BUSINESS ANALYSIS

INTRODUCTION-

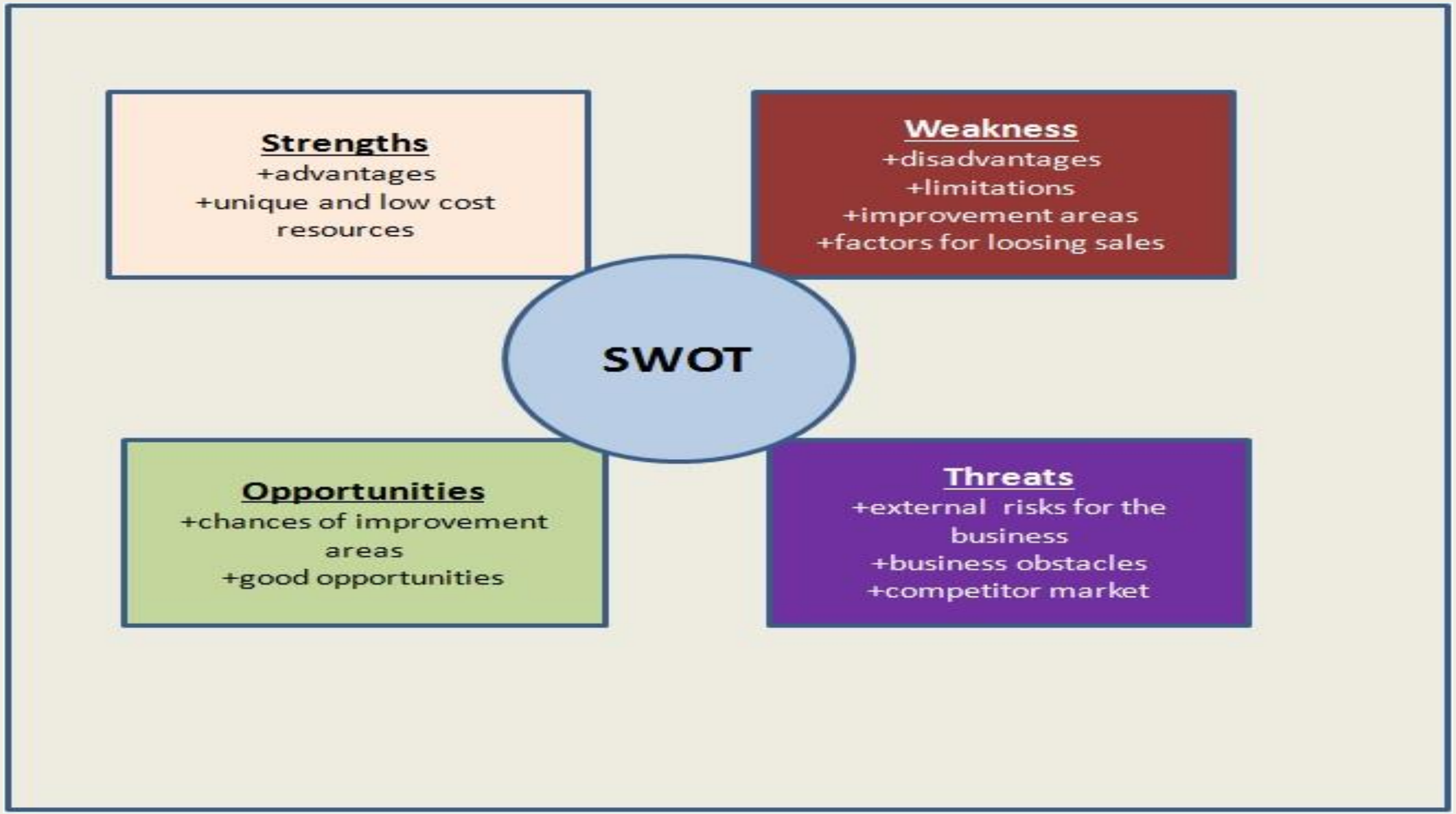
- Business Analysis is the set of tasks, knowledge, and techniques required to identify business needs and determine solutions to enterprise business problems. Although, the general definition is similar, the practices and procedures may vary in various industries.
- In Information technology industry, solutions often include a systems development component, but may also consist of process improvement or organizational change.
- Business analysis may also be performed to understand the current state of an organization or to serve as a basis for the identification of business needs. In most cases, however, business analysis is performed to define and validate solutions that meet business needs, goals, or objectives.

- 10 most popular business analysis techniques that are widely used in the industries-

1. SWOT Analysis

The term SWOT stands for its four elements–

- S- Strength
- W- Weakness
- O- Opportunities
- T- Threats
- It is a thorough analysis conducted by a business analysis considering
- The internal factors as Strength and Weakness
- The external factors as Threats and Opportunities
- SWOT analysis is a four-quadrant analysis for a business analyst where he places the data as the answers for each quadrant. A business analyst answers the questions under each of the quadrants.


Strengths
+advantages
+unique and low cost resources
Weakness
+disadvantages
+limitations
+improvement areas
+factors for loosing sales
SWOT
Opportunities
+chances of improvement areas
+good opportunities
Threats
+external risks for the business
+business obstacles
+competitor market

ADVANTAGES OF SWOT

- SWOT analysis is one of the most popular business analysis techniques followed in the industry.
- Furthermore, it is easy. It is an enterprise level analysis technique and not only limited to business analysis.
- It could be used at any stage of the project if the unit needs it and most of the people know it. Hence, it is widely used in the industry.

2.MOST ANALYSIS

- MOST analysis is a powerful business analysis framework and among the best business analysis techniques using which the business analysts analyze what an organization does and plans to achieve the goal and what it should do to maintain strategic alignment. Hence, MOST analysis is a clear way to understand an organization on its ability and purpose.
- The term MOST stands for its four elements –
- M-Mission
- O-Objective
- S-Strategy
- T-Tactics


Objectives
Key goals that help achieve the mission
Strategies
Options to achieve the objectives
Mission
Organization's purpose
MOST
Tactics
How the strategies will be materialized by action

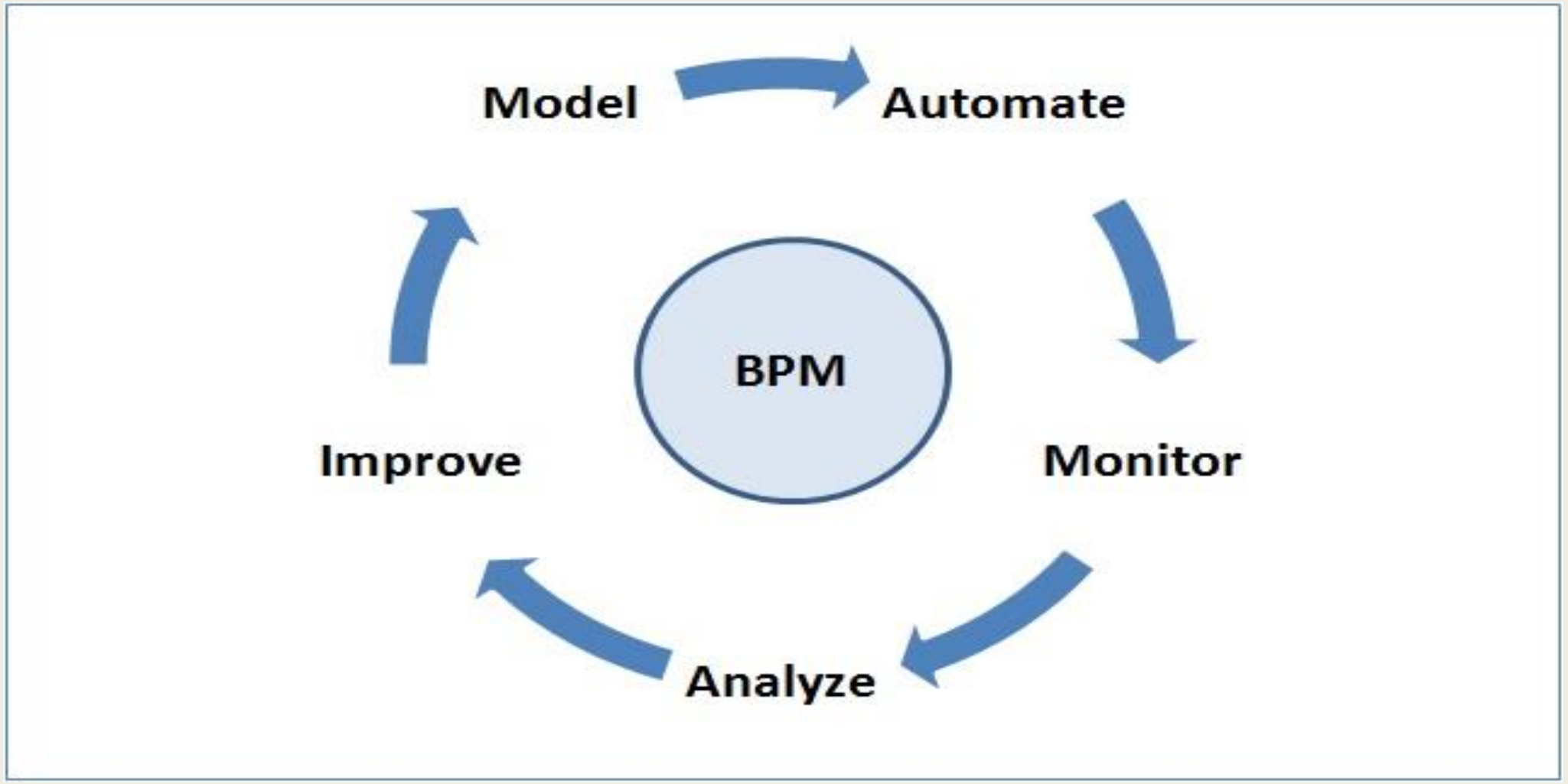
- Each of the factors with their purposes.
- ***Mission*:** This is the most critical factor for an organization which defines its purpose and the goals it wants to achieve in the future. If the mission is specific, then it is easier to analyze and measure the remaining factors.
- ***Objectives*:** We can consider objectives as a collection of goals which as an accumulated result in the mission of the organization. Moreover, Objectives must be S.M.A.R.T –
- S- Specific
- M-Measurable
- A-Achievable
- R-Realistic
- T-Timely

- ***Strategy*:** This is the steps or actions that an organization takes to achieve the objectives and finally to accomplish the mission. A strategy is a group of tactics.
- ***Tactics*:** These are the discrete and straightforward methods which an organization follows to carry out the strategies.
- ***Advantage*:**
- MOST analysis is a structured business analysis technique followed by every working level in an organization from the top to down. The process ensures that an organization retains focus on the mission which is the critical factor for the success of an organization.

3.BUSINESS PROCESS MODELLING

- Business Process Modelling is all about process improvement. It is a legacy process, however, often used as a business analysis technique during the analysis phase of a project to understand or analyze the gaps between existing business process and future business process that business is opting for.
- As per the International Institute of Business Analysis (IIBA), business analysts perform the below tasks in a BPM project:
- Strategic planning
- Business Model Analysis
- Defining process and design it
- Technical Analysis for complex business solutions

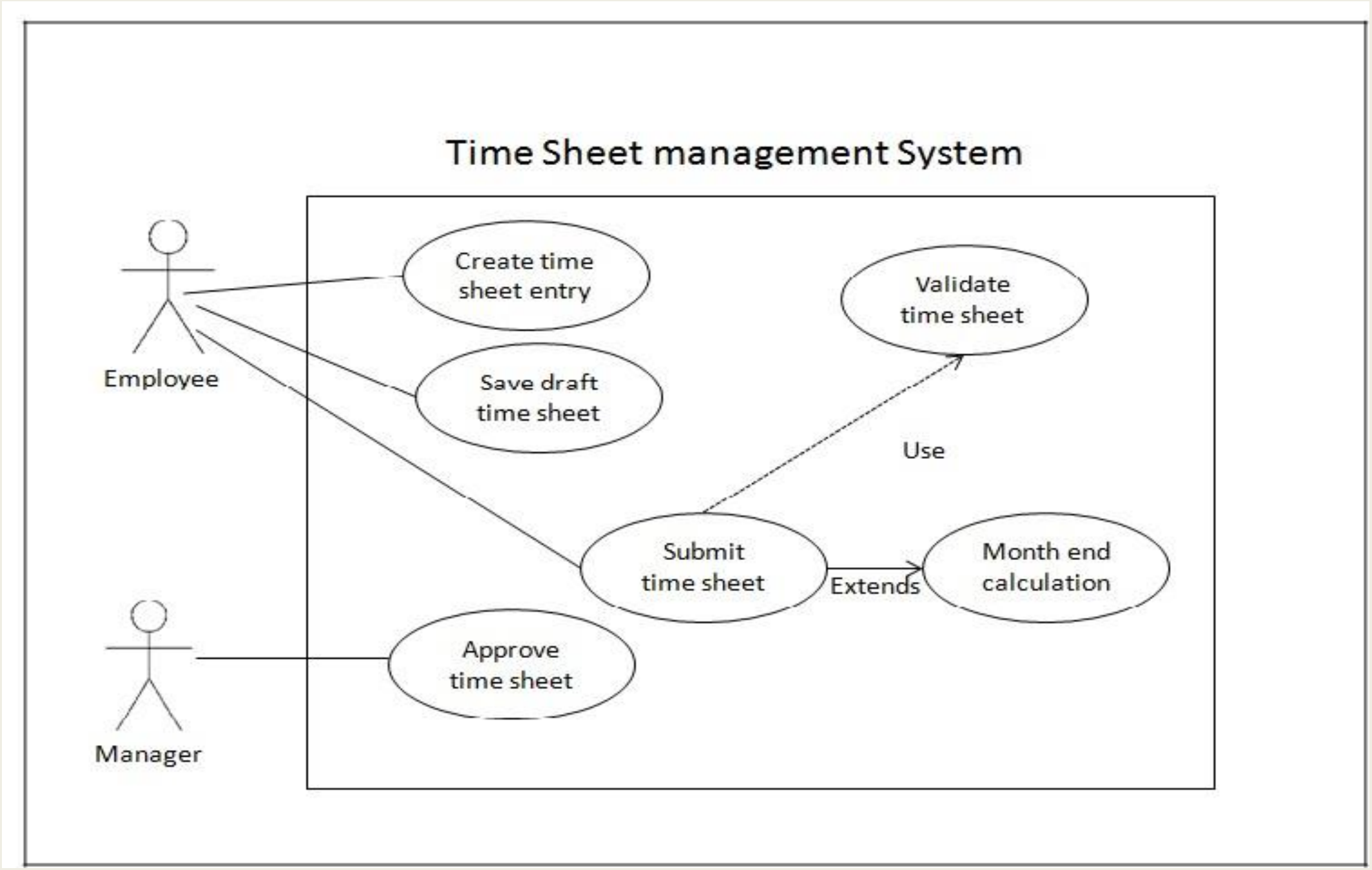
Usually, BPM is represented in a diagrammatic way where process, decisions, and information are represented as a sequential workflow. There are two types notations used for BPM diagrams.



- Usually, BPM is represented in a diagrammatic way where process, decisions, and information are represented as a sequential workflow. There are two types notations used for BPM diagrams
- BPMN – Business Process Modelling Notation
- UML – Unified Modelling Language Activity Diagram
- ***Advantage*:**
- BPM technique is an easy way to logically represent how a business process will operate by different roles. Moreover, it is one of the best business analysis techniques recognized in the industry, especially in IT industry. Hence, people can easily visualize the sequential steps of the perform for a business analyst.

4.USE CASE EXECUTION PROCESS

- **Use Case** execution process. This, in turn, helps to make complex business analysis more straightforward to **Modelling**
- Use case modelling is the technique to pictorially illustrate how the business functions should work in a proposed system through user interactions. This is mainly used in software development project and in the design phase to transform business requirements into functional specifications within an existing development project. There are different tools used to draw UML diagrams such as Microsoft Visio, IBM’s Rational Rose, etc.


Time Sheet management System
Employee
Create time sheet entry
Save draft time sheet
Validate time sheet
Use
Submit time sheet
Extends
Month end calculation
Manager
Approve time sheet

- The primary components of use case modelling in a UML diagram are –
- **System** – The outline of the diagram is represented as the system. In the above diagram, the rectangular box is depicted as the Timesheet management system.
- **Use case** – In a UML diagram UML case is represented by an oval shape, and an individual use case represents a single functionality. In the above example Create tome sheet entry, Validate time sheet, save draft, etc. are separate functionalities that are executed as part of Timesheet management process. As per the convention, every action in the use case is represented using an active verb
- **Actors** – The human-like shape in the diagram represents the user who is associated with the use case or functionality. They are not part of the process. Hence, we represent them outside the rectangular box.
- **Association**- An actor's interaction with the system via use cases is known as an association. In the above diagram, we can see the Employee and Manager both the actors are interacting with the system through different use cases.
- **Stereotypes**- The relationships between the use cases are known as Stereotypes. There are two types of Stereotypes –
  - *<<uses>>*
  - *<<extends>>*

- *Advantage*:
- The UML Use Case Diagram is a very useful Business Analysis technique to clarify and demonstrate the scope of functionality. A Business Analyst must emphasize much more on the key functional areas. Hence, proper actor interactions using the UML Use Case Diagram help in this process. A UML diagram helps to get the original functional requirements with the business which is more important from the Business Analysts point of view.

4.BRAINSTORMING

- This is a group activity and one of the most popular business analysis techniques among the business analysts. This is a very creative technique where a group activity is performed to generate ideas, root cause analysis and proposing solutions for the problems. Not to mention Brainstorming works as an underlying technology for other business analysis techniques including SWOT analysis, PESTLE analysis, etc.

6.NON- FUNCTIONAL REQUIREMENT ANALYSIS

- This business analysis technique is used when a technology solution is changed. For example migration from one technology to another which enforces builds from scratch. In this type of analysis technique, a business analyst mainly focuses on system performance and data storage requirements to measure the performance factors of the proposed system for live data. This is performed during the Analysis phase of a project and implemented during the Design phase.
- Non-functionality requirements can be of various types for example:
- Performance
- Security
- Logging
- Reliability
- ***Advantage*:** This is the easiest and one of the best business analysis techniques. Moreover; it has importance as without this analysis obtaining an intended result is relatively impossible.

7.PESTLE ANALYSIS

- There are always environmental factors which influence business in its strategic planning. These key factors are commonly known as PESTLE which stands for –
- P- Political
- E – Economic
- S – Social
- T – Technological
- L- Legal
- E – Environmental
- *Advantage*:
- PESTLE is a simple and easy framework for business analysis which involves cross-functional skills of a business analyst along with his expertise. With an effective PESTLE analysis, we can reduce the potential threats of an organization. Moreover, it opens up the scopes to exploit the opportunities for entering into new markets globally.
-

Following are some of the key factors which drive the PESTLE parameters. Hence, the task of a business analyst is to apply PESTLE analysis technique to understand and identify the factors within the environment of the organization operates and analyze how those PESTLE factors will influence the future performance of the organization.

8.REQUIREMENT ANALYSIS

- Requirement analysis is a part of the project lifecycle, and it usually starts at the stage when business stakeholders propose a solution. As part of requirement analysis technique, a business analyst needs to conduct interviews to understand the intention of requirements which include –
- Questions
- Captures
- Interprets
- Workshops
- ***Advantage*:** Though requirement analysis is an informal business analysis technique almost in every project, it turns out important. Without a proper requirement analysis, a project cannot perform the right design and development. Hence, it could be considered as the most important phase of a project. Moreover, it elicits direct stakeholders involved in the project which becomes useful in a later point in time.

9.USER STORIES

- This is a modern business analysis technique mostly used in the agile model where there is a need for iterations for requirement gathering, designing and building a project. In this technique, requirements are collected from end users point of views to build the best solution.
- ***Advantage***: As the requirements are analyzed from the users' perspective, hence, the outcome of such an analysis is very much user-focused and highly effective.

10.CATWOE

CATWOE is a generic thinking way for business analysis to understand what a business is trying to achieve. It identifies what the problem areas are and how the solution will impact the business and its associated people.

- CATWOE is an acronym for
- Clients
- Actors
- Transformation
- World View
- Owner
- Environmental Constraints

- ***Advantage***: The CATWOE analysis brings up the different stakeholders' perceptions on a common platform. Hence, it provides a holistic understanding regarding assumption, the integrity of the data, ethical angle. It helps a business analyst to prioritize different perspectives depending on its merits.