

E-Business and E-Commerce



Definition: Electronic Business (U.S. Census Bureau)

- An **process** that an organization conducts over a **computer-mediated network**
 - **Production** – procurement, ordering, stock replenishment, payment processing, production control, etc.
 - **Customer-focused** – marketing, selling, customer order processing, etc.
 - **Internal or management-focused** – employee service, training, recruiting, information sharing, etc.

Definition: Electronic Commerce

- Any **transaction** completed over a computer-mediated network that involves the **transfer of ownership or rights to use goods or services**.
- Completed transactions may have a zero price.

Definition: Electronic-Business Infrastructure

- The share of total **economic infrastructure** used to support e-business processes and conduct e-commerce transactions.
 - Hardware
 - Software
 - Telecommunication networks
 - Support services
 - Human resources

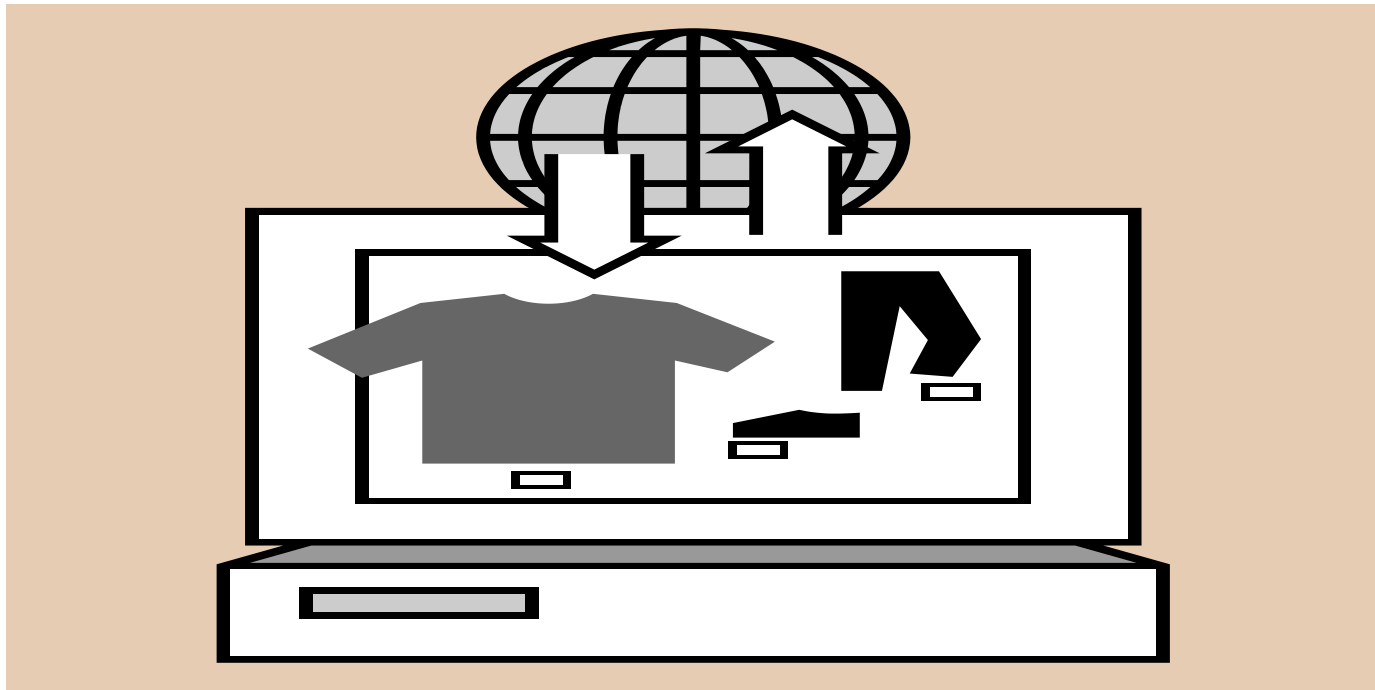
Definition: Computer-Mediated Networks

- **Electronically-linked devices** that communicate interactively over network channels.
 - Computers, personal digital assistants, web TV
 - Internet-enabled cellular phones, interactive telephone systems
 - Internet, intranets, extranets, telecommunication networks, EDI

New Business Rules from E-Business

- Customers determine everything.
- Knowledge and information become more valuable than physical assets.
- People want more choices of products and services.
- Time is present time, distance is zero.
- Technology and network determine how the business is conducted.

What Are the Potential Benefits of E-Business?



Potential Benefits of E-Business

- More product/service selections
- Higher Productivity
- Improved accessibility and convenience
- Better availability of information
- Shorter lead time
- Improved communication
- Stronger competitive position

Examples of E-Business Applications?



Categories of E- Business Applications (BW, Nov. 24, 2003)

- Collaboration
- Customer Service
- Customization
- Streamlining
- Management
- Cutting Edge

Examples of E-Business Applications

- Cisco (financial management)
- Nike (product design)
- Jet Blue Airlines (customer service & ticketing)
- Dell Computer (customer ordering & service)
- Boeing (flight manuals, maintenance documents, spare parts to order)
- Garden.com (drop ship)
- AlliedSignal (operations scheduling & supply chain)
- Starbucks (smart cards & web access)

How Can An Automobile Manufacturer Apply E-Business?



How Can An Automobile Manufacturer Apply E-Business?

- Sales
- Customer Service
- Supplier management
- Marketing
- Product Design
- Financing
- Employees Training

The Internet's Influence on Industry Structure – Michael Porter

- Bargaining power of supplier
- Bargaining power of buyers
- Rivalry among existing competitors
- Barriers to entry
- Threat of substitute products or services

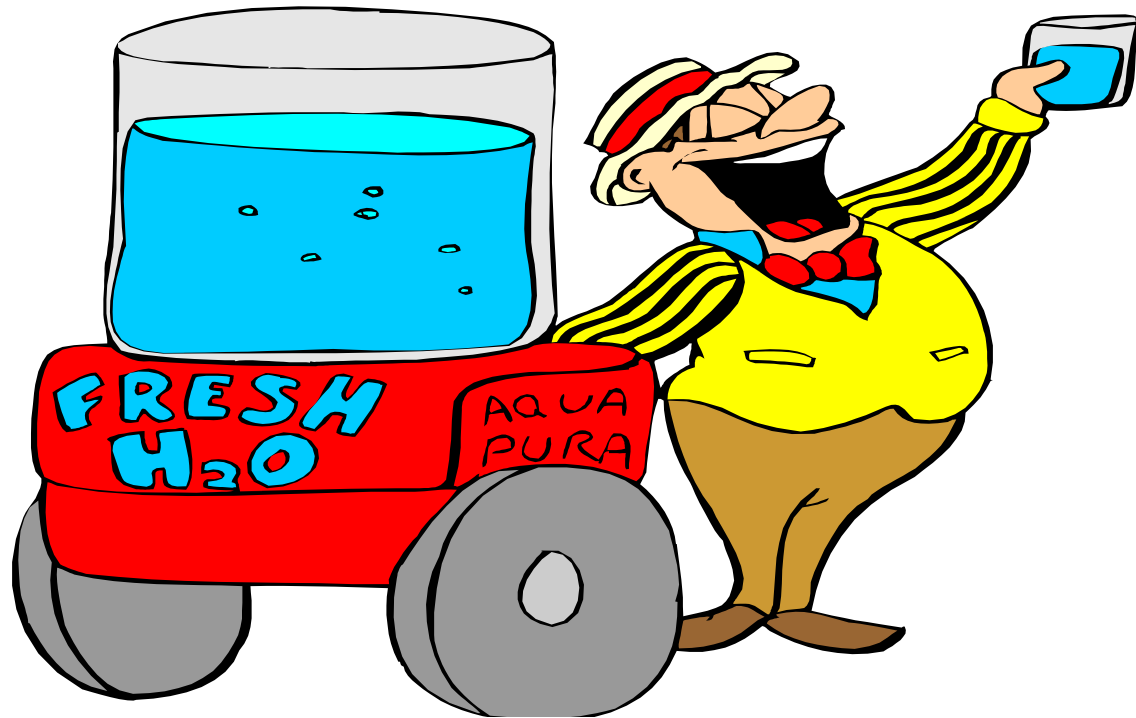
Launching E-Business Initiatives

- Define what an e-business initiative means for the organization.
- Ask key questions to develop a strategy.
- Communicate the plan to executives and employees extensively.
- Prepare for mistakes and develop effective recovery systems.

Types of E-Commerce

- Customer-to-Customer (C2C)
- Business-to-Customer (B2C)
- Business-to-Business (B2B)
- Government-to-Business (G2B)
- Government-to-Citizens (G2C)

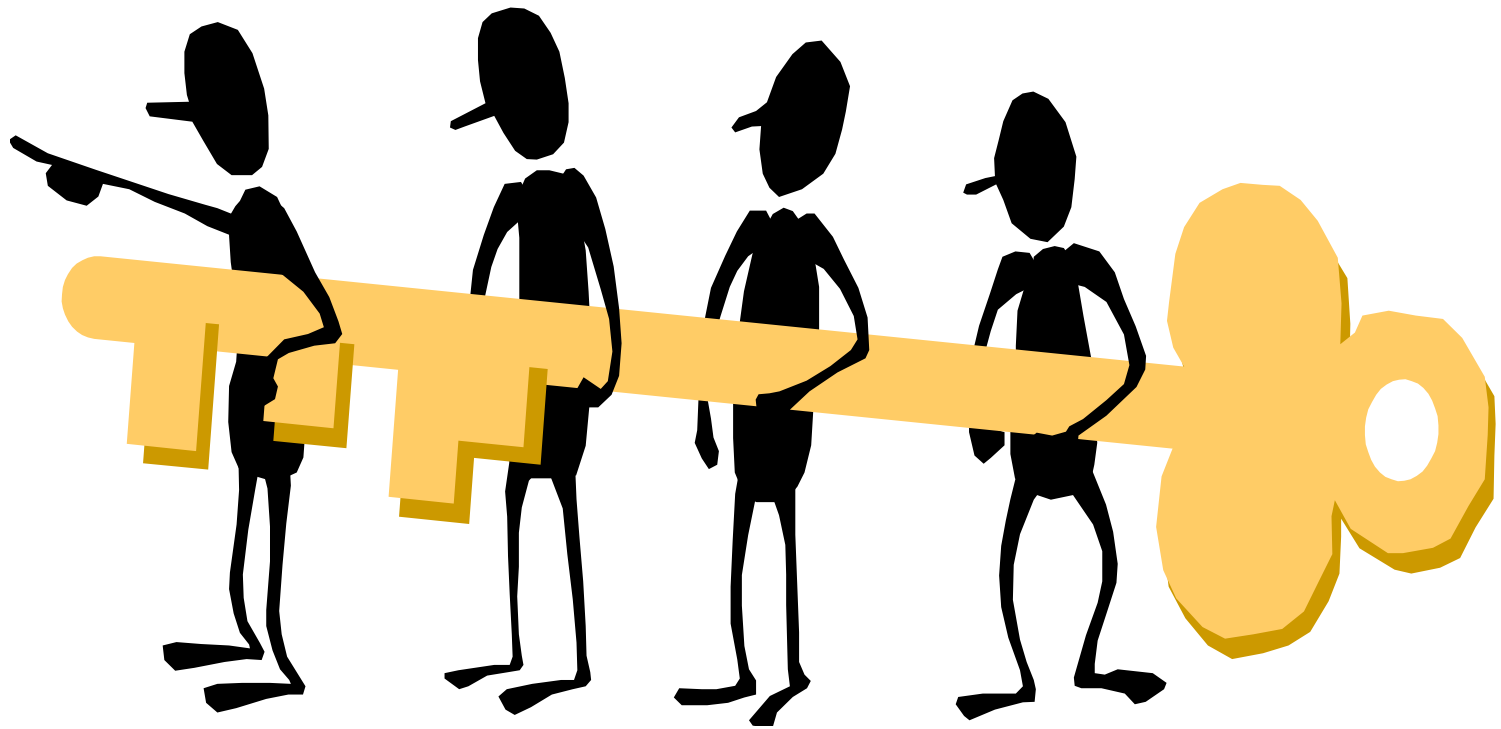
Examples of E-Commerce?



Examples of E-Commerce

- Retailing and Marketing
- Entertainment and Travel
- Education and Learning
- Banking and Investment
- Health-Care
- Auction
- Personal and Business Service

Who Are Potential E-Commerce Supply Chain Members?



Potential Supply Chain Members of E-Commerce

- End users
- E-store
- payment processor
- Distributors'/Producers' supply chain
- Transportation/logistics providers
- Customer service providers

Application of the Internet in Value Chain (Michael Porter)

- Improving **operational effectiveness** versus improving **strategic positioning**
- Effects on stages in the value chain
 - Inbound Logistics
 - Operations
 - Outbound Logistics
 - Marketing and Sales
 - After-Sales Service

Basic E-Commerce Strategies

(P. Evans & T. Wurster, HBR, 1999)

- **Reach** (access and connection with customers)
- **Richness** (depth and detail of information to/from customers)
- **Affiliation** (advancing customers' interests)

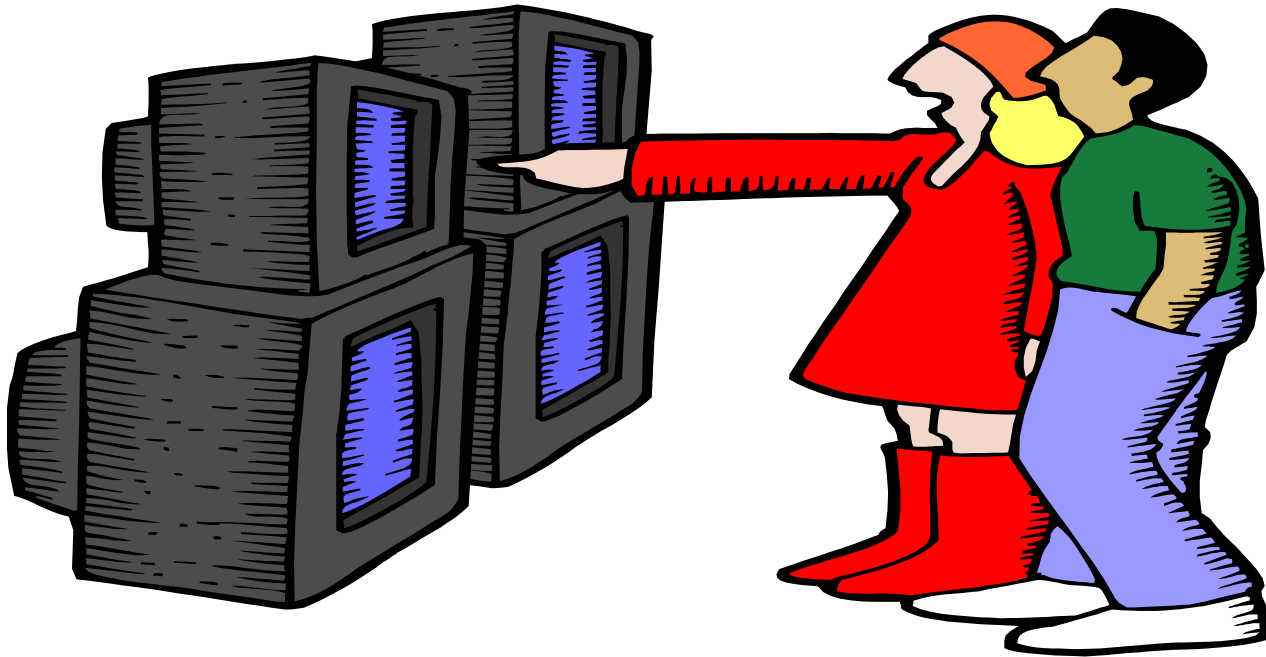
Key Business Drivers of E-Commerce

- Internet
- Information
- Collaboration
- Agility
- Speed
- Service

Competitive Advantages of E-Commerce

- Offers personalized products/services
- Enables customer self-service
- Reduces lead time
- Reduces overall cost for seller and customers
- Improves utilization of resources throughout the supply chain
- Increases customer satisfaction and loyalty
- Expands to global marketplace

What Could Be the Tasks Performed by Customers?



Tasks Performed by Customers

- Browse catalogs
- Conduct research on products/services
- Configure and place orders
- Look up pricing
- Look up lead time and order status
- Access invoicing information
- Access customer service information

B2C E-commerce Implementation Strategies

- Educate the customer
- Make the shopping fun
- Serve customers well
- Personalize the sales pitch
- Cross sell and up sell
- Low price
- Painless returns

Ways to Improve E-Commerce Operations

- Technology (hardware and software)
- Business Process Reengineering
- Agile production (mass customization)
- Just-in-time system
- Supply chain management
- Business intelligence
- Customer relationship management