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**Adoption of E-commerce in Nigerian Businesses:**

A change from traditional to e-commerce business model in  
Richbol Environmental Services Limited

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## **Thesis Abstract**

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The emergence of e-commerce is changing many traditional ways of doing business and there are lots of success story regarding e-commerce in developed countries. These successes have prompted governments and business organizations in developing countries including Nigeria to step up their effort in the adoption and use of e-commerce technology.

The rapid rise of e-commerce has brought with it a large amount of e-commerce business models which are more easy to implement, run, and profit-oriented. With these rapid changes in business environment and processes, it has become paramount for traditional businesses to “move along with time” by changing their business model in order to remain relevant and competitive in this modern time.

The aim of this research is to examine various e-commerce business models and recommend one that fits into the business processes of Richbol Environmental Services, and device a way(s) in which it can be implemented. In other words, focus is on the change of business model from brick-and-mortar to e-commerce business model.

Qualitative research methodology was utilized in this study. The qualitative research data consisted of two in-depth interviews with key managers of Richbol Environmental Services Limited. The respondents who are directly involved in the management of the company gave an in-depth analysis of the pros and cons of their business model, and also indicated their desire to adopt an e-commerce business model amidst concerns over potential safety issues.

The author recommends that management within Richbol re-evaluate their current business model and endeavor to modify their website for this purpose. It is also recommended that e-shop business model be adopted as it is easy to implement, fits well with the product they offer, and represents an avenue in which most online businesses start their e-business adventures.

Keywords: e-commerce, business models, e-shop, e-business, adoption, Nigeria, business environment

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## Abbreviations

<b>EDI</b>	Electronic data interchange
<b>LTD</b>	Limited.
<b>IT</b>	Information Technology
<b>FCT</b>	Federal Capital Territory
<b>OPEC</b>	Organization of Petroleum Exporting Countries
<b>NBS</b>	National Bureau of Statistics
<b>GDP</b>	Gross Domestic Product
<b>ISPs</b>	Internet Service Providers
<b>ARPV</b>	Average Revenue Per user
<b>NGN</b>	Next Generation Networks
<b>IP</b>	Internet Protocol
<b>NITEL</b>	Nigerian Telecommunications
<b>ATMs</b>	Automated Teller Machines
<b>SMEs</b>	Small and Medium Sized Enterprises
<b>CWG</b>	Collaborative Working Group
<b>UPS</b>	United Parcel Service
<b>APIs</b>	Application Programming Interfaces
<b>XML</b>	Extensible Markup Language
<b>WSDL</b>	Web Service Definition Language
<b>SOAP</b>	Simple Object Access Protocol

# 1 INTRODUCTION

This is the introductory part to the research work. This part of the research will narrate the background to the subject matter. It also includes the research problem, justification of study, objective of the study, research questions, scope of the study, and limitations of the study.

## 1.1 Background

A little over a decade ago, a professor of engineering at a major university boldly remarked, “The internet has no commercial viability”. This statement may certainly have been true at that time due to the fact that the Internet as a means of doing business was still “developing”. But even then it was obvious that the internet provides limitless network opportunities for businesses and the future is certainly bright.

The effects of the evolution of the internet and web access to today’s world can be likened to the effects the industrial revolution had on the agrarian societies centuries ago. This has made doing business internationally even much more easier and faster to do, and it has brought many geographically distant countries even more closer in the virtual world. New innovations in telecommunications, the continuous development of the internet and emergence of e-commerce have enhanced the globalization of markets. (Emerald Insight Staff 2005, 25)

The explosion in the use of the internet has created opportunities for several innovations. Electronic commerce, which is one of the most interesting and important aspect of this explosion has changed the way businesses operate. Large amounts of business organization now offer goods & services as well as communicate with their suppliers and buyers over the internet. Electronic commerce has brought about a highly competitive market and as a result large



brick-and-mortar companies are rethinking their business models with the aim of staying competitive. A report says that by 2014, over 1 trillion dollars in revenue will be generated by e-commerce worldwide (Digital economy, [ref. 26 September 2011]). This figure is evident in the speed at which e-commerce has risen within the past few years.

E-commerce is attracting converts at an overwhelmingly increasing level. In short, e-commerce has moved beyond its developing days and is getting down to serious business, becoming a natural part of multi-channel efforts to make sales and improve the bottom line. (Lou [ref. 26 September 2011]). In order to rip the full benefits of e-commerce, businesses are redesigning their processes as a whole rather than doing the same things in a different way.

As the world becomes a global village due to the internet revolution, Nigeria though not a frontrunner is also not left behind in the pack. Infrastructural deficiencies have impeded the development of digitalization in the Nation's body polity but satisfactory signals are emerging that Government intends to actively promote and support the required and relevant structures

## **1.2 Research Problem**

Implementing a successful e-commerce is not as easy as most people might think. Many obstacles exist and they all revolve round three parts of e-commerce puzzle- money, technology and people. Sometimes the cost of avoiding e-commerce is greater than the cost of adopting it. However, as e-commerce has grown and has become an important tool in highly-developed nations, such cannot be said for the lesser developed nations, thus creating a digital divide.

The rapidly changing business environment has brought about new business models that are easy to implement, and generate huge amount of revenue while cutting cost. Companies are now changing business models in order to remain competitive and gain access into new markets. However, there are lots of business organizations in the less developed nations that still operate with traditional business model and are being hindered from switching over to the e-commerce business model due to factors such as, the lack of technical resources, highly-skilled e-commerce personnel, and so forth.

Nigeria being one of the few nations in the world blessed with abundant mineral resources, an entrepreneurial population and a productive agricultural base. By virtue of size, population location is well positioned to be the hub of economic activities in Africa. E-commerce is an opportunity for businesses to explore the great benefits that the internet has brought in the form of new business models. This study emphasizes the importance of these new business models and also tries to find ways in which business models can be changed.

### **1.3 Purpose of the Study**

The objective of this research is to create an online presence for the case company; Richbol Environmental services LTD (RES) i.e. the integration from the less profitable brick and mortar business model to a more profitable e-commerce business environment. To achieve this goal, we will look into their present business processes, e-readiness and finally, propose an e-commerce business model that fits well to their products.

### **1.4 Research Questions**

Research questions are at the central point of a research design. It identifies the destination of a research work. In many research works, research questions are normally presented as the first thing, but this does not usually work out well in

some study, especially qualitative research works. Looking into a research question before having a clear picture of what theoretical and methodological options there are, often leads to the danger of making a “type III error” i.e. answering the wrong question. However, this does not mean the research work would not have a research question. The main idea behind the formulation of a research question is to decide what you want to find out that is, to explain specifically what your study will attempt to learn or understand. (Maxwell 2005, 65-67).

However, the main research questions in this thesis is in form of structured questions for personal interview and it all centers on the current business practices (models), how a new business model can be adopted, the change to new business model and post evaluation of the new model in Richbol Environmental Services Ltd. The managers of Richbol would be asked structured questions concerning the change of business model from the brick-and-mortar environment to the e-commerce business model. The questions are meant to test how well they agree with the new model and what their views are about the new business model.

## **2 GENERAL OVERVIEW OF ELECTRONIC COMMERCE**

This part of the research focuses on the foundation issues that form the core basis for the theoretical framework. This chapter will review different literature to make analysis of e-commerce. It will discuss the history, types, benefits and limitations, and features of e-commerce. E-commerce business models will also be discussed in detail.

### **2.1 Definitions of E-commerce**

It is important to elaborate on the definitions of e-commerce as that will help to determine the scope and perspective of this chapter. Electronic commerce (e-commerce) is the wireless transfer of business information and transaction via electronic data interchange (EDI), e-mail, electronic bulletin boards, fax machines and electronic funds transfer. The concept of e-commerce is all about using the Internet to do business better and faster. It is about giving customers controlled access to your computer systems and letting people customize products and services for themselves and delivering the products and services in due time. These personalized automated services are of great financial benefits to a business in the form of increased revenue and decreased cost of doing business. It is about committing your company to a serious online effort and integrating your Web site with the heart of your business.

Furthermore, there are some elements of commerce that are necessary for any transactions to take place, which are as true for regular bricks-and-mortar commerce as they are for e-commerce. A trading activity usually consists four main elements, which are, quoting, ordering, payment and delivery. If any of these stages is carried out online, that means e-commerce has taken place. In a more practical example, if one purchases a downloadable music album from notjustok.com, all the four trading stages from quoting to delivery are carried out online. If one buys a digital camera from ebay.com, the ordering and payments are

done online while the delivery involves couple of offline approaches. These transactions can all be termed e-commerce.

(The World Wide Web, [ref. 28.9.2011]).

## **2.2 E-commerce and E-business**

E-business is often used synonymously with e-commerce. However, they are a bit different as the former is broader than the later. There are many definitions that are found in literature and some of them will be discussed here. According to Weill & Vitale (2001,5), e-business is marketing, buying, selling, delivering, servicing, and paying for products and services, and information across networks linking an enterprise and its prospects, customers, agents, suppliers, competitors, allies, and complementors. However, Greenstein and Vasarhelyi (2002, 2-4) moved to argue that e-business involves exchange of information not directly related to the actual buying and selling of good, activities such as use of electronic mechanisms to distribute information and provide customer support . E-business refers to the initiating, arranging, and carrying out electronic business processes (Meier & Stormer 2009, 2). Figure 1 below illustrates the difference between e-commerce and e-business systems.

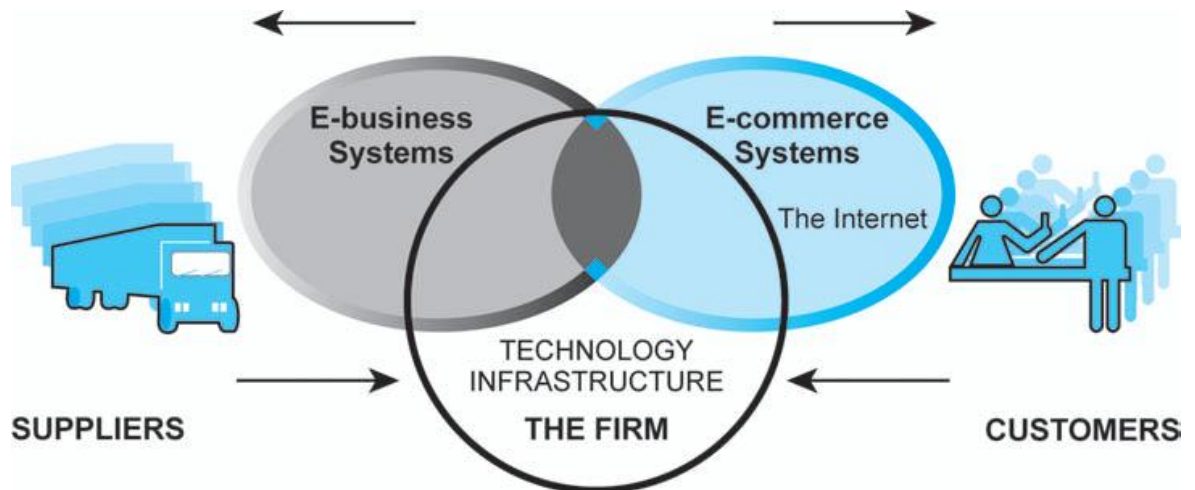


Figure 1. Difference between E-business and E-commerce (Introduction to E-commerce, [ref. 28 October 2011]).

### 2.3 History of E-commerce

E-commerce might be a relatively recent concept as compared to other phenomenon; nevertheless, it would be worthwhile to talk about the history no matter how brief. The invention of the Electronic Data Interchange (which is widely known as EDI) in the 1960s is believed to be a sort of spring board so far as the history of e-commerce is concerned. The EDI facilitated electronic transaction as well as the transfer of important business information. However, the history of e-commerce can be divided into three periods.

(History of e-commerce, [ref. 29.9.2011]).

#### 2.3.1 1995-2000: Innovation

The early years of e-commerce brought about rapid growth and ground-breaking innovation, beginning in 1995 with the first widespread use of the web to advertise products. It was also a time when a lot of internet/online based companies were established with billions of dollars as their capital base.

Stakeholders such as computer scientists and information technologists believed the overwhelming early success of e-commerce was a vindication of the fantastic work they have put into the development of information technology for over four decades extending from the development of the early internet to the PC, to local area networks.

The economists believed e-commerce has brought about the prospect of a perfect competitive market where cost, price and quality information are distributed equally, and suppliers compete against one another and buyers have unlimited access to all market information. Entrepreneurs see this as an opportunity to earn far above normal returns of investments while having access to billions of consumers worldwide.

Thus, the early years of e-commerce were characterized young entrepreneurs' vision of profiting from new technology, hyper competition and achieving first mover advantages. But it is worth noting that only 10% the online businesses formed in 1995 survived and only a tiny percentage of them are profitable.

### **2.3.2 2001-2006: Consolidation**

During this period, emphasis moved to a business driven approach. Key players started to focus on how to strengthen their positions in the market as against the creation of new brands. Startup businesses in the period were primarily financed by traditional methods. Intermediaries strengthened and e-commerce was dominated by retail giants while the more successful businesses used a mixed "bricks and clicks" strategy, by combining traditional sales efforts with online efforts.

### **2.3.3 2006-present: Reinvention**

E-commerce entered a third period in 2006 which extends to this present day. This period, while still business-driven is also audience, customer and community-driven. In addition, many large online firms are now entering the market and acquiring early stage firms such as MySpace and YouTube through buy-outs while first-mover advantages are returning in new markets as traditional Web players catch up. (Laudon & Traver 2009, 29-36). Also, the breadth of e-commerce offerings continue growing, especially in travel, information clearing houses, entertainment, retail apparel, appliances, and home furnishings while online sites continue to strengthen profitability by refining their business models and leveraging the capabilities of the Internet.



Table 1. Evolution of E-commerce (Laudon&amp; Traver 2009, 37)

<b>1995-2000 INNOVATION</b>	<b>2001-2006 CONSOLIDATION</b>	<b>2006-Future RE-INVENTION</b>
Technology-driven	Business-driven	Audience, customer, and community driven
Revenue growth emphasis	Earnings and profits emphasis	Audience and social network growth emphasis
Venture capital financing	Traditional financing	Smaller VC investments; early small buyouts by large online players
Ungoverned	Stronger regulation and governance	Extensive government surveillance
Entrepreneurial	Large traditional firms	Large pure Web-based firms
Disintermediation	Strengthening intermediaries	Proliferation of small online intermediaries renting business processes of larger firms
Perfect markets	Imperfect markets, brands, and network effects	Continuation of online market imperfections; commodity competition in select markets
Pure online strategies	Mixed "bricks and clicks" strategies	Return of pure online strategies in new markets; extension of bricks and clicks in traditional retail markets
First-mover advantages	Strategic follower strength; complimentary assets	First-mover advantages return in new markets as traditional Web players catch up
Low complexity retail products	High complexity retail products	Services

## 2.4 Types of E-commerce

E-commerce utilizes information and communication technologies to carry out business transactions between two or more parties. However, e-commerce can be categorized based on the types of parties involved in a kind of commercial activity. Table 2 lists six types of e-commerce, but due to the scope of this study, the author will limit the discussion to only B2B and B2C in this chapter.

Table 2. Electronic Commerce Categories (Schneider 2008, 8)

Categories	Description	Example
<b>Business-to-customer (B2C)</b>	Businesses sell products or services to individual customers	Walmart sells merchandise to consumers through its Website
<b>Business-to-business (B2B)</b>	Business sell products or services to other businesses	Grainger sells industrial supplies to large and small businesses through its Website.
<b>Consumer-to-consumer (C2C)</b>	Participants in an online marketplace can buy and sell goods to each other.	consumers and business trade with each other on ebay.com
<b>peer-to-peer (P2P)</b>	Internet users share files and computer resources directly without having to go through a central Web server	bittorrent allows users share music and video files amongst themselves.
<b>Mobile e-commerce (M-commerce)</b>	Conducting commerce by using mobile phones, smart phones	ordering and paying for a book via a mobile phone

### 2.4.1 Business-to-Customer (B2C) E-commerce

This is the most commonly known type of e-commerce. Emphasis is placed on providing goods and services directly to the consumer via the Web. Business-to-consumer e-commerce offers consumers the possibility to shop for a wider range

of products and services from different merchants and at reasonable prices online. The B2C model of e-commerce transaction is ideally suited for the following types of merchandise:

1. Goods that can be easily transformed into digital format, such as books, music clips and videos, and software packages.
2. Items that follow standard specifications such as Pinter ribbons, ink cartridges e.t.c.
3. highly rated branded items or items with return security like Dell, Hp and Compaq computers e.t.c
4. Items sold in packets that cannot be opened even in physical stores.
5. Items that can be experienced online, such as an online Mp3 music album.

Existing businesses utilizes B2C e-commerce to gain more market space as well as to maximize profit through the reduction in transaction cost. Also, small businesses looking to surpass entry barriers use it as a tool for a smooth entry into the market while established consumer merchandisers like Dell computers adopt it so as to reach out to global customers.

Online based B2B e-commerce businesses are those kind of businesses that started off online and carry out most of their commercial activities via the internet. These businesses do not have a physical store. Amazon.com is a good example of B2C e-commerce that is solely built on the Web. Amazon is a US based retailer company which started as an online book store in 1995 and has grown to include stores for computer software, video games, electronics , furniture, food, toys, apparel and various CDs, DVDs and Mp3 downloads.

In addition, since the internet provides opportunity for small businesses to have access to global consumers as well as the expansion of their market place, many

small businesses can also benefit from the advantages of e-commerce. Usually, e-commerce businesses have to choose between either creating their own online store or become a part of an intermediary running a cluster of businesses. However, creating own e-commerce websites may not always attract customers, and as a result most small businesses might opt to be part of an intermediary. Yahoo Small Business is a good example of an intermediary model of the B2C e-commerce. (Bhasker 2006, 23-25)

#### **2.4.2 Business-to-Business (B2B) E-commerce**

In B2B e-commerce, businesses focus on selling to other businesses directly or through an intermediary. Many transactions worth huge amounts are carried out between companies through e-commerce channels, dealing in all kinds of products and services (Grefen 2010). According to Quaddus & Xu(2010, 51), “B2B covers a broad spectrum of applications that enable businesses to form electronic relationships with their distributors, re-sellers, suppliers, customers, and other business partners”. In addition, B2B e-commerce is believed to be by far the largest and successful form of e-commerce in terms of turnover and transactions made as it accounted for over 90% of all e-commerce transactions made in 2009 (Economist Intelligence Unit 2009). In fact, the growth of B2B e-commerce has been rapid over the last decade. Figure 2 below shows a strong growth rate in terms of revenue (in US dollars) for B2B transactions.

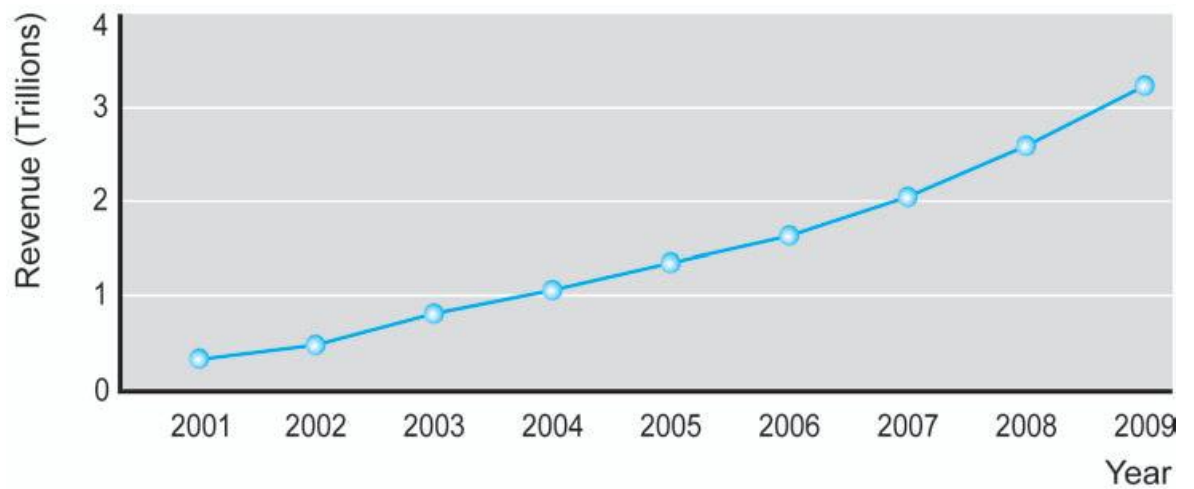


Figure 2. The growth of B2B E-commerce (in US dollars) (Introduction to E-commerce [ref. 30 October 2011]).

The B2B e-commerce can be supplier-centric, buyer-centric or an, intermediary-centric. In the supplier-centric model, a supplier sets-up an e-commerce marketplace or platform on which it interacts with buyer businesses. Suppliers involved in this model are usually a dominant or recognized force in the market for the products or services they supply, and they set the pricing scheme to fit the needs of buyers' businesses.

In the buyer-centric model, businesses that are well known and have a high purchase capacity can create an e-commerce site through which they deal with supplier businesses. The site is used by the buyer business for placing quotations and carrying out the whole buying process. These kinds of businesses usually have the capacity to lure prospective suppliers to perform business dealings in their market place.

Finally, in the intermediary-centric e-commerce, a third party creates an e-commerce market place which serves as a platform on which supplier and buyer businesses can interact. This model is advantageous to both the buyers and sellers with regards to pricing, quality, availability, and delivery of goods and

services. Buyers place their request for quotations through this platform and sellers respond by bidding electronically, and subsequently, the buyers chooses the bids that are most beneficial. The intermediary company serves as an e-market maker in that, it eliminates or reduces the need for buyers search for sellers on their own and vice versa. (Bhasker 2006, 19-21).

## **2.5 Benefits and Limitations of Electronic Commerce**

### **2.5.1 Benefits of Electronic Commerce**

E-commerce has continued to change the face of global business since its evolution years ago. In fact, few innovations in history have provided as much benefits to the world as e-commerce has. Its emergence has brought advantages to the society, organization, individuals, industries and even the government.

The global reach offered by the Web enables a company to place their products and services in front of the entire world. This benefits a company in that; they are able to transact business with anyone from anywhere in the world and at any given time over the Web. This also means that products and services can be accessible from any internet-connected device. Thus, reducing the time and cost of making transactions. The global access makes it possible for companies to explore more easily new business opportunities and new markets. Therefore, it is easy for a new entrant to compete with well established companies. Amazon.com was able to carve a market niche and subsequently became an established firm as an online bookstore despite the fact there were already a lot of established bookstore firms (but with no online stores).

Furthermore, the use of online advertising enables organizations to reach target markets in a much more cost-effective manner than traditional print media or TV commercials. Huge investments are now being pumped into online advertising by organizations due to the benefits it offers. Companies now advertise on social networks like facebook. According to reports, internet advertising is expected to grow by around 12-15% in 2011 and it also accounts for around 15% of global advertising expenses (Digital media, [ref. 12 October 2011]). These figures go a long way to show how important and beneficial online advertisement has turned out to be.

Through e-commerce, organizations can capture valuable data about their customers, which can be used to reach targeted market segments and support customer relationship marketing. Organizations utilize digital direct marketing to disseminate messages to potential customer groups about products and services within their specific areas of interest. Also, organizations have an opportunity to interact with their customers in a way that allows them to build increased customer loyalty.

The ubiquitous nature of e-commerce means that customers are to access a vast number of products and services from suppliers around the globe, thus providing a much wider range of choices in suppliers, price, quality and features. Buyers are able to shop and make product comparisons with different online stores from the convenience of their homes at any time of the day or night. There is no limit to the market place, and this is in sharp contrast to traditional commerce where consumers have to visit a market place in order to make a purchase. Also, delivery costs and time are dramatically reduced for products that can be delivered over the internet such as games, e-books, music, software, and videos.

(Reynolds 2009, 206-207.)

Talking about social network technology, e-commerce provides a many-to-many model of communication via social media. Nowadays, people can share videos, pictures, music on social networks like facebook, twitter, YouTube, and MySpace. These social networks serve as a medium for people to strengthen ties with existing friends and meet new ones. Businesses now use these social technology as a tool for advertising thereby, getting their messages across to millions of people using these social medias.

Additionally, the interactive nature of the e-commerce technologies allows a consumer to engage in a dialog in a similar way which is similar to face-to-face customer service. It has an advantage over Traditional technologies in that, it can request customers information be entered into a form. On the other hand, forms can be filled for instance via a television set or a phone. It allows for a more effective way of communication between a merchant and a consumer while reducing sales cost in the process.

E-commerce enables merchants to individualize marketing messages to specific individuals. The goal of this is to provide suitable product/service information in a more personalized way in order to arouse a consumer. Merchants obtain vital information that might suit an individual mainly through previous purchases. Customization is a unique feature in that; it permits consumers to choose what particular kind of products they want from style, function, and colour. For example, a consumer who wants to purchase a computer from dell.com can choose exactly how he wants his computer to look like.

Finally, the abundant information on the Web today is available to all market players alike. This information for instance helps consumers know what the prices of a range of products really are in the market and what best buy options are available. Likewise, online merchants can easily create different target groups



based on information they get from consumers via the web, and in so doing, maximizing their profits. (Laudon& Traver 2009, 14-16).

## **2.5.2 Limitations of Electronic Commerce**

Despite all the benefits that can be enjoyed from the use of electronic commerce, there are also some limitations and potential problems associated with its adoption. Most of these disadvantages arise from the rapidly developing pace of the underlying technologies. However, these limitations are expected to disappear once e-commerce more available to and widely accepted.

The sale of perishable grocery products such as, fruits and vegetables online has proved to be a great issue because buyers want to examine these items for freshness and quality. This means online grocery stores must build warehouses and physical stores within the geographic areas in which they operate because perishable products must always get to the customer in time to avoid losing freshness and quality. An American online grocer, peapod nearly went out of business in the early 2000s because it lacked the infrastructure to deal with the ever growing customer base. However, some online grocery stores like Tesco, FreshDirect and Disco Virtual have been more successful by limiting their service areas to densely populated urban environments that offer sufficiently large numbers of customers within relatively small geographic areas, which makes their delivery routes profitable.

For businesses, the calculation or return-on-investments in e-commerce has been more difficult because it is hard to quantify the costs and benefits. The costs of implementing e-commerce projects can change dramatically due to rapid changes in the underlying technologies. Also, firms that want to do business online have problem with the integration of current databases and transaction-processing

software which was originally meant for traditional commerce into the software that enables e-commerce. Financially, tying the existing systems into new online business systems can be very expensive.

There are still concerns over the security of the internet. Consumers have concerns about whether online data is secured from being accessed by unauthorized users or fraudsters. This is the more reason why some people prefer not to buy from the internet as it would require them to provide credit card information when it comes to payment. Therefore, it is the responsibilities of companies to preserve their good image by putting in place powerful safeguards to protect their customers. They must demonstrate the ability to operate in a safe and reliable manner that builds the trust of their customers. (Schneider 2010, 19-20.)

## **2.6 Business Model**

A business model is the theoretical design for an organization that describes how it makes money on a sustainable basis and grows (Curtis & Cobham 2008, 208). Jansen, Steenberkkers, and Jägers (2007, 29) defined a business model as “the unique configuration of elements that consists of the strategy, processes, technologies, and the governance of the organization. This configuration is formed to create value for the customers and thus to compete successfully in a particular market”. Tassabehji (2003, 154) stressed further the importance of a business model by adding that a well planned and successful business model will in the long term, give the business a competitive advantage in its industry, enabling it to earn more profits than its competitors. The evolution of e-commerce has brought about the emergence of new business models in markets. However, traditional business models co-exist alongside the new models because they are still as relevant to the market as ever. Usually, a business model is the focal point of a company’s business plan because it spells out the business processes that result in profit. In this chapter, the author will explore in detail both e-commerce and traditional business models.

### 2.6.1 The Key Components of a Business Model

As mentioned earlier, developing a successful business model is vital to a company because it is on this model that it sustains itself in the short term and grows in the long term. A well planned and potentially successful business model must contain these elements: value proposition, revenue model, market opportunity, competitive advantage, competitive environment, market strategy, organizational development and management team. These elements are illustrated in table 3 and discussed fully below.

Table 3. Components of a Business Model (Laudon & Traver 2009, 6)

<b>TABLE 2.1 KEY ELEMENTS OF A BUSINESS MODEL</b>	
<b>COMPONENTS</b>	<b>KEY QUESTIONS</b>
Value proposition	Why should the customer buy from you?
Revenue model	How will you earn money?
Market opportunity	What marketplace do you intend to serve, and what is its size?
Competitive environment	Who else occupies your intended marketplace?
Competitive advantage	What special advantages does your firm bring to the marketplace?
Market strategy	How do you plan to promote your products or services to attract your target audience?
Organizational development	What types of organizational structures within the firm are necessary to carry out the business plan?
Management team	What kinds of experiences and background are important for the company's leaders to have?

#### Value Proposition

Creating a value proposition is a central part of a business model. Developing a value proposition is based on a market research and analysis of the benefits, costs and value a company can offer to consumers. In other words, companies must be able to offer something distinctive from their competitors.

Before Ryanair existed, most customers would have to pay high air transportation prices which means only the wealthy ones can actually get to travel by air. Since the establishment of Ryanair in 1985, they have consistently offered customers low fare flights in almost every European country and coupled with launching Europe's largest booking website - [www.ryanair.com](http://www.ryanair.com). They have been able to attract so many customers and provided stiff competition with other airline companies. Ryanair's value proposition is unrivaled low fares and convenience.

Therefore, developing a value proposition is based on what customers' wants, and current trends in the market. Ryanair observed the market and developed a value proposition that addresses the customers' demands.

### **Revenue Model**

A revenue or monetization model lays out the process by which a company will earn revenue, generate profits and produce a superior return on invested capital. The aim of business organization is to make profit and to produce returns on invested capital that exceeds returns that could be obtained from elsewhere. The most commonly adopted revenue models are: the advertising model, subscription model, the transaction fee model, the sales model, and the affiliate model.

In the advertising revenue model, a company can offer on its website, a forum for advertisements to advertisers for a fee. Those websites that are very popular and attract a lot of visitors can charge higher advertising rates. Facebook and Google, for instance derives a huge amount of revenue from online advertising

In the subscription revenue model, a website host offers its users contents or service for a subscription fee for some or all of its offerings. These kind of

subscriptions could be monthly, quarterly or annually. For instance, Arsenal.com provides access to premium contents, such as live premier league and champions league games, exclusive player interviews, and match highlights only to subscribers, who have a choice of paying a £1.50 day subscription fee or a £36 annual fee. In order for a web site to acquire subscribers, it must offer contents that are of high value and premium offering that is not available elsewhere and cannot be easily duplicated.

In the transaction fee revenue model, a business organization receives a fee for executing a transaction. The revenues will be based on transaction fees and the amount of transactions. For example, online travel agents such as Supersavers facilitate flights bookings, hotels bookings e.t.c. and receive transaction fees from their customers. Other businesses that use this model are eBay, PayPal. While in the sales revenue model, a company generates revenue by selling goods, information and services to customers. Amazon, Hp, Apple, Microsoft are good examples of companies using this kind of business model.

Finally, in the affiliate revenue model, websites can generate revenues by earning commissions from selling products and services of other companies or providing advertisements and links of other companies. The revenue depends on the numbers of customers that views the links or the advertisements. Companies that use this type of revenue model are Google, Espinions, MyPoints, eBay, Amazon. Table 4 below shows the five primary revenue models.

Table 4. Revenue models

TABLE 2.2 FIVE PRIMARY REVENUE MODELS		
REVENUE MODEL	EXAMPLES	REVENUE SOURCE
Advertising	Yahoo.com	Fees from advertisers in exchange for advertisements
Subscription	WSJ.com, Consumereports.org Sportsline.com	Fees from subscribers in exchange for access to content or services
Transaction Fee	eBay.com, E-Trade.com	Fees (commissions) for enabling or executing a transaction
Sales	Amazon.com, LLBean.com, Gap.com, Sears.com, JCPenny.com	Sales of goods, information, or services
Affiliate	MyPoints.com	Fees for business referrals

### Market Opportunity

This refers to a company's intended marketplace and the overall potential financial opportunities available to the company in that marketplace. It could also be seen as an identified void, need, or demand in market that a firm can take advantage of because it is not being addressed by the competitors. In finding out a firm's realistic market opportunity, the two major things to consider are the market space and market's potential financial worth.

### Competitive Environment

Competitive environment refers to a firm's external environment that consists of other firms that offer similar products and services and operate in the same market. These firms compete for customers in order to gain more market share and increase their profitability. A competitive environment also consists substitute products, potential new entrants, as well as suppliers and customers. The influencing factors of a company's competitive environment are: the number of active competitors, the size of their operations, the market share of each competitor, the profitability of these firms, and the pricing of their products.

Typically, competitors can be divided into direct and indirect. Direct competitors are those firms that offer similar products and services in the same marketplace. For example, Google and Yahoo, both of whom offer online search engines can be said to be direct competitors. Indirect competitors are companies that offer different types products and services that satisfy the same needs.

### **Competitive Advantage**

A competitive advantage exists when a company is able to gain superiority over its competitors by offering same goods and/or services to the consumers at lower prices. Companies achieve competitive advantages when they have access to factors of production that their competitors are not able to obtain. A firm's competitive advantage might be in the form of financial resources, intellectual resources (expertise, creativity, and innovation), legal resources (patents, trade mark), human resources, reputational resources (such as, brand name), organizational resources, and informational resources (Ferrel & Hartline 2010, 127).

However, one unique competitive advantage comes from being a first-mover. A first mover advantage is gained when a firm moves into an untapped market space or becomes the first to adopt a newly invented technology. If a first-mover firm develops a strong customer base and brand name that cannot be rivaled, it can sustain its first-mover advantage for a long period of time. This is because brands are built upon loyalty, trust, reliability, and quality. Once obtained, they are difficult to copy or imitate.

### **Market Strategy**

All organizations require a sound marketing strategy. Without a market strategy, organizations would not be able meet the needs of customers or other stakeholders. Market strategy is a detailed plan that describes the process of how

a company intends penetrate a new market and attract customers, and concentrate on how its limited resources can increase sales and achieve a sustainable competitive advantage by fulfilling the customers' satisfaction.

### **Organizational Development**

Gallos (2006, 3) defines organizational development as “an effort planned, organization-wide, and managed from the top, to increase organization effectiveness and health through planned interventions in the organization's processes, using behavioral science knowledge”. Firms need an organization to efficiently implement their business plans and strategies. Normally, in a Company, jobs are divided into functional departments, such as production, sales, marketing, finance, and logistics. These divisions enable the proper flow of business processes. Companies face two types of problems: continuous adaptation to a rapidly changing environment, and corresponding internal integration that will support the success of the external adaptation. In overcoming this problem, companies must have a plan for organizational development.

(Laudon & Traver 2009, 5-12)

### **Management Team**

A Management team is charged with the responsibility of making a business model work. Because the work of management teams is complex and requires a vast knowledge of a firm's operations as well as the external environment, firms face the challenge of finding people who have both the experience and the ability to apply that experience to new situations.

In order to increase the quality of decisions made by a management team, it is beneficial to form a heterogeneous management team. A heterogeneous management team is composed of individuals with different functional



backgrounds, education, and experience. Heterogeneity among team members promotes debate, which often leads to better strategic decisions being made and in turn produce higher firm performance. (Hitt, Ireland & Hoskisson 2010, 356).

## **2.6.2 Electronic Commerce Business Model**

E-commerce business models have evolved in response to the growth in the internet. Most e-commerce business models involve the transaction of goods and services or the provision of information. An e-commerce business model identifies the revenue-generation processes for a business involved in e-commerce (Shelly & Campbell 2010, 424). Canzer (2005, 93) defined e-commerce business model as, a descriptive representation of the fundamental components of a business that operates partially or completely on the internet. The following section introduces several business models for conducting e-commerce

## **2.6.3 Major Electronic-Commerce Business Models**

Electronic commerce is playing a catalytic role in organizational change by opening up the possibility of new business models for organizing production and transacting business. There are many e-commerce business models, and more are being invented by the day. Most companies utilize two or more of these models in their operations because at times they are intertwined. The various e-commerce business models are discussed below.

### **E-Shops**

This model is mainly used by B2B as well as B2C businesses. E-shops are online stores offering goods and services over the internet. Order placements and payments are usually done online but the delivery of such goods and services is accomplished traditionally. In other words, it is a partial combination of both

electronic and traditional commerce systems. However, in some cases involving electronic products and services, delivery is made immediately over the internet. Instances of these kinds of products and services are music, image and photographic services. A good example of B2B e-shop is Ladybird, a brand label for children's clothing that distributes its products through a network of franchised retail businesses. E-shop business model is a very effective way of bypassing intermediate operators, thereby reducing costs and delivery time. (Curtis & Cobham 2008, 208- 210)

### **Brokerage Model**

The brokerage model comprises of a digital environment built by brokerage firms with the aim of bringing buyers and sellers together to enable the exchange of goods and services. While the vast majority of brokerage activity is carried out among businesses, eBay provides both businesses and consumers a platform for buying or selling virtually anything. Brokerage sites often specialize by providing a particular type of product and service. Their focus thereby, is to satisfy the needs of a niche market.

Firms that end up having excess inventory as a result of overestimated demand can go to e-commerce sites specializing in redistributing unwanted inventory in order to find buyers for these goods. In this kind of situations, firms give out price discounts for their products in order to attract buyers. Examples of e-commerce sites that utilize the brokerage model are [Retailexchange.com](http://Retailexchange.com) and [Overstock.com](http://Overstock.com).

Brokerage businesses employ systems that tend to reflect buying and selling environments that is easy to understand and comfortable for users. Brokerage

firms earn revenues mostly through commission charges that are based on the value of the goods bought and sold. Also, brokerage businesses may charge membership fees and collect advertising revenues by selling display space on their screens.

### **Content Providers Model**

Content providers distribute information content, such as digital video, music, photos, articles, and artwork over the internet. Website content providers make money by charging subscription fee, a charge for viewing single items such as a report, or a membership fee. The subscription model which is common with publications and research organizations, such as, Forrester Research inc. and Business Week, often allow access to some of their site's contents free of charge and then seek to induce interested clients to subscribe to the full range of contents available on the site.

Additionally, not all online content providers charge for their information. Users can access information at some of these sites without paying any money. They might however, request that users register to gain wider access to the providers' contents. The information obtained from registered users can be used to offer sales on products from the firm. Some more popular sites make money through advertising and partner promotions on the site.

### **Distribution Channel Member Model**

This model includes the activities of retailers, wholesalers, and manufacturers conducting business over the Web. Wholesalers and manufacturers have discovered that the internet is useful as tool for reducing costs and finding new sales. A good instance of the internet-related manufacturing is that of Dell Computer, which established a model for building computers to orders entered

online by customers and for building relationships with component manufacturers and customers.

### **Affiliation Model**

This model involves an agreement entered into by website operators and companies in which the site operators create an online link to the company's site on their Web page, and for every visit or purchases made at the company's site by customers, a fee is paid to the website operators. This is a very good e-business model for any website operator that wants to earn a share of the revenues from products sold by a company. For instance, Amazon.com pays a 15 percent finder's commission for customers sent its way.

This affiliation model costs little or nothing to try out for firms that are seeking to build sales through partnerships with website operators. The only true cost is the screen space that is taken up by the affiliation site icon. Also, companies can save huge funds that might have been invested in advertisement campaigns because these affiliation programs are only paid for when sales are made. However, an affiliation program might only work well for known brands as consumers might be less willing to try out an unknown brand.

### **Community Provider Model**

Community providers are sites that create a digital online environment where people with similar interests can exchange their opinions about politics, and sports, find old high school classmates with whom they would like to re-establish contact, play bridge or poker and so forth. Social networking sites, such as, Facebook, MySpace, Twitter, Friendster have acquired millions of users within a

short period of time which points to the fact that, it is the fastest growing online activity.

The value proposition for community providers is to create a fast, convenient platform where users concentrate on their most important concerns and interests, share experiences with friends, and learn more about their own interests. This makes them to continue to flourish as a niche for small and special-interest groups. For example, Oxygen, Oprah Winfrey and iVillage have carved out a niche for themselves by developing a community of female users by focusing mainly on topics that are of interest to women

Community providers earn revenue through advertising, affiliate programs, transaction fees from other firms. The success of this model is based on creating awareness among users and spreading the word. For instance, when friends tell you that they have a Facebook profile and encourage you to build your own online profile.

### **Portal Model**

Portals are sites that serve as a gateway to information located elsewhere on the internet through powerful web search tools as well as package of content and services all in one place. Portals generate revenue mainly by charging advertising fees, collecting fees for redirecting customers to other sites. Examples of portal e-business models are Yahoo, Google, AOL, MSN/Windows Live and so forth. Some portals, such as search engines define their market space to include all internet users and are referred to as horizontal portals, while others are referred to as vertical portals because they focus on a particular subject matter or market niche. (Canzer 2005, 94-101)

### **Infomediary Model**

The infomediary model is based on the sale of information collected from online consumers or internet users. Data about consumers and their consumption habits are valuable, especially when that information is carefully analyzed and used to target marketing campaigns. For example, e-machine, a computer hardware seller collects information and sales data during interactions with customers. The collected data is subsequently sold to advertisers that are interested in targeting some specific kind of customers. (Bhasker 2006, 59).

### **E-Procurement**

Electronic procurement, which is also known as supplier exchange, is the business-to-business purchase and sale of supplies and services over the internet. It is a system that can connect companies and their business processes directly with suppliers while managing all interactions (such as correspondence, bids, questions and answers, and previous pricing) between them (E-procurement, [ref. 23 October 2011]).

E-procurement is carried out by using software applications that includes features for supplier management and complex auctions. For instance, firms such as Ariba have created software that helps large firms organize their procurement process by creating mini-digital markets for a single firm. Ariba creates custom integrated online catalogs which enable suppliers to open up their catalogs and product ranges at significantly reduced cost for purchasing firms. (Laudon & Traver 2009, 26).

### **Service Provider Model**

Service providers offer services online. Services that can be provided to customers are Web 2.0 applications such as video sharing, photo sharing, and

user-generated content. Google, Yahoo and Microsoft are one of the pioneers of this model, with Google developing online applications such as Google Maps, Google Docs and Spreadsheets, and Gmail. Also, there are strong growths in some personal services such as online medical bill management, financial and pension planning, and travel recommender sites.

As in other e-commerce business model, service providers earn revenue by charging a fee or monthly subscriptions, advertising, and collecting personal information that is useful in direct marketing. The value proposition of service providers is convenience, time-saving, and low-cost alternatives to traditional service providers. However, some services such as dentistry, medical services, plumbing, and car repair cannot be completed via the internet. But, arrangements can be made for these services online. (Laudon & Traver 2009, 23).

#### **2.6.4 Traditional Business Model**

A traditional business model, otherwise known as “brick and mortar” is the conduct of profitable business activities with zero digitalization. This business model has been around for a long time and is still being utilized alongside e-commerce business models in the present time. Business organizations that utilize this model have physical stores or market places where they carry out business transactions physically with customers. A brick and mortar business model is expensive to utilize as it involves physical based marketing, setting-up physical stores and warehouses, and there is always a risk of over-production which might result in huge losses. Also, in contrast to an e-commerce business model which is almost completely devoid of any form of paper work, a traditional business model involves a lot of paper works such as paper catalog, paper-based billing, paper-based tendering and so forth which is a bit cumbersome.

However, similarities do exist between these two models. Regardless of whether goods are to be sold online or at a physical retail outlet, warehousing and distribution logistics costs are incurred in both business model operations. Additionally, an e-commerce business model can accommodate online customers who are dispersed throughout the world by using courier services for delivery without operating a physical store. But a brick and mortar business model is based on selling and distributing a product to customers who walk into a physical store. (Canzer 2005, 93).

In relation to the case company (Richbol), business transactions are done entirely offline. Prospective customers or clients visit the company's business premises in order to indicate their interest in a product or services and in other cases the customers call via telephone to do this. Afterwards, Richbol sends a quotation or invoice (through offline means) to the customer. The customer is expected to pay the price of the product directly to the bank and after which the customer comes to pick-up the product himself. This model is however very cumbersome, time wasting, and energy-sapping for the customers. Hence, there is a need for a review of the model.

## **2.7 E-commerce Adoption**

E-Commerce adoption is a cost effective way to reach global players, gaining market share, streamlining a wide spectrum of business processes and technology for competitive advantage utilizing telecommunication networks, improving relationships, advantageous to early adopters, willing to change and improve communication - internally and externally, ensuring sufficient resources and skilled staffs (Warden & Motjoloane 2007). The adoption of e-commerce is tending to automate rather than re-design existing business processes. A business is said to have adopted e-commerce when it has achieved interactive e-commerce status. Moller & Licker (2005, 881) identified a six-phase e-commerce status indicator in



their research which relevant to e-commerce in developing countries; they are: no e-commerce, connected e-commerce, static e-commerce, interactive e-commerce, transactive e-commerce, and integrated e-commerce.

Over the years, researchers such as Merhtens, Cragg & Mills(2001); Beatty, Shim, & Jones (2001); Grandon & Pearson (2004); Moller& Licker (2005) have carried out various studies to determine the factors that leads to the adoption of e-commerce by business organizations. Amongst these factors are: top management support, organizational competency, IT capability, market e-readiness, supporting industries e-readiness, Government e-readiness, and so forth.

### **2.7.1 Top Management Support**

Top managers play a crucial role in the adoption of e-commerce. Adopting e-commerce depends heavily on the support from top management. Top management support will positively influence the extent of organizational assimilation of e-commerce business processes (Chatterjee, Grewal & Sambamurthy 2002, 71). The top management has the power and authority to make strategic decisions; thus they can develop e-commerce vision and strategy. These actions legitimize the e-commerce adoption process in an organization, and signal top management commitment to successful implementation, and serve to convince other employees to expend the effort required to adopt the new system. For instance, end-users might resist new innovation if learning barriers are too high. But top management interventions in the form of authorizing end-user training and the development resource materials can help to overcome such barriers. (Sharma & Yetton 2003, 534-536). Beatty, Shim & Jones (2001, 341) explained that top management support is important for e-commerce technology adoption because they transform existing organizational procedures and impact relationships with trading partners.

### **2.7.2 Organizational Competency**

Organizational competency is the combination of skills, information, performance measures, and the corporate culture that an organization utilizes in achieving its e-commerce goals. The availability of employees that possesses these proficiencies is important for e-commerce adoption because employees' morale and skill level within an organization has a direct impact on the successful adoption of e-commerce. Organizational competency is critical in achieving team alignment and effective execution of e-commerce projects. Molla and Licker (2005), in their research stated that Organizational competency refers to the availability of employees with adequate experience and exposure to information and communication technology and other skills (such as business strategy) that are needed to adequately staff e-commerce projects.

### **2.7.3 Information Technology (IT) Capability**

IT capability refers to the level of IT resources and personnel IT knowledge of an organization. These resources influence and determine an organization's ability to convert IT assets and services into the adoption of new technologies. There are five dimensions of IT capability, they are: IT infrastructure, IT human resources, IT-related intangible resources, IT co-ordination, and IT governance. (Tarrafdar & Gordon).

### **2.7.4 Attributes of Innovation**

The likelihood of adoption of a given innovation depends on its attributes as perceived by potential adopters. These attributes include perceived benefits, compatibility, complexity, trialability and observability.

➤ **Perceived Benefits**

Perceived benefits refer to the extent of managements recognition of the relative advantage of adopting ecommerce to the organization. Relative advantage is the extent to which an innovation is perceived as better than the idea it supersedes (Rogers 2003, 15). Beatty, Shim & Jones (2003, 339) stated that an organization will only adopt an innovation if it will resolve existing problems or provide new business opportunities. The authors further listed what the perceived benefits of adopting an innovation will include; reduced transaction costs, improved cash flow, increased productivity, better customer services, and improved operational efficiency.

➤ **Perceived Compatibility**

Perceived compatibility is the degree to which an innovation is consistent with existing values, past experiences and needs of potential adopters. Business organizations are more likely to adopt a new technology if it is consistent with their value system, existing infrastructure, business processes, and culture. There is a positive relationship between organizational compatibility and e-commerce technology adoption. (Beatty, Shim & Jones 2001,340).

➤ **Perceived Complexity**

This is the degree to which an innovation is perceived as difficult to understand and use. The complexity of a new technology has a direct effect on its adoption. Business Organizations are more likely to adopt a new innovation if it does not require that they develop new skills and understanding in order to use it.

➤ **Observability**

This is the degree to which the results of an innovation are visible to others. The more visible an innovation is, the more likely it is to be adopted by observers. This helps potential adopters to know how valuable the innovation is beforehand due to observable results by early adopters of such innovation. (Rogers 2003, 15-16).

### **2.7.5 Market E-readiness**

This refers to how prepared an organization's business partners such as customers and suppliers are at accepting the adoption of e-commerce. For the successful operation of e-commerce, all available stakeholders in the market have to be willing to make business dealings online.

### **2.7.6 Government E-readiness**

This is government's level of commitment to the adoption of e-commerce in terms of formulating a legal infrastructure to promote, support, facilitate and regulate e-commerce. Government can provide an enabling environment for the adoption of e-commerce by addressing infrastructural problem and championing mass awareness programme.

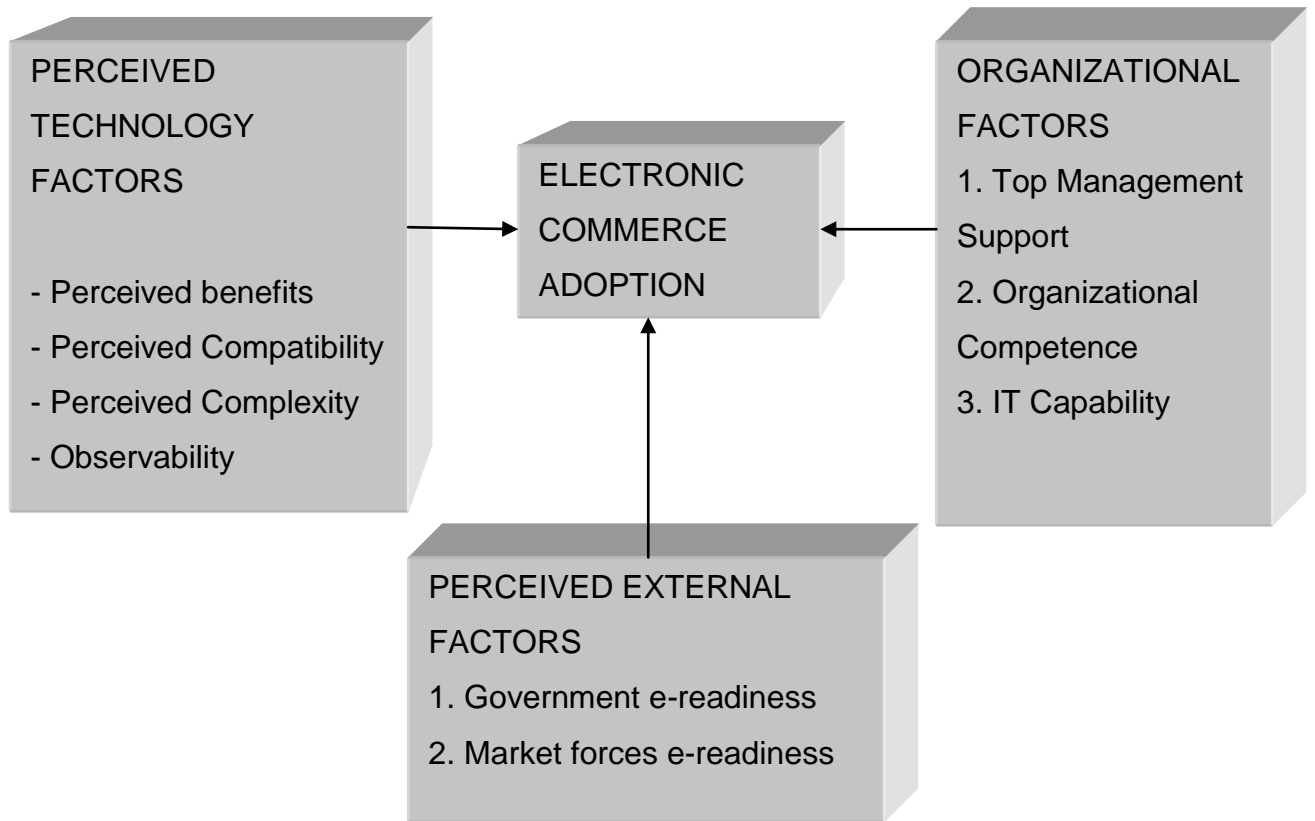


Figure 3. Factors Influencing the Adoption of E-commerce. (Aghaunor & Fotoh 2006)

### **3 OVERVIEW OF E-COMMERCE IN NIGERIA**

This part of the research work focuses on Nigeria, Nigerian business environment, and e-commerce trends in the country. The chapter also dealt with issues such as internet penetration in Nigeria and the challenges confronting the adoption and development of e-commerce in Nigeria.

#### **3.1 Overview of Nigeria**

According to Robson (2005, 8), “modern Nigeria is “big” in many different ways. It is one of the largest countries in West Africa. It has the greatest population in any African country - one in seven Africans is a Nigerian. It is the main producer of oil in Africa, and is an important contributor to the continent as a whole”. Nigeria is a federal constitutional republic comprising 36 states and its federal capital territory (FCT), Abuja. The country is located on the Gulf of Guinea on Africa’s western coast. According to the CIA fact book (2010), Nigeria covers an area of 923,768 sq km (336,669 square miles) and is twice the size of California and three times the size of the United Kingdom. The country stretches about 700 miles from east to the west and 650 miles from south to the north. Nigeria’s neighbours are Niger and Chad to the north, Benin and Togo to the west and Cameroon to the east. (Falola 1999, 21-22). The country is the most populated in Africa with 155.2 million people and 1.9% annual growth rate making it the eighth most populated country in the world (CIA 2011 est.). Nigeria is a multi-ethnic nation with 250 recognized ethnic groups of which Hausas 21%, Yorubas 20%, Igbos 17%, Fulanis 9% are the most populous and politically influential tribes. English is the official language spoken side-by-side with widely-used indigenous languages. (Nigeria Business intelligence Report 2001).

The Nigerian economy is one of the fastest growing in the world, with the National bureau of Statistics (NBS) projecting a 7.98% growth in 2011 as against 7.85 % growth recorded in 2010. Nigeria is blessed with abundance of oil and as a result became a member of organization of the petroleum exporting countries (OPEC) in

1971. It is one 12<sup>th</sup> largest producer of petroleum in the world and the 8<sup>th</sup> largest exporter, and has the 10<sup>th</sup> largest oil reserves. Petroleum plays a major role in the Nigerian economy, accounting for 20% percent of gross domestic product (GDP), 95% of foreign exchange earnings, and about 65% of budgetary revenues (OPEC 2011). Prior to the discovery of oil in Nigeria, the major contributor to the economy was agriculture, which contributed over 60% of the GDP in the 1960s. During that period, Nigeria was the world's largest producer and exporter of agricultural produce such as cocoa, palm oil, palm kernel, cotton, groundnut, rubber and so forth (Alkali 1997, 15-16). However, the country's over-dependence on oil has led to rent seeking and a reluctance to examine potential avenues for economic diversification. Figure 2. below illustrates the map of Nigeria including its 36 states and neighbor countries.



Figure 4. The Map of Nigeria (Adapted from CIA The World Fact book).

### **3.2 The Business Environment in Nigeria**

A country's business environment is crucial to the survival of every business organization. An enabling environment that makes it easy for business organizations to be run successfully is the one that fosters national economic growth. Since the return of civilian rule in Nigeria over 12 years ago, the political climate has been quite stable apart from some sectarian violence in the northern part of the country. This bodes well for business organizations in Nigeria as laws and regulations tend to be unchanged over a long period of time. A change in laws and regulations by the government can lead to high operating costs for businesses and a change in competitive landscape. Nigeria's politicians have realized that by creating an enabling business environment, they contribute positively to the welfare of the people, therefore increasing their chances of being elected again. (Maritz 2010, 6).

Furthermore, Nigeria has a persistent power supply problem which is yet to be solved by the government. Power outages result in huge losses to businesses, especially manufacturing firms. It has been reported that 97% of Nigerian firms experience power outages, and such outages lasts on the average for some 196hours per month. As a result of this situation, 86% of Nigerian firms have their own generators which produce over half of their electricity needs. (Larossi, Mousley, Radwan 2009, 24). Therefore, firms will have to incur extra costs in the consumption of petrol or diesel.

There are also issues with the transportation infrastructure in Nigeria. The rail-way transportation system in Nigeria is completely crippled which means most goods have to be transported by road. However, this may be quite cumbersome as the state of Nigerian roads is bad, due to lack of maintenance.



Finally, corruption is one problem business organizations face in Nigeria. According to Transparency International's corruption perception index 2010, Nigeria was ranked 134<sup>th</sup> (of 178 countries). However, this is a slight improvement from 2009 when the country was ranked 147<sup>th</sup> in the world. There is an air of optimism that corruption will become less of a problem in future as significant efforts are being made by the government to address this issue.

### **3.3 Internet Penetration and Electronic Commerce Trends in Nigeria**

Internet usage in Nigeria is still relatively at a low level and therefore e-commerce is at a developing stage. However, researchers believe that there is an increasing awareness of the benefits and potential opportunities arising from e-commerce and as a result, e-commerce is slowly but surely taking off gradually in Nigeria (Folorunsho, Awe, Sharma & Jeff 2006). In the last decade, there were just a couple of dial-up email providers and internet service providers (ISPs) in Nigeria. Today, there are about 130 licensed ISPs as well as a number of data carriers, internet exchange and gateway operators. Nigeria is one of the biggest and fastest growing telecom markets in Africa, attracting huge amounts of foreign investments, haven overtaken South Africa to become the continent's largest mobile market with now over 75 million subscribers.

However, subscriber growth slowed significantly during 2009, partly as a result of the global economic crisis. Much of the remaining addressable market is in the country's rural areas where network rollouts and operations are expensive. This in combination with declining ARPU (Average revenue per user) levels is forcing the networks to streamline their operations and to develop new revenue streams from services such as 3G mobile broadband, mobile payments/banking, and others. The internet protocol (IP)-based next generation networks (NGN) are enabling the convergence of voice, data/internet, and video, realizing the provision of triple-play services that will also involve the country's competitive broadcasting sector. The

Nigerian Telecommunications' (NITEL) market monopoly which lasted for decades has been broken with the privatization of the telecom sector which resulted in the new entrants venturing into the market and providing more competition. At the moment, there are over 25 telecom operators in the country. The arrival of a third international submarine fibre-optic cable by Globacom, another telecommunication company and is set to revolutionize the market by reducing the cost of international bandwidth by up to 90%. (Lange 2010).

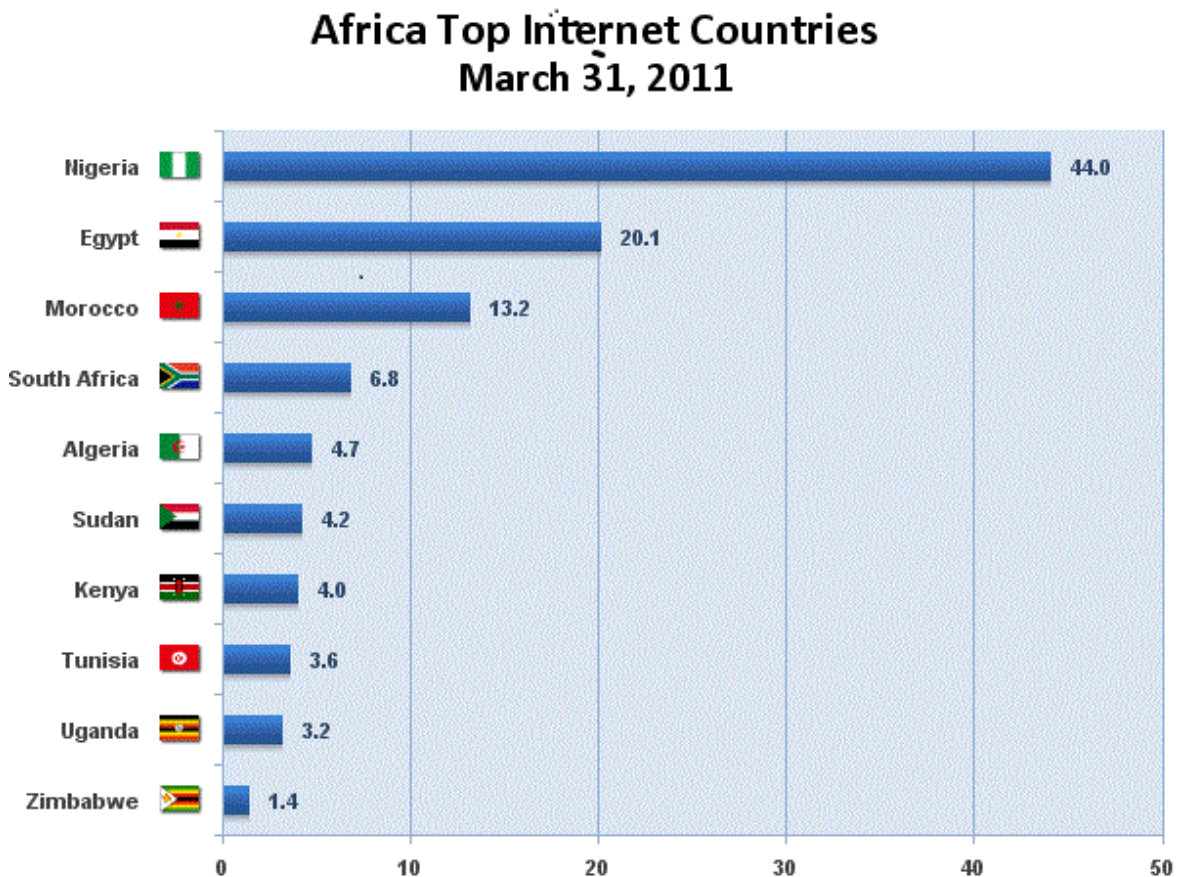


Figure 5. Top Africa internet Countries (Internet World Stats 2011)

Table 5. Internet Usage Statistics in Nigeria (adapted from internetworldstats.com)

YEAR	Population	Internet Users	Penetration (% population)
2000	142,895,600	200,000	0.1%
2006	140,003,542	5,000,000	3.1%
2009	149, 229,090	23,982,200	16.1%
2011	155,215,573	43,982,200	28.3%

Table 5 above shows the steady growth of internet users in Nigeria over a decade. The growth of a number of internet users from year 2000 to 2011 is sporadic as it recorded 28.3% growth rate. There were 200,000 internet users in Nigeria in year 2000. The number of internet users had increased to 5,000,000 by 2006 (3.1% of the country's national population). In 2009, the figure was more than triple as over 23 million people used the internet in Nigeria. By 2011, the number of internet users stands at 43,982,200 that is over a quarter (28.3%) of the country's population. The increasing number of internet users in the country shows a rapid and continuous growth rate and makes Nigeria the top internet country in Africa according to the above table 5.

Another area where e-commerce has had a boom in Nigeria is the banking sector. At present, over 90% of Nigerian banks offer online, real-time banking services which allows customers to perform banking transactions from the convenience of their home or offices. The growth of credit/debit cards and ATMs (Automated teller machines) is proving of the country's rapidly developing e-commerce. Nigerians can now pay, withdraw or transfer funds anywhere in the country with the introduction of MasterCard, Visa Card, InterSwitch, and e-transact. (Ovia 2007).

Ovia (2007) explained further that online shopping systems are also showing signs of development with the introduction of online shopping cards by Passport USA (PUSA), a Nigerian company. This shopping card which is initiated in partnership with MasterCard has been designed to make shopping over the internet easier and much safer. In addition, some online businesses like [www.234world.com](http://www.234world.com) and [www.booksng.com](http://www.booksng.com) have also sprung up over the years.

### **3.4 Problems of Electronic Commerce Adoption in Nigerian Businesses**

Despite all the impressive developments discussed in the preceding section, there is still a relative low level of internet penetration in Africa and this has been a major impediment to the adoption of e-commerce. The successful adoption of e-commerce in most Nigerian businesses is being hindered by factors such as lack of infrastructure, corruption, cost of implementation, security, lack of government support, authenticity, privacy among others (Folorunsho et al 2006, 2; Apulu & Latham 2009, 7). Details of these will be discussed below.

- Cost of Implementation – this is defined as the total amount it will cost business organizations to set-up an e-commerce system. Most Nigerian businesses ignore the adoption of e-commerce because of the high cost of its implementation and will rather opt for some other options of making fast profits.
- Accessibility – this is the extent to which the technologies such as internet, credit cards e.t.c needed for e-commerce are available for individual use. In Nigeria, the ease of accessibility to infrastructures and technologies that aid e-commerce is poor.
- Corruption – the issue of corruption is pandemic in Nigeria. Funds released for the development of e-commerce awareness campaigns in the country are being diverted into personal use by government officials.

- Owner Enthusiasm – business owners are not familiar with the potential benefits of adopting e-commerce. An owner's enthusiasm for technology is a major factor in the adoption of e-commerce. There is a need for owners to attend training programmes that will enlighten them on the advantages of adopting e-commerce.
- Cultural barriers – e-commerce adoption initiatives require openness and knowledge sharing, and cultures that lack these two ingredients cannot provide the required human input needed for such initiatives. Nigeria's cultural diversity makes this a challenge for organizations.
- Lack of policy/ institutional framework – though Nigeria has a formulated policy on information technology, this has not been properly implemented. These kind of policies are meant to support businesses' e-commerce initiatives.
- Electricity constraint – limited electricity supply in urban areas and lack of it in rural areas negatively affect the adoption of e-commerce. Electricity is needed to facilitate many e-commerce business processes and the lack of it hinders businesses from adopting e-commerce which results in the loss of potential benefits that can be derived from it.
- Security – by this the researcher means to what extent consumers believe their online payment is free from unauthorized access, use, alterations, and destruction. Various surveys have shown that Nigeria is the riskiest country for online transactions, as a result many Nigerians believe their credit card details are not safe over the internet.
- Authenticity – this is the ability of quality of goods and services displayed over the internet to be the exact quality it possesses. Nigerian businesses often misguide customers by over exaggerating what the real quality or contents of a product and/or service normally should be. As a result, customers will prefer to see and examine products and services physically before giving out their money.

- Privacy and Confidentiality – many Nigerians are unwilling to give out their personal information to companies based on the ease with which consumers' personal information can be captured online and misused. The lack of a good and enforceable data protection act negatively affects the successful adoption and implementation e-commerce in Nigerian businesses.
- Network Reliability – this describes the ability of a company to rely on the transfer confidential and critical information over the internet. Nigeria being a developing country means internet network signals are often very slow and as a result, internet users waste hours buying products they would normally have purchased in a matter of minutes.

## 4 RESEARCH METHODOLOGY AND CASE COMPANY ANALYSIS

The focus of this chapter is to present, discuss and justify the methodology and research approach of this study. It will also justify the reason for the choice of the method to answer the research question. Therefore, this chapter will include the discussion of research purpose, research approach, strategy, data collection methods, data analysis, case company analysis, and so forth.

Inquisitiveness is a unique feature of we humans and this has led us to ask questions about ourselves and our environment. Unquantifiable amount of questions cross our minds everyday and whenever such questions arises, we seek answers to them. "Thus, a systematic search of an answer to a question or a solution to a problem is called research". (Krishnaswami & Satyaprasad 2010, 1-2). Furthermore, to support this notion about human curiosity, Kothari (2004, 2) mentioned four reasons of conducting a research project. They are:

- To gain familiarity with a phenomenon or to achieve new insights into it.
- To portray accurately the characteristics of a particular individual, situation, or a group.
- To determine the frequency with which something occurs or with which it is associated with something else.
- To test a hypothesis of a causal relationship between variables.

According to Khanzode (2004, 3), research is a systematic activity to achieve the truth. A research comprises the collection of information, analyzing the information and finding the conclusion. Goddard & Melville (2004, 1) argued that research is not just the process of gathering information but the finding of solution to unsolved problems or creating that which does not currently exist.

In Myers' (2008, 6) own words, research is an original investigation undertaken in order to contribute to knowledge and understanding in a particular field. He stated further that research is a creative activity leading to the production of new knowledge. The knowledge produced is new in the sense that the facts, the interpretation of those facts, or the theories used to explain them might not have been used in a particular way before in that specific discipline. He also believes that research typically involves enquiry of an empirical or conceptual nature and is conducted by people with specialized knowledge about the subject matter, theories and methods in a specific field.

#### **4.1 Types of Research**

There are many ways of carrying out a research. But according to Sachdeva (2009, 14) and Zikmund & Babin (2009, 44) there are three classifications of research. Which are: exploratory, descriptive, causal.

Exploratory research is a type of research conducted to shed more light or to clarify a particular subject. It helps to determine the appropriate research design, data collection methods and selections of subjects. Exploratory research helps in determining whether a particular subject needs further research. Infact, it helps to save time money and effort that might have been wasted into carrying out surveys that will provide irrelevant information. (Zikmund & Babin 2009, 44).

Descriptive research includes surveys and fact-finding enquiries of different kinds. A descriptive research is meant to describe a situation or state of affairs as it exists at present. (Kothari 2004, 2). In the field of business, descriptive research describe things such as the market potential for a products or the demographics and attitudes of consumers who buy the product. it answers the questions who, what, where, when, and how. (Sachdeva 2009, 15).



Finally, causal research seeks to identify cause-and-effect relationships. This approach is used to predict and test hypotheses, and it can also be used for discovery and explanatory purposes. In the field of marketing, this research can be used to test marketing scenarios, such as what might happen to product sales if changes are made to a products design. (Sachdeva 2009, 15).

Mainly, this particular study would be descriptive in nature. it will tend to describe and explain how Richbol carry out their current business processes and how e-commerce can be implemented into the business.

#### **4.2 Research Approach: qualitative and quantitative Comparison**

In order to justify the reason the researcher has chosen qualitative over quantitative approach, he will establish the difference between the two methods.

Quantitative research methods were initially developed in the field of natural sciences to study natural phenomena. Examples of quantitative methods are survey methods, laboratory experiments, formal methods (econometrics), and numerical methods (mathematical modeling). On the other hand, qualitative research methods were developed in the field of social sciences to enable the social scientists to study social and cultural phenomena. Examples of qualitative methods are action research, case study research, and grounded theory. (Myers 2008, 8).

Sachdeva (2009, 182) stated that the purpose of qualitative research is based on gathering data which provides a detailed description of events, situation and interaction between people, things, providing depth and detail. In comparison, quantitative research approach is normally used for theory testing, which requires the researcher to keep a distance from the research in order to avoid bias results. Zikmund & Babin (2009, 95) added that while in qualitative research large

respondents are usually not the source of data, the opposite is the case in quantitative research. The difference between these two approaches are further illustrated in the table below.

Table 6. Differences between qualitative and quantitative research

Research Agenda	Qualitative	Quantitative
Focus	Understand and interpret	Describe, explain, and predict.
Involvement	High as participant is researcher and catalyst	Researcher keeps himself away to reduce bias
Purpose	In-depth understanding, theory building	Describe, predict and test theory.
Sample Design	Non-probability, purposive	Probability
Sample size	Small	Large
Data type	Verbal or pictorial description	Data is reduced to numerical codes.
Research design	May evolve during research	pre-determined.

Source: (Sachdeva 2009, 182)

Due to these explanations, this research is based on qualitative approach. The answers to the research question cannot be quantified or measured in numbers. Furthermore, as the purpose of this thesis is to propose an e-commerce business framework while trying to understand Richbol's current business practices, a qualitative approach is the method that suits it best.

### **4.3 Data Collection Methods**

Sachdeva (2009, 109) defined data as “a collection of natural phenomena descriptors, including the results of experience, observation or experiment, or a set of premises, which may consist of numbers, words, or images, particularly as measurements or observations of a set of variables”. Data collected can come from primary and secondary sources. Primary data result from first-hand experience and observation (Guffey & Loewy 2009, 259). This means the researcher obtains the data by himself through observations, surveys, interviews, and so on. On the other hand, secondary data comes from what have been experienced or observed by others. Secondary sources are usually books, articles, and other publications made by people with a second-hand knowledge of a subject (Macqueen 1998, 52).

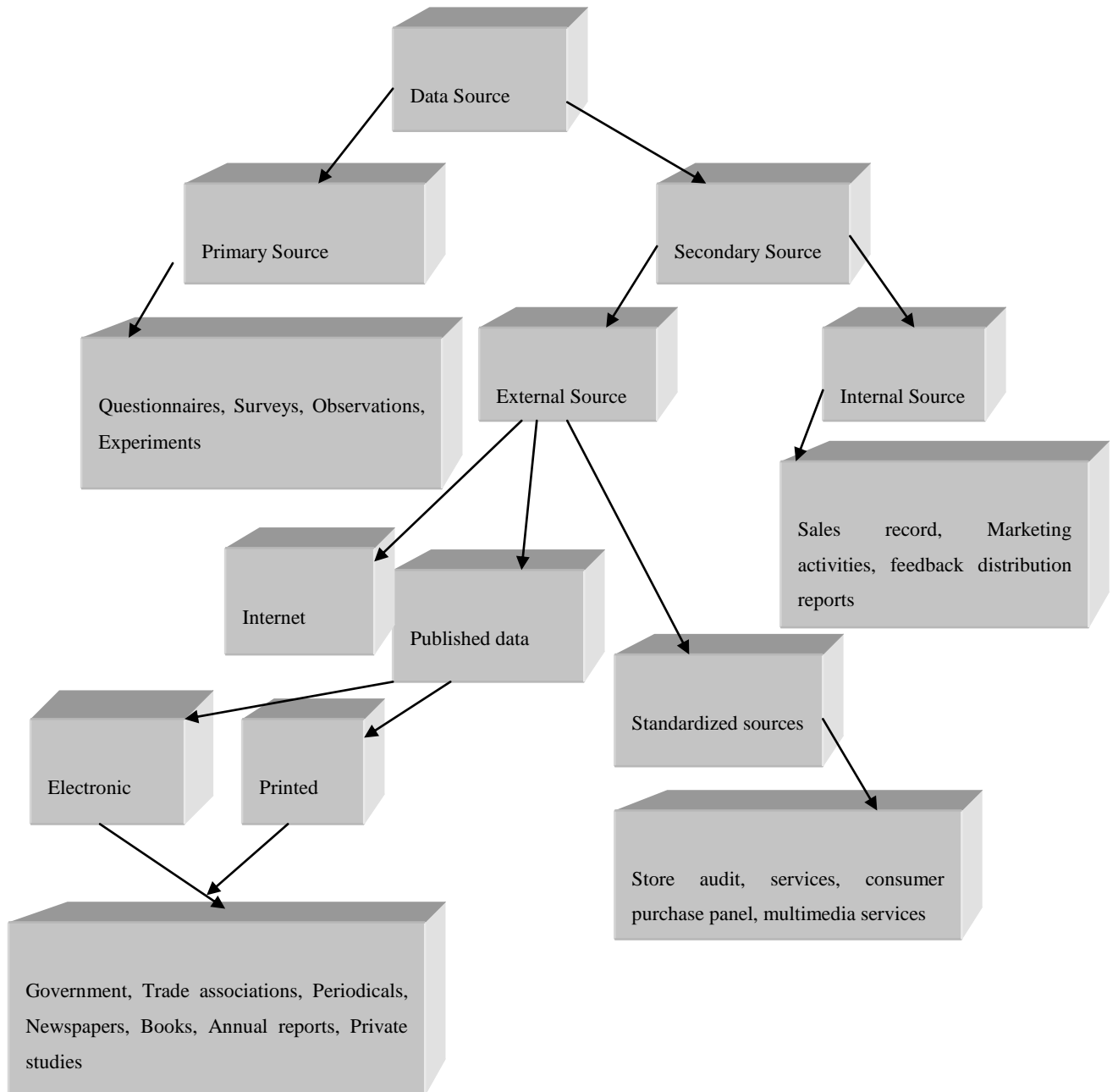


Figure 6. Data Collection Flow Chart (Adapted from Sachdeva 2009, 111).

#### 4.3.1 Primary Data Sources

The major primary data sources are observation, experimentation, interviews, and surveys. Each of these will be explained below.

**Observation:** This is the most commonly used method, most especially in the field of behavioural sciences. Under this method, information is gotten by first-hand investigation rather than asking from a respondent. (Kothari 2004, 96). Observational tactics can be the counting of the number of cars passing by a potential site for a fast-food restaurant or checking the license plates at a shopping center near a state line to determine where shoppers live (Boone & Kurtz 2011, 252).

**Surveys:** In contrast to observation, surveys involve the direct collection of data from people. It is one of the most important areas of measurement in applied research. A survey can be in two forms, namely; questionnaire and interview. Questionnaires are used in cases of big enquiries. A questionnaire consists of a number of questions printed in a definite order on a form. In addition, questionnaires are mailed to respondents who are expected to read and fill them. (Kothari 2004, 96). However, Kothari (2004,97) mentioned that “Interviews involves presentation of oral-verbal stimuli and reply in terms of oral-verbal responses”. Interviews can be divided in to personal interview and telephone interview. Personal interviews are the best means of obtaining detailed information about respondents. Also, it can be conducted at respondents home, or workplaces, and it helps to establish good rapport between the interviewer and the respondent. On the other hand, telephone interviews are a quicker and inexpensive way of obtaining information from respondents via the telephone. (Boone & Kurtz 2011, 254).

**Experimentation:** This produces data suggesting causes and effects. It can be divided into formal and informal experimentation. The formal experimentation is undertaken by scientist, professional researchers who control variables to test their effects while informal experimentation could be as simple as pre-test and post-test in a college course. Did students expand their knowledge as a result of the course? (Guffet & Loewy 2009, 264).

### 4.3.2 Secondary Data Sources

Guffet & Loewy (2009, 259-260) mentioned the various sources of secondary data, and they are: print resources, electronic databases, and the Web.

**Print resources:** Print resources can be found in most libraries and they come in the form of books, periodicals, and bibliographic indexes. Books might become quickly outdated but they provide first class historical, in-depth data on a wide range of subjects. periodicals on the other hand provide limited but current coverage. They provide current information because they are issued on a periodic basis, and they come in the form of magazines, pamphlets, and journals.

**Electronic Databases:** An electronic database is the collection of information (bibliographic as well as full text documents) that has been stored electronically and can be accessed by computer. Most databases are increasingly being available to researchers for free as a result of schools and libraries offering several commercial databases. Examples of resources that can be accessed are magazines, journal articles, government data, newsletters, business reports, company profiles, reviews, and directories.

**The Web:** The Web is a vast network on resources and as result the largest source of secondary data. It includes a large amount of Web sites around the world with trillions of pages of information available. Offerings on the Web include online databases, magazines, newspapers, library resources, sound and video files, and many other information resources.

### 4.4 Validity and Reliability

Validity is an important criterion for effective research because an invalid research is completely useless (Cohen, Manion & Morrison 2007, 133). Validity can be defined as the extent to which the instrument measures what it purports to measure. There several kinds of validity, which are: content, criterion-related, construct, internal, external, concurrent, face, jury, predictive, consequential, and

so on. All these types of validity will not be discussed because they are not all useful in this particular study. However, the author will briefly explain internal and external validity. Internal validity looks to demonstrate that the explanation of a particular event which a piece of research provides can be sustained by the data. External validity is the degree to which results can be generalized to the entire population. (Cohen, Manion & Morrison 2007, 133-137).

Reliability refers to the extent to which test scores are free of measurement error. There are usually three elements in a score gotten from a test, and they true score, systematic error, and random error. However, reliability has to do with random error because it fluctuates from one measurement to the next and it is unpredictable. Measuring something unreliably hampers the trustworthiness of a result. Thus, unreliability is a huge problem. The two main forms of reliability are: repeated measurement and internal consistency. Repeated measurement has to do with our ability to measure the same thing at different times while internal consistency refers to how homogeneous the items of a test are or how well they measure a single construct. (Daniel 2004, 71-73).

In order to make this study relatively reliable, the latest and most applicable theories have to be used to provide a brief overview of the research problem, and develop the research questions. The theories used were current and appropriate for the research study.

## **4.5 Case Company**

### **4.5.1 Richbol Environmental Services Ltd**

Richbol Environmental services Limited have been in the waste/environmental management industry for over two decades, with operations covering every, major

cities in Nigeria as well as in Ghana. They work in collaboration with academicians and other researchers in the field of waste management within and outside Nigeria. Also, they have working arrangements with some foreign companies who in most cases act as their technical partners.

Richbol Cleaning Services was registered as an enterprise in Nigeria in 1986, as a collector of waste, cleaning of premises and industries, general contractor, septic and soak away cleaning and so forth. However, in 1999, the company became a limited liability company and had its name changed to Richbol Environmental Services Limited. With the new name, the scope of business nature was expanded to include general environmental services.

#### **4.5.2 Richbol Environmental Services Ltd's Operations**

Richbol provide supportive and realistic services on sustainable integrated solid waste management practice, that will be private or public sector driven, through the project / practice they also develop small and medium enterprises (SMES), for job creation and poverty alleviation while maintaining clean, beautiful and healthy environment that is conducive for all positive human activities / endeavour from the nuisance called waste (filth) and also offer high quality professional services based on sound technological competence and full understanding of the local peculiarities.

They work in collaboration with other consultants and researchers in the field of waste management within and outside the country, they also represent and have working arrangement with some foreign companies / partners who in most areas act as their technical partners. They help governments and other agencies build environmental based website(s), linking them to similar websites, organisations, agencies and donor groups overseas. They also help government build



environmental/ integrated solid waste management Data-Base used for planning, funding and revenue generation.

Additionally, the company by extension amongst other things has consulted for Ford Foundation West African Office, through their Managing Director, who is a co-consultant to the organization on "Lagos Waste Management Project", he was also part of the participants that went to under study Integrated Solid Waste Management in Cairo Egypt in April 2002 and was also in four states of the United states of America (Pennsylvania, Delaware, New Jersey and New York) for the same purpose and also to attend an International Solid Waste Management conference in 2003. He was also part of the CWG (Collaborative Working Group) on solid waste management in low and middle income countries in Kolkata, India in 2006 and in Ouagadougou, Burkina Faso in December, 2008.

As a member of the International CWG - Collaborative Working Group on solid waste management in low and middle income countries, they propagate the ideal of the organization in Nigeria through free distribution of valuable publications of the CWG. They put together all their technical competence / know-how and experience in assisting state Governments to provide job opportunities for the citizens and also create a beautiful and healthy environment within the state.

They have also successfully implemented series of development programmes on various challenges aimed at improving the lots of the citizenry through seminar / workshop conference, training and consultancy, etc. Also, they are presently pioneering the sales of range of waste / recycling machinery / equipment in the country as part of "integrated waste management". This is because they represent quite a number of reputable manufacturers of these equipment who have established reputation for high quality products with ease of maintenance and very competitive pricing. Through this arrangement we also supply waste collection & disposal trucks. Below is a list of their product and services:

- Integrated solid waste management
- Environmental consultancy
- Sales of all kinds of recycling machinery
- Waste recycling activities
- Landfill technology and facility management
- Waste treatment and incineration technology
- Cost recovery and training programmes
- Sales of waste and environmental management trucks/ equipments
- Office and industrial cleaning
- Landscaping and beautification
- Fumigation and pest control
- Building of environmental database and software

(Richbol [ref. 6. 12. 2011]).



Figure 7. Plastic Bin and Road Washing Trucks (Richbol [ref. 6.12.2011]).

#### 4.5.3 Richbol Environmental Services Ltd's Organizational Structure

The Company has on its board very experienced individuals in the field of business and environmental management. The company has well over twenty-five regular staff, aside from several semi and unskilled workers used for majority of the operations. Figure 7 below illustrates the organizational structure of Richbol Environmental Services Ltd.

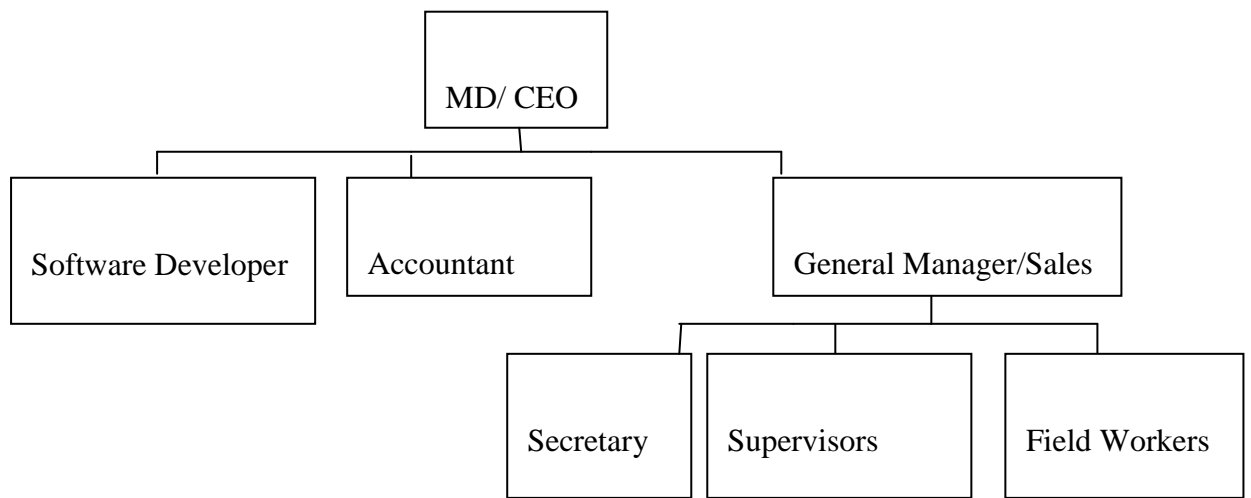


Figure 8. Organizational Structure of Richbol Environmental Services Ltd.

## 5 CHANGE OF BUSINESS MODELS

There is a popular saying that “when the game gets tough, change the game”. This is consistent with the issue of changing the business model of a business organization. Old practices are no longer as effective as they used to be as a result of the emergence of a new business environment. Businesses have gotten to a point where old business models need to be changed or improved with regards to complexity, speed, and effectiveness. This is because; there is a dysfunctional mismatch between today’s business environment and the traditional business model. Great transformations (especially in information and communication technology) have been shaping the economy and business environment for the best part of the last decade which has significantly changed the requirements for running a successful business. However, in this new business environment, traditional business models have survived but have lost its effectiveness significantly. (Kotelnikov [ref. 8.12. 2011]). A researcher mentioned four reasons/ motivation behind the change of business models:

- Old business model is failing to deliver adequate growth.
- Old business model is failing to deliver adequate profits
- A new business is required due to external changes such as regulation, technology.
- A new business model is required in a new market or product segment.

(Brown [ref. 8.12.2011]).

Therefore, this section focuses on the central idea of this thesis i.e. the change of business models. There will be discussions on the old business model currently being utilized by the case company (Richbol) and its effectiveness. Also, the author will present the general new business model that will be proposed to the company in relation to sales and logistics process. However, because of the wide range of products and services offered by the case company, our focus will only

be on just one aspect of their business which is; the sales of waste and environmental management trucks and equipments such as litter picking devices, plastic waste receptacle, plastic waste bags, litter bins, waste compaction trucks, street cleaning/sweeping etc.

## **5.1 Richbol's Business Model (online business card)**

The case company utilizes a business model that can be described as a “brochure site” business model or an online business card. The company has a website providing the name of the business, some information about their products and services, the company's client, company's activities, and contact information. So, people interested in getting more information are asked to call the company. This kind of website, is a kind of internet billboard rather than a money making venture in itself. This amounts to not much more than an electronic version of the traditional marketing brochure.

### **5.1.1 The Transaction Process**

After a prospective corporate or individual buyer has gone through the company's website, he may contact the company either via the telephone, visiting the company's business premises, or an e-mail asking for more information about a particular product or in other cases, placing an order for the product he has an interest in buying. The company then sends an invoice to the customer together with the terms and mode of payment. Afterwards, the customer will have to pay for the product directly to the bank, and come to pick their products up themselves (for individual clients) from the company's warehouse or in the case of corporate clients; the company (Richbol) takes responsibility for the transportation of the purchased product.

The downfall of this business model is that, there is no online presence in the business processes, and the company does not have an existing logistics infrastructure to support the supply activities. Also, it takes a large period of time to complete a single transaction, thereby leading to waste of time, energy, and resources.

## **5.2 The New Business Model (E-shop)**

After taking a closer look at the products being offered by the case company, the author decided to recommend an e-shop business model to the company because it can serve as a perfect fit. Also, this has been chosen because it is the most basic and less complex of all kind of e-commerce business model and it is focused on cost reduction, and access to new markets. E-shop is the most common form of e-commerce business model. The basic core of this business model is online catalogue; in that, it involves a company presenting a catalogue of its products online to customers and providing means by which such customers can purchase these products. E-shop websites contains facilities for ordering and paying for products electronically. (Open university [ref. 14.12.2011]). In order to understand how effective and advantageous this new business model would be for the case company, the author will discuss the key aspects such as logistics and sales system that makes this new model superior to the old one in the following sections.

For Richbol Environmental Services Ltd, setting up an e-shop should not be as tasking as it used to be a few years ago. Nowadays, there are two main ways in which they can integrate this new business model. They can either opt to purchase an e-commerce software which is an easy way to kick-start their online business, or upgrade their existing website into an e-commerce site with the help of a specialist (this is also a viable option for the case company because they have a software developer) either internally or externally. The e-commerce software

usually comes with great features such as shopping cart, hosting, and credit card processing and payment gateway integration.

### **5.3 Logistics System**

The logistics structure of a company utilizing an e-shop business model must be well coordinated and managed because its functionality and importance cannot be overemphasized. A Logistics system is based on a total system view of the effective flow of goods or services from the point of origin through to the point of consumption, thus, conforming to costumers' requirements (Lai & Cheng 2009, 35). A much more comprehensive definition was offered by Bhatnagar (2009, 88) in his book; "logistics system refers to designing, developing, producing, and operating an integrated system which responds to customers expectations by making available the required quantity of required quality products as and when required to offer the best customer service at the least possible costs". A well structured and planned logistics system will result in increased efficiency, improved customer service, increased sales, and improved relationships with customers. However, for the effective coordination and completion of logistics tasks, there are four essential elements of logistics which contribute to the effectiveness. They are namely; customer service, order processing, inventory management, and transportation. Figure 9 illustrates these elements and they are briefly discussed below.

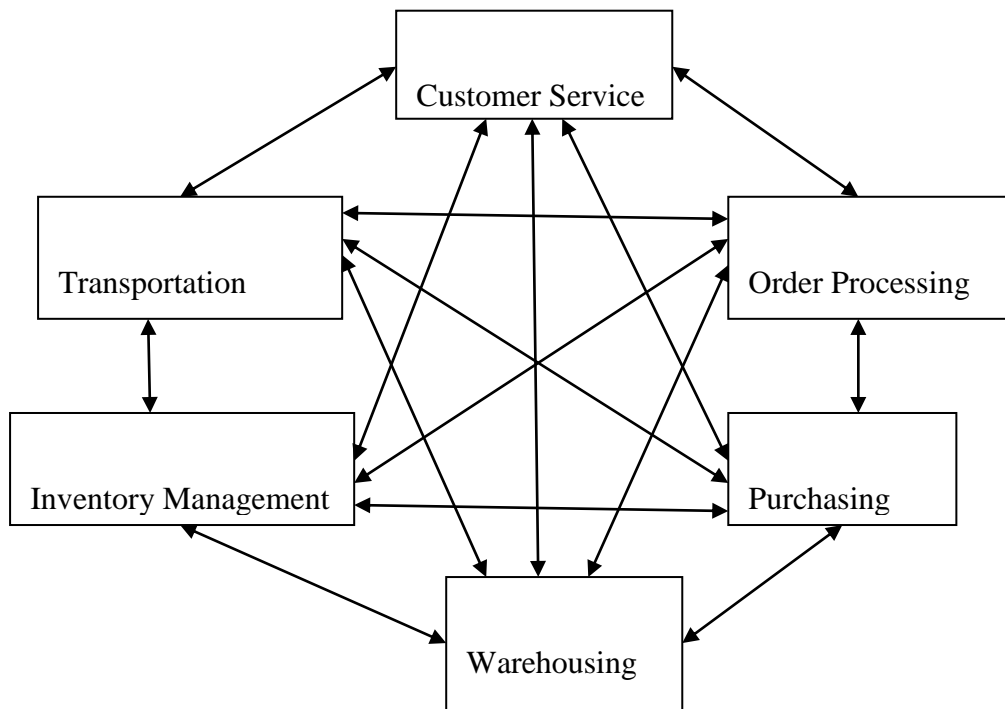


Figure 9. Core Logistics Elements (Lai & Cheng 2009, 37).

- **Customer Service:** This refers to satisfying the customer. It is all about getting the right product to the right customer at the right place, in the right condition, and at the right time at the lowest possible cost. Customer service plays a major role in creating, developing, and maintaining customer loyalty as well as satisfaction.
- **Order Processing:** This has to do with collecting, checking, entering, and transmitting sales-order information. The information collected serves as a useful data for market analysis, financial estimation, logistics operations, and production.
- **Inventory Management:** This involves keeping stocks at optimum level. An effective and efficient inventory control can lead to huge reduction in logistics costs.



- **Transportation:** This has to do with the methods for the movement of goods between parties in the supply chain. Selecting and utilizing appropriate transportation modes, routings and so on is important for every modern firm. (Lai & Cheng 2009, 39).

In a more practical sense, all e-shop businesses have a well set-up logistics system. In most cases, they enter into some sort of alliances with transportation companies or courier companies in order to get goods as fast as possible to their customers. For instance, Lindex ([www.lindex.com](http://www.lindex.com)) is an online shop that sells different kind of clothing and other accessories for women, and kids. They make use of the **supply chain solutions** provided by logistics giants, UPS (United Parcel Service). With this kind of system, UPS moves goods ordered by customers on Lindex's website to the required destination in a matter of days. This makes it easier and possible to; process customers' orders in time, provide first-class customer service, manage their inventory efficiently and most importantly to deliver goods at the required time. Logistics companies such as UPS, DHL, and Lufthansa Cargo provide these kind of **supply chain solutions** for online businesses which makes it easier for them to get products faster to the market, move products internationally, design own supply chain networks, manage post-sales and returns, and so forth.

### 5.3.1 Old and New Logistics System

The case company (Richbol) has a zero or non-existent logistics set-up as customers (most especially individuals) are expected to pick up their goods themselves. This of course means extra cost on the part of the customers and this might be so inconvenient. Therefore, for a business aspiring to adopt an e-shop business model, it is paramount to establish a logistics system as the success of such business model heavily lies on logistics. It is a strategic way to add value to a business, it makes running a business easier, and it lets a business serve customers better.

Furthermore, the management of Richbol Environmental Services Ltd can take advantage of this opportunity by integrating **supply chain solutions** which is provided by one of the various logistics companies into their website. Integrating this kind of system into their e-shop business will go a long way in determining the success of the company. In this case, the author recommends that the management of Richbol Ltd. integrates the UPS Developer Kit.

The UPS Developer Kit is designed to improve a company's efficiency, accuracy, and flexibility. UPS Application Programming Interfaces (APIs) are programming instructions and standards for accessing and integrating UPS functionality into e-commerce websites or enterprise applications. APIs require internal or external Information Technology (IT) developers to write XML code in order to integrate within a customer's systems. Two types of APIs exist, both using Extensible Markup Language (XML). The first type of API uses straight XML; the second type uses Simple Object Access Protocol (SOAP) and Web Service Definition Language (WSDL). Furthermore, customers of the case company (Richbol) can benefit from an improved user experience and employees can become more efficient through the integration of UPS transportation functionality like Rating, Shipping, or Tracking directly into their enterprise business applications and website.

### **5.3.2 Integrating the New Logistics System**

The management of Richbol Ltd. is confronted with two options when integrating this logistics technology, that is; to buy or to build the technology. If they choose to build, they would need an in-house developer (IT personnel) who has the expertise to integrate the APIs or a third-party developer (an external IT personnel). Both types of developer will receive technical support directly from UPS. One difference is that during the registration and certification process, an in-house developer can handle the process independently, but the third-party integrator must register and certify the APIs on the company's behalf.

On the other hand, should the company's management choose to buy the logistics software, they will have to contract with one of UPS' Ready Providers. These are companies that have the approval and certification from UPS to integrate UPS APIs directly into their software. It is the responsibility of the company's management to evaluate the quality of the software, determine whether the software meets their business needs, and evaluate the technical support provided by the UPS Ready Provider.

Although the APIs offered by UPS are available at no charge, the management should consider the time and resources that their company needs to integrate the APIs into their business systems. This cost could be moderate or substantial based on multiple variables. Before integrating, it is advisable to map out a plan that will help the company determine expense and length of development. Below is a list of the possible points they should consider before integrating:

- Mapping and documenting business processes and pain points.
- Detail business needs and document the software functionality required to address pain points.
- Identifying appropriate APIs to meet business needs.
- Request estimates from IT staff on whether to build or buy technology.
- Determine developer skill level required for XML or Web Service coding.
- Evaluate cost and time to integrate the APIs (build) or purchase software with APIs integrated (buy). Evaluation should include:
  - Number and type of platforms and systems impacted
  - High level impacts to interfaces and internal processing logic of each system
  - Number of APIs to be integrated
- Complete cost benefits analysis, including support.

- Make a decision to build or buy based on estimated cost and time to integrate APIs.

### 5.3.3 The API Integration Process

Richbol Environmental Services Ltd can implement a customized integration of UPS APIs based on their particular systems, platforms and software. Customization requires expertise and resources. Only programmers who are knowledgeable in XML/Web Service coding are qualified to integrate the UPS APIs. To ensure that Richbol Ltd's business system or website is properly programmed and integrated, it is recommended that their IT personnel (software developer) or a qualified Third-Party Integrator implement, program, test, and certify the UPS functionality. The process for integrating the API is discussed below:

- **Implementation:** Firstly, the developer must review the requirements for each API carefully at the UPS Developer Kit page at [www.ups.com](http://www.ups.com) . Afterwards, download the Software Developer Kit (SDK) and carefully review the entire Developer Guide for the API that will be integrated. The Developer Kit also includes sample code and WSDLs. Once the kit has been reviewed, the developer/ integrator should request access to the UPS test environment. Most APIs provide immediate access to both test and production environments.
- **Testing:** UPS provides a testing platform that is accessible with an Access Key for all APIs. This will enable live request stimulation and response messaging to ensure the company's XML or Web Service requests has been properly formatted.
- **Certification:** It is paramount for the company's implementation to meet UPS requirements in order to gain production access. Further information on the steps required for certification are outlined within UPS Developer Guide.

- **Get Technical Support:** The company can obtain e-mail support at [www.ups.com](http://www.ups.com) at any time. This can be done by attaching a file with company's e-mail support request that includes the company's XML request/response messages and errors.

#### **5.3.4 How Will The UPS Logistics Technology Work at Richbol Ltd.?**

Let us assume that Richbol have re-modified their website into an e-commerce site for their waste management equipment products such as; waste litter picking device, and plastic bin. Subsequently, they successfully integrated the UPS logistics technology into their e-shop website. This means order entry is automatically linked to a UPS shipping system.

Furthermore, a client visits the company's website and places an order for six plastic bins. When placing the order, the client and the company will have access to pick-up option; package or Less-than-Truckload (LTL). The pickup option enables the company and client to schedule the pickup of the shipment. After completing the transaction, the client gets shipment information which includes the scheduled delivery date and time as well as the number of days in transit.

Subsequently, the client can track the shipments right from the company's website by using the order number. Also, the client can find specific details about his shipment's status, including the time and location of each scan as the package moves toward its final destination. With this functionality, customers return to the company's site to track their shipments or to check the status of their order. This return traffic could lead to repeat customers and more sales. Also this UPS APIs will allow Richbol Ltd. to give their customers a wider range of service levels and rates. This means that, their customers will be able to compare, rate, and select shipping services that best fit their needs and budgets. For example, their

customers can choose express services when they need their packages right away and standard services when they have more time for delivery.

In addition, this logistics technology by UPS will help Richbol Ltd. to build customer relationship, maintain their current customer base and even gain more along the line. In summary the company will be able to;

- Generate specific shipping charges for each of their customer's product purchases.
- Generate specific shipping charges for each shipping option available to customers.
- Create attractive pull-down menus which the online customers can use to make their shipping choices.
- Improve customer service by providing consistent, up-to-date shipping information based on the origin and destination addresses and the date the shipment is needed.
- Plan and manage inventory levels by controlling when the company receives merchandise.
- Offer end-to-end customer service
- Drive additional traffic to their website
- Lengthen the amount of time their customers spend on their website

On the other hand, Richbol Environmental Services Ltd's customers will be able to:

- Find accurate service and rate information from UPS on Richbol's website.
- Compare total shipping and handling charges for different UPS service levels.

- Save money by choosing the best shipping option for their needs every time.
- Learn when their packages will arrive and how much shipping will cost.
- Review delivery options when placing their order at Richbol's website.
- Synchronize the arrival of multiple packages with different points of origin

## **5.4 Sales System**

Generally, the aim of setting up an e-shop is to reduce the cost incurred during the sales of a product (and increase in profit) because then shopping becomes more of a self-service operation. Usually, the sales department is the most affected by the change to e-shop because a different sales system has to be integrated. (Bauchnecht, Madria & Pernul 2000, 200). Continuous changes in business environment prompts sales managers to source for new ways of carrying out the selling process. Realistically, every department in a company has some kind of role in Sales. Since sales is the end-goal of a company, then everyone from HR (human resource) to Finance to R&D (research and development) to support & service has a role in the sales process. The context may vary, but everyone plays a part in either getting customers or keeping them. (Albee 2006).

### **5.4.1 The Sales System at Richbol Environmental Services Limited**

The sales system in the case company is rudimentary and has been obviously designed to fit in with their current business model. Most of the sales issues are left in the hands of the sales manager/representative. The sales representative spends most of his time searching for customers, responding to customer orders (by sending invoice/ quotations), resolving credit issues, and other ancillary

activities. As a result proper information is not being kept because of the huge amount of paper work that needs to be done. This makes it difficult for the sales representative to quickly find needed information. Also, due to a lot of paper work, there is a lack of relevant, real-time, personalized customer information (e.g. order histories) that would help build customer intimacy. Furthermore, due to the fact that Richbol Ltd's selling activities are carried out entirely offline, it makes it difficult for the sales manager to draw up a sales forecast that the company's management can have a high confidence level in, for planning marketing strategies.

Therefore, the focus of the company now would be to increase productivity in their sales department via the deployment of sales management tools that are designed to improve sales representatives' ability to serve customers.

#### **5.4.2 E-shop Sales System (sales portal)**

E-shops use different kind of **sales management tools** in order to serve their customers even better. One of such tool is **sales portal software**. A portal can be defined as an online interface that delivers information and interactions that help accomplish a goal. Sales portal is a collection of sales information and forecasting applications that help salespeople work more efficiently and effectively in customer interactions and in completing indirect sales tasks. So, a sales portal should increase sales effectiveness through delivering actionable information and tools that help salespeople close deals. A sales portal should inform, educate, nurture and connect the employees of a company to help them engage with each other in productive activities that increase the company's overall success at achieving strategic objectives. (Albee 2006). However, the author suggests e-source sales portal to the management of Richbol environmental services Ltd.



The e-source sales portal is a program provided by Azox (<http://www.azox.com>) which enables an online business to service a customer in time and recommend other products that are available for sales. This sales portal provides sales managers/representative with the tool to manage customers in the following ways:

- The ability to place orders, update customer info, and send out e-invoices all from the sales portal.
- Place orders on behalf of customers and provide accurate inventory and pricing.
- Have a full dynamic view of a customer's Microsoft Dynamics GP history with up-to-date order status, invoices, and account statements.
- Ability to keep track and see everything their customers have done.
- Ability to view invoices, make payments, view payment history, view yearly statements and reprint statements all from a secure webpage.
- View account history and search invoices, returns, payments, credits and debits. Search by purchase order, document date, or document number.

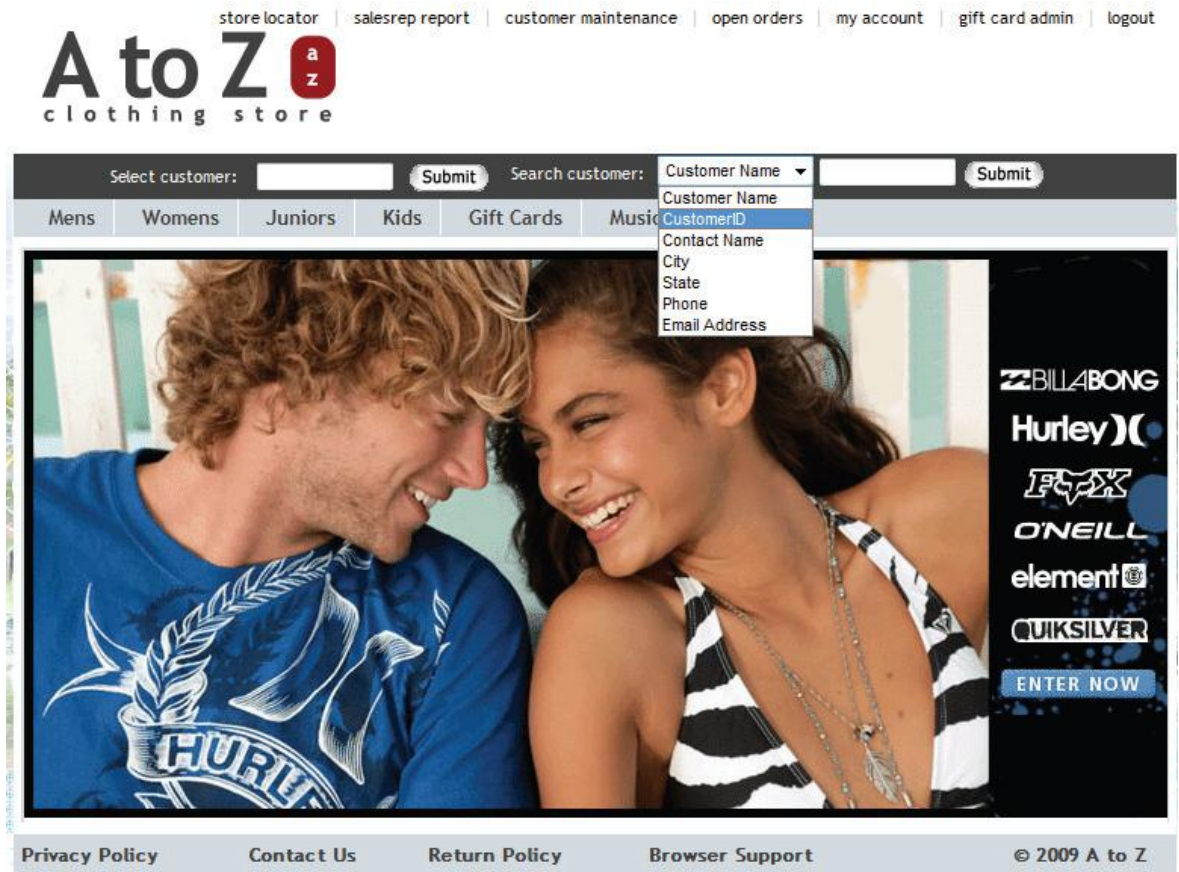


Figure 10. An example of the E-source Sales Portal (e-source [ref. 21.12.2011]).

### 5.4.3 Integrating the Sales Portal on Richbol's Web Page

For the case company, integrating the e-source sales portal will require the help of an IT expert who has knowledge of the technical aspects involved in the installation of the software. The installation of the program usually requires a few downloads of some files but the IT expert needs to check for the following system requirements and sales portal server specifications:

- CPU-Dual 1.5 CHz/RAM-2 GB DDR/HD-U320 Scsi 40GB Raid-1 & 40GB Raid-1
- Secure, high speed connection to SQL server hosting Microsoft Dynamics GP database

- Microsoft Internet Information Server 6.0
- Microsoft Internet Explorer 6.0 or higher
- Microsoft Dynamics GP 10 - GP 2010
- Microsoft .NET Framework
- Windows Server 2003 or later
- Internet Information Server (IIS) 5 to 7
- Microsoft SQL Server 2000 or later

The e-source sales portal will help to streamline Richbol Ltd's business processes, improve the productivity of the sales department and support the sales manager by providing clear, relevant data. This will eliminate all of the previous manual processes while integrating on their webpage, access to all relevant customer sales data.

## 6 EMPIRICAL DATA (Testing)

This chapter reveals the responses collected from the Managing Director, and the general/sales manager of Richbol through telephone interviews. The questions were asked in order to get their views on the proposed new business model (e-shop model) and whether they have intentions of putting it into use. The respondents' responses are presented in systematic order.

### 6.1 Respondent One

Name: Adebola Olugbenga

Gender: Male

Company: Richbol Environmental Services Ltd.

Designation: Managing Director

Mr. Adebola Olugbenga is the Managing Director of Richbol Environmental Services Limited, a seasoned entrepreneur who is committed to making the environment less polluted. He is also the author of several publications on environmental issues.

**I noticed that your company has a software developer; therefore it is surprising that you have not really thought of doing business online. Why haven't you adopted this e-system up till now?**

Mr. Olugbenga said the main responsibility of the software developer is to develop waste management software that aids in cost recovery which is a vital tool for sustaining and improving all efforts of solid waste management world over and not to give them advices on what kind of business processes is best. He said few years back, the Nigerian business environment was not well developed for e-

commerce and because of this; his company has avoided any form of e-commerce business model for so many years. He added that his main concern about e-commerce business model was with online payment safety issues as there are wide spread cases of online fraud/theft.

**The change of your current business model to an e-shop model will bring about changes in some business processes which includes logistics and sales process. Do you think your company is prepared to make this change?**

The managing director said it was just about time for them to make that change they have been hesitating to make in a long time. He said most of the company's competitors in the same industry have not taken the step into online business and this will give the company a competitive edge over them. He said however, the market is changing all the time and for this reason, complacency is a luxury his company cannot afford to have at this period. Hence, the need to find ways for the continuous improvement of the company. He mentioned that the company has highly-skilled human resources, IT resources, and large business connection that would make the change of business model both worthwhile and smooth.

**Do you think the Nigerian business environment is well developed for the adoption of e-commerce business model nowadays?**

Mr. Olugbenga believes that a lot of things have changed in the Nigerian business landscape over the years and there are now a large number of companies that are changing their business model from traditional business model to e-commerce business models. He said this is a welcome development especially with the government making huge strides by investing in information technology. He said the market is very well equipped to handle the rigours of e-commerce and this might be the right time for business to consider changing their business models.

**With your current business model, I noticed your company does not have an established logistics system. How have you been able to cope with this situation for years?**

Mr. Olugbenga said most businesses like theirs do not have an established logistics system and this has been due to a lack of many options when it comes to

the delivery of goods coupled with the poor state of Nigeria's infrastructure. He said that is why the company urges her individual customers to come and get their goods themselves because it saves Richbol the stress and extra cost of carrying out such services. He however stated that such is not the case for their corporate customers as the company (Richbol) takes care of the transportation of the goods themselves mostly through some local logistics companies. He however, said that their clients understand quite well the kind of business environment they operate in, and therefore they do not usually have any issues with the way business is being run. In his opinion, this is a quite an effective system that works well for the business at the moment

**What is your view on the new logistics system considering the technicalities, potential business benefits, and other factors such as the cost of implementation?**

Mr. Olugbenga said he understands the importance and need for a company to have a well established logistics system. He certainly buys the idea of adopting an e-shop business model and believes having a well established and functioning logistics system is a prerequisite for success of any e-commerce business model. He sees it as a cost cutting avenue and a means to serving customers better. He believes the company has the resources in terms of personnel and funds that are required for the implementation of such a powerful logistics system.

**The nature of your current business model has meant that your current sales system is manually administered. How would you view a new e-sales system that totally eliminates this cumbersome task?**

Mr. Olugbenga said he is impressed by the amount of paper works that would be forgone if the company integrates a sales portal into their website. He is quite upbeat about the prospect of utilizing such program that would streamline their selling process. He however confirmed that he will discuss this issue with the general/sales manager of the company.

**To what extent do you think the e-shop business model can propel your business?**

Mr. Olugbenga said the new business model will give Richbol a competitive edge in the market and it would enable them to easily break into markets that they have been aiming to enter for several years. He believes with the co-operation of the entire company, this can become another success story.

## 6.2 Respondent Two

Name: Mr. Kayode Adigun

Gender: Male

Company: Richbol Environmental Services Limited

Designation: General/Sales Manager

Mr. Adigun is an experienced General/sales manager in business to business (b2b) and business to consumer (b2c) and he is the one overseeing most of the key business processes.

**I noticed that your company has a software developer; therefore it is surprising that you have not really thought of doing business online. Why haven't you adopted this e-system up till now?**

Mr. Adigun said the challenges Nigerian businesses face today in terms of lack of infrastructural facilities has greatly impeded their company in the adoption of e-commerce. He said if the company integrates such e-system into their business processes, they would need to incur more money in the purchase of huge power generators in order to keep their e-business running 24 hours as the state of electricity in the country is not improving. He however, stated that the company's software developer's role in the company is very limited due to reliance on offline business processes. He said there is little the software developer could have done to convince the management (managing director) since he does not hold a degree in business administration!

**The change of your current business model to an e-shop model will bring about changes in some business processes which includes logistics and sales process. Do you think your company is prepared to make this change?**

Mr. Adigun said from his many years of working experience in huge firms, he had experienced changes to business model and it usually requires carrying a lot of people within the company along with the integration process. He continued by saying this might include educating the members of staff on how new business processes are going to work and so on. He mentioned that the company has the resources needed in terms of IT personnel, and IT infrastructure such as PCs to integrate this e-commerce business model. But the decision to integrate will have to be considered by the management. He however confirmed that he is in talks with the managing director and other stakeholders within the company over the adoption of this e-shop business model. He believes that the company is taking this issue very critically.

**Do you think the Nigerian business environment is well developed for the adoption of e-commerce business model nowadays?**

Mr. Adigun said the Nigerian business environment is becoming more technologically sophisticated. He explained that recently, there have been reforms and developments in key sectors especially the banking sector. This had a major positive effect on the business environment and has spurred business into adopting e-commerce business processes with online payment solutions. This has boosted economic growth and spurred a sense of optimism for the country's future. However, he pointed out that it is important for Nigeria to sustain the momentum and overcome other key challenges such as electricity. He said the sustenance of the momentum is important if the business environment is going to compete on an international level.

**With your current business model, I noticed your company does not have an established logistics system. How have you been able to cope with this situation for years?**

Mr. Adigun said this has been the practice for years. He said the company only arranges transportation of goods for some of their "big" corporate customers in



order to encourage them to come back another time. He acknowledged that this is not supposed to be so, especially with the fact that they have lost some individual customers over the years due to logistical issues. He explained that though all their customers are important, the company has to take a somewhat unbalanced/biased stance in the treatment of individual and corporate customers which is due to the company's lack of logistical structure. He mentioned that the company's management had once considered setting up a logistics system in the past by entering into a contract agreement with a local logistics firm, but the deal did not materialize due to cost and efficiency issues.

**What is your view on the new logistics system considering the technicalities, potential business benefits, and other factors such as the cost of implementation?**

Mr. Adigun said he never knew it was possible to integrate logistics technology into a company's system. He said such ideas have never come up in management meetings. He believes implementing this kind of logistics system would not be a problem for the company given the resources they have in possession. He said the benefits far outweigh the cost of implementation particularly when the potential to hold on to existing customers and get new ones is there. He explains that generally, the logistics technology would make his work within the company less tasking.

**The nature of your current business model has meant that your current sales system is manually administered. How would you view a new e-sales system that totally eliminates this cumbersome task?**

Mr. Adigun said he was absolutely ecstatic when he found out about the e-sales portal system. He said with all the experiences he has as a sales manager, he has always work in manually administered sales departments. He continues by saying sometimes he works on weekends in order to make sure that the sales records are up-to-date and customers' orders are responded to in time. He mentioned that the huge amount of customers has meant he hardly gets a rest as he must also prepare sales forecast for the company. He said with the integration of the sales

portal system, his level of productivity and that of the company would reach an all-time high.

**To what extent do you think the e-shop business model can propel your business?**

Mr. Adigun said the whole idea sounds great and he honestly does not see any harm in doing business digitally. He thinks the e-shop business model would be a perfect fit for the product the company offers, and it would improve their overall efficiency.

## 7 FINDINGS AND RECOMMENDATIONS

### 7.1 Findings

These days, adopting electronic commerce business model is an essential tool for an organization that desire to have competitive advantage over others. Making use of modern day technology is now essential for organization survival. Although, it is not a complete guarantee for organizational success but it contributes immensely to the development and profit maximization of a company. It helps to get a new customer, secure existing customer and restore the lost customer. The different literatures reviewed in line with the empirical data gathered from the interview also emphasized on the importance of e-commerce business model.

In the theoretical study, the concept of e-commerce business model was explained, the traditional business model was discussed and also the barriers to effective implementation of an e-commerce business model and its benefits if properly implemented. The researcher also reviewed how to integrate an e-commerce business model (e-shop model) via the integration of e-logistics and e-sales systems to a company web page. Therefore, it is ideal to compare the theory and the reality in a research work with the help of the literatures reviewed and the empirical data collected from the company used as a case study.

Through the literature reviewed, the authors emphasized on the level of competence or capability of Information technology (IT) within a company as a determinant to the adoption of e-commerce business model. Richbol Environmental Services Ltd. has the facilities that can aid in the change of business model (the transition to e-commerce) but they are not putting them to use. They have an internal IT personnel, the required computer systems, and a good environment to integrate an e-commerce business model but their shortcomings have come from a lack of knowledge about the benefits of the new

system, what kind of business model that best fit into their business processes, and how to go about the integration of the new business model to the company.

The literature reviewed also underscored how the adoption of e-business models can lead to changes in a company's e-business model in terms of upgrading from a manual setup to a more electrical and efficient setup that will be of great benefit to customers and the company. Presently, in Richbol offline business processes reigns supreme, and this slows down a lot of customers' orders, causes avoidable mistakes and so on.

It was revealed in the theory part that the role a country's business environment plays in the adoption of e-commerce. The availability of necessary infrastructures, government policies e.t.c. leads to a high rate in the adoption of technology by business organizations. The Nigerian business environment is however, well equipped for Richbol to integrate an e-commerce business model.

In the literature reviewed, a business model must consist of components such as; value proposition, revenue model, market opportunity, competitive advantage, competitive environment, market strategy, organizational development and management team. However, Richbol's current business model lacks most of these components.

Also, the researcher found out that the Richbol's management has been more concerned about the risks involved in selling products online than the benefits. This is the reason they have kept faith with their current business model for years despite the obvious loop holes in the model. They have lost a lot of customers and revenue over the years due to the indecision of the top managers.

## 7.2 Recommendations

In the preceding chapters, I mentioned two ways in which Richbol can integrate an e-shop business model. I said they can either buy e-commerce software, or seek the services of an IT expert to build or modify their current website into an e-shop webpage. In this chapter, I will be recommending **shopify e-commerce software** to them because I believe this is a much easier way for Richbol to integrate. Furthermore, I will not be focusing on the technicalities of this software, but laying more emphasis on the features.

### 7.2.1 The Features of Shopify E-commerce Software

#### 1. Theme Store

The features on Shopify e-commerce software cater to beginners while still allowing customization for advanced businesses. As Richbol creates their storefront, they will enter each product and organize them into categories. Shopify e-commerce software leaves a spot for photos and descriptions, and it is very clear in every case where everything goes. Richbol will be able to personalize their site as much as they like. For instance, they can change background colors, upload logos and much more. Using Shopify templates is easy. The Shopify Theme Store is stocked with tons of sleek-looking templates, all of which can be customized. This e-commerce software uses themes, or templates, that help in website construction. Shopify boasts a robust collection of themes, over 115. There are also third-party themes, which must meet Shopify's quality standards before they will be displayed in the theme shop. Richbol can also create their own theme should they not fancy any of shopify's themes or customize an existing one. Shopify is flexible and helpful.

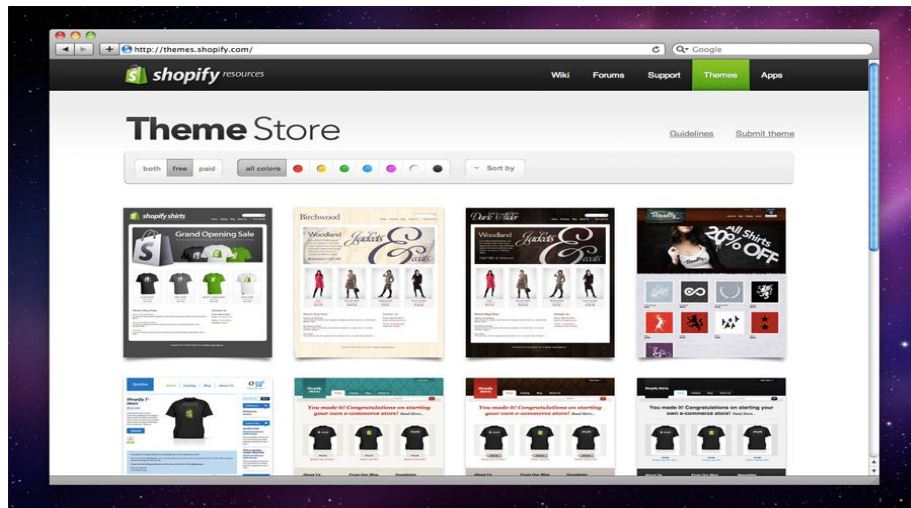


Figure 11. Shopify Theme Store

## 2. Customer Tab

The Customers tab organizes information about Richbol's clients that can be used in marketing campaigns. Richbol can have Shopify filter a list of their biggest customers so they can send specific email marketing their way. They can also reach out to customers who have not been back to shop in a long time. They can even filter customers by location. Shopify e-commerce software can also import or export a large database of customers.

<input type="checkbox"/>	Name (Last, First)	Location	Money Spent	Orders	Last Order
<input type="checkbox"/>	<a href="#">Broadhead, James</a>	British Columbia, CA	\$0.00	1	#1116 Dec 08
<input type="checkbox"/>	<a href="#">Athwal, Kam</a>	British Columbia, CA	\$0.00	1	#1113 Dec 08
<input type="checkbox"/>	<a href="#">Lutke, Tobias</a>	Ontario, CA	\$255.00	1	#1122 Jun 10
<input type="checkbox"/>	<a href="#">Summers, John</a>	New York, US	\$0.00	1	#1132 Apr 14
<input type="checkbox"/>	<a href="#">Oni, Dimitri</a>	Ontario, CA	\$473.00	5	#1131 Apr 13
<input type="checkbox"/>	<a href="#">Ocampo-Gooding, Edward</a>	Montreal, AE	\$0.00	1	#1268 May 04
<input type="checkbox"/>	<a href="#">Lutke, Tobias</a>	Ontario, CA	\$578.86	17	#1254 Mar 04
<input type="checkbox"/>	<a href="#">Katz, Bradley</a>	California, US	\$0.00	1	#1244 Jan 19
<input type="checkbox"/>	<a href="#">Lovett, Brian</a>	New York, US	\$0.00	1	#1233 Jan 06
<input type="checkbox"/>	<a href="#">Baker, Arthur</a>	Michigan, US	\$0.00	1	#1232 Dec 04
<input type="checkbox"/>	<a href="#">Jones, Lucas</a>	North Carolina, US	\$0.00	1	#1201 Nov 10
<input type="checkbox"/>	<a href="#">Fausser, Cody</a>	Ontario, CA	\$0.00	2	#1199 Nov 10
<input type="checkbox"/>	<a href="#">Fausser, Cody</a>	Ontario, CA	\$0.00	7	#1192 Nov 10
<input type="checkbox"/>	<a href="#">rauen_randy</a>	Colorado, US	\$0.00	1	#1179 Oct 30
<input type="checkbox"/>	<a href="#">Owen, Josh</a>	Oregon, US	\$0.00	1	#1174 Oct 24
<input type="checkbox"/>	<a href="#">Simpson, Robert</a>	Oregon, US	\$0.00	1	#1169 Oct 19
<input type="checkbox"/>	<a href="#">Last, First</a>	California, US	\$0.00	1	#1166 Oct 09
<input type="checkbox"/>	<a href="#">Test, Isopone</a>	California, US	\$0.00	1	#1165 Oct 09
<input type="checkbox"/>	<a href="#">Brooks, Fred</a>	North Carolina, US	\$424.00	4	#1164 Oct 09
<input type="checkbox"/>	<a href="#">Lee, Richard</a>	Washington, US	\$0.00	1	#1161 Oct 03
<input type="checkbox"/>	<a href="#">Fausser, Cody</a>	Ontario, CA	\$0.00	1	#1155 Sep 30
<input type="checkbox"/>	<a href="#">Fausser, Cody</a>	Ontario, CA	\$1,830.84	3	#1152 Sep 26
<input type="checkbox"/>	<a href="#">Rauig, Seanford</a>	New Jersey, US	\$0.00	1	#1139 Aug 31
<input type="checkbox"/>	<a href="#">Stanley, Ryan</a>	Colorado, US	\$0.00	1	#1138 Aug 30
<input type="checkbox"/>	<a href="#">Mayer, Wade, III</a>	New York, NY	\$0.00	1	#1136 Aug 28

Figure 12. Customers Tab

### 3. Product Tab

The Products tab will help Richbol keep tabs on inventory. They can create new product profiles, import and export long lists of products and keep track of stock. Blogs can be a great way to draw customers into their store. The Blogs & Pages tab will help to create and organize them. The Navigation tab will put Richbol in the driver's seat as far as how the places on their page are linked together. The Marketing tab will help them track coupons they have issued.

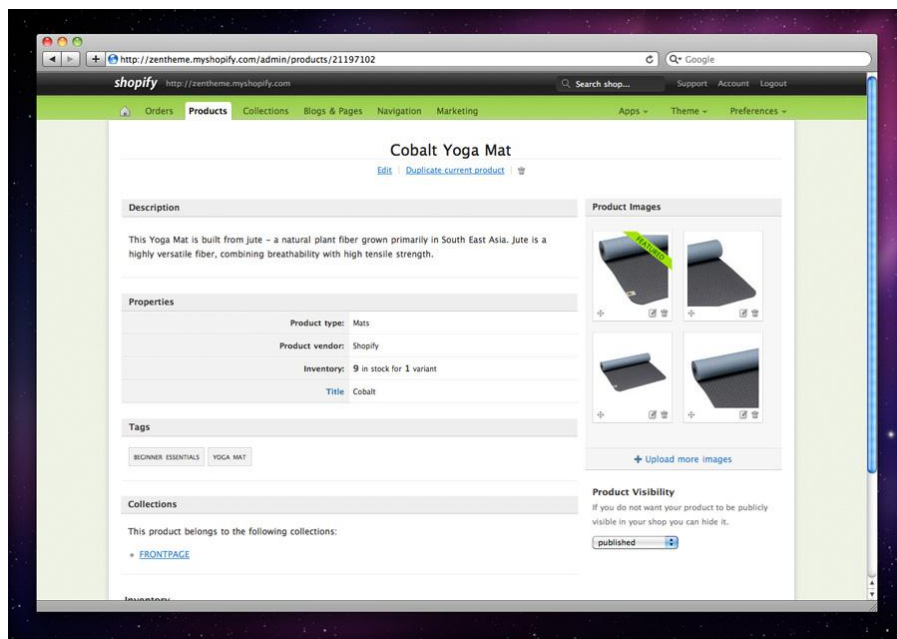


Figure 13. Product Tab

### 4. Shopify Analytics

Shopify e-commerce software Shopify has very powerful built-in analytics that can help Richbol keep track of their online shop's progress over time. Benchmarking their online store's performance will help them make the right choices that will lead to more sales. Detailed statistics include:

- How your customers found you and what country they are in.
- What URLs are referring to your online store.
- What search terms were used to find you

- Track the number of visits including by page hits and unique visitors.



Figure 14. Shopify Analytics

## 5. Online Payments

Shopify takes all the hassle out of receiving payments online. They integrate with over 50 gateways including PayPal, so any store can accept major credit cards. With this function, Richbol's customers have limitless payment options at their disposal. This makes it extremely easy for them to pay for goods without having to go through long queues in a bank for payment purposes.



Figure 15. Shopify Payment Options



## 6. Search Engine Optimization

Shopify stores include built in Search Engine Optimization (SEO) features. These SEO features will ensure that Richbol online shop gets a lot of traffic and sales from Google, Bing, and Yahoo visitors. Under the hood, Shopify stores follow SEO best practices like customizable H1, title and meta tags. It also automatically generates sitemaps.xml files so new products and site changes show up on search engines quickly. This function will no doubt bring in more sales to Richbol.

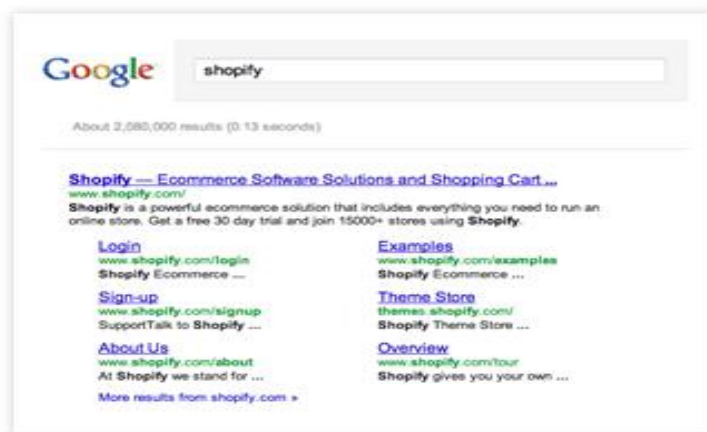


Figure 16. Search Engine Optimization

## 7. Fraud Protection/detection

Customers who shop online are aware that they can be scammed. For that reason, customers need to feel comfortable and secure. Shopify does an outstanding job putting customers at ease. Richbol's e-shop will look professional and will be PCI compliant. The e-commerce software utilizes a 128-bit Secure Socket Layer (SSL) encrypted checkout to protect personal data. And Shopify also has a team of fraud protection specialists who are working hard to make sure businesses like Richbol and their customers have a positive experience. When someone purchases from Richbol's online store, shopify automatically traces the credit card to detect fraud. This system greatly reduces the risk of credit card fraud against businesses.

(Shopify WebPages [Internet document] [cited 20.1.2012])

## **8 CONCLUSION**

The adoption of e-commerce business model is one that is necessary in any business operation and for any organization especially in obtaining a competitive advantage and being able to compete with other organizations. It has been established from the literature review and the interview that the adoption of any kind of e-commerce business processes depends heavily on a country's business environment, availability of funds, and a company's management team.

The Nigerian business environment has seen high level of technological development in recent years and this has prompted a lot of companies to act fast and adopt e-commerce business processes. Richbol environmental services limited is a company in need of changes to her current business processes. The company's management team believes that unless a change is made, the company would not be experiencing any significant growth. As a result, they are ready to implement this very important change to their business processes.

In conclusion, the importance of this thesis to the case company cannot be overemphasized because apart from its helping to look into their current business practices, it also strives to propose a new business model to the company that is profit oriented, and delivers value. In addition, the author believes that the change in Richbol's business model will lead to productivity gains, system efficiencies, and expansion of their geographical reach.

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## **APPENDICES**

**Appendix 1.** Structured questions for the interview

**Appendix 2.** Cover letter for structured interview

**APPENDIX 1. Structured question for the interview**

1. I noticed that your company has a software developer; therefore it is surprising that you have not really thought of doing business online. Why haven't you adopted this e-system up till now?
2. The change of your current business model to an e-shop model will bring about changes in some business processes which includes logistics and sales process. Do you think your company is prepared to make this change?
3. Do you think the Nigerian business environment is well developed for the adoption of e-commerce business model nowadays?
4. With your current business model, I noticed your company does not have an established logistics system. How have you been able to cope with this situation for years?
5. What is your view on the new logistics system considering the technicalities, potential business benefits, and other factors such as the cost of implementation?
6. The nature of your current business model has meant that your current sales system is manually administered. How would you view a new e-sales system that totally eliminates this cumbersome task?
7. To what extent do you think the e-shop business model can propel your business?

**APPENDIX 2: Cover letter for the structured interview**

6<sup>th</sup> December, 2011

Dear Sir,

My name is Abdul-Azeez Oluyomi Emmanuel. I am presently completing a bachelor's degree programme in International Business Administration at Seinäjoki University of Applied Sciences in Finland. I am writing to invite you to participate in my research work in the form of an interview.

My Bachelor Thesis covers change of business models and the necessary processes involved to implement the change. The thesis is focusing on Richbol Environmental Services Limited and the aim of this thesis is look into Richbol's current business processes with a view to suggesting a new business model that fits well into their business.

The study will help the company to realize their hidden business potential and that they can be a strong competitor in their industry. It will also help to determine what kind of e-commerce business model will fit well into their system. Through the interview, I hope to compare the existing business model being used by Richbol with the proposed new business model which is important for their profit maximization.

The interview should take about 25 minutes to complete and it will be appreciated if you can be available within the stipulated time.

Personal information supplied during the interview by the participants will be treated as confidential.

Kindly contact me via email ([Abdulazeez.O.Emmanuel@seamk.fi](mailto:Abdulazeez.O.Emmanuel@seamk.fi)) in regards to any queries you may have.

With Kind Regards,

Emmanuel Abdul-Azeez Oluyomi