114	46%
Mobile	8	21	163%
Total		1,297	

Non-Electronic Platform

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RESULTS AND DISCUSSIONS

The data analysis showed that people make more use of their cards across electronic platforms such as ATMs, Internet Banking, E-Commerce amongst others. The increased use of electronic platform for payment has played a significant role in the increased number of transaction volume and value in the past few years. In the year 2016, transaction processed by the central switch through electronic platform (i.e. non cheque) accounted for 85.8% of the overall transaction in terms of volume and 82.4% in terms of value which is an increase over the year 2015 by 6% in both transaction volume and value.

As the trend shows, more people are adopting the use of electronic payment system i.e. going the cashless direction.

In comparison to 2015, the central switch experienced a massive increase in instant payment and POS transaction in terms of volume and value. Cheques and clearing based on transactions has a little increase in terms of volume, this might be attributed to fact that there is massive shift from clearing based transfers which occurs in cycles of an hour to instant payments.

CONCLUSION AND RECOMMENDATIONS

- In order to overcome the challenges, it is hereby recommended that the policy of ebanking should be re-examined periodically (may be quarterly or half yearly)

- There should be functional infrastructures, regular public awareness and improvement in literacy level and continuous training of manpower to operate the scheme.

The beauty of electronic banking is to enhance banks performance but the threats of fraudsters has affected the security imperatives of banks to perform in line with payments system vision 2020. To this, there is a need for watertight measures to nip e-fraud in the bud once and for all. There are serious threats that these development pose to the stability of the banking sector. It is now necessary for the National Assembly to review the cyber crime (Prohibition and Prevention) Act 2015 on the punishment for e-fraud.

Government must also, be willing to invest in ICT training for security operatives. This is because the protection of information infrastructure in the delivery of financial services is critical all over the world. People who attempt to compromise it should be punished and face the sanction of the law. It will always be a lost battle if security professional are always behind the cyber criminals in terms of the technological knowledge, computing skills and security expertise. People have to be sure that their investments are secured, especially when their investments are being managed by the organization charged with the responsibility of doing so. Like the saying goes "we cannot fight today's crime with yesterday's technology". Once these are put in place, we are only a step away from winning the war against e-fraud.

- In order to ensure continued growth of electronic banking in Nigeria, it is important for providers of banking services to continue to educate their users on electronic platforms.

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