

Software Project Management

Initiation and Planning

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Today's Lecture

- Project Charter Development
- Project Management Planning
- Project Planning

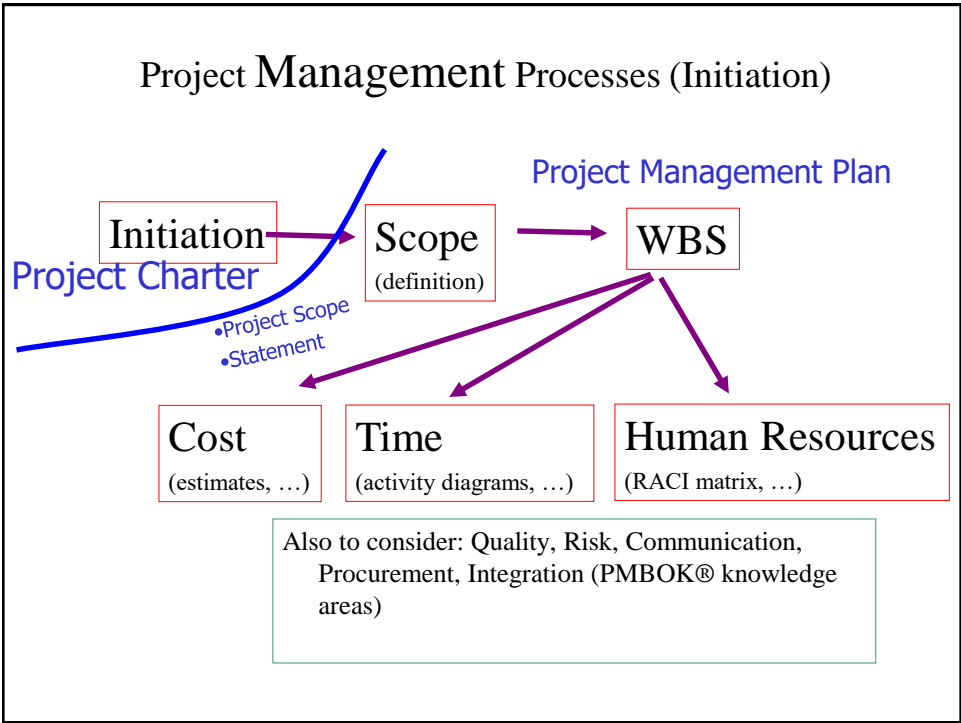
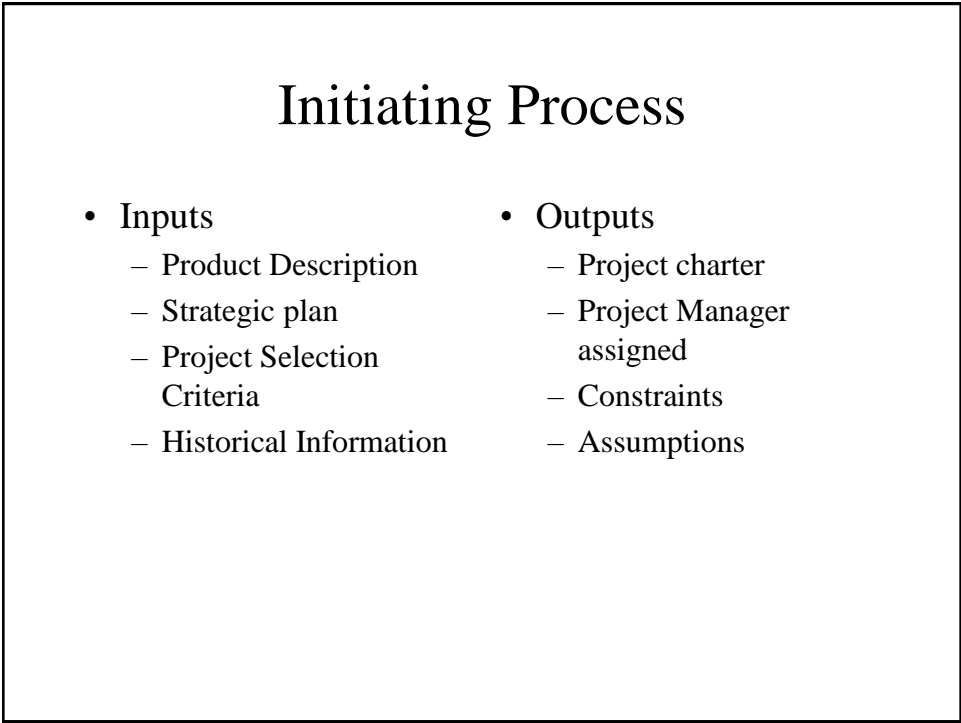
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SOFTWARE PROJECT INITIATION

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Initiation a Project

- Project Selection
- Business development
- Proposal
 - Activity analysis
 - Activity attribute analysis
 - Activity scheduling
 - Resource pool analysis and selection
 - Cost estimation
 - Pricing
- award



Project Charter and Project Management Plan - Terminology

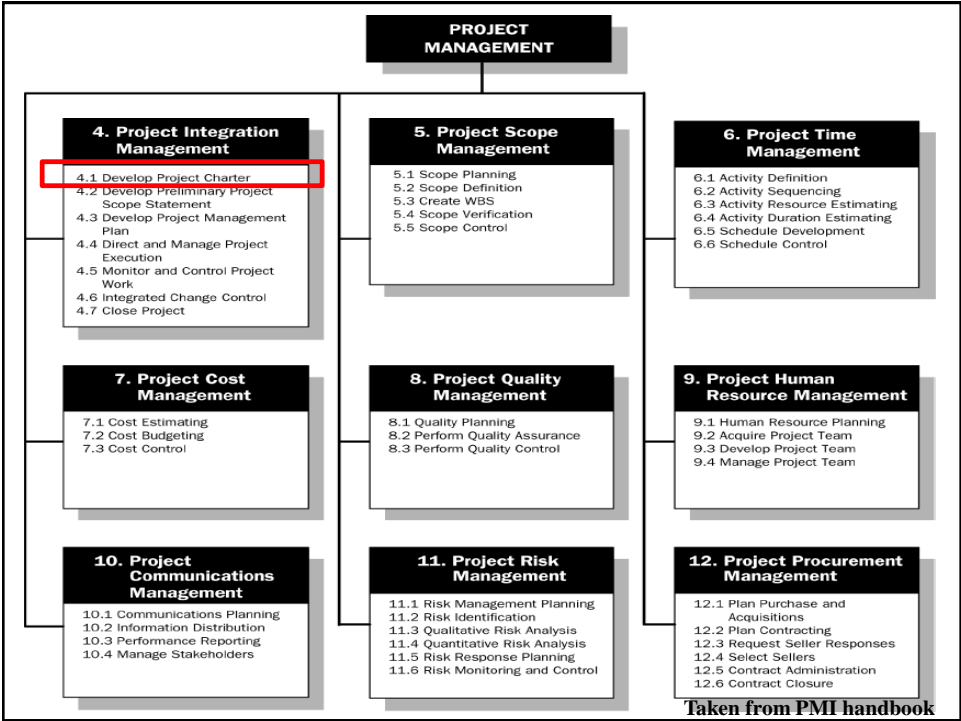
- Project Charter: Project Initiation Document, Project Mandate, Project Brief, Letter of Agreement, Statement of Work
- Project Management Plan: Strategy Plan, Project Execution Plan, Project Plan

Project Charter and Project Management Plan The Main Concept

- Project Charter:
 - Comes from “outside” the project and defines the project.
 - Unchanged during the project.
- Project Management Plan:
 - Owned by the project team.
 - Constantly updated during the course of the project.

Two Processes in Project Initiation

- *Develop Project Charter*
- *Stakeholder Analysis*



The Project Charter (Definition)


- The project charter is a document that formally recognizes the existence of a project. It describes the product to be delivered and addresses the business need of the project.
- The charter should be SMART:
 - Specific
 - Measurable
 - Achievable
 - Realistic
 - Time-specific



- Typical contents:
 - ♦ Project Title, Start & Finish Date
 - ♦ Budget Information
 - ♦ Project Manager (contact address)
 - ♦ Project Objectives
 - ♦ Approach
 - ♦ Roles and Responsibilities (Sign off)
 - ♦ Comments (from stakeholders)

•Example (Six Sigma Project Charter)
http://www.slideshare.net/vicky_200835/six-sigma-project-charter

PROJECT CHARTER

[**Note:** All fields in blue text or marked by an asterisk (*) must be filled in.]

[To see Online Help  make certain that Tools/Options/View/ScreenTips is checked]

1. Does my project require a Charter? 
2. Obtain the [latest version](#)  of this Charter Template from the <document source>.
3. Save the Charter file using the filename format: *Project Charter_Project Name.doc*.
4. Enter all dates in the 8-digit MM/DD/YYYY format (e.g., 02/15/2004).
5. Type an X in the appropriate checkboxes.
6. Keep a printed copy of your Risk Evaluation

1. General Project Information

* Project Name:


* Department Sponsor:

• What department is the primary proponent of this project? (Enter one.)

• Who, within that department, is the Project Sponsor? (Note: This person must be a decision-maker with the authority to commit department resources.)

• Is this an Enterprise Project, i.e. does it have significant impact on 3 or more departments (Y/N)?

Department Co-Sponsor:


* Department Project Rank  :

* If this project is mandated or is required for continued business operation:

Mandated by whom?

Impact of not meeting mandate?

Document History

Version 	Date	Author	Reason for Change

•Example from www.cvr-it.com

SEN 413: Software Project Management

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Inputs to “Develop Project Charter”

- Project statement of work, Business Case and/or Contract
- Enterprise environmental factors
- Organizational process assets

- *Reasons for projects:*

- *Business need*
- *Product scope description*
- *Strategic plan*

Assignment

- Consider your FYP
 - CEO is respective Project Supervisor
 - You are Project Manager
 - Financer is BUIC
 - Develop
 - SOW, (Thursday, Week 3)
 - Project Charter, (Thursday, Week 3)
 - Project Management Plan, (Thursday, Week 5)
 - Project Plan, (Thursday, Week 5)
 - Project WBS, (Thursday, Week 6)
 - Cost Estimate, (Thursday, Week 8)
 - Risk Register, (Thursday, Week 10)

SOFTWARE PROJECT PLANNING DOCUMENTS

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Planning Overview

- Project charter ????
- Estimation / proposal / Bid review
- WBS
- Org BS
- Team building and training
- Detailed activity analysis
- Detailed scheduling
- Resource analysis and selection
- Resource loading
- Baseline budget
- Work methods
- Quality statement
- Mobilization plan

Project Management Plan

- Project Overview
- Project Organization
- Managerial Processes
- Risk Management Process
- Technical Process
- Monitoring and Control Mechanisms

Project Management Plan Template as Example

Purpose

The *Software Project Management Plan* summarizes the project management models. This document is created before the project kick the management and the developers. The SPMP documents all issues related to client requirements (such as deliverables and acceptance responsibilities).

Audience

The audience of this document is the project participants, including

Template

Outline

1. Introduction

- 1.1 Project overview
- 1.2 Project deliverables
- 1.3 Evolution of this document
- 1.4 References
- 1.5 Definitions, acronyms, and abbreviations

2. Project organization

- 2.1 Process model
- 2.2 Organizational structure
- 2.3 Organizational boundaries and interfaces
- 2.4 Project responsibilities

3. Managerial process

- 3.1 Management objectives and priorities
- 3.2 Assumptions, dependencies, and constraints
- 3.3 Risk management
- 3.4 Monitoring and controlling mechanisms

4. Technical process

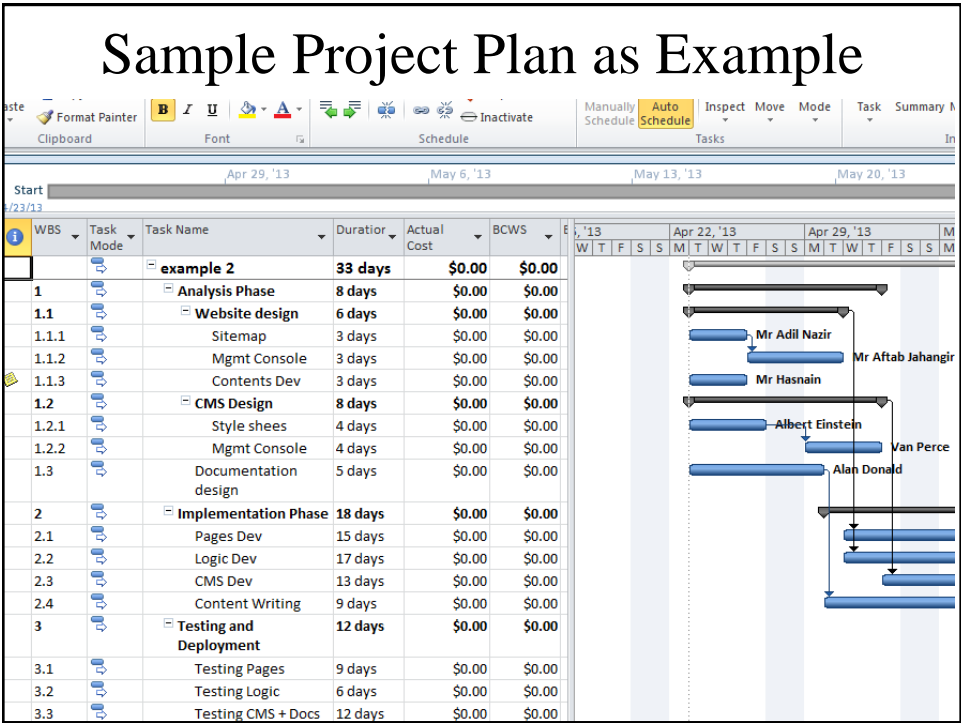
- 4.1 Methods, tools, and techniques
- 4.2 Software documentation
- 4.3 Project support functions

5. Work elements, schedule, and budget

Taken from Applied Software Eng.

Project Plan

- Work breakdown structure
- Staffing plan
- Project schedule
- Project Budget
- Project Control Plans
 - Communication plan
 - Change management plan
 - Risk management plan
 - Issue management plan



Difference between Project Management Plan and Project Plan

- **Project Plan**
 - is broad and deals with high level planning,
 - deals with “What” part of the project
 - defines the vision
 - developed to successfully complete the project
- **Project Management Plan**
 - is described in very detail
 - deals with “How” part of the project
 - is executed to achieve the vision
 - defines and develop the system to be used to complete the project successfully
- For large projects, Project Plan and the Project Management Plan are different documents but for smaller projects, they can be merged

From Projects to Software Projects

Software Plan and Software Project Management Plan

- Software Project Management Plan (SPMP)
 - Describes how project would be handled from start to closing
 - Some consider it the most important document in the project (along with SRS)
 - Can be seen as an aggregation of other core documents
- Software Project Plan
 - Revolves around software development plan
 - Describes what would be developed
 - Correlation with How, What, Do-it phases we discussed earlier

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Common parts of SDP / SPMP

- Project overview
- Deliverables
- Project organization
- Managerial processes
- Technical processes
- Budget
- Schedule

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Communications Management Plan

- Often a section of SPMP
- Describes information flow to all parties
 - Gathering and distributing information
- Status meetings
 - Monthly, Weekly, Daily?
 - Status reports are vital

Outstanding questions...

- Project Manager is part of which team...
- Who is functionally important...
- Is it project manager or we require a functional manager as well...
- What could be the name of a functional manager in software development...
- We need another lecture to resolve this...

Software Project Management Plan

- Project Overview
- Project Organization
- Managerial Processes
- Risk Management Process
- Technical Process
- Monitoring and Control Mechanisms

Project Development Plan

- Software development work breakdown structure
- Staffing plan (Developers on each module)
- Software development schedule
- Budget
- Software development control Planning
 - Communication plan
 - Change management plan
 - Risk management plan
 - Issue management plan

Conclusion

- Project Charter
- Project plan
- Project management plan
- Requirements of additional planning documents for a software project

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