Preface

In the early 1990s, e-commerce ushered in an era that is now called “the digital economy.” It revolutionized the process of buying, selling, and exchanging products and services, and spawned a host of business and technological innovations. As globalization and competition pose new opportunities and challenges, firms face increased pressure from stakeholders to create e-business values. They are attempting to find which e-commerce models and applications will contribute effectively to their sustainability, growth, and innovation. Innovations in technology in the e-business area have encouraged firms to constantly improve existing business processes and to invent new business models and applications.

Recently, advancements in wireless technology have extended the reach of e-commerce to mobile business environments. As a growing number of customers utilize mobile devices to exchange information and to conduct business transactions, firms are competing to provide the most value-added, innovative, convenient mobile services for their customers. While large firms have been the early adopters and beneficiaries of most e-business innovations, an increasing number of small and medium-sized enterprises (SMEs) are also rapidly adopting e-business to better serve customers, improve productivity, extend market base, and stay competitive.

E-commerce has also provided firms with new ways of approaching, acquiring, and retaining customers. On top of various web-based marketing sources, firms have recently shown significant interest in online social networking as a new marketing source. Online social networking services such as Facebook, Twitter, and LinkedIn provide firms with significant business building communities based on interests and relationships.

E-commerce brought about a paradigm shift caused by “disruptive” technology that is radically changing the traditional way of doing business. The digital economy emerging from the Internet revolution changed the rules and principles traditionally held by business firms. The paradigm shift was unprecedented in terms of the complexity and magnitude, and pressured firms to be more innovative and proactive to business problems than ever before. Anecdotal evidence of excellent companies such as e-Bay and Amazon.com show that they understand the dynamics of the
complex interrelated internal and external forces imposed on the company, develop comprehensive business plans from multi-layered stakeholders’ perspectives, and implement the plans at the right time, magnitude, and place.

**AUDIENCES OF THIS BOOK**

Electronic Commerce Management for Business Activities and Global Enterprises: Competitive Advantages is written as an e-commerce textbook for undergraduate and graduate students in various business programs, including information systems, marketing, computer science, and MBA. In addition to serving as a textbook in e-commerce, this book also provides an excellent repository for instructors, researchers, and industry practitioners for their research ideas, theories, and practical experiences.

**THEMES AND COVERAGE**

In addition to regular topics traditionally taught in the classroom, this textbook addresses the many new emerging ideas and applications and presents tools and techniques in all aspects of e-commerce development and management in the global economy. To this end, this textbook highlighted the following themes and content:

**Up-to-Date Coverage on International B2B E-Commerce**

- Environments for international B2B e-commerce
- Success factors of international B2B e-commerce
- B2B e-commerce standards for global enterprises

**Real-World In-depth Case Studies**

- Fifteen full-length e-commerce case studies written by 25 researchers worldwide
- A blend between research studies and real-world cases
- Research-based analysis frameworks for case studies

**Special Attention to Emerging Business Models and Technologies**

- Emerging Web 2.0 business models and social media
- Trends in mobile technologies (Smartphones and Tablets)
Expanded Coverage on E-Commerce Systems Development and Management

- A framework for e-commerce systems development
- Architecture of e-commerce systems
- Languages and tools for e-commerce systems development
- Security and public key infrastructure

OVERVIEW OF THIS BOOK

This book is organized into four sections.

Section 1, the Introduction, discusses various types of e-commerce and their value creating opportunities, the impacts of e-commerce on organizations and the government, Web 2.0, foundation theories in e-commerce, and emerging Web 2.0-based business models. Section 2, Consumer and Business Sides of E-Commerce, discusses the details of B2C and B2B e-commerce, factors of consumer behavior models, trust, and perceived risk, and discusses various types of e-marketplaces, international B2B e-commerce and technology standards, and mobile commerce. Section 3, Payment, Security, and Privacy in E-Commerce, addresses online payments, security, public key infrastructures, and privacy. Finally, Section 4, the Systems Development, Technologies, and Issues in E-Commerce, addresses a framework of e-commerce systems development, web technologies, convergence of the Internet and telecommunications, emerging standards, the digital divide, and ethics and regulatory issues in e-commerce including web accessibility and digital rights management. A brief introduction of each chapter follows.

Section 1: Introduction consists of three chapters. Chapter 1, “Introduction to E-Commerce in the Global Economy,” defines electronic commerce (e-commerce), presents the origin of the Internet and the growth of e-commerce, categorizes different types of e-commerce, and discusses the characteristics of organizations in the e-commerce era. Chapter 1 also presents the various impacts of e-commerce on organizations, describes Web 1.0 and Web 2.0, and discusses major Web 2.0 applications.

Chapter 2, “Web 2.0 and Enterprise 2.0,” defines Web 2.0, presents seven principles that exemplify Web 2.0, discusses enterprise 2.0, and explains how firms use social networking sites, blogs, folksonomies, and wikis. Chapter 2 also introduces Web 2.0 users’ interaction spaces and discusses the risks posed by Web 2.0 initiatives.

**Section 2: Consumer and Business Sides of E-Commerce** consists of five chapters. Chapter 4, “B2C E-Commerce, C2C E-Commerce, and E-Recruiting,” defines B2C e-commerce, discusses pure play and brick-and-click retailers, describes the major advantages and challenges of pure play and brick-and-click retailers, and discusses various B2C e-commerce business models. Chapter 4 also discusses B2C e-commerce in the digital content industry and the financial industry, explores the roles of consumer-to-consumer information sharing, provides various sources of online consumer information, and explains the uses and benefits of choiceboards/configurators. Various types of e-recruiting and challenges in e-recruiting are also presented.

Chapter 5, “B2C Online Consumer Behavior,” discusses the importance of online consumer behavior, presents various models of online consumer behavior, and explains various components of the models. Chapter 5 also defines trust, describes its various dimensions related to online consumer behavior, defines perceived risk, and explains its various dimensions. Electronic service quality and its various dimensions are also introduced.

Chapter 6, “B2C Marketing,” discusses the impacts of the Internet on marketing, defines customer relationship marketing and electronic customer relationship marketing (e-CRM), and discusses key factors in a successful implementation of e-CRM. Chapter 6 also introduces online advertising and explores online advertising methods and techniques including search engine optimization. Various types of website data analyses are also explored.


Chapter 8, “Mobile Commerce,” outlines various mobile commerce applications, discusses personalization and privacy issues, and introduces various mobile devices, cellular network technologies, and trends in mobile technologies including smartphones and tablets. Chapter 8 also explores location commerce and different information delivery mechanisms, explains pervasive computing and its impacts on mobile commerce, and discusses radio frequency identification technologies and its uses for mobile commerce.

**Section 3: Payment, Security, and Privacy in E-Commerce**, consists of two chapters. Chapter 9, “Online Payment Systems,” explores various online payment systems, describes advantages of online payments, and discusses mobile payments. Chapter 9 also outlines online credit card payment processes, discusses credit card fraud, and explains third party online payment services. Electronic funds transfer systems are also discussed.
Chapter 10, “Security and Privacy in E-Commerce,” introduces various types of security threats, describes major approaches to the management of security threats, presents authentication methods, and explores different approaches to security enhancement including a public key infrastructure (PKI). Chapter 10 also introduces principles for privacy management, describes popular end-user privacy-enabling technologies (PETs), and discusses how third party web seals can be used to address consumers’ various concerns - such as information privacy, transaction security, and complete/accurate transactions.


Chapter 12, “Trends, Ethics, and Regulatory Issues in E-Commerce,” introduces the convergence of the Internet and telecommunications and discusses various emerging standards and technologies, including Internet Protocol communications and XBRL. Chapter 12 also presents web accessibility, the digital divide, and e-inclusion. Finally, Chapter 12 explores intellectual property rights and taxations issues in e-commerce.

STRUCTURE OF THE CHAPTERS

- Learning Objectives
- Chapter-Opening Case
- Body of the Chapter
- Key Terms and Definitions
- Case Study and Questions
- Chapter End Review Questions
- Web Exercises
- Team Exercises
- References

SUPPLEMENTS

All supplements are available to qualified instructors through the IGI website and marketing team. Please contact the IGI marketing team at marketing@igi-global.
com for details. The book adopters may also contact the author, Dr. In Lee, at I-Lee@wiu.edu for the supplements and any questions. Supplements that accompany this textbook include:

- Instructor’s Manual with Solutions
- Lecture Slides in PowerPoint
- Test Bank