

## Challenges of Electronic-Commerce as Propellant of SMEs in Nigeria

Hedrick Benson

Department of Economics, Lagos State University, Nigeria.

---

### ABSTRACT

The embracing of e-commerce by Small and medium scale businesses in Nigeria is essential considering the fact that it has the capacity to enhance the revenue of the financial system of the country, create new markets for both small and larger businesses and open up channels to serve and interact with consumers. There is no doubt that the Nigeria has several, legal, financial, infrastructural and technological challenges obstructing the comprehensive adoption of e-commerce by small businesses in the country, however, addressing these challenges can increase the attractiveness of e-commerce by addressing the problems faced by the users. As propellants of small businesses, e-commerce has the capacity to support rapid market changes with remarkable improvements on foreign and local markets. E-commerce can boost the need to compete more effectively in both local and international sectors, while enabling globalization of the production and supply of goods and services - as well as the need to integrate small enterprises more effectively into the supply chains of larger businesses. The government should therefore initiate programmes that will speed up the acceptance of e-commerce on a large scale.

**Keywords:**E-Commerce, SMEs, Challenges, Propel, Economy.

---

### INTRODUCTION

Electronic commerce (e-commerce) involves business transactions using Information and Communication Technology (ICT) services. E-commerce encompasses selling products and services through the means of internet communications. Before the arrival of e-commerce, a lot of business transactions were carried out in physical locations. [1] note that e-commerce has given rise to new opportunities for those who chose to adopt it, and also enabled them to thrive in national and international business markets. Throughout the world [2], assert that the impact of electronic commerce on the economies of countries across the world will definitely advance economic competence, competitiveness, and profitability (for those engaging in e-commerce) and, consequently result in the development of the information society. [3], explain that the internet which originated from the United States of America has received world wide acceptance. [4] cited in [5] explained that nowadays, a company without a website is regarded as old-fashioned. Thus, rapid advancements in the field of information and telecommunications technologies in

the first decade of 21st century have been truly remarkable and have resulted in the remarkable transformation of most societies into information-based cultures. The fast emergence and acceptance of e-commerce has resulted in a deep positive impact on business world. It is being implemented rapidly in business establishments in different sectors of the economy worldwide. The use and application of electronic commerce in business practices is quite varied between different parts of the world. There has been rapid growth in the use of ecommerce in North American, Western Europe, and South East Asian countries, while West Africa is yet to see that level of growth. Nigeria, which is the most populous and resource-rich country in Africa, provides an ideal context for the analysis of the challenges in ecommerce development and implementation [6]. Nigeria, being one of the world's most promising and competitive economies, is one of the perfect investment destinations on the landscape of Africa. According to most global investment and economic reports, Nigeria is considered as a fast-emerging world economic center

[www.idosr.org](http://www.idosr.org)

relative to business climate, a free and competitive marketing system, consumer and purchasing power parity, market reforms, oil and related resource-rich reserves and fiscal freedom [7].

The sweeping changes that have enveloped the world of business in general and businesses transacted only over the internet could be perceived from a different innovative standpoint. The series of changes as seen by its impact have redrawn the boundaries of businesses, thus constructing a new but strong world economy, and at a much faster rate than the industrial revolutions [8]. Nevertheless, the drastic changes came with new conditions such as new but strong competitive strategies by

#### **Small and Medium Scale Enterprises (SMEs)**

Small and medium enterprises (SMEs) are remarkably the force behind economic development. They account for almost 90% of businesses in both leading and developing economies through wealth distribution, job creation, technological advancement, reduction of poverty and innovation [10]. In the Federal Ministry of Commerce and Industry's guidelines to the Nigerian Bank for Commerce and Industries (NBCI) in 1981/82, small scale enterprises are regarded as those with total investment cost no more than N500, 000 (\$3,125) (excluding cost of land but including working capital). However, the NBCI, in its agreement with the World Bank, over the same period, defined small scale enterprises as one with project cost not exceeding N300, 000 (\$1,875) and with cost per job created not more than N7, 500 (\$46.88) [11].

In most developing economies, small scale industries are used as a strategy for job creation, food security, poverty alleviation, rapid industrialization, and curtailing rural urban migration, including economic restructuring for development and growth [12]. [13] stated that SMEs provides more than 75% of jobs within a country while [14] argued that SMEs plays a very strong role in every economy. [15] explained that apart from the banks, oil companies and of recent communication companies in Nigeria, the SMEs occupy an enviable, position within

Hedrick

organisations, new business models, new products, and new management techniques. The internet transcends time and space making it easier for businesses to extend beyond regional boundaries [9]. As such, the management of businesses has gone beyond the grips of individual countries and governments of the world. The internet and e-Commerce compared to physical channels have also given consumers more benefits and assorted choices of both products and services. Conversely, the poor development of SMEs has been recognized as the result of lack of awareness of e-commerce, amidst other numerous challenges in Nigeria, which forms the basis for this study.

the Nigerian economy, accounting for more than 64% of the jobs. Even though the Nigerian economy is heavily reliant on oil, small, medium and micro enterprises are found in the all parts of the country. The use of e-commerce by these Small and Medium Scale Enterprises in Nigeria is a new development. While the internet services have gained ground in all conglomerates and some medium organisations in Nigeria, most SMEs are still lagging behind [16].

#### **E-Commerce**

The Organization for Economic Cooperation and Development (OECD) (2004) cited in [17] defines electronic commerce as a new way of conducting business, qualifying it as business occurring over network which use nonproprietary protocols that are established through an open standard setting process such as the internet [18]. In the WTO work programme on electronic commerce, it is understood to mean the production, distribution, marketing, sales or delivery of goods and services by electronic means. According to [19], e-commerce covers a broad range of business processes and design of technology resources to assist business managers in the manner in which they interact with customers and conduct their businesses.

E-commerce and the new emerging digital technologies and services can be

instruments for development and help improve the livelihood of millions across the world, by connecting isolated areas and bringing together different people into projects and programmes to support economic and social development. E-commerce has created internal and external value chains within the businesses. Over the years, it has surfaced as a major base for worldwide economic growth and proved that it has the capacity to change the economic and social structure of countries [20]. Through e-commerce, people are able to reduce the duration of time in ordering, invoicing, making payment and delivery. This feat has become possible by surmounting lots of difficulties and employing appropriate strategies through which e-commerce could greatly influence the global economy and also changed the old-style of doing business transactions [21]. Subsequently, internet expansion in developed countries is growing at a speedy rate; but the speed is not reflected in developing countries. E-commerce can be categorized into the following:

**1. Customer to Customer (C2C):**

This is an e-commerce model that involves consumers directly transacting with other consumers in the cyberspace. According to [22], one of the behaviours that consumer exhibits is divestment; this is a process through which consumer disposes products after consumption. Normally, consumers at various levels tend to remarket the depreciated product for others to use it, or throw it away if it gets damaged beyond usage. In online environment, this model provides a way for consumers to sell to each other, with the help of online marketing tools. It is an Internet-enabled form of historical commerce in the form of barter, flea markets, swap meets, garage/yard sales and the like where consumers sell directly to other consumers online. It includes any website where people are brought together to buy, sell, or trade. One of the common examples of this model is the eBay.com, a site that coordinates and supervise online auction.

**2. Business to Customer (B2C)**

This is where customers learn about products or services through electronic publishing, and buy them using electronic cash and secure payment systems, and have them delivered electronically or through physical channels. Basically, businesses sell to the general public through catalogues utilizing shopping cart software. In order to supplement retailing activities, firms like www.234world.com, Xtaples.net, www.booksng.com, www.orderbay.com Jumia.com sell their merchandise online directly to their customers, and banks allow consumers to enjoy various banking services such as cash withdrawals, cash transfer, etc.

**3. Business to Business (B2B)**

This is an electronic market transaction in which businesses, governments, and other organisations depend on computer-to-computer communications as a fast, economical, and a dependable way to conduct business transactions. These benefits of this form of business to SMEs include selling goods and services to new vendors, purchasing direct materials, purchasing indirect materials, investment in e-procurement solution, and leveraging existing web presence.

**4. Customer to Business (C2B)**

This is a type of online transactions where consumers initiate trading with companies - these are mostly suppliers. In this model, a consumer posts his project with a set budget online and within hours companies review the consumer's requirements and bid on the project. The consumer reviews the bids and selects the company, which suits its purpose that will complete the project.

**5. Customer to Government (C2G)**

This is a type of online interaction where feedback is given to government through pressure group or individual sites.

**6. Business to Government (B2G)**

This is a type of online interaction where feedback from businesses is given to government and non-government organizations.

**7. Government to Citizen (G2C)**

This is a type of online interaction through which government offer national

[www.idosr.org](http://www.idosr.org)

transactions such as local government services, national government information, and tax information to its citizens and other stakeholders. At the moment the only well developed form of

### **E-commerce Performance in Nigeria**

Even with the growth of internet users in Nigeria, not so much work has been done in assessing e-commerce activity. Presently, a lot of online shopping sites are flourishing in Nigeria, serving thousands of searchers every week. Some of them are: jumia.com, konga.com, www.234world.com, Xtaples.net, www.booksng.com, www.orderbay.com and the hosts of others [23]. Moreover, banks have almost totally adopted electronic business process which is evident in online and internet banking respectively. These make the transaction process so easy that buyers begin to overlook the open offline market [24]. For example, a site like 234world.com allows buyer to pay to a designated bank account after making online purchases. The items purchased are then shipped to the buyer without delay. SoftPay on the other hand allows individual to receive money online and thereafter use it to pay for purchases made. It even helps online shopping sites to collect payment for purchases made. Considering all these, it is expected that the number of people engaging in e-commerce activity in Nigeria will increase in the near future. [25] notes that, the global growth rate of e-commerce is 16.8%, while Africa's e-commerce is growing at the rate of 25.8%. Nigeria, South Africa and Kenya are the top three countries that shop online which have contributed immensely to the growth of their economies. Emmanuel cited in [3] observed that e-commerce is at the elementary stage in Nigeria, with an overwhelming impact on business transactions in the country. According to him, the Nigerian Bureau of Statistics reported that ICT enabled online businesses contributes about 8.4% of Nigeria's GDP and recorded a 16.4% growth in 2014, and the industry boasts of about 300,000 online orders daily. In order to actively engage in e-commerce, a customer needs to have

Hedrick

e-Commerce in Nigeria are Business to Business (B2B) and Business to customers (B2C). Others such as the government related commerce are yet to become active.

access to the internet as well as a means of error free payment in order to make use of e-commerce services successfully [9]. This is only possible if the customers have good awareness about the banking services and also have accounts. According to the research done by [14], published on *Thisday Newspaper*, 'only 38% of Nigerians have a bank account'. Another research by [1] reveals that "the total amount of automated teller machine cards issued by commercial banks in the country by the end of July 2013 is about 14.72 million". About 32.5 million Nigerians have internet access through the telecommunication network and altogether 45 million have internet access by any mode [18]. This implies that out of the 45 million with internet facility, only 14.72 million have a means of payment. The adoption of e-commerce among SMEs in Nigeria is still very low due to a number of challenges [10]. These challenges range from inadequate ICT infrastructure, poor telecommunication network, lack of awareness on e-business, insufficient legal and regulatory framework, high cost of internet services, partial automation of banks, security and privacy, among others. Hence, many of the small and medium sized enterprises (SMEs) in Nigeria have been slow in the adoption of e-commerce because of the above mentioned issues.

[12] added that distrust, cost of broadband, logistics, Africa's open market, fragmented market and literacy rate also hamper e-commerce. According to Emmanuel, cited in [20], distrust is a serious challenge facing e-commerce in Africa. He notes that in Nigeria, the Inter-Bank Settlement System (NIBSS) in 2015 reported the high level of fraudulent transactions, which amounted to 8.8% of online transactions. Distrust is therefore a major challenge that has persistently kept many from buying and selling online, especially as it is linked to the

[www.idosr.org](http://www.idosr.org)

security system of online payment platforms. It is a problem that seems to defy all measures being put in place to curtail financial fraud resulting from cyber crimes. According to [18], phishing is very common in Nigeria, where people are unsure about putting their credentials online. Because of this, several companies offer cash on delivery to assuage this challenge.

In the same vein, ICT software provides the much needed platform for e-commerce development and sustainability in Nigeria. [8] identifies some of the software applications for e-commerce to include: Operating systems and software servers, Security/ Encryption Software, payment system, Customer Relationship Management Software, etc. regrettably; this important sector (software development) is grossly under developed in the Africa. The UNCTAD (2012) report identified limited access to venture capital as the biggest challenge to the software sector of the Information and Communication technology industry in African countries and this situation has

#### **E-Commerce as Propellant of SMEs**

The need for micro- and small enterprises to consider adopting e-Commerce is driven by global, regional and national business trends [16]. This relates to markets, costs, new technologies and political factors. They include:

- i. Adaptation to rapid market changes that are impacting on export and domestic markets.
- ii. Cost competition and the need to compete more effectively in both local and international sectors.
- iii. Globalization of the production and supply of goods and services - and the need to integrate small enterprises more effectively into the supply chains of larger businesses.
- iv. Increased customer expectations and consumer power - buyers expecting to be

#### **Challenges of E-Commerce in Nigeria**

[17] found that the fear of fraud and risk of loss has commonly been cited as a

Hedrick not changed. The report shows that ICT software and services are dominated by the developed world with some developing economies catching up. It further highlighted that enhanced access to ICTs in developing countries is widening opportunities in areas including health, education, governance and business creation and expansion. "Software production can contribute to the structural transformation of economies, and pull them away from dependence on low-technology goods and on a limited number of products for export." It identified Kenya and South Africa as top suppliers of software and services for domestic consumption in the continent, especially in the areas of smart phones and tablets, as well as mobile applications driven by mobile broadband Internet services. However, piracy, poor ICT infrastructure and inadequate protection of intellectual property rights are some of the major challenges hindering ICT software development and service (e-business) expansion in Africa [21].

able to access web-based information about products and services.

- v. Adaptation to new technologies - an overall need for technological upgrading.
- vi. Greater role for information in business and the need to access process and communicate it efficiently and effectively.
- vii. Government deregulation and liberalization - lowering costs of access.
- viii. Bilateral and multilateral trade agreements - opening up markets to developing country producers.
- ix. Adaptation to higher quality standards such as ISO9000 - ICTs are acting as an enabler in this area.

significant barrier to B2C e-commerce, with empirical research findings

supporting these assumptions. Furthermore, [4] discovered that while e-commerce offers great opportunities for one-to-one marketing, it significantly reduces, or even puts an end to the personal service (human-to-human contact) characterizing traditional commerce especially in the developing countries. This may, be an impediment to e-commerce for many consumers. [9] however stressed that due to low bandwidth connections, using the internet may be time consuming, and thus frustrating. [17] further noted that e-commerce may offer consumers savings in time, in practice, however, using the internet for commercial purposes may prove to be too time consuming for many users. There are multiple reasons for this:

- i. Difficulties locating websites/products/services.
- ii. Registration procedures required to access services.
- iii. Making price comparisons, etc.
- iv. Cost of acquiring a computer, cost of use and internet access fees have all been adjudged as some of the barriers to e-commerce adoption by SMEs by various researchers.

However, [10] presented a more succinct barriers stating that 'on the internet, it is more or less impossible to make sure, beyond doubt, that (tangible) products have the desired features (e.g. design, material, colour, fit), giving rise to a quality evaluation barrier to e-commerce'.

#### CONCLUSION/RECOMMENDATION

The gains of e-commerce are numerous; for instance, e-commerce presents the most capable and efficient way of business start-up, running and operations. It has fewer operating costs compared to conventional businesses. Such cost include cost of establishment, cost of running the business, logistics costs, costs of materials, marketing, sales and distribution. Similarly, e-commerce affords businesses wider reach and access into global market. According to [6], cited in [25], with e-commerce there is massive awareness, visibility and opportunity to promote goods and services. Also, e-commerce improves market awareness

Empirical findings by [11] showed that the need to feel and touch was the dominating disadvantage for all home-shopping services. Other cited barriers to e-Commerce are as follow:

#### **Lack of gratification**

As opposed to physical stores, e-shopping involves the customer and the computer. The usual feelings of pleasure, variety of products, and so many things to see with the pomp and pageantry are non-existent. E-shopping therefore cannot be a substitute for these experiences.

#### **Difficult to locate items**

[2] and [8] clearly stated that some consumers find it difficult to locate some of the items they wish to purchase, this therefore amounts to poor site usability. [22] however, discussed four major stages adopted by most e-Commerce groups in the United Kingdom. These are (a) those that are developing their first e-mails and websites - known as the developers; (b) those that are using e-mails and exchanging documents and designs electronically with customers and suppliers - known as the communicators; (c) those that have web presence which means websites with online ordering facilities and (d) those using online ordering and payment capabilities known as the "transactors". In comparison with the developing countries such as Nigeria, most SMEs are still at the developers stages while most conglomerates within the polity have attained the four stages.

among customers which result in competition and price reduction. Again, e-commerce enhances customer services and brand awareness, order taking and processing which leads to high customer loyalty. Again, e-commerce enables high level of efficiency in various aspect of business operation such as efficiency in supply chain management that leads to lower transaction costs (marketing, sales, transaction processing, reduced overhead, reduced inventory and labour costs. Also, with e-commerce, businesses achieve improved accuracy, quality and speed of transaction; and if properly implemented, e-commerce further

[www.idosr.org](http://www.idosr.org)

provides competitive advantage among businesses which results in increased profits. This helps to strengthen firms' market position in the industry.

Consequently, several companies and organizations in Nigeria are beginning to take advantage of the opportunities

Hedrick provided by e-commerce; however, critical challenges need to be addressed. The government should come up with initiatives that will accelerate the adoption of e-commerce, which would promote economic development in all regions [19].

#### REFERENCES

1. Abubakar, M. Y. (2017). The Relevance of E-Commerce in Nigeria. *Northwest Business and Entrepreneurship Development*, 6.
2. Agwu, M. E. and Carter, A. L. (2014). Mobile phone banking in Nigeria: benefits, problems and prospects. *International Journal of Business and Commerce*, 3(6); 50-70.
3. Agwu, M. E. and Murray, J. P. (2014). Drivers and Inhibitors to E-Commerce Adoption among SMEs in Nigeria. *Journal of Emerging Trends in Computing and Information Sciences*, 5(3),
4. Amaefule, E. (2013). 32.5 Million Nigerians Access Internet via Telecoms Networks [online] <http://www.punchng.com/business/32-5-million-nigerians-access-internet-via-telecomsnetworks/>
5. Awan, M. A., Khan, H. U. and Zhang, W. (2012). A comparative study on online service quality perception of two major regional economies. *International Journal of e-Education, e-Business, e-Management and e-Learning*, 2(6); 529-551.
6. Chima, O. (2011). Survey: 38% of Nigerians have bank accounts. *Thisday Newspaper*, p.1 [online] <http://www.thisdaylive.com/articles/survey-38-of-nigerians-have-bank-accounts/88304/>
7. Daniel, E., Wilson, H. and Myers, A. (2002). Adoption of E-commerce by SMEs in the UK: towards a stage model. *International Small Business Journal*, 20(3); 253-270
8. El Gawady, Z. M. (2005). International Conference of Globalization, Technology and Sustainable Development. World Association for Sustainable Development, United Arab Emirates University, 21-32 November, 2005.
9. Emmanuel, O. (n.d). Is E-commerce really helping Nigeria's economy?, <http://venturesafrica.com/is-e-commerce-really-helping-nigerias-economy/>
10. Faloye, D. O. (2014). The adoption of e-commerce in small businesses: an empirical evidence from retail sector in Nigeria. *Journal of Business and Retail Management Research (JBRMR)*, 8(2).
11. Ghobakhloo, M., Arias-Aranda, D. and Benitez-Amado, J. (2011). Adoption of e-commerce applications in SMEs. *Industrial Management & Data Systems*, 111(8), 1238-1269.
12. Jardim-Goncalves, R., Grilo, A., Agostinho, C., Lampathaki, F. and Charalabidis, Y. (2012). Systematisation of interoperability body of knowledge: the foundation for enterprise interoperability as a science. *Enterprise Information Systems*, 7(1); 7-32.
13. Johnson, M. (2011). Getting Nigerian Businesses Online Initiative. A Speech Delivered by the Minister of Communication Technology at the Opening Ceremony of the GNBO SMB Fair in Lagos, Nigeria.
14. Kunle, A. (n.d). UN report identifies challenge to Africa's ICT growth. In *National Mirror*, <http://nationalmirroronline.net/news/un-report-identifies-challenge-to-africas-ict-growth>
15. Lal, K. (2007). Globalization and Adoption of ICTs in Nigerian SMEs,

- Science, *Lal Technology Society*, 12 (2), 217-244.
16. Lawal, A. and Chukwu, R. C. (2015). E-Commerce, Problems and Prospect in Nigeria. *International Journal of Scientific Engineering and Applied Science*, 1(3).
  17. MacGregor, R. (2010). Perception of Barriers to e-Commerce adoption in SMEs in a Developed and Developing Country: a Comparison between Australia and Indonesia. *Journal of Electronic Commerce in Organizations*, 8(1); 61-82
  18. Musa, A., Khan, H. U. and Alshare, K. (2015). Factors influence consumers adoption of mobile payment devices in Qatar. *International Journal of Mobile Communications*, 13(6); 670-689.
  19. Ndubisi, E. (2015). The challenges facing e-commerce start-ups in Africa. In: Harvard Business Review, <https://hbr.org/2015/03/the-challenges-facing-e-commerce-start-ups-in-africa>.
  20. Oliveira, T. and Martins, M. F. (2010). Understanding E-Business Adoption across Industries in European Countries. *Industrial Management & Data Systems*, 110(9), 1337-54.
  21. Omar, M. (2015). How e-commerce is booming in Africa. In *World Economic Forum*, <https://www.weforum.org/agenda/2015/08/how-e-commerce-is-booming-in-africa/>
  22. Onwuegbuchi, C. (2013). ATM cards, Nigeria Communications Week. [online] <http://nigeriacommunicationsweek.com.ng/e-financial/banks-issue-1472m-cards-invests25bn-on-atms>.
  23. Saffu, K; Walker, J., and Hinson, R. (2008), Strategic value and electronic commerce adoption among small and medium-sized enterprises in a transitional economy *Journal of Business & Industrial Marketing*, 23, 395-404
  24. Ugwushi, B. I. (2009). SMEs Key Failure-Factors, a Comparison between the United Kingdom and Nigeria. *Journal of Social Sciences*, 18(3), 199-207.
  25. United Nations Conference on Trade and Development (UNCTAD), (2012). Information Economy Report 2012. In *Report no UNCTAD/IER/2012*.