Barriers to Successful Implementation of Shopping Cart as a Marketing Tool by Livestock Farmers in Nigeria

¹I. O. Awinle, ²O. Shoewu, L. A Akinyemi, ³N. T. Makanjuola

Center for Information and Communication Technology (ICTEC), Crescent University, Abeokuta, Km 5, Ayetoro Road, Abeokuta, Nigeria Department of Electronic and Computer Engineering, Lagos State University, Epe Campus, Nigeria

ABSTRACT: In Nigeria of today marketing strategies which involves the use of Information and Communication Technology (ICT) are growing but still an aspect of marketing widely known as Shopping Cart in Information and Communication Technology has not be seen as a means of interaction between sellers and buyers. A good Shopping cart framework will support improvements of a company's productivity, management effectiveness and ultimately, the quality of services it offers to its clients/customers and the public in general. The challenges of successful implementation of a Shopping Cart by companies in developing countries like Nigeria are identified and analyzed in this work. Livestock industry is used as a case study and efforts were made in this paper to descriptively list the approach towards eliminating these challenges which will ultimately lead to maximization of profits by companies.

I. INTRODUCTION

Understanding a Shopping Cart

A shopping cart can simply be seen as software used to make a place for product catalogue which are available for online ordering and gives room for visitors to be able to select, view, add, delete and purchase merchandise through the integrated use of computers and other high technology devices and equipment especially the internet.

The above illustration is a representation of a scenario in which you go into a shopping mall, the first thing you will pick in a shopping mall is a cart, then you drive/push your cart through the mall in search of products, then you select and add them to the cart, after which you will go to the counter to pay and it is then you have purchased the products.

The shopping process comparison between physical shopping mall and the online shopping cart is shown in **Table 1 below:**

Table 1. A Comparison of Traditional and Online Shopping		
Traditional Shopping	Online Shopping	
1. Search Item #1	1. Search Item #1	
2. Place Item #1 in Physical Shopping cart	2. Add Item #1 to Virtual Shopping Cart	
3. Search Item #2	3. View Shopping Cart	
4. Place Item #2 in Physical Shopping cart	4. Search Item #2	
5. Check-out	5. Add Item #2 to Virtual Shopping Cart	
6. Pay with cash or credit	6. View Shopping Cart	
7. Leave store	7. Check-out	
	8. Create an account. Enter name, email	
	9. Enter Shipping Address	
	10. Enter Billing Address	
	11. Choose Shipping Method	
	12. Enter credit card info	
	13. Review order & final price	

Source: http://www.internettg.org/newsletter/dec01/article_chaparro.html

It can be seen from the table above that the online shopping store takes extra effort and these are necessary due to security and validation of the process despite this the online users should not be discouraged with too many processes.

A shopping Cart in advanced countries like the United States of America (USA) is a well-known tool which companies and individuals are using to market their product. Some of the well-known shopping sites are Amazon.com, VeriSign, PayPal, WebAssist, and LinkPoint. Some of the key reasons for the use of a shopping cart by these companies include:

- Internet was a wave of the future and had to bite the bullet.
- Customers' comfort and convenience.
- Increase Sales
- Easy Product and Information Management to Customers/buyers
- Best solution for their business

However, the extent of the use of a Shopping Cart is directly related to the level of IQ of firms. A business executive, Bill Gates, quoting Encarta [1], once said "You know you have built an excellent digital nervous system when information flows through your organization as quickly and naturally as thought in a human being. It's business at the speed of thought". This simply shows the importance of ICT to businesses in advanced countries.

Statement of the Problem

The key problem, which this paper is going to address, is why most companies in developing countries (Nigeria as a case study) never seen a shopping cart as a means of generating and increasing revenue. This paper will present the factors responsible for these problems as challenges. These challenges will be look at and the approaches to reduce them will be discussed.

Research Strategy

The research strategy used in this paper to analyze the barriers to successful implementation of shopping cart as a marketing tool in Nigeria is similar to the one by Marples et al [2], since the objectives are partly confirmatory but primarily exploratory. The strategy involves the use of observations, referential and direct interviews, questionnaires and reviews. This approach enables deep insight into failure of usage of a shopping cart as a means of marketing in Nigeria. The theoretical aspects of the challenges to usage of shopping cart will be based on ICT literature and the analytical aspects will be based on real-life case(s).

The Barriers And Approaches To Its Elimination

Product and Information Management of Customers/buyers by complex organization like a livestock marketing firm is usually uptight with challenges. These challenges are known as "barriers". Barrier is defined by Schoepp [3], quoting WordNet, as "any condition that makes it difficult to make progress or to achieve an objective". This paper will be analyzing the barriers to successful implementation of shopping cart as a marketing tool in Nigeria.

Classification of the barriers

Barriers have over the years been categorized into two; which are extrinsic and intrinsic, by researchers but their opinions on the meaning of these categories differ. In a study, Ertmer [4], referred to extrinsic barriers as first edict and mentioned access, time, support, resources and training while intrinsic barriers is second order and mentioned attitudes, beliefs, practices and resistance. Alwani [5], pointed out that Hendren saw extrinsic barriers as pertaining to organizations rather than individuals and that intrinsic barrier pertains to administrators and individuals.

In this paper however, barriers to successful implementation of shopping cart as a marketing tool for livestock farmers in Nigeria were generally classified into four categories, namely infrastructural and resources, technology, users, implementation barriers.

Infrastructural and Resources Barriers

Derisory electric power

Electricity is a major requirement for the growth of any country but in Nigeria today, it has been quoted that the current public electricity generation is about 4,000 megawatts, yet ICT devices/equipment still suffers from what it ultimately needs to function. The inadequacy of the electric power is due to the population of the country (over 140 million people) compare to the electricity being generated. This results to people adhering to stand by generator for power supply (not cost effective). Moreover, some ICT equipment breaks down with unstable electric power, there by real time application like a shopping cart will suffer because these types of applications are supposed to be online 24 hours.

It is recommended that the Nigeria government should fully focus on solving the electric power as a matter of priority.

Lack of eminent equipment

In Nigeria today, second class equipment are much preferred, most of which are abandoned equipment from western countries. This largely affects the use of quality equipment to propagate ICT applications. This is further encouraged by the policies of government on what comes into the country. The ICT sector of the

economy does not really have a concrete policy or standard on which the sector should be built on, aside for the international standard which itself is not largely followed due to available equipment.

II. INTERNET USAGE

Though the availability of internet services has broadly increased in Nigeria but still not adequate when compare with the population of the country and the use of this services is still largely common within the elite people. Study showed that most grassroots livestock farmers has minimal access and the elite farmers, that has more access, have little knowledge of internet marketing known as shopping cart. Table 2 below showed the details of internet accessibility among livestock farmers in Nigeria.

	Internet	Internet	
Category of livestock farmer	Availability (%)	Accessibility (%)	Usage (%)
Grassroots	30	10	< 5
Elite	70	90	< 30

The grassroots percentage is based on the availability of internet services within surrounding community while elite percentage is based on the availability of internet services within surrounding community and personal possession of internet equipment e.g. modem. The table above simply showed that the use of the internet services is very minimal among livestock farmers. It is therefore recommended that series of seminars be conducted by government to enlighten farmers on power of the internet.

Technology Barriers

These types of barriers are associated with the deployed technology and capability of the provider of this technology to be able to implement ICT relevancies.

Limited/No knowledge of the technology

A major barrier to the successful implementation of shopping cart as a marketing tool amongs livestock farmers in Nigeria is the issue of limited knowledge of the technology by local ICT practitioners and this has affected sectors that would have used the medium as a marketing tool because the ICT practitioners could not propagate the usefulness of the technology to the people.

Users' Barriers

Another barrier to successful implementation of shopping cart as a marketing tool in Nigeria is the users of this technology. These users are usually buyers, sellers and searchers. The major barriers affecting these users are resistance to change, computer/internet skills. These users' barriers are discussed below.

Computer/Internet skills

Majority of users have little or no computer knowledge, hence their ability to browse the internet becomes a difficult task.

Resistance to change

The traditional way of buying and selling livestock products is much more convenient for majority of buyers and sellers simply because of their unwillingness to change or try other modes of buying and selling, one of which the shopping cart provides.

Implementation Barriers

Implementation barriers are factors that affect how ICT applications are implemented. This majorly involves bad planning and wrong approaches especially when it comes to the implementation of a shopping cart. These points will be explained more clearly in the following sections.

Dearth of proper planning

A project without a solid plan can simply be termed a dead project and planning is a major barrier when it comes to ICT projects. For a shopping cart application to be successful, proper planning has to be done, starting from the conception of the project to execution and delivery. Steps in developing a shopping cart technology is proposed by an article on CxT Group, Inc. website [6].

Step 1 – Choosing the Shopping Cart

Begin by researching which shopping cart is provided by your hosting company. While using the shopping cart provided by the hosting company is the easiest route, keep in mind that this product serves a wide audience and may not do exactly what you would like it to do. For example, most canned shopping cart applications allow you to customize your storefront using templates; however, you may be limited to the photos or color choices defined within a particular template. Some shopping carts allow you to write custom cascading style sheets (CSS) code, but, CSS is limited to color and font choices only. On the plus side, the shopping cart provided by the hosting company will get you going much faster.

Going the custom route can be beneficial if you have particular needs that cannot be met with a canned application. Several options are available: open source, shareware and fully licensed products. To establish a custom shopping cart, you have to understand the scripting language to be used and have the ability to set up the shopping cart on the platform where your site is hosted.

When making a decision regarding which custom option to use, keep in mind the tech support available to you. With open source and shareware tools, you may have to wait for a while to get an answer to your question.

Step 2 – Set up your Merchant Account

This portion of the process takes the longest time – sometimes up to two or three weeks. Make sure that the merchant account that you set up works with the shopping cart you are selecting and can be hosted on the same platform as your website. The three major categories of merchant accounts that can be created are:

- 1. **Standard Merchant Account** Using this account, you will be able to sell regular products, such as books, shoes or electronics.
- 2. **Specialty Merchant Account** This account is created for merchants that sell computer software, flowers or training materials.
- 3. **International Merchant** If you intend to sell your products internationally, then you will need this merchant account.

Your banker can arrange a meeting with a representative who will explain the fee structure and terms and conditions for setting up a merchant account.

Step 3 – Payment Gateway

Usually, when you set up a merchant account, your payment gateway will be set up automatically as well. In the case where the merchant account is not compatible with the shopping cart, you might have to set up the payment gateway manually. This process often involves a conference call between the payment gateway representative, the merchant account representative, and the technical person who is helping you program the shopping cart.

Step 4 – Set-up SSL

Once you set up your shopping cart, you need to add a secured socket layer (SSL) certificate to the portion of the site that houses the shopping cart. For example, you may place your shopping cart under the sub-domain as follows:

shop.domainname.com

Most people won't buy from your site unless you have the SSL installed. SSL prevents hackers from stealing your customers' personal information, including credit card numbers. Typically, a SSL certificate is issued for a year and is location-specific, meaning you can't move the certificate from one domain to another. Therefore, you should not to change the location of the shopping cart once you have applied the SSL certificate because you will have to purchase a new certificate for the new location.

Step 5 – Refund Policy, Privacy Policy, Terms and Conditions

Before bank representatives approve merchant accounts they often request that the site states your refund policy, privacy policy and terms and conditions. If you don't offer a refund, this policy should be clearly stated on your site.

Wrong approaches

T he approaches to successful implementation of a shopping cart should be direct. Buyers should not be wandering about on the site. Sven Lennartz [7] pointed out that "One of the simplest examples of flawed design decisions is the incorrect use of the **shopping cart icon** — a traditional icon which stands for the virtual holding place for any products of the store. Used properly, this little yet powerful element can help users to buy a product as quickly and painlessly as possible. As such, it is essential for the purchasing procedure and therefore deserves to be considered carefully during the design process". This amongst many other mistakes is made by developers in developing and implementing a shopping cart application.

III. CONCLUSION

Shopping cart in Nigeria is still far behind in terms of local application for marketing firms just like other developing countries and some of the causes have been identified. In this paper, these causes were treated as barriers and each barrier is considered as it affects the successful implementation of a shopping cart application. Recommendations were made to how these barriers can be minimized or eradicated.

It is hoped that these recommendations will be implemented and will lead to successful usage of a shopping cart as a marketing tool amongst the livestock farmers in Nigeria.

REFERENCES

- [1]. Microsoft Encarta 2009., http://www.microsoft.com/uk/encarta/
- Marples C.G., Doherty N.F. and King M. (1998). Factors Affecting the Success of Hospital Information Support Systems, <u>http://openlibrary.org/books/OL17556728M/Factors affecting the success of hospital information_support_systems</u>.
 Schoepp K. (2005). Barriers to Technology Integration in a Technology-Rich Environment, Journal of
- [3]. Schoepp K. (2005). Barriers to Technology Integration in a Technology-Rich Environment, Journal of Learning and Teaching in Higher Education: Gulf Perspective, 2(1), 1-24.
 [4]. Extract P.A. (1000). Addressing First Order and Supersonal Order. Previous Addressing for the Supersonal Order and Control order. Structures for the Supersonal Order and Control order.
- [4]. Ertmer P.A. (1999). Addressing First-Order and Second-Order Barriers to Change: Strategies for Technology Integration, Journal on Education Technology Research and Development, 47(4), 47-61
- [5]. Al-Alwani A. (2005). Barriers to Integrating Information Technology in Saudi Arabia Science Education, http://gradworks.umi.com31/85/3185124.html.
- [6]. CxT Group, Inc., http://www.cxtgroup.com/shopping-cart.html
- [7]. Sven Lennartz (2008). Shopping Carts Gallery: Examples and Good Practices, www.smashingmagazine.com/
- [8]. BIOGRAPHY OF AUTHORS
- [9]. Prof. Rasheed A. Hamzat (Email: <u>rahamzat6nov@yahoo.com</u>; +2348129236840)
- [10]. Prof. R. A. Hamzat is the Director of the Center for Information and Communication Technology (ICTEC) of Crescent University, Abeokuta, Nigeria. He is an Animal Nutritionist/Nutritional Biochemist. His interest is deeply entrenched in Information Technology in relation to Livestock Farming.
- [11]. Mr. Awinle O. Ibrahim (Email: awinle@yahoo.co.uk; +2347036899293)
- [12]. Mr. Awinle O. Ibrahim is the Head of Information and Project Management Unit of Crescent University, Abeokuta, Nigeria.
- [13]. He has a second class degree upper division in Electronics and Computer Engineering from Lagos State University, Lagos, Nigeria. He loves software Engineering and seeking his master degree in Telecommunication, He has worked as Software Developer, Project Manager and Information and communication Technology Instructor.