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Research Paper

A Study of E-Commerce: Challenges and Oppurtunities in an Indian Economy

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ABSTRACT
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 publicityand discussion about e-commerce. Librarycatalogues 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 differencecontexts in which electronic commerce is used, couples with the myriad related themes that have arisen from the new area of electronic commerce and to provide and 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'. He maintains that in its purest form, electronics commerce has existed for over 40 years, originating form the electronic transmission of messages during the Berlin airlift in 1948. From this, electronic data interchange (EDI) was the next stage of e-commerce development. In the 1960s a cooperative effort between industry groups produced a first attempt at common electronics data formats. The formats, however, were only for purchasing, transportation and finance data, and were used primarily for intra-industry transactions. It was not until the late 1970s that work began for national Electronics Data Interchange (EDI) standards, which developed well into the early 1990s.

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I. INTRODUCTION

As with e-commerce, e-business (electronic business) also has a number of different definitions and is uded in a number of different contexts. One of the first to use the term was IBM, in October 1997, when it launched a campaign built around e-business. Today, major corporations are rethinking their business in terms of the Internet and its new culture and capabilities and this is what some see as e-business.

E-business is the conduct of business on the Internet, not only buying and selling but also servicing customers and collaborating with business partners.

E-business includes customers service (e-service) and intra-business tasks.

E-business is the transformation of key business processes through the use of Internet technologies. An –e-business is accompany that can adapt to constant and continual change.

The development of internet and extranet is part of e-business.

E-business is everything to do with back-end systems in an organization.

In practice, e-commerce and e-business are often used interchangeably.

E-COMMERCE, E-BUSINESS :

Some analysts and on-line business people have decided that e-business is infinitely superior as a moniker to e-commerce. That's misleading and distracts us from the business goals at hand. The effort to separate the E-commerce and E-business concepts appears to have been driven by marketing motives and is dreadfully thin in substance.

Here's the important thing: E-commerce, E-business or whatever else you may want to call it is a means to an end.

The different names, definitions and words referred to in the previous sections are merely a sample of the glossary that has originated from marketing departments to sella concept, the media to describe a sensational 'new' phenomenon, consultants to justify their fees and recommendations, and business to validate and implement the new technology. In fact there is no one definitive meaning of e-commerce or e-business that is perspectives and emphases of different people in different organizations and business sectors. Some argue that it makes little sense to have a restrictive definition for the term e-commerce since it is unlikely that there will be agreement on a single unique definition. 'Attempting to define E-commerce or E-business is guaranteed to generate Byzantine debates with meaningless origins. It reminds me of trying to answer the following question: 'If one synchronized swimmer drowns, would the others follow?"

Because of this trend, it is necessary when undertaking any electronic commerce, electronic business or any other e-related project or assignment, to clearly define any term in the context and environment in which it is being used.

KEY DRIVERS OF E-COMMERCE

It is important to identify the key drivers of e-commerce to allow a comparison between different countries. It is often claimed that e-commerce is more advanced in the USA than in Europe. These key drivers can be measured by a number of criteria that can highlight the stages of advancement of e-commerce in each of the respective countries. The criteria that can determine the level of advancement of e-commerce are summarized in Table 1.1 and can be categorized as :

1. *Technological factors :* The degree of advancement of the telecommunication infrastructure which provides access to the new technology for business and consumers.
2. *Political factors :* including the role of government in creating government legislation, initiatives and funding to support the use and development of e-commerce and information technology.
3. *Social factors :* incorporating the level and advancement in IT education and training which will enable both potential buyers and the work force to understand and use the new technology.
4. *Economic factors* :including the general wealth and commercial health of the nation and the elements that contribute to it.

Since a distinction has been made in this book between e-commerce and e-business for consistency, the key drivers of e-business are also identified. These are mainly at the level of the firm and are influenced by the macro-environment and e-commerce, which include:

- *Organizational culture* –attitudes to research and development (R&D); its willingness to innovate and use technology to achieve objectives.
- *Commercial benefits* – in terms of cost savings and improved efficiency that impact on the financial performance of the firm.
- *Skilled and committed workforce* – that understands, is willing and able to implement new technologies and processes.
- *Requirements of customers and supplies* – in terms of product and service demand and supply.
- *Competition*- ensuring the organization stays ahead of or at least keeps up with competitors and industry leaders.

These key drivers for the implementation of e-business can be put into the context of the classic economic equation of supply and demand illustrated in Figure 1.2

Table 1.1 Key drivers of E-commerce

Key drivers	Measurement criteria
Technological factors	• Telecommunication infrastructure Backbone players and competition Pricing Internet service providers Range of service available (e.g. ADSL, ISDN) Ownership (private or public sector) • Access to new technology developments • Bandwidth • Speed of development and implementation of new technology by industry sector.
Political factors	• Number and type of government incentives and programmes to support the use and development of new technology. • Legislation-number and type of supportive or restrictive laws and policies that govern electronic data, contacts and financial transactions. For example, laws that recoginise and enforce the validity of electronics documentation, contracts and transactions in a court of law: the validation of digital signatures; the legal usage of electronic security measures such as encryption. • Public policies-whether government supports the growth of electronic transactions and processes. For example, filing tax returns to the inland Revenue electronically, the national education curriculum and training.
Social factors	• Skills of workforce • Number of users on-line • Penetration rate of PCs • Level of education; computer literacy and IT skills • Culture of technophilia –a willingness and ability to adopt new technology and the speed at which technology achieves critical mass as in Japan
Economic Factors	• Economic growth –GDP • Average income • Cost of technology (hardware and software) • Cost of access to telecommunications infrastructure –pricing structures and rates. • Commercial infrastructure- advancement of banking sector; payment systems • Innovative business models

Thus, e-commerce provides the infrastructure and environment that enables and facilities e-business. Within this, implementation of e-business is solely dependent on whether there is a demand by the organization and whether it can be supplied within the organization.

THE IMPACT OF ELECTRONIC COMMERCE

E-commerce and e-commerce are not solely the Internet, websites or dot com companies. It is about a new business concept that incorporates all previous business management and economic concepts. As such, e-business and e-commerce impact on many areas of business and disciplines of business management studies. For example :

- *Marketing* – issues of on-line advertising, marketing strategies and consumer behaviour and cultures. One of the areas ion which it impacts particularly is direct marketing. In the past this was mainly door-to-door, home parties (like the Tupperware parties) and mail ordr using catalogues or leaflets. This moved to telemarketing and TV selling with the advances in telephone and television technology and finally developed into e-marketing spawning' 'eCRM' (customer relationship management) data mining and the like by creating new channels for direct sales and promotion.
- *Computer sciences* – development of different network and computing technologies and languages to support e-commerce and e-business, for example linking front and back office legacy systems with the 'web-based' technology.
- *Finance and accounting* – on-line banking ; issues of transaction costs; accounting and auditing implications where 'intangible' assets and human capital must be tangibly valued in an increasingly knowledge based economy.
- *Economics*- the impact of e-commerce on local and global economies; understanding the concepts of a digital and knowledge-based economy and how this fits into economic theory.
- *Production and operations management* – the impact of on-line processing has led to reduced cycle times. It takes seconds to deliver digitized products and services electronically; similarly the time for processing orders can be reduced by more than 90 per cent from days to minutes. Production systems are integrated with finance marketing and other functional systems as well as with business partners and customers (see Intel mini-case).

BENEFITS OF E-COMMERCE TO ORGANISATIONS

International marketplace. What used to be a single physical marketplace located in a geographical area has now become a borderless marketplace including national and international markets. By becoming e-commerce enabled, business now have access to people all around the world. In effect all e-commerce business have become virtual multinational corporations.

Operational cost savings. The cost of creating, processing, distributing, storing and retrieving paper-based information has decreased (see Intel mini-case).

Mass customization. E-commerce has revolutionized the way consumers buy good and services. The pull-type processing allows for products and services to be customized to the customer's requirements. In the past when Ford first started making motor cars, customers could have any color so long as it was black. Now customers can configure a car according to their specifications within minutes on-line via the www.ford.com website.

Enables reduced inventories and overheads by facilitating 'pull'-type supply chain management- this is based on collecting the customer order and then delivering through JIT (just-in-time) manufacturing. This is particularly beneficial for companies in the high technology sector, where stocks of components held could quickly become obsolete within months. For example, companies like Motorola (mobile phones) and Dell (computers) gather customer orders for a product, transmit them electronically to the manufacturing plant where they are manufactured according to the customer's specifications (like colour and features) and then sent to the customer within a few days.

Lower telecommunications cost. The Internet is much cheaper than value added networks (VANs) which were based on leasing telephone lines for the sole use of the organisation and its authorized partners. It is also cheaper to send a fax or e-mail via the Internet than direct dialing.

Digitisation of products and processes. Particularly in the case of software and music/video products, which can be downloaded or e-mailed directly to customers via the Internet in digital or electronic format.

BENEFITS OF E-COMMERCE TO CONSUMERS

24/7 access, Enables customers to shop or conduct other transactions 24 hours a day, all year round from almost any location. For example, checking balances, making payments, obtaining travel and other information. In one case a pop star up web cameras in every room in his house, so that he could check the status of his home by logging onto the Internet when he was away from home on tour.

More choices. Customers not only have a whole range of products that they can choose from and customize, but also an international selection of suppliers.

Price comparisons. Customers can 'shop' around the world and conduct comparisons either directly by visiting different sites, or by a visiting a single site where prices are aggregated from a number of providers and compared (for example www.moneyextra.co.uk for financial products and services).

Improved delivery processes. This can range from the immediate delivery of digitized or electronic goods such as software or audio-visual files by downloading via the Internet, to the on-line tracking of the progress of packages being delivered by mail or courier.

An environment of competition where substantial discounts can be found or value added, as different retailers vie for customers. It also allows many individual customers to aggregate their orders together into a single order presented to wholesalers or manufactures and obtain a more competitive price (aggregate buying) for example www.letbuyit.com

BENEFITS OF E-COMMERCE TO SOCIETY

Enables more flexible working practices, which enhances the quality of life for a whole host of people in society, enabling them to work from home. Not only in this more convenient and provides happier and less stressful working environments, it also potentially reduces environmental pollution as fewer people have to travel to work regularly.

Connects people. Enables people in developing countries and rural areas to enjoy and access products, services, information and other people which otherwise would not be so easily available to them.

Facilities delivery of public services. For example, health services available over the Internet (on-line consultation with doctors or nurses), filling taxes over the Internet through the Inland Revenue website.

WHAT ABOUT THE LIMITATIONS OF E-COMMERCE

There was much hype surrounding the Internet and e-commerce over the last few years of the twentieth century. Much of it promoted the Internet and e-commerce as the panacea for all ills, which raises the question, are there any limitations of e-commerce and the Internet ?

Isaac Newton's 3rd Law of Motion, 'For every action there is an equal and opposite reaction' suggests that for all the benefits there are limitations to e-commerce. These again will be dealt with according to the three major stakeholders-organisations, consumers and society.

LIMITATIONS OF E-COMMERCE TO ORGANISATIONS

Lackof sufficient system security, reliability, standards and communication protocols. There are numerous reports of website and databases being hacked into, and security holes in software. For example, Microsoft has over the years issued many security notices and 'patches' for their software. Several banking and other business websites, including Barclays Bank, Powergen breaches in security where 'a technical oversight' or 'a fault in its systems' led to confidential client information becoming available to all.

Rapidly evolving and changing technology, so there is always a feeling of trying to 'catch up' and not be left behind.

Under pressure to innovate and develop business models to exploit the new opportunities which sometimes leads to strategies detrimental to the organization. The ease with which business models can be copied and emulated over the Internet increase that pressure and curtail longer-term competitive advantage.

Facing increased competition from both national and international competitors often leads to price wars and subsequent unsustainable losses for the organization.

Problems with compatibility of older and 'newer' technology. There are problems where older business systems cannot communicate with web based and Internet infrastructures, leading to some organizations running almost two independent systems where data cannot be shared. This often leads to having to invest in new systems or an infrastructure, which bridges the different systems. In both cases this is both financially costly as well as disruptive to the efficient running of organizations.

LIMITATIONS OF E-COMMERCE TO CONSUMERS

Computing equipment is needed for individuals to participate in the new 'digital' economy, which means an initial capital cost to customers.

A basic technical knowledge is required of both computing equipment and navigation of the Internet and the World Wide Web.

Cost of access to the Internet, whether dial-up or broadband tariffs.

Cost of computing equipment. Not just the initial cost of buying equipment but making sure that the technology is updated regularly to be compatible with the changing requirement of the Internet, websites and applications.

Lack of security and privacy of personal data. There is no control of data that is collected over the Web or internet. Data protection laws are not universal and so websites hosted in different countries may or may not have laws which protect privacy of personal data.

Physical contact and relationships are replaced by electronic processes. Customers are unable to touch and feel goods being sold on-line or gauge voices and reactions of human beings.

A lack trust because they are interacting with faceless computers.

LIMITATION OF E-COMMERCE TO SOCIETY

Breakdown in human interaction. As people become more used to interacting electronically there could be an erosion of personal and social skills which might eventually be detrimental to the world we live in where people are more comfortable interacting with a screen than face to face.

Social division. There is a potential danger that there will be an increase in the social divide between technical haves and have-notes-so people who do not have technical skills become unable to secure better-paid jobs and could form an underclass with potentially dangerous implications for social stability.

Reliance on telecommunications infrastructure, power and IT skills , which in developing countries nullifies the benefits when power, advanced telecommunication infrastructures and IT skills are unavailable or scarce or underdeveloped.

Wasted resources. As new technology dates quickly how do you dispose of all the old computers, keyboard, monitors, speakers and other hardware or software ?

IDENTIFYING TRANSCATING PARTNERS

Another method for classifying e-commerce is by identifying the partners directly involved in the transaction. An informal version of this framework is being loosely applied in the use of the terms business-to-business (B-to-B), business-to-consumer (B-to-C) and consumer-to-consumer (C-to-C). But what exactly does this mean?

The framework that is summarized in Figure 1.4 indetifies a range of relationships based on the party that initiates the transaction and the party that accepts the transaction. The party originating the e-commerce

transaction also includes the facilities for initiating and fulfilling it. For example in the case of B-to-C, a business sets up a website that invites and enables consumers to buy their products and then fulfils the purchase. But the

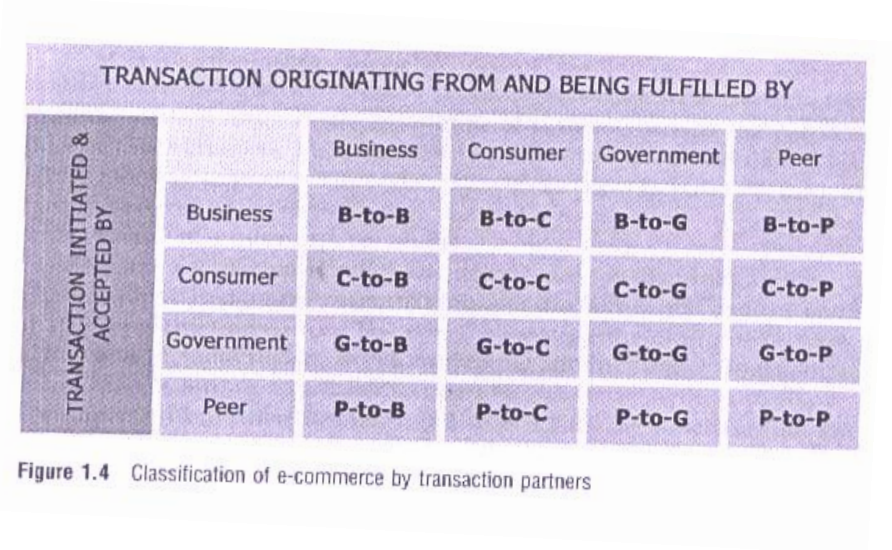

Figure 1.4 Classification of e-commerce by transaction partners

consumer actually initiates the transaction by requesting and then accepting the purchase. So there are a number of exchanges that take place between the parties before the transaction is completed and fulfilled.

Each of the categories identified in Figure 1.4 are described as :

Business-to-Business (B-to-B) The exchange of products, services or information between business entities. According to market research studies published in early 2000, the money volume of B-to-B revenue worldwide will be $7.29 trillion by 2004, a compound annual growth of about 41 per cent.

Web-based B-to-B includes:

- Direct selling and support to business (as in the case of Cisco where customers can but and also get technical support, downloads, parches on-line).
- E-procurement (also known as industry portals) where a purchasing agent can shop for supplies from vendors, request proposals, and, in some cases, bid to make a purchase at a desired price. For example the auto parts wholesaler (rliableautomotive.com); and the chemical B-to-B exchange(chemconnect.com).
- Information sites provide information about a particular industry for its companies and their employees. These include specialized search sites and trade and industry standards organization site. E.g. newmarket makers.com is a leading portal for B-to-B news.

Many B-to-B sites may also fall into none or more than one of these groups. Models for B-to-B sites are evolving and are discussed in more detail in Chapter 5.

Business-to-consumer (B-to-C) The exchange of products, information or services between business and consumers in a retailing relationship. Some of the first examples of B-to-C e-commerce were amazon.com and dell.com in the USA and lastminute.com in the UK. In this case, the 'c' represents either consumer or customer.

Business-to-Government (B-to-G) The exchange of information, services and products between business organizations and government agencies on-line.

This may include,

- E-procurement services, in which business learn about the purchasing needs of agencies and provide services.
- A virtual workplace in which a business and government agency could coordinate the work on a contracted project by collaborating on-line to coordinate on-line meetings, review plans and manage progress.

Business –to-Peer Networks (B-to-P) This would be the provision of hardware, software or other services to the peer networks. An example here would be Napster who provided the software and facilities to enable peer networking (discussed in more detail in Chapter

Consumer-to-Business (C-to-B) In this exchange of products, information or services from individuals to business. A classic example of this would be individuals to business. A classic example of this would be individuals selling their services to business.

Consumer-to-Consumer (C-to-C) In this category consumers interact directly with other consumers. They exchange information such as:

- Expert knowledge where one person asks a question about anything and gets an e-mail reply from the community of other individuals, as in the case of the New York Times-affiliated abuzz.com website.
- Opinions about companies and products, for example epinions.com.

This is also an exchange of goods between people both with consumer auction sites such as e-bay and with more novel bartering sites such as swapitshop.com, where individuals swap goods with each other without the exchange of money.

Consumer-to-Government (C-to-G) Examples where consumers provide services to government have yet to be implemented. See Government-to-Business.

Consumer-to-Peer Networks (C-to-P) This is exactly part of what peer-to-peer networking is an so is a slightly redundant distinction since consumers offer their computing facilities once they are on the peer network.

Government –to-Business (G-to-B) (Also known as e-government, discussed in detail in Chapter 5.) The exchange of information, services and products between government agencies and business organizations. Government sites now enable the exchange between government and business of :

- Information, guidance and advice for business on international trading, sources of funding and support (ukishelp), facilities(e.g. www.dti.org.uk).
- A database of laws, regulations and government policy for industry sectors.
- On-line applications and submission of official forms (such as company and value added tax).
- On-line payment facilities.

This improves accuracy, increases speed and reduces costs, so businesses are given financial incentives to use electronic-form submission and payment facilities.

Government-to-Consumer (G-to-B) (Also known as e-government). Government-to-Government transactions within countries linking local governments together and also international governments, especially with in the European Union, which is in the early stages of developing coordinated strategies to link up different national systems.

Government-to-Peer Network (G-to-P) As yet there is no real example of this type of e-commerce.

Peer-to-Peer Network (P-to-P) (Peer-to-Peer networking is discussed in more detail in Chapter 5). This is the communications model in which each party has the same capabilities and either party can initiate a communications session. In recent usage, peer-to-peer has come describe applications in which users can use the Internet to exchange files with each other directly or through a mediating server.

Peer Network-to Consumer (P-to-C) This is in effect peer-to-peer networking, offering services to consumers who are an integral part of the peer network.

Peer Network-to-Government (P-to-G) This has not yet been used, but if it was, it would be used in a similar capacity to the P-to-B model (see below), only with the government as the party accepting the transaction.

Peer Network-to-Business (P-to-B) Peer-to-Peer networking provides resources to business. For example, using peer network resources such as the spare processing capacity of individual machines on the network to solve mathematical problems or intensive and repetitive DNA analyses which requires very high capacity processing power.

This framework can be used by organizations to segment their customers and distinguish the different needs, requirements, business processes, products and services that are needed for each.

WHAT ARE THE BARRIERS TO E-COMMERCE

The drivers of e-commerce were identified and summarized in Table 1.1Conversely there are also barriers to the growth and development of e-commerce. Numerous reports and surveys identify the different kinds of barriers, and many of them focus on security as being one of the largest inhibitors to and problems for e-commerce. CommerceNet (anon-profit consortium of business, technology academic and government leaders who develop and implement e-commerce technology and business practice) conducts and annual time series survey of visitors to the CommerceNet website, to identify the barriers to e-commerce. Different nations are at different stages of development of e-commerce and as such the issues that are relevant to one nation may not be relevant to another. Similarly, the issues that are relevant to the type of organization also differ. For example, large organizations have different needs and infrastructures to SMEs. The study of 1,000 visitors divides the findings into the perspectives of three different types of organization : large B-to-B organizations; SME B-to-B enterprises; and B-to-C retailers. The study divides the results into US and non-US based. This is particularly useful because the USA is at a more advanced stage in the e-commerce adoption lifecycle than the majority of other nations and so can be used as a predictor of things to come or as a warning to prevent followers experiencing similar pitfalls and problems.

The findings summarized in Figure 1.6 show that barriers to e-commerce can be seen as being relevant both to the macro-environment and the micro-environment level of the firm itself. Overall, all three kinds or organizations have similar barriers but with different emphases.

Internet infrastructure deals with issues such as availability and quality of the internet in terms of speed and reliability. This barrier is of particular concern to SMEs and B-to-C organizations, since their business relies more on general consumers and so the was with which the general public can connect to the Internet has a direct impact on their Web-based business.

Technically infrastructure deals with issues of standardization of systems and applications, which is a particular concern for larger organizations who want to implement solutions such as value chain integration and e-supply chain management.

Security in its broadcast term is one of the most significant barriers to e-commerce both within the organization and external to it. Identified as Security and Encryption; Trust and Risk; User Authentication and Lack of Public Key Infrastructure; Fraud and Risk of Loss it relates to the development of a broader security infrastructure and it also relates to the kinds of measures organizations can take to improve security.

Although security is a major companies in the B-to-C e-commerce retail sector, since it reflects the concerns and perceptions of users and potential customers that are conducting financial transactions on-line.

The commercial infrastructure relates to issues such as international trade agreements, taxation laws and other legal agreements that facilitate all kinds of on-line trading and so is a barrier relevant to all types of organizations.

At the level of the organizations itself, there are many barriers to e-commerce that relate to issue of organizational structure and culture. These are most significant for large organizations that have to deal with change management issues. For example, there is a sense that much work still needs to be done to design the right organizational structure and corporate culture that will promote and be able to maximize the benefits of widespread e-commerce applications. Additionally, there is a perception that business partners face similar organisational and technological problems, which raises the barrier further.

Another significant issue was found to be the lack of qualified personnel to implement in-house and third-party e-commerce systems. For SMEs, this is a particularly strong concern because internally they do not have sufficient resources to attract and maintain their own support staff to develop a sophisticated technology infrastructure. With regards to third parties, the qualified personnel tended to worek for larger organizations, which were more concerned about noted that, 'small firms get lots of vague and general exhortations to go "online" but find it very difficult to get reliable, well informed advice and also to get honest, effective support from a Web services provider.'

Another major barrier to the development of e-commerce was a lack of proven business models. This is a reflection of the instability of the whole dot com phenomenon, and the poor performance of the dot coms on the world's stock exchanges in late 1999 and early 2000 after the dizzy heights to which dot com companies rose in 1998-9. A financially successful business model has yet to emerge into the business world's limelight as the model to follow.

II. CONCLUSIONS

There is no one commonly agreed definition of e-commerce or e-business. Thus, there is a need to clarify terms being used and explain the context in which they are being applied. E-commerce has an impact on three major stakeholders, namely society, organisactions and customers (or consumers). There are a number of advantages, which include cost savings, increased efficiency, customization and global marketplaces. There are also limitations arising from e-commerce which apply to each of the stakeholders. These include information overload, reliability and security issues, cost of access, social divisions and difficulties in policing the Internet. Successful e-commerce involves understanding the limitations and minimizing the negative impact while at the same time maximizing the benefits.

REFERENCES

[1]. The Shorter Oxford English Dictionary, Vol. I, p. 256. Book Club Associates, 1983.
[2]. www.ibm.com/e-business (accessed September 2000)
[3]. www.whatis.com/ecommerce (accessed September 2000)
[4]. V.Zwass, 'Structure and macro-level impacts of electronic commerce: from technological infrastructure to electronic marketplaces', http://www.mhhe.com/business/mis/zwass/ecpaper.html.(accessed May 2001).
[5]. Walid Mougayar 'E-commerce? E-business? Who E-cares? 'COMPUTERWORLD, 2 November 1998; http://www.cybermanagement .com/cw7.htm (accessed September 2001).
[6]. R. Kalakota and A.B. Whinston, Frontiers of Electronics Commerce, Addison-Wesley, 1996.
[7]. DTI Report –Government's Expenditure Plans for 2001-2002 (March 2001) Chapter 1- 'Delivering Better Public Services' (Figure 1.2): http:// www.dti.gov.uk/expenditureplan/expenditure2001/intro_chap1/chap1/section3.htm (accessed December 2001).
[8]. Deification of peer-to-peer networking: www.whatis.com (accessed December 2001).
[9]. 'A study of on-line retailing 2000- Forrester Research': www.forrester.com (accessed March 2000) .