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## E-Commerce

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### ABSTRACT

Over the last two decades, rising internet and mobile phone penetration has changed the way we communicate and do business. E-commerce is relatively a novel concept. It is, at present, heavily leaning on the internet and mobile phone revolution to fundamentally alter the way businesses reach their customers. This paper deals the conceptual knowledge of e-commerce, literature review, current and future aspects of e-commerce in Indian context. The present development would be a valuable addition to researcher and academicians; and useful theory for practitioners, advertisers, and entrepreneurs.

**Keywords:** E-commerce, B2B, C2C, B2E, G2C, G2G, P2P.

### INTRODUCTION

Even today, some considerable time after the so called 'dot com/Internet revolution', electronic commerce (e-commerce) remains a relatively new, emerging and constantly changing area of business management and information technology. There has been and continues to be much publicity and discussion about e-commerce. Library catalogues and shelves are filled with books and articles on the subject. However, there remains a sense of confusion, suspicion and misunderstanding surrounding the area, which has been exacerbated by the different contexts in which electronic commerce is used, coupled with the myriad related buzzwords and acronyms. This paper aims to consolidate the major themes that have arisen from the new area of electronic commerce and to provide an understanding of its application and importance to management. In order to understand electronic commerce it is important to identify the different terms that are used, and to assess their origin and usage. According to the editor-in-chief of International Journal of Electronic Commerce, Vladimir Zwass, 'Electronic commerce is sharing business information, maintaining business relationships and conducting business transactions by means of telecommunications networks'. E-commerce—the use of the Internet and the Web to transact business. More formally, we focus on digitally enabled commercial transactions between and among organizations and individuals. Each of these components of our working definition of e-commerce is important. Digitally enabled transactions include all transactions mediated by digital technology. For the most part, this means transactions that occur over the Internet and the Web. Commercial transactions involve the exchange of value (e.g., money) across organizational or individual boundaries in return for products and services. Exchange of value is important for understanding the limits of e-commerce. Without an exchange of value, no commerce occurs.

### 2. LITERATURE REVIEW

Literature on web theory is scant because it is a relatively a new area and the technologists at the forefront of Web design are typically not sufficiently academically inclined to formulate the relevant theories [2]. While previous research has examined Internet usage [14], commercial websites [4], website design [12], website effectiveness from the consumers' perspective [5], pricing paid placements on search engine, and bidding [1]. This form of online advertising emerged in 1998 [3], rapidly has become the central business model of the major search engines [8], and is one of the most rapidly growing segments of the online marketing area [13] Search engine has become a necessity for people to surf the web [6]. It is a simple user interface is designed. Any user simply fills in several fields and the system makes the decision about what to find, where to search and how to look at. The threshold of search is lowered. SEM is an internet marketing model aiming at promoting the ranking of websites in the search

engine's search results page which can make a web site introduce into more web users and website traffic [7]. Li-Hsing HO et. al., (2011) explained about exploration of SEO technology applied in internet marketing, Kesharwani and Tiwari (2011) studied the importance of website quality towards the success or failure of any e-vendor. [10] studied that the quality of internet banking (i-banking) services in India from customer's perspective. Malhotra and Singh (2007) carried out a research to find the i-banking adoption by the banks in India. Thus, it is high time that India should act fast and decisively in order to use the growing electronic trade to our advantage.

### **3. E-COMMERCE TYPES**

There exist different transaction schemas that are forked from different types of e-commerce. Here, we are going to talk about them in details.

#### **1. Business-to-business**

Business-to-business (B2B) describes commerce transactions between businesses, such as between a manufacturer and a wholesaler, or between a wholesaler and a retailer. Contrasting terms are business-to consumer (B2C) and business-to-government (B2G). The volume of B2B (Business-to-Business) transactions is much higher than the volume of B2C transactions. The primary reason for this is that in a typical supply chain there will be many B2B transactions involving sub components or raw materials, and only one B2C transaction, specifically sale of the finished product to the end customer. For example, an automobile manufacturer makes several B2B transactions such as buying tires, glass for windscreens, and rubber hoses for its vehicles. The final transaction, a finished vehicle sold to the consumer, is a single (B2C) transaction.

#### **2. Business-to-consumer**

Business-to-consumer (B2C, sometimes also called Business-to-Customer) describes activities of businesses serving end consumers with products and/or services. An example of a B2C transaction would be a person buying a pair of shoes from a retailer. The transactions that led to the shoes being available for purchase, which is the purchase of the leather, laces, rubber, etc. However, the sale of the shoe from the shoemaker to the retailer would be considered a (B2B) transaction. While the term e-commerce refers to all online transactions, B2C stands for "business-to-consumer" and applies to any business or organization that sells its products or services to consumers over the Internet for its own use. When most people think of B2C e-commerce, they think of Amazon, the online bookseller that launched its site in 1995 and quickly took on the nation's major retailers. In addition to online retailers, B2C has grown to include services such as online banking, travel services, online auctions, health information and real estate sites.

#### **3. Business-to-employee**

Business-to-employee (B2E) electronic commerce uses an intrabusiness network which allows companies to provide products and/or services to their employees. Typically, companies use B2E networks to automate employee-related corporate processes.

Examples of B2E applications include: Online insurance policy management, corporate announcement dissemination, online supply requests, Special employee offers, and Employee benefits reporting.

#### **4. Business-to-government**

Business-to-government (B2G) is a derivative of B2B marketing and often referred to as a market definition of "public sector marketing" which encompasses marketing products and services to various government levels - including federal, state and local - through integrated marketing communications techniques such as strategic public relations, branding, marcom, advertising, and web-based communications. B2G networks provide a platform for businesses to bid on government opportunities which are presented as solicitations in the form of RFPs in a reverse auction fashion. Public sector organizations (PSO's) post tenders in the form of RFP's, RFI's, RFQ's, Sources Sought, etc. and suppliers respond to them. Government agencies typically have pre-negotiated standing contracts vetting the vendors/suppliers and their products and services for set prices. These can be state, local or federal contracts and some may be grandfathered in by other entities (ie. California's MAS Multiple Award Schedule will recognize the federal government contract holder's prices on a GSA General Services Administration Schedule). There are multiple social platforms dedicated to this vertical market and they have risen in popularity with the onset of the ARRA/Stimulus Program and increased government funds available to commercial entities for both grants and contracts [4].

#### **5. Business-to-Manager**

Business-to-Manager or B2M is a new mode of E-business. It refers to transaction between enterprises (product sellers or any other workers) and professional managers. B2M schema consists of finding out the information on the net and earning commission by providing services for enterprises.

#### **6. Consumer-to-business**

Consumer-to-business (C2B) is an electronic commerce business model in which consumers (individuals) offer products and services to companies and the companies pay them. This business model is a complete reversal of traditional business model where companies offer goods and services to consumers (business-to-consumer = B2C). We can see this example in blogs or internet forums where the author offers a link back to an online business facilitating the purchase of some product (like a book on Amazon.com), and the author might receive affiliate

revenue from a successful sale. This kind of economic relationship is qualified as an inverted business type. The advent of the C2B scheme is due to major changes: Connecting a large group of people to a bidirectional network has made this sort of commercial relationship possible. The large traditional media outlets are one direction relationship whereas the internet is bidirectional one. Decreased cost of technology: Individuals now have access to technologies that were once only available to large companies (digital printing and acquisition technology, high performance computer, powerful software).

#### 7. Consumer-to-consumer

(C2C) (or citizen-to-citizen) electronic commerce involves the electronically facilitated transactions between consumers through some third party. A common example is the online auction, in which a consumer posts an item for sale and other consumers bid to purchase it; the third party generally charges a flat fee or commission. The sites are only intermediaries, just there to match consumers. They do not have to check quality of the products being offered. Consumer-to-consumer (C2C) marketing is the creation of a product or service with the specific promotional strategy being for consumers to share that product or service with others as brand advocates based on the value of the product. The investment into conceiving and developing a top of the line product or service that consumers are actively looking for is equatable to a Business-to-consumer (B2C) pre launch product awareness marketing spend. This type of e-commerce is expected to increase in the future because it cuts out the costs of using another company. An example cited in Management Information Systems, is for someone having a garage sale to promote their sale via advertising transmitted to the GPS units of cars in the area. This would potentially reach a larger audience than just posting signs around the neighborhood. In the economic downturn which commenced in 2008 C2C commerce levels increased dramatically online [7].

#### 8. Government-to-Business

Government-to-Business (abbreviated G2B) is the online non-commercial interaction between local and central government and the commercial business sector, rather than private individuals (G2C). For

#### 9. Government-to-Citizen

Government-to-Citizen (abbreviated G2C) is the communication link between a government and private individuals or residents. Such G2C communication most often refers to that which takes place through Information and Communication Technologies (ICTs), but can also include direct mail and media campaigns. G2C can take place at the federal, state, and local levels. G2C stands in contrast to G2B, or Government-to-Business networks.

One such Federal G2C network is USA.gov: the United States' official web portal, though there are many other examples from governments around the world [9] [10].

#### 10. Government-to-employees

Government-to-employees (abbreviated G2E) is the online interactions through instantaneous communication tools between government units and their employees. G2E is one out of the four primary delivery models of e-Government. G2E is an effective way to provide E-learning to the employees, bring them together and to promote knowledge sharing among them. It also gives employees the possibility of accessing information in regard to compensation and benefit policies, training and learning opportunities and civil rights laws. G2E services also include software for maintaining personnel information and records of employees. G2E is adopted in many countries including the United States, Hong Kong and New Zealand.

#### 11. Government-to-Government

Government-to-Government (abbreviated G2G) is the online non-commercial interaction between Government organisations, departments, and authorities and other Government organisations, departments, and authorities. Its use is common in the UK, along with G2C, the online non-commercial interaction of local and central Government and private individuals, and G2B the online non-commercial interaction of local and central Government and the commercial business sector. G2G systems generally come in one of two types:

1) Internal facing - joining up a single Governments departments, agencies, organisations and authorities - examples include the integration aspect of the Government Gateway, and the UK NHS Connecting for Health Data SPINE.

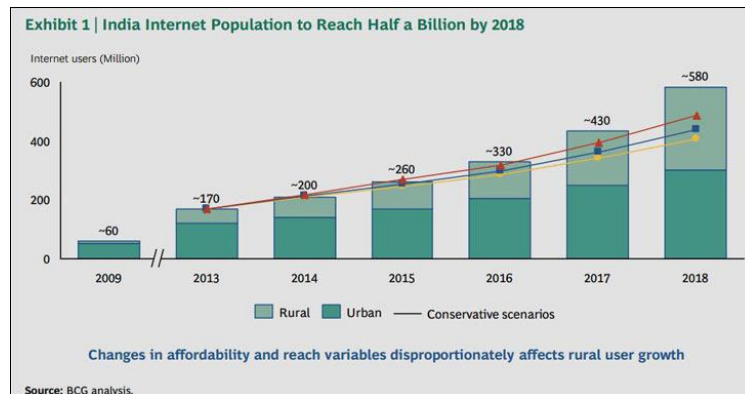
2) External facing - joining up multiple Governments IS systems - an example would include the integration aspect of the Schengen Information System (SIS), developed to meet the requirements of the Schengen Agreement [18].

#### 12. Peer-to-peer

Peer-to-peer (P2P) computing or networking is a distributed application architecture that partitions tasks or workloads between peers. Peers are equally privileged, equipotent participants in the application. They are said to form a peer-to-peer network of nodes. Peers make a portion of their resources, such as processing power, disk storage or network bandwidth, directly available to other network participants, without the need for central coordination by servers or stable hosts. Peers are both suppliers and consumers of resources, in contrast to the traditional client-server model where only servers supply, and clients consume. The peer-to-peer application structure was popularized by file sharing systems like Napster. The concept has inspired new structures and philosophies in many areas of human interaction. Peer-to-peer networking is not restricted to technology, but

covers also social possesses with a peer-to-peer dynamic. In such context, social peer-to-peer processes are currently emerging throughout society.

#### 4. E-commerce in India



The number of Internet users in rural areas will touch 210 million by 2018. In 2001, there were approximately seven million Internet users in India. This number has grown by 25 times in the last 12 years at a compounded rate of over 30 per cent year on year. Today, 40 million Indians are online every day, spending 40-45 hours over the Internet per month. India is the second largest market for social networking giants such as Facebook and LinkedIn - 58,000 new users get connected on to a social network every day.

That is not all. The IAMA and The Boston Consulting Group (BCG) report India@Digital.Bharat establishes that India is headed towards an Internet economy worth \$200 billion by 2020 that will contribute to 5 per cent of the GDP growing at 23 per cent compared to the overall 13 per cent.

#### 5. Ecommerce its pros and Cons for Trader and Buyers

Advantages for traders

- The possibility of the small companies to compete with the large companies Due to small expenses incurred by a virtual shop small companies are confronting with one less barrier in penetrating the markets already dominated by the large companies. More than this due to her flexibility and perception towards new the small company has a major advantage in comparison with a large one dominated by bureaucracy and conservatism.
- Permanent contact with customers for 24 hours and 7 days Comparing with the common employees who need salaries, a working time table, vacation, with a varying productivity and being subjective a web site is offering information about the company and her products or she is taking and processing orders for 24 hours of 24 and 7 days of 7 continuously with minim costs. This is bringing an advantage, too in case of the
- Expansion on the foreign markets when the hourly difference making more difficult the contacts between the companies. It also improves the communication with the customers that have not to observe a strict time table thus being able to obtain information and place orders any time.
- International markets penetration facilities the world network is not limited by borders, it does not belong to anyone and the access and publication costs are extremely low. The communication with a customer positioned to the opposite pole of the world is as easy as the communication with someone in the next room. Any producer now can sell his products in any country by the means of the web site and no contacts with local companies or large investments are necessary anymore.
- The decrease of the functioning costs these costs may be drastically diminished by the automatics of the orders process. There is also the possibility of total automatics by the integration with the administration system thus leading to the increase of the general productivity of the company.
- New possibilities for performing a direct marketing (one-to-one) Comparing with a human being the computer may retain not only the name and personal data of all customers as well as their preferences being capable to adapt the offer and products presentation according to each customer's profile. The study of the customers on internet may be achieved using all available data such as: location, type of browser and operation system, the site where they do come from navigation habits but the customers will not realize at all that they are subject of such studies. This is why many consider this as an infringement of the personal intimacy.

Disadvantages for traders

- The Fraud As in any other activity field, the technology of internet created new fraudulent possibilities. In the lack of a direct contact a client may cheat the trader regarding his identity or his real payment possibilities. Most of the occidental virtual shops hesitate to send commodities to East Europe because of the many successful embezzlement trials initiated by East Europeans with false credit cards.
- The Security Another important problem is that regarding the security of the data. A company that has not access to internet does not have too many worry reasons as regards the integrity of her administration informatics systems. The connection to a public network that can be accessed by anyone more or less authorized and the access to the confidential data of the local network is raising serious problems. Therefore new risks occur these being not present before the apparition of such type of commerce.
- Launch and integration costs although the launch costs of a virtual shop are much lower in comparison with those of a real one they may be incorrectly estimated. A company that has not implemented yet an administration informatics system or those where the employees do not have minim
- Technical knowledge may confront with an unexpected increase of the launch costs due to the necessity of the acquisition of training systems for the employees.

#### Advantages for buyers

- Availability for 24 hours of 24 and 7 days of 7 This availability independent on a certain program represents a major advantage for the clients who can purchase during night too when they are not busy with other urgent problems (job, household).
- Facilities Due to the electronic commerce there is no need to go to the commercial places or to the shop next to corner .Everybody may place orders from home sitting in front of the PC and thoroughly analyzing and comparing different products.
- Access to information and different products without any restrictions the apparition of the electronic commerce gave a new meaning of the term 'globalization'. For example in order to buy handcrafted items from Madagascar it is not necessary to travel to that destination but only to open the browser at the address of a shop that is trading such items (address that can be found using the searching motors). Before buying the product the potential future buyer has more free and cheap access to the offers of the producers or trading companies.

#### Disadvantages for buyers

- Security the most important reason for which some persons hesitate to use internet for purchases-as resulted from most of the opinion polls – is that of being afraid to supply on line information regarding the credit card. But the same persons are giving daily the credit card number, at phone, to other persons they even do not know at all when they buy from catalogues or TVs.
- Intimacy Another important problem is the attempt to the personal intimacy. The potential buyers are afraid that by internet the traders or a bad will person can collect thorough information and they will not realize this at all. Unfortunately these worries are the result of some exaggerations especially in Occident where The Theory of Conspiracies is fashionable.
- Absence of human contact this is the obvious inconvenient generated by the electronic commerce. The low launching and maintenance costs of a virtual shop derive of the advantages of the automatics of the processes and there is no need to employ additional personal, on one hand. On the other hand the absence of the seller, the human presence to which the buyer may appeal to in case he has doubts, represents an obstacle in spreading this form of commerce. In this respect some companies created programs that are permitting the vocal contact or visual one between the customer and one employee of the company during his visit on the web site.

## 6. CONCLUSIONS

After careful observation, it has come to my conclusion that e-commerce has undeniably become an important part of our society. The World Wide Web is and will have a large part in our daily lives. It is therefore critical that small businesses have their own to keep in competition with the larger websites. Since web developers have lowered down the prices for their services, it has become more affordable for small businesses to use the World Wide Web to sell their products. Although there are negative aspects of e-commerce, small businesses have tried to accommodate to the needs of the consumers. For example, one of the negative aspects of e-commerce is that consumers lack the advice and guidance of sellers, to accommodate that, they have customer service through the phone of online to answer any questions. It is also important to note that e-commerce does not benefit all small companies equally. How much revenue a business gets from e-commerce depends on what kind of service it gives. For example, most people would like to try on clothes before they buy them, so it probably would not benefit a small business that sells clothes as much as a small business that sells home supplies or specialty books. Nevertheless, e-commerce does benefit any business even in small ways. This is why it is crucial to understand how e-commerce affects small businesses because it is becoming such a huge part of how society functions that it affects the economy greatly and whatever happens to the economy affects us. This is why is it important to understand this subject because in the long run, it will affect all of us.



Access to technology thoroughly the access to technology refers to both the internet penetration degree and the spread of the computers and specialized knowledge. As long as a site of electronic commerce will be accessible only to persons who at least know to launch the browser and type the web address most of the potential customers will prefer the next to corner shop. Besides this although 200 millions of users of internet services, figure registered today, seems to be important it is not as important as it seems considering the population of the earth counting 6 milliards of inhabitants. In Romania the 400 thousands of users represent a small number in comparison with the population of 22 million of inhabitants

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