

# Chapter 1

## Introduction

### EMERGENCE OF E-COMMERCE

Convergence in Information and Communication Technology (ICT) has widened its applications to business processes. One of such applications is e-commerce. E-commerce combines IT, telecom technology and business processes to provide a unique environment for transactions. It is a comprehensive system of trading in goods, services and information using computer networks including the public network like Internet (Cunningham, 2001; Kauffman and Walden, 2001). E-commerce offers opportunities for enhancing levels of efficiency and reliability in different business processes by automating the execution of transactions. It provides various advantages for both the consumers and for the businesses. Three main advantages that e-commerce brings to users are: (a) the wider choice of products; (b) complete/more information; and (c) competitive prices (Tilson et al., 1998; Bolin, 1998). For businesses, advantages include: (a) reduced purchase costs; (b) lower levels of inventory; (c) reduced

sales and distribution costs; (d) better services to customers; (e) opening of new market segments; and (f) reduced cycle times (Bolin, 1998). Increasingly, companies are recognizing the potential of e-commerce and are using this in their trading systems.

E-commerce is a unique enabler of transactions. It equips the trading parties with ability to set up the trading systems of e-commerce with convenience and affordability; ability to transact 24×7×365; ability to access the global marketplace as Internet is global public network; ability to communicate with the trading partners even across the world almost instantaneously and at a very low cost; ability to reduce transaction costs through the process of disintermediation in the distribution processes and leveraging on the buying power by creating more competitive environment in the procurement processes; ability to interact on a computer independent platform via the Internet and not to be restricted to existing hardware platforms (Gascoyne & Ozcubukcu, 1997); and ability to obtain participation of consumers in product design.

DOI: 10.4018/978-1-61350-353-9.ch001

Although, Business-to-Consumer (B2C) e-commerce is more visible and has been able to draw the attention of marketing experts as well as scholars, the Business-to-Business (B2B) segment is the one that has registered higher volumes of business. While B2B e-commerce has been in practice even when Internet was evolving, there has been substantial growth in B2B e-commerce mainly after the emergence of the web as a channel of communication between organizations. The growth in B2B e-commerce has been faster than in B2C e-commerce primarily due to the unique environment of B2B e-commerce. In B2B e-commerce, buyers have higher level of competence in use of e-commerce infrastructure, purchases are more frequent and of higher value per transaction, trading partners are often known to each other, payment is not generally insisted on delivery and the logistics are generally in place for carrying out the transactions. By using Internet technology, many companies have been able to reduce costs of processing transactions and achieve cost efficiencies with help of establishing direct contact between buyers and sellers.<sup>1</sup> Numerous firms use B2B e-commerce infrastructure not only as a transaction platform but also as high value collaborative network for effectively managing relationships with their business partners. Such infrastructure promotes business-to-business information sharing, collaboration and business process integration throughout the value chain.

## **GROWTH TRENDS OF B2B E-COMMERCE**

There has been tremendous growth in B2B e-commerce particularly after the emergence of web-based business networks. It is estimated that about ninety percent of e-commerce is in B2B segment (Reedy, Schulo & Zimmermann, 2000). Leading consultants such as Forrester, Gartner, IDC, Jupiter and others have predicted exponential growth in B2B e-commerce, in the present decade. In US,

B2B e-commerce registered a compound annual growth rate of about around 13 percent during the period 1999-2006 and a 9 percent annual increase is forecasted for the period 2006-2012 (Bruce D. et al., 2009). The volume of B2B e-commerce in US was estimated at \$2.48 trillion in 2008 and is forecasted to reach a level of \$3.66 trillion by 2012<sup>2</sup>. The global estimates and forecasts regarding the volume of B2B e-commerce differ significantly. However, the estimates for average compound annual growth rate between 2000 and 2006 for B2B e-commerce has been in the range of 54.4 percent to 81.5 percent. The estimates regarding the growth in Asia and Pacific region has been as high as 109 percent for the same period (Ecommerce and Development Report, 2002). India has also shown spectacular growth in e-commerce. IDC estimated that e-commerce in India is growing at a rate of 55% as compared to 20% in US.

All the above forecasts indicate that the market is realizing the potential of B2B e-commerce and is willing to invest in B2B e-commerce infrastructure. Though the growth in B2B e-commerce is significant, it is restricted by a number of barriers/factors.

## **BARRIERS IN GROWTH OF B2B E-COMMERCE**

Although there are many factors impeding the growth of B2B e-commerce in a country, the important ones can broadly be classified into four categories. They include: (a) Socio-Culture barrier barriers; (b) Lack of standards and laws; (c) Technology Infrastructure barrier; and (d) Lack of trust in B2B e-commerce infrastructure. While the first three barriers may be beyond the control of business organization as they relate directly to the environment in a given country or region, the last one is specific to the company and the B2B e-commerce infrastructure created by a given company for interacting with its trading partners.

14 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/introduction/60580](http://www.igi-global.com/chapter/introduction/60580)

## Related Content

---

### Information Technology, Political Institutions, and Generalized Trust: An Empirical Assessment Using Structural Equation Models

Blaine Robbins and Maria Grigoryeva (2010). *International Journal of Dependable and Trustworthy Information Systems* (pp. 55-69).

[www.irma-international.org/article/information-technology-political-institutions-generalized/46938](http://www.irma-international.org/article/information-technology-political-institutions-generalized/46938)

### Social Networks and Trust in e-Commerce

G. Scott Erickson, Kurt Komaromi and Fahri Unsul (2010). *International Journal of Dependable and Trustworthy Information Systems* (pp. 45-59).

[www.irma-international.org/article/social-networks-trust-commerce/43581](http://www.irma-international.org/article/social-networks-trust-commerce/43581)

### International Trade in the Context of the COVID-19 Pandemic

Giga Abuseridze (2021). *Impact of Infodemic on Organizational Performance* (pp. 217-230).

[www.irma-international.org/chapter/international-trade-in-the-context-of-the-covid-19-pandemic/278934](http://www.irma-international.org/chapter/international-trade-in-the-context-of-the-covid-19-pandemic/278934)

### Navigating an Immersive Narratology: Factors to Explain the Reception of Fake News

Bradley E. Wiggins (2021). *Research Anthology on Fake News, Political Warfare, and Combatting the Spread of Misinformation* (pp. 125-141).

[www.irma-international.org/chapter/navigating-an-immersive-narratology/269090](http://www.irma-international.org/chapter/navigating-an-immersive-narratology/269090)

### First Experiment on Modeling Safety LifeCycle Process in Railway Systems

Brahim Hamid, Yulin (Huaxi) Zhang, Jacob Geisel and David Gonzalez (2011). *International Journal of Dependable and Trustworthy Information Systems* (pp. 17-39).

[www.irma-international.org/article/first-experiment-modeling-safety-lifecycle/65520](http://www.irma-international.org/article/first-experiment-modeling-safety-lifecycle/65520)