PROSPECTS OF APPLICATION OF E-COMMERCE IN LIS

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Abstract

Attempts to find out the prospects of application of e-commerce in the possible areas of LIS and identifies the advantages provided by this comparatively new commercial concept in LICs. The article also highlights on the suggestions for the LICs, which can be useful in the implementation of the concept in future.

Keywords : E-commerce, Internet, Consortium

1. Introduction

The world has witnessed rapid changes over the last decade with globalization, increased competition and technological advances. Organizations including libraries today are developing new relationships with customers/users, distributors, suppliers and partners. Internet has brought in a new concept, called e-commerce, in marketing and business fields.

Now Library and Information Science (LIS) also getting help from e-commerce. As the world is enjoying the taste of doing business online, the library and information centers (LICs) are also in the way to adopt the new process of business to bring a revolution to the world of information.

2. Definition of e-commerce

There is no universally accepted definition of the term e-commerce. It is the pre-eminent buzzword of the online business revolution. It is the art and science of selling products and/or services over the Internet. E-commerce is the buying and selling of goods and services on the Internet.

3. Benefits of e-commerce

3.1 Global Accessibility and Sales Reach

An e-commerce can receive orders from just about any country in the world.

3.2 Market Base Expansion

An e-commerce can open its critical information systems to entirely new groups of users, including employees, customers, suppliers, and business partners, who formerly did not have timely access to them.

3.3 Increased Profits

With e-commerce companies reach more and different customers and gain exposure in new markets not covered by existing physical channels.

3.4 Improved Customer Service and Loyalty

E-commerce enables a company to be open for business whenever a customer needs it. It provides day-night service.

3.5 Shorter Time-to-Market

E-commerce makes for fast and flexible execution and response to market opportunities.

3.6 Supply Chain Integration

E-commerce enables the full integration of a business, making the entire supply chain more efficient from the point of customer contact all the way back through physical distribution, warehousing, manufacturing, resource management, and purchasing.

3.7 Reasonable Price

As the marketing cost is negligible business houses can offer goods to the customers at minimum price.

3.8 Infrastructure Benefit

A business house having e-commerce technology need not require building its infrastructure by bricks and cements. It just requires having a website. Thus, preliminary expenses are very less.

4. E-commerce and Internet

The last decade of the 20th century witnessed the emergence of an all pervasive global information infrastructure, commonly referred to as the Internet. As Internet Technology advances and overcomes problems with reliability and speed, it is likely to be used in almost every conceivable way to exchange information and trade goods and services.

4.1 Benefits of Internet Marketing

Internet facilitates advertising, marketing and sales thereby promoting e-commerce. Marketing through advertisements is one of the well established channels in business. Some of the benefits of Internet marketing are:

- Some of the benefits associated with Internet marketing include the availability of information. Consumers can log onto the Internet and learn about products, as well as purchase them, at any hour.

- Companies that use Internet marketing can also save money because of a reduced need for a sales force.

- Internet marketing can help expand from a local market to both national and international marketplaces.

- Unlike traditional marketing media (like print, radio and TV), entry into the realm of Internet marketing can be a lot less expensive.

- The measurability of the Internet as a media makes it easier to experience innovative e-marketing tactics that will prove a better cost of acquisition than other media. However in most developed countries, Internet marketing and advertising spending is around 5% only, while TV, radio and the print are more.

- Advertising over Internet involves low premiums, assures easy access and has global appealing as against the conventional print media.

- Whereas print media generally have a restricted domain, Internet caters all kinds of vendors and customers in almost all subject areas.

- Unlike print media, there is no restriction of space; one can put up additional information.

- Unlike the print media where it takes longer time to know the popularity or otherwise of the product, in case of Internet it is immediately known to the vendor due to the instant feedback received from the customers.

- Whereas in the conventional commerce the advertiser goes to the consumer, in the Net commerce the latter goes to the former. Quite often, the interaction between the user and the Web site results in online ordering and receiving the products as well.

- Advertising on the Web (or Netvertising), i.e., hosting a home page on the Web, is one of the best ways to make the world know about an institution, an organization, a library or even an individual (say, a professional consultant). This would enable publicity about the various facilities, services and products offered to the users.

5. How e-commerce is useful in LIS ?

Library and Information Science (LIS) also getting help from e-commerce. As the world is enjoying the taste of doing business online, the library and information centers are also in the way to adopt the new process of business to bring a revolution to the world of information.

5.1 In Improvement of Information Services

An important goal for many libraries is to improve its information services by increasing access to information. The library may achieve this goal through the use of e-commerce.

Some corporations are now digitizing many internal documents and presentations for access by others in the corporations; this is something the library may take an active role in.

- **Access to Information**

With the proliferation of computers and Internet access in homes, libraries and workplaces across the world, increased access to information is possible for many people throughout the world. E-commerce opens up a whole new global market for the libraries. Anything chosen to place on the library's web site will be available for anyone to access at any time of the day or night (sometimes referred to as 7/24).

- **New Information Resources**

Libraries which are part of bigger organizations such as a college or university are now including information regarding other departments or campus libraries. Corporate libraries with resource centers in different cities, states or countries may also follow this approach.

- **Delivery of Information**

Using e-commerce will help the library deliver information quickly to large groups of individuals. This may range from information regarding the library's policies to information on how to access the library's collections or services.

- **Broaden Information Market**

If the library is not currently using e-commerce, it may only be reaching people who live in the same city as where the library is located. However, if e-commerce is used to increase the market to which information is distributed, not only may the library reach more patrons in the city, but throughout the state, and throughout the rest of the country and worldwide. The library may also reach those patrons who may be unable to come to the library not only for geographic reasons, but also because of disability or illness. Broadening the market not only increases awareness of the library and the services it offers, but may generate more visitors to the library and possible donations to the library in the future.

5.2 In Collection Development

The traditional acquisition problems can be solved to some extent with the use of e-commerce. The advantages can be shown below :

- **Financial advantage**

E-commerce can solve the financial problem of LICs by decreasing delivery cost of the materials. Besides, online ordering and online payment can give some relief to the libraries. The marketing

cost is also negligible in comparison to traditional marketing. Besides, discount given to some of the items is very attractive.

- **Easy access to far-off markets**

The problem of access to far-off markets now has been solved by the Internet. The publishers and suppliers can be given order by the help of e-mail facility as most of them have their

- **Selectivity and availability**

Internet provides the facility to select the required items from a vast collection. If someone is not finding the appropriate one he can search it in other online shop. It solves the problems of local book-sellers, which may not have the publication of interests of the libraries in their stock.

- **Quick / instant delivery of foreign publications**

As the foreign publications are costly and to procure them is very much time consuming in general way of ordering, E-commerce can make possible to procure within a short period of time (within two or three days). Besides, the formalities are also very less in online purchasing.

5.3 In Marketing of Library and Information Products

- **Libraries on the Web**

As libraries shift more services to the Internet, the library web site becomes increasingly important - as a product (service) in its own right and as a major tool in marketing other products of the library. Libraries can use the Web to provide services, to market services, or as part of the marketing process.

For many users, the web site is the library. Some users never visit the library. For others, a web site is just another branch of their favorite library - and a great place to shop for information 24/7. More libraries are providing services and marketing on the Web as a response to changes in the way the world accesses information.

- **Demand is growing for 24/7 access to all services**

The technology now exists to allow libraries to offer 24 hours a day, 7 days a week reference. This service will allow librarians to share both digital and print information with the patron, instruct patrons on how to access information and will do so without the limitation of library hours or building constraints. The use of this service will drive traffic to library sites, providing great opportunities for library marketing on the Web.

- **Advantages over traditional paper-based libraries**

Selling documents, or charging for their use, over the Internet offers many advantages over traditional paper-based libraries.

It provides the customer with more choices and customization options (e.g. choice of font).

It decreases the time and cost of search and discovery, both in terms of customers finding electronic documents and object and authors finding customers (e.g., advertising, target marketing).

It expands the marketplace from local and regional markets to national and international markets with minimal capital outlay or equipment, space, or staff.

Indeed, it makes it possible for a single digital library to act as the sole storage of a digital document, with other libraries and users from around the world accessing the document from this single library with equal ease to a resident living next door to the library.

It decreases the high transportation and labor costs of creating, processing, distributing, storing and retrieving paper-based information; and of identifying and negotiating with potential customers and suppliers.

It facilitates increased customer responsiveness, including on-demand delivery.

- **Creating one-to-one relationship with users**

Internet is a terrific way for online marketers to interact with consumers. A variety of tools exists for marketers, including e-mail, forums, bulletin boards, newsgroups, and mailing lists. These can be used to dispense information about new products and services and the LIC's background to foster a relationship.

People who have questions about the LIPS can send e-mail to the LIC. They might have seen the address on advertisement or product package. Responding to each message individually helps to develop one-to-one relationship with consumers.

Sometimes it is seen that many people ask the same questions most of the time. For that some prewritten answers can be used by copy and paste. What used to take five minutes to write, now takes five seconds.

If people read the prewritten response and still have questions, they can send a new request to a LIC staff who can answer the difficult questions. Thus staff spends their time dealing with the more difficult questions while the routine questions are handled by the auto answer facility.

Any kind of file can be sent via e-mail, whether it is text, photo, or sound. E-mail can thus provide more information than a customer support representative talking on a telephone. One can also

provide answers to customers just at the moment they are most interested in developing a relation-
ship with the LIC, even if that happens to be holiday.

- **Creation of database**

One can create a database of valuable information on where people can be contacted and what their
key interests are. The tactic of using a separate mailbox for information replies can also be used to
track the number of responses from a particular source.

- **Sending specific information**

The LICs might send the users specific information about the products that entice them to order
directly. The LICs might build a relationship with them by sending a newsletter every month or
quarter that gives them interesting new ways to use the LIPS.

6. Successful Uses of E-commerce

Libraries in the United States are successfully using e-commerce in a number of different ways to
accomplish various goals.

- A good example of a library using direct e-commerce is the Library of Virginia. The Library of
  Virginia uses direct e-commerce in two different ways. Patrons of the library may adopt a book
  (i.e., one that is damaged) by faxing or mailing in an online form with credit card payment from
  the library's web site www.leo.vsla.edu/foundation/adform.html .Visitors to the Library of Virginia's
  web site may also shop on-line from the library's gift shop www.leo.vsla.edu/shop/index.html.

- An example of a library using e-commerce indirectly is the Seattle Public Library. The Seattle
  Public Library will answer questions of library card holders and allow new patrons to apply for a
  library card online www.spl.org/quickinfo/formexpl.html .

- The Library of Congress has also used indirect e-commerce by including its catalogue holdings
  on its web site www.lcweb.loc.gov/homepage/online.html .

- Central Washington University Library web site www.lib.cwu.edu/circulation/renewals.html pro-
  vides individual circulation records, a listing of items patrons have checked out and allow pa-
  trons to renew materials online.

7. Developing an E-commerce Strategy for the LIS

There are a number of things to consider when developing an e-commerce strategy for the LIC.

- Determine the library's primary goal in relation to e-commerce.
- What is it the LIC wants to achieve?
- Do the LIC want to increase revenue or efficiency?

- Do the LIC want to be marketed?

- Decide what the goal is and should be reassessed often, as they may change over time.

- Study how others have met this goal - examine other web sites. For example, the Central Washington University Library allows patrons to renew materials and provides individual circulation records. The Seattle Public Library will answer questions from its patrons and will allow patrons to apply for cards online

- Register the library's domain name - the name is the key to e-commerce, so select and register an appropriate domain name if the library has not already done so. Also, the LIC may want more than one URL, for instance, one URL for its indirect e-commerce portion, and a separate URL for its direct e-commerce portion or cyber shop.

- Allowing patrons to order articles, images, presentations and books online.

- Assess the technical capabilities of the library - does the library need to train digital workers, hire employees or work with consultants? If this is its first time developing online presence, the library will need to assess what goes into creating and maintaining a web site.

- What are the monetary realities of the library - what is the budget for setting up an e-commerce site?

- Should the library sell from its own web site?-does the library have loyal customers to the web site? Does the library have a good relationship with an online vendor?

- When is the best time to launch the library's e-commerce initiative? Should the library launch it all at once, or launch it in portions? Partially launching it may provide the library with a "test" to evaluate its positive and negative aspects. However, make sure the library launch enough of it to make it worthwhile for the clientele.

- Will the library be providing goods and services to the public that requires payment, or not? If so, how will the library collect payments? - Credit card or checks? Digital cash? Offline or online?

- Does the library want to make money without "selling" from its web site? The library may sell advertising on its web site - banner ads, bounty deals and displaying content on a commissioned basis (i.e., content owner sells content and institution obtains a portion of the moneys obtained)

- Establish both online and offline marketing plan—mail out, brochures, traditional press; register with search engines every six to eight weeks (i.e., Yahoo!), third party web sites and/or links to your web site, and email broadcasts.

- Examine the legal issues - intellectual property (i.e., trademarks, copyright), taxation, privacy and advertising. A lawyer specializing in intellectual property or Internet law may be able to advice on these issues.

8. Suggestions

It is necessary that LICs should redefine their objectives and roles in changing context and to respond to the changing and challenging needs. Merely changing the name from library to information centre will not help. The present trend of collection development, marketing and information service should be renovated and in this regard some suggestions are brought forward on the basis of the study.

8.1 Internet connection to the LICs

To step into e-commerce in the library environment, the infrastructure i.e. Internet is to be established means overall organization structure should be designed to facilitate a networking mode of functioning.

8.2 Library Website

The Library should build its own Website with the information regarding location, staff, library rules, working hours, services, facilities, resources, etc.

8.3 Remote access to library

With the availability of Internet, libraries can use their homepages to advertise their services, such as, calendar of events, new IT services, new collection of topical subject, local heritage, sales of library publications in their homepages.

People can also access library's OPAC from homes and offices.

Libraries can introduce Online Reference Inquiry Form (ORIF) in their home page. Library users will be able to key in reference inquiries through the ORIF or to search libraries' databases from any locations at any time

8.4 One-stop information centre

Libraries can be developed as a one-stop community information centre for IT services. By allowing library users to access variety of online databases available through the Internet, users do not have to go to different places to get information. They can navigate the WWW by themselves or with the assistance of library staff.

8.5 Repackaging of information

For personalized services, library staff should be able to response to request for literature search on specific information. Such literature search will include: compilation of bibliographies on selected topics of interest to specific user needs; compilation of addresses for contact; developing metadata on relevant websites; creating hyperlink of relevant websites to cater for special user needs, etc. The library staff should be able to search for such information either from available reference sources or from the Internet, and repackage that specific information according to specific individual request, thus providing value-added services. Such services can be charged accordingly as it includes some cost.

8.6 Sell of old products through e-auction

The products which are weeded out can be resold through the auction sites in a less price. There are some auction sites. These fix the deal with customers and make the auction easy through online process. It can help the LICs to earn some money.

8.7 Hyperlinking relevant sites

Library should maintain a database on user profile that includes information about their specific subject interests. Librarian should make regular scanning on relevant databases and websites as well as from latest journal publications that matches the interest of registered users. Information from various sources that match users' interests should be consolidated and repackaged in a systematic way in accordance to specific users' needs. By doing so members will always exposed to their subject interests.

8.8 User education programmes

Systematic user education programmes on the use of IT should be introduced. The programme should include basic information handling skills, use of varieties of library resources including IT products, literature search by navigating the Internet, search strategies for different information resources, use of reference sources, compilation of bibliographies and information packaging, etc.

8.9 Forums and seminars on IT

The library should organize regular forums and seminars on various IT related topics. Such forums and seminars should be opened to library users as well as staff from other libraries. It should cover the new facilities acquired by the library.

8.10 Obtaining subscribers

One of the best ways to obtain subscribers is to ask visitors to sign up when they first enter the library website and also ask if they would like to receive updated information, notice of new articles and product, etc.

8.11 Need of training

There is need of proper training for the information professionals how to use the Internet for acquisition of library materials. Besides, the way to build the library Website and the related activities, such as to commit a secure online transaction as well as to advertise the LIPS on the Internet need a sophisticated training course.

8.12 Establishing E-Journals Consortium

The LICs can establish e-journal consortium so that users can carry out searches on a single table contents of database and access, view, download or print full-text electronic articles from any publisher provided the library has a valid subscription. In India, UGC-INFONET E-Journals Consortium, INDEST Consortium, FORSA Consortium, CSIR Consortium, IGCAR Consortium, IIM Consortium and URL (Urdu Research Library) Consortium are playing a great role in reducing costs and increase access by evaluating products and negotiating directly with publishers. The consortium can help in marketing of LIPS in a cooperative way.

8.13 Introduction of Document Delivery Service (DDS)

The LICs can introduce DDS as a method of marketing. The e-mail, FTP, EDI facilities of Internet can do a good business in LIS. Documents in any form can be supplied to the needy persons with a price tag. If a customer is satisfied then he will of course pay for the service. It will help in resource mobilization.

8.14 Database management system (DBMS)

Libraries should develop well-enabled DBMS in order to provide on-line database access through the Internet. Web-based library and information services would motivate the users and maximize the utility of the library resources in a more effective and efficient way.

8.15 Reference services

LICs should use the Internet for providing reference information such as getting addresses, weather information, e-mail addresses of any kind etc. Several leading encyclopaedias, dictionaries, directories, handbooks, manuals are accessible on-line via Internet.

8.16 Professional communication and interactions

The library professionals working in the higher educational institution should use the Internet as the platform for exchanging ideas & information. One can participate in selected discussion forums and news groups.

9. Conclusion

The article implies the magnificent role of e-commerce in LIS. The LICs can utilize this opportunity and make themselves self-sufficient in financial sector. With the changing environment there is need to take bold step. It is an encouraging sign with good number of consortia efforts are done in India by the consortium for group of libraries falling under certain disciplines viz. FORSA for Astronomy, CSIR for Scientific labs, INDEST for libraries in the area of Engineering and Technology including management libraries. The member libraries can share the resources and also sell the LIPS to the information seekers.

E-commerce can solve the problems of traditional transactions of LICs and provides some solutions in the era of IT. Besides, the increasing cost of maintaining the LICs need some way of earning money. It will be possible when the people will be made aware of the LIPS offered by a library. E-commerce is one of the best ways of attracting new users. But earning money is not the main goal of a library. First to provide information services in a quick and sufficient way is the main objective of the LICs. E-commerce can help in both the ways. For that there is need of awareness among the library professionals. Though it seems to be a dream to our libraries it is not impossible.

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