

# Manajemen Proyek SI

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## Project Planning Overview

- *Planning is the Seed for Success.* Without a project plan, project success will be impossible
- Project planning is a process concerned with organizing the efforts to implement a project and to meet all project objectives for functionality, quality, reliability, schedule and cost.
- The purpose of the plan is to provide a framework for management monitoring and control of performance.

1

## The Project Plan (1)

1. It defines the scope of the project, consisting of the end products that will be delivered (a.k.a. deliverables), the customers or users of the end product, and all the associated assumptions and constraints.
2. It identifies the project activities that will be performed.
3. It describes the interdependencies between the activities and when the activities will be accomplished.

2

## The Project Plan (2)

4. It defines the resources necessary to acquire/develop and implement the end products.
5. It describes the processes and procedures that will be used for managing schedule, cost, quality, procurement and risk.

3

## The Project Plan (3)

- is more than just an estimate of what will be done, when it will be done and the resources required to do it.
- It is a commitment by individuals and organizations to perform according to the plan.
- Therefore, it is critical that the individuals who must make these commitments are active participants in the planning process and accept ownership of their portion of the project plan.

4

## Project Planning

- is a continuous process, as plans need to be updated continually to reflect project performance and changes in external factors.
- However, at the beginning of each project and each project phase, baseline plans must be documented against which performance will initially be measured.

5

## Project Planning (2)

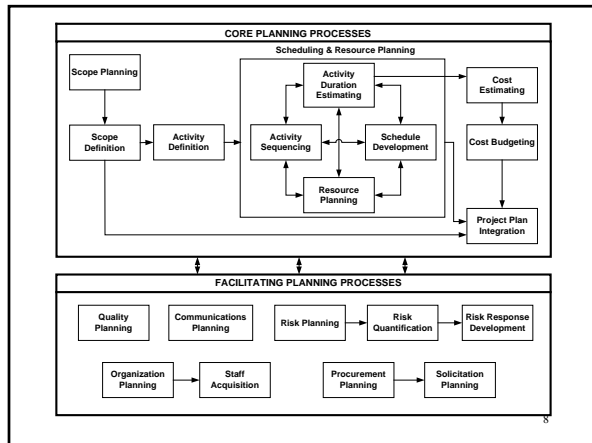
- Measuring performance against the baseline is necessary to determine corrective actions needed to stay on plan or to identify any changes required to the plan.
- The focus should always be on having a current plan that charts the road to successful achievement of the project objectives.
- If the plan is not updated continually, it will quickly deviate from project reality, and will no longer be useful as a guide to the project team or as a vehicle to communicate with project stakeholders.

6

## Project Planning Activities

1. **Core Processes** that include the activities required to build or implement the product or service, and
2. **Facilitating Processes** that help to ensure that the product will meet the goals of the project and that the project will be managed successfully.

7



8

## Core Planning Processes

- The core planning processes are shown above as a logical sequence of events.
- In reality, there are many inter-dependencies among the steps and the process is highly iterative.
- Planning is also done in layers, similar to peeling an onion. It starts at a high level based on a general definition of a project and previous experience on similar projects and evolves into very detailed task statements, schedules and cost estimates.

9

## Scope Planning (1)

- Scope describes what is included in the project or project phase, and equally important, what is excluded.
- Scope includes functional scope, organizational scope (e.g. which organizations will be included), geographical scope (e.g. which sites are included), and all important assumptions and constraints.

10

## Scope Planning (2)

- Scope can be viewed from two perspectives:
  - Product scope as viewed by the user that defines the features, functions and limitations of the product or service, and
  - Project scope as viewed by the implementers that defines the work to be done to develop/implement the product or service.

11

### Scope Planning (3)

- The output is a written Statement of Scope as the foundation for project planning and project decisions.
- The Scope Statement includes a list and brief description of all deliverables of the project and/or the current phase.
- Project deliverables are features and functions that require review and approval by the stakeholders.
- All critical assumptions and constraints that affect the project scope should be documented.

12

### Scope Planning (4)

- It is very important to identify the project boundaries clearly up front and to communicate them to the stakeholders.
- It is equally important to identify project exclusions such as functions that will not be automated or customers that will not be served, and to identify all the details of what is included in the project scope.

13

### Scope Definition

- Subdividing the major project deliverables into smaller, more manageable components. Examples might be subsystems or functional modules of a software package, or a breakdown of a large systems integration task into hardware, network and software components, etc.
- The outputs of scope definition are a description of each of the component deliverables and the top levels of a work breakdown structure (WBS) defining their relationships.

14

- **The last four items are closely inter-related.**
- **Activity Sequencing, Resource Planning, Activity Duration Estimate and Schedule Development are performed iteratively until a satisfactory project schedule is developed.**

15

### Activity Definition

- Identifying the specific tasks that must be performed to produce the various project deliverables.
- The format for documenting this activity is the WBS that identifies the tasks and their interrelationships together with a task statement that describes each task, its inputs and its deliverables.

16

### Activity Sequencing

- Defining the logical dependency relations between tasks.
- Logical dependency relations are to be distinguished from resource driven dependencies that are handled in Schedule Development.

17

## Resource Planning

- Determining the availability of resources (people and equipment) that will be used in developing the project schedule.
- Resource planning may need to be repeated if the scheduling process yields unsatisfactory results.

18

## Activity Duration Estimating

- Estimate the resources and duration required to perform each task considering the skills and experience of the available staff.
- Activity duration estimation should also take into consideration the project organizational structure and the time required for decision-making and decision approval.

19

## Schedule Development

- Balancing activity sequences, activity resource requirements and resource availability to create a project schedule.
- Important factors in this process are the identification of the critical path, that is the sequence of tasks that if slipped will cause the overall project to slip, and an assessment of uncertainty and risk to the project.

20

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24

## Cost Estimating

- Estimating the costs of resources (people, equipment, and materials) by activity, and associated overhead costs.

25

## Cost Budgeting

- Summarizing the cost estimates into time-phased budget forecasts by organization and funding source.

26

## Project Plan Development

- Taking the results of all of the above planning processes and putting them in a consistent, coherent document.
- The document may be a higher level plan that includes a funding request or a very detailed plan used by the Project Manager for tracking progress on a day-to-day basis.

27

## Facilitating Planning Processes

- The facilitating planning processes are activities that support the implementation of a quality product on schedule and within budget.
- They are activities that require resources and schedules just as the core processes.
- Facilitating processes should be included on the project WBS.

28

## Quality Planning

- Defining resource requirements and schedules for quality reviews, whether technical reviews or user reviews.
- It is important to plan these reviews because they usually require commitments of expert resources from outside the project team.
- Another aspect of quality planning is to plan quality assurance audit activities, whether done internally or by an external independent auditor.

29

## Organization Planning

- Identifying, documenting and assigning project roles, responsibilities and reporting relationships.
- Major projects require a fulltime project team reporting to the project manager plus part-time support from user departments and various ITA Bureaus, if required.
- It is important that responsibilities be delegated in an effective manner and understood by all parties.
- This process should also identify the necessary working groups that will provide input and include a review by stakeholders.

30

## Staff Acquisition Planning

- Hiring or transferring staff onto a project can be a significant bottleneck.
- Therefore, it is essential to document the staff acquisition process into the project schedule, and that appropriate management commitment is obtained up front.
- There must be a mutual understanding on how and who will conduct project team performance evaluations.

31

## Communications Planning

- Determining the information and communications needs of the stakeholders: who needs what information, when and how it will be provided to them.
- Communications can consist of presentations scheduled at essential points in the project, newsletters, or other forms of communication.
- All of these require resources that must be included in the project plan.

32

## Risk Planning

- Consists of risk identification, risk quantification and risk response planning.
- Some typical factors increasing the risk of a project are:
  - Utilization of new state-of-the-art technologies
  - Lack of staff skills and experience in the technologies that will be utilized
  - Very aggressive schedules due either to mandatory external requirements or management goals
  - Lack of buy-in by the stakeholders
  - Organizational unwillingness or unreadiness to make the necessary business process changes
  - Inadequate management of project scope that allows uncontrolled scope expansion

33

## Procurement Planning including Solicitation Planning

- This is another potential project bottleneck.
- Therefore, it is essential to lay out the schedule for the complete procurement process from the development of any request for proposals (RFP) to final approvals and product or service delivery.

34

## Conclusion (1)

- Thorough planning is critical to the success of a project.
- Good planning will help avoid costly overruns and ensure that the stakeholders' objectives are achieved.
- Planning lays a foundation for improved communication with the stakeholders so that their expectations are consistent with the realities of the project.

35

## **Conclusion (2)**

- The result of the planning process is an integrated project plan document that is the baseline for schedule, cost, quality, and risk management.
- The amount of planning performed should be commensurate with the scope of the project and the value of the information developed.

36