

E-Commerce and E-Business

Session Speaker
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Session Objectives

- To understand the implications of **e-commerce in Supply Chain**
- To know different types of **e-business in current business environment**

Session Outline

- E-commerce and Supply Chain
- E-Auctions
- E-business concepts, opportunities and dimensions
- E-business framework
- Session Summary

E-Business

“It is not the strongest of species that survive, nor the most intelligent, but one most responsive to change”

Charles Darwin

“If you’re not changing faster than your environment, you are falling behind”

Jack Welsh, Former CEO of GE

E-business and E-commerce

Electronic business or e-business is the use of Information Technology to improve business

e-Business

- e-Business is a term used to describe businesses run on internet or use internet technologies to improve productivity & profitability of Business
- IBM started in 1997 using this term
- It is the easy way to reach out to all involved in supply chain

e-Business

- How easy is now to order a mobile phone on internet ?
- Booking of a hotel or ticket online ?
- Transfer of money from one account to another online ?
- Choice to compare different products on internet ?

e-Business & e-commerce

- e-Business refers to broader definition of e-commerce not just buying, selling of goods & services but also servicing customers, collaborating with business partners, conducting e-learning & processing electronic transactions
- e-Commerce describes the process of buying, selling, transferring products or services and or information via computer networks including internet

e-Business vs e-Commerce



E-Commerce:

- **marketing**
- **selling**
- **buying of products and services on the Internet**

E-Business:

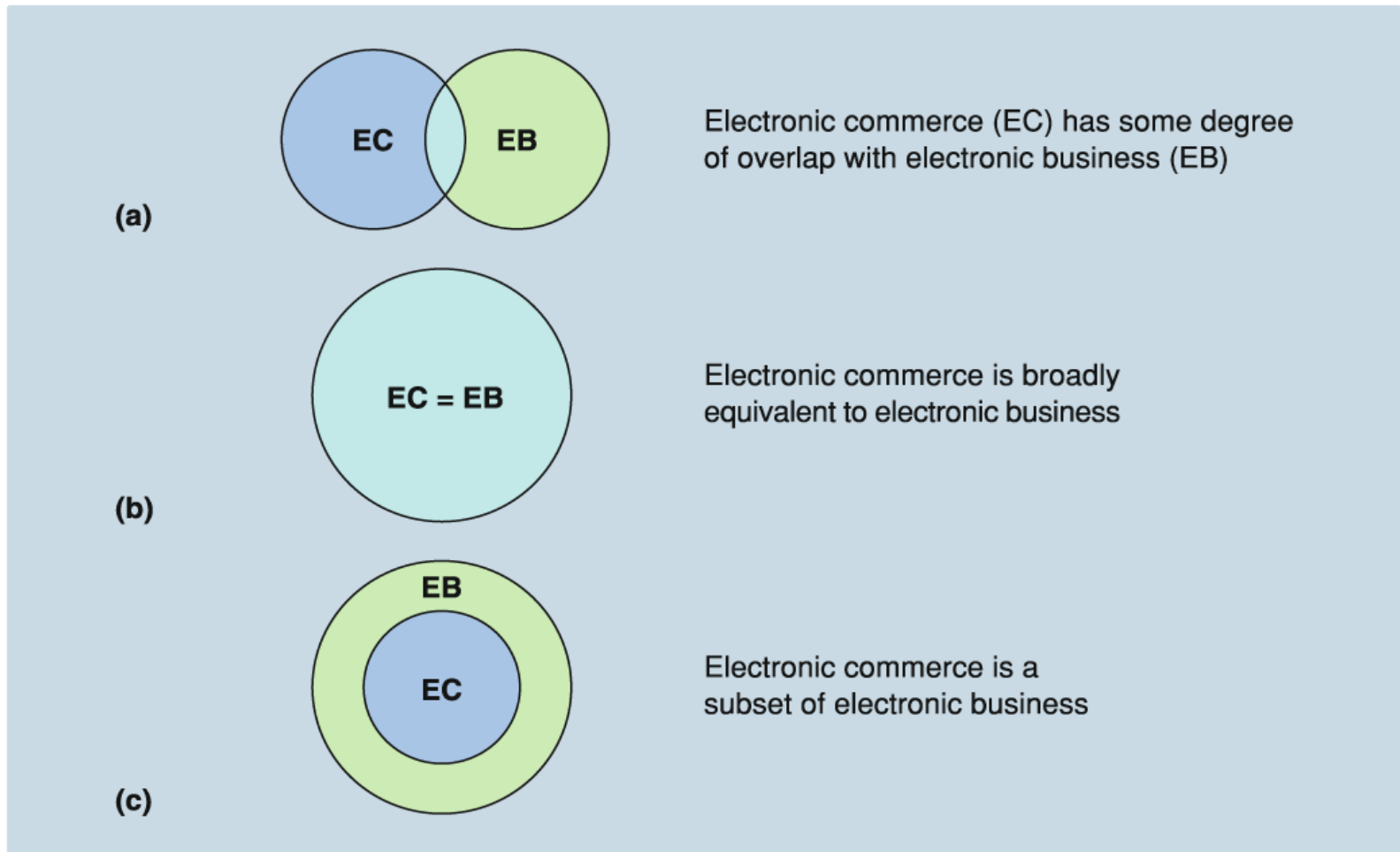
Improving business performance through low cost and open connectivity:

- New technologies in the value chain
- Connecting value chains across businesses

in order to :

- Improve service/reduce costs
- Open new channels
- Transform competitive landscapes

E-business and e-commerce



**Three alternative definitions of the relationship
between e-business and e-commerce**

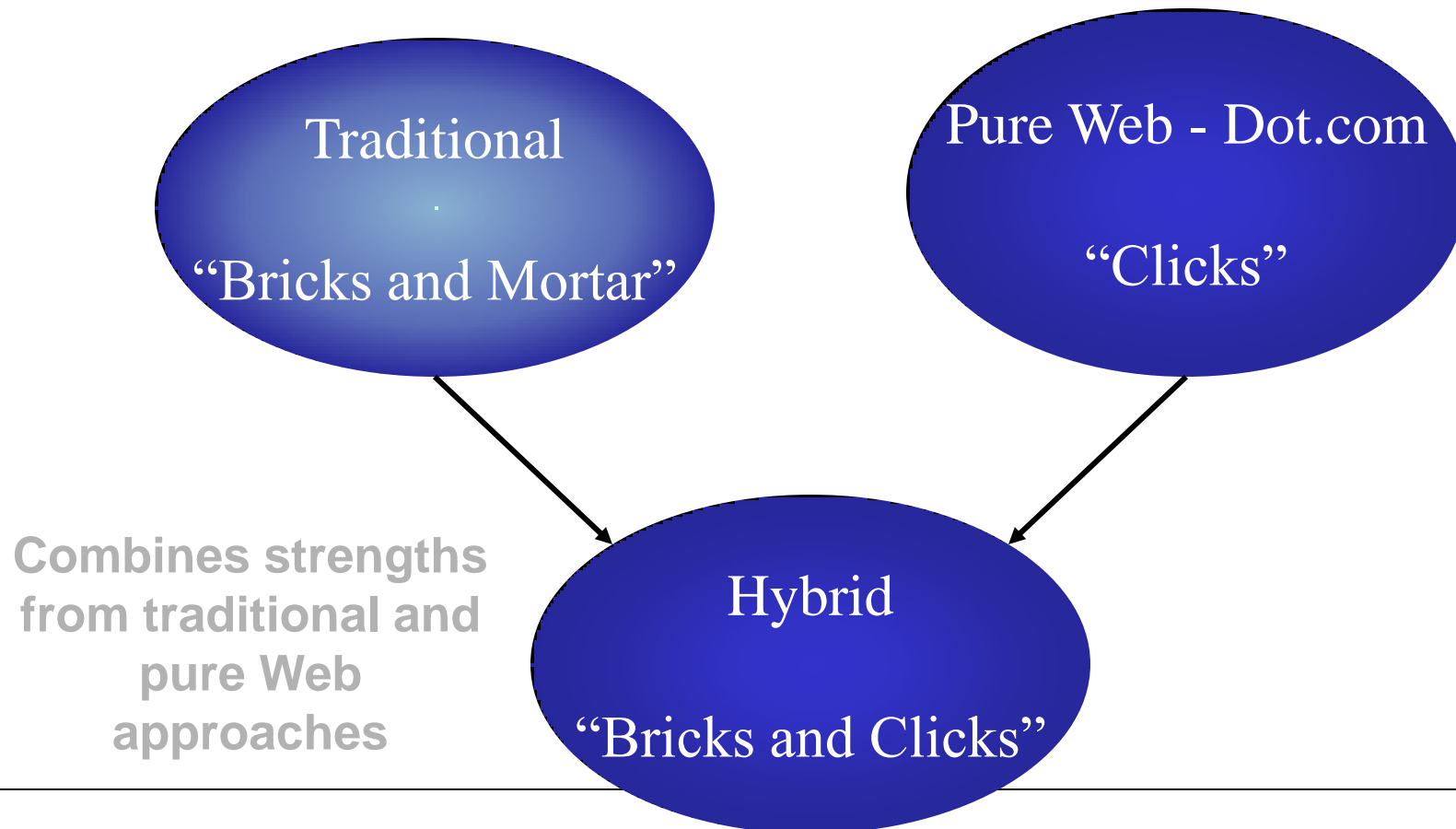
Benefits of e-Business

- Generate additional Revenues
 - New markets
 - New products
 - New customers
- Reduce Costs (Integration and ‘Collaboration’)
 - Process efficiency
 - Reduce IT variety and -complexity

Benefits of e-Business

- Customer Retention (‘Added Services’ and ‘Virtual Community’)
 - Know more about your customers
 - Integrated channel management
 - Proactive and personalized offerings
- Improve Image / Position Brand
 - Applying innovative technologies
 - Leadership enterprise
 - Address younger customer segments
- Not to miss the boat

‘Bricks and Clicks’ - A Hybrid Model



e-procurement

Some transactions used :

- Scheduling Suppliers
- To allow access of drawings and specifications by suppliers
- Entry of offers in customer's website
- Possibility by suppliers to create advance shipment notification
- Bidding process
- Reverse auction process
- Sending enquiry to registered suppliers
- Sending PO to suppliers online

E-procurement categories

- Indirect procurement : Non production items like services, office supplies, printing, advertising, labour ...
- Direct procurement : Raw materials, parts and assemblies
- Sourcing : Identification, evaluation, negotiation of products and supplies for both direct and indirect parts

e-procurement – Case study

- Karnataka state police Housing corporation(KSPHC) used reverse auction process for sourcing web-hosting service
 - Bidding process lasted 90 minutes
 - During this time, 200 bids were posted & 16 bids in last 5 minutes
 - Starting from initial quote of INR 3.2 Mio the auction ended at 0.78 INR Mio
 - With this, KSPHC could increase contact from 15 to more than 500 suppliers
- Source : OM,B.Mahadevan

E-Auction requirements

- Buyer & Seller must be neutral to each other
- Only price should be undefined
- Must add value mutually
- High Integrity

Electronic market structure

- Many players support do business electronically in market

Structure

Extranet

Web EDI

Forward Auction

Reverse Auction

Exchanges

Examples

www.citrix.com

www.iedisource.com

www.fedsales.com

www.ariba.com

www.HoustonStreet.com

e-Business

Electronic market structure has three Categories :

- Collaborative Mechanism

Market participants exploit electronic integration.

This includes extranet, trading partner network (TPN) & web-EDI. Collaboration capability will help to eliminate duplicate resources, improved process & responsiveness

e-Business

- Quasi-market Mechanism

Here either buyer or seller initiate marketplace, host, monitor and enroll market participants.

E.g. Forward Auction and Reverse Auction

Also possible is few buyers or suppliers creating consortium like www.metaljunction.com (steel industry) or www.covisint.com (automobiles)

e-Business

- Neutral Market Mechanism

Here large number of buyers and suppliers participate in this. E.g. exchange, commodity aggregators. These are characterized by neutrality

Advantages of e-procurement

- Wide reach
- Reduced transaction cost
- Fast response
- Reliability of communication
- Seamless integration
- Enhanced communication
- Improved processes and supplier management
- Rationalization of resources & manpower
- Reduced lead-time
- Improved reporting and tracking

e-procurement

- Purchase Manager has to decide which market structure he can use to enhance advantage to Business
- Purchase manager should drive internal members to accept market place structure selection and support

Types of e-business

Business-to-business (B2B)

Business that sells products or provides services to other businesses

Business-to-consumer (B2C)

Business that sells products or provides services to end-user consumers

Amazon.com

Consumer-to-consumer (C2C)

Consumers sell directly to other consumers

e-bay.com

Types of e-business (cont.)

Business-to-government (B2G)

Government buys or provides goods, services or information to/from businesses or individual citizens

Business-to-employee (B2E)

Information and services made available to employees online

Mobile commerce (m-commerce)

E-commerce transactions and activities conducted in a wireless environment

Collaborative commerce (c-commerce)

Individuals or groups communicate or collaborate online

Evolution of e-business

- *1997: Introduction of a brand new phrase – e-business*
- *1999: The emphasis of e-business shifted from B2C to B2B*
- *2001: The emphasis shifted from B2B to B2E, c-commerce, e-government, e-learning, and m-commerce*
- *2004: Total online shopping and transactions in the United States between \$3 to \$7 trillion*
- *E-business will undoubtedly continue to shift and change*

Evolution of e-business (cont.)

The Scenario

- *50 percent of Internet users will shop*
- *E-business growth will come more from:*
 - *B2C, B2B, e-government, e-learning, B2E, c-commerce*

Levels of e-maturity



Stakeholders

E-Business relationships are formed with the following types of stakeholders:

- Internal stakeholders: Management and staff
- Suppliers and manufactures
- Customers
- Intermediaries
- Financial institutions
- Web service providers
- Associations
- Web communities
- Etc.

Major Players

The Sabre logo is written in a bold, italicized, red sans-serif font.The Alibaba.com logo features an orange stylized 'A' icon followed by the text 'Alibaba.com' in orange and 'Global trade starts here.' in black.The Government Procurement logo consists of a blue circular emblem with red and white swooshes, followed by the text 'Government Procurement' in blue and red, and the website 'www.gprocurement.go.th' in black.The eBay logo is composed of the letters 'e', 'b', 'a', 'y' in red, blue, yellow, and green respectively, with a small trademark symbol.The Dell logo is the word 'DELL' in a bold, blue, sans-serif font, with a small trademark symbol.The amazon.com logo features the text 'amazon.com.' in black, with a small orange arrow pointing from the 'a' to the 'z'.The e*TRADE logo consists of a black rectangle containing a stylized 'e' with a green asterisk and the word 'TRADE' in white.The priceline.com logo is the text 'priceline.com' in white, lowercase, sans-serif font, set against a dark blue rectangular background.

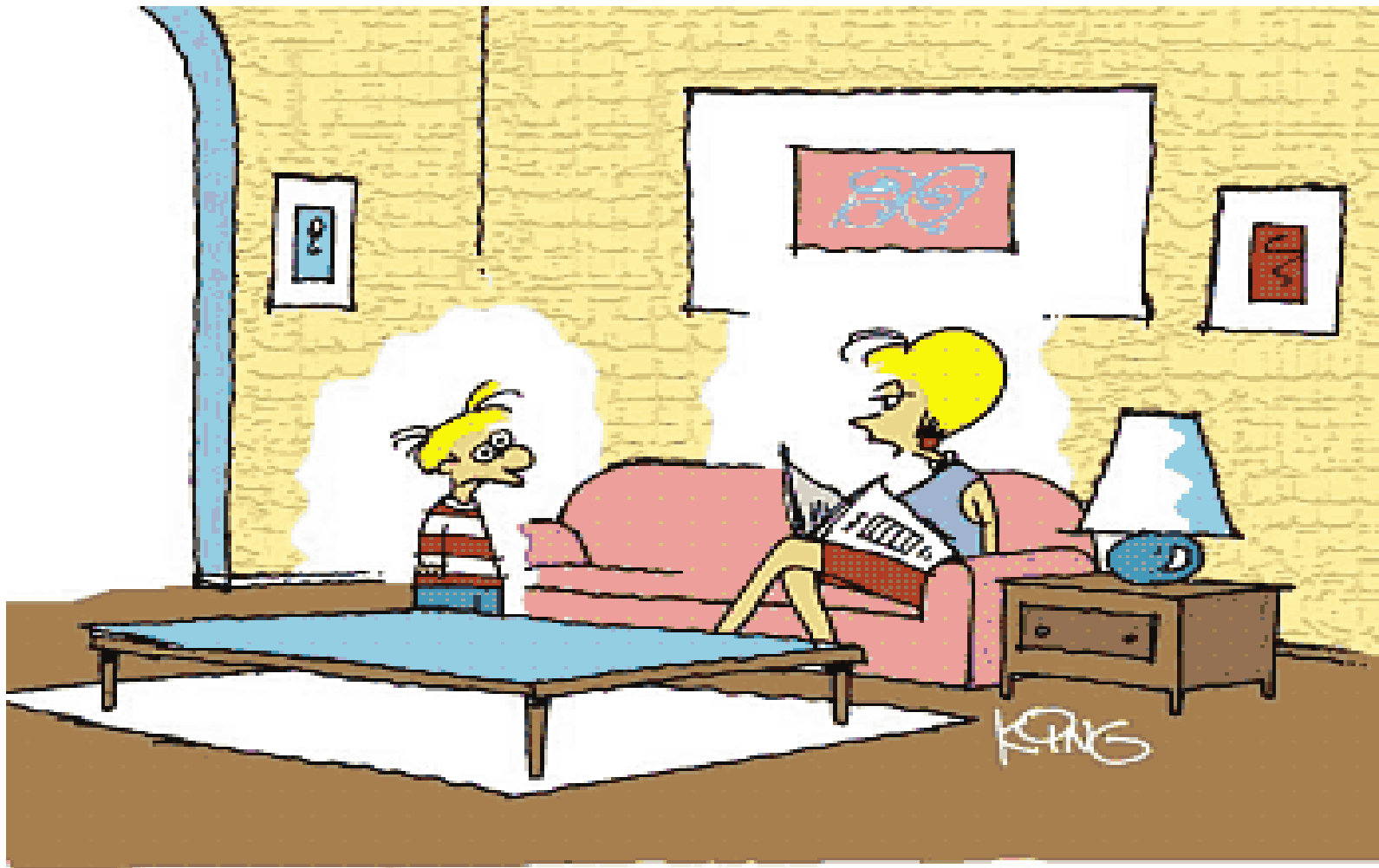
e-Commerce

Role of MIS

- Identifying **Information** to make effective **decision making** process of the organisation and creating **information system to satisfy those needs**
- Bridges gap between **Business and Technology**

Succeed in Technology by Connecting with People





*"No, you weren't downloaded.
You were born."*

Electronic Commerce (E-Commerce)

- **Commerce refers to all activities of purchase and sales of goods or services.**
 - Marketing,
 - sales,
 - payment,
 - Fulfillment & customer service
- **Electronic commerce is doing commerce with the use of computers, networks and commerce-enabled software**

(more than just online shopping)

Brief History

- **1970s: Electronic Funds Transfer (EFT)**
 - Used by the banking industry to exchange account information over secured networks
- **Late 1970s and early 1980s: Electronic Data Interchange (EDI)**
 - Used by businesses to transmit data from one business to another
- **1990s: the World Wide Web on the Internet** provides easy-to-use technology for **information publishing and dissemination**
 - **Cheaper to do business (economies of scale)**
 - **Enable diverse business activities (economies of scope)**

e-commerce applications

- Supply chain management
- Inventory management – Online status on inventory availability
- Remote banking
- Procurement and logistics – auctioning/bidding
- Online marketing and advertisement
- Customer service – Product usage information, on line fixing problem, reporting complaints..
- Home shopping

E- Commerce and Supply chain

- Digitise some products
- Replace all paper documents
- Replace faxes and telephone calls with electronic messaging
- Enhances collaboration and information sharing

E Commerce and Supply chain

- Shortens SC to minimize inventories
- Facilitates customer service and introduces efficiency in Buying & Selling

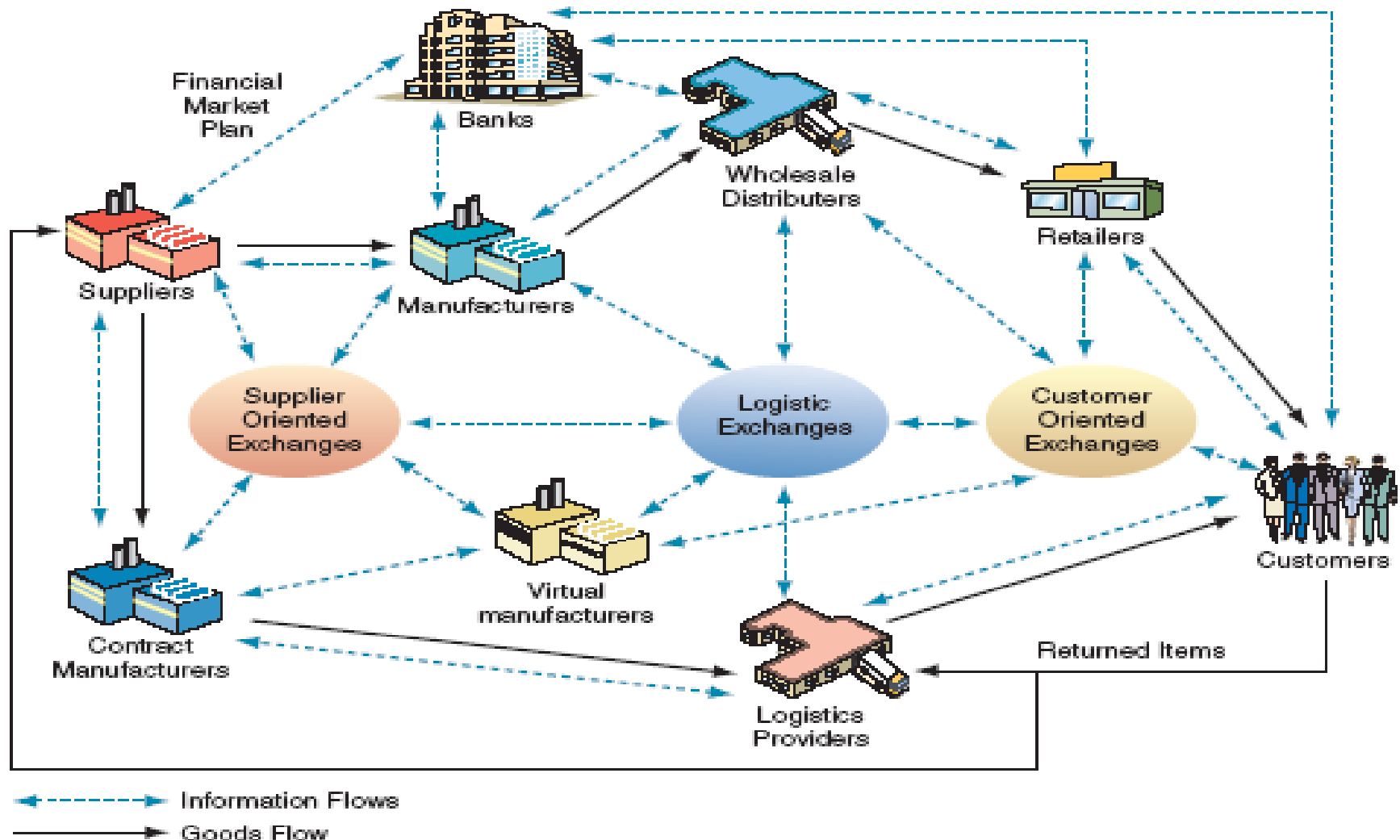
e-bay to V3

- Enables faster, cheaper and better communication
- Introduce flexible pricing **eg: Airlines**
- Enables electronic fund transfer

E Commerce and Supply chain

- **Upstream Activities** improve the upstream supply chain through *e-procurement*
- **Internal Supply activities** from entering purchase orders, to recording sales, to order fulfillment, to tracking shipments, are usually conducted over a **corporate intranet**
- **Downstream Activities** enhance the downstream activities by providing **online ordering**

COMPUTERISED SUPPLY CHAINS



The Main Elements of E-commerce

- Consumer shopping on the Web, called **B2C** (business to consumer)
- Transactions conducted between businesses on the Web, call **B2B** (business to business)

Advantages of Electronic Commerce

- **Increased sales**
 - Reach narrow market segments in geographically dispersed locations
 - Create virtual communities
snapdeal.com
- **Decreased costs**
 - Handling of sales inquiries
 - Providing price quotes
 - Determining product availability
- **Being in the space**

Amazon.com

Disadvantages of Electronic Commerce

- **Loss of ability to inspect** products from remote location
 - Camera, Resort Membership
- Rapid developing pace of **underlying technologies**
 - Honda Hydrogen car
- **Cultural and legal** impediments
- Hacking Data or Information

The process of e-commerce

1. Attract customers

- Advertising, marketing

2. Interact with customers

- Catalog, negotiation

3. Handle and manage orders

- Order capture
- Payment
- Transaction
- Fulfillment (physical good, service good, digital good)

4. React to customer enquiries

- Customer service
- Order tracking

e-bay.com

System Design Issues

- Good architectural properties
 - Functional separation
 - Performance (load balancing, web caching)
 - Secure
 - Reliable
 - Available
 - Scalable

Mobile trading set to take off in October 2010

Exchanges ready for dry runs; thrust on data security.




Source: BL, 8 sep 2010

Challenges Ahead...

- **e-supply chains must be an integral part of business strategy**, that intends to take an organisation forward in the next 10 years
- **Companies cannot transform themselves into e-business** just by purchasing some software
- **Customers needing a short response** time may not order through internet
- Brand is more important in online than off-line
- E business takes longer to deliver goods **physically**

Vendors hopeful of 'profitable' e-governance deals

“If your revenues from e-governance projects in 2010 was x , you could brace up for anywhere between $2x$ - $3x$ in revenues in 2011.”

India focus	
	<ul style="list-style-type: none">• Aadhar, R-APDRP, e-passport are key projects for next calendar year• e-governance opportunities, from a revenue perspective, will continue to be there for IT vendors• Questions remain on profitability of deals• Hardware-led projects still margin dilutive• Large IT contracts increasingly being given weightage for technical criteria• Government buyers feel IT vendors not transparent enough

All Villages to get Access to Banking in Next 5 yrs: RBI

Source: ET, 20 Dec. 2010

India needs e-governance systems to check corruption through Electronic Service Delivery Bill

- Kapil Sibal

Source: ET

Sep. 29, 2011

Recent Government Initiative (12.2012) :
Direct cash transfer (pensions, scholarships,
subsidies) to beneficiaries through Aadhar-
enabled accounts avoiding middlemen

Other technologies used in SCM

- Bar coding
- RFID
- Smart cards
- GPS

Session Summary

- Advantages and disadvantages of e-commerce has been explained.
- E-business framework has been elucidated with challenges ahead.