

PREPARATION OF PROJECT AND ERP

PREPARATION OF PROJECT

Project is a scheme for investing resources which can be reasonably analyzed & evaluated as an independent unit. It is analnated as independent unit.

Quantifiable & non quantifiable

Quantitative assements are mode involving Projects on health education & defense

Sector projects: Automobile, food processing, transport, educational, power

Techno-Economic projects.

- a. Factor intensity – oriented classification based on the intensive of factors projects such as capital intensive or labour intensive.
- b.Cause – oriented Projects are classified as demand based on raw material based.
- c.Magnitude oriented Project based on the magnitude of investment

Project identification

Concerned with collection of economic data, compiling & analyzing it to identify the possibility of investment to produce the goods or services for making profit

- 1. Observe
- 2. Trade & profession marketing
- 3. Bulletin & Research institutes
- 4. Endearment

resources. Project selection

- 1. Technology
- 2. Equipment

3. Investment size
4. Location
5. Marketing
- 6.

Need of Project report

1. It serves as a road map describing the direction of enterprises its goal to achieve them.
2. It also serves to attract investors & lenders.

Contents of report:

- General information
- Promoter
- Location
- Land&building
- Plant & machinery
- Capital requirement and cost
- Operational requirement and cost
- Raw material
- Man power
- Products
- Market
- Economic analysis
- Working capital
- Requirement of funds

Project formulation

1.General information which includes

- Bio data of promoter
 - Industry profile
 - Constitution & organization.

2.Project decision utililises, pollution control, communication system, transport facilities, machinery & Equipment, capacity of the plant, Technology selected.

3. Market potential capital costs & sources of finance
4. Capital costs & sources of finance
5. Assessment of working capital requirement
6. Other financial aspects
7. Economic & social variables
8. Project implementation.

Objectives

1. To develop & strengthen their entrepreneur quality.
2. To analyze environmental set up relating to small industry & business
3. To select product
4. To formulate project report for a product
5. Good & bad about the entrepreneurship
6. To appreciate the need for entrepreneurship
7. To understand the process & procedures & formalities involved in setting up enterprise
8. To give knowledge of sources of help & concessions.
9. To acquire the basic skills
10. To enable them to communicate regularly
11. Develop broad vision of business passion for integrity & unity

GUIDELINES BY PLANNING COMMISSION FOR PROJECT REPORT

Planning commission of India issued some guide lines for preparing/ formulating realistic project reports. The project formulation stage involves the identification of investment options by the enterprise and in consultation with the Administrative ministry the planning commission and other concerned authorities. The summary of the guidelines by planning commission are presented here.

General information:

The feasibility report must include the analysis of the industry to which it belongs. The

report should deal with description of type of industry, its priority, past performance, increase in production, role of public sector, technology, allocation of funds and information about the enterprise.

Preliminary Analysis of alternatives

The details like gap between demand and supply of proposed products, availability of capacity, list of all existing plants in industry, indicating their capacity, level of production attained, list of present projects and list of proposed projects. All technically feasible options are considered here. Location of plant/ project, requirement of any foreign exchange, profitability, return on Investment, alternative cost calculations etc., are to be presented.

Project Description

The feasibility report should provide a brief description of the technology/process selected for the project, information pertaining to the selection of optimal location, population, water. Land, environment, pollution and other environmental problems etc., are to be provided.

The report should contain details of operational requirements of the plant, requirement of water, power, personnel, land, transport, construction details for plant and offices etc.

Marketing plan:

The details like marketing plan, demand, target price of product, distribution methods etc., are to be presented.

Capital require ments and costs

Information with regard to capital requirement and costs with breakup are to be provided. The estimates should be realistic and based on logical information.

Financial Analysis

Financial analysis is essential to assess the financial viability of the project.

A proforma balance-sheet, details of depreciation, clearance for foreign exchange, details of any income tax rebate, incentives for back work areas are to be included.

Economic Analysis

Social profitability analysis is to be made. Impact of the operations on foreign trade, direct costs and benefits are to be included in the report.

Miscellaneous aspects

Depending upon the nature and size of operation of a particular project, any other relevant information may be included in the project report.

NETWORK ANALYSIS:

Network is a set of symbols connected with each other with a sequential relationship with each step making the completion of a project/event. A business plan or any project contains various activities. Any delay in any activity will affect the other activities, project is delayed, costs will go up leading to reduced profit. A number of networking techniques have been developed for project scheduling.

They are:

- Program me evaluation and Revuew techniques
- Critical path method
- Line of balance
- Graphical evaluation and Review techniques
- Work shop analysis and scheduling programme

Among these, PERT and CPM are the most widely used network analusis techniques in project management.

Importance of network analysis

The network analysis helps in identifying the hidden stages involved in project estimates. By identifying them the management can improve on the ongoing project estimates and learn for future use. The following are some of the points that speak about the importance of network analysis.

1. The whole project has to be considered with reference to the sequence of

activities and events. Sequence means activities that are to follow on after another leading to an event.

2. The events should be considered as different branches of operations.
3. The different segments of the project are treated as separate network which are finally integrated to the overall network. Then the entire project may be put on one network.
4. The time estimates may be done based on either previous experience of similar types of operations or may be based on probabilities for the ones where previous experience does not exist.
5. Cost estimates would depend on the project time estimates and the charge of prices of different factors of production.
6. The physical progress of the project, nature of events, job formed and snags in different areas of project work would call for corrective action at appropriate time. The concept of crashing would be helpful to reduce penalties.

Programme evaluation and Review techniques (PERT)

PERT was first developed as a management aid for completing Polaris Ballistic missile project in USA during 1958. It worked well in completing this project well in advance. From then on PERT schedules the sequence of activities to be completed in order to accomplish the project within a short period of time. It helps to reduce both cost and time of the project.

Steps involved in PERT:

- The various activities involved in the project are drawn up in a sequential relationships to show which activity follows what.
- The time required for completing each activity of the project is estimated and noted on network.
- The critical activities of the project are determined.
- The variability of the project duration and probability of the project completion in a given time period are calculated.

Advantages of PERT:

1. It determines the expected time required for completing each activity.
2. It helps completion of project within an expected time period.
3. It helps the management in handling uncertainties involved in the project there by reducing the element of risk.
4. It enables detailed planning of activities.
5. It stresses for correct action at a given time period there by helping the project to be completed on time.

Limitations of PERT:

1. Difficult to provide realistic/correct time estimates for new activities in the absence of past data.
2. There is no provision in this techniques about requirement of resources at various activities.
3. For the effective control of a project using PERT, it calls for frequent updates and revision of calculations which is a costly affair.

Critical path method (CPM)

CPM was first developed by Dupont of USA in 1956 for doing periodic overhauling and maintenance of a chemical plant. CPM differentiates between planning and scheduling of the project. Planning refers to determination of activities to be accomplished; scheduling refers to the introduction of time schedules for each activity of the project. The duration of different activities in CPM are deterministic. There is a precise known time for each activity in a project.

Advantages of CPM:

1. It helps in ascertaining the time schedule of activities having sequential relationship.
2. It makes control easy for the management.
3. It defines the most critical elements in the project. Thus, the management is kept

alert and prepared to focus their attention on the critical activities.

4. It makes room for detailed and better planning.

Limitations of CMP:

1. CPM operates on the assumption that there is a precise known time that each activity in the project will take. But this may not be true in real practice.
2. CPM estimates are not based on any statistical analysis.
3. CPM cannot be used as a controlling device for the simple reason that any change introduced will change the entire structure of network. It is not a dynamic controlling device.

Difference between PERT and CPM

Though PERT and CPM look same, they differ in certain aspects. The differences between PERT and CPM are listed below:

PERT	CPM
Its origin is military	Its origin is industry
Event oriented approach	Activity oriented approach.
Allows uncertainty.	Does not allow uncertainty
It has three time estimates	Only single time estimate
Time – based	Cost-based
Probabilistic model	Deterministic model
There is no demarcation between critical	Marks critical activities

and non-critical activities.	
It averages time.	Does not average time
It is suitable where high precision is required in time estimates.	Suitable where requirement of precision is reasonable.

ERRORS OF PROJECT REPORT

Project report formulation is very important and not an easy task. The entrepreneurs often make errors while preparing project report. The following are some of the widely noticed errors in project report:

Product selection:

It is noticed that some entrepreneurs commit mistakes by selecting a wrong product for their enterprise. They select the product without giving due attention to product related and other aspects such as demand for that product, market need, competition, life cycle, availability of resources like raw materials, skills labour, technology etc

Capacity utilization estimates:

The entrepreneurs many times make over optimistic estimates of capacity utilization. Their estimates are based on completely false premises and are made in complete disregard of present performance of the enterprise, prevailing market conditions, competitive atmosphere, the technical snags etc.

Market study

Production of goods is ultimately meant for sale. Hence market study plays vital role and is very important. Market study is a difficult task. Some entrepreneurs assume that there

will be good market for their product without conducting effective market study, leading to failure.

Technology selection

The technology varies from product to product. Selection of wrong technology leads to wrong product or product with inferior quality. Selection of right technology is very important.

There are two types of errors made by some entrepreneurs in selecting the location of enterprise. First, they are attracted by the concessions and government offers, financial incentives to establish industries at a particular location.

Selection of Ownership form

Many enterprises fail merely due to the ownership form of enterprises is not suitable.

PROJECT APPRAISAL

Project appraisal means the assessment of a project in terms of its economic, social and financial liability. This makes it necessary to recognize the interrelationship of various aspects of a project. This exercise is critical as it calls for a multidimensional analysis of the project. Financial institutions carry out project appraisal to assess its creditworthiness before giving finance to a project.

Method of project appraisal

Any project is appraised under the following contexts:

- Economic analysis
- Financial analysis
- Technical Feasibility
- Managerial competence
- Market analysis

Economic analysis

Economic analysis of appraisal is fundamental one. Economic analysis includes requirements for raw materials levels of capacity utilization, expected sales, expected expenses and expected profits. Business should have a volume of profit that decides sales to

be achieved. The amount of sales has to be calculated to achieve the target profits. Demand for the product is to be identified carefully as it is the deciding factor of project feasibility points considered for the location of the enterprise are to be maintained. The Government policies in this regard should be considered. The government offers specific incentives and concessions for selling up industries in notified backward.

Financial Analysis

Financial is one of the most important prerequisites to establish an enterprise. It is the finance that facilitates an entrepreneur to bring together the labour, raw materials and other facilities to produce goods. Financial analysis includes assessment of financial requirements like fixed capital and working capital, land and building, plants and machinery are some of the examples of fixed capital assets. The working capital is also analyzed. Working capital is that amount of funds which is needed in day-to-day's business operation. Break-even analysis is made to assess at what level of production/sales will result in no loss/no gain situation.

Technical feasibility

While making project appraisal, the technical feasibility of project is made. Technical feasibility means the adequacy of the proposed plant and equipment to produce the product at proposed technology. It should be ensured that know-how is available within the entrepreneur or should be obtained from outside in the form of either collaboration or purchase or franchise.

Managerial competence

Before the actual start of production, there is a need to study the market with respect to demand, target customers, when and where the products are to be sold. Production has no value unless the produced goods are sold. Hence, knowledge of anticipated market for a product becomes an important aspect in every business. Demand forecasting is one such method of knowing the anticipated market. The various methods of estimating the demand for a product are:

1. Opinion pool.
2. Market survey.

3. Life cycle analysis.
4. Desk survey.
5. Dealers opinion etc.

IDENTIFICATION OF BUSINESS OPPORTUNITIES

Business opportunities can be obtained from various magazines, trade journals, financial institutions, government, commercial organizations, friends, relatives, competitors etc. Choosing of best business opportunity from the information collected requires ingenuity, skill and foresight of entrepreneur. An entrepreneur has to identify and select the most rewarding opportunity from the available ones. For this one has to evaluate the following areas and understand the gap between demand and supply.

- Study of government rules and regulations regarding the different business opportunities.
- Extensive and in depth study of promising investment opportunity.
- SWOT analysis of the business opportunities.
- Market feasibility study.
- Technical feasibility study.
- Financial feasibility study and
- Social feasibility study.

An opportunity can be defined as an attractive and excellent project idea which an entrepreneur searches for and accepts such idea as a basis for his investment decision. A good business opportunity must be capable of being converted into feasible project. Two major characteristics of business opportunity are: good and wide market scope and an attractive, acceptable and reliable return on investment.

Sources of business ideas

1. Unfulfilled demand; An Unfulfilled demand will open doors to new products
2. Own idea: One own creative idea can result in a business opportunity.
3. Social and economic trends: Social and economic trends necessitate demand for new products.
4. Magazines/Journals/ Research publications: Magazines/ Journals/ Research

publications form a major role of ideas.

5. Government: Government also identifies and proposes ideas and give support for business opportunities.

6. Emerging new technology and scientific know how: commercial exploitation of indigenous and imported technologies and know-how is another source of opportunities.

7. Changes in consumer needs: the needs of consumers change giving rise to requirement of new business opportunities.

8. Trade fairs/Exhibitions: Trade fairs and technical exhibitions also offer wide scope for business opportunities.

9. Banks and government agencies: Commercial banks and government agencies encourage entrepreneurs by providing business opportunities, ideas subsidies, loan etc.

Market feasibility study

Feasibility study is a detailed work of collection of data analysis and concludes the feasibility of that operation. Market feasibility study involves the study and analysis of the following aspects. Market feasibility study will assess whether the product has good market. This needs to study the following:

Nature of market: The nature of market in terms of monopolistic or perfect competition is to be studied.

Cost of production: It is essential to study and control cost of production. Cost of production decides the selling price.

Selling price and profit: Selling price plays a vital role in profit. In price sensitive goods like cosmetics, one should be careful in fixing the price.

Demand: Present demand and demand forecast are prepared and studied. This will decide the facility planning.

Market share: Estimated market share is to be made. Comparison is made with share of similar products.

Target market: Study is made with regard to the target market and market segmentation.

TECHNICAL FEASIBILITY STUDY

In technical feasibility study, the following points are studied.

- Location of the project: The data regarding the location of project is very important.

It may be located in rural, urban or semi-urban areas.

- Construction of factory, building and its size: The construction details, the nature/type of building and its size for the project are to be analyzed.
- Availability of raw materials: The study of availability of raw materials, sources of supply, alternate sources, its quality and specifications cost etc., are to be studied.
- Selection of machinery: The selection of machinery required to produce the intended product is to be carried out. The specifications are capacity, cost sources of supply, technology evaluation of various makes of the machine. Their good and bad etc., are studied.
- Utilities: The details about availability of utilities like water, gas electricity, petrol, diesel etc. are to be studied.
- Production capacity: Establishment of production capacity and utilization of production capacity are analysed.
- Staff requirement: Study and analysis of requirement of workers, technical staff and officers etc. is to be made.
- Technical viability: The technical viability of the opportunity is to be

studied. **FINANCIAL FEASIBILITY STUDY**

Financial feasibility is the most important aspect of a business opportunity. Some of the aspects involved in financial feasibility study are:

- **Total capital cost of project:** It is very essential to study the total cost of project. This includes fixed capital, working capital and interest factor.
- **Sources of capital:** The study of main sources of capital is to be made. If capital is borrowed, interest burden is to be studied in detail.
- **Subsidiary sources for additional finance:** After study of main sources of capital, subsidiary sources of capital are to be identified and studied.
- **Financial for future development of business:** Financial requirement for future development of business are to be studied. Working capital requirement for at least three months running of enterprise are to be estimated.
- **Break Even Analysis(BEA):** BEA is to be carried out to see at what level of production/sales will make the organization no loss/no profit situation. BEA is very useful to identify the level of production that makes profit.

- **Estimation of cash and fund flow:** It is very essential to make a study of estimation of cash and fund flow in the business.
- **Return on investment(ROI):** ROI is to be calculated to see the amount of return on investment for the investors/share holders and how much they get.
- **Proposed balance sheet:** Proposed balance sheet is made showing liabilities and assets, depreciation, interest burden, profits expected etc.
- **Cost of labour and technology:** The cost of employees is to be estimated and studied. If technology is not available then it has to be purchased from any R & D institution or by way of foreign collaboration.

SOCIAL FEASIBILITY STUDY

Social feasibility study is important in the social environment.

- **Location:** The location is in such a place that it should not have objection from the neighbors.
- **Social problem:** The enterprise should not create any nuisance to the public.
- **Pollution:** There should not have any sort of noise or other pollution objectionable society. Suitable measures are to be taken for controlling pollution.
- **Other problem:** Any other problems related to the society and people are to be studied.