

E-Commerce (Winter 2011)

Basics

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Concetti Base

- Definizione:

Il commercio elettronico è il processo di acquistare, vendere, trasferire o scambiare prodotti, servizi e informazioni attraverso reti di computer, Internet inclusa.

- La definizione non è universale, diversi punti di vista possono portare a diverse definizioni, tutte sensate.

Definizioni

- **Comunicazione:** consegna di beni, servizi, informazioni o pagamenti su reti di computer o tramite altri mezzi elettronici
- **Commerciale:** capacità di vendere o acquistare prodotti, servizi o informazioni tramite internet o altri servizi online
- **Processi di Business:** capacità di completare processi di business su reti di computer, sostituendosi a processi fisici
- **Servizi:** strumento per tagliare i costi di governi, enti, marche, consumatori e allo stesso tempo per migliorare la qualità di servizio e i tempi di consegna

Definizioni - II

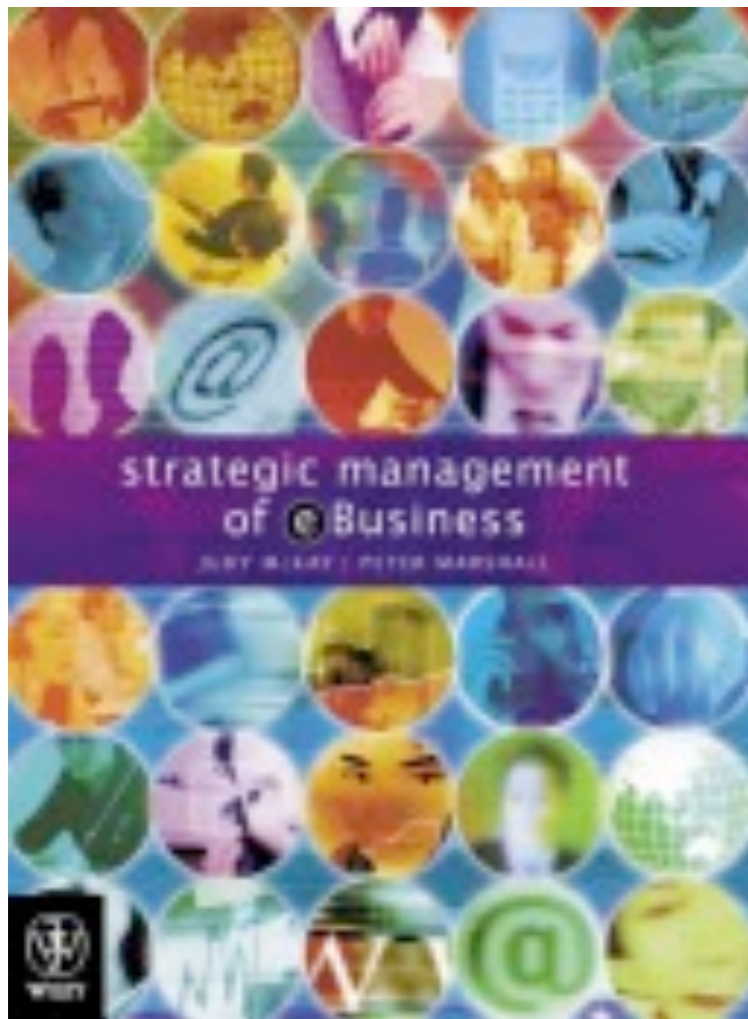
- **Learning:** fornire conoscenza online, corsi di training, corsi professionali, lezioni universitarie, seminari
- **Collaborazione:** un framework per collaborazione interorganizzazione e intraorganizzazione
- **Comunità:** un luogo di incontro per i membri di una o più comunità che possono imparare, collaborare, eseguire transazioni, condividere contenuti e idee

E-Commerce vs E-Business

- In some context e-commerce is used in a narrow sense: *transactions conducted between business partners*
- Many use the term e-business instead:
 - *servicing customers*
 - *collaborating with business partners*
 - *buying and selling good and services*
 - *conducting electronic transactions within an organization*
- We can use the terms indifferently

McKay and Marshall 2004

- E-Business is the use of the Internet and other information technologies to support commerce and improve business performance



Wiley, 2004 - 370 pages

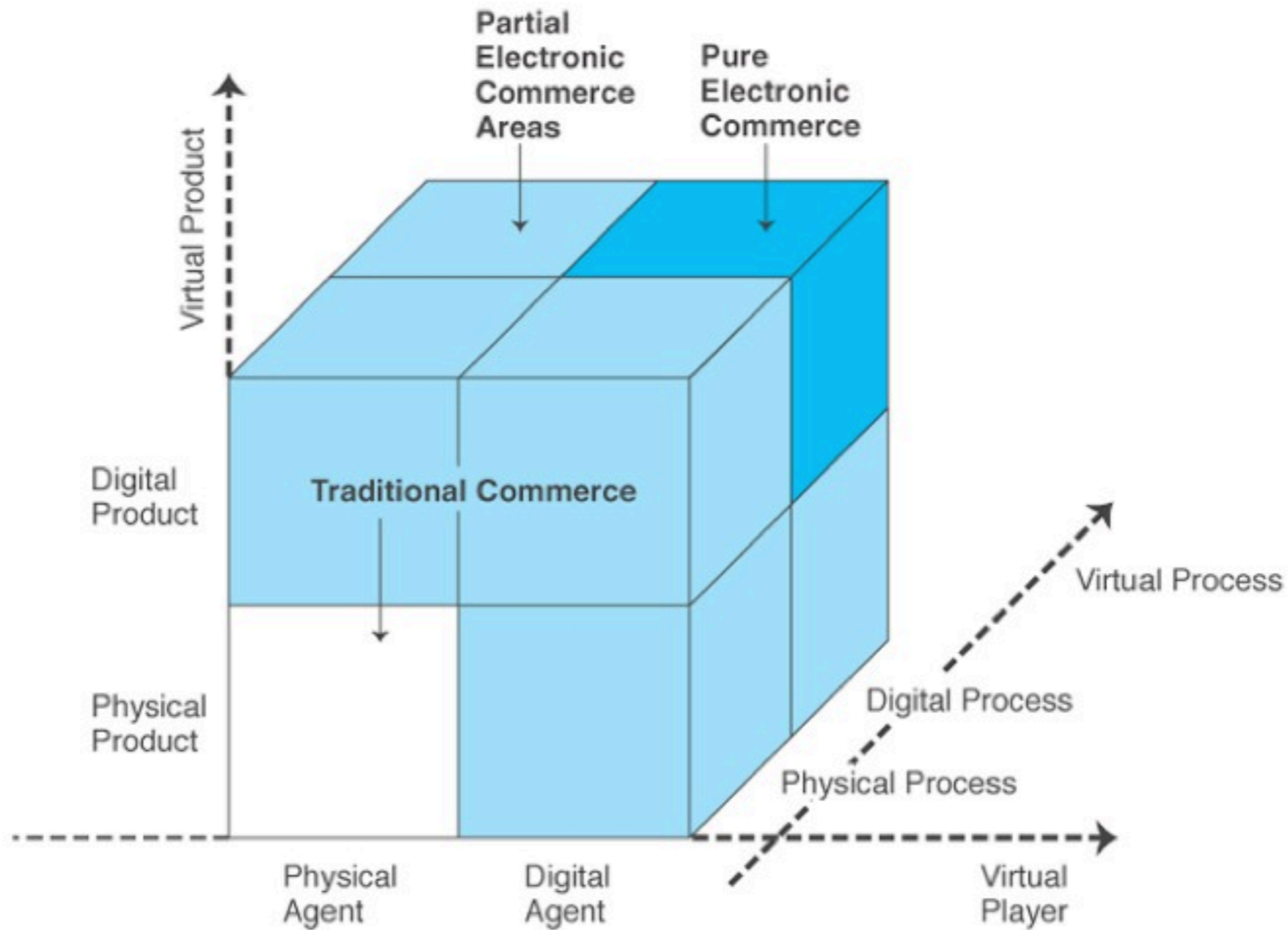
Strategic Management of e-Business presents the established models of **strategic management and their sustainability to the e-commerce environment**. The text discusses the strategic management of e-Business. Both "back-office" systems and e-commerce systems are described and analysed. Since **management models have changed as a consequence of greater technology**, increased Internet usage to build closer links with suppliers and customers, there is increased focus on the management models that create and maintain value, improve supply chain management, establish and sustain sound customer relationships and create strategic networks. It is these new business objectives and associated management paradigms that are outlined in this new Australasian text. The text adopts a "post dot-com crash" organisational perspective on e-Business and e-Commerce, focusing on those elements that will be important in the future. Thus topics such as e-business strategy, m-Commerce and mobile computing, customer relationship management, and supply chain management are given prominent treatment along with the usual major topics of IT management. Due to the interrelation between IT and e-Business this text is ideal for both IT management and e-business management units. Students are provided with the strategies and models for successful management of e-commerce initiatives. FEATURES Chapter on m-commerce Chapters on e-business and SME's Comprehensive and diverse case studies at the end of each chapter represent **typical business case scenarios** that apply the theory and models presented in the text Reflects current research in strategic management of e-commerce Written for all students undertaking study in strategic e-commerce Combines strategy and human factors Highlights the importance of creating value in business relationships as well as ethical governance 'Thinking Strategically' vignettes in each chapter pose various business scenarios and ask the student to assess and offer a strategic solution

Pure and Partial EC

- Depends on the **degree of digitalization** of:
 - the product
 - the process
 - the delivery agent
- **Brick-and-mortar** organizations are old-economy organizations (corporations) that perform most of their business offline, selling physical products by the means of physical agents

Pure and Partial EC

- **Virtual organizations** conduct their business activities solely online (all three dimensions are digital)
- **Click-and-mortar** organizations conduct some EC activities, but also has business on the physical world
- Gradually many brick-and-mortar organizations are migrating to click-and-mortar

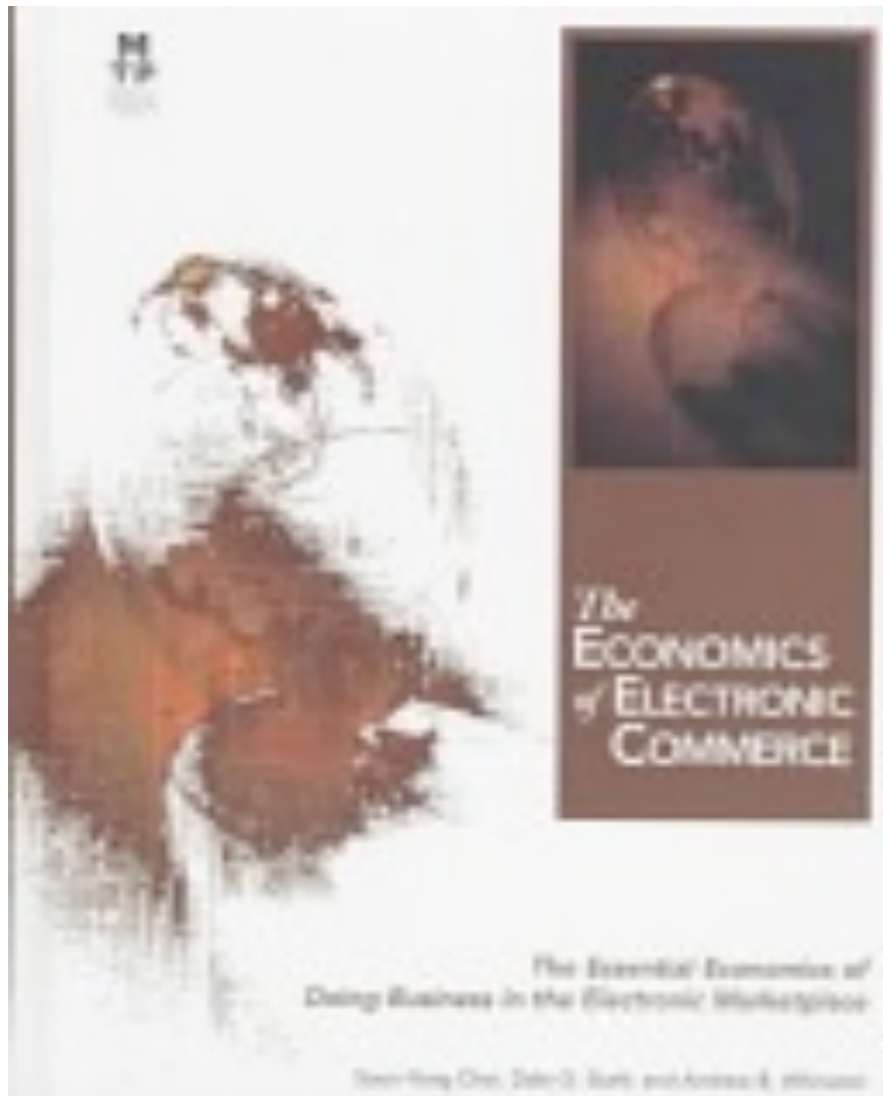


Source: *Economics of Electronic Commerce*, 1/E by Choi/Stahl/Whinston, ©1997. Reprinted by permission of Pearson Education, Inc., Upper Saddle River, NJ.

Dimensions of EC

Exhibit 1.1

The Dimensions of EC

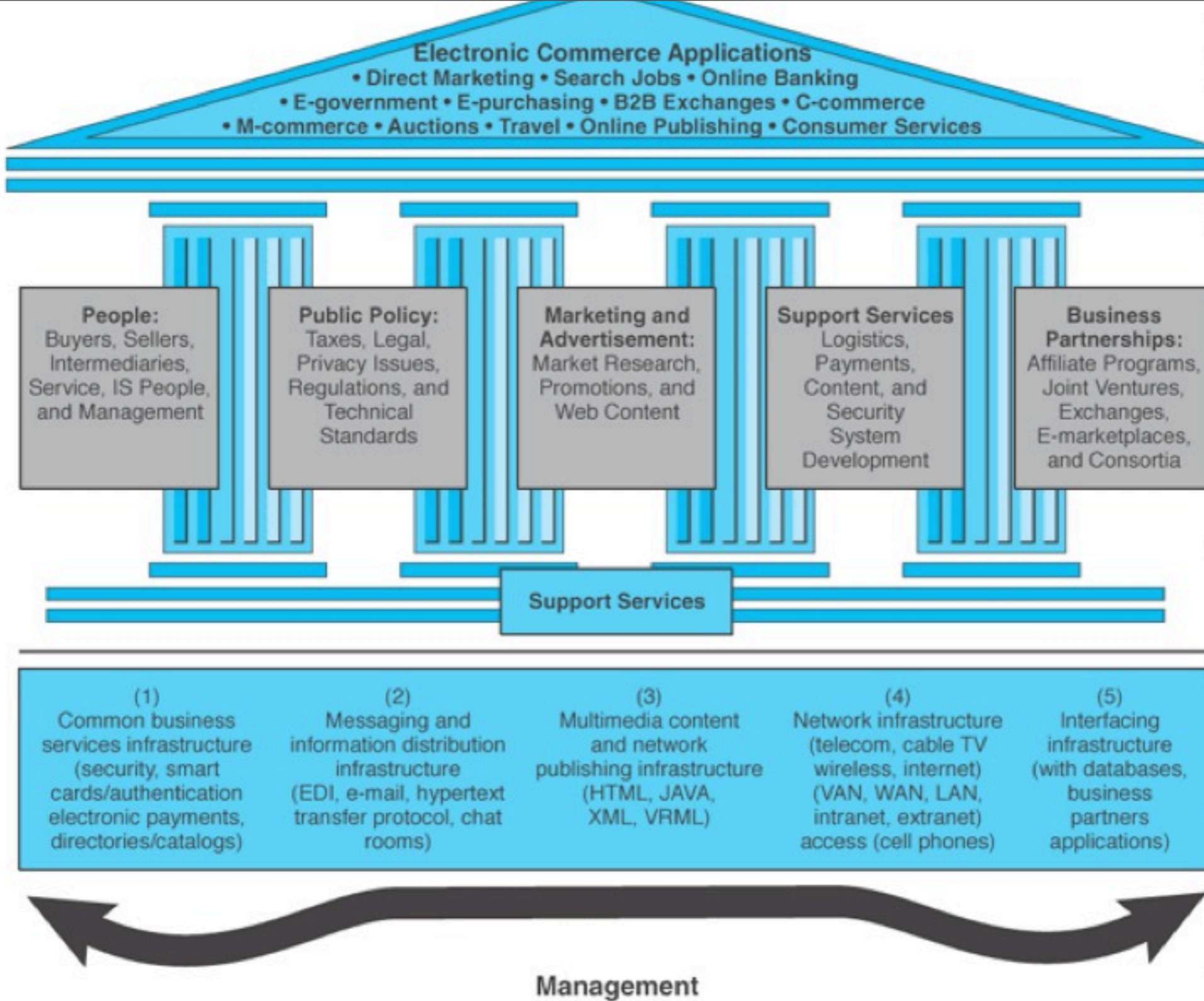


Macmillan Technical Pub., 1997 - [Business & Economics](#) - 626 pages

While all other electronic commerce titles focus on "how to," *The Economics of Electronic Commerce* is the first to present current issues of electronic commerce from an economics perspective. Everyone involved in building electronic commerce applications and systems, as well as Internet consultants and economists, needs this foundational information for the future of the Internet.

A Framework for EC

- A framework or conceptual schema or conceptual data model is a map of concepts and their relationships. This describes the semantics of an organization and represents a series of assertions about its nature. Specifically, it describes the things of significance to an organization (entity classes), about which it is inclined to collect information, and characteristics of (attributes) and associations between pairs of those things of significance (relationships).

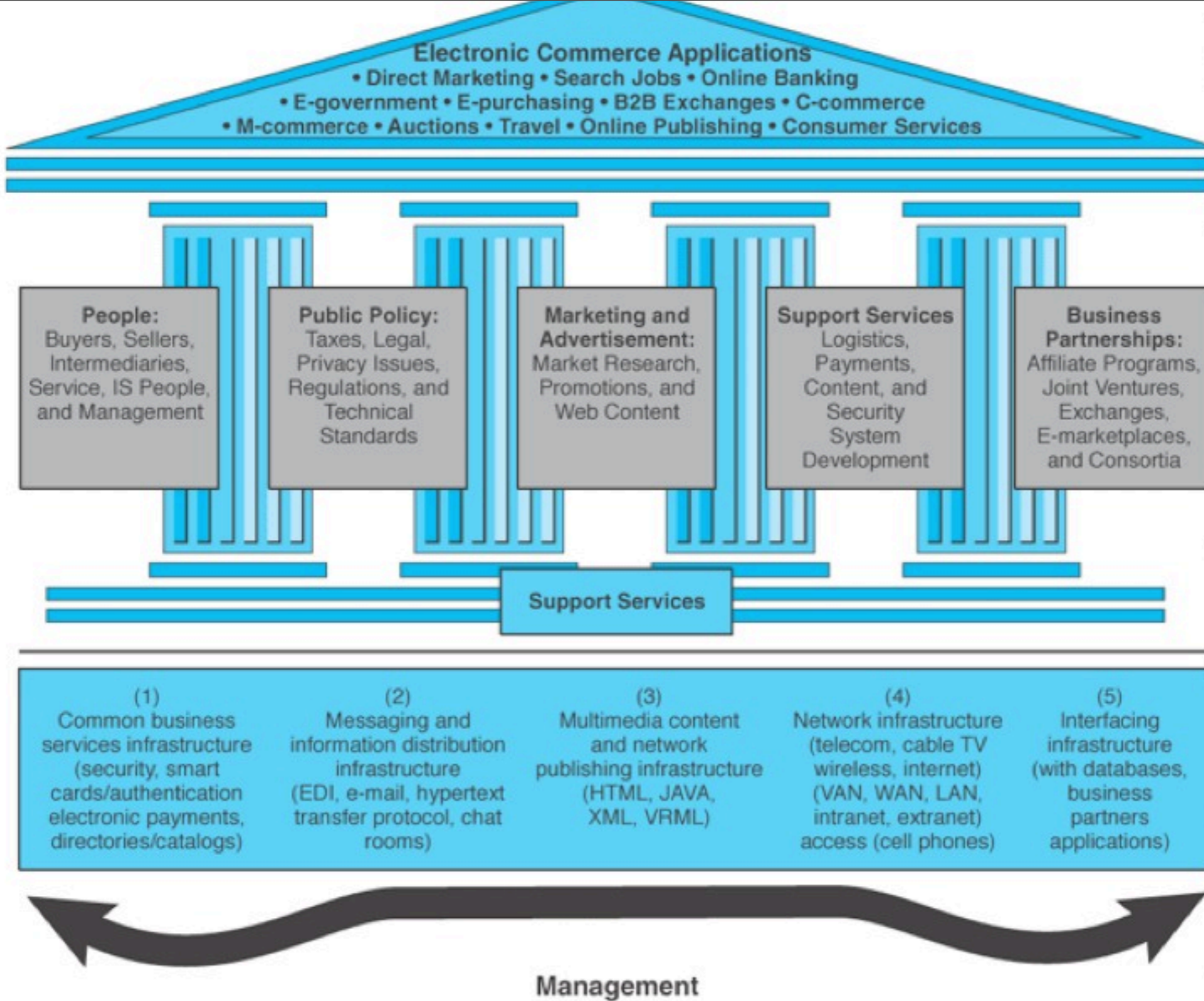


A Framework for EC

Exhibit 1.2

Columns

- People: sellers, buyers, intermediaries, information systems specialists, and any other participants
- Public Policy: legal aspects, taxes, privacy enforcement, technical standards, etc.
- Marketing and Advertisement: important in B2C where buyer and seller do not know each other
- Support services: online payment systems, content management systems, etc.
- Business Partnerships: the interactions between a company and its suppliers



A Framework for EC

Exhibit 1.2

Classification of EC

- A way to classify e-commerce is by using the nature of the transactions and the relationship among participants:
 - business-to-business (B2B): businesses make online transactions with other businesses
 - business-to-consumer (B2C): online transactions are made between businesses and individual consumers. also called e-tailing: online retailing
 - business-to-business-to-consumer (B2B2C): e-commerce model in which a business provides some product or service to a client business that maintains its own customers

Classification of EC - II

- consumer-to-business (C2B): e-commerce model in which individuals use the Internet to sell products or services to organizations (betterworldbooks.com)
- consumer-to-consumer (C2C): e-commerce model in which consumers sell directly to other consumers (ebay)
- peer-to-peer (P2P): technology that enables networked peer computers to share data and processing with each other directly; can be used in C2C, B2B, and B2C e-commerce
- mobile commerce (m-commerce): e-commerce transactions and activities conducted in a wireless environment

Classification of EC - III

- location-based commerce (l-commerce): m-commerce transactions targeted to individuals in specific locations, at specific times
- business-to-employees (B2E): e-commerce model in which an organization delivers services, information, or products to its individual employees, B2ME is mobile (techs receiving information dynamically on their palm or smartphone)

Classification of EC - IV

- collaborative commerce (c-commerce): e-commerce model in which individuals or groups communicate or collaborate online
- e-learning: the online delivery of information for purposes of training or education
- e-government: a government entity provides goods and services to business or individuals

Case of Study: Godiva.com

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Business Models

- One of the main characteristics of EC is to enable new business models. New ways of making money.
- *Business model*: a method of doing business by which a company can generate revenue to sustain itself
- [Weill and Vitale 2001] developed a framework for evaluating the validity of e-business initiatives
 - eight atomic business models that can be combined to form more complex business models

Atomic Business Models

- Direct Marketing
- Intermediary
- Content Provider
- Full-service provider
- Shared infrastructure
- Value net integrator
- Virtual community
- Consolidator of services

Example:
Amazon.com
combine direct
marketing,
intermediary, virtual
community and
content provider

Business Model Elements

- According to [McKay and Marshall 2004] a business model is composed by 6 elements:
 - A description of the customers and the company's relationships with customers
 - a description of all products and services the company offers
 - a description of the business process
 - a list of resources required and available
 - a description of the supply chain, including suppliers and business partners
 - a description of the revenues expected (revenue model), costs, etc.

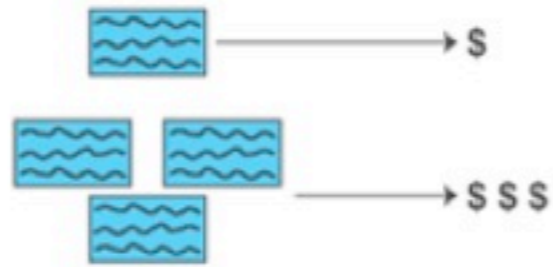
Value Proposition

- Business models also include a value proposition:
 - Value proposition: The benefits (tangible and intangible) a company can derive from using the model

Revenue Model

- Revenue model: description of how the company or an EC project will earn revenue
 - Sales: selling merchandise or services
 - Transaction fees: commissions on the volume of transactions made (per value or per transaction)
 - Subscription fees: fixed amount (usually monthly) to get some type of service
 - Advertising fees: charging for placing advertise
 - Affiliate fees: commissions for referring other's websites
 - Other revenue sources: pay-for-play, pay-for-watch, licensing, etc.

Transaction Fees Model



Commissions paid on volume of transactions

Subscription Model



Fixed amounts are charged, usually monthly

Advertisement Model



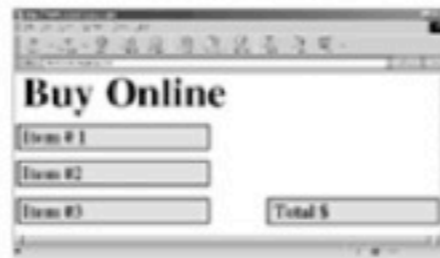
Payments from advertisers

Affiliate Model



Commissions for referring customers

Sales Model



Revenue from sales of goods or services

Common Revenue Models

Exhibit 1.6

Typical Business Models

- Online direct marketing: selling products or services online
- Electronic tendering system: (reverse auction): model in which a buyer requests would-be sellers to submit bids, and the lowest bidder wins
- Name your own price: a model in which a buyer sets the price he or she is willing to pay and invites sellers to supply the good or service at that price
- Find the best price: also known as a search engine model
- Affiliate marketing: an arrangement whereby a marketing partner (a business, an organization, or even an individual) refers consumers to the selling company's Web site
- Viral marketing: word-of-mouth marketing in which customers promote a product or service to friends or other people
- Group purchasing: quantity purchasing that enables groups of purchasers to obtain a discount price on the products purchased

Typical Business Models - II

- Online auctions: different types of auctions, usually a sequence of consecutive bids for various goods and services, the highest bid get the auctioned item
- Product and service customization: creating or modifying items following the buyer's specifications
- Others: marketplace exchanges, information brokers, bartering, deep discounting, membership, value-chain integrators, value-chain service providers, supply-chain improvers.

Dynamic Business Models

- In order to succeed in the fast moving marketplace, business and revenue model must change
 - Amazon went from books to everything, added marketplace, etc.
 - AOL: [20 Years of AOL Annoyances and Foul-Ups - PCWorld](#)

Benefits of EC

- Global reach
- Cost reduction
- Supply chain improvements
- Extended hours: 24/7/365
- Customization
- New business models
- Vendors' specialization
- Rapid time-to-market
- Efficient procurement
- Improved customer relations

for organizations

Benefits of EC

- Ubiquity
- More products and services
- Cheaper products and services
- Instant delivery
- Information availability

for consumers

Benefits of EC

- Telecommuting
- Higher standard of living
- Availability of public services

for the society

Limitations of EC

EXHIBIT 1.7 Limitations of Electronic Commerce

Technological Limitations

Lack of universal standards for quality, security, and reliability.

The telecommunications bandwidth is insufficient, especially for m-commerce.

Software development tools are still evolving.

It is difficult to integrate Internet and EC software with some existing (especially legacy) applications and databases.

Special Web servers are needed in addition to the network servers, which add to the cost of EC.

Internet accessibility is still expensive and/or inconvenient.

Order fulfillment of large-scale B2C requires special automated warehouses.

Nontechnological Limitations

Security and privacy concerns deter customers from buying.

Lack of trust in EC and in unknown sellers hinders buying.

Many legal and public policy issues, including taxation, have not yet been resolved.

National and international government regulations sometimes get in the way.

It is difficult to measure some of the benefits of EC, such as advertising. Mature measurement methodologies are not yet available.

Some customers like to feel and touch products. Also, customers are resistant to the change from shopping at a brick-and-mortar store to a virtual store.

People do not yet sufficiently trust paperless, faceless transactions.

In many cases, the number of sellers and buyers that are needed for profitable EC operations is insufficient.

Online fraud is increasing.

It is difficult to obtain venture capital due to the failure of many dot-coms.

Summary

- Definition of EC and description of various categories
- The content and framework of EC
- The major types of EC and business models
- Case of studies
- Overview of benefits and limitations