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A Study on Implementation Challenges of E-Commerce in India

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Abstract

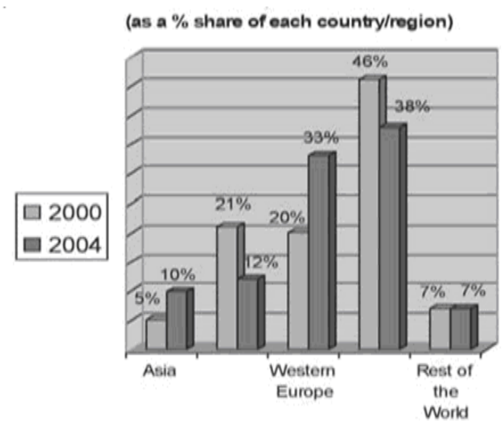
Electronic commerce, commonly known as e-commerce or E-commerce, consists of the buying and selling of products or services over electronic systems such as the Internet and other computer networks. The amount of trade conducted electronically has grown dramatically since the spread of the Internet. A wide variety of commerce is conducted in this way, spurring and drawing on innovations in electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), automated inventory management systems, and automated data collection systems. Modern electronic commerce typically uses the World Wide Web at least at some point in the transaction's lifecycle, although it can encompass a wider range of technologies such as e-mail as well.

Keywords: *E-Commerce, Implementation Challenges, Virtual Mall, E-Tailing.*

Introduction

As a place for direct retail shopping, with its 24-hour availability, a global reach, the ability to interact and provide custom information and ordering, and multimedia prospects, the Web is rapidly becoming a multibillion dollar source of revenue for the world's businesses. A number of businesses already report considerable success. As early as the middle of 1997, Dell Computers reported orders of a million dollars a day. By early 1999, projected e-commerce revenues for business were in the billions of dollars and the stocks of companies deemed most adept at e-commerce were skyrocketing. Although many so-called dotcom retailers disappeared in the economic shakeout of 2000, Web retailing at sites such as Amazon.com, CDNow.com, and CompudataOnline.com continues to grow.

International Data Corp (IDC) estimates the value of global e-commerce in 2000 at US$350.38 billion. This is projected to climb to as high as US$7.14 trillion by 2007. IDC also predicts an increase in Asia's percentage share in worldwide e-commerce revenue from 5% in 2000 to 18% in 2007. Asia-Pacific e-commerce revenues are projected to increase from $76.8 billion at year-end of 2001 to $438.5 billion by the end of 2007.



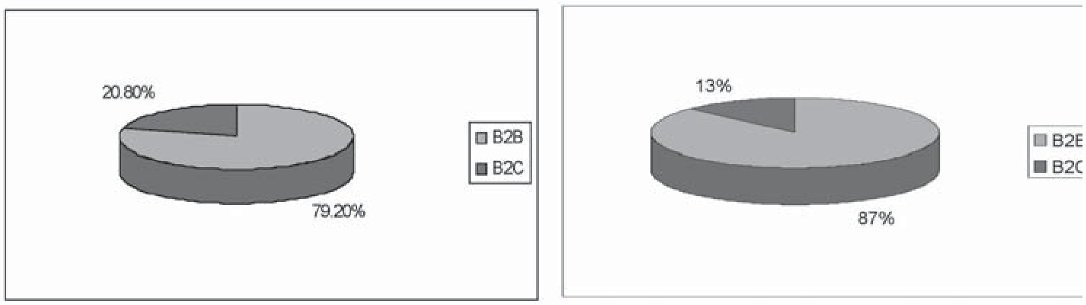
Worldwide E-Commerce Revenue, 2000 &2004 (As a % share of each country/region)

The different types of e-commerce

The major different types of e-commerce are: business-to-business (B2B); business-to- consumer (B2C); business-to-government (B2G); consumer-to-consumer (C2C); and mobile commerce (m-commerce).

B2B e-commerce

B2B e-commerce is simply defined as e-commerce between companies. This is the type of e-commerce that deals with relationships between and among businesses. About 80% of e-commerce is of this type, and most experts predict that B2B E-commerce will continue to grow faster than the B2C segment. The B2B market has two primary components: e-frastructure and e-markets. eMarketer projects an increase in the share of B2B e-commerce in total global E-commerce from 79.2% in 2000 to 87% in 2007 and a consequent decrease in the share of B2C e-commerce from 20.8% in 2000 to only 13% in 2007. Likewise B2B growth is way ahead of B2C growth in the Asia-Pacific region. According to a 2001 eMarketer estimate, B2B revenues in the region are expected to exceed $300 billion by 2004.



Share of B2b and B2c E-Commerce in Total Global E-Commerce (2000 and 2004)

B2C e-commerce

Business-to-consumer e-commerce, or commerce between companies and consumers, involves customers gathering information; purchasing physical goods (i.e., tangibles such as books or consumer products) or information goods (or goods of electronic material or digitized content, such as software, or e-books); and, for information goods, receiving products over an electronic network. It is the second largest and the earliest form of e-commerce. Its origins can be traced to online retailing (or e-tailing).13 Thus, the more common B2C business models are the online retailing companies such as Amazon.com, Drugstore.com, Beyond.com, Barnes and Noble and Toys us. Other B2C examples involving information goods are E-Trade and Travelocity.

E-Marketer estimates that worldwide B2C e-commerce revenues will increase from US$59.7 billion in 2000 to US$428.1 billion by 2004. Online retailing transactions make up a significant share of this market. E-Marketer also estimates that in the Asia- Pacific region, B2C revenues, while registering a modest figure compared to B2B, nonetheless went up to $8.2 billion by the end of 2001, with that figure doubling at the end of 2002-at total worldwide B2C sales below 10%. B2C e-commerce reduces transactions costs (particularly search costs) by increasing consumer access to information and allowing consumers to find the most competitive price for a product or service. B2C e-commerce also reduces market entry barriers since the cost of putting up and maintaining a Web site is much cheaper than installing a "brick-and-mortar" structure for a firm. In the case of information goods, B2C e-commerce is even more attractive because it saves firms from factoring in the additional cost of a physical distribution network. Moreover, for countries with a growing and robust Internet population, delivering information goods becomes increasingly feasible.

B2G E-COMMERCE

Business-to-government e-commerce or B2G is generally defined as commerce between companies and the public sector. It refers to the use of the Internet for public procurement, licensing procedures, and other government-related operations. This kind of e-commerce has two features: first, the public sector assumes a pilot/leading role in establishing e-commerce; and second, it is assumed that the public sector has the greatest need for making its procurement system more effective. Web-based purchasing policies increase the transparency of the procurement process (and reduce the risk of irregularities). To date, however, the size of the B2G E-commerce market as a component of total e-commerce is insignificant, as government e-procurement systems remain undeveloped.

C2C e-commerce

Consumer-to-consumer e-commerce or C2C is simply commerce between private individuals or consumers. This type of e-commerce is characterized by the growth of electronic marketplaces and online auctions, particularly in vertical industries where firms/businesses can bid for what they want from among multiple suppliers.16 It perhaps has the greatest potential for developing new markets.

M-Commerce

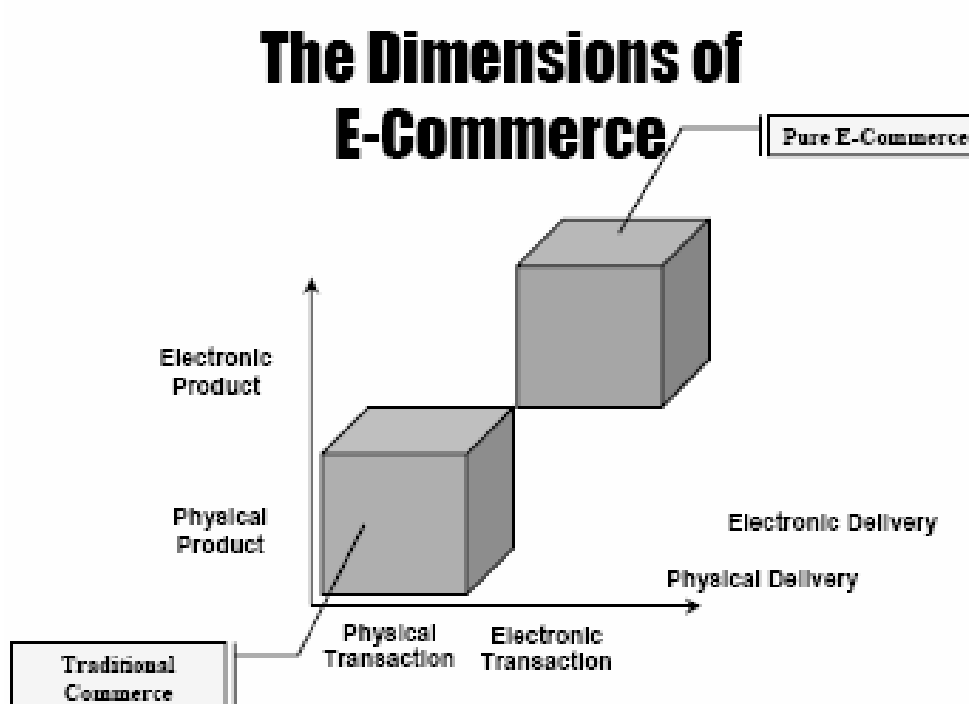
M-commerce (mobile commerce) is the buying and selling of goods and services through wireless technology-i.e., handheld devices such as cellular telephones and personal digital assistants (PDAs). Japan is seen as a global leader in m-commerce. As content delivery over wireless devices becomes faster, more secure, and scalable, some believe that m-commerce will surpass wire line e-commerce as the method of choice for digital commerce transactions.

Pros and cons of each revenue source

- Selling physical goods requires warehousing, shipping, returns, and heavy customer service. It's a significant investment of time and/or money, but this has the highest revenue potential.
- Just running ads is much less work, especially with if you don't have to deal directly with the advertisers. However, the earnings per click are quite low, so you need a lot more traffic to make good money. And not all informational topics are profitable. For example, searchers for entertainment and sports information don't tend to click on ads or buy anything.
- When you promote other people's goods as an affiliate, you sit between the last two options- it can pay better than ads and be less hassle than hard goods. But you still have to provide content on profitable topics, and you need to be a comfortable and effective salesperson for the products that pay your bills.
- Developing and selling your own digital products is at least as much work as selling hard goods, but requires much less overhead. You can write an e-book, turn it into a pdf, and get it onto a website with very little money.
- And we shouldn't end without mentioning that you can also sell your services online. If you write about what you do, whether you're a web designer, lawyer, doctor, psychologist, carpenter, whatever, you can get web visits from prospects in your local area and turn those people into customers.

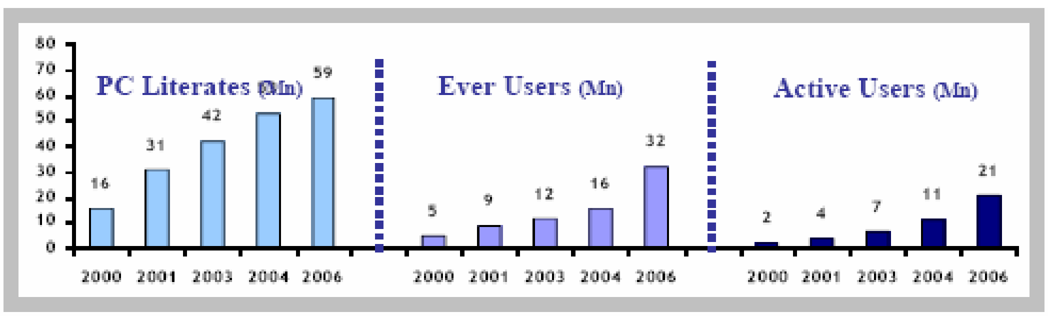
History Evolution and Growth of E-Commerce in India

Commerce has evolved over the centuries. Prior to the evolution of money it was a simple "barter process" where things could be exchanged, say milk for grains. The evolution of money brought with it, the concept of a "marketplace". In a marketplace, Commerce is function of 4 P's – Product, Price, Place and Promotions. All these four components play a vital role in a transaction to take place. Different combinations of 4Ps determine different forms of Commerce. Once the marketplace came into existence, a few pioneers realized that people would be ready to pay extra if they could deliver products at customer's doorsteps. A slight modification on Price and Place led to the convenience of getting products at their homes. This concept delighted the customers and thus, the concept of "Street Vendors" was born. When the Postal System came into being the sellers decided to cash in on the new opportunity and started using mailers giving description of their products. It led to the concept of "Mail Order Cataloguing". From here, the evolution of the "Tele shopping" networks was inevitable with the development of media vehicles. The latest generation of commerce is one that can be done over the internet. Internet provides a virtual platform where sellers and buyers can come in contact for sale and purchase of goods and services.



Usage of E-Commerce

According to the survey conducted among the Industry players, the E-Commerce Industry in India was worth Rs 7080 crores at the end of 2009-10. Is it big enough? How much is it expected to grow? The adoption and usage of E-Commerce in the country is a function of the overall environment for Internet usage in a country. To correctly understand the likely growth path for E-Commerce in India it is imperative to understand the internet ecosystem in the country.



Source: I-Cube 2006, Syndicated Research of e-Technology Group@ IMRB, March 2006

The PC literate population is on a fast growth curve having grown 100% in 2006 over 2004. Though in India overall penetration is still low the important factor is that a critical mass of users is shaping up which will fuel rapid growth over the next 3-4 years. A Claimed or Ever Internet User is defined as one who has ever accessed Internet. A subset of Claimed Internet users, Active Internet Users are defined as those who have accessed Internet at least once in the last one month. They are the regular users of Internet and are aware of the recent trends and applications emerging on the Internet. The population of Active Internet Users was 21 million in March 2006. As these Internet Users mature with respect to exposure and awareness of internet, they tend to spend more time online; access internet more frequently and surf non-communication based applications and advanced online applications like gaming, E-Commerce, etc.

However, the interesting part is that out of the 13.2 million internet users across 26 cities covered in I-Cube 2006, (Syndicated Research of e technology group @IMRB International), 14.2% use the internet to buy travel tickets; 5.5% people do online shopping especially products like Books, Flowers, Gifts etc. and 5% people deal in stocks and shares through the internet. Though the percentage contribution of E-Commerce is almost same over the years, however, the number of Internet users using E-Commerce is growing rapidly. Thus, E-Commerce is surely being adopted by the Internet users as a way to shop. They are buying a variety of products online and visiting various websites to buy products from. Given the rate of growth in E-Commerce users, size of the E-Commerce industry is expected to reach **Rs. 9210 crores** at the end of 2007-08, a big jump of 30% over the current industry size.

ISSUES AND CHALLENGES IN THE IMPLEMENTATION OF E-COMMERCE IN INDIA

An April 2004 survey by AC Nielsen found that news stories about identity theft and fraud have confused many consumers about how to shop safely online. The survey revealed the top security concerns of online shoppers, which are:

- Not receiving the items purchased, or receiving items that are substantially different from their descriptions on the Web site
- E-mail addresses sold to third parties
- Fears about personal or financial information being stolen
- E-mail scams known as “phishing” or “spoofing” that result in messages being sent to consumers from disreputable sources that are disguised as messages from trusted retailers or financial institutions.

The role of government in the development of e-commerce in developing countries

While it is generally agreed that the private sector should take the lead role in the development and use of e-commerce, the government plays an instrumental role in encouraging e-commerce growth through concrete practicable measures such as:

1. Creating a favorable policy environment for e-commerce; and

2. Becoming a leading-edge user of e-commerce and its applications in its operations, and a provider to citizens of e-government services, to encourage its mass use.

What is a favorable policy environment for e-commerce?

Among the public policy issues in electronic commerce that governments should take heed of are:

- “Bridging the digital divide” or promoting access to inexpensive and easy access to information networks;
- Legal recognition of e-commerce transactions;
- Consumer protection from fraud;
- Protection of consumers’ right to privacy;
- Legal protection against cracking (or unauthorized access to computer systems); and
- Protection of intellectual property.

Measures to address these issues must be included in any country’s policy and legal framework for e-commerce. It is important that government adopt policies, laws and incentives that focus on promoting trust and confidence among e-commerce participants and developing a national framework that is compatible with international norms on e-commerce (covering for instance, contract enforcement, consumer protection, liability assignment, privacy protection, intellectual property rights, cross-border trade, and improvement of delivery infrastructure, among others).

Triggers and Barriers for the E-Commerce market in India

In addition to the industry size, it is imperative to understand the reasons behind the growth and reasons hampering the growth E-Commerce industry in the country. This section elaborates the triggers and barriers that impact the adoption of E-Commerce by the Internet users. We would start by enlisting the triggers which motivate the online shoppers to buy products online.

Time saving is the major reason that drives Internet users to shop online. It is followed by convenience of anyplace, anytime shopping online. Online stores do not have space constraints, thus, a wide variety of products can be put for display.

Companies can display whole range of products being offered by them. This further enables the buyers to choose from a variety of models after comparing the looks, features, prices of the products on display.

To attract customers to shop online, e-Marketers are offering great deals and discounts to the customers. This is facilitated by elimination of maintenance, real-estate cost of the seller, selling its products online. An insight into some of the problems stated by customers while buying through Internet will help us to have a closer look at the issues which need to be addressed by the online community.

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