

Chapter 3

Project management

- Project management
 - PM activities
 - Vision and Scope
 - Planning
 - Estimation
 - project Schedule

Chapter 3 Project Management

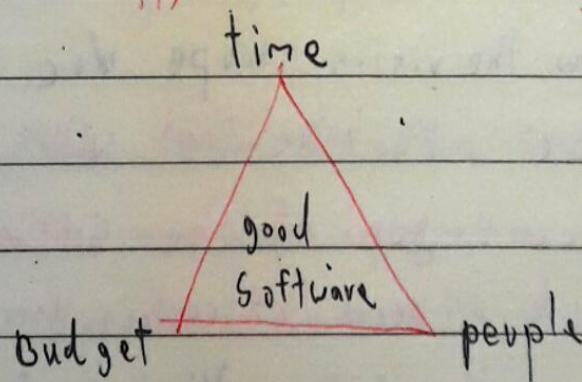
- Introduction to Project Management
- Project management activities
- Vision and Scope document
- Project planning
- Project estimation

What is Project Management

- set of activities involved in ensuring the project must be finish on time and accordance with requirement

Success criteria

- Deliver the software to the customer at the agreed time
- keep overall costs within budget.
- Deliver software that meets the customer's expectation
- Maintain a happy and well functioning dev team



key management responsibilities

Executive sponsor → Project manager → Project

Project management activities

- Vision and Scope Document: identify the main stakeholder to drive project
- Project Plan: planning, estimating, scheduling, assigning task
- Risk management: assess the risk that may effect a project
- Report: track / report the progress of a project to client/dev
- People management: choose right people to the right job

Understand the Project needs

Resulting of lacking understood of the project needs

- Narrow focus on individual problem
- Lose track of the big picture
- Software that solves wrong problems
- Project fail

Vision and Scope document

- help pm. avoid that problem by catching mis under is early on
- must review the vision scope doc
- Scope doc: Feature that will be developed
- Vision doc: goal of the software that fulfills need of certain user / stakeholder

Problem statement

- background
- stakeholder / user
- Risk / Assumption

Vision of the Solution

- Vision statement
- List of feature
- Scope of phase
- Feature that will not be done

Project planning

it is an output of the project that defines the work that will be done on the project

- statement of work (SOW) that describes all work products
- resource list
- work break down structure / set of effort estimates
- Project schedule
- Risk plan

Project estimate

- help team to create estimates for software project
- use work breakdown structure
 - list task
- WBS is created, the team must create an estimate of the effort required to perform each task
- The most accurate are those that rely on prior experience
- No estimate is guaranteed to be accurate

Assumptions Make Estimates More Accurate

- deal with incomplete information
- find a compromise to resolve disagreements
- do a risk assessment for the project plan



Wideband Delphi: Estimation

- depend on group estimation

planning > Kickoff meeting > Individual preparation > Estimation Session
> Assembling tasks > reviewing results

Planning

- select team & moderator
- Representation from all group
- moderator is unbiased and manage the meeting
- moderator ensures that every one participates
- pm must be a member of estimation team

Kick off meeting

- Explain the Delphi process
- Read vision and scope doc
- Review goal
- Brainstorm
- Generate the initial WBS
- Out put of the session is a high-level list of task and set of assumption write by mod

Individual Preparation

- create set of preparation

Estimation Session

- Moderator distribute an empty form to each
- fill form
- Share
- discussion
- change

Assemble & Review

- collect
- Compiles
- Review

Why Wideband Delphi

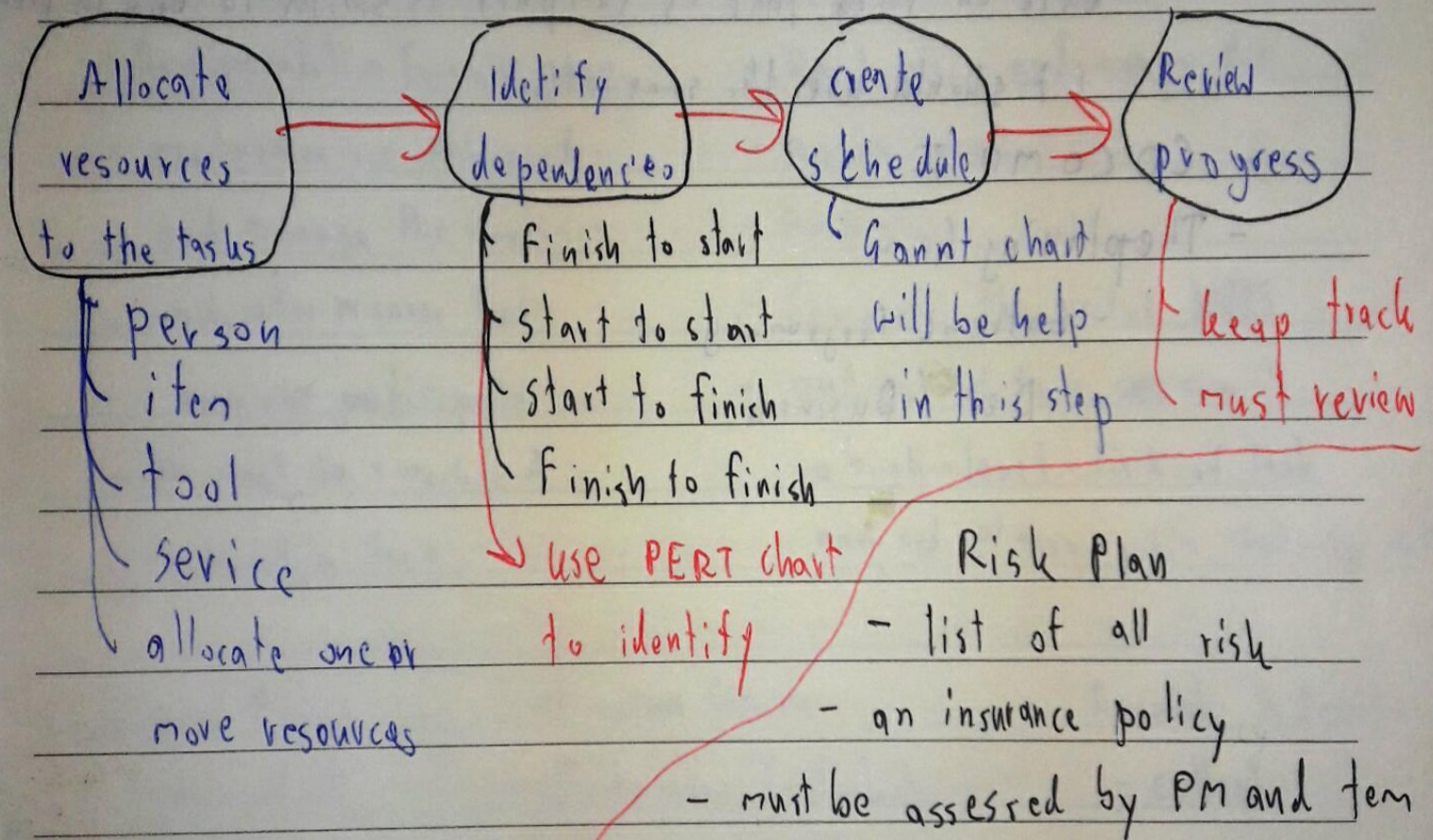
- produces several important element of project plan
- Work because it require the entire team to correct one another
- addresses the problem through the discussion

Other Estimation Techniques

- Proxy Based Estimating (PROBE)
 - base on idea that is component is similar to one in prev
it should use the same effort
- COCOMO II
- The planning game
 - Extreme Programming
 - Dev / Business

Project Schedule

- Project schedule is a calendar that links the project tasks to be done
- In order to create the project schedule
 - Work breakdown structure
 - effort estimate for each task
 - resource list with availability for each resource



Scheduling problems

- predicting how long each task will take
- Productivity is not proportional to number of worker on a task
- Adding people to late project make it later because of communicating overhead
- can be prio
- 2 way
 - Probability
 - Impact