



Unit-1

The world of E – Business

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What Is E-Business?

Electronic-Commerce

- *The buying and selling of information, products, and services via computer networks and distributed media, usually the World Wide Web.*

E-business

- *can be defined as the conduct of automated business transactions by means of electronic communication networks(via internet or private network)end-t-end.*

- There are a number of definitions of electronic commerce dependent on different perspectives:
 - From a *business process perspective* it is the application of IT and communications toward the support and automation of business transactions and workflows.
 - From a *service perspective* it is a tool to address the need for cutting service costs while improving service quality and speed of delivery
 - From an *online perspective* EC provides the capability of buying and selling information, goods and services over the Internet and other online services.

Electronic Business: definition

Electronic-Business:

Definition :E-Business “ The automation of the entire spectrum of interactions between enterprises and their distributed employees , trading partners , suppliers and customers.”

- *The conduct of transactions by means of electronic communications networks (e.g., via the Internet and/or possibly private networks) end-to-end.*

- The term end-to-end business transaction signifies that a succession of automated business processes and information systems of different companies involved in an inter company business transaction are successfully integrated.
- The aim is to provide seamless interoperation and interactive links between all the relevant members of an extended demand and supply chain ranging from product designers, suppliers and their partner end-to-end customers.

- Consider a case where the sales dept of a MNC lands a strategic deal. This company needs to quickly update its
 - customer relationship system,
 - the order management system,
 - the billing system,
 - the warehouse management system and
 - Inform its suppliers and logistic providers that a key order must be filled.
- Accomplishing these types of challenging enterprise business tasks is difficult because of the multiple resources needed and the precise timing required to make a collaborative(intra or inter) company network work consistently and effectively.

e-Commerce vs. e-Business

- A particular form of e-business is e-commerce.
- E-commerce is buying or selling a product or service on the internet which can be conducted using B2B or B2C perspective.
- E-business is more generic term as it refers to not only information exchanges related to buying or selling but also servicing customers and collaborating with business partners, distributors and suppliers.

- E-business enables companies to link their internal and external processes more efficiently and flexibly, work more closely with suppliers and better satisfy the needs and expectations of their customers.
- Internal processes include distribution, manufacturing and accounting while external include processes that connect an org. to its customers and suppliers.

- E-commerce which can be more correctly termed as web-commerce - the purchase of goods and services over the web via a secure server with e-shopping carts and e-pay services, like credit or debit card pay authorizations.
- It is defined as buying or selling of goods and services, and the transfer of funds through digital communications.
- This includes on-line display of goods and services, ordering, billing, customer service and all handling of payments and transactions.
- It does not include key business processes such as CRM, SCM and ERP.

- E-business is a broader term than e-commerce.
- For eg complete integration into organizations' ERP systems or equivalent business tools, to undertake business processes by electronic communications end-to-end.
- Key processes such as CRM, SCM and ERP on web means the enterprise customers can do far more than simply placing order and paying.
- To succeed in e-business it is crucial to combine technological developments with corporate strategy that redefines a company's role in the digital economy while taking into a/c its various stakeholders.

Characteristics of E-Business

- E-Business is about integrating external company processes with an organization's internal business processes. These include:
 - Collaborative product development.
 - Collaborative planning, forecasting and replenishment.
 - Procurement and order management.
 - Operations and logistics

- Collaborative product development
 - Fastest growing technologies in engineering and manufacturing market(automotive, aerospace , office equipments etc).
 - Contributes towards making products with in a short span of time while maintaining quality and reducing cost.
 - It reduces the time that is needed to bring products to the market place.
 - Offer ERP integration and SCM.

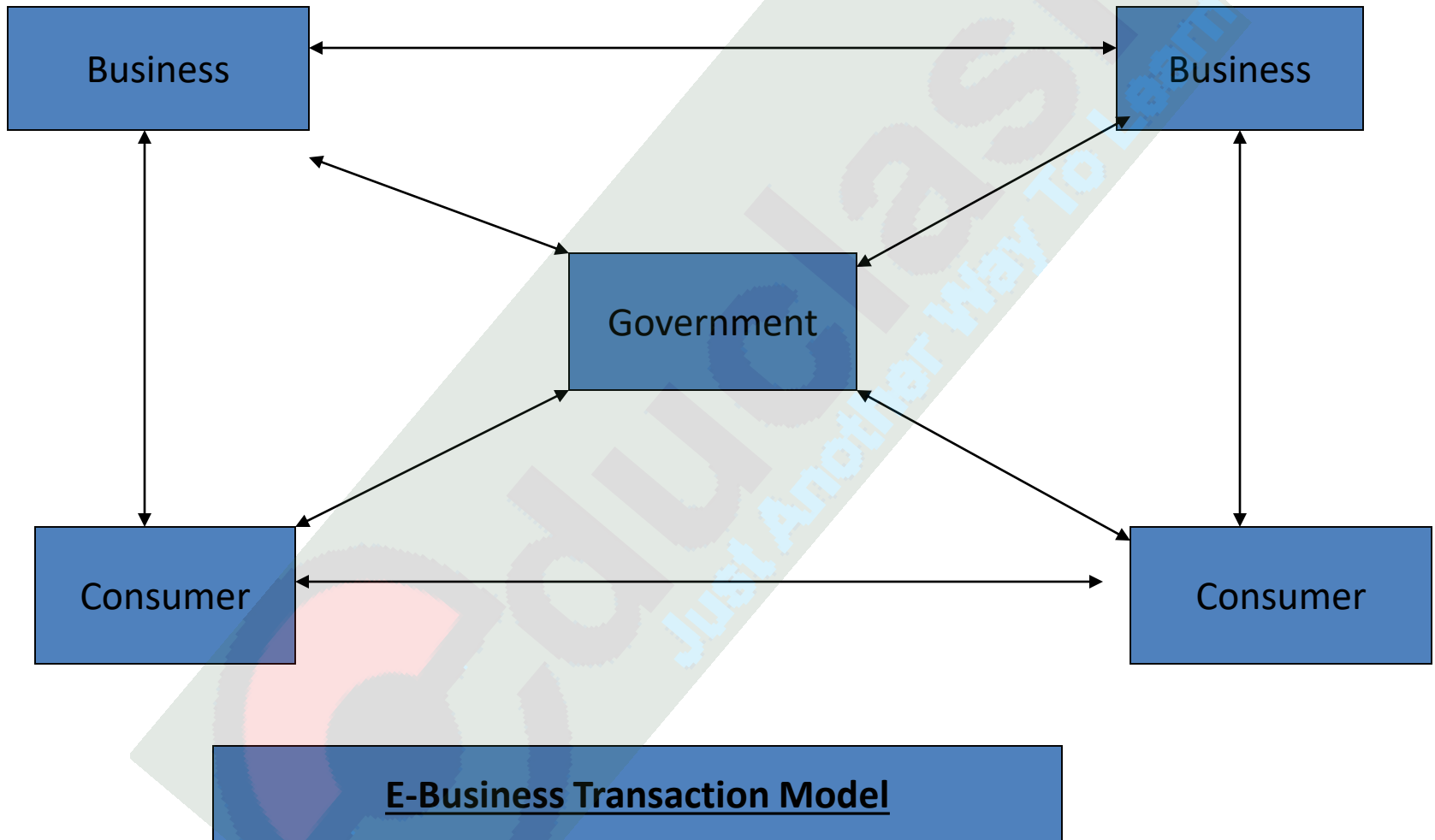
- Collaborative planning, forecasting and replenishment
 - This is the process in which manufacturers, distributors and retailers work together to plan, forecast and replenish products.
 - The main objective is that the trading partners work from a common forecast or plan in which retailer, distributor and manufacturer collect market intelligence on product information, store promotional programs and share information in real time over digital networks.
 - Improves customer service, improve supply chain inventory levels and lower inventory cost as well as achieve better control of production planning activities.

- Procurement and order management
 - To support Procurement and order management processes , companies use integrated electronic ordering process and increase efficiencies in purchasing operations.

- Operations and logistics
 - It is the part of supply chain process that plans, implements and controls the efficient, effective flow and storage of goods, services and related information from point of origin to the point of consumption in order to meet customers requirements.
 - To make this happen transportation, distribution, warehousing, purchasing and order management functions must work together.
 - **Logistics** - sharing of critical and timely data on the movement of goods as they flow from raw material all the way to end-user.
 - Operations and logistics processes are based on open communication between the networks of trading partners , where integrated processes and technology are essential for high performance logistics .

E-commerce Types

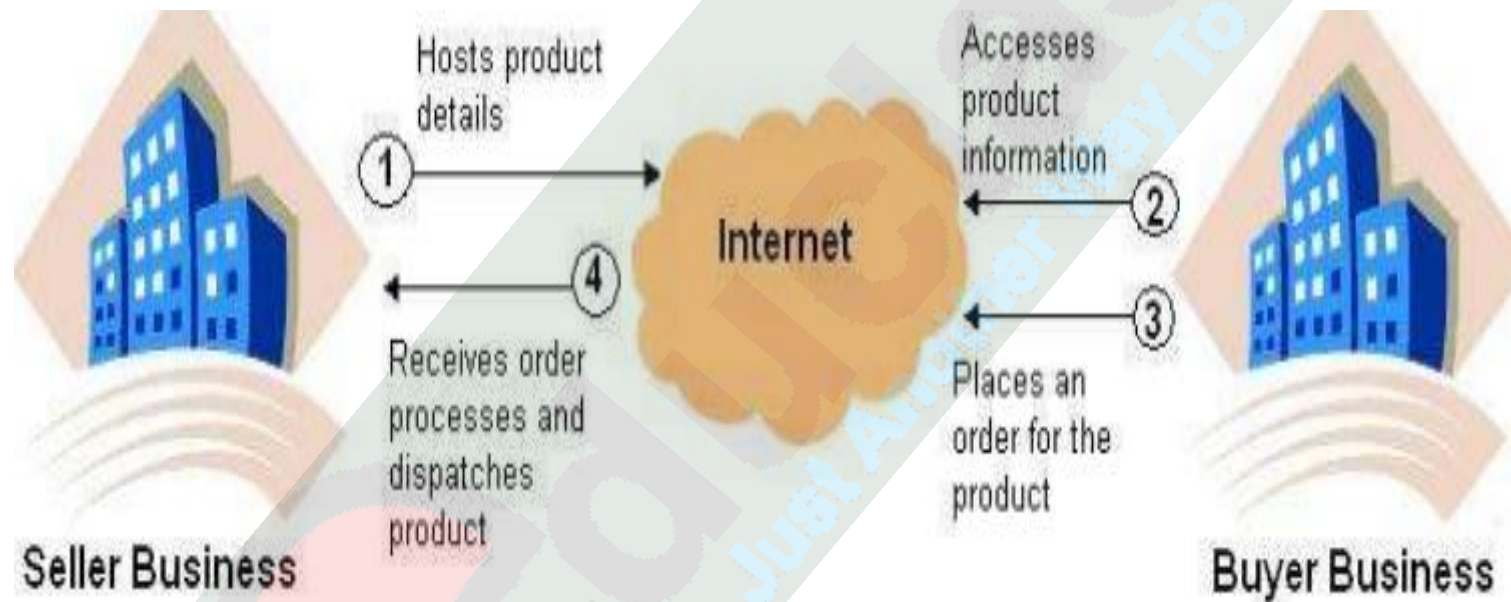
- E-commerce can be classified according to the transaction parties as
 - Business – to – Business (B2B) model
 - Business – to – Consumer (B2C) model
 - Consumer – to- Consumer (C2C) model
 - Consumer – to – Business (C2B) model



Business to Business (B2B)

- The exchange of products , services or information between businesses on the internet is B2B e-commerce. It covers business transactions along the various interactions existing in the value chain. Egs brokering websites , product supply and procurement exchanges etc. eg. Airparts.com
- Business to Business e-commerce facilitates inter-organizational interaction and transaction .
- Requires two or more business entities interacting with each other directly or through an intermediary.

- The business application of B2B e-commerce can be utilized to facilitate almost all facets of interactions among organizations such as inventory management, distribution management, order fulfillment and delivery, and payment management.
- Example: Dell deals computers and other associated accessories online but it does not manufacture all those products. So, in order to deal those products, first step is to purchase them from unlike businesses i.e. the producers of those products.



B2B Business Model

- The B2B e-commerce can be supplier centric, buyer centric or an intermediary centric.
- In **Supplier Centric** model , a supplier sets up the electronic commerce marketplace. Various customer/buyer businesses interact with the supplier at its electronic commerce marketplace.
- In **Buyer-centric** e-commerce, major businesses with high volume purchase capacity create an e-commerce marketplace for purchase and acquisition by starting a site on their own. The online e-commerce market place is used by the buyer for placing requests for quotations (RFQ) and carrying out the entire purchase process.
- The united states Government and the General Electric's Trading process network are eggs . GEIS initiated a web site for posting invitations for tenders and other accompanying documents

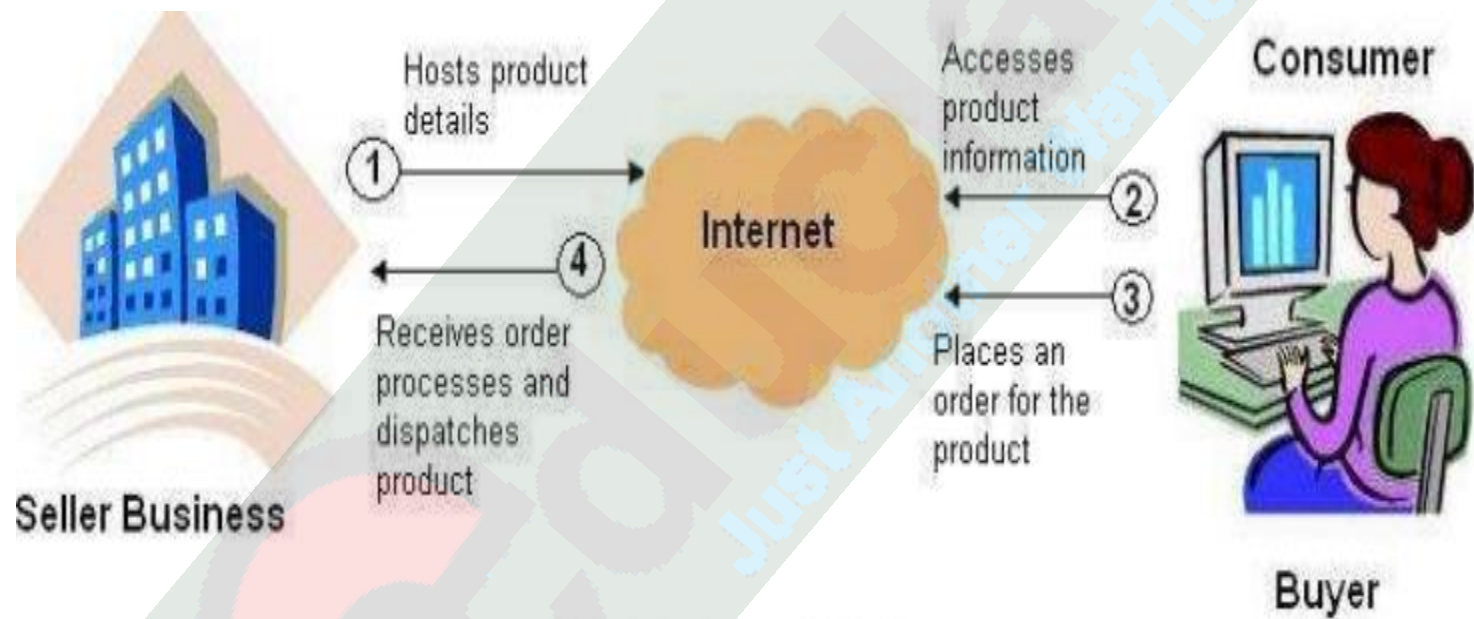
- In **Intermediary-centric e-commerce**, in the B2B context, a third party sets up the e-commerce marketplace and attracts both buyer and seller businesses to interact with each other .
- IndiaMart.com has been serving as third party e-marketplace for indian exporters and manufacturers.

Major Advantages of B2B

- **Direct interaction with customers:** the unknown and faceless customer including other businesses now has a name, face and profile.
- **Focused sales promotion:** gives authentic data about the likes, dislikes and preferences of clients and thus help the company bring out focused sales promotion.
- **Building Customer loyalty:** once the customer develop a binding relationship with a site or product, they do not like to shift loyalties to another site or product.
- **Scalability:** web is open and offers round the clock access.
- **Savings in Distribution costs:** company can make huge savings in distribution, logistical and after sales support cost by using e-business models.

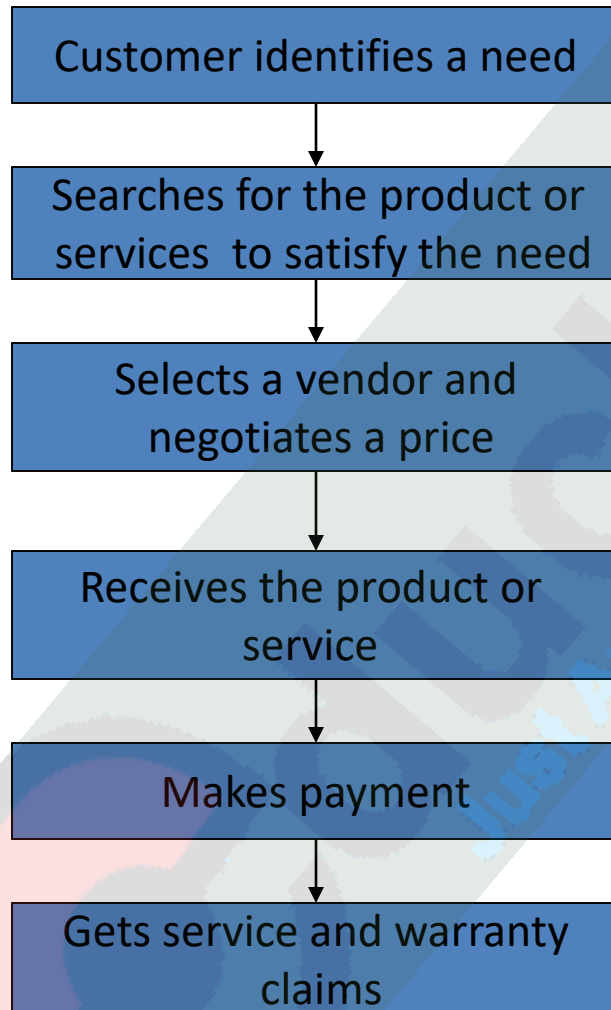
Business to consumer

- **B2C** (business to consumer): It may be defined as any business selling its products or services to consumers over the internet for their own use . It reflects only the interaction between retailer and consumer. Amazon.com the online bookseller is the prime e.g.
- B2C transactions include the following steps:
 - a/c acquisition
 - Product discovery through search and browse
 - Price negotiation
 - Payment and
 - Product delivery



B2C Business Model

Process in B2C



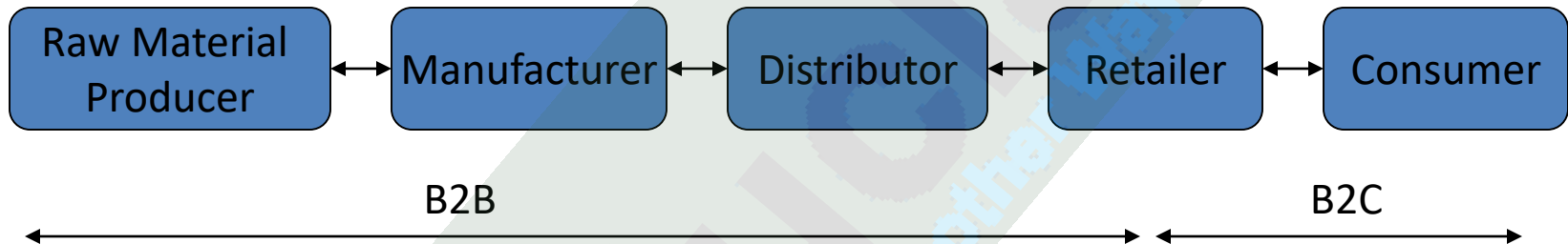
- B2C offers consumers the capability to browse , select and buy merchandise online, from a wider variety of sellers and at better prices.
- It often includes e-retail and other online purchase such as airline tickets , entertainment venue tickets etc
- B2C e-business models include virtual malls , which hosts many online merchants.
- Example: www.flipkart.com, www.myntra.com

• **Advantages of B2C e-commerce**

B2C e-commerce has the following advantages:

- Shopping can be faster and more convenient.
- Offerings and prices can change instantaneously.
- Inexpensive costs , big opportunities.
- Globalization- web can make u big player .
- Reduced operational costs.
- Customer Convenience.
- Knowledge Management. You can find out who visited your web site.

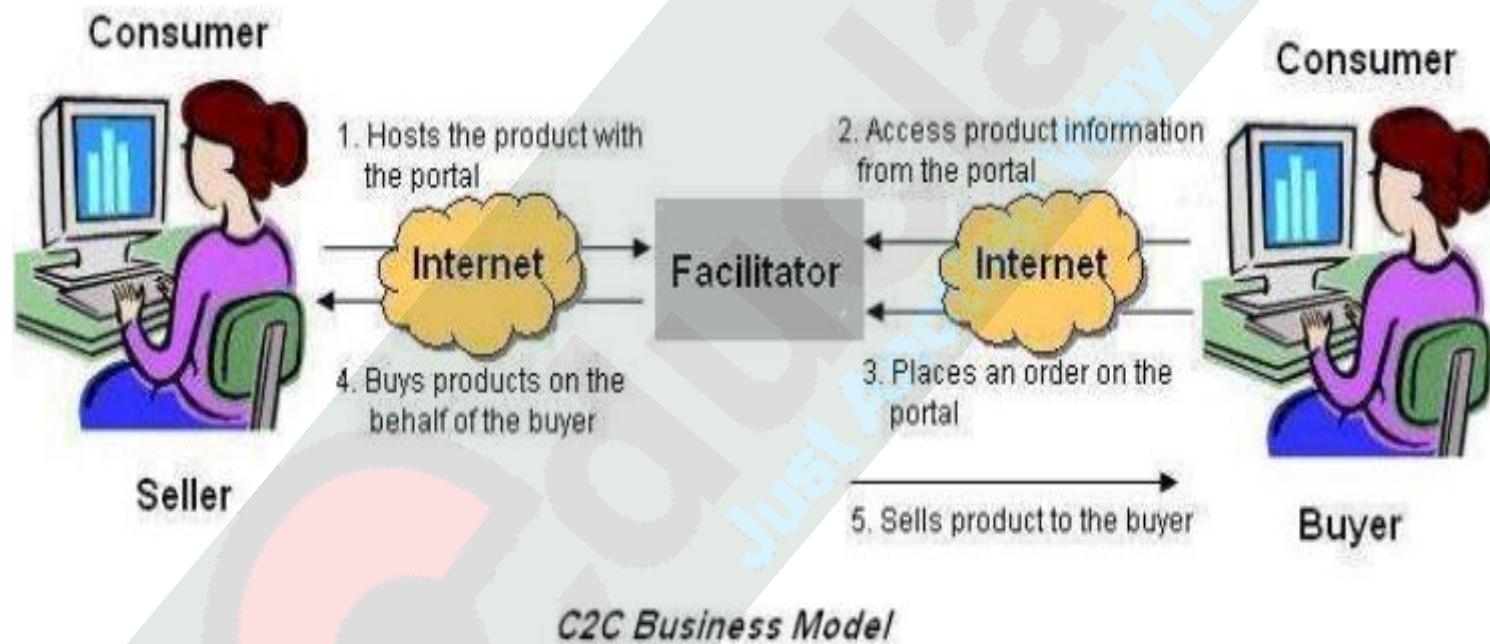
E-Business Model Based on Relationship of Transaction Parties



Relation Between B2B and B2C

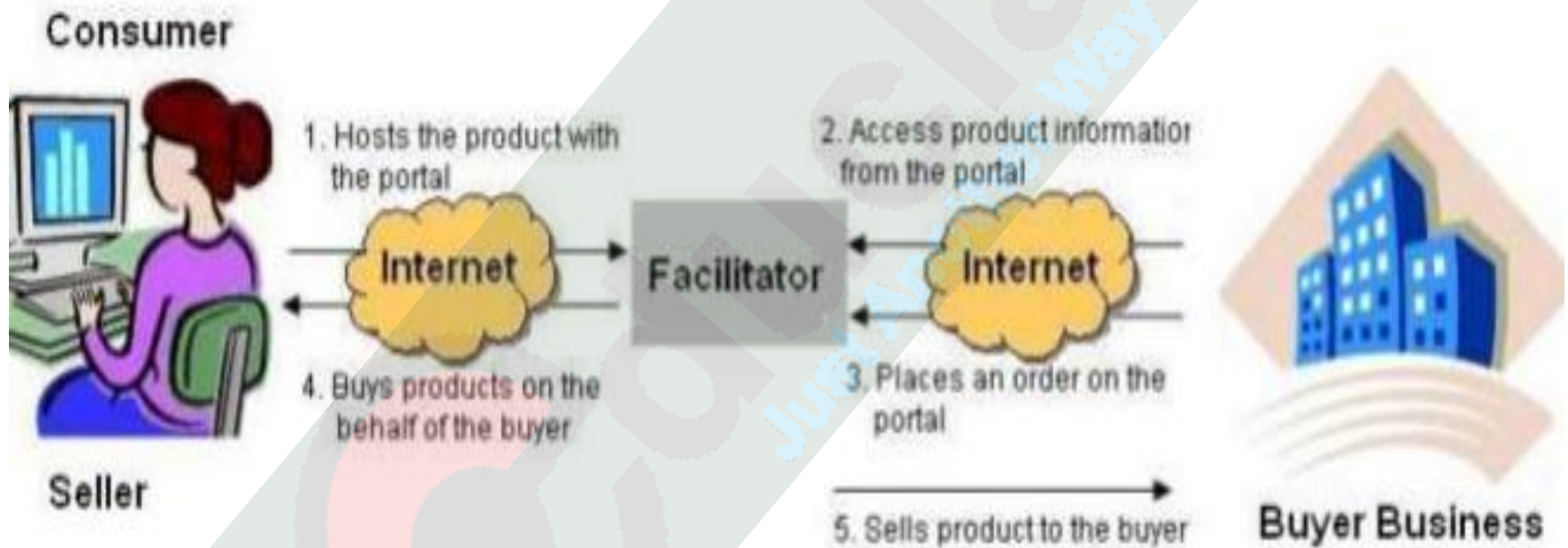
Consumer to consumer

- **C2C** (consumer to consumer): This is consumer-to-consumer e-commerce. A virtual marketplace on the Internet in the form of a website enables sellers and buyers to meet and exchange goods including used goods at negotiated price in C2C.eg . eBay. COM
- With C2C e-business model, consumers sell products, personal services and expertise directly to other consumers through number of methods:by placing online classified Ads, by participating in forward and reverse auctions or by making trades.
- C2C is the e-commerce activity that provides the opportunity for trading of products and/or services amongst consumers who are connected through the internet. Electronic tools and infrastructures are employed to support the transactions. Transactions corresponds to gift items, craft items, etc. eg: quickr.com, olx.com.



Consumer to Business

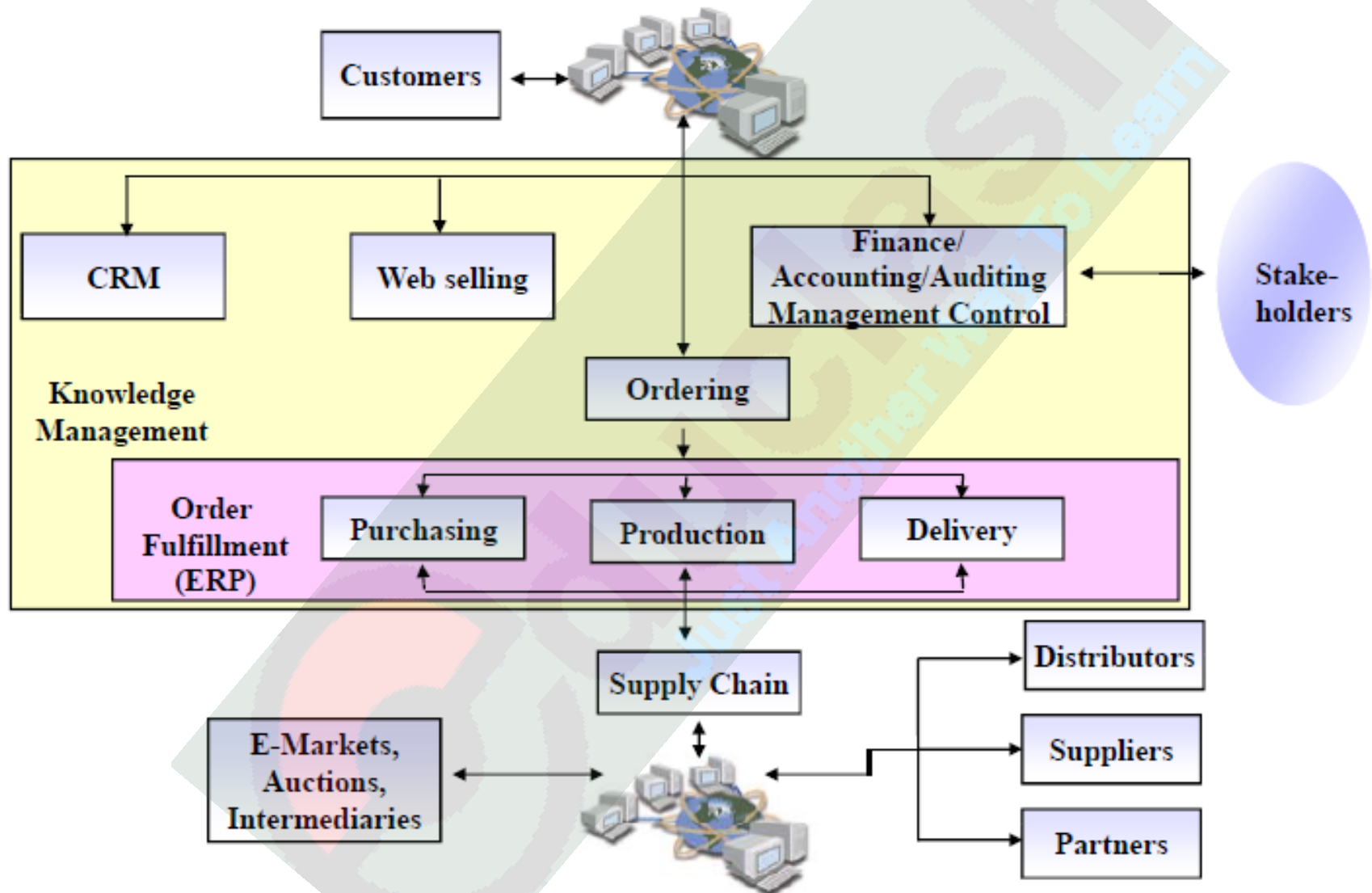
- **C2B** (Consumer to Business): sites where consumers set prices and companies bid to offer products and services. Egs razorfinish.com
- C2B e-business model uses reverse auctions to enable consumers to name their own price for a specific good or service; once the bid is offered and accepted , it is often binding.
- Collects the individual consumer's bid for product or service such as an airline ticket, rental car and then offer the bid to multiple sellers who either accept or decline the consumer's bid.
- Example: www.monster.com, www.nakuri.com



Elements of E-Business

- The vision of e-Business is that enterprises will have to access to much broader range of trading partners to interact and collaborate with and not only to buy and sell more efficiently.
- To maximize supply chain efficiency, improve service to customers and their profit margin organization must make certain that their business info systems such as inventory, accounting, manufacturing and customer support not only interact but can also become web-enabled so that business systems of their partners and customers can interact with them.

- In order to optimize their operational efficiency, enterprise need to develop newer distributed applications that extract data and launch business processes across many or all of these systems.
- An e-Business solution should embrace (basic elements in the e-business topology)
CRM,ERP,SCM and vertical product offerings.
- Diagram shows common topology for conducting e-Business from point of view of a transaction company, it shows how a company interact with customers, suppliers, distributors and e-Markets and sets out the flow of information and materials in an e- Business Solutions.



- CRM:
 - these are front office system that deal directly with its customers.
 - It is the process of creating relationships with customers through reliable service automated process.
 - It includes 3 types of applications:
 - Customer facing
 - Sales force facing
 - Management facing.

- ERP:
 - can aid in the control of many business activities like sales, delivery, billing, production, inventory management and Human resource management.
 - It is designed around 4 primary business processes:
 - Production: manufacturing resource planning and execution process
 - Buying a product: procurement process
 - Sales of products and services: customer order management process
 - Costing, paying bills and collecting : financial/management accounting and reporting process

- Supply chain management
 - Is a network of facilities and distribution options that performs the functions of procurement of materials, transformation of these materials into intermediate and finished products and distribution of these finished products to customers.
- Knowledge Management:
 - Relates to the identification and analysis of available and required knowledge assets and related processes.
- E-markets:
 - Is an electronic meeting place for multiple buyers and sellers providing many participants with a unified view of sets of goods and services, enabling them to transact using many different mechanism

E-Business Roles & Challenges

- e-Business applications have two sides:
 - Buy side: organizations that use e-Business facilities for their buying needs, e.g., spot purchasing and/or enterprise-wide procurement.
 - Sell side: businesses that sell their products via the transaction mechanisms offered in e-Business applications.
- Transforming from traditional suppliers to e-business enabled suppliers include among other things:

- Manage multiple selling channels based on various technologies, protocols, data formats and standard business processes.
- Ability to take multiple types of orders from customers.
- Ability to differentiate and customize products and services from other suppliers.
- Ability to adapt and grow the e-Business without dramatic technology changes, organizational restructurings, business processes or radical new investments.

- To meet needs of buyers and suppliers e-Business strategy and solutions should be built around following basic principles:
 - Empowering suppliers and buyers:
 - For an e-business solution to be truly effective for suppliers it must empower them to sell wherever their buyers are located by providing a wide variety of selling channels with relatively low investment.
 - Buyers must be similarly empowered to pick and choose from various suppliers at different places in the world by means of different types of selling channels.
 - Enabling suppliers of all sizes:
 - An understanding that suppliers of all sizes and levels exist, getting suppliers connected electronically with buyers through flexible solutions is only part of challenge.

e-Business Requirements

1. Identify/measure quantifiable business objectives:
 - ✓ Companies must accurately measure the impact an e-business initiative has on their business process and whether it has sustainable long term effect.
2. Ensure organizational/operational flexibility:
 - ✓ However Well organized the enterprise was before the deployment of e-business solns, the situation will surely change b'coz of e-business initiative.
3. Re-think entire company supply chains:
 - ✓ To optimize performance and value as they seek to better integrate with suppliers and customers, share info, inter-link processes and so on.
4. Transform the company to a process-centric one:
 - ✓ Process centric companies place their primary emphasis on maximizing the efficiency of processes, not on maximizing the efficiency of dept or functional units.

5. **Define business processes:**

- ✓ Companies must create models of existing processes and interactions, determining the relevant events, time frames , resources and costs associated with business processes.

6. **Understand security requirements:**

- ✓ The breadth of access and interaction representative of e-Business solns requires the ability to provide controlled and focused access by customers , employers, suppliers and in some cases, applications which can interact directly without human intervention.

7. **Align business organizations with a flexible IT architecture:**

- ✓ The solns required reflect the need to integrate business processes at a variety of different levels from applications and data and finally across organizations in a way that embrace all possible sources of complexity.

8. **Establish ubiquity within standards:**

- ✓ None of the Integrated technologies created by IT vendors has achieved complete coverage for the demand of IT world. Attempts were made at establishing open stds for interoperability.

- Success in end-to-end e-Business applications require adoption of following methods and technologies:
 - Efficient Business process management for modeling and automation of business processes.
 - Efficient business to business communication for secure and reliable exchange of information and transaction
 - Efficient enterprise application integration technology for combining mission-critical legacy systems- throughout the networked enterprise – with new business components.

Impacts of E-business

- The emergence of e-Business impacts organizations in various ways.
- Some of the key characteristics:
 - Speed at which transaction can occur.
 - Ability to connect multiple parties at the same time.
 - Ability to gather and manipulate information in new way.
 - Absence of traditional business tool-paper forms and face-to-face retail contacts.

Advantages of Electronic Business OR Impacts of e-Business

- Some of the potential benefits motivating today's enterprise to undertake e-Business initiatives:
 - Improved operational efficiency and productivity.
 - Reduction in operating costs of goods and services.
 - Improved competitive position
 - Penetration into new markets through new channel
 - Improved communications, information and knowledge sharing
 - Harmonization and standardization of process
 - Improved internal information access
 - Improved relationships with suppliers and improved customer service

- Improved operational efficiency & productivity:
 - Most often touted benefits of e-Business is potential for tremendous improvements in operational efficiency.
 - Using e-Business technology to interact with trading partners, organizations can streamline operations and increase effectiveness at same time
 - By eliminating operational waste productivity gains.
- Reduction in operating costs and costs of goods and services:
 - Collaboration with suppliers, customers, distributors raise opportunities that range from basic electronic information exchange to facilitating transactional exchanges of information
 - Helps lower the cost of communication and collaboration between trading organization
 - Connecting directly with suppliers and distributors organization can realize more efficient processes result into reduced unit costs for products, services lower prices to customers while achieving economies of scale.

- Improved competitive position:
 - Global reach, rapid growth, efficient reduction of product time to market ,optimization of product distribution channels, all contribute to a superior competitive position.
- Penetration into new markets through new channels:
 - With e-business location is of no consequence when it comes to reaching customers.
- Improved communications, information and knowledge sharing:
 - The alignment of key supply chain partners with organization's strategies helps exploit expertise and knowledge in creating value.

- Harmonization and standardization of processes.
 - To provide simple ,transparent and effective processes for global commerce, it is imp not only to exploit advances in IT, but also adopt new approaches to trade facilitation based on simplification and harmonization of business processes.
- Improved internal information access.
 - Quantities and qualitative improvements to internal information access can yield big payoffs for the business.
- Improved relationships with suppliers and improved customer service
 - Internet is an effective way to maintain relationship between customers, suppliers and its usefulness for reaching global customers is significant.

Inhibitors of E-Business

E-business adoption is closely linked to a company's perception of the importance of trading on the Internet and how it might impact on their business

A key indicator that may influence adoption of e-Business is the size of firm.

Typically large firm adopt e-Business strategy – engage small and medium enterprises(SMEs) in their supply chain

- Management/Strategy Issues
 - Lack of a clearly defined e-Business strategy
 - Organizational changes required by e-Business
 - Management attitudes and organizational inflexibility
- Cost/Financing Issues
 - Costs of implementation of e-Business
 - Calculating the Return on Investment (ROI)
- Insufficient security & trust Issues
- Legal issues
- Technology Concerns
- Arguments against investment

Management/Strategy Issues

- E-Business Strategy:
 - Lack of clearly defines strategy is a major inhibitors for companies to espouse e-Business-based technological solutions.
 - Need for e-Business strategy and action plan that has sufficient detail to allow progress to be monitored and measured
- Organizational changes required by e-Business:
 - Traditional structure not suitable for e-business as they may fragments customer service ,retard market responsiveness and constrain improvement in process efficiency
 - Barriers erected between departments to inhibit sharing of information
 - To identify business opportunities, risks and process improvement company requires good understanding of how suppliers, distributors, retailers, end-users, joint venture, partners and competitor interrelate.
- Management attitudes and organizational inflexibility
 - More serious in SMEs bcoz of the traditional leadership and organizational form.
 - Firms operating in more traditional sectors also tend to be less innovative.

Cost/Financing issues

- Cost of implementation of e-business
 - Cost of setting up e-Business includes preliminary planning, procuring hardware/software tools ,continuous maintenance, servicing costs and telecommunication charges.
 - Can be serious barrier for small companies.
- Calculating the ROI(return on Investment)
 - Difficult to calculate ROI on e-Business investment
 - SMEs work with limited funding resources and need to see significant return before they will take major decision on e-Business.

Security and trust issues

- Security:
 - Many companies are afraid to move to electronic trading systems bcoz of the potential for
 - theft of business info. and funds
 - Alteration of financial docs
 - Illicit transactions and concerns over payment security
- Trust:
 - Level of trust that organizations are willing to place in businesses selling goods and services on the internet.
 - If organizations don't trust those companies which provide goods and services , they will not engage in e-business transaction.
- New partnership loyalties:
 - Cooperation rather than competition may be the basis for success in e-Business.
 - E-Business markets may create much larger markets, but can require a great deal of loyalty and trust building in the new partnerships that they create.

Legal Issues

- Legal barriers could be defined as “ a specific legal provision, which prevents enterprises from entering into e-business”.
- The most imp legal issue hampering the growth of e-Business is still a lack of awareness.
- Few companies are familiar with the rules and regulations that apply to an online environment, leading to much uncertainty for e-Business companies and consumers alike.

Technological Concerns

- In each company transactions are processed differently.
- B-2-B integration is about coordinating the flow of information among businesses and their heterogeneous business support systems without being tied to one specific technology.
- Building integration bridges that span independent organizations and their systems is challenging.

Arguments Against Investment

- Uncertainty about the viability of the initial investment and the rising cost of maintenance services may reduce the willingness of enterprises to undertake the necessary investment.