UNIT–3

Business Process Automation and ERP

Introduction:

Business process automation is the technology that executes difficult tasks or processes in a business where manual effort can be replaced. It is done to minimize costs, increase efficiency and streamline processes.

Without automation, the following issues could come:

- Delayed Purchase Order approval
- Impacted productivity
- Incomplete records
- Errors in the Purchase Order
- Errors while taking delivery of the supplies

Business process automation can help improve accountability, transparency, and enable accurate data recording, which can be accessed by relevant stakeholders when necessary.

Some factors that can indicate the need for automation include

1. High-volume of tasks
2. Multiple people required to execute tasks
3. Time-sensitive nature
4. Significant impact on other processes and systems
5. Need for compliance and audit trails

If an activity meets all the criteria listed above, it's very likely you need to automate your business process.

To give you a clearer picture, here are some commonly automated processes in organizations.

- E-mail and push notifications
- Helpdesk support
- Creating customer case studies
- Backup and restoration
- Employee leave requests
- Sales orders
- Time and attendance tracking

Organization Structure:

An **organizational structure** is a system that represents how certain activities are performed to achieve the goals of an **organization**. These activities can include rules, roles, and responsibilities. The organizational structure also determines how information flows between levels within the company.

Types of Organizational Structures:

1. Functional Organization Structure
2. Product Organization Structure
3. Geographic Organization Structure
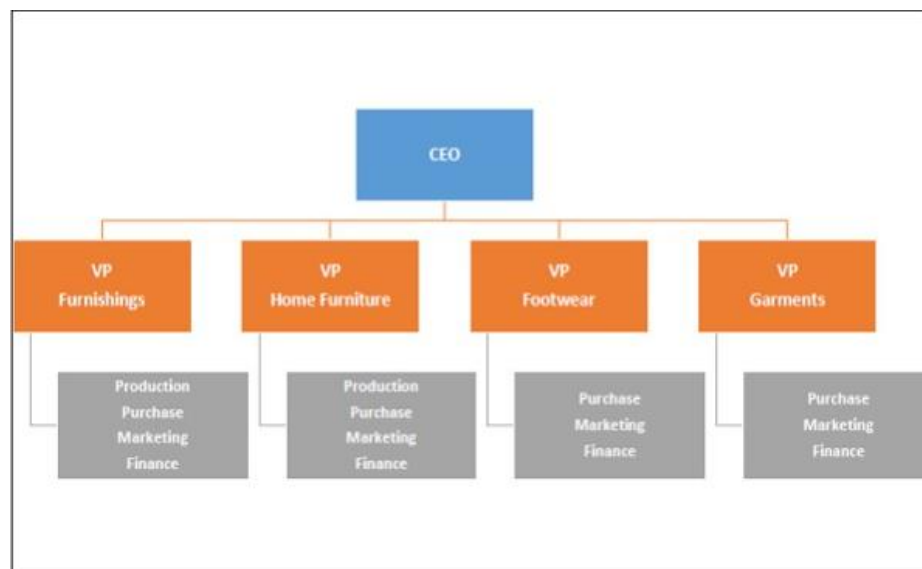4. Matrix Organization Structure

1. **Functional Organizational Structure:**

It is the common structure found in most organizations. It starts with positions with the highest levels of responsibility at the top and goes down from there. Primarily, employees are organized according to their specific skills. Each separate department is managed independently.
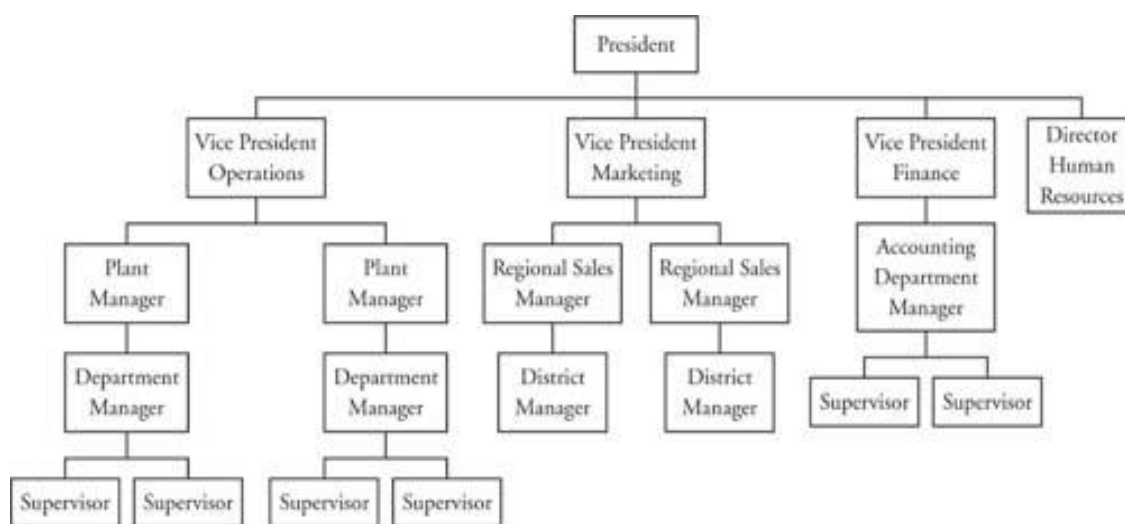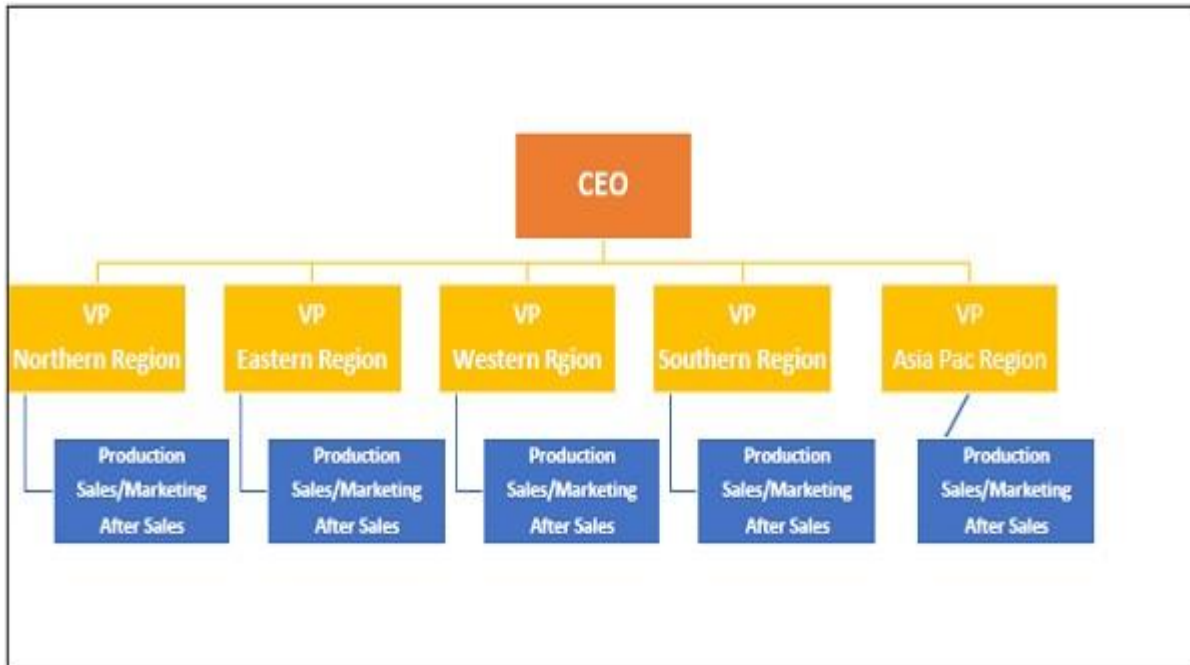

2. Product Organizational Structure:

This is another commonly used structure, where organizations are organized by a specific product type. Divisions are separated by product line. For ex,


3. Geographic Organizational Structure:

The structure is based on geographic regions. Divisions are separated by region.

4. Matrix Organizational Structure:

A matrix organizational structure looks like a grid and it shows cross functional teams that form for special projects. For ex, an engineer (led by an engineering director) may regularly belong to the engineering department but work on a temporary project (led by a project manager).
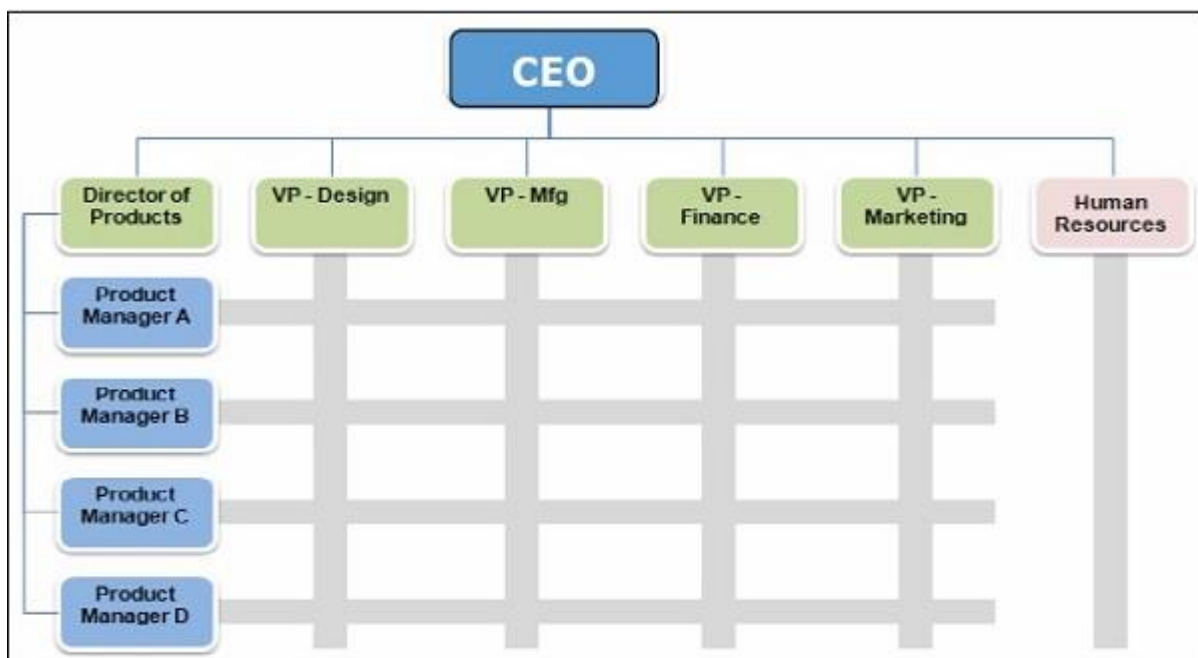
Functional Units:

A typical organization has different functional units, such as the Human Resources, Finance, Marketing, Sales, Operations, IT etc. Each unit is managed by a functional manager who reports to the organization.

Workflow:

The workflow the series of activities that must be carried out in a specific order to accomplish a set business objective.

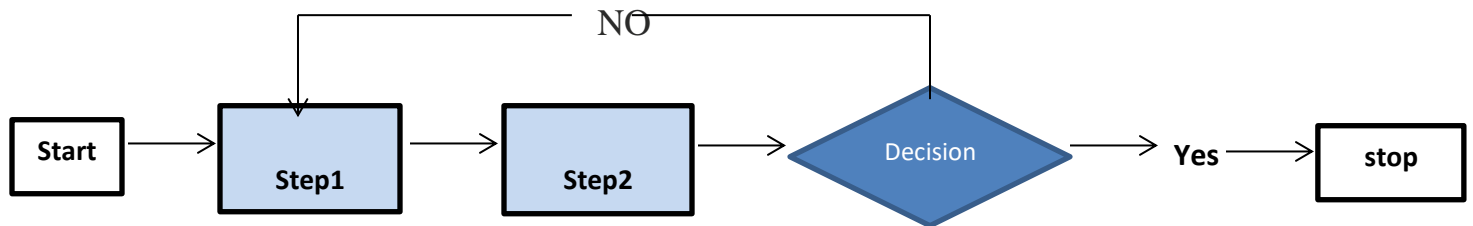Figure shows a simple and general workflow to get an idea about how work flow looks like

Fig. General Workflow example

Workflow Process Components Overview

Each workflow process is defined by one or more of the following components. These components are discussed at greater length below.

- **Activity**– Represents a single, logical step in the process.
- **Action**– Defines how an activity is accomplished. An action can be a simple expression evaluation or a call to a complex Java class.
- **Transition**– Defines the movement from one activity to the next.
- **Split**– Defines the movement from a single activity to more than one activity.
- **Join**– Defines the movement from multiple activities to a single activity.