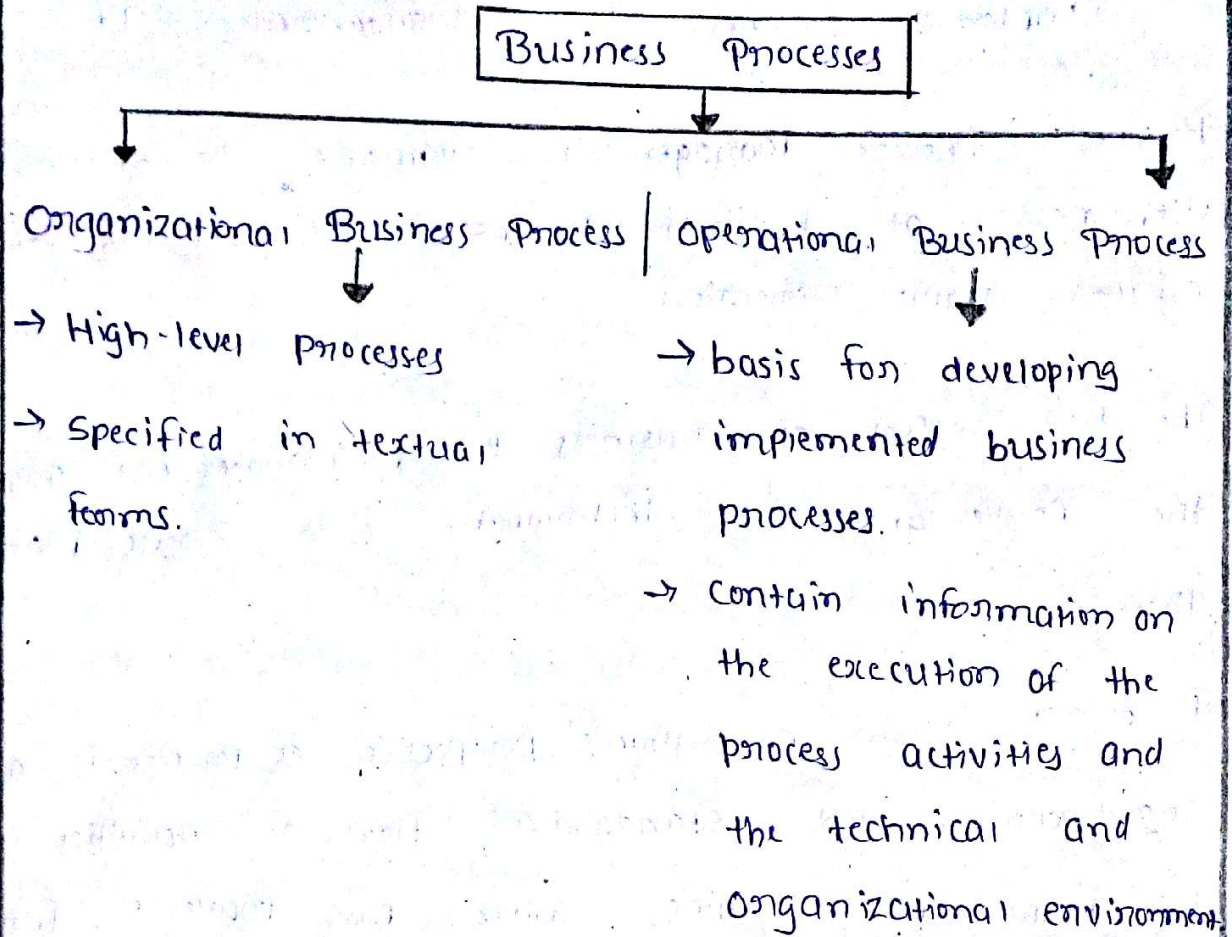


Subject:- Information Technology

Chapter-1- Business Process Management & IT

- (1) Business Process Management evaluates the efficiency and usefulness of business processes for reducing cost and ensures value creation.
- (2) The key concept of Business Process Management (BPM) is the convergence of technologies with process management theories.
- (3) Process :- From a Business perspective, a process is a coordinated and standardized flow of activities performed by people or machines, which can traverse functional or departmental boundaries to achieve a business objective and create value for internal or external customers.
- (4) A Business Process consists of a set of activities that are performed in coordination in an organizational and technical environment.
- (5) Examples of key business processes life cycle pertaining to accounting, sales, and purchase and finance.

(6) Classification of Business Processes



(7) Business Process Management (BPM) is defined as the achievement of an organization's objectives through the improvement, management and control of essential business processes. It refers to the closed loop, iterative management of business processes over their complete life cycle.

⊕ BPM Principles :- PVC pipes

- ↳ Processes are Assets
- ↳ Value to Customers.
- ↳ Continuous improvement of processes.

④ BPM Practices :-

AAP TO (UC)² browser use karte hai.

- ↳ Appoint Process Owners
- ↳ Align Employee Rewards to Process Performance.
- ↳ Process - Oriented organizational Structure
- ↳ Top - Down commitment, bottom-up execution,
- ↳ Use Information Technology to Manage Processes
- ↳ Collaborate with Business Partners.
- ↳ Utilize BPR, TQM and other process improvement tools.
- ↳ Continuous Learning and Process Improvement.

(8) Business Process Management Life cycle. - ADIRO

- Analysis
- Design
- Implementation
- Run & Monitor
- Optimize.

(9) Success Factors of BPR. - AE OBBO [Just like OPPO]

- Adequate IT Infrastructure.
- Effective Change Management.
- Organization wide commitment.
- BPR Team Composition.
- Business need analysis
- Ongoing continuous improvement

(10) Key factors to consider in implementing BPM.

Ye, IT(s)³m hai G(ii), tough to hoga na.

- Investments to make
- Tools to be used,
- Scope
- Skills Required
- Sponsorship / Buy-in-Needed
- Methods to be used
- Goals

(11) Need for a BPM implementation.

- Business Process Management is a prerequisite for organizational competitiveness. It includes establishing and maintaining an environment in which people working together perform a specific job efficiently.

(12) BPA* Benefits & Risks. * Business Process Automation.

- ⊕ Benefits -
 - ↳ Savings on costs
 - ↳ Staying ahead in competition
 - ↳ Fast service to customers.
- ⊕ Risks -
 - ↳ Risk to jobs
 - ↳ False sense of security.

(13) Accounting Information System (AIS) is defined as a computer based system of collection, storage and processing of financial and accounting data that is used by decision makers.

⊕ Basic function of AIS.

- Collection and store data.
- Record Transaction,
- Safeguard organizational Assets.

⊕ Processing cycles of Accounts BPM.

→ FINANCE le kar HR se people recruit karo aur purchase and EXPENSE karo, fin. PRODUCTION karke sale karo aur REVENUE generate karo aur GENERAL LEDGER AND REPORTING SYSTEM mein data process karke report generate karo.

(14) Approaches to Mapping System.

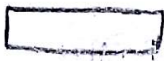
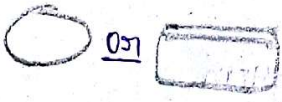
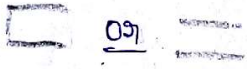

(A) Entity - Relationship Diagram.

→ EIR Modelling is defined as a data modelling technique that creates a graphical representation of the entities and the relationships between entities within an Information System.

- Entity - Represented by Rectangle - denotes a physical object, an event or a concept.
- Relationship - Represented by Diamonds - denotes an association that exists between two entities.
- Attributes - Represented by ovals.

(B) Data Flow Diagram.

→ A DFD illustrates technical on business processes with the help of the external data stored, the data flowing from a process to another, and the results.

Term	Symbols	Meaning
Entity		the source or destination of data, referred as agents. terminators terminators or source/sink.
Process		receives input and generates some output.
Data Store		where a process store data. Files and tables are considered as data stores.
Data Flow		movement of data between the entity, the process and the data store.

(C) Flowchart

→ A Flowchart is a diagram prepared by the programmer of the sequence of steps involved in solving a problem.

Type of Flowchart

Explanation

- Document Flowchart traces the physical flow of documents through an organization.
- System Flowchart depicts the electronic flow of data and processing steps in an information system.
- Program Flowchart most detailed and concerned with the logical / arithmetic operations on data within the CPU and the flow of data between the CPU on the one hand and the input / output peripherals on the other.

(D) Decision Tree

- Also termed as a Inference or Logical tree.
- It is a tree-like representation and is defined as a collection of a basis (~~situation~~) (condition) and a conclusion (action) and is a one way to display an algorithm.

(E) Decision Table

→ It is a table which may accompany a flowchart defining the possible contingencies that may be considered within the program and the appropriate course of action for each contingency.

→ It is divided into four quadrants -

- ↳ Condition Stub,
- ↳ Condition Entries,
- ↳ Action Stub and
- ↳ Action Entries.

(15) Six Sigma:- DMAIC

- Define
- Measure
- Analyze
- Improve
- Control

(16) Types of Relationships in E/R Model

- (i) one-to-one Relationships (1:1)
- (ii) one-to-many Relationships (1:N)
- (iii) many-to-one Relationships (M:1)
- (iv) many-to-many Relationships (M:N)

(17) Difference between Flowchart and Data Flow Diagram

Flowchart

→ Presents step to complete a process.

→ does not have any input from or output to an external source.

→ timing and sequence of the process is shown by a flowchart.

→ Shows how to make a system function.

→ used in designing a process.

→ Types - System, Data, Document and Program

Data Flow Diagram

→ Present the flow of data.

→ describes the path of data from an external source to internal source or vice versa.

Whether processing of data is taking place in a particular order or several processes are taking place simultaneously is described by DFD.

→ defines the functionality of a system.

→ used to describe the path of data that will complete the process.

→ Types - Physical Data Flow and Logical Data Flow.

(18)

Benefits and Limitations of Flowchart.

⊕ Benefits :-

Quicker and Efficient CP bhi ED Co (ko) kuch nahi keh Sakta.

- Quicker grasp of relationships.
- Efficient coding.
- Efficient program maintenance
- Effective Analysis
- Documentation
- Communication
- Orderly check out of problem.

⊕ Limitations :-

- CL RMS
↓ ↓
Company Law Railway Mail Service
- Complex Logic
 - Link between conditions and actions
 - Reproduction
 - Modification
 - Standardization

(19)

Major reasons for failure of BPMs.

- Inadequate investment in ongoing training for involved personnel;
- Lack of corporate policy protecting the integrity of the data in the BPM Systems;
- Superficial or deficient executive involvement;
- Deficient project management;

- Breakdown in gap analysis;
- Limited options for customization of the BPM Software are required;
- Not flexible enough or too complicated to be customized to meet the precise workflow and business process;
- Failure to identify future business ~~with~~ needs;
- Inadequate assessment of the need for change management;
- Persistent compatibility problems with the diverse legacy systems of the partners;
- Resources not available when desirable;
- Software fails to meet business needs;
- System may be over-engineered when compared to the actual requirement; and
- Technological obsolescence.

(20) Data Processing Cycle.

- Data Input
- Data Storage
- Data Processing
- Information output