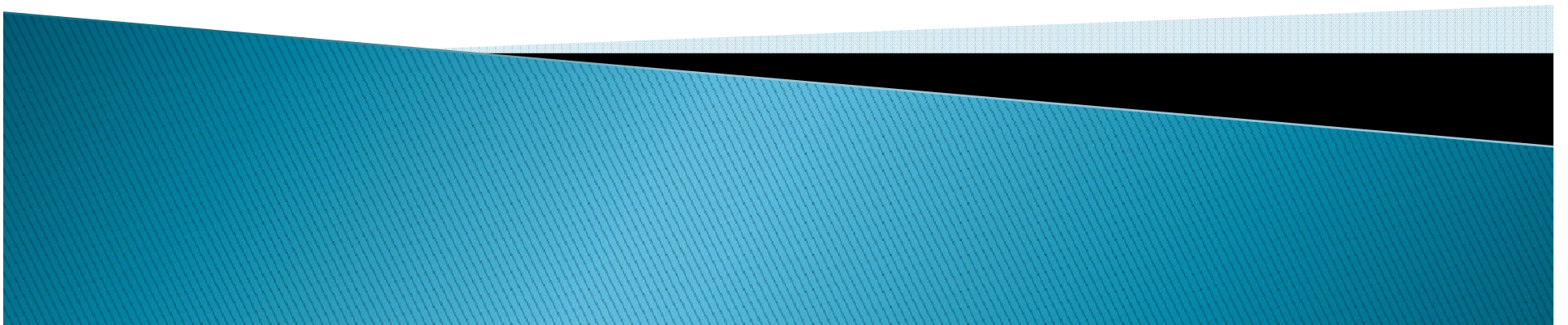


U-V Application Area



Outline

- ▶ Business
- ▶ Taxation
- ▶ Electronic Payments
- ▶ Supply Chain
- ▶ EDI
- ▶ E-Market
- ▶ Emerging Trends

Business

- ▶ IT revolution has greater impact on us rather than industrial revolution
- ▶ Application of e-com has led many changes in the way business is conducted
- ▶ An e-com is solution to conduct business using Technology through an intra-extra or internet solution
- ▶ E-business is umbrella term that include e-commerce & refers to the use of Internet to expand company's value chain

Business ..

- ▶ Ultimate goal of e-business is to create value for customers
- ▶ Firm with effective e-business strategy develops the capability needed to improve flow of information & business intelligence among partners, suppliers, employees and customers
- ▶ Also aims to solve problem of all parties that comprises its extended value chain

Business ...

- ▶ Business with strong Internet presence reduce staffing and office space overhead
- ▶ Strong Internet results in more competitive pricing of service & product
- ▶ Internet provide most economical form of advertisement
- ▶ Website with e-com capability draws peoples back
- ▶ Builds brand loyalty and awareness which is rare in mainstream advertisement

Taxation & e-commerce

- ▶ Taxation in e-commerce is important issue due to large volume of trade
- ▶ Taxation in e-com is always debatable issue in every country
- ▶ Agenda of debate is whether tax policies should promote business on web or preserve it on main street
- ▶ Many argue that it's not government responsibility to protect older Industry those are threatened by emerging Technologies

E-Tax

- ▶ E-Tax means company is using web as media for making sales and thus results in profit which is taxable
- ▶ IT ACT-2000 is clear as incidence of cyber contracts, their place and time of execution
- ▶ If sales takes place through Internet its not difficult to understand the implication of sale or income tax
- ▶ All the transactions are taxable under the present provisions of taxation

Ambiguities

- ▶ E-Commerce taxation has many legal issues
- ▶ For provision of service such as download of software or music for a price is taxable
- ▶ What would be the value of shareware where we place condition for use of service for a restricted period
- ▶ If user continues to use beyond trial period will it be treated as “deemed sale”
- ▶ If so will it be treated as taxable

Ambiguities..

- ▶ Should e-com company follow cash system of accounting only
- ▶ What is taxability of service which is given free?
- ▶ Should it be treated as gift ?
- ▶ What is taxability of service exchanged for another service
- ▶ These are some of the issues for which there is no answer

Electronic Payments

- ▶ For online shopping everyone wants convenience of online payment rather than mailing DD or Cheque
- ▶ As a business owner you can experience a huge decrease in the time it takes to get your funds into your hands

Entities involved

- ▶ In order to do successful payment processing multiple entities have to work in coordinated manner
- ▶ Some entities involve are
 1. Customer gateway
 2. Bank clearing house
 3. Merchant

Online banking (CBS) Core banking

- ▶ You can make enquiry about balance, credit, debit
- ▶ Obtain cash payment by tendering cheque
- ▶ Deposit cheque or cash for credit
- ▶ Get statement of account
- ▶ Fund transfer'
- ▶ Trading
- ▶ Many more..

Types of e-Payment System

1. Electronic Token

- ▶ Electronic token is digital analog or various form of payment backed by bank
- ▶ There are two types of tokens
 1. Real time Token (Prepaid token) these are exchange between buyer and seller, users prepay for token that serves currency e.g. Digi cash, Debit card
 2. Postpaid tokens– these are used with fund transfer instruction between buyer and seller e.g. electronic cheque, credit card etc

2. Electronic or digital Cash..

- ▶ Combines computerized convenience with security and privacy that improve the paper cash
- ▶ Some qualities of Digital cash are
 - Legal lender–payee is obligatory to take it
 - It is negotiable – can be given or handed to someone else
 - It is bearer instrument – possession is proof of ownership
 - It can be hold and used by anyone

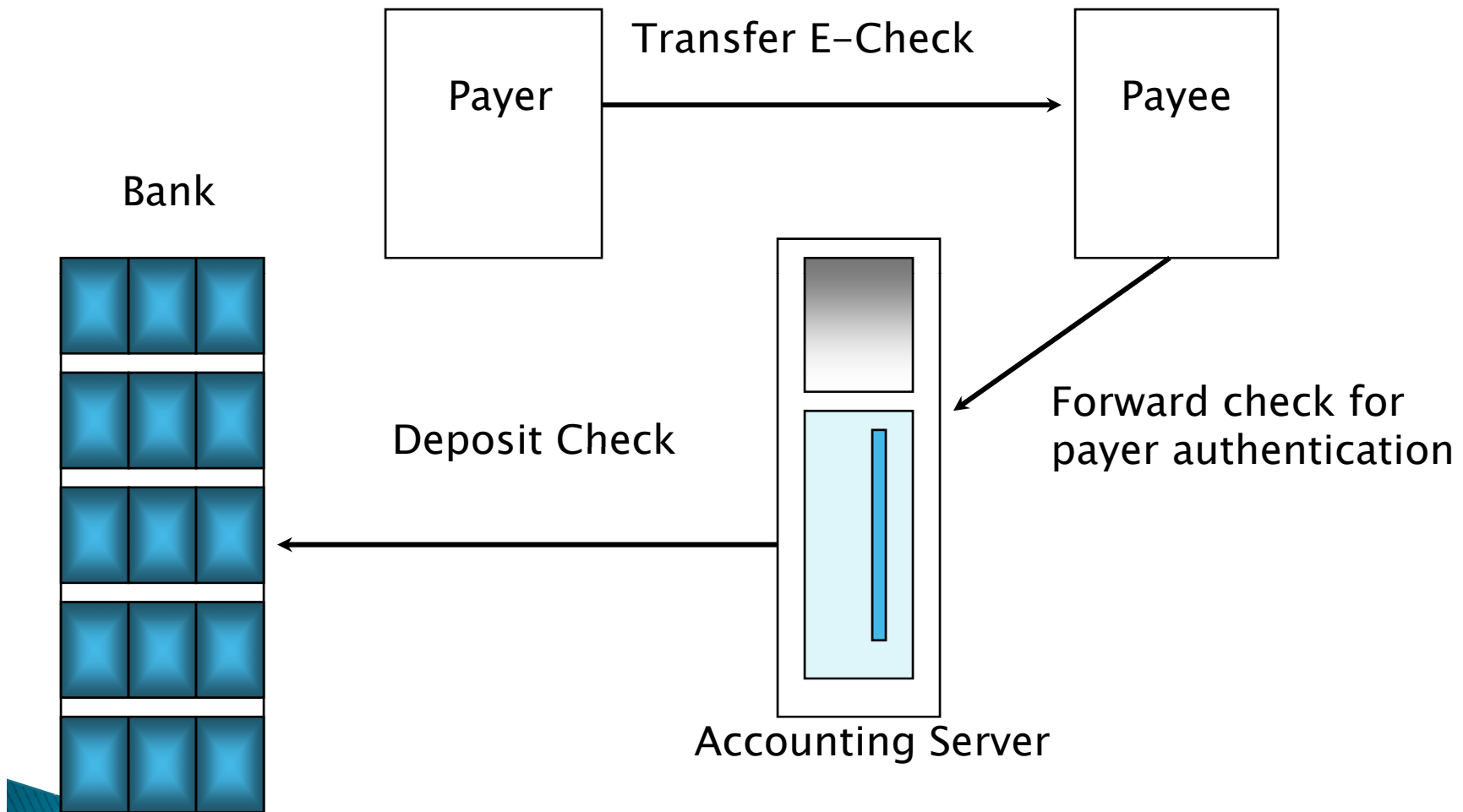
Electronic or digital Cash..

- ▶ Some Properties of Digital cash are
 - Must have monetary value
 - Must be interoperable or exchangeable
 - Must be storable and retrievable
 - Should not be easy to copy and tamper
- ▶ Limitation of debit & credit card
 - They are identification cards owned by issuer and restricted to one user
 - They are not legal tender
 - Their usage requires an account relationship and authorization system

3. Electronic Cheque

- ▶ Electronic cheques are modeled on paper except they are initiated electronically
- ▶ They use digital signature for signing and endorsing
- ▶ It requires digital certificate to authenticate the payer, payers bank and bank account
- ▶ It can be delivered either by direct transmission using telephone lines or by Internet
- ▶ Benefits
 - Well suited for micro payments
 - Can serve the corporate market

Payment Transaction Sequence



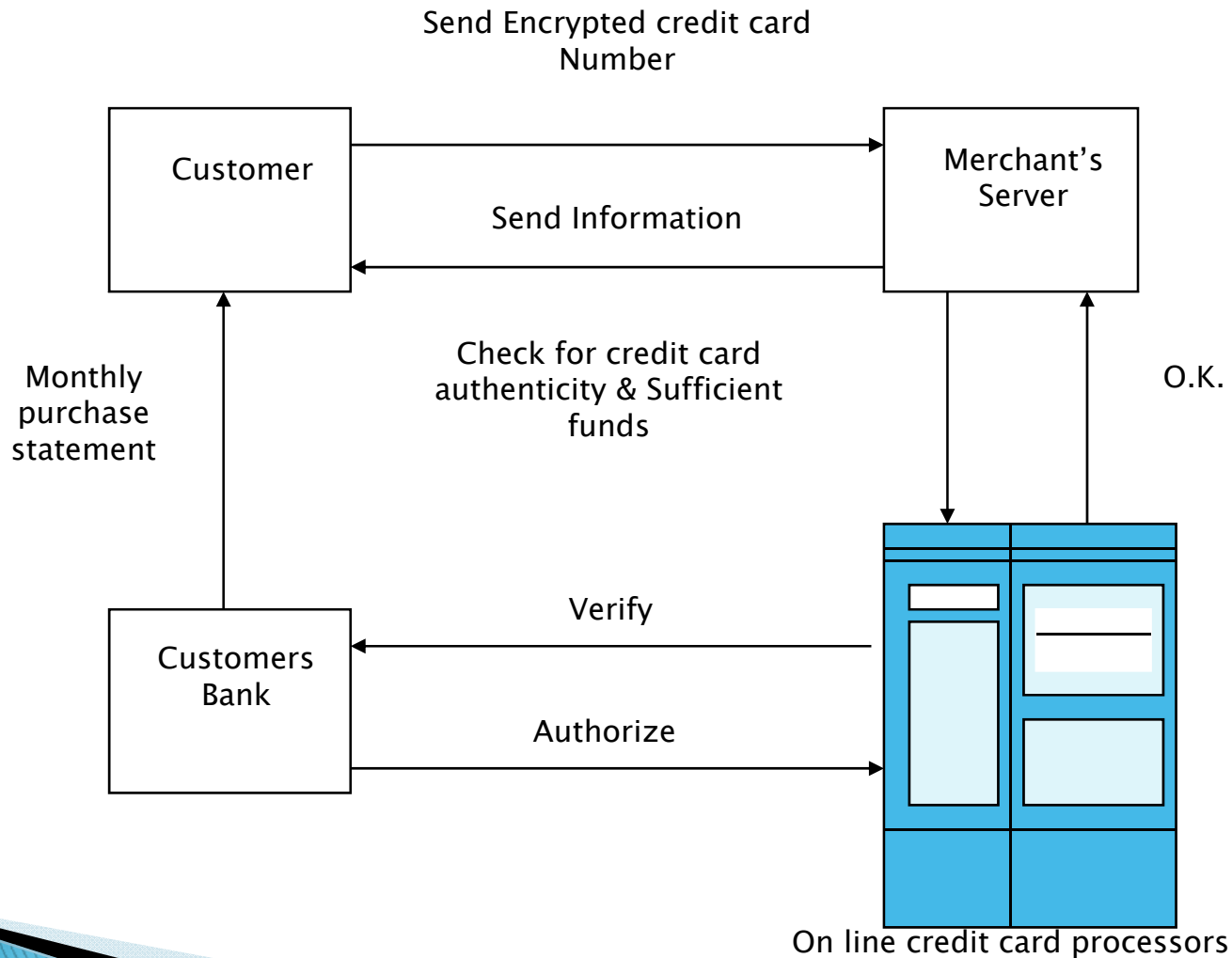
Credit card based Pay System

- ▶ To avoid the complexity of digital cash and electronic checks, credit card provides alternate solution
- ▶ Credit card payments can be done in three basic categories:
 1. Payment using plain credit card details.
 2. Payment using encrypted credit card details
 3. Payment using third party verification

Credit card Transaction

- ▶ The following steps are taken securely before actual goods and services or funds flows:
 - A customer present his/her credit card information securely to the merchant
 - A merchant validates the customer's identity as the owner of the credit card account.
 - The merchant relays the credit card charge information & signature to its bank or on-line credit card processor.
 - The bank or processing party relays the information to the customer's bank for authorization approval.
 - The customer bank returns the credit card data, charge authentication and authorization to the merchant

Credit card Transaction



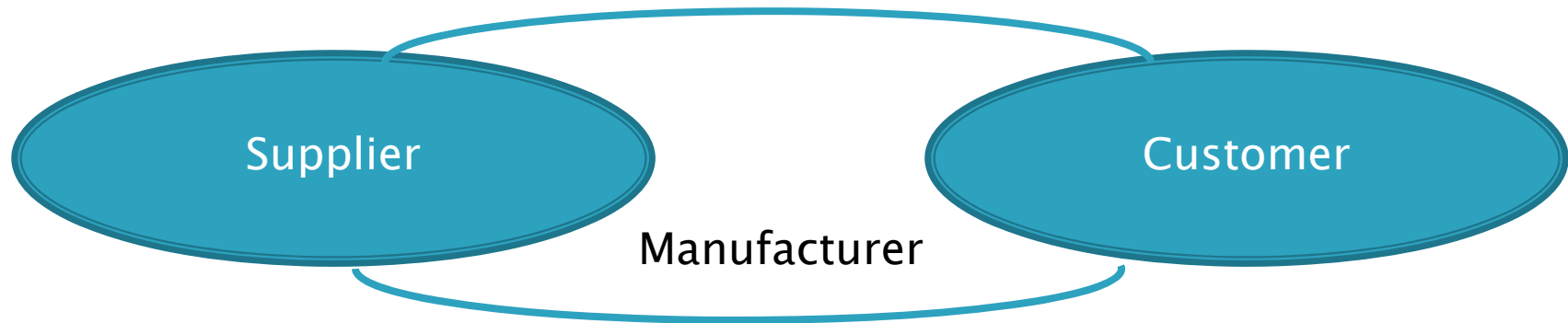
Some more Payment options

4. Debit cards
5. EPS (electronic payment system)
6. OPS(online payment system)

Risk , Mistake & disputes

- ▶ Feature of automatic records include
 - Permanent storage
 - Accessibility and traceability
 - Payment system database
 - Data transfer to payment maker, or monetary authority.
 - Mondex electronic purse equivalence with cash, but its cash wallets are design to hold the automatic records of the last 20 transaction with a statement built in.

Supply Chain



- ▶ Supply chain / logistic network or supply network is coordinated system of entities , activities , information & resource involve in moving product or service from supplier to customer

Definition of SCM

- ▶ A network of autonomous or semi-autonomous business entities collectively responsible for procurement, manufacturing, and distribution activities associated with one or more families of related products. – Jayashankar et al
- ▶ A supply chain is a network of facilities that procure raw materials, transform them into intermediate goods and then final products, and deliver the products to customers through a distribution system. –Lee and Billington
- ▶ A supply chain 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 the distribution of these finished products to customers. –Ganeshan and Harrison

Features of SCM

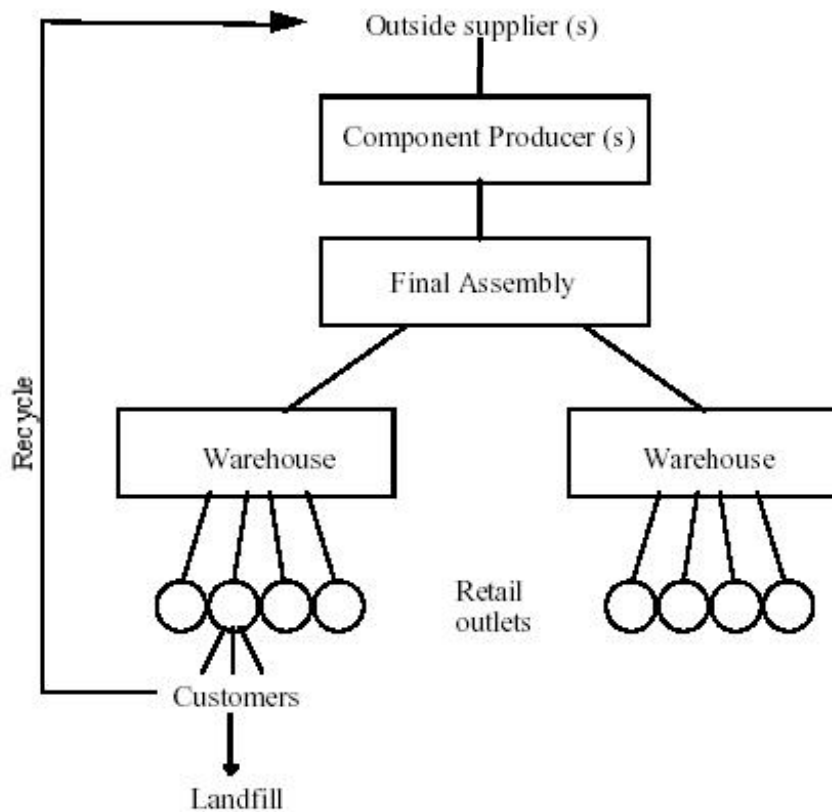
1. Includes all activities and processes to supply a product or service to a final customer.
2. Any number of companies can be linked in the supply chain.
3. A customer can be a supplier to another customer so the total chain can have a number of supplier–customer relationships.
4. Depending on the products and markets, the distribution system can be direct (supplier to customer) or indirect (involving distributors, warehouses, and retailers).

What is Supply chain Management

- ▶ Management of flow of
 1. Materials,
 2. Information, and
 3. Funds

Across the entire supply chain.

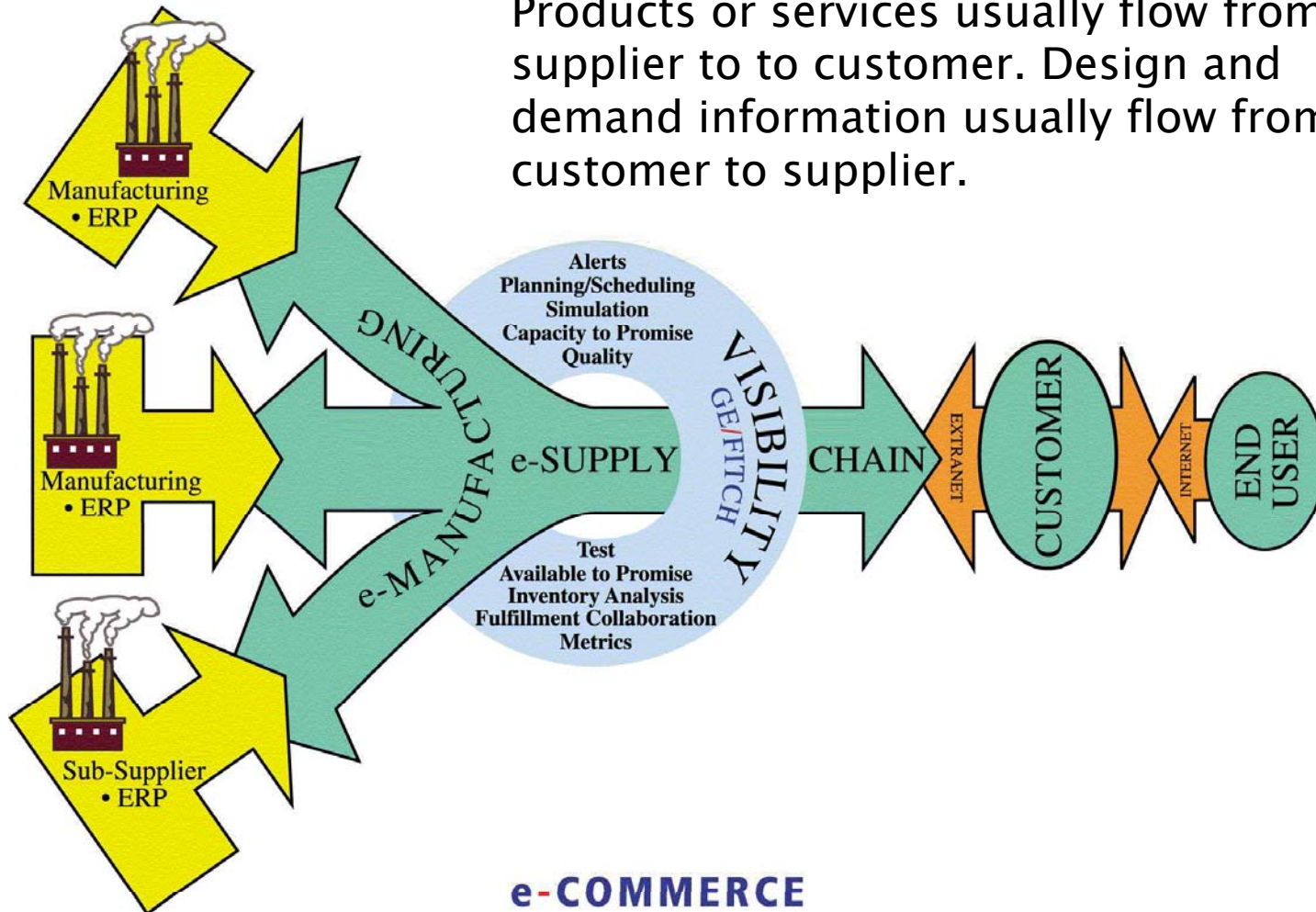
Material Flow



- ▶ Raw materials enter into a manufacturing organization via a supply system and are transformed into finished goods.
- ▶ Finished goods are then supplied to the consumers through a distribution system.
- ▶ Several companies linked together in the process, each adding value to the product as it moves through the supply chain.

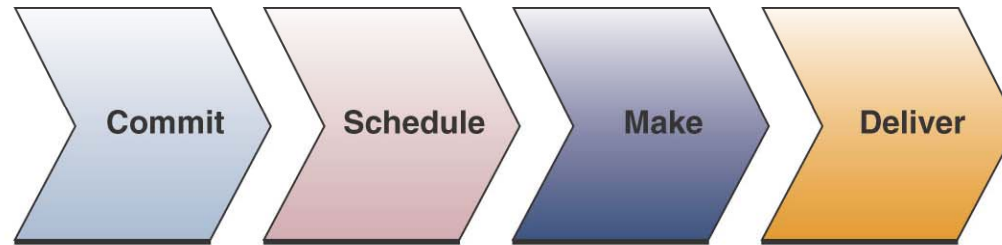
Information Flow

Products or services usually flow from supplier to to customer. Design and demand information usually flow from customer to supplier.

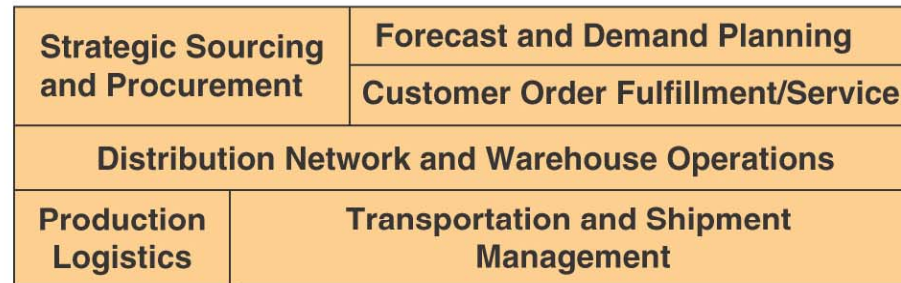


SCM

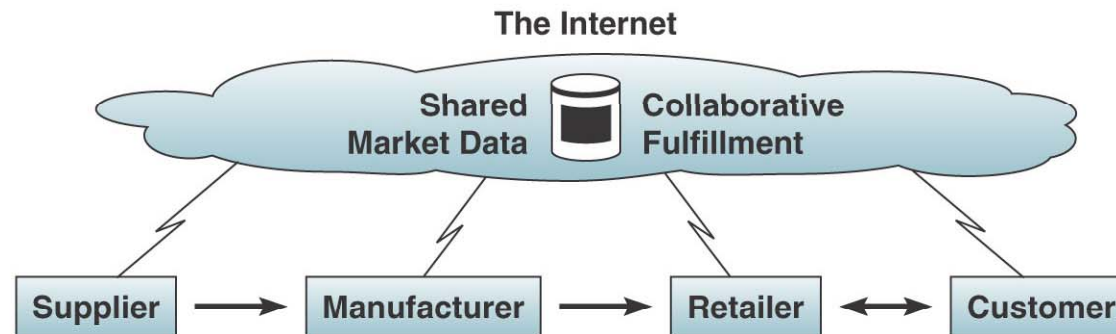
Supply Chain Life Cycle



SCM Functional Processes



SCM Integrated Solution



What do SCM tools do



- Supply chain management tools enable managers to make informed business decisions about the operation of their supply chain



- Supply chain management tools facilitate planning and production scheduling based on known business constraints

SCM Vendors

- ▶ Although each of the vendors claim to provide an end to end solution, they actually fall into two distinct camps
- ▶ First are the ERP vendors who provide a strong solution for integrating the data environment and providing visibility
- ▶ Second are the SCM vendors who provide robust optimization solutions
- ▶ In combination, with an ERP vendor providing the data environment and a SCM vendor providing the optimization solution, you can achieve a very elegant solution

Leading SCM Vendors	
ERP Focused	SCM Focused
<ul style="list-style-type: none">■ Oracle■ SAP■ JD Edwards■ Peoplesoft■ Invensys Baan	<ul style="list-style-type: none">■ i2■ Manugistics■ Aspentech■ Logility

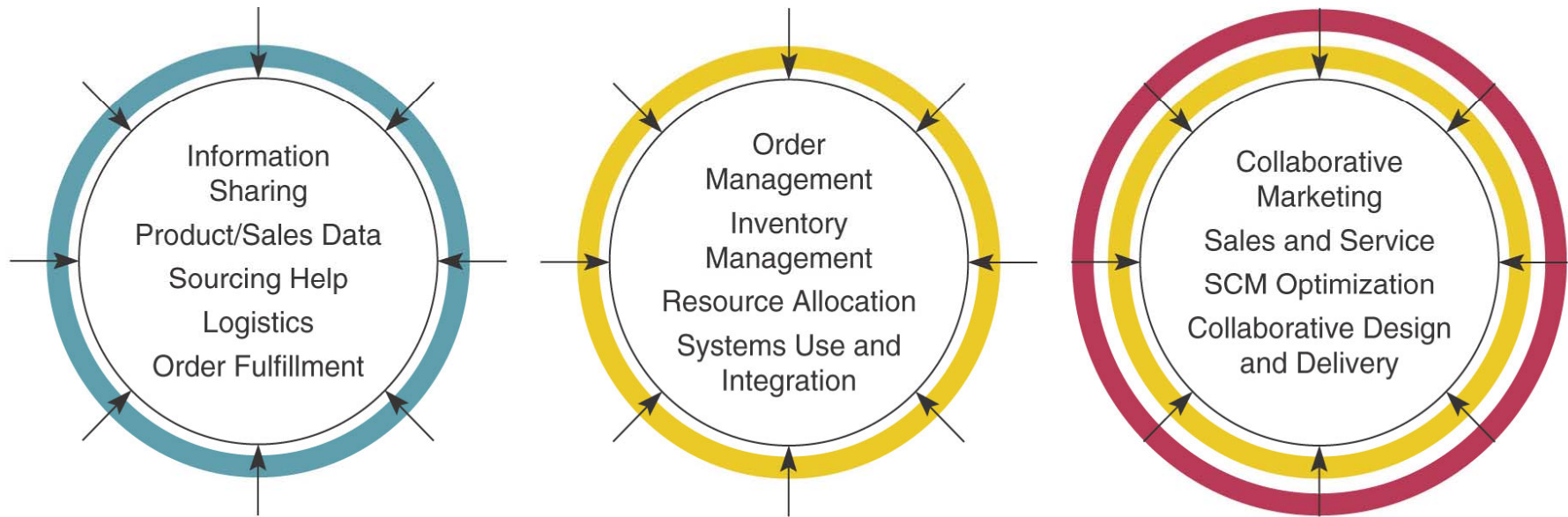
Benefits and Challenges

- ▶ Can provide faster, more accurate
 - order processing,
 - reductions in inventory levels,
 - quicker time to market,
 - lower transaction and materials costs, &
 - strategic relationships with suppliers

Problem causes

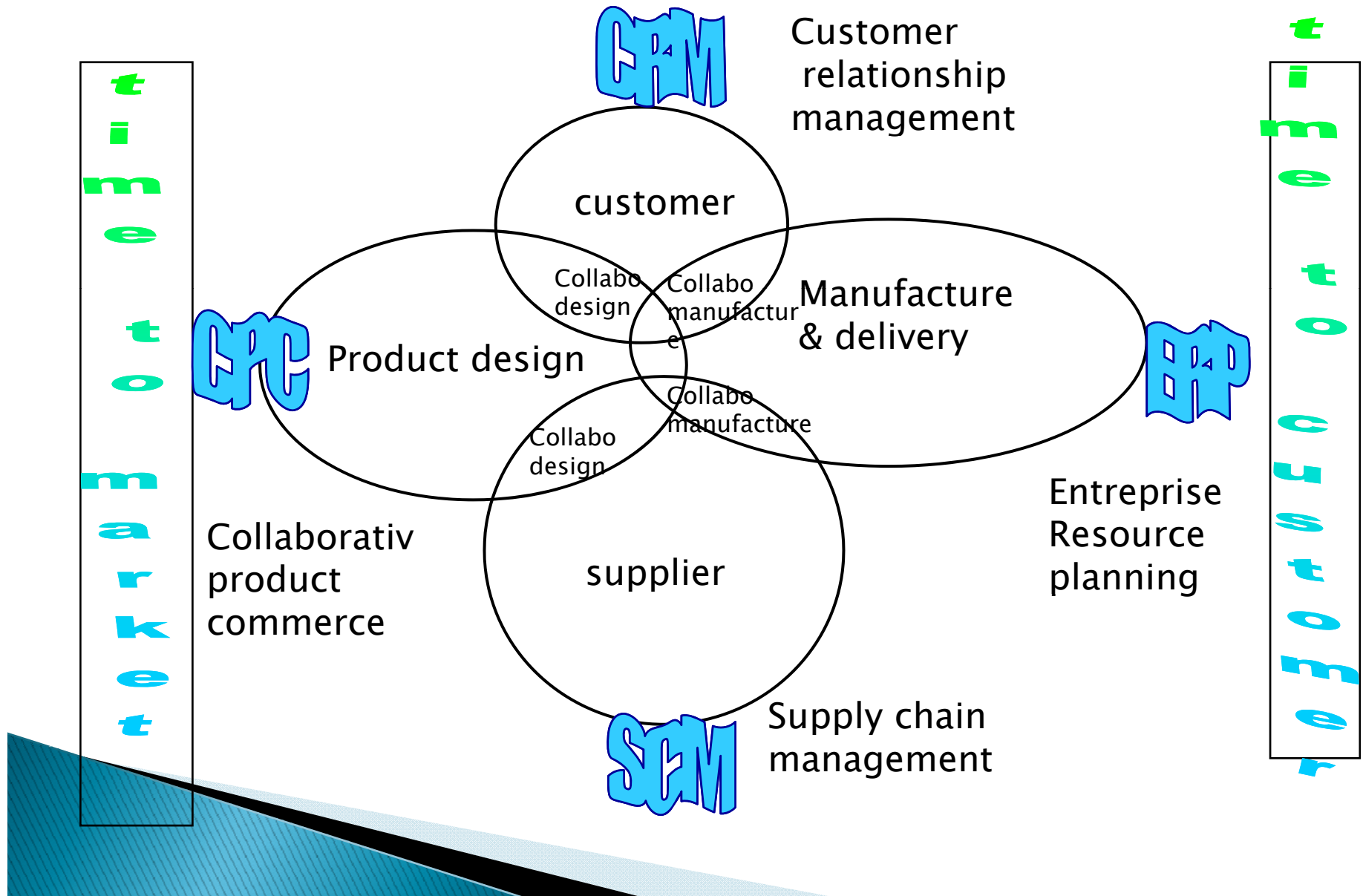
- Lack of proper demand planning knowledge, tools, and guidelines
- **Inaccurate or overoptimistic demand forecasts**
- Inaccurate production, inventory, and other business data
- Lack of adequate collaboration

SCM Satges



SCM Stage 1	SCM Stage 2	SCM Stage 3
<ul style="list-style-type: none"> • Current supply chain improvement • Supply chain, e-commerce loosely coupled 	<ul style="list-style-type: none"> • Intranet/extranet links to trading partners • Supplier network expansion 	<ul style="list-style-type: none"> • Collaborative planning and fulfillment • Extranet and exchange-based collaboration

ERP & related software systems



Strategies for Supply Chain Management

1. E-Procurement

- ▶ Provide cross enterprise system integration
- ▶ Electronic catalogues
- ▶ Online buying & Selling with advantages
 1. Enhances efficiency
 2. Reduces cost/cycle time
 3. Helps in contract compliance & customer reach

2. Integrated planning & Manufacturing

- ▶ Provides cross planning & execution
- ▶ System to System integration with advantages
 - Lead time margin
 - Accuracy/flexibility
 - Inventory levels
 - On time delivery

3. Integrated Delivery

- ▶ Provides cross enterprise logistic management
- ▶ Consignment visibility with advantages
 1. Logistic cycle time
 2. Reduced cost
 3. Lead time

4. Online Marketing

- ▶ Provides product bounding extension
- ▶ New product/service creation
- ▶ New market/channel creation
- ▶ Advantages
 1. Market segment share
 2. Customer reach

