EFFECT OF E-COMMERCE ON PERFORMANCE OF COMMERCIAL BANKS IN NIGERIA (A CASE STUDY OF FIRST BANK PLC, BWARI AREA COUNCIL, ABUJA).

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Abstract

The relevance of e-commerce to commercial banks especially in the First Bank PLC, Bwari Area Council, Abuja, Nigeria has not attracted much attention. There is still doubt on its relevance on elevation of banking industries in Nigeria. Thus, this study examined the effect of e-commerce on performance of commercial banks (A case study of first bank plc, Bwari Area Council, Abuja). The study adopted a Survey design. The sample size of was determined using the popular Taro Yamani formula (1964) which gave a sample size of 246. The study relied on only on the primary data. The questionnaire was the instrument used for data collection. The hypotheses were tested using Regression analysis. According to the findings, electronic trading has a significant effect on performance of First Bank Plc, Bwari area council, Abuja, Online delivery has significantly influenced on customer satisfaction and there is a significant relationship between online sourcing and efficiency of first bank plc, Bwari area council, Abuja. The study concluded that e-commerce boosts and promotes organizational performance, makes organizations, banks and other financial service providers to become competitively advantageous and reduces operational cost. Anything less, would be undesirable as it is easier to arouse a demand, etc. The Study recommended that \(\sigma\) banks and other financial service providers should leverage their investments on information technology to fully realize the benefits of e-commerce, banks should anticipate competitors' actions and develop new marketing and succession plans that are robust and contingent, banking industry should embrace the use of electronic commerce for improved profitability, productivity and operate optimally amidst

competitors and also that skilled, experienced and dynamic personnel should be used, as this would lead to effective customer service delivery.

Keywords: E-commerce, e-trading, online-delivery, online- sourcing and First bank Plc, Bwari area council, Abuja

Introduction

E-commerce has a significant impact on business costs and productivity (Bharadwaj, 2019). E-Commerce has a chance to be widely adopted due to its simple applications. Thus, it has a large economic effect. Electronic Commerce provides the capability of buying and selling products and information on the internet and other on-line service. Electronic commerce is transforming the marketplace by changing firms' business models, by shaping relations among market actors, and by contributing to changes in market structure (Boudreau, Karen, Daniel and Detmar 2015). It is difficult to single out the impact of electronic commerce. Some businesses address three themes associated with electronic commerce and the organizational changes it entails: changes in business models, changes in market structure and opportunities for economic growth created by organizational change. Bradley, Stephen, Jerry, Hausman and Richard (2018) argue that electronic commerce creates the possibility of new models for organizing production and transacting business, by offering inters modality and complementarily – not only substitution in business models.

E-Commerce plays an important role in the economic growth and development of nation. It is a purposeful activity includes in planning, controlling, promotion and also distribution of various goods and services Caldeira and Ward, 2019). In this research paper will describe how the Business spirit play an important role in firm's growth. It also pertains to any form of business transaction in which the parties interact electronically rather than by physical exchanges or direct physical contact. E-commerce is usually associated with buying and selling over the Internet or conducting any transaction involving the transfer of ownership or rights to use goods or services through a computer-mediated network (Callahan and Pasternack, 2016). In e-commerce, information and communications technology (ICT) is used in inter-business or inter organizational transactions (transactions between among business organizations) and in business-to-consumer transactions (transactions between business organizations and also individuals). E-commerce is a way of conducting business over the Internet.

Though it is a relatively new concept, it has the potential to alter the traditional form of economic activities. Already it affects such large sectors communications, service, finance, retail trade and holds promises in areas such as education, health, transport and government. The largest effects may be associated not with many of the impacts that command the most attention but with less visible, but potentially more effects on routine business activities (Cavusgil, 2020)... E-commerce presents opportunities to accelerate business processes, reduce costs, reach new customers and develop new business models and markets in the business organization. The general agreement is that electronic markets and digitalization of products will impact material flows. A clear identification of the extent and direction of effects, however, has not yet been achieved, and the issue remains controversial. Increased resource productivity is discussed as one of the major potential ecological advantages of e-commerce. Potential exists, above all, in the fields of demand and supply chain management and mass customization. Potentials to increase resource productivity appear in outline particularly in the business-to-business (B2B) field, where there may be, for instance, reduction in quantities procured or stored, Surplus production, and error rates between supplier and manufacturer (Cheung and Fung, 2015).

The internet has created a new climate for business in which sound principles of strategic management are more, not less important (Chien-Chao, 2018)). According to (Cavusgil, 2020), e-commerce is amongst the emerging technologies, which has the potential to remake entire industries and obsolete established strategies. The advent of e-commerce is therefore changing the game of business, threatening the very existence not only of firms but also of industries.

Being an alternative channel for marketing or selling products online, the Internet has contributed to bringing about irreversible changes in the way business is conducted (Cheung and Fung, 2015). E-commerce transactions are performed electronically by using computer and communication networks. Some companies have moved their business entirely to the web, others are strategically investing in or merging with already existing online organizations.

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Statement of the Research Problem

E-commerce has gained popularity across the globe with the increasing number of organizations who are gaining internet access globally (Al-Madi and Al-Sarayrah, 2017).. In 2006, Nigeria was reported as African's fastest growing nation in the context of telecommunications ranging from 3.1 per cent growth to 16.1 per cent which is an improvement (Al-Qirim, 2016). It is, however, not yet uhuru for e-commerce in Nigeria. Many Organizations have not yet fully adopted the new technology as according to research to enhance their effectiveness.

On the growth of e-commerce in the Nigeria community, Ayaggari, Beck and Demirgue-Kunt (2018) argue that many steps have been taken for its promotion, but there are still lots to be done to make it operate well in the country. Some of the major steps already taken by the government include legislative efforts to ensure that telecommunication companies operate easily by providing the necessary interconnectivity required for e-commerce to fully take root and the WIN project among others. Implementing successful e-commerce service is not as easy as most people think (Asiabugwa and Munyoki, 2019). Many obstacles exist and they all revolve around three major pieces of the electronic commerce puzzle viz-a-viz money, technology, and people. Sometime the cost of avoiding e-commerce is greater than the cost of initiating it.

There is a big gap in the internet and e-commerce adoption between the developed and developing countries, thus creating a digital divide (Kesper, Rajaratnam and van Seventer, 2017). The main obstacles that prevent developing countries from leveraging the internet are lack of adequate communication infrastructure, technical know-how and information processing about the economy and the environment, poorly designed websites which may not be functional always, fraudulent tendencies, etc. The lack of adequate banking infrastructure is also considered as one of the problem faced by developing countries in building economic solutions (Aryeetey, 2016).

In Nigeria, various studies have been done with reference to e-commerce, a few has been done in regards to the effect of e-commerce in Manufacturing firms in Nigeria depicting the existence of a knowledge gap. Therefore, this study sought to establish the effect of e-commerce on the performance of commercial banks in Nigeria. With reference to first bank plc, bwari area council, Abuja.

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Objectives of the Study

In line with the aforementioned, the major objective of the study is to determine the effect of e-commerce on performance of commercial banks in Nigeria (A case study of First Bank Plc, Bwari Area Council, Abuja). Specifically, other objectives are:

- i. To determine the effect of electronic trading on performance of First Bank Plc, Bwari area council, Abuja
- ii. To ascertain the influence of online delivery on customers satisfaction.
- **iii.** To determine the extent of the relationship between online sourcing and efficiency of First Bank Plc, Bwari Area Council, Abuja. To what extent is the relationship between online sourcing and efficiency of first bank Plc Bwari Area Council, Abuja?

Research Questions

The following are the research questions:

- i. What is the effect of electronic trading on performance of First Bank Plc, Bwari area council, Abuja?
- ii. What is the influence of online delivery on customer satisfaction?

Statement of Hypotheses

- i. Electronic trading does not significantly have effect on performance of First Bank Plc, Bwari Area Council, Abuja.
- ii. Online delivery has not significantly influenced customer satisfaction.
- iii. There is no significant relationship between online sourcing and efficiency of first bank plc, Bwari area council, Abuja

Concept of E-commerce

Conner (2020) posited that electronic commerce is simply defined as the commercial transaction of services in an electronic format. Electronic Commerce according to Dierickx and Cool (2019) is also defined as doing business electronically. It is based on the electronic text, sound and video. It encompasses many diverse activities including electronic trading of goods and services, online delivery of digital content, electronic fund transfers, electronic shares trading, electronic bills of lading, commercial auctions, collaborative design and engineering online sourcing, public procurement, direct consumer marketing and after sales services. It involves both products (consumer goods, specialized medical equipment) and services (information services, financial and legal services). Elia, and Lefebvre (2018) described e-commerce as a process of

integration of all company's processes, activities and services toward buying and selling of products and exchange of information and funds with the company's partners via computer networks and electronic technologies. Dimitrios (2015), also defined e-commerce as a "process of buying, selling, transferring, or exchanging of products, services, and/or information via computer networks, including the Internet.

Cooper and Zmud, (2017) refer to e-commerce in this early stage as a "land grab". At once, the whole new marketplace was created and companies who had sufficient resources and willingness could "grab from the land". These large companies firstly understood the possibilities that e-commerce can offer and started exploring and developing them. Since most companies were dependent on external investors, achieving the profit was relatively rare. The pressure to the smaller companies was far more intensive, and many of them suffered losses. He said that in the beginning, the technology was simple, inexpensive and internet connection slow, the websites were mainly English based, e-mails were used unstructured and the integration of e-commerce with other processes were not efficient. "Second wave" is characterized with the technological boom after 2001, mobile broadband development, and increased speed of Internet on low cost price. The land was already captured and the key players shifted their attention from capturing to defending the land. Companies started to focus more on competitive advantage and developing strategies to achieve it (Currie, 2019).

Electronic trading

This refers to a method of trading securities, financial derivatives or foreign exchange electronically (Cooper and Zmud,2017). Both buyers and sellers use the internet to connect to a trading platform such as an exchange-based system or electronic communication network (ECN). One of the main advantages of trading online is the speed of transactions. Instruments can be bought and sold almost instantaneously, with no delays caused by paper copies of documents being filed. The growth of electronic trading has also meant lower costs for many third-party brokers, with savings often being passed on to investors in the form of smaller commissions. The internet has also made trading accessible to far more people across the world than traditional methods (Currie, 2019). It also means trading of notified agricultural produce including livestock in which registration, auctioning, billing, booking, contracting, negotiating, information exchanging, record keeping

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and other connected activities are done electronically on computer network/internet (Globerman, Thomas, and Stephen, 2015).

Online delivery service

According to Asiabugwa and Munyoki (2019) e-Service or 'electronic service' constitutes the online services available on the Internet, whereby a valid transaction of buying and selling (procurement) is possible, as opposed to the traditional websites, whereby only descriptive information are available, and no online transaction is made possible. The Service Delivery environment is the situation prospective clients find when they seek services, both in terms of tangible factors (e.g., the physical plant, personnel, equipment, and supplies) and the intangibles (e.g., treatment received from the staff, educational messages received). The stronger the input from each of these areas, the better will be the services provided to clients. Effective service delivery demands that programs balance the need for high-volume services delivered with patient-centered, highquality care. Strong service delivery indicators—and their corresponding targets - enable health programs to measure progress and design and implement more effective health strategies (Cooper et al, 2017). Online delivery service (or eservice) is a highly generic term usually referring to 'The provision of services via the Internet (the prefix 'e' standing for 'electronic', as it does in many other usages), thus e-Service may also include e-Commerce, although it may also include noncommercial services (online), which is usually provided by the government (Elia et al,2018). An umbrella term for services available on the Internet, e-Service include e-Commerce transaction services for handling online orders, application hosting by application service providers (ASPs) and any processing capability that is obtainable on the Web (currie,2019)

Online Sourcing

A defined by Conner (2020), e-Sourcing is the process of obtaining bids from different suppliers via a single online portal. The benefits of e-Sourcing include streamlining the sourcing process, reducing prices by maximizing supplier competition, and creating a repository for sourcing information. The first step in getting started with e-Sourcing is selecting an e-Sourcing tool. There are both basic and advanced types of e-Sourcing tools available today. Beyond accepting bids, basic e-Sourcing tools "should help with the gathering of supplier information" and typically include the "the ability to import and export information in CSV

format and Excel format, the ability to create the RFx itself" using templates, and the ability to manage the sourcing process workflow Globerman et al (2015). He cites "being able to explore alternate award scenarios, being able to encourage supplier flexibility in how they bid, and [being able to] encourage suppliers to get creative with what they offer," as the additional capabilities of advanced e-Sourcing tools. With both basic and advanced options available, should a procurement team start basic or pursue the most robust capabilities? "If they want to encourage creativity among suppliers and to be able to tap that," an advanced tool may be best, suggests Busch. "It's my view today that you should explore all options from the start (Kesper et al 2017)."In terms of e-Sourcing tool vendors, Busch advises "especially if you've heard of the vendor and you do reference checks on them, they're all fairly solid for sourcing." Even ERP system providers, which have historically lagged e-Sourcing specialists in innovation, "have largely caught up" in at least basic capability now, he claims. Busch notes that differences between e-Sourcing vendors lie in their user interfaces, negotiation capabilities, workflow flexibility, and data libraries (Dierick et al 2019).

Empirical Review

Goldstein and Connor (2016) did Research entitled the effects of e-trading on development export of rose water and essential oil. This study aims to identify structural barriers of exports rose water and essential oil to the United Arab Emirates. The population is consisted 77 persons of administrators of export companies in Kashan. Questionnaire was a kind of self-made. This study also attempted to identify the barriers to e-trading in export of rose water extract and essential oil with using a five-point Likert scale as an indicator. There are three factors associated with the proposed model. Barriers to e-trading export of rose water and export of rose water was determined in the following order of priority: Problems and obstacles related to information infrastructure, problems related to Legal, Legal problems related to, legal and security infrastructure, of infrastructure, Educational problems, behavioral and cultural infrastructure.

Gupta, and Dubelaar (2015) did research entitled effect of online delivery on the export of oil, gas and petrochemical. In this research were studied the effect of the application of e-commerce on the export of products, oil, gas and petrochemical industries and are presented conclusions and recommendations. In the study by reviewing research literature is discussed to explain the subject matter and

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methodology. For conducting this research used a field method that is supported by the library. The sample consisted member firms of Exporters Association products of oil, gas and petrochemicals. According to the results of research to active public policymakers in the field of export and also active managers in export recommended that Further to the e-commerce to develop exporting, have the necessary attention its export policy formulation.

Hitesh., Manoj., Hardeep and Leena (2019) carried out in a study entitled "Challenges and strategies for development of online sourcing aspect of ecommerce in Iran", discussed about the requirements of e-commerce, barriers and it's extend in Iran and the establishment of ecommerce in the country are known to cause the gap between rich and poor and have emphasized on the necessity of quickly providing the technological platform in order to prevent serious damage to the economic, cultural and political structure of society. As well as because of political problems and economic sanctions have considered the necessity of making culture and providing internal context for the development of e-commerce in the inside of country.

Kariuki (2020) in his paper, explored the ethics of business to business electronic commerce with focus on banking sector. The researchers had chosen a case study of online foreign exchange developments at an investment bank. The important areas include freedom of choice, trust and transparency of business to business transaction and limits to responsibility with regard to facilitation of fraud. The authors found that e-banking had forced the banking sector to recognize, restructure and reconsider its institutional arrangements. The challenges of e-banking services would be successful for banks only if fraudulent activities could be controlled, transparency in transaction could be maintained, ethical rules and regulation to be followed so that e-banking could be widely acceptable among customers.

Roles of Electronic Commerce in Banks

Banks and other financial service industries have used e-commerce channels for some years now, to communicate and transact businesses with both the domestic and international corporate customers (Greenspan,2019). They even use these e-channels for receiving instructions and delivering their products and services to their various customers though it varies widely in capability and sophistication. This could represent a great opportunity for banks, since they could provide an

attractive option for the customers who need an online bank. These types of banks are chosen as opposed to those solely on the internet (Virtual banks) as the world's experience has demonstrated that many customers prefer selecting a traditional bank with the option of internet banking. Customers feel more comfortable with this choice knowing they have the option to visit a real branch office if they choose (Kalakota and Robinson, 2015). E-commerce provides open and universal accessibility to products/services that may be difficult to obtain physically. It gives an ease of information gathering (Hassbroeck, 2017). The adoption and increased use of e-commerce channels/platforms to purchase goods and services allows the e-customer to save material resources, energy, travel and distribution costs (Janson, Cecez and Dubravka, 2015). It has achieved socio-economic and environmental sustainability. It potentially puts increasing power of selection and decision making in the realm of the customers. It also facilitates economic and social changes. E-commerce has become the most wide-ranging and significant area of current development in product marketing (Greenspan, 2019).

Electronic Commerce Methods in Nigerian Banks

According to Kariuki (2020), some of the methods of e-commerce in Nigeria are:

i. Electronic Banking (E-Banking): Nigerian banks have recently embraced electronic banking which has been made possible by the advancements in information technology (IT). Electronic banking can be defined as the delivery of banking services and products through the use of electronic means irrespective of the place, time and distance. E-banking comprises a system whereby all banking services and transactions are conducted via electronic medium. Such banking services and transactions among others include cash deposits and withdrawals, checking of account balances, managing requests and many more. In this case of e-banking, the network is referred to as extranet. An extranet is the use of internet technology outside a company's premises to share commercial and operational information and task with customer alternatively; it is a private network outside a business whereas the internet is a worldwide public network. No one outside is permitted but customers can see the extranet. It is securely protected, customers are able to transact on the banks website in a secured environment by using secured socket layer (SSL). E-banking has the potential to increase a bank's profitability and heighten customers' satisfaction as the ease and effectiveness of service delivery, cost reduction, etc. makes it possible for banks to attain efficiency and consequently boost banking performance in the Nigerian economy.

ii. Mobile Commerce/Mobile Banking: Information resources are accessed using devices that have wireless connections. Telephone banking is a process whereby one breach of a bank calls another where the customer's account is domiciled, to confirm if the account is valid before any transaction of either a deposit or withdrawal. With the advent of global system for mobile communication (G.S.M), we now have some banks using it as a medium of conducting some of their services. Also, with this, the owner can access other transactions link, buying any of the bank e-product/service. Among other electronic and/or banking transaction methods, the widely used is Automated Teller Machine (ATM). ATMs are mostly used if it is mostly located outside the banking halls, airports, schools, shopping malls, places far away from home, situated in large stores, filling stations, eateries, and hotels. It also has self-supervising operating applications and diagnostic programs and incorporate sophisticated physical and logical security features. The ATM is a combined computer terminal with cash vault and record-keeping system in one unit, permitting users to enter a bank's book keeping system with a plastic card containing a personal identification number (PIN). It is accessed by punching a special code number into the computer terminal linked to a bank's computerized records. It is aimed at decongesting the banking halls and providing alternative avenues for cash for customers outside banking hours. Customers can have access to their account information, check account balances, make cash withdrawals, purchase airtimes, pay bills, shop online, fund transfers, quick-teller services, e.g DSTV& PHCN bills payment, etc. It offers several retail banking services to customers. First introduced as cash dispensing machine, but now provides a wide range of services.

iii. Internet Banking: Internet banking is a real time solution that allows you to access your accounts with no banking restriction. It is accessible 24/7 (24hours a day, 7 days in a week). You may check your balances, view your account statements, and transaction history even for your various accounts. You can also transfer money between your accounts, pay your bills, pay salaries, vendors, contractors, manage requests such as bankdraft and cheque book requests, debit/credit cards requests, etc change your password over the internet, and all in a secure manner, view real time transactions, account balances, fund transfer, book for airline tickets, within/interbank, download activity in any format, local money transfer, monitor trade finance transaction, cheque confirmation, create, amend or cancel standing orders, direct debits, bills payment, etc. It comprises all banking

transactions using a personal computer, connected to the internet via a browser and a token given by your bank. It reduces cost, improves the flexibility of business transactions. Internet banking helps to manage your account and investments with ease. It personalizes your financial and other commercial transactions. Internet banking has made it possible for deposit or withdrawal of money irrespective of your location. Internet is often the most efficient way to distribute internal corporate information, because producing and distributing paper is usually slower and more expensive than using web based communications.

- Information **Technology:** Information technology encompasses the performance of banking/marketing/commercial activities and functions vua a complex system of computer networks. Presently, banks have been able to medicate all the financial and commercial transaction of their clients at least to a large extent. Biometrics and a large amount of data and information can now be processed, stored or transferred at a surprising speed using the computer and other wireless devices with the aid of information technology. Nigerian banks are not left out in utilizing information technology (IT) in order to improve their general service delivery. For example, some of the ICT processes that are being used by banks in Nigeria include: Mobile telephone, facsimile, Automated teller Machine (ATM), Internet Banking, etc. These technological innovations have been identified to contribute to the distribution channels of banks. New technology helps managers envision the future. Technological advancement promises to change the way and manner organizations innovate and change their approach in a variety of strategic issues ranging from entering new markets to responding to a competitor's attack, especially in today's increasingly complex and competitive business environment. Information Technology has surmounted the slow and expensive process of traditional marketing practices especially as it relates to business activities in the banks, other financial service industries and various business entities. It has been able to solve out-of-stock problems.
- **v. Social Networks:** A social network is a collection of interconnected people. It comprises points people (potential customers) and connections between these points using e-mail, sms purchases, telephone calls, etc. It helps an organization to focus on organizational resources more effectively. The rapidly evolving world of internet and social networks creates a whole new game plan for online forum, debates, blogs, etc., using technological innovations. It measures the flow of

information, uses network parameters to drive predictive analytics, calibrate the connections between parties in the network. It equally helps to surmount marketing challenges. It shows an emerging interest in computer mediated communications and how it enhances customer value during service encounters. It is a service experience that is based on flow of information via electronic channel with little or no physical interaction.

E-commerce and organization performance

Nowadays, the internet introduces new means to assist people, convert our life and become irreplaceable. The internet has introduced various and easy ways for the consumer to shop online and internet usage growing day by day for diverse purposes such as searching information, comparing prices and products, products selection, and payments online via using credit cards (Kalakota et al 2015).

E-commerce is the process of buying and selling through the internet directly from a seller without any intermediary party. It is internet technology that provides an opportunity to buy and sell online with one click. Meanwhile, it is also considered as a virtual store or e-tailing. The internet is very important and playing a key role in an organization at all level. E-commerce increasingly every day that encourages researchers to conduct research on how e-commerce influence organization performance (Keen, 2016). In Pakistan e-commerce is still at the introductory stage but excited and expected growth in the future. Furthermore, e-commerce also provides a new way to business and change all functions from advertising to payments clearance (Laudon, and Traver, 2019). In addition, e-commerce reduces business cost and disappear cultural boundaries in business and enhance organizational performance. Organizations working hard to invite and attract consumers to offline as well as online stores but in Pakistan very less research on this area (Lawal and Ijaiya,2020). Moreover, customers moving towards to purchase goods by internet due to advance technology or globalization.

Organization competing with other organizations and attract customers and try to retain and loyal by their performance (Kraemer, Gibbs, and Dedrick, 2019). But in Pakistan situation quite different according to Nielsen (2010) Pakistan is the second lowest country in e-commerce. Prior studies show that there is a significant positive relationship between e-commerce and organization performance (Hitesh et al 2019). Some studies show mixed results between e-commerce and organization performance (Gupta et al 2015). So according to (Kariuki 2020). when

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we have mixed results can introduce the third variable as a moderator and in current study social media as a moderator to strengthen the relationship between e-commerce and organization performance.

The Effects of Electronic Commerce on Business

E-Commerce and E-Business are not solely the Internet, websites or dot com companies. It is about a new business concept that incorporates all previous business management and economic concepts. As such, E-Business and E-Commerce impact on many areas of business and disciplines of business management studies. According to Goldstein etal (2016), some of them are:

- **1. Management Information Systems –** Analysis, design and implementation of e-business systems within an organization; issues of integration of front-end and back-end systems
- **2.** Human Resource Management Issues of on-line recruiting, home working and 'Intrapreneurs' works on a project by project basis replacing permanent employees.
- **3. Finance and Accounting -**On-line banking; issues of transaction costs; accounting and auditing implications where 'intangible' assets and human capital must be tangibly valued in an increasingly knowledge based economy.
- **4. Economics** -The impact of e-commerce on local and global economies; understanding the concepts of a digital and knowledge-based economy and how this fits into economic theory
- **5. Production and Operations Management -**The impact of on-line processing has led to reduced cycle times. It takes seconds to deliver digitized products and services electronically; similarly the time for processing orders can be reduced by more than 90 per cent from days to minutes. Production systems are integrated with finance marketing and other functional systems as well as with business partners and customers.
- **6. Marketing -** Issues of on-line advertising, marketing strategies and consumer behavior and cultures. One of the areas in which it impacts particularly is direct marketing. In the past this was mainly door-to door, home parties and mail order using catalogues or leaflets.
- **7. Computer Sciences -** Development of different network and computing technologies and languages to support e-commerce and e-business, for example linking front and back office legacy systems with the 'web based' technology.

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8. Business Law and Ethics – The different legal and ethical issues that have arisen as a result of a global 'virtual' market issues such as copyright laws, privacy of customer information, legality of electronic contracts etc.

The Benefits of E-Commerce to Business, Consumers and Society

According to Caldeir et al (2019), benefits of e-commerce has been explained on business, consumer and the society

1. Benefits of E-Commerce to Business

- **a) International Marketplace -** What used to be a single physical marketplace located in a geographical area has now become a borderless marketplace including national and international markets? By becoming e-commerce enabled, businesses now have access to people all around the world. In effect all e-commerce businesses have become virtual multinational corporations.
- **b) Operational Cost Savings -** The cost of creating, processing, distributing, storing and retrieving paper-based information has decreased.
- c) Mass Customization E-commerce has revolutionized the way consumers buy goods and services. The processing allows for products and services to be customized to the customer's requirements. In the past when Ford first started making motor cars, customers could have any color so long as it was black. Now customers can configure a car according to their specifications within minutes online via the www.ford.com website.
- **d)** Lower Telecommunications Cost The Internet is much cheaper than value added networks (VANs) which were based on leasing telephone lines for the sole use of the organization and its authorized partners. It is also cheaper to send a fax or e-mail via the Internet than direct dialing.
- **e) Digitization of Products and Processes -** Particularly in the case of software and music/video products, this can be downloaded or e-mailed directly to customers via the Internet in digital or electronic format.
- **f)** No more 24-hour-time Constraints Businesses can be contacted by or contact customers or suppliers at any time.

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2. Benefits of E-Commerce to Consumers

- a) 24/7 Access Enables customers to shop or conduct other transactions 24hours a day, all year round from almost any location. For example checking balances, making payments, obtaining travel and other information.
- **b) More Choices -** Customers not only have a whole range of products that they can choose from and customize, but also an international selection of suppliers.
- **c) Price Comparisons -** Customers can 'shop' around the world and conduct comparisons either directly by visiting different sites, or by visiting a single site where prices are aggregated from a number of providers and compared.
- **d) Improved Delivery Processes -** This can range from the immediate delivery of digitized or electronic goods such as software or audio-visual files by downloading via the Internet, to the on-line tracking of the progress of packages being delivered by mail or courier.
- **e) An Environment of Competition -** Where substantial discounts can be found or value added, as different retailers vie for customers. It also allows many individual customers to aggregate their orders together into a single order presented to wholesalers or manufacturers and obtain a more competitive price.

3. Benefits of E-Commerce to Society

- a) Enables more Flexible Working Practices This enhances the quality of life for a whole host of people in society, enabling them to work from home. Not only is this more convenient and provides happier and less stressful working environments, it also potentially reduces environmental pollution as fewer people have to travel to work regularly.
- **b)** Connects People Enables people in developing countries and rural areas to enjoy and access products, services, information and other people which otherwise would not be so easily available to them.
- c) Facilitates Delivery of Public Services For example, health services available over the Internet (on-line consultation with doctors or nurses) filing taxes over the Internet through the Inland Revenue website.

Drivers of E-commerce

According to Kraemer et al (2019) the key drivers of e-commerce are technological factor, political factor, social factor and economic factor. Technological factor is the degree of advancement of the telecommunications infrastructure which provides

access to the new technology for business and consumers. This also involves speed of development and implementation of new technology by industry sector. Technology is what drives the phenomena of globalization and provides competitive advantage to firms. Technological factor reduces costs, improves quality and leads to innovation. It can benefit consumers as well as the organizations providing the products. Political factor refers to the degree of intervention of government in the economy (Kesper et al, 2017).

There are certain formal and informal rules laid down by the government which every organization has to abide by in order to sustain its operations in a particular country. Important political factors in relation to e-commerce include the role of government in creating government legislations, initiatives and funding to support the use and development of e-commerce and information technology, government incentives to develop and support the use of new technology. Legislation includes number and type of supportive or restrictive laws and number of policies that govern electronic data, contacts and financial transactions. According to Conner (2020) Public policies would include whether government supports growth of electronic transactions and processes. Political decisions have a strong influence on many vital areas for business such as the education of the workforce, health of the nation and quality of the infrastructure of the economy such as the road and rail system. Bradley (2018) further argued that social factors are cultural aspects and demographic variables which are closely linked to the market potential and customers' needs. These include age distribution, attitude towards health and environment, education, leisure activities, attitude towards career, hanging lifestyle, gender role. As a Key driver to E-commerce, incorporating the level of advancement in IT education and training which will enable both potential buyers and the workforce to understand and use the new technology.

This also includes skills of workforce, number of workforce online, penetration of computers, level of education, computer literacy. Economic factors are those which have a direct impact on the capital loss of organizations and purchasing power of customers.(Currie,2019) These include: the general wealth and commercial health of the nation is also an important driver. Economic factors are influenced by organizational culture, Commercial benefits, Skilled and committed workforce. Economic factor as key drivers of e-commerce are defined by average income, economic growth GDP, cost of technology (hardware and software) cost

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of access to telecommunication infrastructure pricing structures and rates and innovative business models (Elia et al ,2018).

The Barriers of E-Commerce

The drivers of e-commerce were identified and summarized. There are barriers to the growth and development of e-commerce. Numerous reports and surveys identify the different kinds of barriers, and many of them focus on security as being one of the largest inhibitors to and problems for e-commerce (Aryeetey 2016). Different nations are at different stages of development of ecommerce and as such the issues that are relevant to one nation may not be relevant to another. Similarly, the issues that are relevant to the type of organization also differ. Overall, all kinds of organizations have similar barriers but with different emphases for discuss as follows (Boudreau et al 2015):

- **1. Commercial Infrastructure** Relates to issues such as international trade agreements, taxation laws and other legal agreements that facilitate all kinds of on-line trading and so is a barrier relevant to all types of businesses.
- **2. Technology Infrastructure** Deals with issues of standardization of systems and applications, which is a particular concern for larger organizations who want to implement solutions such as value chain integration and e-supply chain management.
- **3. Internet Infrastructure** Deals with issues such as availability and quality of the Internet in terms of speed and reliability. This barrier is of particular concern to Business to Consumer organizations, since their business relies more on general consumers, and so the ease with which the general public can connect to the Internet has a direct impact on their Web-based business.
- **4. Security -**In its broadest term is one of the most significant barriers toe-commerce both within the organization and external to it. Identified as Security and Encryption; Trust and Risk; User Authentication and Lack of Public Key Infrastructure; Fraud and Risk of Loss it relates to the development of a broader security infrastructure and it also relates to the kinds of measures barriers to e-commerce businesses can take to improve security.
- **5. Interoperability of systems** This is identified as one of the major barriers for large US based Business to Business corporations. This refers specifically to implementation and compatibility problems of integrating new e-commerce applications with existing legacy systems and resources within organizations. This

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problem also extends to interacting with systems of business partners and stakeholders.

6. Lack of Qualified Personnel- This is a particularly strong concern because internally they do not have sufficient resources to attract and maintain their own support staff to develop a sophisticated technology infrastructure. With regards to third parties, the qualified personnel tended to work for larger organizations.

Research Design

A descriptive research design was used which called for a quantitative method of doing research. One of the criteria which was used was that First Banks Plc had website. This enabled to obtain accuracy and indeed to establish the effect of ecommerce on performance of first bank plc, Abuja municipal area council, Abuja.

The Population

There are 28 first bank branches in six area councils of FCT. The population of the study is only 650 workers of First Bank Plc Bwari area councils, Abuja, Nigeria.

Sample Size Determination

A sample is a smaller group of selected items. That is, the subset of a given universe. Sampling is the process of selecting a given amount of elements from a universe on which a study will be conducted. The sample size was determined using the popular Taro Yamani formula as could be seen below;

$$n = N$$

$$1 + Ne2$$

Where: N = Population size

1 = Constant

e = Margin of error

$$n = N$$

$$1 + Ne2$$

Substituting into the formula, we have

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$$n = \frac{650}{1 + 650(0.05)2}$$

$$n = 650$$

$$1 + 650 (0.0025)$$

$$n = 650$$

$$1 + 1.625$$

$$n = 650$$

$$2.615$$

$$n = 246$$

Data Collection

The study used only primary data. A structured questionnaire was used to collect primary data. The 246 questionnaire targeted the workers of the banks. The questionnaire consisted of 4 parts, part A was to collect the data on the profile of the banks. Part B was to collect data on the extent of use of various e-commerce services in the banks. Part C was to collect data on the factors influencing the adoption of e-commerce strategy in the banks and effect on performance. Part D was to collect information on the benefits of e-commerce strategy.

Data Analysis

Before analysis, the data collected was checked for completeness and consistency by editing, coding, classification and tabulation. Analysis was carried out with the help of SPSS (Statistical Package for Social Scientists) Version 21.0. Regression analysis was used to come up with the model expressing the relationship between the dependent variable and independent variables A multiple regression model was developed to describe the relationship between the dependent and independent variable. The regression equation assumed the following form:

Variable/Model of Specification

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 $Y = \beta o + \beta ixi$

Specifically:

 $Y = \beta o + \beta 1X1 + \beta 2X2 + \beta 3X3$

Where:

Y= Performance of first banks plc, Abuja municipal area council, abuja

X1= Electronic trading

X2= Online delivery

X3= Online sourcing

Test of hypotheses

H01: Electronic trading does not significantly have effect on performance of first bank plc, Bwari area council, Abuja.

Table 4.0.1 Model Summary

Model	R	R Square	Adjusted R	Std error of
			Square	the estimate
	.644	.518	.614	3.16529

- a. Dependent variable: Performance of first bank Bwari area council, Abuja
- b. Predictor (Constant): Electronic trading

The study conducted a regression analysis to establish the effect of electronic trading on Performance of first bank Bwari area council, Abuja. Table above shows the model summary which shows that the R2 is 0.518 which means that 51.8% of variation on organizational performance is due to electronic trading as an aspect of e commerce.

Table 4.0.2 Anova

Model	Sum of	Df	Mean	F	Sig
	Squares		Square		
Regression	9.632	1	9.632	28.765	.000
Residual	71.660	214	.335		
Total	81.292	215			

- a. Dependent variable: Performance of first bank Bwari area council, Abuja
- b. Predictor (Constant): Electronic trading

Table 4.0.1 shows the ANOVA results of the linear regression analysis. The findings show that the significance level is < 0.005(p = 0.000). This finding

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implies that the regression model is significant in explaining change in the study variables

Coefficient

Model	Unstandardized Coefficient	Standardized Coefficient	Т	Sig.
	B Std Error	Beta		
(Constant)	2.826 .198		14.257	.000
Electronic				
trading	.281 .052	.644	5.363	.000

Dependent variable: Performance of first bank Abuja Bwari area council, Abuja The regression coefficient show that the size of the effect of independent variable on the dependent variable. Table 4.0.3 shows that an increase in electronic trading leads to increase in Performance of first bank Bwari area council, Abuja. The findings reveals that electronic trading significantly has effect on performance of first bank plc, Bwari area council, Abuja.

H02: Online delivery has not significantly influenced customer satisfaction.

Table 4.0.4 Model Summary

Model	R	R Square	Adjusted R	Std error of
			Square	the estimate
1	.663	.569	.564	2.59465

- a. Dependent variable: Customer satisfaction
- b. Predictor (Constant): Online delivery

The study conducted a regression analysis to establish the Influence of online delivery on customer satisfaction. Table 4.0.4 shows the model summary which shows that the R2 is 0.569 which means that 56.9% of variation on organizational performance is due to online delivery as an aspect of e commerce

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Table 4.0.5 Anova

Model	Sum of	Df	Mean	F	Sig
	Squares		Square		
Regression	5.619	1	5.619	15.889	.000
Residual	75.673	214	.354		
Total	81.292	215			

- a. Dependent variable: Customer satisfaction
- b. Predictor (Constant): Online delivery

Table 4.0.5 shows the ANOVA results of the linear regression analysis. The findings show that the significance level is < 0.005(p = 0.000). This finding implies that the regression model is significant in explaining change in the study dependent variable

4.0.6 Coefficient

Model	Unstandardized Coefficient		Standardized Coefficient	Т	Sig.
	В	Std Error	Beta		
(Constant)	2.976	.228		13.073	.000
Online delivery					
	.258	.065	.663	3.986	.000

a. Dependent variable: Customer satisfaction

The regression coefficient show that the size of the effect of independent variable on the dependent variable. Table 4.0.6 shows that an increase in online delivery leads to increase in customer satisfaction. The findings reveals that online delivery significantly has effect on customer satisfaction.

There is no significant relationship between online sourcing and efficiency of first bank plc, Bwari area council, Abuja

Table 4.0.7 Model Summary

Model	R	R Square	Adjusted R	Std error of
			Square	the estimate
1	.588	.446	.443	.49852

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Dependent variable: Performance of first bank Bwari area council, Abuja Predictor (Constant): Online sourcing. The study conducted a regression analysis to establish the effect of online sourcing on efficiency of first bank plc, Bwari area council, Abuja. Table 4.0.7 shows the model summary which shows that the R2 is 0.446 which means that 44.6% of variation on efficiency of first bank plc, Bwari area council, Abuja is due to online sourcing as an aspect of e commerce

Table 4.0.7 Anova

Model	Sum of	Df	Mean	F	Sig
	Squares		Square		
Regression	28.107	1	28.107	113.096	.000
Residual	53.185	214	.249		
Total	81.292	215			

- a. Dependent variable: Performance of first bank Bwari area council, Abuja.
- b. Predictor (Constant): Online sourcing

Table 4.0.7 shows the ANOVA results of the linear regression analysis. The findings show that the significance level is < 0.005(p = 0.000). This finding implies that the regression model is significant in explaining change in the study dependent variable

Coefficient

Model	Unstandardized Coefficient		Standardized Coefficient	Т	Sig.
	B	Std Error	Beta		
(Constant)	1.255	.248		5.061	.000
Online sourcing					
	.694	.065	.588	10.635	.000

a. Dependent variable: Performance of first bank Bwari area council, Abuja. The regression coefficient show that the size of the effect of independent variable on the dependent variable. Table 4.0.8 shows that an increase in online sourcing leads to increase in Performance of first bank Bwari area council, Abuja. The findings reveals that online sourcing has effect on Performance of first bank Bwari area council, Abuja.

Discussion of Findings

Research Objective One

The research objective one was to determine the effect of electronic trading on performance of first bank plc, Bwari area council, Abuja. The result of the hypotheses one confirm that there is a positive effect of electronic trading on performance of first bank plc, Bwari area council. The finding revealed that the organization enjoys electronic trading which had effect on their performance. The finding collaborates with the finding of Goldstein et al (2016) that electronic trading has a positive effect on organizational Performance.

Research Objective Two

Research objective two was to ascertain the influence of online delivery on customers satisfaction. The result of the hypotheses two confirm that there is a positive influence of online delivery on customer satisfaction. In comparison to other studies, the finding is in line with the finding of Gupta et al (2015) that online delivery has influence on the performance of oil firm.

Research Objective Three

Research objective three was to determine the extent of the relationship between online sourcing and efficiency of First Bank Plc, Bwari area council, Abuja. The result of the hypotheses three confirm that there is a positive relationship between online sourcing and efficiency of first bank plc, Bwari area council. The findings are supported by other studies especially by Hitesh et al (2019), which has it that there is a positive relationship between online sourcing and performance firms in Iran.

Conclusions

From the foregoing, no bank is interested in spending a huge of money on electronic commerce without anything to show for it at the end of the exercise. Thus, effectiveness and impact of electronic commerce can't be overemphasized as it plays a dominant role in the communication of product information (goods and services) to customers. This study therefore concludes that:

1. E-commerce boosts and promotes organizational performance. It allows economies of scale and sustainable demands, adds value to shareholders, increases production, leading to higher revenue.

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- 2. It makes organizations, banks and other financial service providers to become competitively advantageous and reduces operational cost. Anything less, would be undesirable as it is easier to arouse a demand.
- 3. E-commerce if adequately funded by an organization will enhance the achievement of the organization marketing and corporate objectives. Banks with a strong support and commitment to e-commerce from top management are more likely to adopt e-commerce banks that have the requisite It and business resources (infrastructures and skills) for e-commerce adoption stand a better chance of adopting ecommerce and profitability of the organization involved.
- 4. E-commerce has made it easy to search for availability of products easily at banks, it also increases customer's satisfaction and has attracted more customers, and the website of the company should be more accessible and make the customers connection faster. E-commerce is also a major tool for adopting to the changing business environment and has brought about reduction in marketing cost, increase in banks products and profitability of the organization.

Recommendations

From the foregoing, the following recommendations were made so as to heighten the use of electronic commerce as a veritable tool for the development and growth of Nigerian banking industry.

- 1. Banks and other financial service providers should leverage their investments on information technology to fully realize the benefits of ecommerce.
- 2. Banks should anticipate competitors' actions and develop new marketing and succession plans that are robust and contingent.
- 3. Banking industry should embrace the use of electronic commerce for improved profitability, productivity and operate optimally amidst competitors.
- 4. Skilled, experienced and dynamic personnel should be used, as this would lead to effective customer service delivery.
- 5. Customers' satisfaction should be the watchword for banks because customers are the king in any business organization. Payment on the internet should be risk free. There should be free flow of information about banks and their products. Now that most people are unemployed in Nigeria, government should utilize e-commerce and get people empowered so that they can be self-employed. Government should explore the opportunities embedded in electronic commerce to create employment for

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- the citizenry adding that it would help in reducing the high rate of cybercrime in the country.
- 6. Our businesses should be e-commerce friendly to attract foreign investors awareness programmes should be organized such as talk shows, seminars/workshops and be taught in tertiary institutions, schools, etc.
- 7. The availability of current technology in computing networks in Nigeria and some of the infrastructures needed for the successful take-off of ecommerce are already on ground. Government should therefore study the system to see how it can be adopted to develop the banking industry. Government should provide necessary infrastructures for e-commerce to thrive in Nigeria.

Suggestions for Further Research

The study suggests that more insight research should be done on e-commerce in Nigeria and other factors that may affect it, including other variables which may have further impact than currently analyzed. In particular, the effect of e-commerce may be done both in international and local manufacturing firms to compare the effect on the two divisions.

More empirical findings may be sought to determine a true linear relation of the independent variables and dependent variables. Indicators of e-commerce need to be expounded further and also the measurement of e-commerce outcome needs to be further explored.

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