E -business and E -commerce
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Module 1

Learning Areas

1.0 Introduction to E-business

- Define e-business and e-Commerce
- Distinguish e-comm and e-buz
- A brief history of Internet Business
- Types of e-commerce
- Impact of e-commerce

E-Commerce & E-Business

▸ *E-commerce* describes the process of buying, selling, transferring, or exchanging products, services, and/or information via computer networks, including the Internet.

▸ *E-business* refers to a broader definition of e-commerce, not just the buying and selling of goods and services, but also servicing customers, collaborating with business partners, conducting e-learning, and processing electronic transactions

E -commerce

- **Covers outward-facing processes** that touch customers, suppliers and external partners, **including;**
- sales,
- marketing,
- order taking,
- delivery,
- customer service,
- purchasing of raw materials and
- supplies procurement

E -commerce

▸ *Formulating commercial transactions at a site remote from the trading partner* *(online)* *and then using electronic communications to execute that transaction.*

▸ Electronic commerce encompasses the entire online process of developing, marketing, selling, delivering, servicing, and paying for products and services.

E-commerce and E-business

▸ Businesses integrate their Web-based e-commerce systems with their e-business systems for supply chain management, customer relationship management, and online transaction processing, as well as to their traditional or legacy, computer-based accounting and business information systems.

E-Commerce Integration

▸ **Vertical integration** of front-end Web site applications to company's existing transaction systems;

▸ **Cross-business integration** of a company with Web sites of customers, suppliers or intermediaries;

▸ **Integration of technology** with reasonably redesigned processes for order handling, purchasing or customer service.

E -business Integration

- E-commerce plus internal processes such as production, inventory management, product development, risk management, finance, knowledge management and human resources.

- E-business strategy **is more complex**, more focused on internal processes.

Aim of E -buz Integration

▸ Aimed at cost savings,

▸ Improvements in efficiency,

▸ Productivity.

4 directions of integration:

- **Vertically,** between web front- and back-end systems;

- **Laterally,** between a company and its customers, business partners, suppliers or intermediaries;

- **Horizontally,** among e-commerce, enterprise resource planning (ERP), customer relationship management (CRM), knowledge management and supply-chain management systems; **and**

- **Downward** through the enterprise, for integration of new technologies with redesigned business processes

E -Business – Transaction Medium

Most e-busimess is done over the Internet. But EC can also be conducted on private networks, such as *value-added networks* (*VANs, networks that add communication services to existing common carriers*), on local area networks (LANs) or wide area networks (WANs)
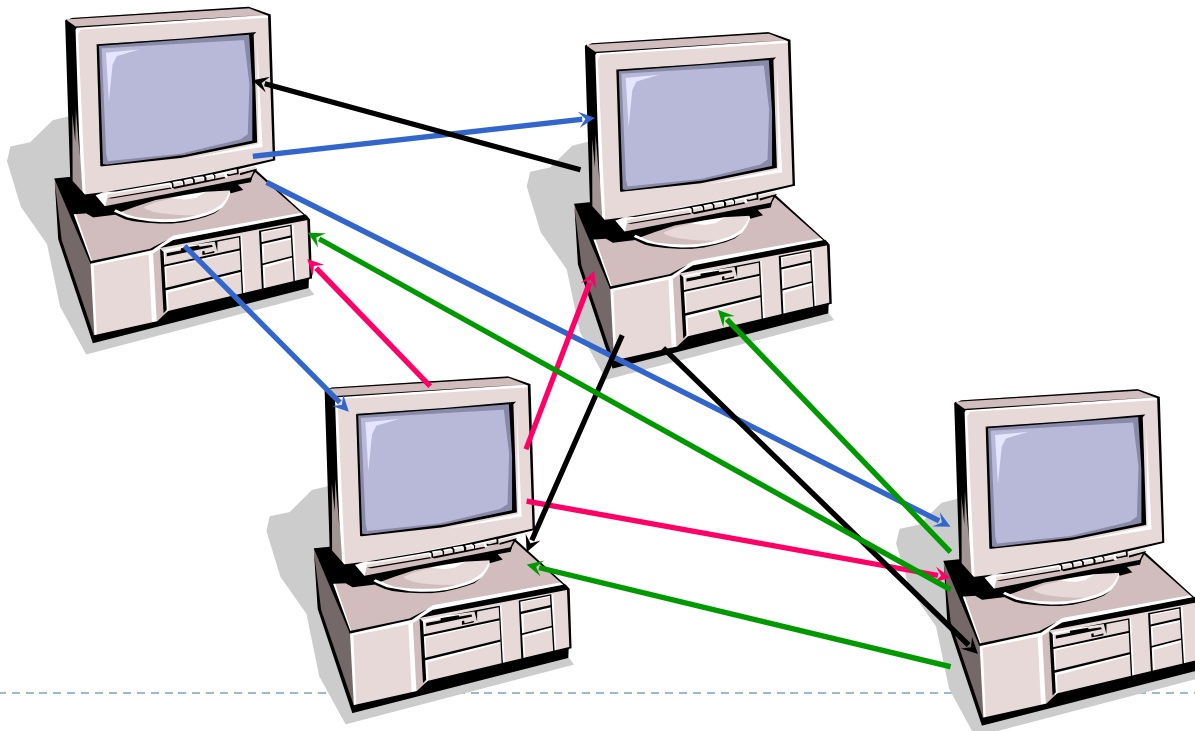
The Internet

- A global network of computer networks
  - It had its origins as a military project in 1969 (DAPRA);
  - It was adopted by the research and academic community;
  - Has continuously become an engine of business and commerce in both developed and emerging economies
- The web is a big marketplace, and tens of thousands of people have put hundreds of thousands of hours into making it a 'mobile shopping mall'.

Internet Business: 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) for e-commerce within companies

  ‣ Used by businesses to transmit structured data from one business to another

Internet age systems

- 1955–1974; The Electronic Data Processing **(EDP)** era
- 1975–1994; The Management Information Systems **(MIS)** era
- 1995–Todate (The Internet era)
- **EDP** – essentially batch – controlled by the DP professionals – used at the 'organisational level'
- **MIS** – utilises transaction processing (TP) and databases – enabled access to business data throughout the organisation
- **The Internet era systems** – enables BtoB and BtoC systems

E -Business – Transaction Types

- ✓ **Business-to-business (B2B)**

- ✓ **Collaborative Commerce (C-Commerce)**

- ✓ **Business-to-Consumers (B2C)**

- ✓ **Consumers-to-Businesses (C2B)**

- ✓ **Consumer-to-Consumer (C2C)**

- ✓ **Intra-business (Intra-organizational) Commerce**

- ✓ **Government-to-Citizens (G2C)**

- ✓ **Mobile Commerce (M-Commerce)**

Why should organisations use the Internet in Business?

✓ Access to a global market;

✓ Potential for widening consumer choice;

✓ Ease with which a business can interact with and solve customer problems

✓ Potential cost savings;

✓ Transaction ease and convenience

✓ Opportunities for close alliances with stakeholders (suppliers, clients,....)

Business-To-Consumer – B2C

▸ **Also, Electronic retailing** (*e-tailing*); is the direct sale of products to customers through electronic storefronts or electronic malls, usually designed around an electronic catalogue format and/or auctions.

  ▸ **Electronic Storefronts.** Hundreds of thousands of single storefronts can be found on the Internet, each with its own Internet name and EC portal, such as Home Depot, The Sharper Image, or Wal-Mart.

  ▸ **Electronic mall**, also known as a cybermall or e-mall, is a collection of individual shops under one Internet address.

▸

E-tailing Issues – B2C

- The following are the major issues faced by e-tailers that may be handled and supported by IT tools:
- **Resolving channel conflict**
- **Resolving conflicts within click-and-mortar organizations**
- **Organizing order fulfilment and logistics**
- **Determining viability and risk of online e-tailers**
- **Identifying appropriate revenue models**

Service Industries – B2C

Delivery of *services (buying an airline ticket or stocks)* can be done 100 percent electronically, with considerable cost reduction potential. Therefore, online services is growing very rapidly. E.g;

- **Electronic banking**
- **International and Multiple-Currency Banking**
- **Online Securities Trading**
- **Online Job Market**
- **Travel Services**
- **Real Estate transactions**

Qn: Describe the different online services provided on the Ugandan market.   (10 marks)

Key Questions for E-tailers

- ✓ Does the Internet enable a company to significantly enhance its value proposition to customers?

- ✓ Does Internet suit the nature of Company's products?

- ✓ Can the company brand attract customers to the web site?

- ✓ What value-added services and techniques can be employed to encourage customer 'lock-in'?

- ✓ What is the relationship between online and offline business activities?

- ✓ Where do we obtain the necessary online marketing and web site capabilities?

e-Commerce Success Factors

- **Selection and Value.** Attractive product selections, competitive prices, satisfaction guarantees, and customer support after the sale.

- **Performance and Service.** Fast, easy navigation, shopping, and purchasing, and prompt shipping and delivery.

- **Look and Feel.** Attractive Web storefront, website shopping areas, multimedia product catalog pages, and shopping features.

- **Advertising and Incentives.** Targeted Web page advertising and e-mail promotions, discounts and special offers, including advertising at affiliate sites.

- **Personal Attention.** Personal Web pages, personalized product recommendations, Web advertising and e-mail notices, and interactive support for all customers.

- **Community Relationships.** Virtual communities of customers, suppliers, company representatives, and others via newsgroups, chat rooms, and links to related sites.

- **Security and Reliability.** Security of customer information and website transactions, trustworthy product information, and reliable order fulfillment.

E-Business & Web Design

Module 2

Knowledge Areas

▸ Developing a Web Store

▸ Managing a Web Store

▸ EDI: A closer look

▸ Comparison with EFT

A Web Store

- An online stall for a company's products
- Its the primary focus of such e-tailers
- Are websites that become high-priority destinations for consumers
- Buyers repeatedly choose to go there to buy products and services
- Have to be attractive, secure, simple to use and convenient for the buyers

Developing a Web Store

- Involves launching retail store on the Internet
- Building an e-commerce website.
- Use simple website design software tools and predesigned templates
- Larger companies can use their own software developers
- A firm can hire an outside website development contractor to build a custom-designed e-commerce site
- Market your site in a variety of ways that attract visitors to your site
- Transform them into loyal Web customers.

Serving Your Customers on a Web store

▸ Creating incentives to encourage visitors to register

▸ Develop Web cookie files to automatically identify returning visitors

▸ Contracting with website tracking companies for software to automatically record and;

▸ Analyze details of the website behaviour and preferences of Web shoppers.

▸ Ensure that your website has the look and feel of an attractive, friendly, and efficient Web store.

▸ Include a few graphics to enable quick connections

▸ Stay in touch with changing market needs

▸ boim2ccis@gmail.com

Managing your Web Store

‣ Manage as both a business and a website

‣ Use management reports to record and analyze Web store traffic, inventory, and sales results.

‣ Build customer lists for e-mail and Web page promotions,

‣ Provide customer relationship management features to help retain Web customers.

‣ Use software links to download inventory and sales data into accounting packages.

‣ Twenty-four hours a day and seven day a week operation all year long.

Ensure Secure Transactions

▸ Password and encryption protection of Web store transactions and customer records

▸ Monitor web activity to prevent access by phising sites and suspicious intruders

▸ Employ firewalls and security monitors to repel hacker attacks and other security threats.

▸ Provide clients twenty four hour tech support to help them with technical and security problems.

EDI transactions

EDI trade exchanges
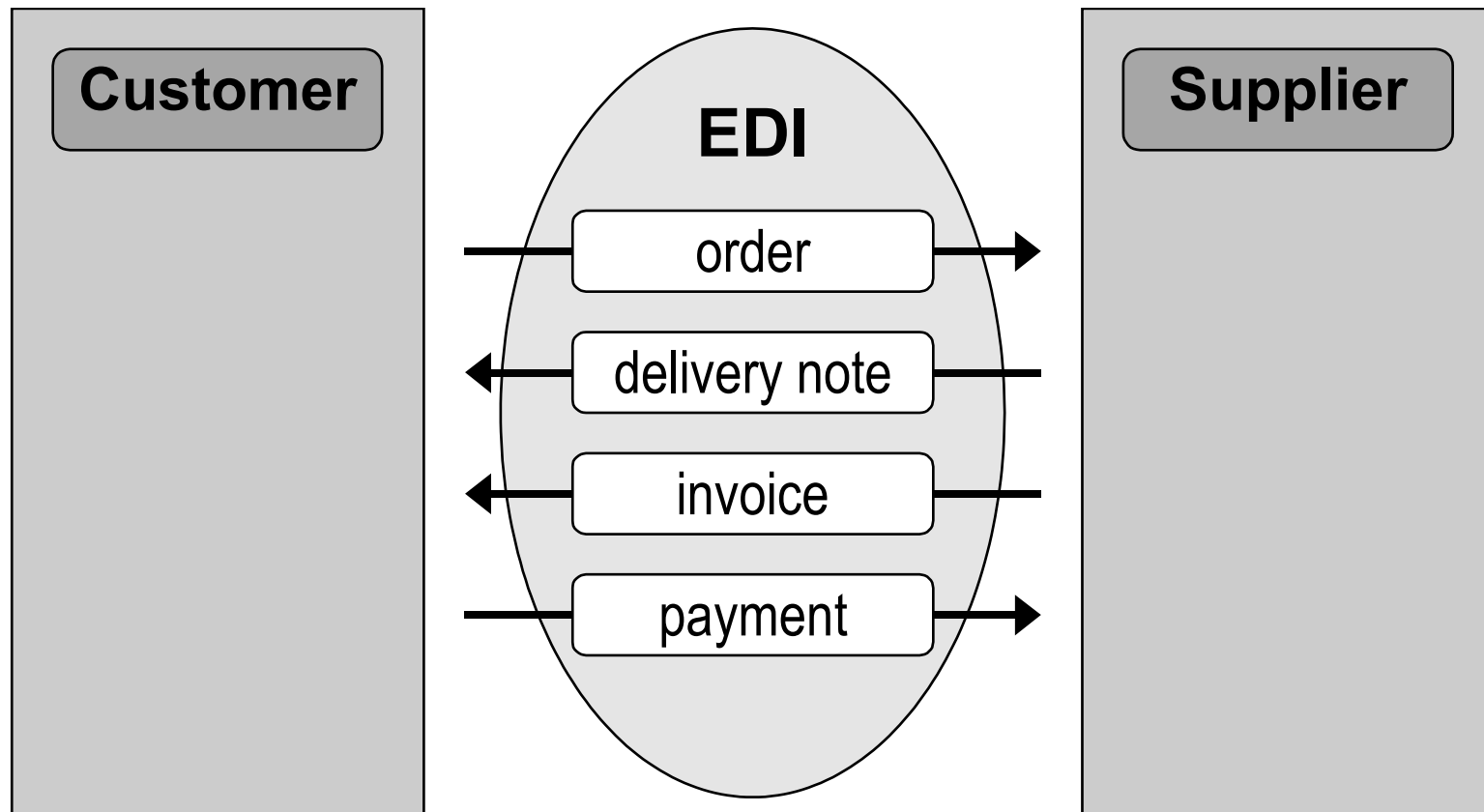
EDI definition

‣ Summarised as:

A 'Paperless Trading'

‣ Defined as:

'The transfer of structured data,
    by agreed message standards,
        from one computer system to another,
            by electronic means.'

International Data Exchange Association (IDEA)

EDI definition

Structured data

▸ Standardised Document

   ▸ e.g. Order/Invoice

▸ Codes

   ▸ e.g. Product Code/Customer Code

   ▸ (preferably using a common standard e.g. ANA/UPC)

▸ Values

   ▸ e.g. Quantity Ordered, Prices, Rates

EDI definition

Agreed message standards

▸ Sectorial standards

e.g. The **Odette File Transfer Protocol** (OFTP) used for EDI (Electronic Data Interchange) between two communications business partners. It comes from the Odette-Organisation (Organization for data exchange by Tele-transmission in Europe).

▸ National standards, e.g. ANSI X12, Tradercoms

▸ International standards

i.e. EDIFACT- **United Nations/Electronic Data Interchange For Administration, Commerce and Transport** (**UN/EDIFACT**) is the international EDI standard developed under the United Nations.

▸ ISO- International Standards Organisation

EDI definition

From one computer system to another

▸ EDI messages are (properly) sent:

  ▸ From one computer's application,
    e.g. the customer's Purchasing System.

  ▸ To a second computer's application,
    e.g. the supplier's Order Processing System.

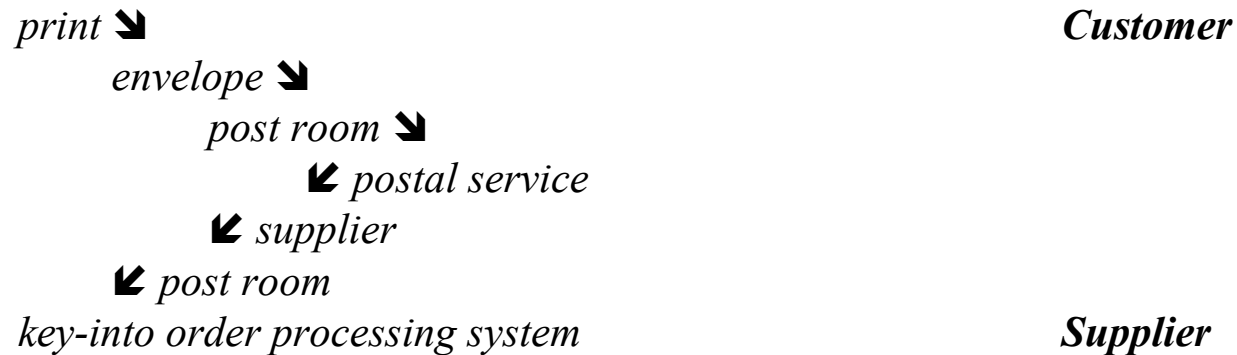 ▸ There is no need read or re-key the data into a computer system.

EDI definition

By electronic means

‣ Transmission by:

  ‣ data communications network (The Internet)
  ‣ or possibly physical transfer of:
      ‣ magnetic tape or
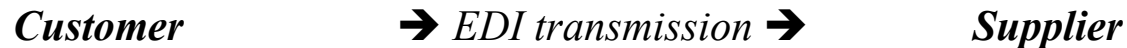   ‣ Blu Ray, DVD, Memory Card……

Benefits of EDI

1. Shortened ordering time

a posted order …

print ↘   ***Customer***
   envelope ↘
     post room ↘
      ↙ *postal service*
     ↙ *supplier*
   ↙ *post room*
key-into order processing system   ***Supplier***

… say 7 days between two large organisations

an EDI order …

Customer   **➔** *EDI transmission* **➔**   ***Supplier***

… one day, one hour, as quick as you like

Benefits of EDI

2. Cutting costs

‣ Stationery

‣ Postage

‣ Staff:

  ‣ order entry

  ‣ invoice matching

  ‣ payment checking

‣ the principle saving is staff costs
  – staff savings can be very significant

Benefits of EDI

3. Elimination of errors

▶ no keying errors

▶ (but no manual check for silly mistakes)

4. Fast response

▶ immediate acknowledgement and status report

▶ (available but not always implemented)

Benefits of EDI

5. Accurate invoicing

- automatic matching to orders
- elimination of queries and delays

6. EDI payments

- rapid settlement
- automatic matching to invoices

Benefits of EDI

7. Reduced stock holding

▸ Just-in-time for manufacture

▸ Quick response supply for retail (agile logistics)

▸ Less (or no) cost of stock in hand

▸ Less (or no) warehousing costs

▸ Elimination of double handling of goods

▸ Less damage / deterioration of stock

8. Accelerated Cash flow

▸ quicker settlement = improved cash flow

Benefits of EDI

9. Business opportunities

▸ Access to Customers that require EDI, wider markets, greater sales

10. Customer lock-in (retention)

▸ Switching costs – setting-up an EDI system with a new supplier is costly for an existing customer

EDI and Internet e-Commerce

▸ EDI and Internet e-Commerce complement each other:

▸ Internet e-Commerce provides for searching for products and for once-off purchases.

▸ EDI is an application to application interface for repeated and standardised transactions.

EDI

Internet e-Commerce

Materials Supplier

Product Supplier

Manufacturer / Retailer

Customer
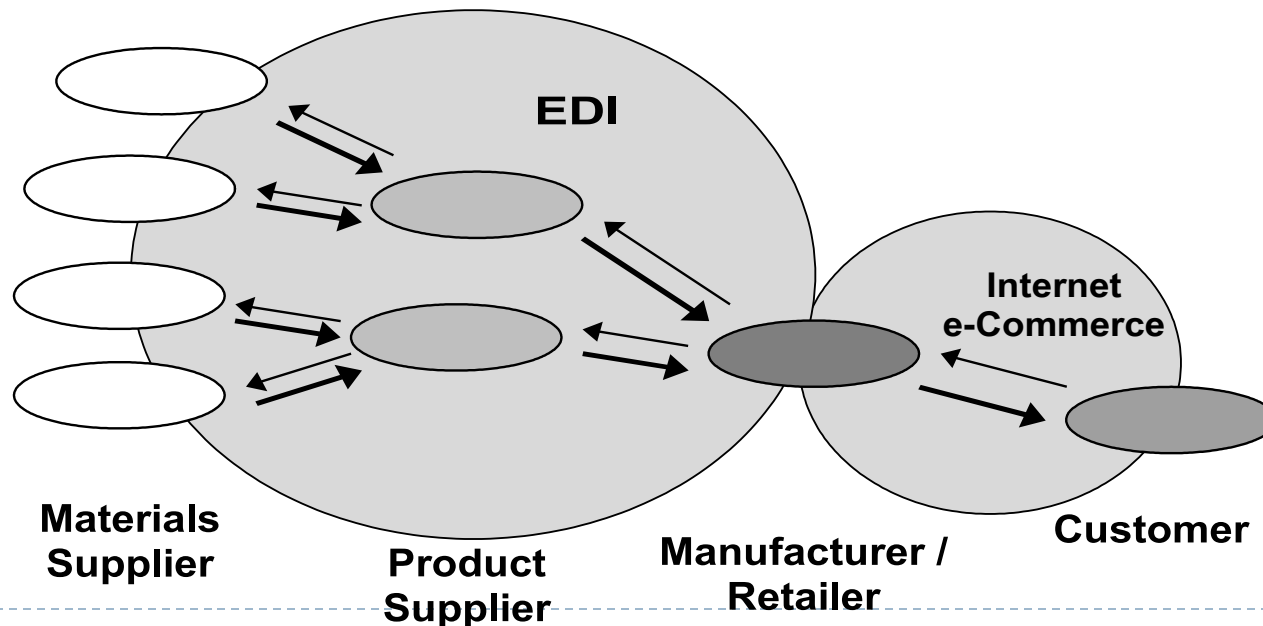
Task??????????????????

1. List the transaction types that take place between trading partners that are suitable for EDI implementation. Suggest some communications that would not be suitable for this technology.

3. List the four elements of an EDI system

4. Identify the advantages of EDI are in comparison to paper orders

5. How is EDI and EFT related. How do the two contribute to e-commerce and e-business?