



## **Chapter VII**

# **E-Commerce and Executive Information Systems: A Managerial Perspective**

Geoff Erwin  
Cape Technikon, South Africa

Udo Averweg  
University of Natal, South Africa

### **ABSTRACT**

*The rapid spread of connectivity via the World Wide Web has dramatically altered the ways in which organizations deal with customers and the methods that executives adopt to be informed about business operations. This chapter reviews Executive Information Systems (EIS) and the way in which EIS interacts with e-commerce applications.*

### **INTRODUCTION**

The emergence of e-commerce as a business transactions mechanism has introduced new considerations into strategic decision-making and the design of decision support information systems. Information Systems (IS) at strategic decision-making levels are commonly characterized as being 'executive'. The impact of such decisions, by definition, will be significant (Turban, 2001). IS for

executives therefore require careful planning in their features and applicability to organizational situations. Executive Information Systems (EIS) are designed to serve the needs of executive users in strategic planning and decision-making (Srivihok, 1998) and for making strategic and tactical decisions (Salmeron et al., 2001).

The technology for EIS is evolving rapidly and future systems are likely to be different (Sprague & Watson, 1996). EIS is now clearly in a state of flux. Turban (2001) concurs: "EIS is going through a major change". Emerging (Web-based) technologies can redefine the utility, desirability and economic viability of EIS technology (Volonino et al., 1995). These technologies may need to be applied to resolve one of the most challenging and critical components of an EIS - data accessibility - which often incurs the greatest time, expense and delay in EIS implementation. The accessibility, navigation and management of data and information for improved executive decision-making are becoming *critical* in the new global business environment (Averweg & Erwin, 2000).

The evolution of Web-based business activity has resulted in the term *e-Business* being used to refer to three categories of business activity:

- Business-to-Employee (B2E): Intranet-based applications internal to a company;
- Business-to-Consumer (B2C): Internet-based applications for a company's customers; and
- Business-to-Business (B2B): Extranet-based applications for a company's business partners. (An IOS: Inter Organizational System).

The term *e-commerce* often refers only to B2B (McNurlin & Sprague, 2002). However, in this Chapter the term *e-commerce* is used to refer to all three categories. EIS, specifically in the *e-commerce* environment, is the focus of this chapter.

## **BACKGROUND**

Concern about Information Technology (IT) impact on society, organizations and people is not new. Some 170 years ago, British intellectuals expressed philosophical arguments about the effects of the Industrial Revolution on society (Turban et al., 1999). While there are philosophical, technological, social and other differences between that society and our own, there are people nowadays who believe that mankind is threatened by the evolution of technology. However, our society has not rejected technology and we recognize that computers and technology are essential to maintaining and supporting our culture. IT has become the major

16 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/commerce-executive-information-systems/30318](http://www.igi-global.com/chapter/commerce-executive-information-systems/30318)

## Related Content

---

### Partnering for Perfection: An Economics Perspective on B2B Electronic Market Strategic Alliances

Qizhi Dai and Robert J. Kauffman (2008). *Electronic Commerce: Concepts, Methodologies, Tools, and Applications* (pp. 1953-1977).

[www.irma-international.org/chapter/partnering-perfection-economics-perspective-b2b/9597](http://www.irma-international.org/chapter/partnering-perfection-economics-perspective-b2b/9597)

### Modeling Customers' Intention to Use E-Wallet in a Developing Nation: Extending UTAUT2 With Security, Privacy and Savings

Vishal Soodanand Avinash Rana (2020). *Journal of Electronic Commerce in Organizations* (pp. 89-114).

[www.irma-international.org/article/modeling-customers-intention-to-use-e-wallet-in-a-developing-nation/241249](http://www.irma-international.org/article/modeling-customers-intention-to-use-e-wallet-in-a-developing-nation/241249)

### Integration between Regression Model and Fuzzy Logic Approach for Analyzing Various Electronic Commerce Effects on Economic Growth in Organizations

Hamed Fazlollahtabar and Mohammad Ali Ehsani (2010). *Journal of Electronic Commerce in Organizations* (pp. 17-31).

[www.irma-international.org/article/integration-between-regression-model-fuzzy/46945](http://www.irma-international.org/article/integration-between-regression-model-fuzzy/46945)

### The Impact of Blockchain Technology on Human Resource Management

Erhan Atay and Jane L. Y. Terpstra Tong (2022). *Handbook of Research on Social Impacts of E-Payment and Blockchain Technology* (pp. 136-151).

[www.irma-international.org/chapter/the-impact-of-blockchain-technology-on-human-resource-management/293863](http://www.irma-international.org/chapter/the-impact-of-blockchain-technology-on-human-resource-management/293863)

### Design Agents with Negotiation Capabilities

Jana Dospisil (2001). *Internet Commerce and Software Agents: Cases, Technologies and Opportunities* (pp. 122-149).

[www.irma-international.org/chapter/design-agents-negotiation-capabilities/24612](http://www.irma-international.org/chapter/design-agents-negotiation-capabilities/24612)