



**DRAFT TRAINING MANUAL**  
**FOR**  
**GENERAL ENTREPRENEURSHIP COURSES IN**  
**UNIVERSITIES**

**COURSE 2: VENTURE CREATION AND GROWTH**

**MODULE 5: NEW OPPORTUNITIES FOR EXPANSION (e-business)**

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## **MODULE 5: NEW OPPORTUNITIES FOR EXPANSION (e-business)**

### **Description/Rationale**

This module explores the process and issues involved in conducting business or commerce over the Internet or World Wide Web. Technologies used to deliver e-Commerce, e-Business, and the strategies used to launch e-Commerce Web Site will be discussed. Participants will learn fundamental concepts about e-Commerce, e-Business, and related technologies as well as what it takes to succeed in this e-driven economy. Definitions, issues, tools, processes, terminologies, technologies, and best practices will be discussed.

### **Objectives/Learning Outcomes**

Upon the completion of this module, the participants will be able to:

- describe E-Commerce, E-business and related technologies,
- define e-Commerce and describe how it differs from e-Business,
- describe the major types of e-Commerce/e-Business,
- discuss in a practical way the application of these techniques in real business,
- determine the requirement (hardware and software) for a small e-Commerce web site,
- identify unique features and business significance of e-Commerce technology
- examine the challenges and prospect of e-Commerce in Nigeria

### **Summary Content**

1. Introduction
2. What Is e-Business?
3. What Is Commerce?
4. What Is e-Commerce?
5. Difference between E-business and E-commerce
6. Why Study E-Commerce?
7. Types of E-Commerce
8. Key Technologies Enabling E-Commerce
9. Dimensions of E-Commerce
10. E-Commerce Driver for Small Businesses
11. Advantages and Disadvantages of E-Commerce
12. Steps to Starting e-Commerce
13. The State of e-Commerce in Nigeria

## **Delivery Methodology**

This module will be delivered in a variety of ways including:

1. Instructor led lectures, multi-media presentations, interactive and participatory, informal discussions, and exercises.
2. Research or exercise assignments to apply e-Business/e-Commerce principles using Internet
3. In class small group discussion of questions or assignments.
4. Hands-on activities using computer hardware and/or software;
5. Individual or group project presentations followed by in-class discussion

## **Duration of Course**

- This module can be covered in 3 hours

# TOPIC ONE

## 1. INTRODUCTION

Science and Technology have always influenced modes, practices and procedures of business and trade. The advancement of Science and Technology, more particularly in electronics and internet, has profoundly influenced the conduct of business in the world. The fast changing information technology and convergence of various communication technologies have virtually taken the business practices by storm. The use of Internet has made the world small and through it, business transactions are conducted globally at a faster pace. The age of connectivity has reduced distances and brought people closer. This can be directly attributed to the development of electronics and communication technologies.

Computers and the Internet are now increasingly widely used to function as part of doing business. Transactions conducted through the Internet have enormous implications on the international competitiveness of every nation, giving rise to new and exciting opportunities in national and international industries, the governments and for individuals.

Students, lawyers, doctors, engineers and various other professionals get to access vast information through the World Wide Web (WWW) network system. It has revolutionized national and international business transactions because of its numerous benefits. Businesses now use different technologies and embrace a wide range of methods such as electronic banking, electronic trading, electronic cataloguing, video conferencing, multi-media communications, electronic data interchange, electronic mail, facsimile and all forms of messaging between enterprises. Internet-users have grown phenomenally in the past 5 years and the number is expected to continue to increase.

In this module we describe the use of Internet and other electronic technologies as means of achieving New Opportunities for Business Expansion.

## 2. WHAT IS E-BUSINESS?

*Electronic Business* or *e-Business* refers broadly to the use of technologies, particularly the Information and Communication Technologies (ICTs), to conduct business or facilitate improved business activities and processes, including procurement, operation, manufacturing, marketing and sales, logistics, human resources management, finance, and research and development. Originally, the term *e-Business* refers primarily to the digitally enabled

transactions and processes *within* an organization, involving information systems under the control of the organization. E-business does not include commercial transactions involving an exchange of value across organizational boundaries. These online interactions are aimed at improving or transforming business processes and efficiency.

Over time, e-Business has been known to cover online transactions, extending to all Internet-based interactions with business partners, suppliers and customers such as selling direct to consumers, manufacturers and suppliers; monitoring and exchanging information; auctioning surplus inventory; and collaborative product design.

E-Business, therefore, relates to any commercial activity that is conducted in an electronic format including commercial transactions conducted via the Internet, telephone and fax, electronic banking and payment systems, electronic purchasing and restocking, etc. Like the telephone, fax, and calculator, e-Business is a tool that can enable increased productivity, improved customer services, and reduction in costs.

E-Business is not limited to certain type of business or technology, but includes networking, allowing sales and marketing activities, purchasing and logistics, production, education, design and engineering to take place. The most effective use of e-Business is when a business combines several of these activities allowing information to flow from sales, to purchasing and production. It facilitates creating more effective external interactions with customers, clients, collaborators and suppliers, as well as helps improve internal business efficiency and even the emergence of new products and services.

E-Business could be generally described as any ICT enabled system that suppliers, distributors, or customers use, as the basis for conducting their business operations, such as:

- Communicate with clients or suppliers via email;
- Send email to other organizations to order supplies;
- Sell or promote products or services via a web site and/or email;
- Publish a web site to provide public information about the business;
- Use the Internet for online banking and paying bills;
- Research information about customers and competitors using web sites;
- Provide technical or customer service by email or web site; and
- Manage and distribute internal organization documents via an intranet.

### **3. WHAT IS COMMERCE?**

Commerce can be defined as the negotiated exchange of goods and services between two or more individuals and/or companies in which each party hopes to gain a benefit by exchanging something with the other party (or parties). What is exchanged is generally money. But

money is not the only thing that can be exchanged. For the purpose of this module, we will focus on the exchange of money for products, goods or services; this has been in practice for thousands of years.

#### **4. WHAT IS E-COMMERCE?**

The advances in Information and Communication Technologies (ICTs) and the emergence of the Internet have revolutionized business activities enabling new ways of conducting business referred to as electronic commerce (Zwass 2003; Turban, King, Lee, & Viehland, 2004). Electronic commerce (e-Commerce) describes the process of buying, selling, transferring, or exchanging products, services, and/or information through computer networks, principally the Internet (Turban et al., 2004). Electronic commerce can also be described as the sharing of business information, maintaining of business relationships, and conducting of business transactions by means of telecommunications networks (Zwass, 2003).

Due to the invention of internet, web technologies and other electronic devices, a new form of commerce known as e-Commerce has emerged. Electronic Commerce (e-Commerce) is a set of technologies, applications, and business processes that link businesses, consumers, and communities for the purposes of buying, selling, and delivering products and services; as well as for integrating and optimizing processes *within* and *between* participating entities. E-Commerce builds on traditional commerce by adding the flexibility and speed offered by electronic medium, thereby facilitating improvement in operations leading to substantial cost savings, as well as increased efficiency and competitiveness through the redesign of traditional business methods.

E-Commerce involves the application of ICTs to conduct *commercial* transactions between and among organizations and individuals. It could be said to comprise of all commercial transactions mediated by digital technology (landline telephone, fax, mobile phones, electronic mail and Internet), between private individuals or commercial entities, which take place in, or over, electronic networks. The object of the transactions could be tangible or intangible. The only important factor is that the communication and transactions take place over an electronic medium.

As we will discuss later, e-Commerce is not just about using new technologies, but also helps to support profitable business relationships and promotes more effective business practices.

*“To thrive in the e-commerce world, companies need to structurally transform their internal foundations to be effective. They need to integrate their creaky applications into a potent e-business infrastructure.”*

from the **E-Business: Roadmap for Success** by

Dr. Ravi Kalakota

## 5. **DIFFERENCE BETWEEN E-BUSINESS AND E-COMMERCE**

The terms ‘*e-Business*’ and ‘*e-Commerce*’ are often used interchangeably, but what do these words really mean? While the meaning of the words Commerce and Business are essentially the same in English as nouns describing organized profit-seeking activity, there is a difference between e-Commerce and e-Business. The difference is quite artificial, but different terms do carry different meanings.

As was mentioned earlier, e-Commerce refers to online transactions - buying and selling of goods and/or services over the electronic medium especially the Internet. Electronic business transactions involving money are "e-Commerce" activities.

However, there is much more to e-Business than selling products and services. What about research, development, marketing, procurement and customer relations? To sell online successfully, much more is required than merely having a website that accepts credit cards. Selling online successfully requires a web site that people want to visit, accurate catalog information, good logistics, and much more. The term "e-Business" highlights the fact that definition of e-Commerce was too narrow. To be successful, we need to think more broadly.

E-business goes far beyond e-Commerce or buying and selling over the Internet, and deep into the processes and cultures of an enterprise. E-business is the powerful business environment that is created when critical business systems are connected directly to customers, employees, vendors, and business partners, using Intranets, Extranets, e-Commerce technologies, collaborative applications, and the Web.

A good example of a pioneering e-Business is Dell Computer. The Dell Computer company is one of the earlier companies that created a ‘fully integrated value chain’ – a three-way information partnership with its suppliers and customers by treating them as collaborators who together find ways of improving efficiency across the entire chain of supply and demand. Dell's Computer suppliers have real-time access to information about its orders. Through its corporate extranet, they can organize their production and delivery to ensure that their customer always has just enough of the right parts to keep the production line moving

smoothly. By plugging its suppliers directly into the customer database, Dell Computers has ensured that they will instantly know about changes in their demand. Similarly, by allowing entry to customers into its supply chain via its website, Dell enables them to track the progress of their orders from the factory to their doorstep. Successful new-businesses can emerge from nowhere. Figure 1 shows an illustration of the difference between e-business and e-Commerce.

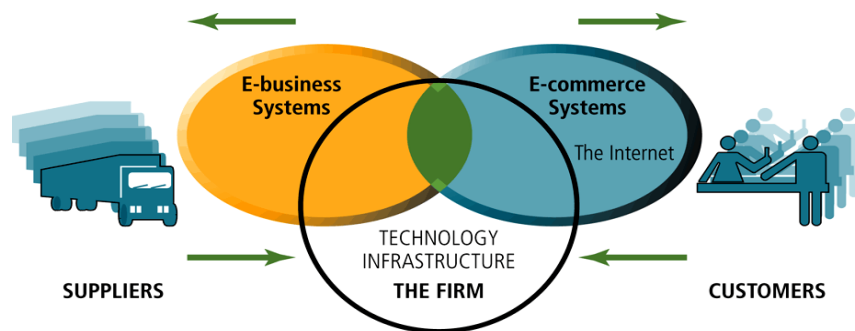


Figure 1: Difference between e-Business and e-Commerce

(source E-commerce (business. technology. Society), 2<sup>nd</sup> Ed., K. C. Laudon & C. G. Traver

We may therefore say that *e-Commerce* - which describes the buying and selling of products, services, and information or making transactions via computer networks, including the Internet - is a subset of e-Business. While e-Commerce defines interaction between organizations and their customers, clients, or constituents, e-Business also encompasses an organization's internal operations. It means that e-Commerce is using the Internet to order and pay for products and services, while e-Business covers a broader range of activities that could take place electronically, as well as via e-mail or the web. While having a web presence is the most common form of e-Business, it is much more than that.

E-business allows for more efficient and effective linking between departments, development of a closer relationship with suppliers and partners and better meets the needs and expectations of clients, leading to improvements in the overall business performance processes.

From the above explanations, it is clear why the two concepts are similar. In other words, these two can be used interchangeably, bearing in mind the following relationships:



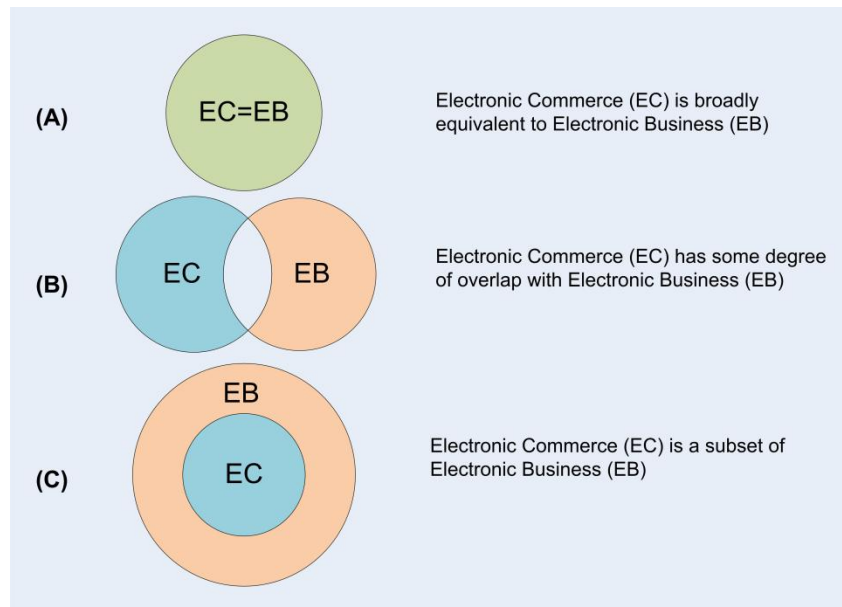


Figure 2: Possible relationships between e-Business (EB) and e-Commerce (EC).

In line with the above discussion, we will henceforth discuss e-Business and e-Commerce together as one entity, as depicted in relationship A (i.e.,  $EB = EC$ ), using the name e-Commerce. Moreover, e-Commerce can be individualized, and is applicable to Small and Medium Enterprises (SMEs).

## 6. WHY STUDY E-COMMERCE

E-Commerce technology is different and more powerful than any of the past technologies. It has challenged much of the traditional business thinking, with a number of unique features as summarized in Table 1.

Table 1. Some Unique Features of e-Commerce

Technology	Description	Business Significance
<b>Ubiquity</b>	Internet/Web technology is available everywhere and anytime	The marketplace is extended beyond traditional boundaries and transcends geographic location. "Marketspace" is created and can take place anywhere and anytime.
<b>Global Reach</b>	The technology reaches across national boundaries, around the earth.	Commerce is enabled across cultural and national boundaries seamlessly and without modification. "Marketspace" - potentially billions of consumers and millions of businesses worldwide.
<b>Universal Standards</b>	A set of technology standards (Internet) is universal.	There is one set of technical media standards across the globe.

<b>Richness</b>	More powerful selling environment with video, audio, and text messages.	Video, audio, and text marketing messages are integrated into a single marketing message and consuming experience.
<b>Interactivity</b>	The technology works through interaction with the user. Can simulate face-to-face experience, but on global scale.	Consumers are engaged in a dialog that dynamically adjusts the experience to the individual, and makes the consumer a co-participant in the process of delivering goods to the market.
<b>Information Density</b>	Technology reduces info costs & raises amount and quality of information available to all market participants	Information processing, storage, and communication costs drop dramatically, while currency, accuracy, and timeliness improve greatly. Information becomes plentiful, cheap, and accurate.
<b>Personalization &amp; Customization</b>	Allows personalized messages to be delivered to individuals/groups.	Personalization of marketing messages and customization of products and services are based on individual characteristics

## TOPIC TWO

### 7. TYPES OF E-COMMERCE

Several models of e-Commerce or e-Business have been identified and categorized according to the nature of the market or by the technology used. First we discuss the models based on market relationship.

#### A. Business Models based on Market Relationship

##### i. Business-to-Consumer (B2C)

Virtually all goods and services can be sold to customers online. Transactions of commercial organizations selling their products and/or services directly to the consumers are known as business-to-Consumer (B2C). In other words, it is an exchange and transaction of information, products or services between a business and a consumer(s). It is the interaction to the purchase/sale of goods and services between a business and consumer(s) (i.e., retail transactions), including tangible goods such as books, music, collectibles, clothing, consumer electronics, real estate and airline tickets, as well as intangible services such as financial information, health information, and digital goods. The “novelty” is that retail transaction is done on the Internet/Web, rather than in a “brick and mortar” store location.

Many types of business models within this category include:

- **Online Retailers/Storefronts** – This is the online version of traditional retailer. These are virtual online merchants that operate retail store only interacting directly with the customer. They include stores operating online distribution stores as well as physical stores. Other versions include merchants selling products through online catalog (online version of direct mail catalog), as well as manufacturer selling products and services directly to customers over the Web. A number of stores sell goods and services and keep a fraction of the money as fees – e.g, B&M retailers, Amazon.com, E\*Trade, Dell.com.

#### **Advantages**

- Easy to use, fast to set-up,
- All tasks handled on the web,
- Updates made easily,

#### **Disadvantages**

- Limited layout flexibility,
- Generic store design,
- User interface may be slow,

- No need for a separate web site
  - Customization may not be possible
- **Content Providers** – These are companies that provide digital content information and entertainment over the Web. This was a significant source of e-Commerce revenue in the early 2000 (second largest source of B2C e-Commerce revenue in 2002). Typical revenue models including subscription pay for download, advertising and syndication. Examples are Ads only (e.g., original Yahoo), *Wall Street Journal* online, and ThisDay Newspaper online subscription.

#### **Advantages**

- More control over layout & design,
- Good for firms with existing web sites,
- Highly customizable

#### **Disadvantages**

- Requires installation & set-up,
- Requires some technical knowledge,
- Usually needs additional programming.

- **Portals** – Portals are commonly used by companies that offer powerful search tools plus an integrated package of content and services. Portals which could be designed to be generalized or specialized utilize a combination of subscription or advertising revenues as well as transaction fee model.
- **Transaction Brokers** – This is a model that processes online transactions for consumers. The primary value proposition is saving time and money for its customers, while charging some transaction fee. Companies using this model include (a) financial services, (b) Travel services, and (c) Job placement services
- **Service Providers** – As the name implies this model offers services online for its customers while charging subscription fees or one-time payment. The value proposition is to offer service to its clients that are valuable, convenient, time-saving, and low-cost alternatives to traditional service providers.
- **Market Creators** – In this model, a company uses Internet technology to create marketplace that brings buyers and sellers together. The revenue model is typically a transaction fee. Notable examples include eBay.com and Priceline.com.

#### **Advantages**

- Potentially high visitor traffic,
- Site creation & maintenance performed in browser,
- Can complement a stand-alone store

#### **Disadvantages**

- May not be able to use your domain name,
- Must conform to site policies,
- May require a commission on sales

- **Community Provider** – These are sites that create a digital online environment where people with similar interests can transact, communicate, and receive interest-related information. The revenue model is not well defined and typically relies on a hybrid model. Examples include Wiserearth.com, Epinions.com and Oxygen.com.

## ii. **Business-to-Business (B2B)**

Business-to-Business (B2B) e-Commerce refers to electronic business transactions directly between two or more companies, relating to the purchase and sale of goods and services. In other words, it involves electronic business transactions with other business(s), which typically takes the form of automated processes between trading partners and is performed in higher volumes. This is perhaps the largest form of e-Commerce based on the value and/or volume of transactions. This is by far the most common type of e-Commerce generally managed by larger companies that are supplying merchandise to smaller businesses who then sell to their customers. Manufacturers, who are selling in large quantities, are a good example of this.

B2B can also encompass marketing activities between businesses, and not just the final transactions that result from marketing, and also are used to identify sales transactions between businesses.<sup>1</sup> B2B e-Commerce focuses more on creating highly efficient and transparent markets that would transform the structure of industry value chains.

B2B activities includes portals that operate as online business marketplaces, portals, auction sites exchanges as well as e-procurement, supply chain management, and trade opportunities for both buyers and sellers. Benefits of eMarketplaces can include reduced costs, better research and quicker transactions for buyers. Rewards for sellers include improved customer service levels and cheaper products and services.

Small and medium-sized enterprises (SMEs) can benefit from business-to-business e-Commerce as follows:

- **Purchasing Indirect Supplies:** Indirect supplies, such as office furniture, pens, paper, and general office equipment, are often a first step for smaller businesses to implement B2B e-Commerce. Many suppliers offer catalogue-based websites for corporate purchases, and are similar to buying online from a B2C website. Corporate accounts can be established online, and organizations can save significant time and money on automating this purchasing process.

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<sup>1</sup> [www.wikipedia.com](http://www.wikipedia.com)

- **Purchasing Direct Materials:** Direct materials are any products that go into the production of your goods or services for sale. Establishing a relationship with a vendor that supports e-procurement may reduce costs. Joining an e-marketplace and holding reverse auctions where your suppliers bid on your requirements can lead to a real reduction in the overall cost of manufacturing your product.
- **Selling Products or Services to New Vendors:** By joining an e-marketplace you can open up new opportunities to sell your products around the globe. While many private e-marketplaces are restricted to vendors of the particular organization running the exchange, public hubs can allow you to offer your services to all other participants. Hopefully the same e-marketplace where you make purchases can be the same place where you sell your wares, thus increasing your reputation as a valued member of the online community.
- **Leveraging Existing Web Presence:** Greater sophistication can be programmed into existing online store to target business clientele. This often includes adding account registration and per-user price discounting, as well as possibly allowing for purchase orders as payment for corporate clients. You should keep in mind that this additional functionality is not trivial, and could require rebuilding your online store from the ground up at a significant cost.
- **Investing in E-Procurement Solution:** If your business is a major consumer of various suppliers, perhaps e-procurement will be an added value. With a manageable expenditure you could realize a significant return on investment.

### iii. **Consumer-to-Consumer (C2C)**

This model provides a way for consumers to sell to each other, with the help of an online market maker. It is an Internet-enabled form of historical commerce in the form of barter, flea markets, swap meets, garage/yard sales and the like.<sup>1</sup> In other words, consumers sell directly to other consumers. It includes any website where people are brought together to buy, sell, or trade. Online auction such as **eBay.com** is a perfect example of this business model. Another good example will be **Craig-List.com** in the USA.

### iv. **Business-to-Government (B2G)**

As the name implies, there is a form of electronic businesses transactions between businesses and the government. In other words, government buys or provides goods,

services, or information to/from businesses or individual citizens. It may also involve transactions regarding various business licensing, legislative issues or reporting requirements.

**v. Business to Employee (B2E)**

This is a model where information and services are made available to employees online. For example, as in B2E portal, a company or organization Intranet or Extranet can be customized for each employee. It includes specific information and personalized data such as personal hyperlinks, stock quotes, sports scores and news clips. It could even include a video feed to their children's day care center.<sup>2</sup>

**2. Business Models based on Technology Used**

**i. Peer-to-Peer (P2P)**

This model uses peer-to-peer network technology, which enables Internet users to share files and computer resources without having to go through a central Web server. Napster.com was one of the most well-known examples of P2P until they were put out of business for copyright infringement. Other examples are MGM, Grokster.com, etc.

**ii. Mobile commerce (M-commerce)**

In mobile commerce, wireless digital devices such as cell phones and handheld devices are used to enable transactions on the Web. It takes traditional e-Commerce business models and leverages emerging new wireless technologies. Key technologies are telephone network based 3G; Wi-Fi; and Bluetooth. However, technology platform continues to evolve

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<sup>2</sup> [www.answers.com](http://www.answers.com)

Table 1. Summary of Major Types of E-Commerce Models

<b>TABLE 1.3 MAJOR TYPES OF E-COMMERCE</b>	
TYPE OF E-COMMERCE	EXAMPLE
B2C—Business to Consumer	Amazon.com is a general merchandiser that sells consumer products to retail consumers.
B2B—Business to Business	eSteel.com is a steel industry exchange that creates an electronic market for steel producers and users.
C2C—Consumer to Consumer	eBay.com creates a marketplace where consumers can auction or sell goods directly to other consumers.
P2P—Peer to Peer	Gnutella is a software application that permits consumers to share music with one another directly, without the intervention of a market maker as in C2C e-commerce.
M-commerce—Mobile commerce	Wireless mobile devices such as PDAs (personal digital assistants) or cell phones can be used to conduct commercial transactions.

(Source: E-commerce (business. technology. Society), 2<sup>nd</sup> Ed., K. C. Laudon & C. G. Traver)

## 8. KEY TECHNOLOGIES ENABLING E-COMMERCE EVOLUTION

The widespread use of e-business or e-Commerce did not come by chance. Many factors contributed to the advancement. It ranges from decreasing cost of increasingly more powerful computer hardware such as processors, memory chips, drives and networks to advance software programs. The convergence of technologies leading to the integration of voice, data, image, video data also played a vital role. Without going into details, the e-Commerce enablers are summarized in Table 2.

Table 2. E-Commerce Enablers

<b>TABLE 2.6 E-COMMERCE ENABLERS</b>	
INFRASTRUCTURE	PLAYERS
Hardware: Web Servers	IBM, HP/Compaq, Dell, Sun
Software: Operating Systems and Server Software	Microsoft, RedHat Linux, Sun, Apache Software Foundation
Networking: Routers	Cisco, JDS Uniphase, Lucent
Security: Encryption Software	VeriSign, Check Point, PGP Corporation
E-commerce Software Systems (B2C, B2B)	IBM, Microsoft, CommerceOne, Ariba, BroadVision
Streaming Media Solutions	Real Networks, Microsoft, Apple
Customer Relationship Management Software	PeopleSoft, Siebel, SAP
Payment Systems	Verisign, PayPal, CyberCash
Performance Enhancement	Akamai, Cache Flow, Inktomi, Cidera
Databases	Oracle, IBM, Microsoft, Sybase
Hosting Services	Interland, IBM, WebIntellects

(Source: E-commerce (business. technology. Society), 2<sup>nd</sup> Ed., K. C. Laudon & C. G. Traver)

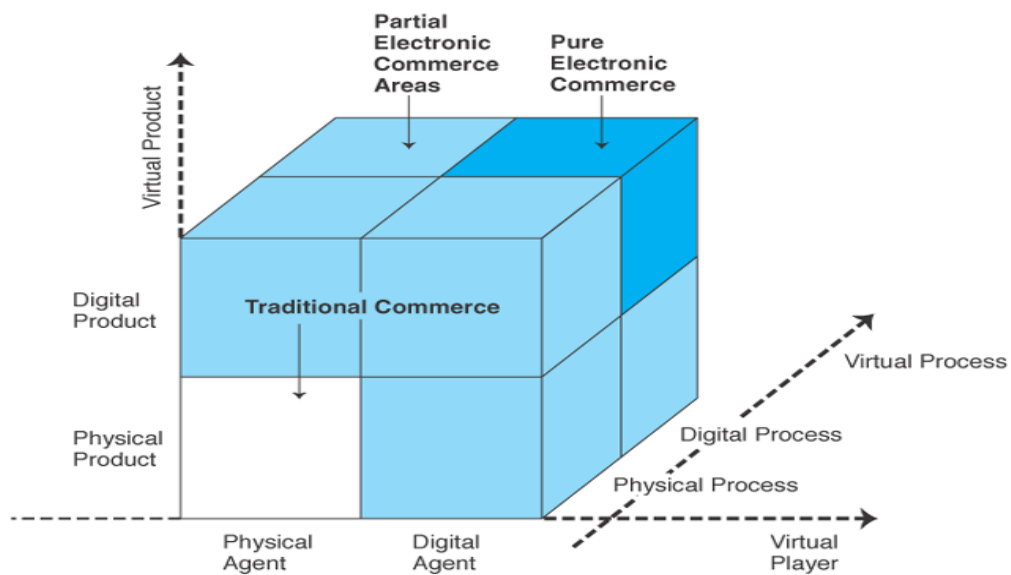


## 9. DIMENSIONS OF E-BUSINESS

In this section, we examine different dimensions of businesses in relation to commerce.

Based on the above mentioned e-Commerce perspectives and the degree of digitization of product, process, and the delivery agent, business can be classified as pure or partial e-Business/e-Commerce. In traditional commerce, all dimensions are physical, which means that both buyer and seller must meet at a specified physical location. On the other hand when all dimensions are digital or electronic pure e-Commerce is obtained. This is depicted on the lower left hand side of the exhibit 1.1 or Figure 3. Obviously, in partial e-Business/e-Commerce, all other possibilities include a mix of digital and physical dimensions. Particularly in the developing countries, the partial e-Business/e-Commerce has been adopted due to inadequate enabling environment (such as a suitable infrastructure, policies, and financial resources).

**Exhibit 1.1** The Dimensions of Electronic Commerce



Source: *Economics of Electronic Commerce*, 1/E by Choi/Stahl/Whinston, ©1997. Reprinted by permission of Pearson Education, Inc., Upper Saddle River, NJ.

Figure 3: The Dimensions of e-Business/e-Commerce

## **10. E-COMMERCE AS DRIVER FOR SMALL BUSINESSES**

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

- Adaptation to rapid market changes that are impacting on export and domestic markets.
- Cost competition and the need to compete more effectively in both local and international sectors.
- 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.
- Increased customer expectations and consumer power – buyers expecting to be able to access web-based information about products and services.
- Adaptation to new technologies – an overall need for technological upgrading.
- Greater role for information in business and the need to access process and communicate it efficiently and effectively.
- Government deregulation and liberalization – lowering costs of access.
- Bilateral and multilateral trade agreements – opening up markets to developing country producers.
- Adaptation to higher quality standards such as ISO9000 – ICTs are acting as an enabler in this area.

### **ADVANTAGES AND DISADVANTAGES OF E-COMMERCE**

Modern e-Commerce/e-Business has been around since the mid 1990s, ever since the advent of the World Wide Web. Now anyone can become a global seller of goods, services, and information online. No longer do you need huge distribution networks and management teams to run a successful business. We summarize below some of the well known e-Commerce advantages and disadvantages.

#### **A. Advantages**

##### **i. Cost Reduction Benefits:**

One of the greatest benefits of e-Commerce is cost reduction benefits. It is simply the most cost effective way to open and run a business. E-Commerce business has far fewer overheads than traditional brick and mortar business. The cost benefits include:

- *Reduced cost of establishment:* There is little cost associated with establishment of e-Commerce. Little rental expenses, employee costs, insurance, power, phone or any of the hundred other bills that conventional store owners have to deal with on a regular basis.
- *Reduced Running Cost:* Low running costs and time effective management are also benefits of e-Commerce. In Figure 4, the grey area in the chart depicts the running costs for a typical e-Commerce business, compared to the blue area for traditional brick and mortar store. These low running costs mean a far bigger profit margin, while staying competitive. A medium sized E-Commerce business can be run for \$25 - \$200 a month, while small to average sized brick and mortar business will cost over \$200 per square foot, per year in rent in major business districts. When you start adding the other essential running costs involved with the brick and mortar stores, the price of owning a business just keep increasing.
- *Reduced travel costs:* By using a mobile phone, email and other ICTs enabled devices to substitute for journeys, travel cost will be greatly reduced.
- *Reduced cost of materials:* More information means better choice of suppliers and more competitive prices.
- *Reduced marketing and distribution costs:* It is easier to market and distribute products and services using e-Commerce. For example, publishing a brochure online can reach an unlimited number of potential customers and allow for regular update.
- *Reduced sales costs:* E-Commerce provides unprecedented opportunities for businesses to reduce the costs of trade locally and across borders.

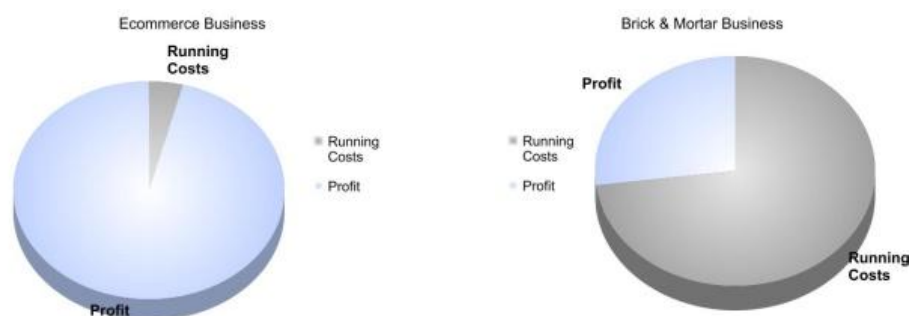


Figure 4: Comparison of running cost

(<http://www.ecommerce-web-hosting-guide.com/advantages-of-ecommerce.html>)

## ii. **Market Benefits:**

- *Greater reach:* A vital benefit of e-Commerce is access to global markets which enables businesses to expand their reach. The Internet allows for unconstrained awareness, visibility and opportunity for a business to promote its products and services (Senn, 2000). A web presence can allow businesses to reach out to customers far beyond their immediate location, and is open often 24 hours a day, every day. Time and distance are no longer a problem, since customers can access product and services from anywhere in the world, whatever time zone they live in. An e-Business doesn't need to close at the end of day! The potential reach of vast number of customers is illustrated in Figure 5.
- *Improved customer service and brand awareness:* With e-Commerce businesses can provide more responsive order taking and after-sales service to customers, and therefore lead to increased customer loyalty. E-Commerce also offers new avenues of promotion for products and services.
- *Increased market awareness:* Businesses can become more aware of competition within their market and more aware of market changes, which can lead to product/service innovation or quality improvement.

## iii. **Increased Efficiency**

- E-Commerce can provide substantial benefits to small enterprises via improved efficiencies and raised revenues. E-Commerce not only reduces costs but it can also increase the speed of buying and selling transactions. It enables a new way of working to emerge as businesses face the future and embrace the new economy. E-Commerce enables businesses to gain access to better quality information, and thus empowers them to take informed decisions in their businesses.
- *More efficient supply chain management:* E-Commerce can eliminate the need for middlemen leading to lower transaction costs (including marketing, sales, transaction processing), reduced overhead, and reduced inventory and labor costs.
- *Improved internal functions:* Cutting down on meetings, improving the exchange of critical knowledge, eliminating red tape, and streamlining communications. Reduction in routine administrative tasks frees staff to focus on more strategic activities.

- *Improved processes of activity* – Both efficiency and effectiveness can be improved across a wide range of activities using e-Commerce – particularly internal and external communications (including advocacy with donors, government, etc) and procurement.

iv. **Better Service Delivery**

- With e-Commerce, a business will achieve improved accuracy, quality and time required for updating and delivering information on products and/or services. E-Commerce necessitates improved ease, speed and immediacy of customer ordering. With e-Commerce it is not necessary to have vast quantities of stock. The store or business carries only what is needed or better yet, carry none at all. Many suppliers will ship direct to the customers, meaning stocking the merchandise is unnecessary.

v. **Competitive Advantage:**

- E-Commerce can give a competitive advantage if properly implemented. It can help strengthen market position and open up new business opportunities with the potential of increased profits. It can enhance market, industry or competitor intelligence acquired through information gathering and research activities.

vi. **Continuous Trading**

- a) This can be classified under market benefits. Online business gives you access to the largest market available, with over 3 billion people currently connected and growing on a daily basis. Access for customers to catalogues and services is on a 24 hours, 7 days a week basis. By breaking the restraints of geographical boundaries, e-Commerce can be used to access the global marketplace on a continuous basis. Huge difference is evident in the bar graph in Figure 5. With such a huge customer base, the potential reach of vast number of people, is one of the greatest e-Commerce advantages.

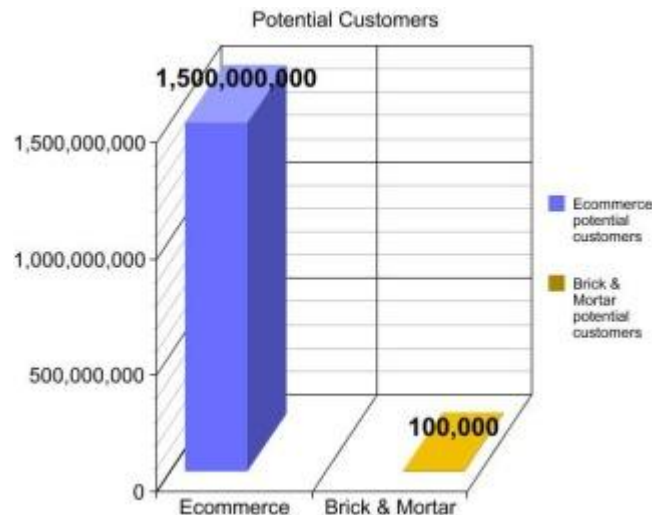


Figure 5: Potential Customer Reach.

(<http://www.ecommerce-web-hosting-guide.com/advantages-of-ecommerce.html>)

#### vii. **Human Capital Development**

- E-Commerce can be used to improve business and organizational skills as well as technical skills of the employee. The motivation and confidence of staff can be enhanced through e-Commerce activities.
- With e-Commerce, information and knowledge capacity can be improved to support marketing, communication and branding of products and services.

### **B. Disadvantages**

As noted above, e-Commerce is generally presented in very positive terms but, along with the potential benefits, come potential problems especially for developing countries. The few pitfalls of going into e-Commerce are discussed below. They are the financial costs, the business 'opportunity costs' and the dangers of failure. These disadvantages are far less than the advantages and most can be overcome.

#### i. **Extra Cost**

- Developing e-Commerce for a business will most certainly require extra costs. Initial start-up costs (investment in a computer, network connection, bandwidth, etc) can be significant, and there are additional running costs too. Even after start-up, e-Commerce activity will need to run in parallel with existing business methods (if applicable). For example, enterprises will need to continue to produce paper-based marketing material (brochures, stationery, leaflets, etc) as well as building up web

presence. This will duplicate some activities adding to overall costs. These costs are definite whereas the new revenue streams from e-Commerce are not, particularly given the relatively lower numbers of people online and with credit cards in developing countries. Hence, many small businesses may be sceptical about e-Commerce benefits, and should be encouraged to approach it in the step-by-step manner.

**ii. Risk of Failure**

- Research has shown that any new business venture is likely to fail, unless careful steps were taken to guide against it. As the dot.com boom and subsequent bust demonstrated, e-Commerce ventures may be more likely to fail than conventional businesses. This emphasizes the importance for small businesses to be careful and not throw all their eggs into the e-Commerce basket. Failure can be avoided by first deciding not to adopt e-Commerce at all or by taking a step-by-step approach that minimizes risk.

**iii. Risk of Losing Focus**

- For conventional businesses running brick & mortar store, it is important that online and offline efforts are not in competition with each other within a business. In fact, for most large and medium sized enterprises, offline activities (such as face-to-face meetings) will remain far more important than online communication. In the long term, risks can be minimised through effective integration of online and offline activities – using e-Commerce to complement existing business processes. In the short and medium terms, there is a risk that a business could lose focus of its true business needs if e-Commerce is oversold. This has happened before during the dot.com boom in the late 1990s.

**iv. Opportunity Cost**

- With e-Commerce, there will be risks for businesses if e-Commerce does not take off as anticipated. Also, there are other costs involved in building capacity in the business as it relates to e-Commerce in various ways:
  - i. Knowledge: improving management and staff's knowledge about e-Commerce.
  - ii. Skills: gaining specific skills in using, advising and training on e-Commerce.
  - iii. Attitudes: developing positive but realistic attitudes towards e-Commerce among staff.
  - iv. Finance: affording the direct and ongoing costs of any investment in e-Commerce.

v. **Risks of Ignoring e-Commerce**

Technology and innovation are often described as the catalyst for change. Ignoring new technology may have significant impact on the ways business is done in the future. For example, having no website, or a badly designed or marketed website, may put a business at a disadvantage compared with competitors. Over the medium and long term, unsuitable or inadequate technology can mean that customers remain uninformed and therefore business cannot compete effectively. The real risk to small business is NOT getting involved. Not putting e-Business solutions into place will force small businesses to face the real threat of declining business.

Not having e-Business in place will squeeze a business out of the supply chain by those who do business online. Some large industry firms require their suppliers to be connected to their network. Most importantly a business may not be able to keep up with competitors without the innovation that comes with e-Business affecting costs, sales and eventually, revenue and profit. E-Commerce offers great benefits to any economy. As it continues to gain acceptance in Nigeria, the initial divide between Nigerian consumers and the rest of the global market will be bridged. Nigerian consumers will have direct contact with merchants of their choice, in any region of the world. Nigerian businesses will also be able to take advantage of the global reach, to open new and profitable markets for local goods and services, in the not-too-distant future.

There is no denying the fact that by facilitating the integration of Nigeria economy and society with rest of the world, e-Commerce will flourish in Nigeria. Today all countries are working to achieve structural reforms in society under the key paradigms of liberalization and globalization. The nation's competitive power will determine the trade and the nation's strength in science and technology will play an important role to dominate the trade. All organizations are making the best use of digitalization and use of the Internet to achieve the desired goal. Computers and the Internet are now increasingly widely used to function as part of the business. Transactions conducted through the Internet will have enormous implications on the international competitiveness of every nation, giving rise to new and exciting opportunities in both the domestic and international arena.

vi. **Sustainability**

A business may be able to overcome initial investment, but it is sustainability in terms of recurrent costs, required staffing and skills, maintenance and upkeep, that could become a pitfall.



**Technology Phobia:**

- The technology can be alien to owners or employees, especially those new to E-commerce. Therefore all the normal fears and self doubts of engaging in something new and unknown is a disadvantage. Without the e-Commerce technology, businesses remain without the tools that they need to compete effectively. Technology should be an enabler and not a driver for the realization of benefits, and risks need to be assessed in terms of actual costs, opportunity costs, and the dangers of failure.

## TOPIC THREE

### 11. THE STATE OF E-COMMERCE IN NIGERIA

The Internet has brought about the emergence of virtual markets with four primary distinct characteristics, which are real-time, shared, open and global. The growing rate of ICT utilization particularly the Internet has influenced at an exponential rate, online interaction and communication among the generality of the populace. The shortcomings notwithstanding, most people are connected through their cell phones, home PCs, corporate access, and public kiosks. The patronage of the Internet all over the world is monumental and has remained on the increase from inception.

Despite the global reach of e-Commerce, not all countries have taken advantage of or benefited from e-Commerce. For example, Nigeria is yet to harness the opportunities for optimal financial gains. There is a big gap in Internet and e-Commerce adoption between the developed and developing countries (Licker & Motts, 2000); thus creating a digital divide. Digital divide is defined as the “differential capabilities of entire social (or regional) groups to access and utilize electronic forms of knowledge” (Straub, 2003), segregating the ‘haves’ from the ‘have-nots’ in the information society. One area where international digital divide is evident is in electronic commerce. Examination of the major e-Commerce sites will highlight this great divide and inequality.

The main obstacles that prevent developing countries, of which Nigeria is part, from leveraging the internet are:

- (1) lack of adequate infrastructure;
  - (2) lack of technical know-how;
  - (3) information processing about the economy;
  - (4) Lack of legal and regulatory framework; and
  - (5) The lack of adequate banking infrastructure is also considered as one of the problems faced by developing countries in building e-Commerce solutions (Khalfan & Akbar, 2006).
- Other factors affecting the adoption of e-Commerce in Nigeria could be classified under:

1. data security,
2. network reliability,
3. credit card threat,
4. authenticity,
5. citizen's income and education, to mention few.

We will summarize the state of e-Commerce in Nigeria by presenting the SWOT Analysis.

**Strengths:** these indicate areas where drivers or enablers are strong in the country and/or where constraints are being overcome:

- Growing competition plus other diffusion-friendly strategies and government policies to develop ICT infrastructure,
- High ICT infrastructure investment and growth rates, including growth of mobile telephony,
- High growth of intermediated access to ICTs – e.g. via Internet cafés and telecentres plus sharing of ICTs – so there can be many users per Internet-linked PC,
- Falling costs of many aspects of e-Commerce components including hardware and telecommunications charges,
- Growing pool of ICT skills in the country as well as growing IT sector provide a foundation for e-Commerce growth,
- Active promotion of e-Commerce specifically and ICT usage generally by government agencies (new ministry of Communications Technology), NGOs and large private firms, and
- Reasonable Western language proficiency in Nigeria.

**Weaknesses:** these indicate areas where constraints are still strong in the country and/or where drivers and enablers are weak:

- Lack of nationally coordinated ICT infrastructure, knowledge and skills compared to industrialized countries,
- Very uneven distribution of infrastructure in rural-urban terms,
- Uneven distribution of ICT access capacities between various social groups as well as in urban and rural population,
- Large proportion of mobile phones are not Internet-capable,
- Poor Western language skills and/or lack of support for ICT usage in local languages,
- High cost of ICT usage relative to costs in industrialized countries,
- Lack of large mass of local customers using or with potential to use e-Commerce,
- Lack of e-Commerce awareness and skills among entrepreneurs, and among support staff,
- Absence of an 'e-Commerce culture', e.g. dislike of operational transparency, and preference for personal contact in commerce,
- Poor financial and logistics infrastructure to support secure online payment and e-Commerce fulfillment,
- Poor ICT reliability and security combined with relatively slow-speed,
- Limited export-orientation and export-capability among MSEs,

- Lack of support to MSE innovation by local financial institutions, and
- No current legal and regulatory frameworks for e-Commerce

**Opportunities:** local, regional or global opportunities that are or may be available to e-Commerce-enabled MSEs:

- Primary product export sectors such as agriculture, horticulture, fisheries, forestry and mining products.
- Manufactured exports.
- IT-based services that are readily traded over the Internet such as software, data entry, call centre operations, etc.
- Tourism and travel-related sectors.
- "Traditional" sectors with export market appeal such as handicrafts, textiles, art, natural medicines, etc.
- Fair traded goods, which are often sold via the Web in Western markets.
- Growing opportunity to leverage low labour costs.
- Strengthening local supply chains and driving down input prices.
- Main export markets are OECD nations with already high levels of e-Commerce.
- Main opportunities in early steps of e-Commerce including online ordering but offline payment,
- Large and young population profile, who may more-readily take to e-Commerce,
- Domestic use of e-Commerce using mobile networks and communications ('m-Commerce').
- Diffusion of new generations of Internet-capable mobile phones.
- Plenty of 'virgin' markets providing opportunities for e-Commerce first movers.
- Improved processes and products/services through closer interaction with customers.

**Threats:** risks that face MSEs in the country specifically due to growth of e-Commerce:

- Competition and penetration of local or existing export markets by e-Commerce-Capable overseas firms.
- Growth of larger firms able to invest more in e-Commerce at the expense of MSEs.
- Increased disparities between few early adopters of e-Commerce and many 'laggards'.
- Increased disparities between urban and rural areas.
- Wasted investments in e-Commerce by early adopters.
- Growing automation leading to loss of low labour cost advantages.

## 12. STEPS TO STARTING E-COMMERCE BUSINESS

*Information in this section is from “E-Business Overview, by The Business Link , a not-for-profit organization supported by the Governments of Canada and Alberta*

This section outlines the 'steps to e-Commerce' describing the differing stages of e-Commerce development that you may find in a small enterprise. It does this through a model and then presentation of six real-life case studies of small enterprises using e-Commerce. The case studies show how enterprises are benefiting from e-Commerce, as well as some of the pitfalls.

The 'steps' model can help you understand the different types of e-Commerce business applications you may encounter. It may also help in identifying the types of assistance needed for small enterprises.

### **Step 1. Starting Out: Simple messaging using mobile communications**

The simplest application of e-Commerce is short messaging services (SMS), which provides a cheap and widely available option for enterprises. Mobile phones offer a number of key advantages over fixed line communications for small businesses – such as instant communications with customers and suppliers, even when on the move. They also provide greater connectivity and network coverage than landlines – users can be instantly connected by text messages and mobile chat – a powerful marketing and advertising tool.

### **Step 2. Getting Online: Email messaging**

Businesses can send or receive emails from a computer terminal either located on your business premises or via a facilitator (such as an Internet café or telecentre). Email is a cheap, quick and reliable way to exchange business information with customers, suppliers, and business contacts that are also connected to email. A variety of information can be sent – not just messages, but documents, photographs, drawings, or any other computer data file.



Figure 6. Steps to e-Commerce

### Step 3. Web Publishing

Enterprise information can be made available by using an online brochure in the form of web publishing, for example. Its simplest form may consist of multiple page website giving a basic business profile, some information about products and services, and contact information such as physical and postal address, telephone and fax, and email contact. Additional information may include an online catalogue – an online version of a conventional catalogue that can be easily updated. Even a simple web presence offers the ability to access a wide – potentially global – market with 24/7 accessibility.

### Step 4. Web Interacting

Web interaction will allow customers, and suppliers more scope to browse through images, descriptions and specifications relating to products and services. Customers may submit email enquiry forms, order online, use online services or use a shopping cart facility and order confirmation – that could be paid for and delivered offline. Interaction over the web can improve customer service and response to customer queries.

### Step 5. Web Transacting

Web transactions is like having a full e-Commerce capability that covers the whole transaction process from the placing of an order to online payment for goods and services via

secure networks. For B2C e-Commerce, this involves making use of secure credit card payment systems, and for B2B e-Commerce, it involves payment through secure banking systems.

## **Step 6. Web Integration**

E-Commerce may also take on a wider role within a business through web integration. Web integration provides an electronic platform that links customer-facing processes such as sales and marketing (the "front office") with internal processes such as accounts, inventory control and purchasing (the "back office"). This means that the business is becoming fully "e-enabled". E-Business links internal systems with external networks (customers, suppliers and collaborators) via the Internet. Integrating systems can make it easier and cheaper to do business, and it can encourage customer loyalty and repeat business.

## **E-Business Planning Checklist**

To start e-Commerce business, it may be necessary to follow a top-down approach in addition to the step-by-step process discussed above. This approach is discussed below.

### **1. Take a careful look at the business**

Analyze your business processes and look for ways to eliminate inefficiencies. In addition, identify ways that your online strategy can complement your offline business strategy.

- Which of my products/services are suitable to be promoted or sold on the web?
- What sets my company apart from my competitors?
- Where do I see my company in 3 years?
- Where are the opportunities to reduce my costs and improve my operations?
- How can I integrate my online and offline business operations?

### **2. Start the preliminary research**

In this preliminary stage you can explore what other businesses are doing on the Internet, both in your field and in others. This will allow you to determine how web sites are structured, how they function, and what opportunities may exist for your company.

- Which e-business options make sense?
- How much will they cost?
- Do I have a list of web sites that I like?

### **3. Define the goals**

After exploring various e-business options and approximate costs, you need to decide what makes sense for your business and set specific goals, by answering the following questions.

- What will be the purpose of my e-business activities now and in the future (i.e., increase sales, reduce costs, enhance customer service, etc.)?
- How will I measure the success and return on investment (ROI) of my e-business activities?
- What type of commitment will be required in terms of money, time, staffing, software, and hardware to build, implement, and maintain my e-business?

### **4. Research the industry**

Perform industry research, which should include a broad view of trends in the industry and e-business opportunities, by answering the following questions:

- How is my industry making use of e-business?
- Take into account industry failures and successes in the planning
- Be considerate of how regulations could impact the industry.
- Are there any new competitive threats in my industry?

### **5. Research the customer**

The e-Commerce product, service, and strategy must be ideally suited to the existing market and provide what customers want, need, and are willing to pay for. You may need to identify the primary and secondary target markets and to assess the potential for your e-business to serve their needs. Answering these questions can help address the following issues.

- Who are my customers?
- What are their specific needs and wants?
- What common characteristics do my customers share (e.g., age, income, lifestyle, Internet usage, location, etc.)?
- What are my customers' buying habits? How will they react to my e-business activities?



## **6. Research the competition**

Competitive analysis should identify current and potential competitors as well as their strengths and weaknesses. This information will be needed in determining the company's competitive edge.

- What are the strengths and weaknesses of the current and potential competitors?
- How will the web site be positioned in relation to the competitors?
- How are the competitors using e-business in their operations?

## **7. Establish the marketing strategy**

The marketing section should outline the e-Business' product, pricing, distribution, and promotional strategies. To establish market strategy, consider the following questions:

- What products or services will be supported by my e-business?
- How will I set my prices in relation to my current pricing strategy?
- How will my products and services be delivered to customers?
- Am I prepared to export or to ship outside of my current market area?
- Have I taken into account all shipping costs and export requirements (e.g., shipping, tariffs, permits, insurance, labelling, and documentation)?
- How will I drive traffic to my web site?
- How will I encourage new users and repeat visitors to use my web site?
- How will my sales inquiries be handled?
- How will I provide customer support?
- How will I establish my credibility online?

## **8. Establish the implementation and operations plan**

Define the responsibilities, staffing requirements, and equipment that will be required to set up your e-business.

- Have I reserved the domain name?
- What are the web content and graphic requirements?
- How can the web site or e-business process be made easy to use?
- Who are the potential partners and intermediaries (e.g., Internet Service provider, web host, web developer, security expert, cyberlawyer, bank, payment gateway, marketplace, cybermall)?

- What equipment will be needed (e.g., server, operating system, hardware, and database)?
- How flexible or scalable will e-Business activities be to adapt to changing markets, customer needs, and server demand over time?
- What are the site maintenance requirements?
- What legal agreements will be required (e.g., privacy policy, service agreements, and development contracts)?
- What staff resources, documentation, and training will be required?
- Implement the schedule outlining milestones, timelines, and team responsibilities.

## **9. Create the financial schedules**

The bottom line is how much will the venture cost and when will it become profitable? Calculate and evaluate projections on the costs, revenues, and return on investment. The following questions may help evaluate projections.

- What are the total projected costs including all costs such as secure site certificate, legal agreements, security assessment, Internet Merchant Account, commissions, search engine registration fees, personal time investment.
- How will the company benefit from e-business in the short and long term?
- What is the breakeven point?
- What is the projected return on investment (ROI)?

## **10. Format and assess the e-business plan**

Finally, design a business plan using the collected information and research. It may be necessary consult professionals to see if the business model makes sense.

## **13. SUGGESTED ACTIVITIES**

### **Question 1: In Groups of 2 or 3 answer the following:**

- What do you predict to be the most significant new trend (paradigm) in E-Business /E-Commerce?
- Who will be affected the most by this trend?

### **Question 2: Use the Internet to find the answer to the following questions**

- 1. E-commerce can be defined as:**
  - A. the use of the Internet and the

- Web to transact business.
- B. the use of any Internet technologies in a firm's daily activities
  - C. the digital enablement of transactions and processes within an organization.
  - D. any digitally enabled transactions among individuals and organizations.
2. **In 2008, roughly \_\_\_\_\_ percent of all U.S. households had broadband cable or DSL access to the Internet.**
    - A. 80, B. 70, C. 60, D. 50
  3. **Which of the following is *not* a major technology trend in e-commerce?**
    - A. Podcasting takes off as a new media format.
    - B. The Internet broadband foundation becomes stronger in households and businesses.
    - C. Computing and networking component prices increase dramatically.
    - D. Wireless Internet connections grow rapidly.
  4. **Which of the following is required for commerce to occur?**
    - A. digital enablement
    - B. a transaction across organizational boundaries
    - C. a transaction across individual boundaries
    - D. an exchange of value
  5. **The integration of video, audio, and text marketing messages into a single marketing message and consuming experience is an example of:**
    - A. richness.
    - B. ubiquity.
    - C. information density
    - D. personalization.
  6. **Which of the following is *not* a limitation on the growth of B2C e-commerce?**
    - A. the sophisticated skill set required to use the Internet and e-commerce systems
    - B. expensive technology
    - C. the persistent global inequality limiting access to telephone service, PCs, and cell phones
    - D. the retrenchment and consolidation of e-commerce into the hands of large established firms
  7. **Which of the following are all unique features of e-commerce technology?**
    - A. interactivity, global reach, information asymmetry, personalization/customization.
    - B. universal standards, richness, information density, interactivity.
    - C. information density, universal standards, personalization/customization, sales force-driven.
    - D. local/regional reach, interactivity, richness, personalization/customization.
  8. **All of the following e-commerce technology dimensions reduce information costs and raise quality *except*:**
    - A. global reach
    - B. richness.
    - C. information density
    - D. interactivity.
  9. **Which of the following is the best definition of transaction costs?**
    - A. the cost of changing prices
    - B. the cost of participating in markets
    - C. the cost of finding suitable products
    - D. the cost merchants pay to bring

- their goods to market
10. **In 2010, the world's online population was approximately:**
    - A. 1.2 million
    - B. 800 million
    - C. 1.4 billion
    - D. 7 billion.
  11. **None of the following technologies easily crosses national boundaries to a global audience *except*:**
    - A. television
    - B. radio stations.
    - C. newspapers
    - D. the Internet.
  12. **Network externalities are related to which of the following features of e-commerce technology?**
    - A. richness
    - B. interactivity
    - C. universal standards
    - D. information density
  13. **E-commerce technologies have changed the traditional tradeoff between the richness and reach of a marketing message. Prior to the development of the Web:**
    - A. marketing messages had little richness.
    - B. the smaller the audience reached, the less rich the message.
    - C. the larger the audience reached, the less rich the message.
    - D. richness equaled reach.
  14. **Which of the following is *not* true regarding e-commerce today?**
    - A. Economists' visions of a friction-free market have not been realized.
    - B. Consumers are less price-sensitive than expected.
    - C. There remains considerable persistent price dispersion.
    - D. The market middlemen disappeared.
  15. **B2G e-commerce is a form of which type of e-commerce?**
    - A. B2C
    - B. B2B
    - C. C2C
    - D. P2P
  16. **Which of the following is an example of Peer-to-Peer (P2P) e-commerce?**
    - A. eDonkey
    - B. Amazon.com
    - C. eBay
    - D. ChemConnect.com
  17. **Which type of e-commerce is distinguished by the type of technology used in the transaction rather than by the nature of the market relationship?**
    - A. Business-to-Consumer (B2C)
    - B. Consumer-to-Consumer (C2C)
    - C. Peer-to-Peer (P2P)
    - D. Business-to-Business (B2B)
  18. **Net marketplaces include all of the following *except*:**
    - A. e-distributors
    - B. exchanges.
    - C. industry consortia
    - D. private industrial networks.
  19. **The size of the global C2C market in 2010 is approximately:**
    - A. \$70 billion
    - B. \$700 million.
    - C. \$3 billion
    - D. \$300 billion.
  20. **E-commerce during the early years of e-commerce was:**
    - A. a technological success and a mixed business success.
    - B. a technological success and a

- business failure.
- C. a technological failure and a business success.
- D. a mixed technological and business success.
- 21. The number of Internet hosts has been growing at the rate of approximately \_\_\_\_\_ percent per year since 2000.**
- A. 15
- B. 25
- C. 35
- D. 45
- 22. The early days of e-commerce are considered:**
- A. the most promising time in history for the successful implementation of first mover advantages.
- B. an economist's dream come true, where for a brief time consumers had access to all relevant market information and transaction costs plummeted.
- C. a stunning technological success as the Internet and the Web increased from a few thousand to billions of e-commerce transactions per year.
- D. a dramatic business success as 85% of dotcoms formed since 1995 became flourishing businesses.
- 23. All of the following can be considered a precursor to e-commerce *except*:**
- A. m-commerce.
- B. Baxter Healthcare's remote order entry system.
- C. The French Minitel.
- D. Electronic Data Interchange.
- 24. E-commerce can be said to have begun in:**
- A. 1983
- B. 1985
- C. 1995
- D. 2001
- 25. Business-to-consumer (B2C) e-commerce is growing at approximately \_\_\_\_\_ percent a year.**
- A. 5-10
- B. 10-15
- C. 15-20
- D. 20-25
- 26. The early years of e-commerce were driven by all of the following factors *except*:**
- A. an emphasis on exploiting traditional distribution channels.
- B. a huge infusion of venture capital funds.
- C. an emphasis on quickly achieving a very high market visibility.
- D. visions of profiting from new technology.

### Question 3: Case Study 1: Ahmed Welding and Fabrication

- Consider a local company based in Kano named Ahmed Welding and Fabrication. This is a micro-enterprise run by a single entrepreneur producing fabricated metal products – windows, doorframes and beds – with four employees, and a turnover of about N50, 000,000 per year. The enterprise sells to local markets and serves many sectors including the construction sector, supplying windows and doorframes, and supplying beds to hospitals. The enterprise mainly sells to individual consumers and schools.

- Using the e-Commerce guideline provided above, develop a step by step plan on how to develop e-Commerce business for this enterprise. Identify the needed ICT Resources, e-Commerce Benefits, to this organization, e-Commerce Challenges and the required e-Commerce Support.

## **14. CONCLUSION**

In this module, we have presented a snapshot of the concept of e-Commerce and related technologies, as well as the state of e-Commerce in Nigeria. We have shown that the wide digital divide can be narrowed by the application of e-Commerce. Also a developing country can leverage on the application of IT to enhance productivity and international competitiveness, develop e-Commerce, e-Business and e-Governance. With IT and related technologies, a developing country can become industrialized and more competitive. Many countries in Africa are not taking advantage of e-Commerce through opening of economies, which is essential for promoting competition and diffusion of Internet technologies. The developed world has had a long lead over the developing countries in the IT infrastructure and application, but it is not late to start.

## Recommended or suggested further readings

There are lots of resources and information available for anyone who wants to explore the subject of developing e-Commerce or integrating e-Commerce into existing business. Below are some other good resources:

### Websites/ Online resources

1. The Business Link [www.canadabusiness.ab.ca](http://www.canadabusiness.ab.ca)
2. Useit.com [www.useit.com](http://www.useit.com)
3. E-Business News from Forbes [www.forbes.com/ebusiness](http://www.forbes.com/ebusiness)
4. Clickz.com Internet trends and stats [www.clickz.com/stats](http://www.clickz.com/stats)
5. ebizblog [www.ebizblog.ca](http://www.ebizblog.ca)
6. Small Business Computing [www.smallbusinesscomputing.com](http://www.smallbusinesscomputing.com)
7. **Websites** [www.w3.org](http://www.w3.org) World Wide Web Consortium
8. Ecommerce web hosting guide - <http://www.ecommerce-web-hosting-guide.com/advantages-of-ecommerce.html>
9. B2B: [en.wikipedia.org/wiki/B2b](http://en.wikipedia.org/wiki/B2b)

### Books

1. Marcia Robinson, e-Business 2.0: Roadmap for Success
2. Janice Reynolds, The Complete E-Commerce Book
3. Frank Catalano, Internet Marketing for Dummies
4. Elms, Janelle, The seven essential steps to successful eBay Marketing, 2005
5. Gendron, Michael P., Creating the new e-business company: Innovative strategies for real-world applications, 2006
6. Porter, Michael E., Harvard Business Review, Strategy and the Internet, 2001
7. Chaffey D, E-business and E-Commerce Management, 2<sup>nd</sup> Edition (FT Prentice Hall, 2003), ISBN-10 0273683780, ISBN-13 978-0273683780
8. Malmsten E, Leander K, Portanger E and Drazin C, Boo Hoo: A Dot.com Story (Random House Business Books, 2002) ISBN-10 0099418371, ISBN-13 978-0099418375
9. Vise D., The Google Story (Pan, 2008) ISBN-10 0330508121, ISBN-13 978-0330508124
10. Zwass, V. (2003) Electronic Commerce and Organizational Innovation: Aspects and Opportunities. International Journal of Electronic Commerce.
11. Turban, E., King, D., Lee, J., & Viehland, D. (2004). Electronic Commerce: A Managerial Perspective. New Jersey: Pearson/Prentice Hall.
12. Senn, J. (2000) Business-to-business e-commerce. Information Systems Management, Spring, 23–32.
13. Licker, P., & Motts, N. (2000). Extending the benefits of e-commerce in Africa: Exploratory phase. Proceedings of the First Annual Conference of the Global IT Management Association, Memphis, Tennessee, USA, 115-118.
14. Straub, D.W. (2003). Social and International Issues. In Foundations of Net-Enhanced Organizations. New York: Wiley, pp. 465-502.
15. Khalfan, A.M. & Akbar Abdullah (2006). Adoption and Implementation Obstacles of E-Banking Services: An Empirical Investigation of the Omani Banking Industry. In S. Kamel (Ed.) Electronic Business in Developing Countries: Opportunities and Challenges, (p. 283-302). Hershey: Idea Group.