UNIT VI
BUSINESS TO BUSINESS E-COMMERCE

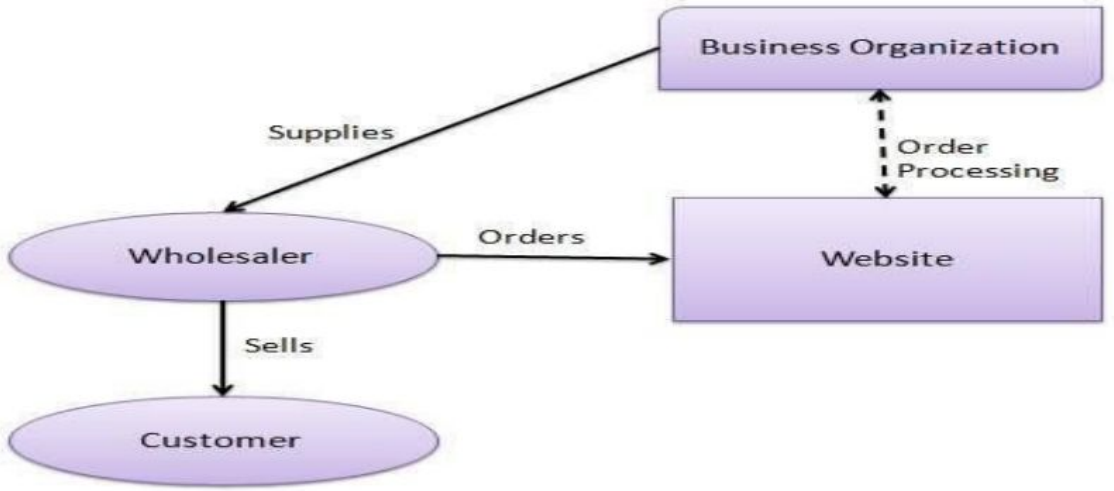
BUSINESS TO BUSINESS E-COMMERCE

- Business-to-business (B2B) describes commerce transactions between businesses, such as between a manufacturer and a wholesaler, or between a wholesaler and a retailer.
- B2B Commerce "Interactions relating to the purchase and sale of goods and services between businesses."
- B2B ecommerce is the process of marketing and selling products between two businesses via online sales portal.

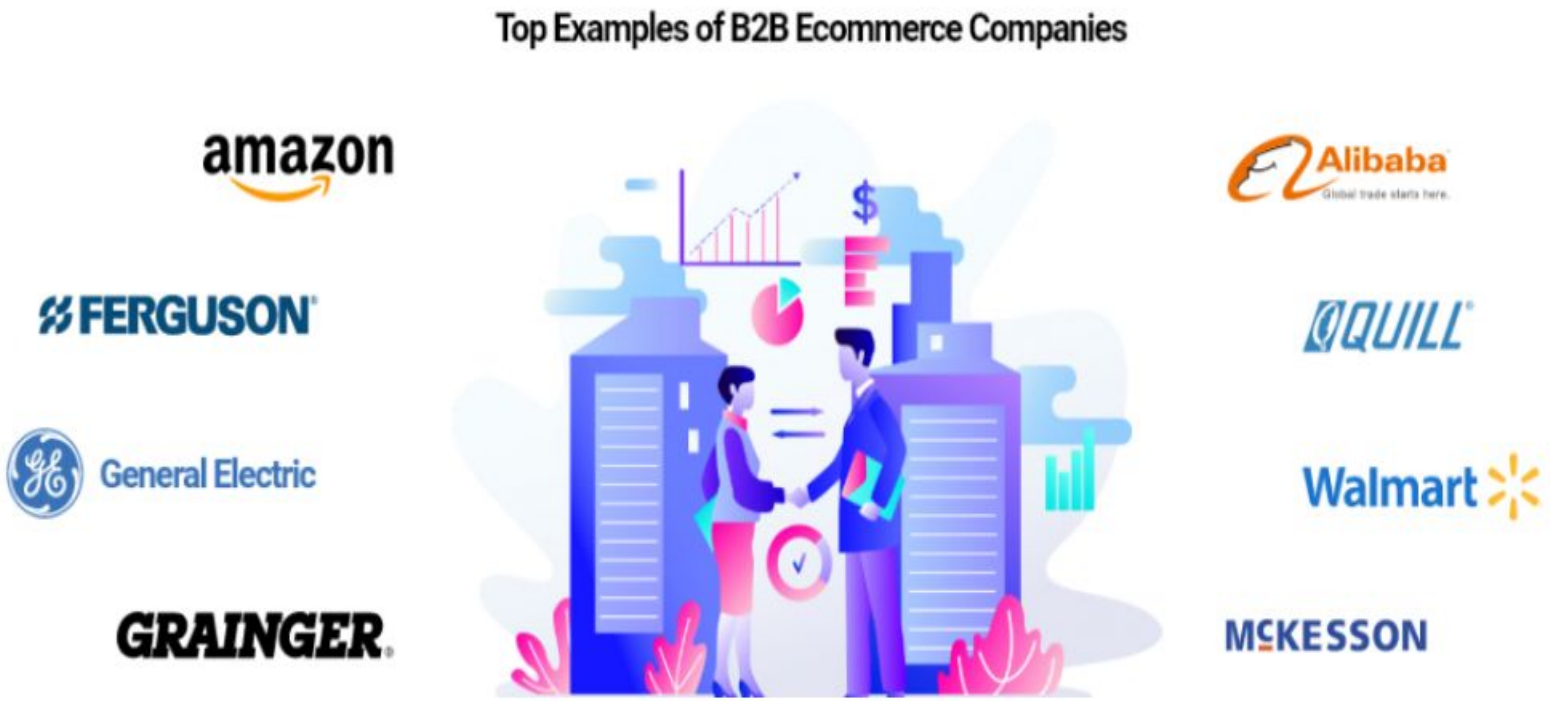
BUSINESS TO BUSINESS E-COMMERCE

Example:

As an example, a wholesaler places an order from a company's website and after receiving the consignment, sells the end product to final customer who comes to buy the product at wholesaler's retail outlet.



EXAMPLES OF B2B ECOMMERCE COMPANIES



NEEDS FOR B2B E-COMMERCE

- It allows the business to replace a number of people in their works department with automated systems.
- It substantially reduces business cycle time.
- It helps in running the business more efficiently, quickly and securely.
- Managing inventory more efficiently.

NEEDS FOR B2B E-COMMERCE

- Adjusting more quickly to customer demand.
- Getting products to market faster.
- Cutting the cost of paper work.
- Obtaining lower prices on some supply.

B2B BUSINESS MODELS

- **Marketplace/Exchange (B2B hub)**
  - Vertical marketplaces; serve specific industries
  - Horizontal marketplaces; serve wide range of companies
  - Both types earn money on transaction fees
  - Key to success: Size of marketplace

B2B BUSINESS MODELS

- **E-distributor**
  - Set up by one company seeking to serve many customers.
  - More products and services = more attractive.
  - Earn money on sales of goods.

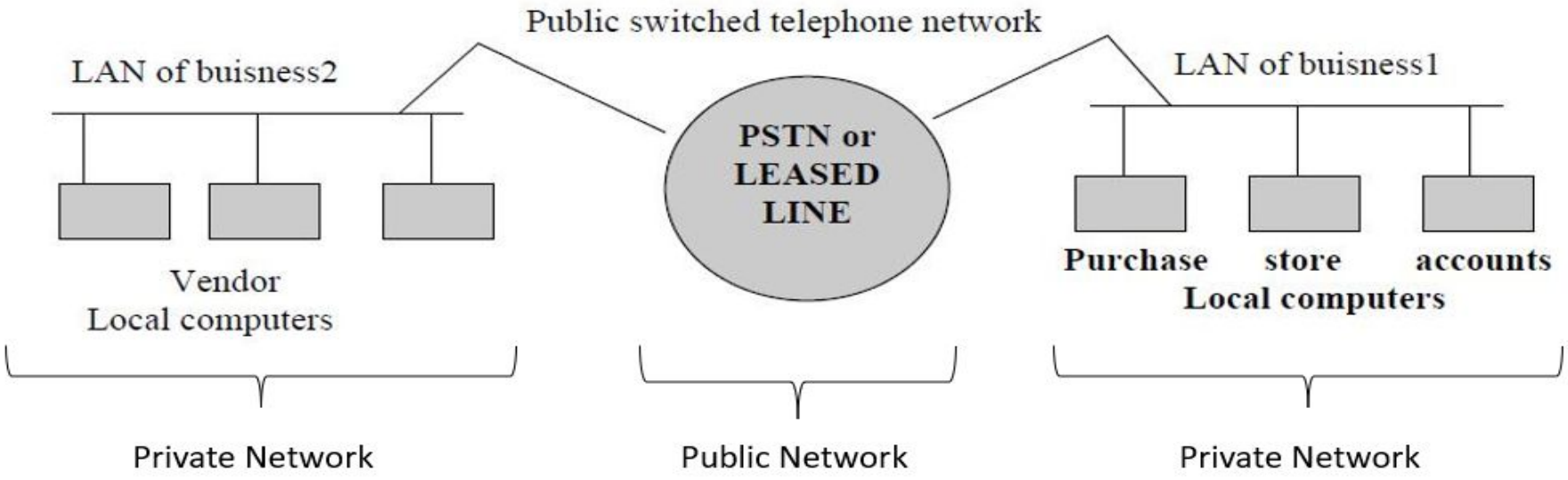
B2B BUSINESS MODELS

- **B2B Service Provider**
  - Traditional: Online Business Services
    - Earn money on sales of services
  - Application Service Provider (ASP)
    - Earn money on rental fees
- **Matchmaker**
  - Form of transaction brokers
  - Earn money on transaction fees

B2B BUSINESS MODELS

- **Infomediary**
  - Audience broker
    - Capture information about customers and use it to help advertisers
    - Earn money on sales of information
  - Lead generators
    - Gather customer data to create customer profiles and preferences
    - Earn money on referral fee

PUBLIC & PRIVATE NETWORKS FOR B2B TRADING



PUBLIC & PRIVATE NETWORKS FOR B2B TRADING

- A **private network** is one in which all devices on the network and all links between those devices are used and administratively controlled by a single organization.
- Example: College LAN, Organization Network

PUBLIC & PRIVATE NETWORKS FOR B2B TRADING

- The **major advantage** of private networks is **privacy**.
- No one but the companies connected at either end of the leased line can access the data traveling across them, providing a high degree of security in terms of data privacy and ensuring that any users accessing machines on the network are authorized to do so.
- The **primary downside** to private networks is **cost**.
- If you need to connect machines in New Delhi and Shanghai, it's necessary to pay the phone company a tariff-based fee (usually based mostly on distance) for the cross-country leased line.

PUBLIC & PRIVATE NETWORKS FOR B2B TRADING

- A **public network** is one where network connectivity and resources are shared by many different administrative units.
- Example: Internet

PUBLIC & PRIVATE NETWORKS FOR B2B TRADING

- **Advantage** of public networks is that they allow organizations to basically time-share connectivity, and not pay for a line when they're not using it. Not every organization uses network capacity at the same time
- The primary **disadvantage** of public networks is a reduced amount of control over data and host security. Since your data is traveling along paths that other organization's data are also using, it is possible
- Another **disadvantage** is that public networks often provide less control over bandwidth than do private networks

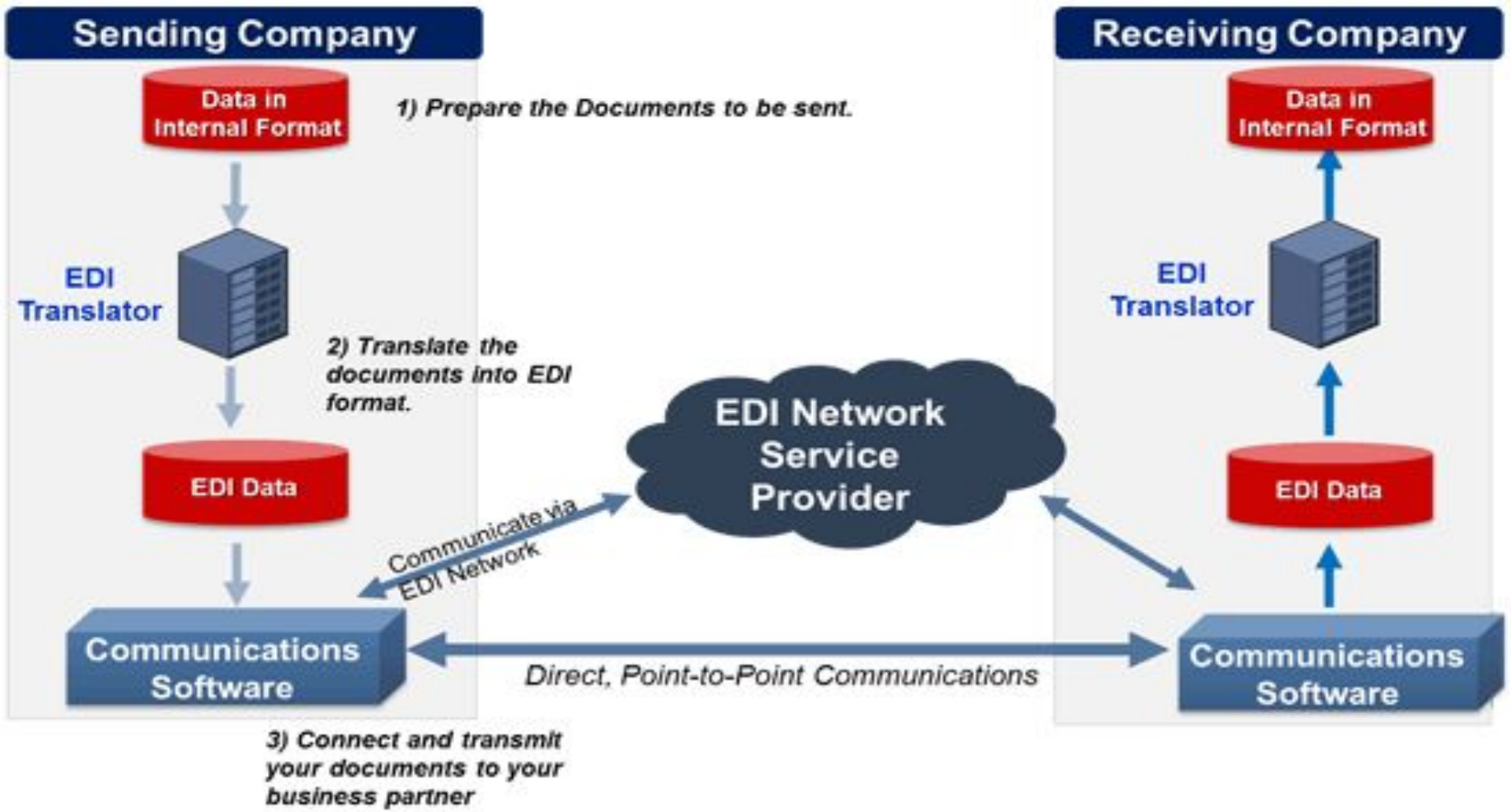
ELECTRONIC DATA INTERCHANGE(EDI)

- It is the inter company computer to computer communication of standard business transactions in a standard format that permits the receiver to perform the intended transactions.
- Direct, computer-to-computer exchange of business data
- Replaces use of paper documents
- Requires two participants to agree on electronic format for the data
  - Two parties within a company (depts)
  - Companies and customers
  - Multiple companies

EDI DOCUMENTS

- Following are the few important documents used in EDI −
- Invoices
- Purchase orders
- Shipping Requests
- Acknowledgement
- Business Correspondence letters
- Financial information letters

STEPS IN EDI


Sending Company
Data in Internal Format
1) Prepare the Documents to be sent.
EDI Translator
2) Translate the documents into EDI format.
EDI Data
Communicate via EDI Network
EDI Network Service Provider
Communications Software
Direct, Point-to-Point Communications
3) Connect and transmit your documents to your business partner
Receiving Company
Data in Internal Format
EDI Translator
EDI Data
Communications Software

FEATURES OF ELECTRONIC DATA INTERCHANGE

EDI is highly secure.

EDI offers speed.

EDI is reliable.

EDI will put you in a better market position in relation to non-EDI competitors.

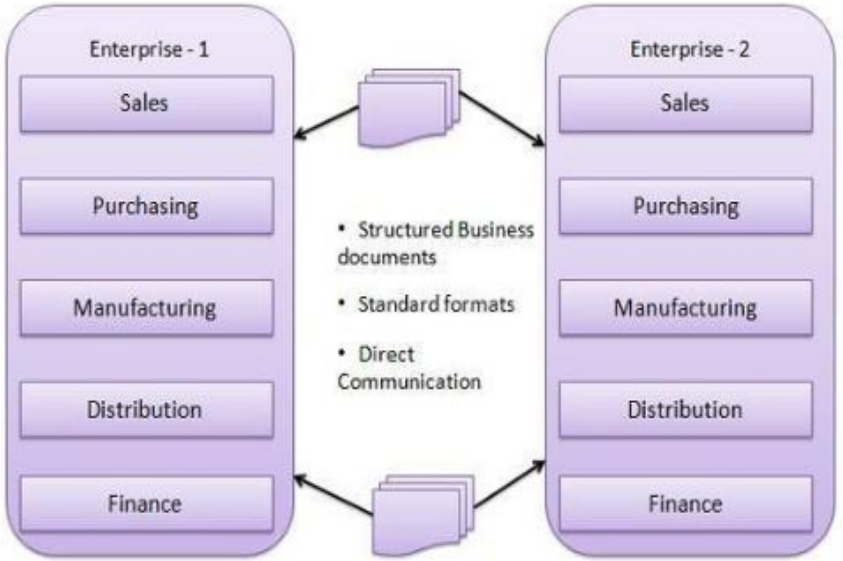
The EDI established an electronic link between companies.

The information so transferred through EDI can directly by the recipient computer.

EDI AND PAPERLESS TRADING

- EDI stands for Electronic Data Interchange.
- National Standards Institute defines it as:

"Electronic data interchange is transmission in a standard syntax, of unambiguous information of business or strategic significance between the computers of independent organizations".



EDI AND PAPERLESS TRADING

- EDI differs from electronic mail because it transmits an actual structured transaction into an unstructured text message such as letter.
- By minimizing the amount of time in the inventory, it also helps in minimizing the costs.
- In case of working with EDI, physical movements of paper are avoided and time per movement can be reduced since all these activities are computer to computer exchange.

EDI AND PAPERLESS TRADING

- EDI is most commonly applied in the execution and settlement phases of the trade cycle.
- In the execution phase of a simple trade exchange, the customer's order can be sent by EDI and the delivery notification from supplier can also be electronic.
- For settlement the supplier can use EDI to send invoices and the customer can finish the cycle with an electronic fund transfer via the bank and an EDI payment notification to the supplier.

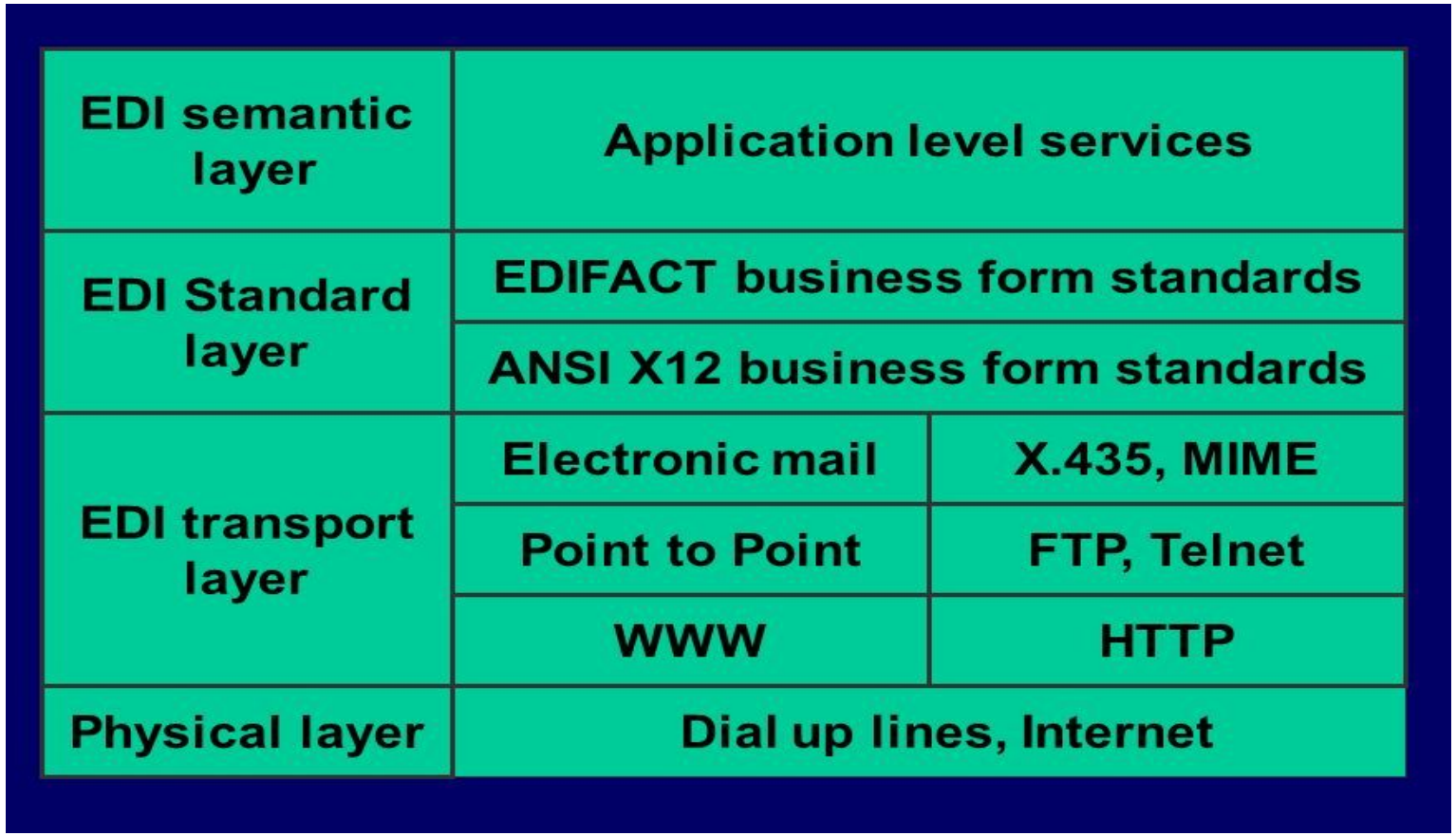
ADVANTAGES OF EDI

- Cost savings
- Speed
- Reduction of errors
- Security
- Integration with office automation
- Just-in-time delivery

EDI LAYERED ARCHITECTURE

- EDI Architecture specifies four layers:
- Semantic/Application Layer
- Standard Translation Layer
- The packing or transport layer
- Physical network infrastructure layer

EDI LAYERED ARCHITECTURE



EDI LAYERED ARCHITECTURE

Semantic layer

- It describes the business application that is driving EDI.
- For a procurement application, this translates into requests for quotes, price quotes, purchase orders, acknowledgements & involves.
- The information seen at this layer must be translated from a company specific from to a more generic form so that it can be sent to various trading partners, who could be using a variety of software applications at this end.

EDI LAYERED ARCHITECTURE

EDI standards

- It specify business form structure and it also influence the content at application layer.
- The most two important standards are:-
  - EDIFACT
  - ANSI X.12

EDI LAYERED ARCHITECTURE

EDI transport layer

- It corresponds closely with the non-electronic activity of sending a business form from one company A to company B.
- The business form could be sent via regular postal service, registered mail, certified mail or private courier such as united parcel service (UPS) or simply faxed between the companies.

EDI LAYERED ARCHITECTURE

Physical Layer

- The Physical layer of EDI (Infrastructure layer) defined the component communication path for EDI data transaction.
- What are the structure of e-commerce supported EDI in which information can be build and what are the communication established over which EDI data transfer from one customer to another customers.

ELECTRONIC DATA INTERCHANGE (EDI) CHARACTERISTICS

There are two characteristics that set EDI apart from other ways of exchanging information.

- EDI only involves business-to-business transactions; individual consumers do not directly use EDI to purchase goods or services.
- EDI involves transactions between computers or databases, not individuals. Therefore, individuals sending e-mail messages or sharing files over a network do not constitute EDI.

EDI STANDARDS

- Series of uniform message formats used to create computer readable versions of traditional paper documents.
- Standards must be employed to ensure that the data being transmitted is universally acceptable.
- EDI standards delineate the correct order and location of units of data in a given EDI document.

PUBLIC STANDARDS

- EDIFACT (EDI for Administration, Commerce and Transportation set up by united Nations)
  - It is accepted world wide.
  - It provides standard formats for business documents and incorporates features that meets international requirements.

PUBLIC STANDARDS

- Industry subsets of the EDIFACT standard (Examples)
  - **EANCOM** (EAN international EDI standard)
    - Developed by the European Article Numbering Association to produce an international EDI standard based on EDIFACT.
  - **EDICON** : Construction Industry
  - **EDIFICE** : Electronic Industry

INDUSTRY SPECIFIC STANDARDS

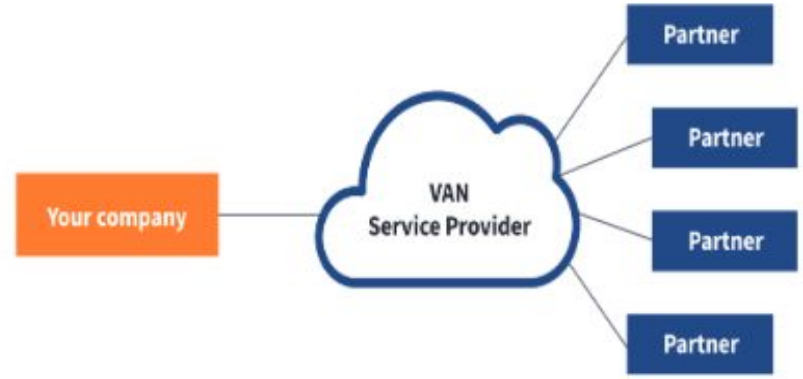
- ANSI X.12
  - These standards are developed and introduced by different countries or industries.
  - American National standards institute.
  - Used in US, Canada, and to a degree in Australia.

REASONS FOR SLOW ACCEPTABILITY OF EDI

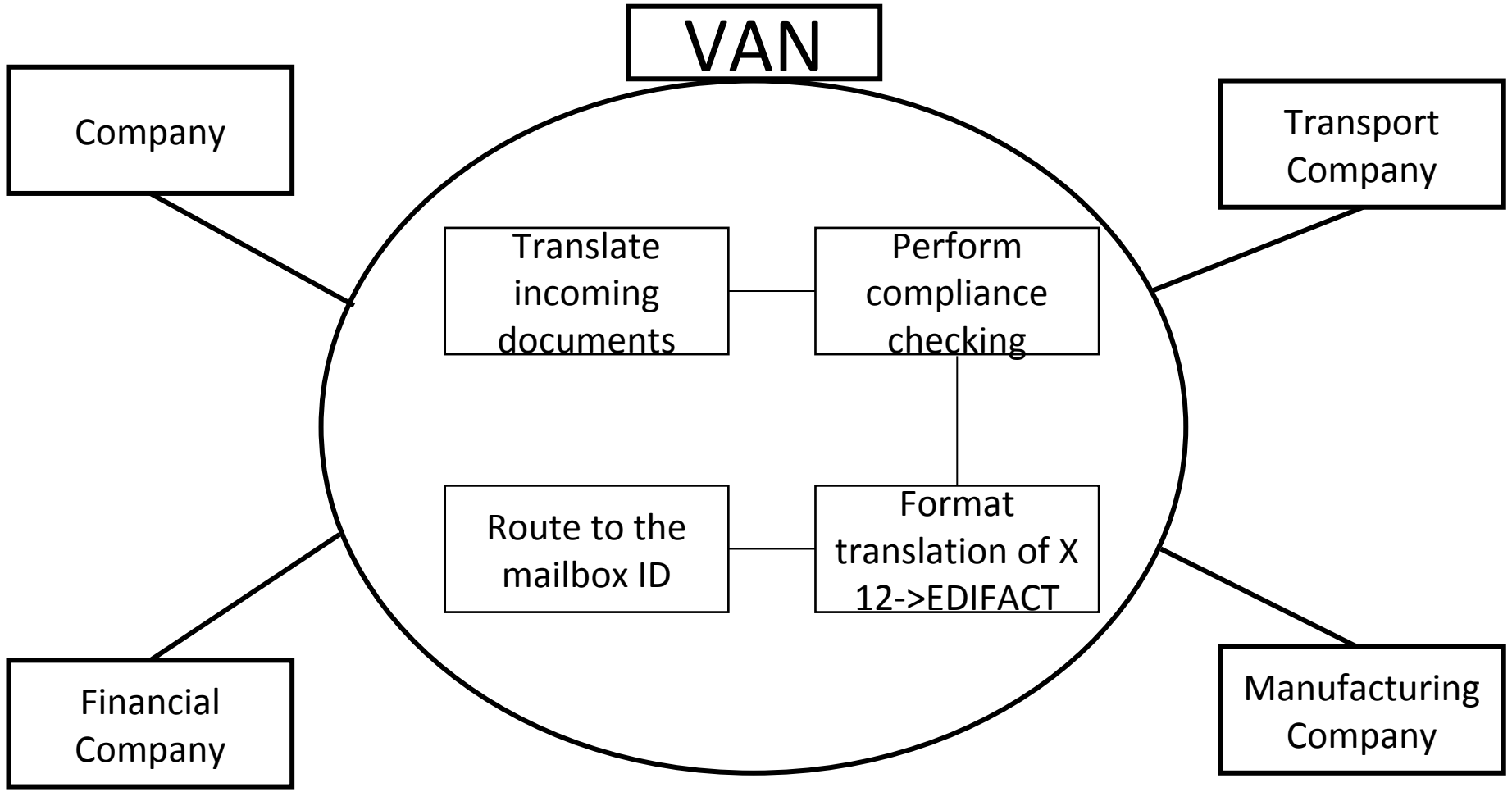
- Different multiple standards followed
- Changing standards
- EDI is too expensive
- Limit your trading partners

VALUE ADDED NETWORKS (VAN'S)

- A value-added network (VAN) is a private, hosted service that provides companies with a secure way to send and share data with its counterparties.
- Value-added networks are a common way to facilitate electronic data interchange (EDI) between companies.
- Typical provider of VANs include:
  - Telecommunication companies
  - Industry groups
  - Specialized service providers
  - Large companies

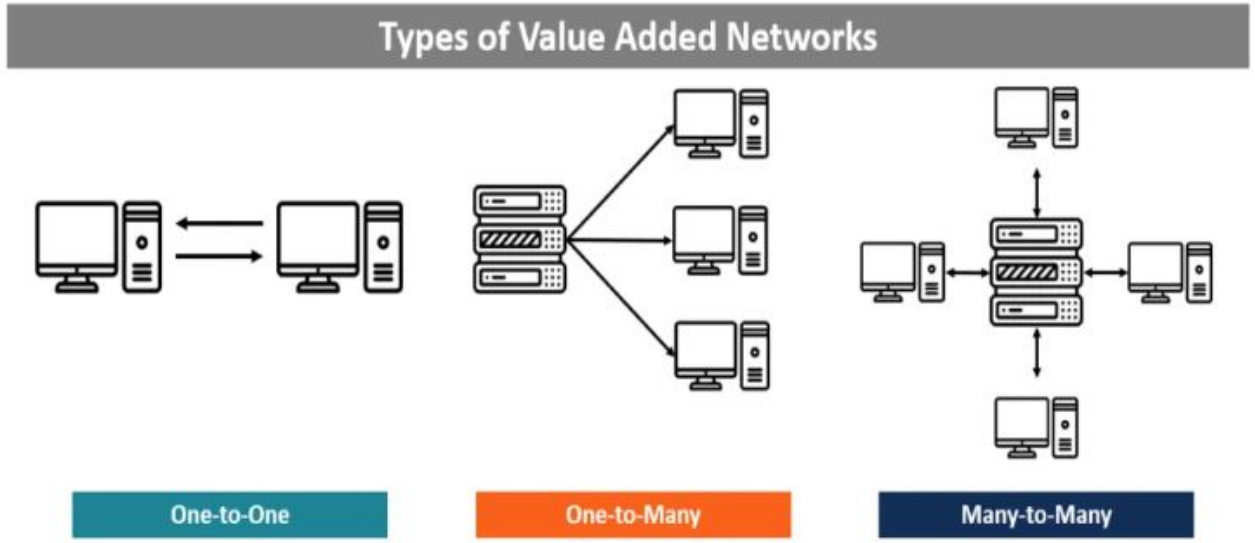


VALUE ADDED NETWORKS (VAN'S)



TYPES OF VALUE-ADDED NETWORKS

There are three types of VANs, based on how the computers in the network are connected:



ADVANTAGES OF VAN'S

- It provides direct communication link to any trading partner.
- It has ability to support varied protocols and access methods.
- It also supports multiple data formats standards.
- It allows store and forward system of messaging.
- It provides tracking and control information with which users audit document and message transmissions between partners.

DISADVANTAGES OF VAN'S

- They are slow and high priced, charging by the number of characters transmitted.
- With connect time and mailbox charges factored in, companies incur charges of many thousands of dollars.

THANK YOU