

PROJECT MANAGEMENT & ENTREPRENEURSHIP

UNIT-3

Notes

PROJECT MANAGEMENT

Project Management, in a simple term, it means managing a project from end to end. The person who supervises the whole project is called the Project Manager. He supervises the resources that are available in order to finish a project. The Project Managers uses different techniques, methodologies, skills. He has the required knowledge which will help the Project achieve the objective as per the criterion which has been agreed upon by all the parties.

Scope of project management

The scope of the essential Project Management is covered in five different phases. To successfully complete the given project, a project manager has to have a good understanding of these basic five phases of the Project. They are as follows:

(a) Initializing the Project

- The benefits or the reasons to do the project is presented.
- Feasibility study is carried out (in order to know whether the objective of the project is achievable and thus can be launched)
- A document stating the objective of the Project is prepared.
- The project manager should mention the different requirement, the business case that was presented and the need of this Project in the business.

(b) Planning and Development of the Project

- In this phase, a roadmap is prepared which focusses on achieving the objective of the project in a systematic way.
- Every aspect of the project is taken into consideration for the smooth running of the Project and the required solution is also provided in the project planning phase.

(c) Project Execution

- In this phase, a team is developed for the Project.
- Resources are assigned.
- The project manager manages the execution.
- Tracking system for the progress of the project is set up.
- The status meetings are done regularly.
- The project schedule is updated as and when the planned task is finished as well as the project planning is modified as per the requirement of the situation during the execution.

(d) Project Monitoring

The third and the fourth phase of the project management go hand in hand in the process of project management.

- During this phase the Project is monitored proactively: In order to know whether the project is going as per the planning, it will also help to know whether the Project is not going over budget and whether the quality of the Project executed till now is up to the mark.

(e) Project Closing

- This phase brings about the completion of the project, and the objective of the project is achieved.
- The team members are acknowledged for their efforts they have put in for the Project.

- The learning while completing the Project is shared with everyone for future reference.
- The final documents, any reports or any other relevant documents are handed over to the team who would be operating the Project regularly.

IMPORTANCE OF PROJECT MANAGEMENT

(a) Strategic Alignment

- Strategic Alignment is the process of linking the organization's structure and resources with its strategy and the ultimate objective.
- All the clients that approach you or give you a project, have certain objectives for their own organization and this project is a step in achieving that goal.
- Project Management is important here as it can align the tasks in such a way that the project connects with the strategic alignment of the customer too.
- A project manager ensures that the project helps in fulfilling the strategic alignment of the organization.

(b) Clear Focus and Objectives

- Project Management is important as it comes up with a proper project plan for achieving the strategic goals.
- The work is divided into small tasks and the completion of these tasks leads to the completion of the project.
- If any risk or problem arises, an efficient project manager would be able to solve it without causing any delay in the project.

(c) Leadership

- Project Management provides leadership, motivation, vision, removes roadblocks and inspires the team as and when necessary.

- A project manager is like a leader whose goal is to complete the project within the time and budget and deliver what was promised.
- Without a leader, the team doesn't properly know what they have to do.
- Leader guides the team and help them to bring out their greatest work.

(d) Project Planning

- Project Management ensures that proper information is available to the organization and the clients of what can be achieved, what will be the budget, which resources would be used and the duration to complete the project.
- Without proper project management, unrealistic goals can be set which would ultimately lead to delayed or over-budgeted projects.

(e) Reduced Costs and Quality Control

- Project management reduces project costs by optimized use of resources, improving efficiency, and decreasing risks.
- As it is important to deliver what was promised to the client, the project manager ensures that the quality of the deliverables remains up to the mark.
- The projects are to be delivered really soon and such a rush may result in ignoring the quality. It's the duty of the project manager to deliver a quality project on time.

(f) Orderly Process

- Project Manager ensures that the right person does the right task at the right time.
- He ensures that the process goes according to the plan throughout the project.
- A project manager keeps in mind the known issues and make such a plan that eliminates most of the issues.
- Proper planning makes the workflow transparent as everyone is aware of who is doing what by when.

- Proper process helps in boosting the process. It ensures such a plan is made that is aligned with the overall strategy.
- Project Management is important because without an orderly and easily understandable process, the organization risks project failure.

ROLE AND RESPONSIBILITIES OF A PROJECT MANAGER

Project managers are responsible for planning, organizing, and directing the completion of specific projects for an organization while ensuring these projects are on time, on budget, and within scope. Project managers help to reduce costs, maximize company efficiencies and increase revenue. Project managers share responsibilities across what's commonly referred to as the project life cycle, which consists of five phases (or processes).

1. Initiating

- Project managers begin each new project by defining the main objectives of the project, its purpose, and its scope.
- They also identify key internal and external stakeholders, discuss shared expectations, and gain the required authorization necessary to move a project forward.

Important questions that project managers ask during the initiating phase are such as:

- 📌 Why is the project important?
- 📌 What's the specific problem we're trying to solve?
- 📌 What is the desired outcome?
- 📌 Has this project been executed before? If so, what was the result? What information from that past project should be considered in this project?

2. Planning

The plan established during this process helps project managers examine:

- Cost
- Timelines
- Risk
- Quality issues
- Communications
- Outline key deliverables and milestones
- Tasks that must be completed

3. Executing

- During this phase the project manager's role is:
- To ensure that tasks are completed as scheduled
- Protect the team from distractions
- Facilitate issue resolution
- Lead the team in working through project changes

4. Monitoring and Controlling

Monitoring and controlling processes actually commence at the beginning of a project and continue throughout planning, execution, and closing. In this phase, a project manager's work includes:

- Monitoring the progress of a project
- Managing the project's budget
- Ensuring that key milestones are reached
- Comparing actual performance against planned/scheduled performance

5. Closing

During the close of a project, project managers will:

- Work with the client to get formal sign-off
- Resources are freed who are no longer needed for the project.

- Review the work of third-party vendors or partners in order to close their contracts and pay their invoices.
- Archive project files for future reference and use.

After the project has been completed, a post-implementation review is often used to identify key lessons learned. Understanding what went well, what could be done differently, and what to stop doing can help inform and improve project management practices moving forward.

THE PROJECT LIFE CYCLE

The project manager and project team have one shared goal: to carry out the work of the project for the purpose of meeting the project's objectives. A standard project typically has the following four major phases--initiation, planning, implementation, and closure. These phases represent the path a project takes from the beginning to its end and are generally referred to as the project life cycle.

(a) Initiation Phase: In the initiation phase--

- The project objective or need is identified (this can be a business problem or opportunity)
- An appropriate response to the need is documented in a business case with recommended solution options.
- Once the recommended solution is approved, a project is initiated to deliver the approved solution and a project manager is appointed.
- The major deliverables and the participating work groups are identified, and the project team begins to take shape.

(b) Planning Phase: In this phase--

- The team identifies all of the work to be done.

- The project's tasks and resource requirements are identified, along with the strategy for producing them.
- The project manager coordinates the preparation of a project budget by providing cost estimates for the labour, equipment, and materials costs (The budget is used to monitor and control cost expenditures during project implementation).
- Once the project team has identified the work, prepared the schedule, and estimated the costs, the three fundamental components of the planning process are complete.

(c) Implementation Phase (Execution): During the third phase, the implementation phase--

- The project plan is put into motion and the work of the project is performed.
- Progress is continuously monitored and appropriate adjustments are made and recorded (as variances from the original plan).
- During project implementation, people are carrying out the tasks, and progress information is being reported through regular team meetings.
- Each project deliverable produced should be reviewed for quality and measured against the acceptance criteria.
- Once all of the deliverables have been produced and the customer has accepted the final solution, the project is ready for closure.

(d) Closing Phase: During the final closure, or completion phase, the emphasis is on--

- Releasing the final deliverables to the customer
- Handing over project documentation to the business
- Terminating supplier contracts
- Releasing project resources
- Communicating the closure of the project to all stakeholders.

The last remaining step is to examine what went well and what didn't, which will help future project teams.

TECHNICAL APPRAISAL

Technical Appraisal is the technical review to ascertain that the project is sound with respect to various parameters such as technology, plant capacity, raw material availability, location, manpower availability, etc. Usually, technical appraisal is carried out by independent agencies carrying out technical studies or by the institution by their in-house technical experts. It ensures that the project is technically feasible i.e. all the inputs required to set up the project are available.

Aspects of Technical Appraisal

(a) Manufacturing Process/Technology

- Two or more alternative technologies are available.
- The choice of technology is influenced by a variety of considerations: plant capacity, principal units, investment outlay, production cost, use by other up product mix, latest developments, and ease of absorption.

(b) Technical Arrangements

- Having a good technical collaborator or a good consultant is very important.

(c) Product Mix

- It is important for the unit to have flexibility to alter its product mix to survive in changing market conditions.

(d) Location and site

- Location should be close to sources of raw material or to the consumption markets.
- Cost effective, cheap, uninterrupted power should be available.
- Water availability is also crucial.
- Transportation accessibility is also important.

(e) Machineries and equipment

- Smooth flow of production can be achieved if the various stages are matched well.

- External consultants must be employed for proper selection of machineries and equipment.

(f) Environmental Aspects

- Polluting units should be set-up in approved industrial zones and where permission from Pollution Control Board is easily available.
- Effluent Treatment Plants (ETPs) should be available to neutralize the output waste.

(g) Flexibility

- Flexibility is desired of Plant & Manufacturing Systems to produce goods to cater to ever-demanding needs of consumers.

(h) Interdependence of parameters

- It is essential so that a one or few parameters do not throw the entire organization into potential losses.

(i) Estimates of the Cost of Production

- It takes into account the costs such as raw materials, power and fuel, product research and development, interest on borrowings, etc.

(j) Competitive Status

- Competitive status of a project is assessed to ensure that the project is strong and can face competition.

ENVIRONMENT AND THE MAIN CHARACTERISTICS

Environment means the surroundings, external objects that influences the circumstances under which someone or something exists.

Characteristics of environment

(a) Environment is complex

The environment consists of number of factors, events, conditions and influences arising from different sources. All these do not exist in isolation but interact with each other to create an entirely new set of influences.

(b) Environment is dynamic

The environment is consistently changing in nature. Due to many and varied influence operating, there is dynamism in the environment causing it to continuously change its shape and character.

(c) Environment is multi-faceted (It is perceived differently by different people)

What shape and character an environment assumes depends on perception of observer. A particular change in environment or a new development may be viewed differently by different observers.

Environment has a far reaching impact on organizations. The growth and profitability of an organization depends critically on environment in which it exists. Any environmental change has an impact on organization in several different ways.

ENVIRONMENTAL SCANNING

Environmental Scanning is the process by which an organization monitors the relevant environment and identify opportunities and threats affecting the business for the purpose of making strategic decisions.

Factors to be considered while conducting an environmental appraisal

- **Events:** Important and specific occurring taking place in different environment sectors.
- **Trends:** General tendencies or course of action around which events and trends take place.
- **Issues:** Current concern that arise or respond to events and trends.
- **Expectations:** Demand which are made by interested group in the light of current issue.

Approaches to Environmental Scanning

- **Systematic approach:** In this approach information for environmental scanning is collected systematically. Information related to markets and customers, change in legislation and regulations etc. have a direct impact on the business therefore it is continually monitored for relevant facts. This approach is beneficial for strategic management and operational activities.
- **Ad-hock approach:** An organization may conduct a special survey related to specific environmental issues from time to time. Such studies may be undertaken when an organization has to take up new projects or update existing strategies. Changes and unforeseen developments may be investigated which affect the organization.
- **Processed form approach:** The organization under this approach uses information in a processed form available from both internal and external environments. For example, information supplied by government agencies, private institutions, it uses secondary data method.

Technique of Environmental Scanning

SWOT analysis

It was developed in 1960's at Stanford research institute. SWOT Analysis is a strategic management technique to understand the internal and external environment of an organization in terms of its strengths, weaknesses, opportunities and threats_

S—Strength; W—Weakness; O—Opportunity; T—Threat

There are four sequential steps of conducting a SWOT Analysis:

- Setting up objectives for the concerned organization
- Identifying the strengths, weaknesses, opportunities and threats of the business by answering the 4 major questions:
 - ✓ How to maximize the internal strengths of the organization?

- ✓ How to minimize the internal weaknesses of the organization?
- ✓ How to capitalize on opportunities present in the external environment of the organization?
- ✓ How to protect the organization from threats in the external environment?

Based upon the results of the above analysis a SWOT matrix is prepared which consists of Strengths, Weaknesses, Opportunities and Threats present in the organization's internal and external environment and its impact on the business is studied. A firm must direct its strengths towards exploitation of opportunities and blocking threats which minimizing the exposure of weaknesses at the same time.

SWOT Analysis is an important tool for auditing the overall strategic position of a business and its environment. The basic objective of SWOT Analysis is to provide a frame work to reflect a firm's ability to overcome barriers (threats) and avail opportunities emerging in the environment.

- **Positive Strengths:** Technological skill, leading brands, customer loyalty, product quality.
- **Negative weaknesses:** Unskilled, weak brands, low customer retention, unreliable products.
- **Opportunities:** Changing customer taste, liberalization of markets, technological advances, lower taxes.
- **Threats:** Changing customer taste, closing of markets, technological advances, high taxes.

Advantages of SWOT Analysis

- It is simple to use low cost is involved it is flexible and can be adapted to varying situations.
- It leads to clarification of issues.

- It helps in development of goal oriented objectives.
- It is useful as a starting point for strategic analysis.

Disadvantages of SWOT Analysis

- Realities may be more complex than represented by SWOT matrix due to simplicity of its use.
- It may result in compiling of lists rather than focusing on organizational objectives.
- Strengths may sometimes be confused with opportunities
- The Person conducting the analysis may be biased towards a view-point and may misinterpret the situation

MARKET APPRAISAL

Market Appraisal is the review carried out by financial institutions to ascertain that the products manufactured by the project can be sold and its value realized.

It asks following 5 critical questions

- Whether the unit has competent sales force and distribution network to sell the products manufactured?
- How the unit is going to capture its share of the feasible market?
- Whether the unit can sell its products at the desired price points?
- Is there a sizeable potential market for the products and whether the unit has a suitable marketing strategy?
- Is the unit in a position to deliver marketable products from the resources deployed?
- Is the Return on Investment sufficient to service the cost of loan/equity and leave a reasonable amount for the unit to carry out sustainable operations?

Importance of Market Appraisal

- It ensures that the project has the competent sales force and distribution network to sell the products manufactured.
- It can sell the products at the price points such that it can service the interest on loans taken. Even after servicing the loan, there is sufficient surplus for the unit to carry out sustainable operations.
- It ensures that there is a potential market which can be met by the production capacity of the unit.
- There is a well thought of sales and marketing strategy favourable for long term operations.

Sales and Marketing

While launching a new product / model, a promoter or CEO or project in-charge will explore the following questions:

S. No.	Particulars	1 st Year	2 nd Year	3 rd Year
1.	No. of Units Sold	30,000	40,000	50,000
2.	Sales Rate per piece (Rs)	200	200	200
3.	Sales (Rs)	60,00,000	80,00,000	1,00,00,000
4.	Cost price per piece (Rs)	100	100	100
5.	Cost Price (Rs)	30,00,000	40,00,000	50,00,000

6.	Profit (Rs)	30,00,000	40,00,000	50,00,000

Q.1. How many units can be sold in first year?

Q.2. Its expected selling price? Its cost price?

Q.3. Sales in further few years down the line?

Then he will estimate the costs and profits generated.

Corporations work on a new project in a systematic and well-defined manner. There is a detailed study on the market, demand for the product, technical aspects of the project, financial estimates, ways to raise the funds, etc.

Aspects of Market Appraisal

Two main aspects are demand analysis and market analysis. **For example**, a company wants to launch a new brand of high quality furniture in the domestic market. Important questions that should be asked to get a correct market and demand analysis will be:

Q.1 Who are the buyers of the furniture?

Q.2 What is the total current demand for this new furniture?

Q.3 How is the demand distributed temporarily (pattern of sales over the year geographically)?

Q.4 What is the break-up of demand of furniture of different types?

Q.5 What price will the customers be willing to pay for the improved range of furniture?

Q.6 How can potential customers be convinced about the superiority of the new furniture?

Q.7 What price and warranty will ensure its acceptance?

Q.8 What channels of distribution are most suited for the furniture? What trade margins will induce distributors to carry it?

Q.9 What are the prospects of immediate sales?

MANAGERIAL APPRAISAL

Harold Koontz has developed a concept of managerial appraisal i.e., appraising managers. According to this concept the managers attain the organizational objectives by performing the basic managerial functions.

These are as follows:

(i) Planning

Planning is the fundamental management function, which involves deciding beforehand, what is to be done, when is it to be done, how it is to be done and who is going to do it. It is an intellectual process which lays down an organisation's objectives and develops various courses of action, by which the organisation can achieve those objectives. It chalks out exactly, how to attain a specific goal. Planning is nothing but thinking before the action takes place. It helps us to take a peep into the future and decide in advance the way to deal with the situations, which we are going to encounter in future. It involves logical thinking and rational decision making.

(ii) Organizing

Organizing is the second key management function, after planning, which coordinates human efforts, arranges resources and incorporates the two in such a way which helps in the achievement of objectives. It involves deciding the ways and means with which the plans can be implemented. It entails defining jobs and working relationships, assigning different tasks associated with the plans, arranging and allocating resources, design a structure which distinguishes duties, responsibilities and authorities, scheduling activities, in order to maintain smoothness and effectiveness in operations.

(iii) Leading

Leading involves the social and informal sources of influence that you use to inspire action taken by others. If managers are effective leaders, their subordinates will be enthusiastic about exerting effort to attain organizational objectives. The behavioral sciences have made many

contributions to understanding this function of management. Personality research and studies of job attitudes provide important information as to how managers can most effectively lead subordinates. To become effective at leading, managers must first understand their subordinates' personalities, values, attitudes, and emotions. Studies of motivation and motivation theory provide important information about the ways in which workers can be energized to put forth productive effort. Studies of communication provide direction as to how managers can effectively and persuasively communicate. Studies of leadership and leadership style provide information regarding questions, such as, "What makes a manager a good leader?" and "In what situations are certain leadership styles most appropriate and effective?"

(iv) Motivating

Motivation is the word derived from the word 'motive' which means needs, desires, wants or drives within the individuals. It is the process of stimulating people to actions to accomplish the goals. In the work goal context, the psychological factors stimulating the people's behaviour can be--desire for money, success, recognition, job-satisfaction, and team work etc. One of the most important functions of management is to create willingness amongst the employees to perform in the best of their abilities. Therefore, the role of a leader is to arouse interest in performance of employees in their jobs. The process of motivation consists of three stages--

- A felt need or drive
- A stimulus in which needs have to be aroused
- When needs are satisfied, the satisfaction or accomplishment of goals.

Therefore, we can say that motivation is a psychological phenomenon which means needs and wants of the individuals have to be tackled by framing an incentive plan.

(v) Staffing

Staffing can be defined as one of the most important functions of management. It involves the process of filling the vacant position of the right personnel at the right job, at right time. Hence, everything will occur in the right manner. It is a truth that human resource is one of the greatest for every organization because in any organization all other resources like- money, material, machine etc. can be utilized effectively and efficiently by the positive efforts of human resource. Therefore, it is very important that each and every person should get right position in the organization so as to get the right job, according to their ability, talent, aptitude, and specializations so that it will help the organization to achieve the pre-set goals in the proper way by the 100% contribution of manpower. Thus, it can be said that staffing is an essential function of every business organization.

(vi) Controlling

Control is a primary goal-oriented function of management in an organisation. It is a process of comparing the actual performance with the set standards of the company to ensure that activities are performed according to the plans and if not then taking corrective action. Every manager needs to monitor and evaluate the activities of his subordinates. It helps in taking corrective actions by the manager in the given timeline to avoid contingency or company's loss. Controlling is performed at the lower, middle and upper levels of the management.

Requirements for an effective managerial appraisal system

The following are requirements for an effective program of managerial appraisal:

1. The program should measure the right things

The effective program must weigh both performance in accomplishing managerial goals and performance as a manager. It is also entirely possible that the evaluator might wish to measure a manager's expertise in non-managerial skills and knowledge. But a manager who does well

on the two standards of goal performance and managerial performance can draw upon expertise in non-managerial areas.

2. The program should be operational

The most effective appraisal program will not be an exercise separate from the operations of the individual manager. It should be operational in the sense that it evaluates what a manager does in his job and not, as has been the case with traditional appraisal programs, what raters think of the man and his work habits.

3. The program should be objective

Any appraisal program gains as it becomes more objective: both appraisers and the appraised prefer objectivity. Verifiability, the key to objectivity, is present if, at the end of the period, it can be said with certainty that something has or has not been accomplished. The better programs of management by objectives accomplished this largely by making goals verifiable either in quantitative terms (for example, dollars of sales or profit or percentage of scrap reduction) or in qualitative terms (for example, a marketing program having certain characteristics to be completed by a certain date). But even in these programs, as well as in the management appraisal program below, complete objectivity has not yet been achieved.

4. The program should be acceptable

Any management technique or program that people do not understand and accept is likely to be ineffective. If forced to, people will give lip service and fill out forms. However, if they understand and believe in a program and see it as a means of helping them accomplish their own personal desires through contributing to group goals, they will use it and feel a sense of commitment to it.

5. The program should be constructive

An effective managerial appraisal program should be constructive by helping individuals to improve their abilities and work. An effective appraisal program will not only determine how

well an individual meets position requirements, an important requisite, but it should also point to his errors, weaknesses, or failures, and by giving him an understanding why these occurred, teach him or open his eyes to his training or learning needs.