# Chapter V E-Commerce Diffusion: Critical Factors Affecting Diffusion of E-Commerce

### ABSTRACT

As we have already mentioned in the Preface of this book, mentioning EC in this chapter will signify and mean B2CEC unless it is mentioned otherwise. This chapter has primarily addressed, discussed, and conceptualized paradigms of three issues of diffusion of EC. First, we investigated the impacts of EC diffusion on overall social, political, cultural, technological, organizational, and economic relations. In this connection, we revealed seven types of prime relational changes on the effects of EC diffusion in a country context. Consequently, government-private organizations, consumers, and intermediaries (viz., the comprehensive relation of market characteristics) are reshaped. Then we traced the diffusion of EC and the role of different actors associated with this new economical and technological innovation, viz. EC, and their functional characteristics in the diffusion process. Based on the association of those stakeholders with the market economy, and the role and functions of those stakeholders in the diffusion process of EC, we conceptualized the theoretical framework for diffusion of EC. From this framework, we revealed that the government role, capability, and globalization policy; consumer preferences; private organization's capabilities; the global E-organizations mission; and the infrastructure and market mechanism factors with a set of associated variables

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create the ability for EC to be diffused in any country. Therefore, the diffusion of EC is not a unidimensional issue, but has multi-dimensional aspects.

## 5.1. INTRODUCTION

"We have a networked society and economy ... and an industrial-aged government." Stephen Goldsmith, Harvard Professor and Presidential Advisor (Turner & Desloges, 2002).

Information and communication technology (ICT) has become one of the core elements of societal, economic, cultural, organizational, and market re-formation, and E-commerce (EC) may reshape future business patterns through globalization. ICT has created many possibilities for improving managerial efficiency and the quality of service delivery to consumers (Cai and Jun, 2003; Lee and Rao, 2003). During the last decade, technology has contributed to revolutionary change in business patterns, relations, and functions (Kim et al., 2006; Sebastianelli et al., 2006); government structures; institutional concepts; and public administration. Technology has also radically changed the process of governance (Fountain, 2001), performance management (Brown, 1999), bureaucracy and corruption reduction (Moon and Bretschneider, 2002), and reengineering (Anderson, 1999). Various technologies have been applied to support these fundamental characteristics of EC, including electronic data interchange (EDI), interactive voice response, e-mail, voice-mail, web service delivery, virtual reality, and public key infrastructure (Moon, 2002). However, the impact of IT on the business environment in the modern market system reflects just one side of the issue. The other side is re-shaped and shaken by social and cultural thrusts. The social and cultural thrusts come from a revolutionary change in perception and speculation of business relations with consumers. Managers realize that the business system should be more dynamic, more customer focused, more open and transparent, more efficient, and more participatory. So the social aspect of forming an online business system is also vital. Therefore, we can categorize the major and fundamental aspects of EC for a government, as well as for firms who embrace online channels, by introducing EC as:

- Clear vision, mission, and objective,
- Structure and policy,
- Continuous service transformation and improvement mechanism,
- Web presence through ICT, Internet, and World Wide Web,
- Telecommunications system,
- Computer, and
- Human capital.

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