

University of Global Village
Department of Business Administration

Course Title: Computer Application in Business

Course Code: 0611-214	Credit: 03
Semester End Exam (SEE) Hours : 03	CIE Marks : 90 SEE Marks : 60

❖ **Course Learning Outcomes: At the end of the Course, the Student will be able to-**

CLO 1	Understand the basic of computer technology and business innovations.
CLO 2	Identify the new trend of business activities due to the development of technology.
CLO 3	Understand the basics of management information system.
CLO 4	Recognize the change occurred within human resource management functions of due to the use of computer technology within business organization.
CLO 5	Learn latest technological innovation occurred within banking institutions due to the application of computer system.
CLO 6	Understand the use of technological instruments and tools used in Accounting and marketing sector of business organization.

❖ **Course Plan Specifying Topic, Teaching Times and CLOs**

SL	Contents of Course	Hrs.	CLOs
1	Computer Technology and Business Innovation	5	CLO1
2	E-Commerce : A new business innovation	5	CLO2
3	Computer and information technology in Management Information System	4	CLO3
4	Computer Application in HRM	5	CLO2 CLO4
5	Recent Trends in Banking	6	CLO2 CLO5
6	Computer Application in Marketing	5	CLO2 CLO6

7	Computer Application in Accounting	4	CLO2 CLO6
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❖ **Course plan specifying content, CLOs, teaching learning and assessment strategy mapped with CLOs:**

Week	Topic	Teaching Learning Strategy	Assessment Strategy	Corresponding CLOs
1	Computer Technology and Business Innovation <ul style="list-style-type: none"> • Definition of computer • Characteristics of a Computer System • Roles of Computers in Various Field • Limitations of computer system 	<ul style="list-style-type: none"> ▪ Lecture ▪ Discussion ▪ Problem Solving 	<ul style="list-style-type: none"> ▪ Question & Answer (Oral) 	CLO1
2	Business Innovation <ul style="list-style-type: none"> • Concept of Innovation • Why do we need innovation in Business • Types of Innovation in Business, • Comparison between Invention and Innovation. 	<ul style="list-style-type: none"> ▪ Lecture ▪ Discussion ▪ Problem Solving 	<ul style="list-style-type: none"> ▪ Question & Answer (Oral) ▪ Class Test 	CLO1
3	Business Innovation <ul style="list-style-type: none"> • Types of innovators • Approaches of Innovations • Innovation Process • Comparison between Invention and Innovation 	<ul style="list-style-type: none"> ▪ Lecture ▪ Discussion. ▪ Problem Solving 	<ul style="list-style-type: none"> ▪ Question & Answer (Oral) 	CLO1
4	E-Commerce : A new business innovation <ul style="list-style-type: none"> • Meaning of Electronic Commerce • Features of Ecommerce • Traditional VS E-commerce • Process of Ecommerce 	<ul style="list-style-type: none"> ▪ Discussion ▪ Problem Solving 	<ul style="list-style-type: none"> ▪ Written exam ▪ MCQ test ▪ Oral test 	CLO2

	<ul style="list-style-type: none"> • Benefits of E-commerce 			
5	E-Commerce (Modules and Challenges) <ul style="list-style-type: none"> • Disadvantages of e-commerce. • E-commerce modules and types. • Categories of e-commerce Company. • Challenges of e-commerce. 	<ul style="list-style-type: none"> ▪ Lecture ▪ Discussion ▪ Problem Solving 	<ul style="list-style-type: none"> ▪ Question & Answer (Oral) ▪ Assignment 	CLO2
6	Computer and information technology in Management <ul style="list-style-type: none"> • Types of Information System • Concept of MIS • Levels of Management • Objective of MIS 	<ul style="list-style-type: none"> ▪ Lecture ▪ Discussion ▪ Problem Solving 	<ul style="list-style-type: none"> ▪ Question & Answer (Oral) ▪ Presentation 	CLO3
7	Management Information System <ul style="list-style-type: none"> • Characteristics of MIS • Need of MIS • Components of MIS • Limitation MIS 	<ul style="list-style-type: none"> ▪ Lecture ▪ Discussion ▪ Problem Solving ▪ Exercise ▪ Assignment 	<ul style="list-style-type: none"> ▪ Question & Answer (Oral) ▪ Class Test 	CLO3
8	Computer Application in HRM <ul style="list-style-type: none"> • Define HRM, • Objective of HRM, • Functions of HRM, • Technology in HRM, • Evolution of HRMS • Human Resource Management Information System (HRIS). 	<ul style="list-style-type: none"> ▪ Lecture ▪ Discussion ▪ Problem Solving 	<ul style="list-style-type: none"> ▪ Question & Answer (Oral) ▪ Class Test 	CLO4
9	HRIS and Time Attendance System	<ul style="list-style-type: none"> ▪ Lecture ▪ Discussion ▪ Problem 	<ul style="list-style-type: none"> ▪ Question & Answer (Oral) 	CLO4

	<ul style="list-style-type: none"> • Key benefits of Human Resource information system • Major components of HRIS • Time Attendance System (TAS). • Key benefits of Time Attendance system • 	Solving	<ul style="list-style-type: none"> ▪ Class Test 	
10	Payroll Management System <ul style="list-style-type: none"> • Payroll Management System • Benefits of Payroll Management Systems • Benefits Administration • Role of Time Attendance system, • Role of Benefit administration. • HRMS Software Application in benefit Administration. 	<ul style="list-style-type: none"> ▪ Lecture ▪ Discussion 	<ul style="list-style-type: none"> ▪ Question & Answer (Oral) 	CLO4
11	Recent Trends in Banking <ul style="list-style-type: none"> • Reasons for computerization • Concept of E-Banking . • Various forms of E-banking • Internet banking • Mobile Banking • Benefits of e-banking • Drawbacks of e-banking. 	<ul style="list-style-type: none"> ▪ Lecture ▪ Discussion ▪ Problem Solving 	<ul style="list-style-type: none"> ▪ Question & Answer (Oral) ▪ Class Test 	CLO2 CLO5
12	Tele-banking and E-check <ul style="list-style-type: none"> • Concept of Tele Banking • Services Under Telebanking • Concept of E-check • Difference between e-check and paper check 	<ul style="list-style-type: none"> ▪ Lecture ▪ Discussion ▪ Problem Solving 	<ul style="list-style-type: none"> ▪ Written exam ▪ MCQ test ▪ Oral test 	CLO2 CLO5
13	ATM and Smart Card <ul style="list-style-type: none"> • Concept of ATM • Advantages of ATM • Drawbacks of ATM • Define Smart Card 	<ul style="list-style-type: none"> ▪ Lecture ▪ Discussion ▪ Problem Solving ▪ Exercise 	<ul style="list-style-type: none"> ▪ Question & Answer (Oral) ▪ Class Test 	CLO2 CLO5

	<ul style="list-style-type: none"> • Types of Smart Cards • Benefits and Disadvantages of smart card 			
14	Computer Application in Marketing <ul style="list-style-type: none"> • Reasons for Computerization • Concept of marketing information system. • Characteristics of Marketing Information System • Strategic Role of Marketing Information System • Components of Marketing Information System. 	<ul style="list-style-type: none"> ▪ Lecture ▪ Discussion ▪ Problem Solving ▪ Exercise ▪ Assignment 	<ul style="list-style-type: none"> ▪ Question & Answer (Oral) 	CLO6
15	Digital Marketing <ul style="list-style-type: none"> • Concept of Digital marketing • Difference between Traditional and Digital • Pros of digital Marketing • Cons of digital Marketing • Importance of digital Marketing 	<ul style="list-style-type: none"> ▪ Lecture ▪ Discussion ▪ Problem Solving ▪ Exercise ▪ Assignment 	<ul style="list-style-type: none"> ▪ Question & Answer (Oral) ▪ Class Test 	CLO6
16	Computer Application in Accounting <ul style="list-style-type: none"> • Concept of Computer application in Accounting • Scope of computer Application in Accounting • Computerized Accounting System (CAS) • Need of CAS * • Basic Requirements for CAS 	<ul style="list-style-type: none"> ▪ Lecture ▪ Discussion ▪ Problem Solving ▪ Exercise ▪ Assignment 	<ul style="list-style-type: none"> ▪ Question & Answer (Oral) 	CLO6
17	<ul style="list-style-type: none"> • Difference between Computerized Accounting System and Manual 	<ul style="list-style-type: none"> ▪ Lecture ▪ Discussion ▪ Problem 	<ul style="list-style-type: none"> ▪ Question & Answer (Oral) 	CLO6

	Accounting system <ul style="list-style-type: none"> • Limitations of CAS • Introduction with accounting software. 	Solving <ul style="list-style-type: none"> ▪ Exercise ▪ Assignment 		
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Assessment and Evaluation

1) **Assessment Strategy:** Group Discussion, Class tests, Case Study, Term Paper, Presentation.

2) **Marks distribution:**

a) **Continuous Assessment:**

- Class attendance is mandatory. Absent of 70% classes; disqualify the student for final examination only authority recommendation will be accepted with highly reasonable causes.
- Late submission of assignments is not allowed. Late submission of assignments will be only taken with highly reasonable causes and 20% mark will be deducted.
- To pass this course student will have to appear mid-term and final examination.

b) **Summative:**

CIE- Continuous Internal Evaluation (90 Marks)

Bloom's Category Marks (out of 90)	Quiz (15)	Assignments (15)	Attendance (15)	Mid Term Examination (45)
Remember				10
Understand	05	05		05
Apply	05			10
Analyze		05		05
Evaluate	05	05	15	10
Create				05

SEE- Semester End Examination (60 Marks)

Bloom's Category	Test
Remember	10
Understand	10
Apply	10
Analyze	10
Evaluate	10
Create	10

Grading Policy: University of Global Village

Marks	Grade	Grade Point	Remarks
80 - 100%	A+	4.00	Outstanding
75 - 79%	A	3.75	Excellent
70 - 74%	A-	3.50	Very Good
65 - 69%	B+	3.25	Good
60 - 64%	B	3.00	Satisfactory
55 - 59%	B-	2.75	Above Average
50 - 54%	C+	2.50	Average
45 - 49%	C	2.25	Below Average
40 - 44%	D	2.00	Pass
0 - 39%	F	0.00	Fail

- 3) **Make-up Procedures:** Dates for exams will be strictly followed. No makeup exam (Normal case), for exceptional case university rules and regulation should be followed.

RECOMMENDED TEXT BOOKS:

- [1] Folarin D. E. A (2020) *Creativity Innovation And Technology In Enterprises*
[2] Davis, G. B., & Olson, M. H. (1984). *Management information systems: Conceptual foundations, structure, and development*. McGraw-Hill, Inc.



Week 1, 2 & 3

Chapter I

Computer Technology and Business Innovation

Chapter Objectives

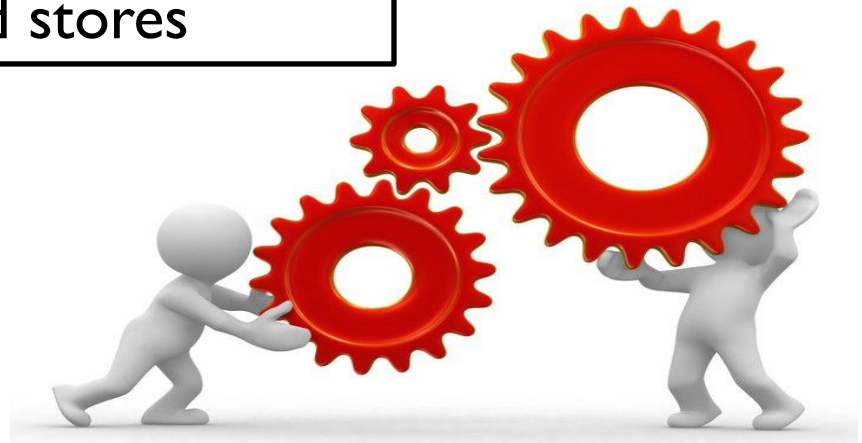
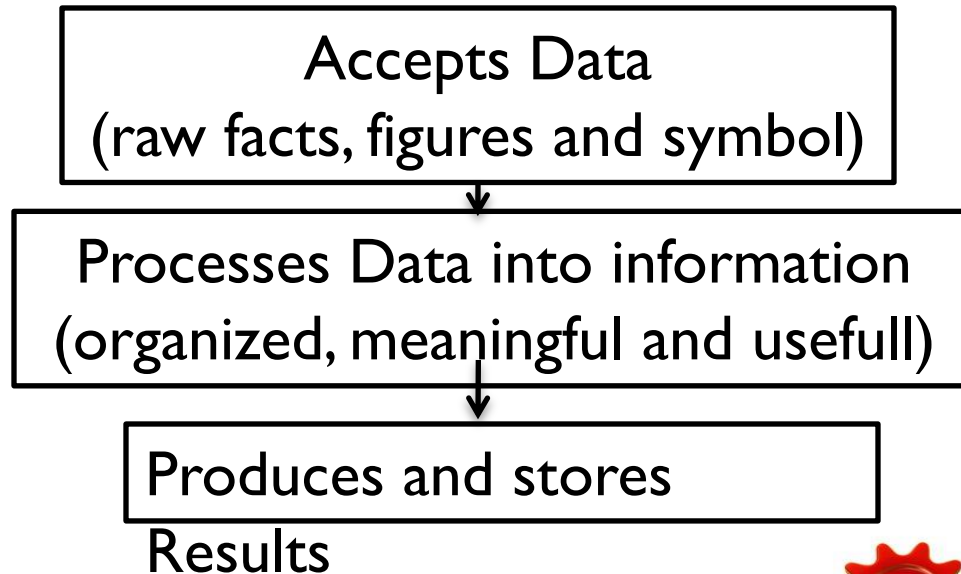
- To introduce computer technology to the students.
- To understand computing process and characteristics of computer.
- To elaborate innovation and importance of innovation in Business.
- Interpret types of Innovation.
- Understand the approaches of innovation.

What is Computer ?

- The word "computer" comes from the word 'compute', which means to calculate. So a computer is normally considered to be a calculating device.
- “Computer is an electronic machine that can solve different problems, process data, store & retrieve data and perform calculations faster and efficiently than humans”.



Computing Process



Characteristics of a Computer System

- **High speed**

A computer is a very fast device capable of data processing at unbelievable speed. It can perform in a few seconds the amount of work that a human being may not be able to do in an entire year even if he works day and night and does nothing else.

- **Diligence**

Computer can perform repetitive works without any tiredness. In Computer program, the process of giving same instruction repetitively is called “Looping”

- **Accuracy**

The accuracy of a computer is consistently high. For a particular computer, each and every calculation is performed with the same accuracy.

Characteristics of Computer System

- **Reliability**

Modern electronic components have long failure free lives. A microprocessor chip is said to have a life of 40 years even under adverse conditions and much before it fails, it will become obsolete.

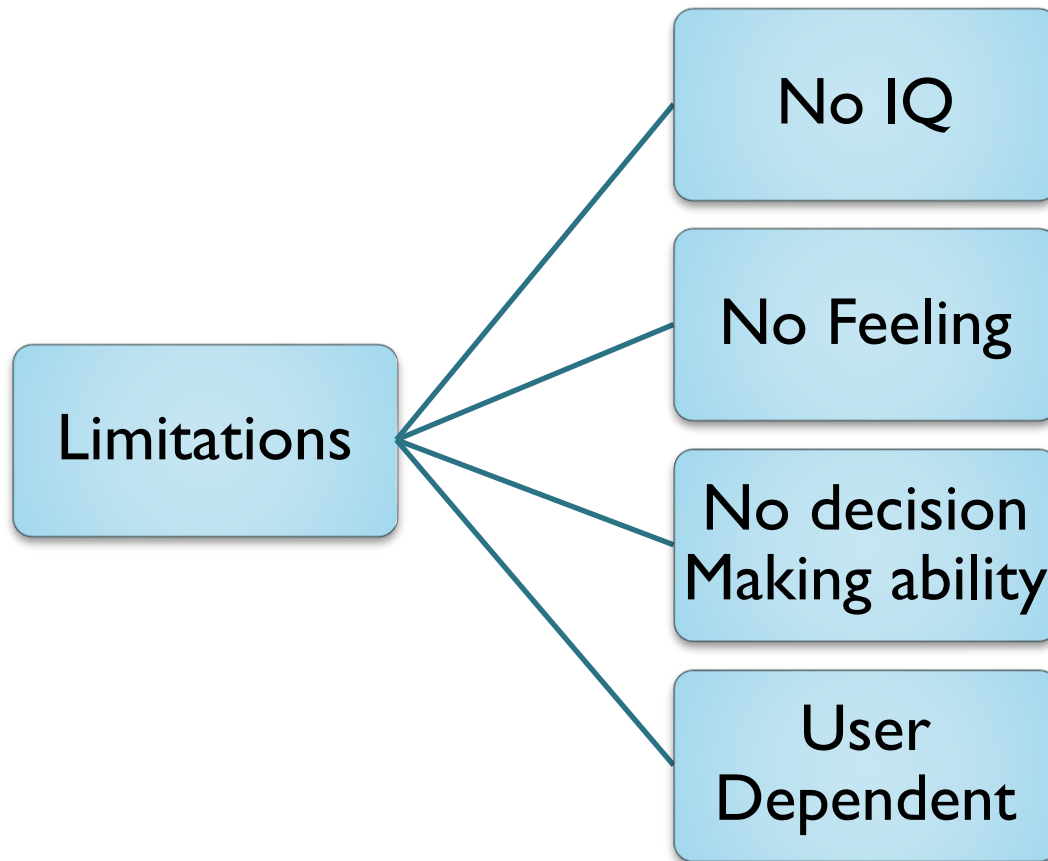
Roles of Computers in Various Field

- **Scientific Research:** Used to resolve complex scientific problems accurately in a short time.
- **Business :** Used in banks, airports, share markets, hotels, export houses, Government offices and others for rising business 10 applications like MIS, Payroll, Inventory, Financial Accounting etc.
- **Space :** Used to design computerized space satellites, rockets and related technology.
- **Data Communication :** Used to computerize geographically separated offices through networking

Roles of Computers in Various Field

- **Medicine:** Used in hospitals and nursing homes/clinics for maintaining medical records, prescription writing, diagnostic applications and computerized scanning(CAT Scanning).
- **Teaching:** Used in development of CBT (Computer Based Teaching)/ CAT (Computer Aided Teaching) programs for education Law.
- **Engineering:** Used CAD (Computer Aided Designing)/CAM (Computer Aided Manufacturing) by engineering companies

Limitations of Computer

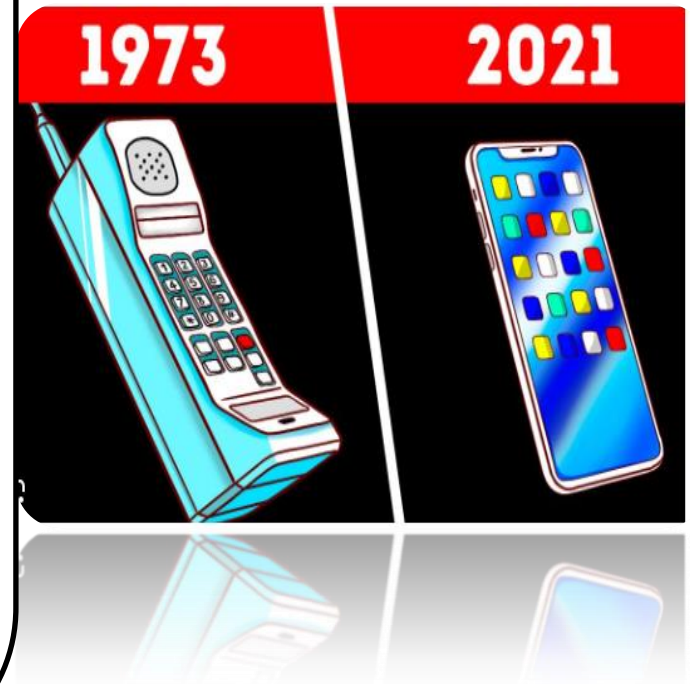


Limitation of Computer

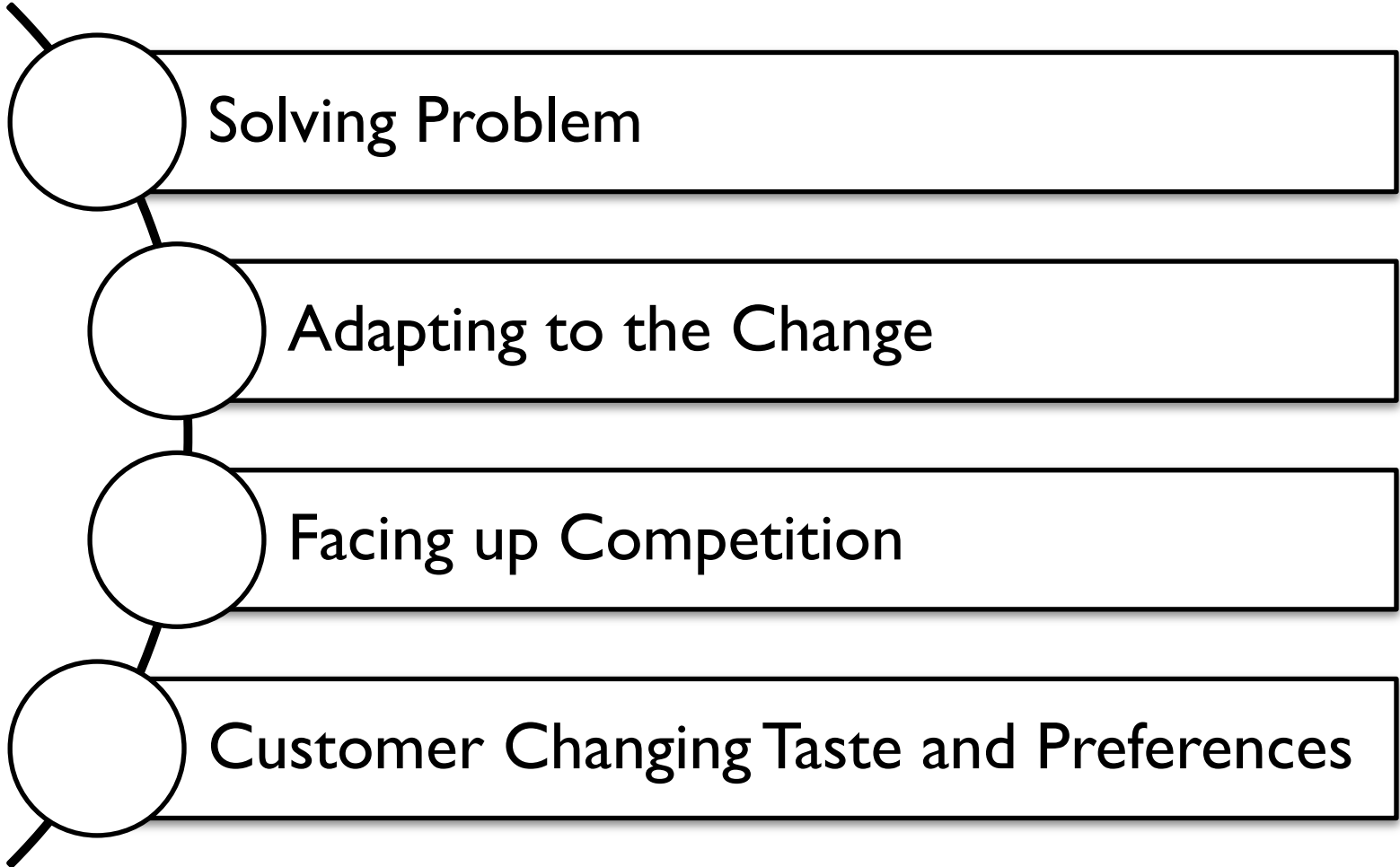
- **No IQ:** It possesses no intelligence of its own. Its IQ is zero, at least till today. Hence, only the user can determine what tasks a computer will perform.
- **No feelings :** Computers are devoid of emotions. They have no feelings and no instincts because they are machine. computers cannot make any type of judgments on their own.
- **No decision making ability:** In capable of making decision as they don't have knowledge and judgment ability.
- **User Dependent :** Fully dependent upon the user. They can do anything without any instruction.

Define Innovation

- Innovation is taking something that already exist and making it better.
- Innovation can be simply defined as a "new idea, creative thoughts, and new imaginations in form of device or method".
- Innovation is the process of turning opportunity into new ideas and of putting these into widely used practice.



Why do we need innovation in Business ?



Why do we need innovation in Business ?

- **Solving problems:** As such, when you encourage innovation, you are opening doors for solutions to problems both within and outside your company.
- **Adapting to change:** Change is inevitable and innovation is the method to not only keep your business a float, but also ensure that it remains relevant and profitable.
- **Facing up the competition:** you can compete strategically by having a dynamic business that is able to make strategic and innovative moves and thus cut above the rest.
- **Customers' changing tastes and preferences:** The current customer has a great variety of taste. The company must therefore keep itself a breast with these evolving tastes and also forge new ways of satisfying the customer.

Types of Innovation in Business

Product or service innovation : Introduction of a product or service that is new or significantly improved with respect to its characteristics or intended uses.

Process innovation: Implementation of a new or significantly improved production or delivery method.

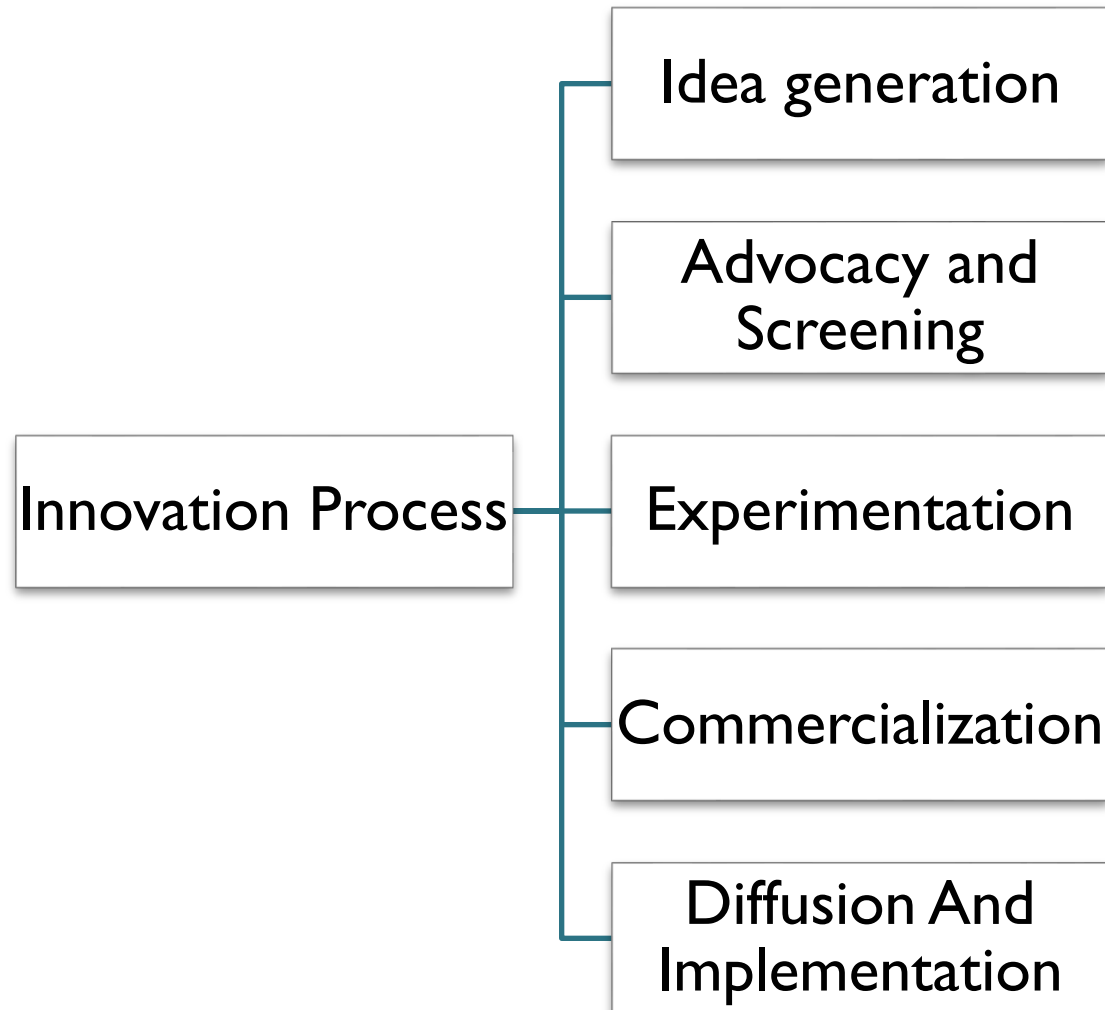
Marketing innovation: Implementation of a new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing.

Organizational innovation : Implementation of a new organizational structure for organizational practices.

Comparison between Invention and Innovation

Point of Differences	Invention	Innovation
Meaning	Development of something that is entirely new.	Adding new shape and feature with existing one.
Skills Required	Technical skills	Strategic skills
Brought about	By scientist	By Top level managers or entrepreneur
Include	A single product	a group of product

Innovation Process



Innovation Process

I. Idea Generation : It involves gathering ideas, research, testing, editing or revising, and ultimately implementing the plan. During Idea generation following thinks should be considered

- Innovate something that meet the needs of the customer.
- Listen to the employees and explain how the innovative product is used to the customers.
- share your thoughts and opinions with your partners and suppliers.
- Listen to the customer and get their feedback.

Innovation Process

2. **Advocacy and Screening** : Not every idea that is generated is worth implementing, for that reason; you must screen all the ideas presented. When screening, ensure you measure the benefits and risks of each idea to determine its viability.

3. **Experimentation**: At this stage, the idea is tested using a pilot test. The test takes place within a targeted market. As you test your product, remember you want to know if the customers will accept it, if the price is acceptable, and if they like the innovation. The aim is to test if the idea is ideal and suitable for the company at a particular time.

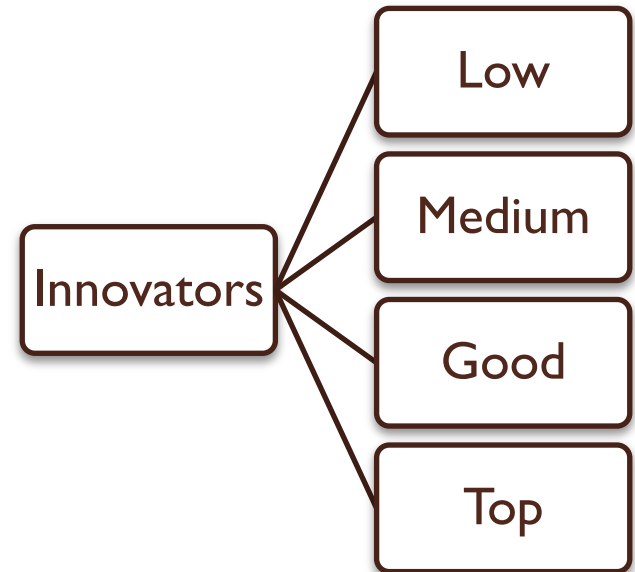
Innovation Process

4. **Commercialization:** When you get to this stage, just know the product is ready for the market. The major work at this stage is to persuade your target audience that the innovation is good for them. To do this, explain how the innovation will be of use to them, when it will be used, and demonstrate the benefits of the innovation .

3. **Diffusion and Implementation:** Diffusion and implementation are two different stages: diffusion is where the company accepts the innovation and implementation is setting up everything that is needed to develop and utilize or produce the innovative idea.

Types of Innovators

- **Low** : They are limited and directly just follow and learn from other companies innovation process in their own industry.
- **Medium**: They put a lot of effort and learn from other companies innovation process within and outside of their industry.
- **Good**: committed to their own innovation processes. They monitor competitors within same industry take lead in innovation.
- **Top**: They do their innovation homework, they keep tabs on what is going on in the rest of the industry and comp up best innovation.



Approaches of Innovation

- **Ideas-driven innovation** : collects and generates a number of ideas which are filtered until one is selected. The lead time for this process is one to five years.
- **Research driven ideas**: collects a huge number of ideas generated from research then select a number of them for development. However, many of these promising projects will be rejected at any stage of the development process, up until completion. The cycle for this approach takes longer -- up to 10 years.
- **Analysis driven innovation**: This approach draws ideas in a systematic way from analysis of the market, competitors and the organization's internal capabilities. Once a project is selected for development, it won't be discontinued.



Thanks



Week 4, 5 & 6

Chapter 2
E-Commerce –A
new business
Innovation

Chapter Objectives

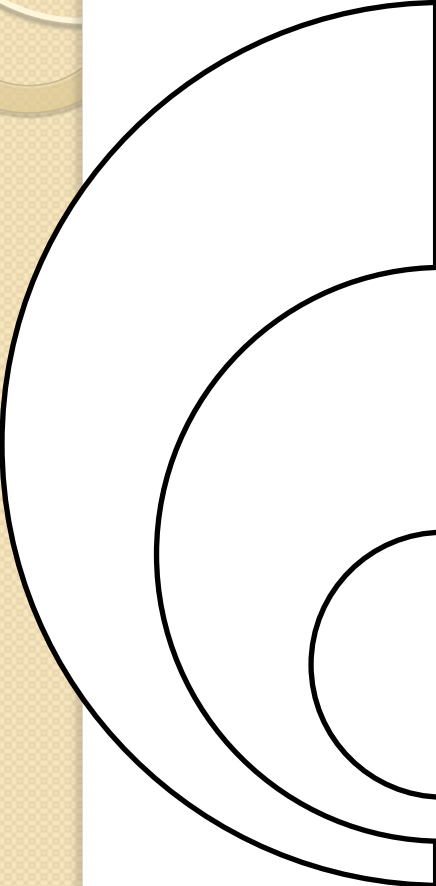
- Understand the concept of e-commerce.
- Summarize the feature of e-commerce.
- Distinguish e-commerce vs. traditional commerce.
- Elaborate the Benefits of e-commerce.
- Interpret the modules of 2-commerce.
- Identify the challenges of e-commerce.

Meaning and Definition

- E-commerce is the buying and selling of goods and services over the internet.
- It is conducted over computers, tablets, smartphones, and other smart devices.
- Almost anything can be purchased through e-commerce today, which makes e-commerce highly competitive..”



Features of E-commerce

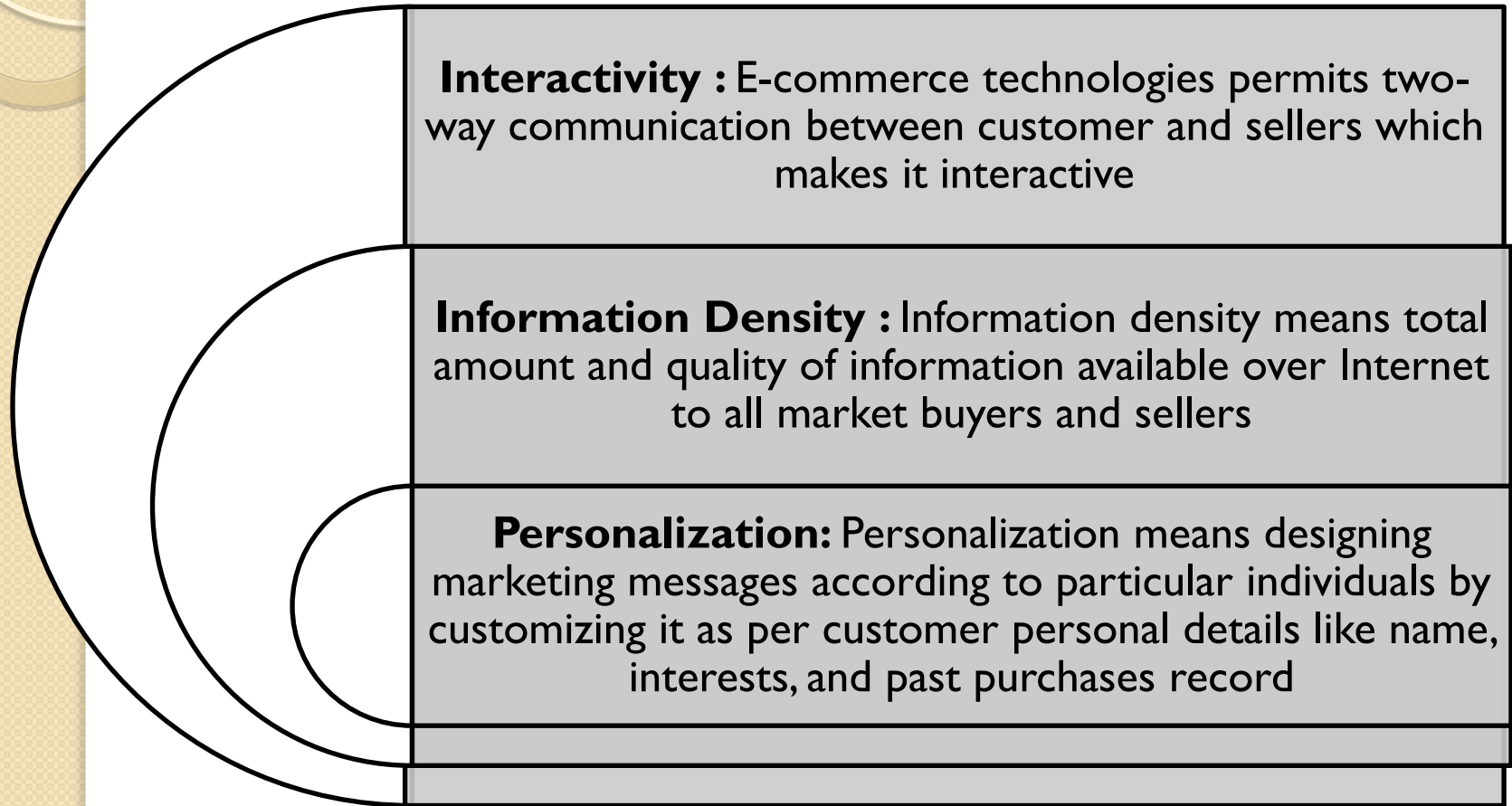


Ubiquity : E-commerce is widespread, that is, it is available everywhere always. It allows shopping from your desktop, at home at work and even from your car.

Global Reach : permits commercial transactions to cross cultural and national boundaries far more conveniently and cost-efficiently.

Universal Standards : It gives same facilities and same price opportunities to every one.

Features of E-commerce



Differences between E-commerce & Traditional Commerce

E-commerce	Traditional Commerce
It is cost-effective.	It is less cost-effective than E-commerce.
No physical inspection.	Physical inspection.
Takes less time.	Takes more time.
Better connectivity.	No better connectivity.
Size of business is easily expandable.	Size of business is not easily expandable.
New product is easily introduced.	Introduction of new products is not easy.
Immediate analysis of customer feedback can be done.	Takes more time in analyzing the customer feedback
24*7 accessibility.	Limited time of accessibility.
Chances of fraud is very high.	Chances of fraud is less compared to E-commerce

Benefits of E-commerce

Benefits to Organizations

- Organizations can expand their market to national and international markets with minimum capital investment.
- An organization can easily locate more customers, best suppliers, and suitable business partners across the globe.
- It helps organizations to reduce overhead costs
- It improves the brand image of the company.
- It helps organization to provide better customer services.
- It helps to simplify the business processes and makes them faster and efficient.
- It reduces the paper work

Benefits of E-commerce

Benefits to the Customers

- It provides 24x7 support. Customers can enquire about a product or service and place orders anytime, anywhere from any location.
- It provides users with more options and quicker delivery of products.
- It provides users with more options to compare and select the cheaper and better options.
- A customer can put review comments about a product and can see what others are buying, or see the review comments of other customers before making a final purchase.

Benefits of E-commerce

Benefits to the Society

- Customers need not travel to shop a product, thus less traffic on road and low air pollution.
- E-commerce helps in reducing the cost of products, so less affluent people can also afford the products.
- E-commerce has enabled rural areas to access services and products, which are otherwise not available to them.
- E-commerce helps the government to deliver public services such as healthcare, education, social services at a reduced cost and in an improved manner

Disadvantages of E-commerce

Technical Disadvantages

lack of system security, reliability or standards owing to poor implementation of e-commerce.

The software development industry is still evolving and keeps changing rapidly. In many countries, network bandwidth might cause an issue.

Special types of web servers or other software might be required by the vendor. Sometimes, it becomes difficult to integrate an e-commerce software or website with existing applications or databases.

There could be software/hardware compatibility issues, as some e-commerce software may be incompatible with some operating system or any other component.

Disadvantages of E-commerce

Non-Technical

Initial cost – The cost of creating/building an e-commerce application in-house may be very high. There could be delays in launching an e-Commerce application due to mistakes, and lack of experience.

User resistance – Users may not trust the site being an unknown faceless seller. Such mistrust makes it difficult to convince traditional users to switch from physical stores to online/virtual stores.

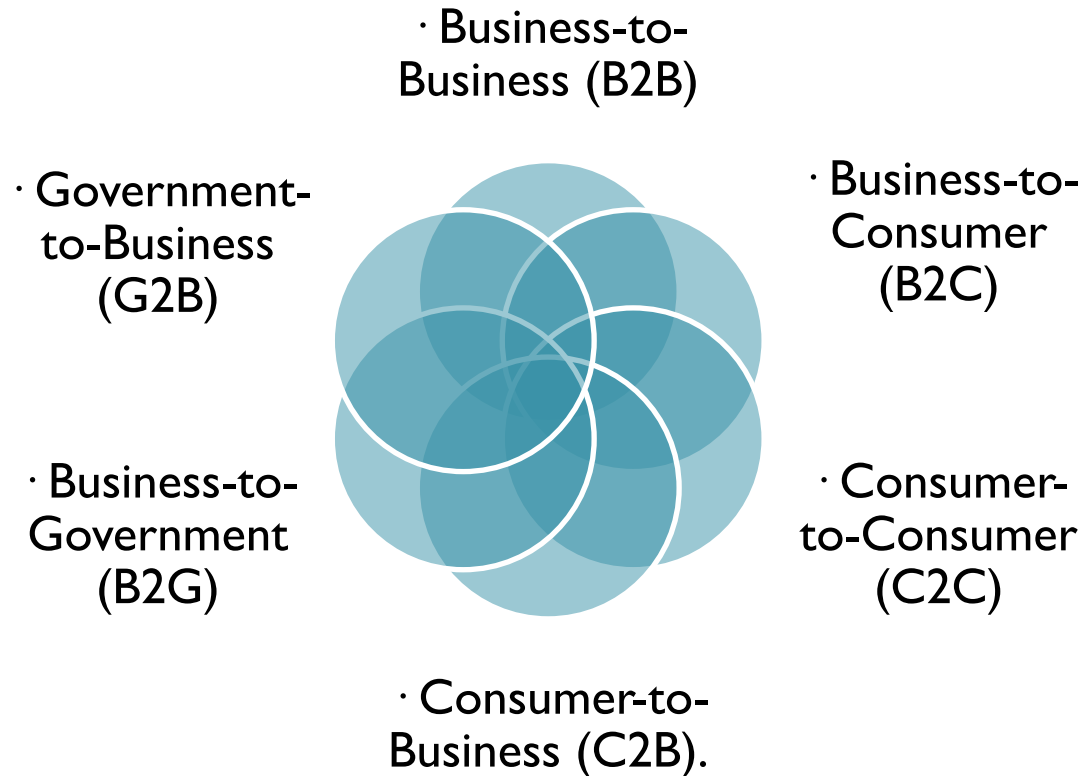
Security/ Privacy – It is difficult to ensure the security or privacy on online transactions.

Disadvantages of E-commerce

Non-Technical

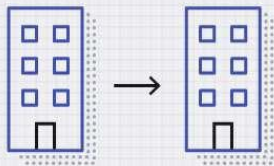
- Lack of touch or feel of products during online shopping is a drawback.
- E-commerce applications are still evolving and changing rapidly.
- Internet access is still not cheaper and is inconvenient to use for many potential customers, for example, those living in remote villages.

E-commerce Modules or Types

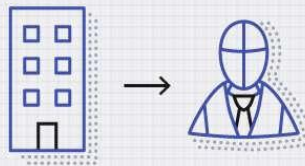


E-commerce Modules or Types

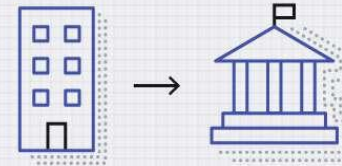
Types of E-Commerce



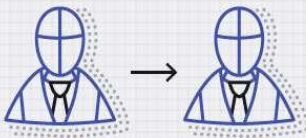
Business to business



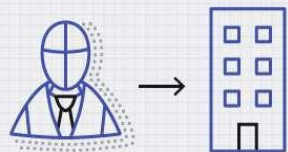
Business to consumer



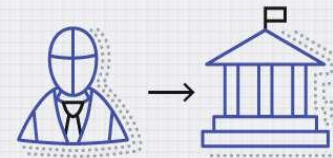
Business to Government



Consumer to consumer



Consumer to business



Consumer to Government

E-COMMERCE MODULES OR TYPES

Business - to - Business

- A wholesaler places an order from a company's website and after receiving the consignment, sells the end product to the final customer who comes to buy the product at one of its retail outlets.

Business - to - Consumer

- A website following the B2C business model sells its products directly to a customer. A customer can view the products shown on the website. The customer can choose a product and order the same.

E-COMMERCE MODULES OR TYPES

Consumer - to - Consumer

- A website following the C2C business model helps consumers to sell their assets like residential property, cars, motorcycles, etc., or rent a room by publishing their information on the website. Website may or may not charge the consumer for its services.

Consumer - to - Business

- In this model, a consumer approaches a website showing multiple business organizations for a particular service. The consumer places an estimate of amount he/she wants to spend for a particular service.

E-COMMERCE MODULES OR TYPES

Business - to - Government

- B2G model is a variant of B2B model. Such websites are used by governments to trade and exchange information with various business organizations. Such websites are accredited by the government and provide a medium to businesses to submit application forms to the government.

Government - to - Business

- Governments use B2G model websites to approach business organizations. Such websites support auctions, tenders, and application submission functionalities.

Categories of E-commerce Companies

Pure Click Companies

The companies which have an online presence rather than any physical location functional through websites are termed as legitimate click companies.
E.g. magicbricks.com

Brick and Click Companies

The business entities which have a physical presence along with an online existence are known as brick and click companies. It includes not only those companies which sell products online but also those firms which have an online portal or website to give information about the entity. *E.g. bigbazaar.com*

Challenges of E-Commerce Growth

Intangibility: The online marketplace is intangible, and the products cannot be touched or examined before purchasing.


Massive Competition: More and more companies are entering the e-commerce market to sell their products globally, thus increasing the level of competition.

Technical Issues: Technology is the base of e-commerce, and lack of technical knowledge is the primary reason for failure. Thus, it involves a considerable cost to outsource such activities.

24X7 Internet Access: It is necessary to have uninterrupted internet connectivity for the seller to process the orders, which is challenging to have in remote areas.

Challenges of E-Commerce Growth

Requires Patience: The companies selling products or services online need to keep patience and wait for the desired response since it takes time to gain attention and visibility from customers in e-commerce.



Lack of Trust: Due to the intangible existence of e-commerce business, there is a lack of trust in shopping and making online payments among the customers.



•Thanks



Week 6 & 7

Chapter 5: Computer and information Technology in Management

An Overview of Management Information System (MIS)

Chapter Objectives

- Understand the basic types of Information System (IS) used by Managers.
- Understand the concept of MIS.
- Elaborate the objectives and Needs of MIS within business organization.
- Summarize the characteristics of MIS.
- Describe the components of MIS.
- Discuss the Limitations of MIS

Types of Information Systems

Transaction Processing Systems (TPS)

- used to record the day to day transactions of a business. An example of a Transaction Processing System is a Point of Sale (POS) system. A POS system is used to record the daily sales.

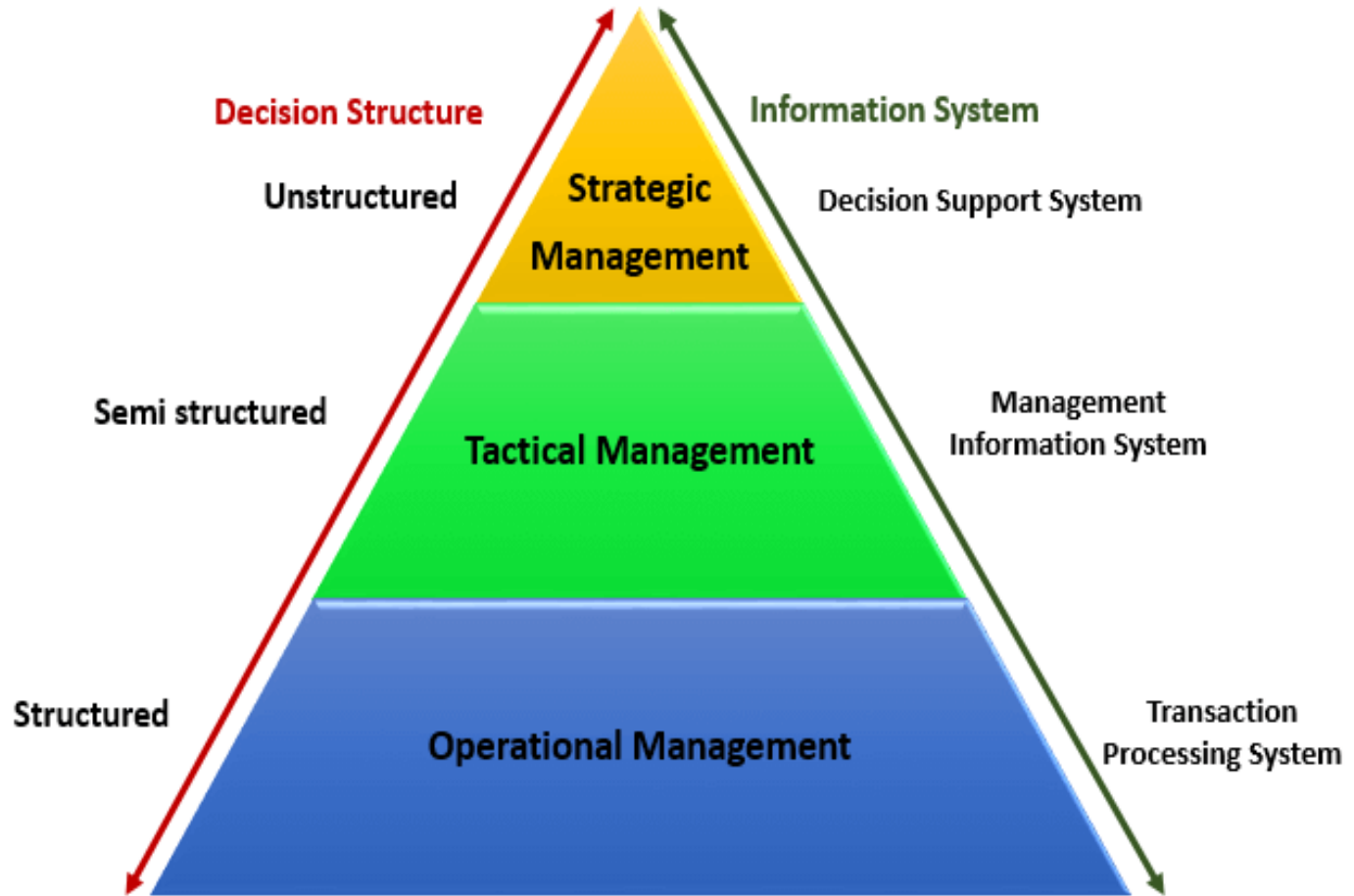
Management Information Systems (MIS)

- Used to guide tactic managers to make semi-structured decisions. The output from the transaction processing system is used as input to the MIS system.

Decision Support Systems

- used by top level managers to make unstructured decisions. The output from the MIS is used as input to the decision support system. systems also get data input from external sources such as current market forces, competition, etc.

Types of Information System



Concept of MIS

Management

- Management is the process of getting things done through others. It involves planning, organizing, leading and controlling

Information

- In MIS, means the processed data that helps the management in planning, controlling and operations.

System

- Data is processed into information with the help of a system. A system is made up of inputs, processing, output and feedback or control.

Concept of MIS

Definition

- MIS means a system for processing data in order to give proper information to the management for performing its functions.
- *Management Information System or 'MIS' can be defined as a planned system of collecting, storing, and disseminating data in the form of information needed to carry out the functions of management.*



Objectives of MIS

Capturing Data

- Capturing contextual data, or operational information that will contribute in decision making from various internal and external sources of organization.

Processing Data

- The captured data is processed into information needed for planning, organizing, coordinating, directing and controlling functionalities at strategic, tactical and operational level.
Processing data means –making calculations with the data, sorting data, classifying data and, summarizing data

Objectives of MIS

Information Storage

- Information or processed data need to be stored for future use.

Information Retrieval

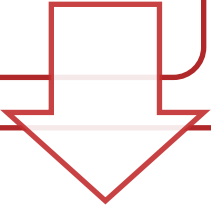
- The system should be able to retrieve this information from the storage as and when required by various users.

Information Propagation

- Information or the finished product of the MIS should be circulated to its users periodically using the organizational network.

Characteristics of MIS

It should work as a complete and comprehensive system covering all interconnecting sub-systems within the organization.



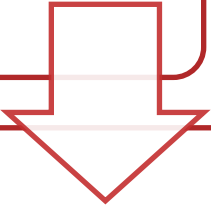
It should be planned in a top-down way, as the decision makers or the management should actively take part and provide clear direction at the development stage of the MIS.



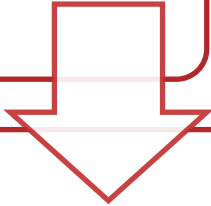
It should be based on need of strategic, operational and tactical information of managers of an organization.

Characteristics of MIS

It should also take care of exceptional situations by reporting such situations.



It should be able to make forecasts and estimates, and generate advanced information, thus providing a competitive advantage. Decision makers can take actions on the basis of such predictions.



It should create linkage between all sub-systems within the organization, so that the decision makers can take the right decision based on an integrated view.

Need for MIS

Decision Making: Decision makers need information to make effective decisions. Management Information Systems (MIS) make this possible.

Internal and external Communication: MIS systems facilitate communication within and outside the organization. It facilitates SMS & Email to communicate with customers and suppliers.

Record keeping – management information systems record all business transactions of an organization and provide a reference point for the transactions.

Components of MIS

People – people who use the information system

Data – the data that the information system records

Business Procedures – procedures put in place on how to record, store and analyze data

Hardware – these include servers, workstations, networking equipment, printers, etc.

Software – these are programs used to handle the data. These include programs such as spreadsheet programs, database software, etc.

Limitations of MIS

High Setup Cost

Setting up an MIS is not cheap though. You have to spend a lot of money to get the right computers and programs.

Technical Problems

MIS can sometimes be a headache. You might face system crashes, annoying software bugs, or even lose important data.

Safety Concerns

MIS systems have lots of important data, and that makes them a target for cyber attacks.

Need trained employees

Only those employees who have been educated and well trained are able to work on MIS.



Thanks



Week 8 & 9

Chapter 4: Computer Technology in HRM

Chapter Objective

- Understand the meaning and major functions of HRM
- Introduce the concept of technology integration in HRM.
- Trace the historical evolution of technology in HRM.
- Discuss the significance of technology in enhancing HR processes and strategic decision-making.
- Explore the Key Technologies in HR.

Define HRM

- **Human resource management (HRM)** is the process of employing people, training them, compensating them, developing policies relating to them, and developing strategies to retain them.
- Human resources (HR) is the division of a business responsible for these functions.



Objectives of HRM

To help the organization attain its goals by providing well-trained and well-motivated employees.

To employ the skills and knowledge of employees efficiently and effectively.

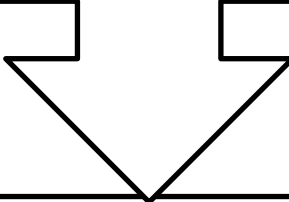
To enhance job satisfaction and of employees by encouraging and assisting every employee to realize his/her full potential.

To establish and maintain productive, self-respecting and internally satisfying working relationships among all the members of the organization.

To bring about maximum individual development of members of the organization by providing opportunities for training and advancement.

Functions of HRM

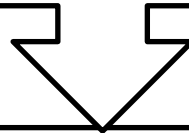
1. Recruitment and Selection - **Recruitment** is the process of actively seeking out and finding candidates for a specific position or job. *Selection* of an employee is a process of choosing the applicants, who have the qualifications to fill the vacant job in an organization.



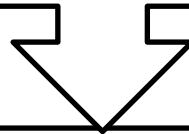
2. Training and Development - **Training** means the process of increasing the knowledge and skills of an employee for doing a particular job. **Development** is concerned with the growth of employees in all respects.

Functions of HRM

3. Performance Management- It is a technique of appraising performance systematically against defined criteria, reviewing progress to date and assessing the potential for advancement..



4. Reward and Retention - This ensures that people are rewarded in accordance with their contribution.



5. Career Management- It is system of charting special career paths for individual employees for advancement in the organization.

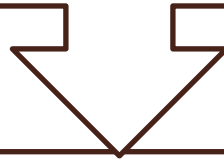
Technology in HRM

- **HR technology:** Any technology that is used to attract, hire, retain, and maintain human resources, support HR administration, and optimize human resource management.
- This technology can be used by various stakeholders, such as managers, employees, and HR professionals.

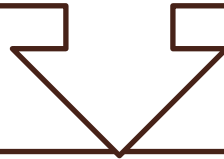


Evolution of HR Technology

Stage 1: Paper-Based Systems -Initially HR systems were “paper-based.” These systems operated independently and did not integrate with any other business-related functions.



Stage 2: Early Personal Computer (PC) there was a migration of the information resident in these paper-based systems to PCs and local area network (LAN) systems. These HR databases were able to produce reports about basic employee information.



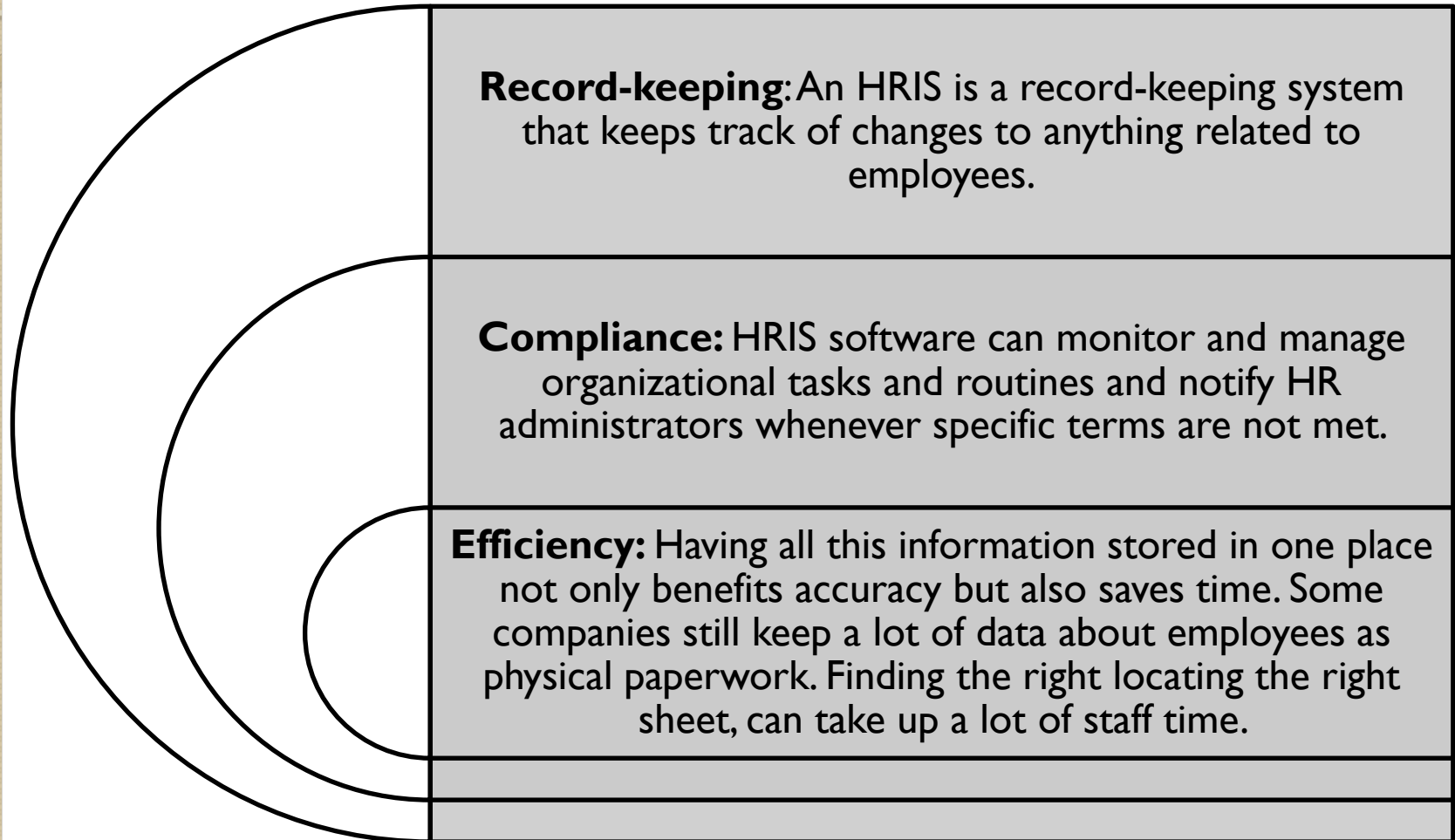
Stage 3: Electronic Database Systems- A relational database means that a piece of data can be stored in more than one file, each one containing different types of data. The different files can be linked so that information from the separate files can be used together.

HR Information System

- **Human resources information system (HRIS)** is an integrated systems used to gather, store, and analyze information regarding an organization's human resources.
- HRIS is the composite, of databases computer applications, and hardware and software.



Key Benefits of an HRIS



Key Benefits of an HRIS



Enhanced Recruitment: With the help of HRIS, HR professionals can accept online applications faster and sort them by relevant filters regarding the position.

Self-Service HR : A final benefit is the ability to offer self-service HR to employees and managers. This enables employees to manage their own affairs.

Major Components of HRIS

Database: HRIS has a database used to store employee information. The HR team can access this information from anywhere at any time.

Time Attendance System : HRIS has a feature that allows employees to enter their own work hours or to leave requests as they see fit.

Payroll function: HR can accurately calculate the number of hours worked so as to determine appropriate employee salary payments amounts.

Allowances or benefits: HRIS accounts for employee assistance arrangements, such as medical benefits or pension fund investments.

Interface for employees: Most HRIS applications provide employees with a level of user access. However, employees are only allowed limited access to databases where they can update their personal information

Time Attendance System (T & A)

- Time and attendance system are used to track and monitor when employees start and stop work.
- It enables an employer to monitor their employees working hours and late arrivals, early departures, time taken on breaks and absence.



Benefits of Time Attendance System

- **Dependable Accuracy:** It minimize the risk of human errors. one of the biggest factors that contribute to financial losses.
- **Increased Productivity:** It saves time and human effort in keeping track of employees. Now work schedules are easily created based on job requirements, employee availability and eligibility, and they are easily duplicated.
- **Pleased Employee:** It offers a self-service component for employees to view schedules, get reminders and have access to shift trade boards through web-based portals or mobile apps

Benefits of Time Attendance System

- **Overall Cost Reduction**

It save labor costs and costs relate to paperwork. This advantage also can benefit your company attendance policy by significantly reducing employee delay and absenteeism.

Payroll Management System

- Payroll management is the administrative task of paying employees for services rendered.
- Payroll typically involves payments of regular salary and wages commissions and bonuses.
- A payroll management system is a software designed to manage the calculation of employee salary or wages, deductions, taxes,, and other financial obligations.



Benefits of Payroll Management System

- Manage employee financial information efficiently.
- Perform payroll calculations and deductions quicker.
- Generate accurate pay slips.
- Calculate bonuses, expenses, holiday pay, etc. with minimum effort.
- Remove the need to understand complex tax legislation.
- Store data such as pay slips and annual reports in a secure, easily accessible system.
- Generate and manage the payroll processes according to the salary structure assigned to the employee.

The Concept of Benefits Administration

- A process of assembling and managing the benefits an organization provides to employees.
- Employee benefits typically include health allowance, disability, vacation, life insurance benefits and pension fund benefits.



The Role of HRIS Software Applications in Benefits Administration

Setting up a benefit

you can construct and manage all your employee benefits automatically. It can reduce some works of HR professionals.

Tracking Past Records

It let you track past employee records including leave, health history, or compensatory payments. In addition, you can keep track of whatever benefits you have delivered to workers.

Benefit Revisions:

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Self Service:

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Week 8, 9 & 10

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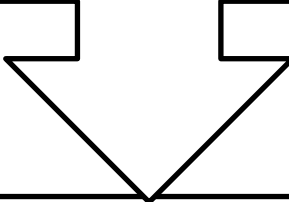
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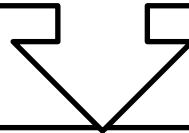
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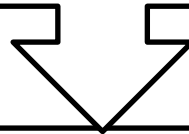
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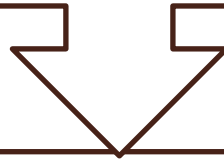
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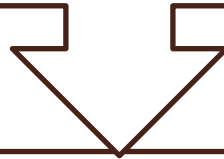


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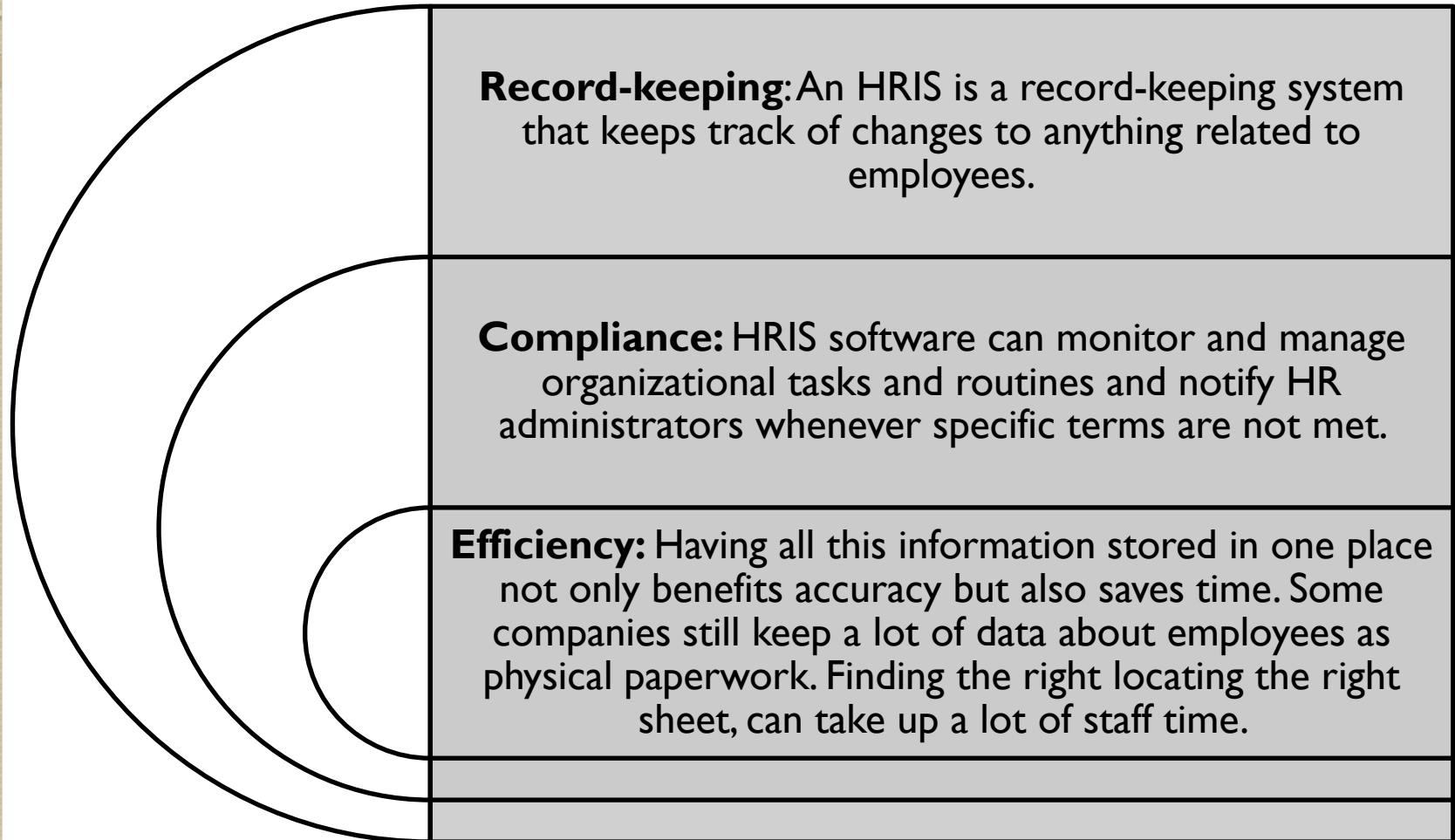
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• Thanks



Week 11, 12 & 13

Chapter 5: Recent Trends in Banking Sectors

Chapter Objectives

- Learn about the impact of digital transformation on the banking industry.
- Explore how technologies such as are revolutionizing commercial banking operations and customer services.
- Explore recent developments in payment systems.
- Understand how these advancements are enhancing the efficiency and convenience of financial transactions.

The Concept of E-banking

E-banking is an electronic payment gateway which enables all the customers of a bank to do banking transactions through their computers without the need to go physically to the bank

It includes electronic funds transfer (EFT), mobile payments for retail purchases, automatic teller machines (ATMs), automatic paycheck deposits, and automated bill payment.



Significance of E-banking

Importance to Clients

- **Lower cost per exchange:** Client doesn't need to visit the branch for each exchange, it saves him both time and cash.
- **No geographical hindrances:** In conventional frameworks, geological distances could hamper specific financial exchanges. Nonetheless, with e-banking, geological obstructions are diminished.
- **Convenience:** A client can get to his record or bank account and execute from any place at any time.

Significance of E-banking

Importance to Banks

- **Lesser exchange costs:** Electronic exchanges are the least expensive methods of exchange
- **Lesser desk work:** Advanced records decrease desk work, paperwork, and make the cycle simpler to deal with. Likewise, it is ecological.
- **Less Human Error:** Since the data is handed-off electronically, there is no space for human mistakes or errors.
- **More Loyal clients:** E-banking administrations or services are convenient to the clients, banks experience higher reliability from their clients

Various Forms of E-Banking

Internet Banking

- A system that enables customers of a bank to conduct a range of financial transactions through the financial institution's website or PC or Laptop.
- It is s a digital method to conduct banking transactions by the means of the internet.

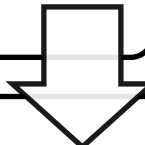


Benefits of Internet Banking

Transferring Funds: With internet banking, you can transfer money from one account to another.



Booking Deposits: Another benefit of internet banking is that you can conveniently open fixed and periodic deposit accounts online.



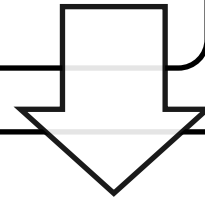
Paying Bills & Recharging: You can pay utility bills like electricity, telephone, gas, etc.



Tracking Account and Checking balances: You can constantly track your account and check account balances from anywhere, at any time.

Benefits of Internet Banking

Products: It allows you to place orders for bank products like cheque Books and Bank Cards.



Add-on Services: You can enjoy a wide variety of add-on services, including buying or selling mutual funds, buying insurance policies, and applying for various types of loans.

Automated Teller Machine

Concept of ATM

- An Electronic banking outlet which allows customers to complete basic transactions without the aid of any representative from the bank.
- It allows you to withdraw money, deposit cash or checks, view your balance or transfer money between accounts.



Key Functions of ATM

Cash withdrawals

You can conveniently withdraw money from an ATM using your debit or ATM card. Simply insert your card, enter your PIN, and enter the amount you wish to withdraw.

Balance inquiries

ATMs allow you to check your account balance, enabling you to stay updated on your finances.

Fund transfers

Many ATMs allow you to transfer funds between your accounts. This feature enables quick and easy money movement without visiting a bank branch.

Account deposits

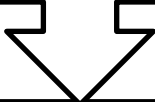
Some ATMs are equipped with deposit functions, allowing you to deposit cash or cheques directly into your account via the machine.

Merits of ATM

Provide Convenience To Customers: Customers are able to do financial transactions conveniently with the use of ATMs.



Offer 24×7 Service: ATMs provides 24 hours a day, 7 days a week and 365 days a year to all its customers.



Reduce Banks Workload: Customers are not required to stand in long queues and fill up various forms for availing basic withdrawal and deposit facilities.

Demerits of ATM

Charges Fees: Bank charges routines charges as per their standard rates for providing them ATM facility.

Limitation On Cash Withdrawal: Bank imposes restrictions on withdrawal limit of their customers using ATM. There are limitations on both no. of free transactions and the amount of money that can be withdrawn per transactions.

Possibility Of Frauds: Customers performing online transactions using ATM are likely to be affected by various frauds. There is a chance of stealing various account information by online hackers while doing online transactions.

Non-Reachable In Rural Areas: There are limited ATM machines installed in rural areas which also do not operate properly. Therefore ATM services are not properly available in rural areas.

Mobile Banking

Definition

- Mobile banking (m-banking) refers to the use of a mobile device like a smartphone or tablet to perform banking activities.
- It is done through a mobile app, USSD, or SMS.
- The key difference between mobile and internet banking is that the former uses a mobile device while the latter employs a desktop or PC.



Types of service in M-banking

Account information access: Account information access allows clients to view their account balances and statements .

Transactions: enable clients to transfer funds to accounts, self-account transfers, pay third parties (such as bill payments), and make purchases.

Investments: enable clients to manage their portfolios or get a real-time view of their investment portfolios (term-deposits, etc.)

Support services: enable clients to check on the status of their requests for loan or credit facilities, follow up on their card requests, and locate ATMs.

Content and news: Content services provide news related to finance and the latest offers by the bank or institution.

Smart Cards

Concept

- A smart card is a small sized card which has a programmable microprocessor chip.
- The chip has the ability to store data, carry out on-card functions,
- These cards are mainly used for making payments and storing relevant information.
- **Example:** ID card, Debit card, Transportation card, medical card.



Benefits of Smart Card

More secure: Smart cards offer more security and confidentiality than any other financial or transaction card on the market.

Safe to transport: These cards give the holder the freedom to carry large sums of money. They are also safe because the cards can be easily replaced.

Time-saving: Making a payment with a smart card saves a lot of time because its chip contains details about the owner.

Less expensive: Smart cards are less expensive and provide faster transaction.

Drawbacks of Smart Card

Easily Lost: Smart cards are small, lightweight and can be easily lost if the person is irresponsible.

Security: Smart cards are secure for many applications, but they are still vulnerable to certain types of attack.

Slow Adoption: If you used as a payment card, not every store or restaurant will have the hardware necessary to use these cards.

Types of Smart Cards

Contact Smart Cards

- These cards require physical contact with the card reader. These cards are inserted into the card reader, which reads the information stored on the contact plate and carries out the required transaction such as ATM Card, SIM Card.

Contactless Smart cards

- Require only nearness to a card reader to be read; no direct contact is necessary such as ID card, medical card.

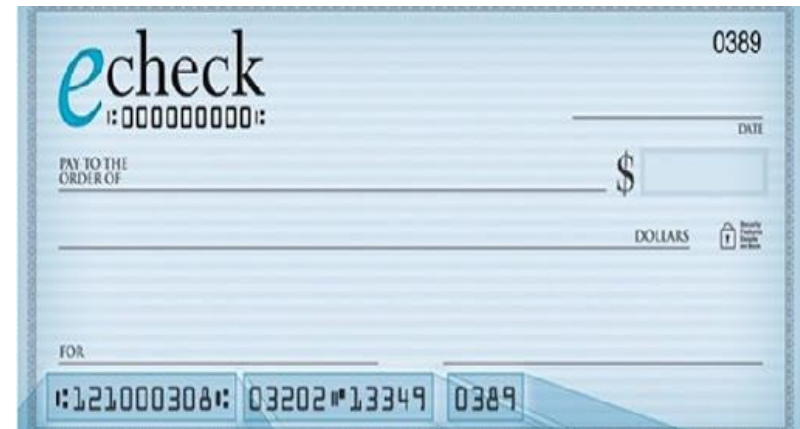
Hybrid smart Card

- These cards are a combination of both the cards mentioned above. They can work as contact smart cards as well as contactless smart cards depending upon the occasion such as master card.

E -Check

Concept of E-check

- An e-Cheque is the electronic version or representation of paper cheque.
- The Information and Legal Framework on the E-Cheque is the same as that of the paper cheque.
- It can now be used in place of paper cheques to do any and all remote transactions.



Benefits E -Check

Save time : Traditional paper checks can take 4 to 5 days to arrive, while e- checks move at the speed of email and give you the power to pay in 4 to 5 seconds.

Save Money: With traditional paper checks you're paying for the paper check, envelope, stamp, and time involved in preparing the check and getting it ready to mail. An e-check costs right around the cost of a stamp, but does the work of a check, an envelope and a stamp at a fraction of the cost. This saves you roughly \$1 per check.

Pay More Safely : It doesn't take a high level of sophistication for a fraudster to walk up to an unattended mailbox and steal the contents



Thanks



Week 14 & 15

Chapter 6

Technology in Marketing

Chapter Objectives

- Learn about the concept of Marketing information system and its role in enhancing marketing functions.
- Explore the concepts digital Marketing and its how it is different than traditional marketing.
- Demonstrate the role digital marketing the recent to ensure customers satisfaction.

Marketing Information System (MkIS) ?

- **A marketing information system (MIS)** is a set of procedures and methods used to gather, analyze, and interpret information related to marketing decisions.
- It is a computer-based system that collects data from various sources, such as internal records, surveys, and external databases, and transforms it into actionable insights for marketing managers.

Role of the MkIS

- **Market Monitoring:** MkIS enables the marketing managers to monitor of the market environment including consumer behavior, competitor activities, new technologies, and governmental policies.
- **Strategy Development:** It provides the information to support strategy development for new products, product positioning, pricing, selling, distribution and customer service.
- **Strategy Implementation:** The MkIS provides support for product launches and enables decision makers to more effectively manage the sales force as well as customer relationships.
- **Functional integration.** The MkIS enables the coordination of activities within the marketing department and other organizational functions such as engineering, production, finance etc.

Components of Marketing Information System

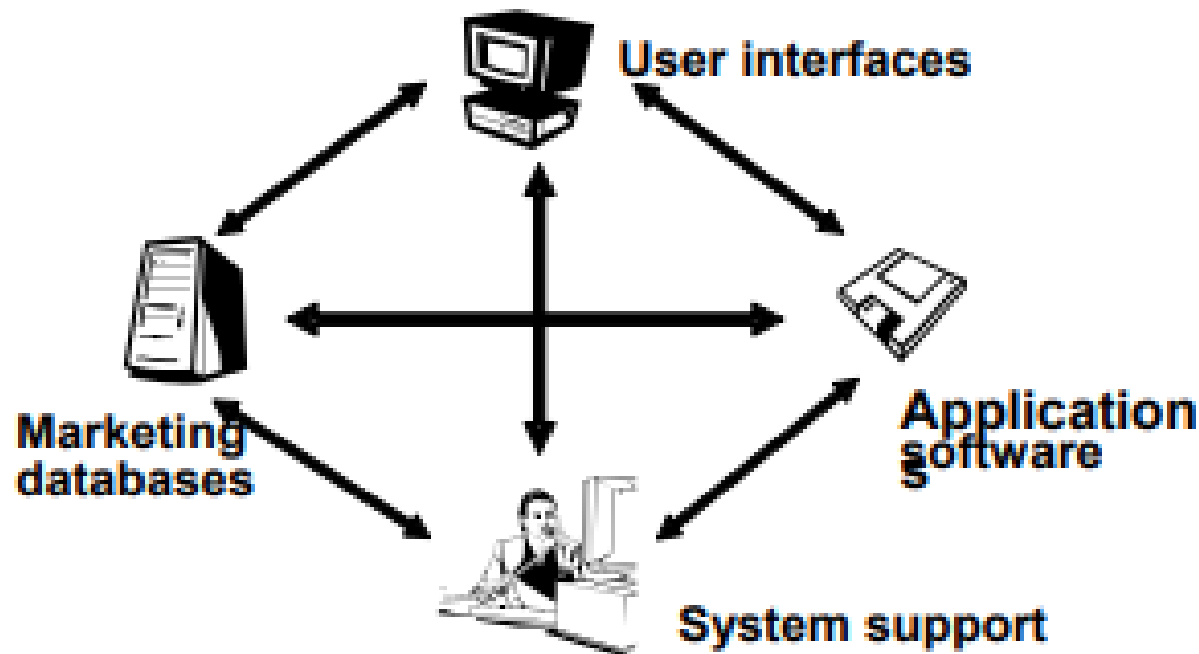


Figure 3. MkIS Functional Components

Components of Marketing Information System

- **User Interfaces.** The essential element of the MkIS is the managers who will use the system. The interface also includes the type of hardware that will be used, the way information is analyzed, formatted and displayed, and how reports are to distributed, costs and securities.
- **Applications Software.** These are the programs that marketing decision makers use to collect, analyze, and manage data for the purpose of developing the information necessary for marketing decisions. Examples include the marketing decisions support software (MDSS).

Components of Marketing Information System

- **Marketing Databases.** A marketing database is a system in which marketing data files are organized to store. Data may be collected from internal and external sources but can be organized in a flat file.
- **System Support.** This component consists of system managers who manage and maintain the systems assets including software and hardware network, monitor its activities and ensure compliance with organizational policies. This function may also include a help desk for system users.

Meaning of Digital Marketing

- Basically, digital marketing is the fundamental term that includes each and every online marketing effort.
- In digital marketing, companies make use of all the digital channels to reach the existing and potential customers.
- The channels may include Google search, social media, email, websites, so on and so forth.



Importance of Digital Marketing?

- **Highly Cost-effective:** Small scale business or startup with minimum capital investment can find a better and budget-friendly channel to promote their products and services.
- **Connect with customers via powerful content:** On the internet, content is regarded as king, that can influence your audience right away if you have the powerful content.
- **Increases conversions:** The rate of incoming traffic converted into the customers often determines the success of digital marketing.

Importance of Digital Marketing?

- **Higher revenue generation:** When customer engagement and conversion is higher, it will reap higher profits for your business. And so, the businesses can expand both domestically and internationally.
- **Creating brand awareness:** Digital marketing helps the firm in creating brand awareness among customers, by keeping them updated about the new products, offers, discounts, etc.

Traditional Vs. Digital Marketing

BASIS FOR COMPARISON	TRADITIONAL MARKETING	DIGITAL MARKETING
Meaning	Traditional Marketing refers to the marketing that uses traditional channels or media, for the purpose of marketing communication.	Digital Marketing implies the marketing of products and services via digital channels, such as the internet, smartphone, display ads, and other digital medium.
Conversion	Slow	Comparatively fast
Engagement	Low	Comparatively high
Effectiveness and expensiveness	Less effective more expensive	Less expensive more effective
Tracking	Not possible	Possible
Targeting	Standardized	Customized
Communication	One-way Communication	Two-way Communication

Pros of Digital Marketing

- **Targeted reach:** It allows businesses to target specific audiences based on demographics, interests, and online behavior.
- **Cost-effectiveness:** This medium often requires lower financial investments compared to Traditional Marketing channels.
- **Flexibility and agility:** This medium allows for quick adjustments and modifications to Marketing campaigns based on real-time data and insights.
- **Brand Development:** It is critical to creating a brand image for the goods or services through marketing so that people regard it as a reputable and trusted name

Cons of Digital Marketing

- **Visible complaints and negative feedback:** your target audience can see what other users have to say about your product or service—bad or good. This can be a blessing or a curse, depending on the quality of your product or service.
- **Technical expertise required:** Implementing digital Marketing campaigns require to hire professionals or invest in training.
- **Privacy issues:** With online marketing, you need to be very careful how you use the information of consumers. You have to be careful not to breach their privacy or security terms.
- **Dependency on technology:** Digital Marketing heavily relies on technology infrastructure and platforms

Cons of Digital Marketing

- **Dependency on technology:** Digital Marketing heavily relies on technology infrastructure and platforms
- **Competitiveness:** Online marketing is inarguably the order of the day. Every company has a social media account, a website, and most likely, a digital marketing company to handle these tasks for them. This makes digital marketing very competitive.



Thanks



Week 16 & 17

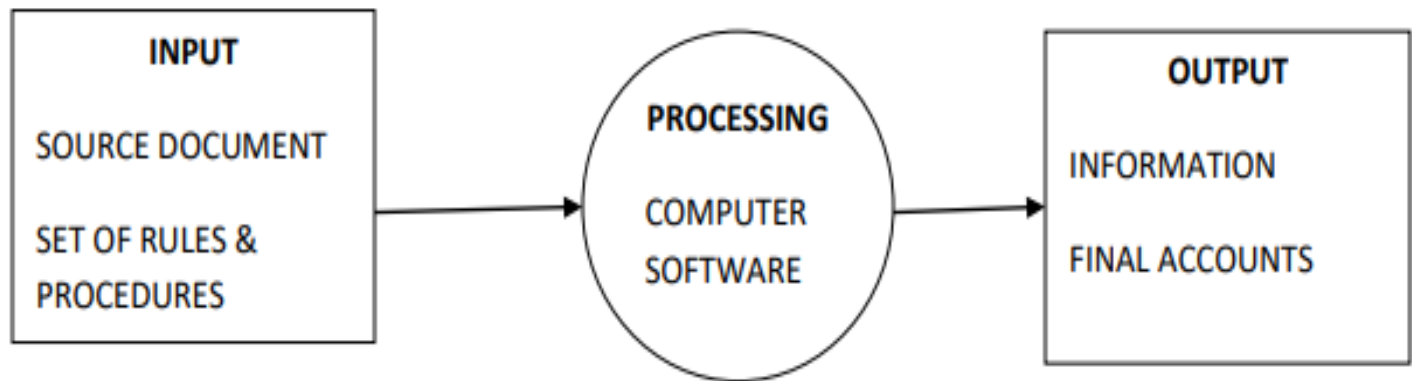
Chapter 7: Computer Technology in Accounting

Chapter Objectives

- Understanding the basics of Computerized Accounting Systems (CAS).
- Explore the Importance and advantages of using computerized systems over manual method.
- Learn about the components of CAS and how it is different than Manual accounting system
- Identify the limitations of CAS.

Computerized Accounting system and Its Components

As its name suggests, "computerized accounting" is accounting done with the aid of a computer. It tends to involve dedicated accounting software and digital spreadsheets to keep track of a business or client's financial transactions.



Computerized Accounting System

Input: The input is the accounting data which is obtained from details of each transaction. Input is set of accounting rules and procedures which are coded in accounting software are run by computers when transactions are processed by systems.

Processing: In this stage the accounting data is processed as for accounting rules of double entry system of book keeping.

Output: The basic output of this system is trading account, profit and loss account, and balance sheet. Computerized accounting system produces these final accounts automatically and on user's request.

Need of Computerized Accounting system

- i) **Numerous transactions** : The computerized accounting system is capable of handling large number of transactions with speed and accuracy.
- ii) **Instant reporting** : The computerized accounting system is capable of offering quick and quality reporting because of its speed and accuracy.
- iii) **Reduction in paper work** : A manual accounting system requires large physical storage space to keep accounting records/books and vouchers/ Documents.

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Need of Computerized Accounting system

iv) Flexible reporting : The reports of a manual accounting system reveal balances of accounts on periodic basis while computerized accounting system is capable of generating reports of any balance as and when required and for any duration which is within the accounting period.

v) On-line facility : Computerized accounting system offers online facility to store and process transaction data so as to retrieve information to generate and view financial reports.

Basic Requirements of CAS

The basic requirements of any computerized accounting system are the following:-

- i) **Accounting framework** : It is the application environment of the computerized accounting system. A healthy accounting framework in terms of accounting principles, coding and grouping structure is a precondition for any computerized accounting system.

- ii) **Operating procedure** :The computerized accounting is one of the database-oriented applications wherein the transaction data is stored in well-organized database. The user operates on such database using the required interface and also takes the required reports by suitable transformations of stored data into information.

Difference Between Manual Accounting and CAS

Basis	Manual Accounting	Computerized Accounting
1. Recording	Recording of financial transactions is through books of original entry.	Data content of these transactions is stored in well designed data base.
2. Classification	Transactions recorded in the books of original entry are further classified by posting them into ledger accounts.	No such data duplications is made. In order to produce ledger accounts the stored transaction data is processed to appear as classified so that same is presented in the form of report.
3. Summarising	Transactions are summarized to produce trial balance by ascertaining the balances of various accounts.	The generation of ledger accounts is not a necessary condition for preparation of Trial Balance.
4. Adjusting	Adjusting entries are made to adhere to the principle of matching.	There is nothing like making adjusting entries for errors and rectifications.
5. Financial Statements	The preparation of financial statements assumes availability of trial balance.	The preparation of financial statements is independent of producing the trial balance.

Limitations Computerized Accounting

- **System Failure:** The danger of a system crashing due to some failure in hardware can lead to subsequent loss of work. This occurs when no back-up is retained.
- **Time Consuming:** In order to avoid loss of work at the time of system failure, there is a need for providing backup arrangements which is a time consuming process.
- **Unanticipated Errors not Known:** Unlike human beings, computers do not have the capability to judge or detect unanticipated errors in the system.
- **Breaches of Security:** The danger of viruses and hacking into the system from outside creates a strong need for security of system. Similarly, the person who has created the specific program can easily defraud by tampering with the original records.



• Thank You