

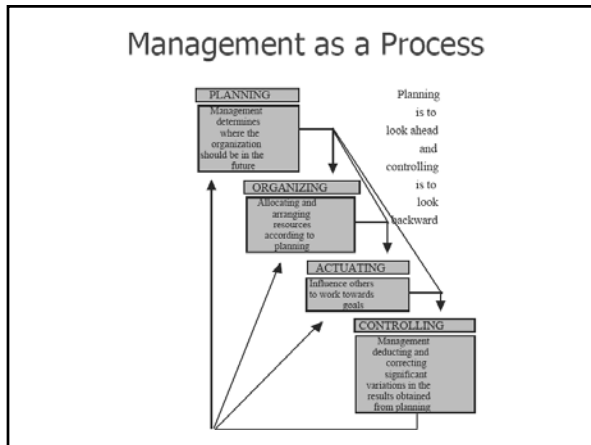
# Manajemen Proyek

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## Definition

- Management**  
 The act, manner, or practice of managing; handling, supervision, or control (The American Heritage® Dictionary of the English Language, Fourth Edition)  
  
*Management is a process of achieving organizational goals by engaging in the four major functions of planning, organizing, actuating and controlling based on limited resources*



## Planning

- Goals
- Objectives
- Detailed method of achieving them in specific time period with minimum problems
- Futuristic in nature
- Short Term
- Long Term

## Organizing

- Organize effort of resources to reach objectives
- Organizational structures
  - flat
  - tall
  - hierarchy
- Established lines of authority, responsibility, accountability, & communication

## Actuating

- Putting the plans and programs of management into action through employees
- called executing, actuating, directing...
- good leaders needed
- motivation
- incentives
- satisfaction

### Controlling

- Insure performance is on schedule according to a plan
- All controls have these steps
  - establish a plan
  - inspection
  - corrective action
- Theoretically not needed if planning, organizing, and implementing are perfect

### Definitions of a Project

- A Project is a coordinated effort, using a combination of human, technical, administrative and financial resources, in order to achieve a specific goal within a fixed time period
- Projects are not routine
  - To get something done!
  - Mounted to achieve some change
  - Have associated procedural changes in business operation

### Attributes of a Project

- Attributes of a project include :
  - It has a *goal*
  - It has a *start* and a *finish*
  - It requires *resources*, including
    - People
    - Money
    - Tools and Equipment
    - Administration
  - It requires *coordination*
  - It is a *temporary structure*
  - It is mounted to *achieve change*

### Project Vs Ordinary Management (1)

Ordinary management                      Project Management

### Project Vs Ordinary Mangement (2)

- **Initiation** involves defining the Goals and Objectives, (scope of the task, financial & technical feasibility, design process, selecting & building a team)
- **Directing** involves conveying goals, objectives, performance standards and responsibilities to staff
- **Measurement** involves monitoring progress, work results and quality
- **Control** involves applying the necessary changes to priorities, standards, work assignments and allocation of corporate resources to ensure that goals of the organization are achieved
- **Termination** involves delivering the work results to the organization, planning the transision of resources to new assignments, and capturing learning which has taken place in the project for use on subsequent projects

### Project Management Fundamentals (1)

- *Scope*
  - what is and what is not included.
  - Where are the boundaries?
- *Time and deadlines*
  - Time is our one irreplaceable resource
  - Deadlines are dates by which a particular task or product must be complete
- *Human Resources*
  - These are the people who will participate in the projects

### Project Management Fundamentals(2)

- *Quality*
  - Quality of the work done and the products produced is fundamental to achieving the project objectives. It is also vital to achieving productivity
- *Communications*
  - The Project resides at the center of a web of communications. It is also essential that communication within the project team is effective
- *Risk*
  - Risk of failure in terms of requirements, budget and deadlines is ever present

### Project Manager

What do you need to be a good project manager:

- A communicator
- A manager
- An innovator
- Technically competent, respected, and aware
- An Administrator
- A Leader
- Able to work well under pressure
- Goal-oriented
- Knowledgeable about the company
- Senior

### Responsibilities

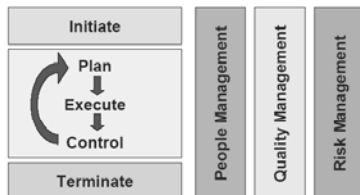
The project manager typically has the following responsibilities :

- Reporting to Senior Management and the Steering Committee
- Communication with Users
- Planning and Scheduling
- Obtaining and allocating resources
- Controlling Risk
- Delivering Results
- People Management
- Coordination
- Quality Assurance
- Budget Control

### Types of I.S Projects

- System development
- Package implementation
- End User Computing
- Prototyping
- Rapid Application Development (RAD)
- System Architecture
- Selection Projects
- Projects involving an iterative lifecycle
- Business Re-engineering Projects
- Technology Implementation Projects
- Component Assembly Projects, typically advocated in Object Oriented (OO) environments.

### Project Phases



- Each phase has a set of tasks, expected results & quality checks

### Project Lifecycle (1)

- We can separate out the Project Lifecycle from the System Development Lifecycle or those of the other project types mentioned
- The Project Lifecycle is thus a container for the System Development Lifecycle (or other type of lifecycle)
- There are some activities which occur once (Initiation, Determining Feasibility, Termination), while others occur for every phase and some per task or activity in the technical lifecycle of the project (depend on the type of project)

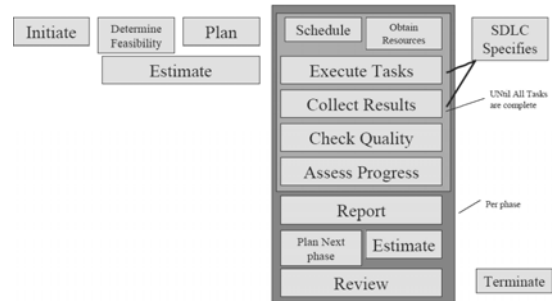
## Project Lifecycle (2)

- Project Lifecycle Pseudo-code :

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INITIATE PROJECT
DETERMINE FEASIBILITY (USE ESTIMATING)
PLAN PROJECT (USE ESTIMATING)
DO UNTIL ALL PHASES COMPLETE
  DO UNTIL TASK FOR PHASE ARE COMPLETE
    SCHEDULE TASKS
    OBTAIN RESOURCES
    EXECUTE TASKS
    COLLECT RESULTS
    CHECK QUALITY
    ASSESS PROGRESS
  END DO
  REPORT ON PROGRESS
  PLAN NEXT PHASE (USE ESTIMATING)
REVIEW
END DO
TERMINATE
    
```

## Generic Projects Lifecycle (1)



## Generic Project Lifecycle (2)

- The generic project lifecycle has major advantages, including the following:
  - Project Managers do not have to re-invent the wheel for each new project
  - The senior management and steering group(s) to which projects report will be able to compare projects meaningfully
  - Project reporting and terminology can be consistent in terms of phases and review points
  - Expertise can be built up with respect to estimating techniques and past performance
  - Standard project plans can be built up in tools, needing only slight modification to provide a solid, comprehensive plan for a new project

## Discussion of the Lifecycle (1)

- Project begin with the initiation phase
- Following by feasibility study and planning. Parallel to these, and central to their success is the estimating activity
- For each phase that follows, there is a common structure incorporating the following steps (repeated for all tasks designated in the phase until two things happens: task complete or reach a mandatory reporting deadline:
  - Schedule the task in detail
  - Obtain any new resources required to carry out the tasks
  - Allocate and execute the tasks

## Discussion of the Lifecycle (2)

- Collecting the work results (deliverables) as these are produced
- Each of deliverables should be quality assured before being accepted as complete
- By counting completed, quality-checked deliverables received, we can monitor our progress on an ongoing basis
- At the end of the phase, we plan the next phase in detail, including re-estimating the task
- We then conduct a formal review with our sponsors and an outside auditor/facilitator
- We can then move on to the next phase.
- When all phases are complete, the project terminates