

## Implementing Channels Optimization Strategies for Efficient E-Banking Operations Osang, F.B1 and Umoren, I.<sup>2</sup>

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### ABSTRACT

In this age where customers enjoy best possible services across all industries, banks have to concentrate on and optimize their channel management strategies so that they are able to ensure customer satisfaction and loyalty. The adoption of the internet for banking services in the world economies serves as the basic motivational factors for banks to consolidate on the internet banking channel to reach out to millions of their customers. The merits associated with this technological innovation are enormous and has revolutionized the banking sector. However, despite the numerous benefits, they are discernible challenges and problems associated with this form of banking such as identity theft, internet fraud, and network issues among others. The core of this research is to explore strategies for efficient channel optimization to plug loopholes in banking operations. This research adopted Innovation Diffusion Theory for the study. The primary and secondary methods of data collection were used with the adoption of questionnaires and personal interviews as the major research instruments for randomly selected staff and customers of Access/Diamond Bank Plc. Chi square was the statistical tool for the analysis and testing of responses. The study revealed that despite challenges associated with virtual channels, efficient channel optimization strategies will lead to efficient banking activities and services, cost-reduction in banks, and reduction of waiting time experienced in the banking halls. This paper further established a closer study of the key aspects of channel optimization strategy and brings into focus the concept of analytics. Analyzing data and discovering meaningful patterns helps the banks take sound decisions.

**Keywords:** *analytics, banking services, channel, optimization strategies, virtual channel*

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### INTRODUCTION

The banking sector like other sectors of the economy has experienced rapid transformation in all its activities through technological innovations. These have made it possible for banks to offer various services independent of the conventional banking halls and beyond its official working hours via alternative delivery channels such as Automated Teller Machines, electronic banking and internet banking, credit/debit cards and the execution of payments through electronic funds transfer at the point of sale etc. Many banks have installed modern computer interconnectivity backbone that would enable them achieve communications of data and multimedia over internets and extranets. Channels are fast becoming an integral part of banking activities. In this

century where customers enjoy best possible services across all industries, banks have to concentrate on and optimize their channel strategies so that they are able to guarantee customers satisfaction and loyalty, that is, with particular attention given to 24/7 operational services, reference data, security management, integrated workflow management, integrated business intelligence, solutions for credit administration and loans, integrated delivery channel amongst others.

Available statistic indicates that in the period between 2012 and 2017, branch banking had declined by 6% while online banking witnessed an increase by 7%, indicating a paradigm shift from the traditional channels like the branch to online. At present, customers are presented with various

alternatives for choices and will not hesitate to switch to banks which give them better services, hence this constant innovation and increased competition makes it pertinent for banks to manage their channels more effectively for efficient service delivery. The traditional banking system which focuses on transactions through a physical branch is fast diminishing; with the seeming unending competition in the banking sector, banks are exploiting channels like mobile and social media to reach out to their customers and ensure that they have an enhanced, effective and seamless banking experience. With online banking, individuals can obtain account balance information; make withdrawals and even payments without having to visit the banking hall.

With the convergence of internet and telecommunication services into the form of hand-held devices, banks have to upgrade their channel management strategies to capitalize on this trend. Channel optimization has a plethora of benefits to offer. On one hand it helps in cost reduction by getting accurate information about customer perceptions and needs and accordingly shifting from high cost to low cost channels. On the other hand it helps the banks in customer acquisition through a thorough understanding of the customer life time value by segmenting customers on the basis of channel usage information. This work seeks to assess the successes recorded in virtual banking channels and challenges that have impeded efforts in the implementation of efficient channel delivery in banking operations in Nigeria, which thus raise concern for strategies for its optimization. It conveys reduction in operational cost than the traditional banking, and with its high potentiality.

The research recommended that banks should align themselves with the government and other private sectors to provide required infrastructures, follow the stipulated electronic banking guidelines of the Central Bank of Nigeria, develop new products to meet the needs of the Nigerian banking customers, reinvigorate and refresh the bank's web assets to prioritize ease of use, navigation

and visual design, enhance customers awareness and online literacy by promoting greater awareness of online security through the various online banking touch points, improve response time to fraud complaints, generate a robust customers information database for overall optimization in bank service delivery.

Electronic banking is faced with problems such as insecurity and congestion of internet; the existing business environment also poses some challenges to the smooth operation of e-banking in Nigeria which are epileptic power supply, dominance of cash transactions in the economy, and low level of awareness among Nigerians and its impact on the operations of financial institutions. Thus, it is this problem that put the banking sector in seemingly perpetual strategies towards the efficient channel optimization for optimum customers' satisfaction and accounts security.

Therefore this research seeks to address the following problems:

- I. How to best protect the vulnerability of banks to potential risks of virus attacks; unauthorized access, fraudulent transactions and theft in the adoption of virtual banking channels in the Nigeria.
- ii. How to tackle the challenges associated with congestion of internet in the smooth operation of e-banking in Nigeria.
- iii. How the old, the poor and illiterate category of persons in the society who do not have the knowledge of computer/internet or e-banking in accessing financial services will be catered for.
- iv. How to solve the problem of epileptic power supply, dominance of cash transactions in the economy and the low level of awareness among Nigerians.

#### **RELATED WORKS**

Rose et al. (2005) considered that customers are attracted to these technologies because of convenience, increasing ease of use, and in some instances cost savings. The use of paper cheques has been supplemented step-by-step with e-cheques (i.e., electronic images) allowing banks to have more storage capacity, reduce costs and improve customer services.

A more recent e-banking development is wireless internet applications of banking sometimes called m-banking (mobile banking).

Laukkanen and Lauronen (2005) believe that due to the widespread use of computer technologies in almost all aspects of life, organizations that are connected to the Internet started extending their services to their customers to include new applications and services that satisfy their customers' desires to make better businesses. One of these emerging applications is mobile banking.

Ayadi (2005) admits that the employment of electronic banking comes with unique challenges. He listed instances of ATMs not disbursing cash despite reflecting otherwise on the bank account, ATMs not returning bank cards and wobbly internet connectivity preventing or disrupting transactions done with mobile phones.

Meltzer (2006) maintains that revenue is a very significant indicator of the effect of alternative channels on the profitability of commercial banks. Due to the novel avenues of revenue, the commercial banks have achieved higher profits from the alternative banking channels. The convenience associated with alternative banking channels in accessing and delivery of financial services is noteworthy in the profitability of commercial banks. Alternative banking channels have made it so easy to access financial services thus motivating more clients to subscribe and use of banking services. The enhanced access and subscription to commercial banks has led to higher profitability. To him, one very significant feature of alternative banking channels is the reduced costs associated with banking. This is achieved by the reduction of staff through self-service channels since the number of staff is drastically reduced. The diminished cost impacts on the profitability of banks since it erases the avenues of expenditure and creates fresh fields of revenue.

Porteous (2006) identifies one of the main challenges to offering financial services to the underprivileged through branches in addition to other bank-based delivery channels to be the high costs involved in these conventional banking methods. The cost to the financial service providers to serve a poor client with a small balance in addition to conducting small transactions is just too great to make such accounts viable. In addition, when financial service providers do not have branches that are close to the customer, the client is less likely to use and transact with their service Dzaja (2007).

Servon and Kaestner (2008) believe E-banking has revolutionized the way business is transacted by globalizing the business enterprise. They maintain that e-banking technologies have proliferated in recent years, and the availability of a wide range of products has led to increasing adoption among customers. These technologies include direct deposit, computer banking, stored value cards, and debit cards. Culled from [www.marketresearch.com](http://www.marketresearch.com), factors impacting online banking include the trend within the industry and the socioeconomic forces behind changing demographics.

Ian (2009) posit that, since banking services are commonly similar between the institutions, the approach must guarantee that each channel is shrewdly positioned to optimize its contribution to the bank's differentiation from the competition. Andrew (2009) holds the view that virtual banking channels offers users access to services with a mobile phone all day, at all times. So, to effectively achieve a truly convenient banking mode, a truly mobile mode of banking has to be explored, hence the need for m-banking. The convergence of the Internet and mobile networks creates new opportunities and applications. Treating mobile business as simply an extension to the traditional web could result in missing out unique differentiated qualities for new value-added possibilities. Mobile Banking is considered to be one of the most value-added and important mobile service available.

Sultana (2009), reveals however that the

outstanding growth of mobile sector worldwide has created a unique opportunity to provide social and financial services over the mobile network. With over 4 billion mobile cellular subscriptions worldwide, mobile network has the ability to immediately offer mobile banking to 61% of the world population. Eze (2009) stressed that the epileptic electricity supply initially dissuaded many from purchasing mobile phones and other technological appliances.

Saxena (2010) reveals that in an endeavour to optimize services and diminish costs, banks are regularly migrating towards a 24-7 service where clients are enjoying the superior sense of independence that this creates. Accessibility is the central pillar as customers demand instant access to deposits, loans and status of their account. Al-Akhras and Qwasmi (2011) considered the term mobile banking (or m-banking) as the alternative banking services that the user can perform via a mobile device ubiquitously at any time and from anywhere.

Kohali and Sheleg, (2011) established that alternative banking delivery channels are new conduits and techniques for providing banking services directly to customers. Recent economic crisis along with increasing market intricacy has placed extraordinary pressure on financial institutions. The demand for a digital lifestyle in addition to the technological insurrection it brings to residences and places of work, as well as the momentous demographic shift and a regulatory structure, are subjecting the finance sector to significant challenges in a time of rigorous market uncertainty. Conversely, times like this present opportunities for commercial banks to embrace change resulting in innovation over the delivery of financial services.

## **MATERIALS AND METHODS**

There are several methods of collecting this basic information. Both primary and secondary sources were used for this research purpose. Primary data was collected through survey by using appropriate research

instrument, with the use of a questionnaire and interview. Secondary data were used for providing the theoretical background to the research problem. The secondary data sources were journal, books, internet materials etc.

The nature of this study requires the collection of both primary and secondary data. Primary data is of paramount importance as there are little published literatures in Nigeria on the current issues on internet banking adoption. Therefore, it was essential to gain first-hand insight knowledge, hence, individual interviews were very important tools used in the collection of qualitative data for this study from customers, bank managers, staff and other stakeholders.

**Data Presentation**

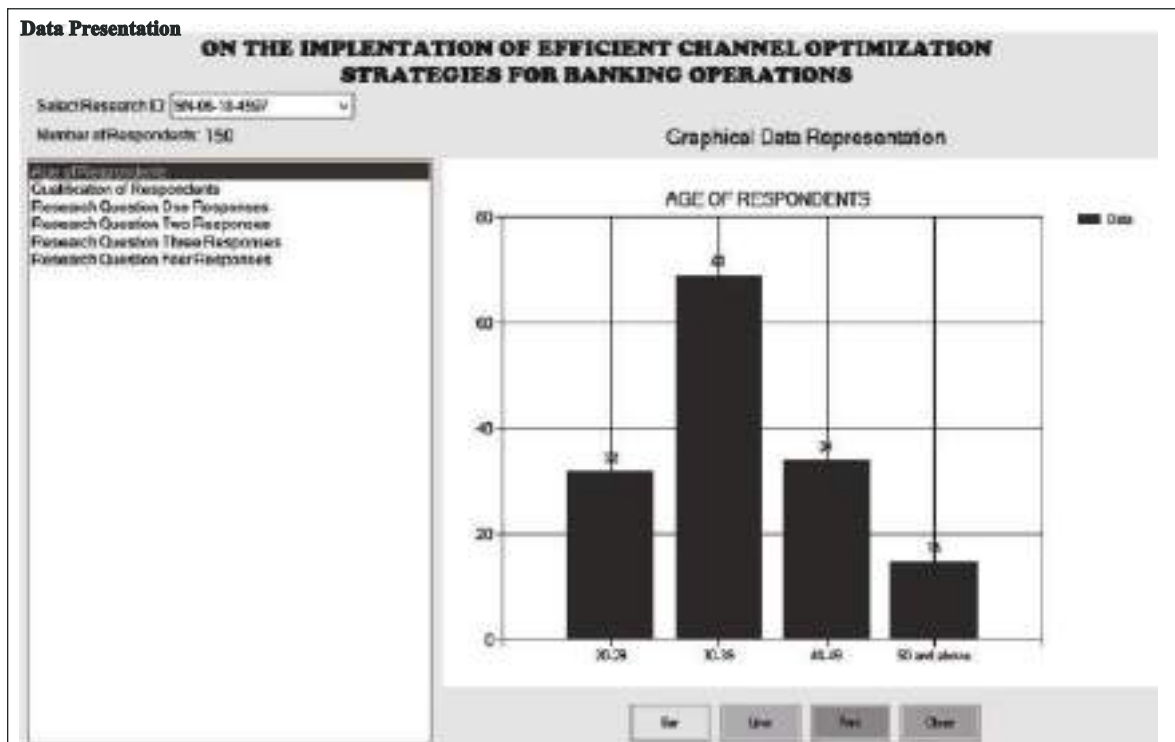
**Table 4.1 Positional Considerations**

S/N	ITEM	SA	A	D	SD
1.	Banks should give consideration to the segmentation of customers according to their preferences.				
2.	Customers should be addressed with regards to their required channels for optimum satisfaction.				
3.	Banks should design easy interfaces in their online platforms to suit customers choice platform.				
4.	Banks should make efforts to balance offline with online transactions for customers convenience.				

**Data Analysis**

**Table 4.2. Data Analysis (Age of Respondents)**

Scoring Interval	Respondents	% of respondents
20-29	32	21.3
30-39	69	46
40-49	34	22.7
50 and above	15	10
	<b>150</b>	<b>100</b>



**Fig. 4.1: Graphical Representation of Data on Respondents Ages**

**Table 4.3. Data Analysis (Educational Qualification of Respondents)**

Qualification	Respondents	% of respondents
FSLC	5	3.33
SSCE	33	22
OND	47	31.3
B.Sc and above	65	43.3
	<b>150</b>	<b>100</b>

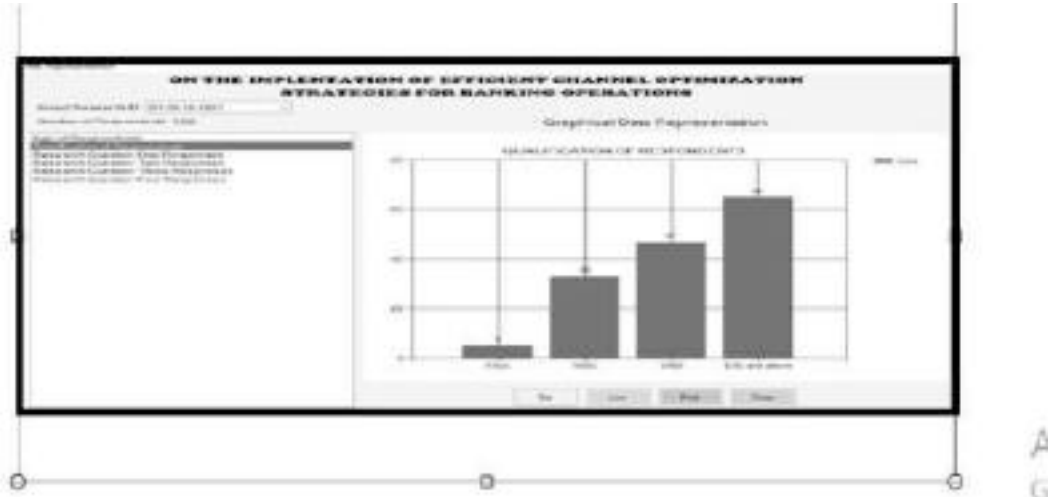


Fig. 4.2: Graphical Representation of Data on Respondents Qualifications

Table 4.4. Data Analysis of Respondents' RESPONSES

S/N	SA	A	D	SD	TOTAL
1	135	12	3	0	150
2	115	35	0	0	150
3	120	20	8	2	150
4	140	10	0	0	150
<b>TOTAL</b>	<b>510</b>	<b>77</b>	<b>11</b>	<b>2</b>	<b>600</b>

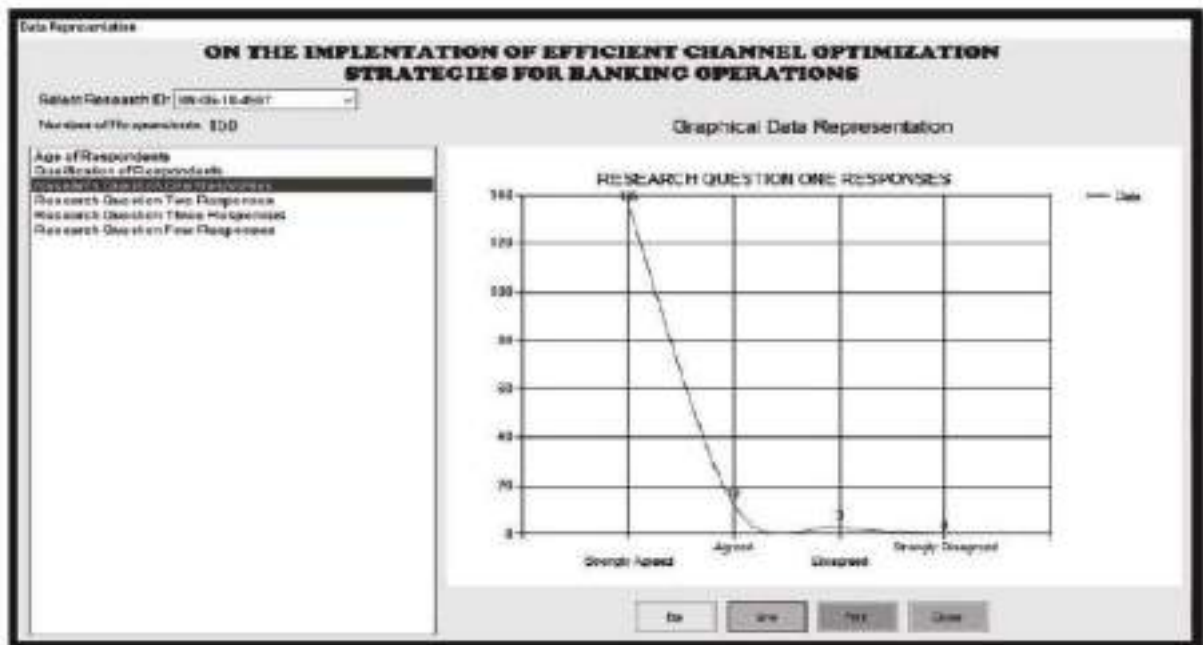


Fig. 4.3: Graphical Representation of Data on Research Questions Responses

Rating Scale:

**Respondents Opinion / Rating**

- SA – Strongly Agree - 4 points
- A – Agree - 3 points
- D – Disagree - 2 points
- SD – Strongly Disagree - 1 point

*Chi Square formula*

$$\text{Chi Square formula} = \sum \frac{E(O-E)^2}{E} \quad (1)$$

- Where X<sup>2</sup>– Chi Square
- E = Expected data
- O – Observed data

$$4.43+2.76+0.01+0.5+1.23+12.8+2.8+0.5+0.44+0.03+9.66+4.5+1.23+4.5+2.8+0.5=48.24.$$

**RESULTS AND DISCUSSION**

The calculated value of X<sup>2</sup>= 48.24 and the D/F: (Number of Rows - 1) + (Number of Columns - 1) = (4-1) + (4-1) = 6. The table value of 6 at 0.5 = 12.592 at X<sup>2</sup> Distribution.

Since the calculated value is greater than the X<sup>2</sup> table value, we conclude that although alternative bank channels are quite innovative, but are plagued with few challenges of fraudulent activities by scammers. But however, banks should give consideration to segmentation of customers according to their preferences, design easy interfaces in their online platforms to suit customers choice platform, make efforts to balance offline with online transactions for customers convenience and above all, individual customer should be addressed with regards to their required channels for optimum satisfaction.

Out of the total of 150 questionnaires retrieved from respondents, a greater percentage tilted toward efficient optimization strategies to be devised by the

The result of (O-E)<sup>2</sup>= Square root of expected data subtracted from observed data is presented in Table 4.5.

**Table 4.5. Data Analysis Results**

	SA	A	D	SD
Question 1	127.5	19.3	2.8	0.5
QUESTION 1	4.43	2.76	0.01	0.5
QUESTION 2	1.23	12.8	2.8	0.5
QUESTION 3	0.44	0.03	9.66	4.5
QUESTION 4	1.23	4.5	2.8	0.5

The values are applicable to questions 2, 3 and 4. Therefore from Table 4.5. we have

banking industry on the existing bank channels for improved services to customers and overall banking operations. This would reduce the hitherto identified insecurity that instills fear in bank customers in their attempt to use online channels.

**CONCLUSION**

Channels are fast becoming an integral part of banking activities. In this age where customers enjoy best possible services across all industries, banks have to concentrate on and optimise their channel management strategies so that they are able to ensure customer satisfaction and loyalty. Indeed, it makes good sense for banks to remain abreast of the changes happening in the technological setting and align their operations efficiently to service customers. This would make the difference between success and failure in times ahead. Nevertheless, it helps in cost reduction by getting accurate information about customer perceptions and needs and accordingly shifting from high cost to low cost channels.

This paper established a closer study of the key aspects of channel optimization strategy and brings into focus the concept of analytics that help the banks take sound decisions.

When used effectively, analytics can help banks identify the channel usage pattern, identify lesser used channels and supplement extensively used channels to arrive at appropriate and competent customer focus initiatives. Generally, this work revealed that banks should give consideration to segmentation of customers according to their preferences, design easy interfaces in their online platforms to suit customers' choice platform, make efforts to balance offline with online transactions for customers' convenience and above all, individual customer should be addressed with regards to their required channels for optimum satisfaction.

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