E-Commerce Challenges and Policy Considerations in Nigeria

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INTRODUCTION

Electronic commerce (or *e-commerce*) is the popular term for doing business electronically. According to Haag, Cummings, and McCubbrey (1998), for businesses, electronic commerce includes performing transactions with customers over the Internet for purposes such as home shopping, home banking, and electronic cash use; performing transactions with other organizations through the use of electronic data interchange (EDI); gathering information relating to consumer market research and competitors; and distributing information to prospective customers through interactive advertising, sales, and marketing efforts. Benefits of e-commerce to companies include a wider potential market (i.e., global access); lowering of transaction costs; increase in the speed of transactions; improved economies of scale; minimization of human intervention in business processes; and unlimited access to product information for customers (Sesan, 2000; Wood, 2003).

While a few developing countries such as Costa Rica are making inroads into electronic commerce (Travica, 2002), many others are slow in its adoption. For example, a study, which rated 42 developing countries on their "e-readiness," found that Taiwan and Estonia had emerged as leaders among developing countries in the ability to conduct e-commerce, whereas Russia, much of the Middle East, and Africa were lagging behind (Anonymous, 2000). One of the countries included in the study but that rated poorly in its e-commerce efforts is Nigeria. In this articl, we shall be discussing the challenges being faced by the country as it grapples with the adoption of e-commerce.

BACKGROUND

Electronic commerce developed as a result of synergism between two industries, namely business and information technology. In the business industry, e-commerce is viewed as a buying and selling process that is supported by electronic means (Wood, 2003) whereas in the information technology industry, it is viewed as an electronic business application aimed at commercial transactions systems. In general, there are four types of e-commerce (Rayport & Jaworski, 2001):

1. **Business to Business (B2B):** B2B refers to e-commerce that takes place between business organizations. The foundation of B2B e-commerce, according to Haag et al. (2002), is electronic data interchange (EDI). EDI is the direct computer-to-computer transfer of transactions information contained in standard business documents such as invoices and purchase orders, in a standard format. EDI replaces paper documents with digital records exchanged between trading partners' computers.
2. **Business to Consumer (B2C):** B2C involves e-commerce sites that sell products and services, or provide information services directly to consumers. B2C (or retail) e-commerce has spawned many new businesses that have no physical stores but can deliver a wide variety of goods on request (National Science Board, 2002). B2C also includes services such as banking, education, consulting, retailing, gambling, and governance (Iyer, Taube, & Raquet, 2002).
3. **Consumer to Business (C2B):** C2B is e-commerce in which the Internet makes it possible for many consumers who want to buy the same or similar products to band together in order to obtain volume discounts from a business.
4. **Consumer to Consumer (C2C):** C2C involves consumers dealing with each other, either through an auction site or directly in one of the peer to peer networking applications.

In terms of product suitability, certain products/services appear more suitable for e-commerce while others remain more suitable for offline sales. The most successful purely virtual companies deal with digital products, including information storage, retrieval, and modification, music, movies, education, communication, software,

photography, and financial transactions. Virtual marketers can sell some nondigital products/services successfully. Such products have a high value-to-weight ratio, are embarrassing purchases, typically go to people in remote locations, or are typically purchased by shut-ins (Wikipedia, 2004). Purchases of pornography and of other sex-related products and services fulfill the requirements of being virtual (or if nonvirtual, generally high value) and of potential embarrassment; unsurprisingly, provision of such services has become the most profitable segment of e-commerce.

Products such as spare parts, both for consumer items like washing machines and industrial equipment like centrifugal pumps, also seem good candidates for selling online. Retailers often need to order spare parts specially, since they typically do not stock them at consumer outlets –this means that e-commerce solutions in this area do not compete with retail stores, only with other ordering systems. Products unsuitable for e-commerce include products that have a low value-to-weight ratio, products that have a smell, taste, or touch component, products that need trial fittings, and products where color integrity appears important (Wikipedia, 2004).

Globally, consumers have accepted the e-commerce business model more slowly than its proponents originally expected (Humphrey, Mansell, Paré, & Schmitz, 2004). Even in product categories suitable for e-commerce, electronic shopping has developed only slowly. Several reasons have been adduced for the slow uptake, including:

1. Concerns about security. Many people will not use credit cards over the Internet due to concerns about theft and fraud. This is in addition to the lack of credit card culture in many developing countries (Travica, 2002).
2. Lack of instant gratification with most e-purchases (nondigital purchases). Much of a consumer's reward for purchasing a product lies in the instant gratification of using, and being seen to use the product. This reward does not exist when one's purchase does not arrive for days or weeks.
3. The problem of Internet access, particularly for developing countries. Low penetration rates of Internet access (see Table 1) greatly reduce the potential for e-commerce in developing countries, especially in Africa, Asia, the Middle East, and Latin America.
4. The social aspect of shopping. Some people enjoy talking to sales staff, to other shoppers, or to their cohorts: this social reward does not exist in online shopping.

CURRENT STATUS OF E-COMMERCE IN NIGERIA

Nigeria—which has been long locked and dragged back by brick-and-mortar methods in governance, education, and business—is at last taking steps to cross the digital divide. With the ongoing revolution in technology and the realization that no country can move forward without first advancing technologically, Nigeria has joined the countries currently reveling the online bug. In the educational sector, seven examination bodies, including the Joint Admissions and Matriculation Board (JAMB) and West African Examinations Council (WAEC) now allow students to register for examinations and to check and to print out their results online. Also, through the initiatives of AfriHub Inc., of the United States, the first phase of electronic learning facilities were recently launched at the two campuses of the University of Nigeria (UNN) at Nsukka and Enugu (Akpore, 2005). The facilities, which are meant to provide real time online training to university students, will be extended to 38 other tertiary institutions across the six geopolitical zones in Nigeria. Access to the Internet in almost all parts of Nigeria has also made it easier for Nigerians to acquire international information technology certifications such as Microsoft, Linux, and Sun certifications.

Table 1. World Internet usage and population statistics (From InternetWorldStats.com, September 30, 2004)

World Regions	**Population (2004 Est.)**	Internet Usage, Latest Data	Usage Growth 2000-2004	Penetration (% Pop.)
Africa	893,197,200	12,937,100	186.6 %	1.4 %
Asia	3,607,499,800	257,898,314	125.6 %	7.1 %
Europe	730,894,078	230,886,424	124.0 %	31.6 %
Middle East	258,993,600	17,325,900	227.8 %	6.7 %
North America	325,246,100	222,165,659	105.5 %	68.3 %
Latin America/Caribbean	541,775,800	55,930,974	209.5 %	10.3 %
Oceania	32,540,909	15,787,221	107.2 %	48.5 %
WORLD TOTAL	6,390,147,487	812,931,592	125.2 %	12.7 %