

Feasibility Study

Lecture 13: Pre-Operation Timetable & Implementation

Lecturer: Fidela R. Balajadia
Associate Professor 2
University of the Assumption, Philippines

Lecture Learning Objectives:

At the end of the lecture, you will be able to:

1. Discuss the project's total pre-operating time frame until the start of normal operations.
2. Identify the proper scheduling of all the pre-operating activities in order to arrive at the smoothest flow of work.
3. Discuss the target start-up and completion dates for all the pre-operating activities.
4. Analyze the pre-operating activity bottlenecks for proper consideration and timely solutions.

This portion presents the project timetable. Specifically, using the Gantt Chart. Present here, a GANTT-Chart of all your project's pre-operating activities. The prescribed outlines provided below could be used as your guide:

- different activities involved in the pre-operation stage of the project in the order of their occurrence, and
- their respective durations.

The **Gantt Chart** is a graphic device that depicts tasks, machines, personnel, or whatever resources are required to accomplish a job on a calendar-oriented grid. A Gantt chart is a bar chart that illustrates a project schedule. It was designed and popularized by **Henry Gantt**. Charts may be provided for various managerial levels and responsibilities. Performance may be monitored and controlled throughout the organization. It is a graphical production scheduling method showing the various stages and how long each stage should take. By charting the production steps through a Gantt chart, the manager is easily able to visualize and schedule production stages.

The **Gantt Chart** is another tool useful in planning, monitoring, and evaluating the progress of the various works to accomplish the project.

The **horizontal axis** at the top of the chart represents the time duration, while the different activities are usually listed in **vertical axis**.

A **line** is usually drawn crossing the different time horizons depending on the duration of the activities.

Gantt Chart is an effective tool for planning and scheduling operations involving a minimum of dependencies and interrelationship among the activities. The best technique is to apply all the activities for which time durations are not difficult to estimate. Just simply the charts are easy to construct and understand by the employees, even though they may contain a great amount of information.

Like for example, the project is expected to be finished in 12 months. The Gantt Chart may appear as follows:

Some Gantt Chart presentations use short vertical lines to represent unfinished work that is carried over to the next period.

Example #1

Time Duration (in months)

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
|--|---|---|---|---|---|---|---|---|---|----|----|----|--|
| Activities | | | | | | | | | | | | | |
| 1. Product Conceptualization & Identification | → | | | | | | | | | | | | |
| 2. Project Feasibility Study | | | | → | | | | | | | | | |
| 3. Plant Renovation | | | | | | | | | | | | | |
| 4. Business Registration | | | | | | | → | | | | | | |
| 5. Purchase of Equipment, raw materials & supplies | | | | | | | | → | | | | | |
| 6. Installation of Equipment | | | | | | | | | | → | | | |
| 7. Hiring of Employees | | | | | | | | | | | → | | |
| 8. Start of Operation | | | | | | | | | | | | → | |

Example #2

| Activities | Time Duration (in months) | | | | | | | | | | | |
|---|---------------------------|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1. Project Planning and conceptualization | █ | █ | █ | █ | | | | | | | | |
| 2. Raising of funds | | | | █ | █ | | | | | | | |
| 3. Acquisition of permits | | | | | █ | | | | | | | |
| 4. Negotiation to the building owner to be rented | | | | | █ | | | | | | | |
| 5. Construction of leasehold improvement | | | | | | █ | █ | █ | | | | |
| 6. Acquisition of assets | | | | | | | █ | | | | | |
| 7. Hiring of Employees | | | | | | | | █ | █ | | | |
| 8. Training and seminar of newly hired employees | | | | | | | | | | █ | | |
| 9. Preparation to normal operation | | | | | | | | | | | █ | |
| 10. Start of Operation | | | | | | | | | | | | █ |

The pre-operation timetable starts with the project planning: this encompasses activities like conceptualization and brainstorming. After such, the proponents will proceed with raising funds. The proponents can raise funds through borrowings from friends, relatives, and banking institutions. They will also raise funds from their own savings. When they already have funds, the proponents will acquire permits for the legality of the operation of the business to operate the business effectively. The proponents will also consider the costs of the building, the layout, and the like in which they are becoming influential to the operation of the business. After the finalization of the agreement, the improvements shall follow. In order for the effective and efficient operation of the business, it's necessary to acquire assets which shall be utilized for the furtherance of the business. The business is the labor intensive one so it will be needing manpower, employees to be hired. Training for the newly hired employees is essential for the business competent and skillful employees. In order to operate the business, proponents will now be in the stage of the preparation for the normal operation of the business. After the planning, raising funds, acquisition of permits, negotiation and construction of building, asset acquisition, hiring and training of newly hired employees and preparation for normal operation, the business can now commence in their operation.

Example #3

| Activities | Time Duration (in months) | | | | | | | | | | | |
|--|---------------------------|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1. Project Planning and conceptualization | → | | | | | | | | | | | |
| 2. Raising of collection of funds | | | | → | | | | | | | | |
| 3. Finding of the location site | | | | → | | | | | | | | |
| 4. Acquisition of permits | | | | | | → | | | | | | |
| 5. Purchase of raw materials, machineries, equipment, and supplies | | | | | | | → | | | | | |
| 6. Hiring of Employees | | | | | | | | | → | | | |
| 7. Orientation and training and employees | | | | | | | | | | → | | |
| 8. Installation of the machineries and equipment | | | | | | | | | | → | | |
| 9. Trial Run | | | | | | | | | | → | | |
| 10. Start the business | | | | | | | | | | | | → |

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Example #4

| Activities | Time Duration (in months) | | | | | | | | | | | |
|--|---------------------------|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1. Product Conceptualization & Identification | █ | | | | | | | | | | | |
| 2. Preparation of Project Feasibility Study | | | | █ | | | | | | | | |
| 3. Negotiations/Approval/Release of finances from project proponents/financiers | | | | | | █ | | | | | | |
| 4. Incorporation/Legal registration with: a. The Department of Trade and Industry Securities and Exchange Commission, if applicable c. Municipality/City Government | | | | | | | █ | | | | | |

Description of the Industry:

Guide questions in describing the industry:

- What is the nature of the industry?
- What makes the project attractive?
- What are the bright promises of the project?
- What is the trend in the global market?
- What are the development programs of the national government?
- Are there other forms of trade barriers?

Description of the Project:

Guide questions in describing the project:

- What type of product or service is provided?
- What is the potential of the product or service in the local market?
- Is there a primary supplier of the proposed product or service?
- Who is the major consumer of the proposed product or service?
- Is the proposed project the result of regional studies?

Location of the Project:

Guide questions in describing the location of the project:

- What is the prevailing peace and order condition in the location?
- Are there primary competitors adjacent to the location?
- Where are the sources of raw materials, labor, and utilities?
- What is the proximity of the sources of raw materials from the location?
- What is the proximity of the location to the market?
- Are there available transportation?

- How far is the processing plant from the households?
- What is the prevailing climate, temperature, or weather condition in the area?

Highlights of Major Assumptions:

Major assumptions should be clearly indicated on the following:

- Market projections in terms of demand and supply
- Expected market share
- Estimated cost of the product or service?
- Estimated selling price
- Estimated number of units to be produced
- Total expected cost of the project
- Means of financing the project
- Expected rate of return, liquidity, solvency

Summary of Findings and Conclusions

a. Market Study:

- Is the proposed project feasible considering the results of the market study?

b. Technical Study:

- Is the study technically feasible?
- Will the rate of return on investment be higher than the cost of capital?

c. Management Study:

- Is the project feasible as regards the organization and management?
- What type of business organization is best suited to the proposed project to fully realize its objectives?

d. Financial Study:

- Is the project financially feasible?
- What is the profitability, liquidity, and stability status of the business?

e. General Conclusion:

- Is the project feasible?

Textbook:

A feasibility study guidebook for Students and Entrepreneurs, Jorge H. Cuyugan, Bright Concepts Printing House, 2020

Writing Project Feasibility Study, Nick L. Aduana, C & E Publishing, Inc. 2021