# Revision and Discussion of Types of production

Job production

Batch production

Mass production

# Initiating and Planning a Project













What is common among all the above activities? and What is unique?

What is your observation?

# Definition of a Project

A project is a temporary endeavor undertaken to create a unique product, service, or result.

- Projects are undertaken to fulfill objectives by producing deliverables.
- An objective is defined as an outcome toward which work is to be directed
- Deliverables may be tangible or intangible
- A deliverable is defined as any unique and verifiable product, result, or capability to perform a service

#### **PROJECT DELIVERABLES**

- A unique product that can be either a component of another item, an enhancement or correction to an item, or a new end item in itself (e.g., the correction of a defect in an end item);
- A unique service or a capability to perform a service (e.g., a business function that supports production or distribution)
- A unique result, such as an outcome or document (e.g., a research project that develops knowledge that can be used to determine whether a trend exists or a new process will benefit society); and
- A unique combination of one or more products, services, or results (e.g., a software application, its associated documentation, and help desk services).

#### **Categories of Projects**

- 1. **Derivative projects** These are projects with objectives or deliverables that are only incrementally different in both product and process from existing offerings. They are often meant to replace current offerings or add an extension to current offerings (lower priced version, upscale version).
- 2. Platform projects The planned outputs of these projects represent major departures from existing offerings in terms of either the product/service itself or the process used to make and deliver it, or both. As such, they become "platforms" for the next generation of organizational offerings, such as a new model of automobile or a new type of insurance plan. They form the basis for follow-on derivative projects that attempt to extend the platform in various dimensions.
- **3. Breakthrough projects** Breakthrough projects typically involve a newer technology than platform projects. It may be a "disruptive" technology that is known to the industry or something proprietary that the organization has been developing over time. Examples here include the use of fiber-optic cables for data transmission, cash balance pension plans, and hybrid gasoline-electric automobiles.
- **4. R&D projects** These projects are "blue-sky," visionary endeavors, oriented toward using newly developed technologies, or existing technologies in a new manner. They may also be for acquiring new knowledge, or developing new technologies themselves.

#### **Project is a Temporary endeavor**

- The temporary nature of projects indicates that a project has a definite beginning and end.
- Temporary does not necessarily mean a project has a short duration. The end of the project is reached when one or more of the following is true:
- > The project's objectives have been achieved;
- > The objectives will not or cannot be met;
- > Funding is exhausted or no longer available for allocation to the project;
- The need for the project no longer exists (e.g., the customer no longer wants the project completed, a change in strategy or priority ends the project, the organizational management provides direction to end the project);
- > The human or physical resources are no longer available; or
- > The project is terminated for legal cause or convenience.

#### **Characteristics of a Project**

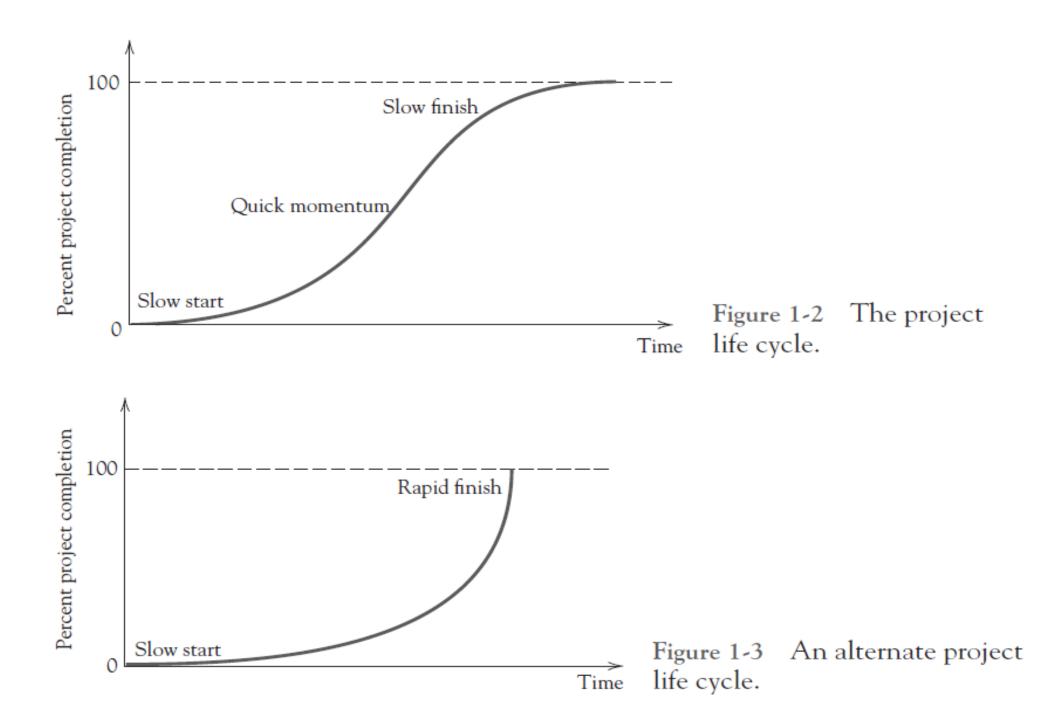
Projects are not homogeneous.

Each project is different.

The distinctive characteristics of a project are as follows.

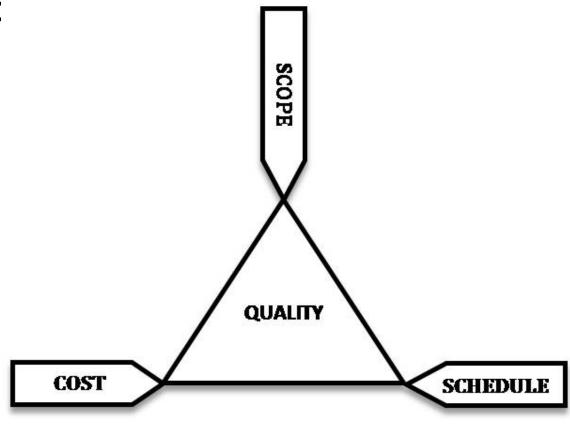
#### **Characteristics of Project**

- 1. Objectives
- 2. Single entity
- 3. Life span
- 4. Require funds
- 5. Life cycle
- Team Spirit
- 7. Risk and uncertainty
- 8. Directions
- 9. uniqueness
- 10. Flexibility
- 11. Sub-Contracting
- 12. Cost



### **Triple constraint**

• All the constraints can be grouped into these three:



# **Project constraints**

