INTRODUCTION TO IT PROJECT MANAGEMENT

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FAITH • INTEGRITY • EXCELLENCE

Presentation Outline

Project Management Life Cycle

Project Management Life Cycle

- Initiate – potential projects are identified and evaluated in terms of importance to the organization
- Plan – scope, time, cost and risk management planning takes place
- Execute – project plan is followed
- Control – project performance is measured against the project plan
- Close – final paper work completed and sign off by all stakeholders

Project Management Life Cycle - Initiation Stage

- ***Define the problem***
  - What client need is being satisfied by the project?
  - It helps to visualize the desired end result.
- ***Develop solution options***
  - *How many different ways might you go about solving the problem?*
  - *Brainstorm solution alternatives (you can do this alone or as a group).*
  - *Is it more or less costly than other suitable choices?*

Project Management Life Cycle - Initiation Stage

- ***The process of authorizing a new or continuing an existing project***
- ***Four initiation activities:***
    1. *Identifying information systems development projects*
    2. *Classifying and ranking information systems development projects*
    3. *Selecting information systems development projects*
    4. *Establishing the Project Contract*

Stakeholders initiations

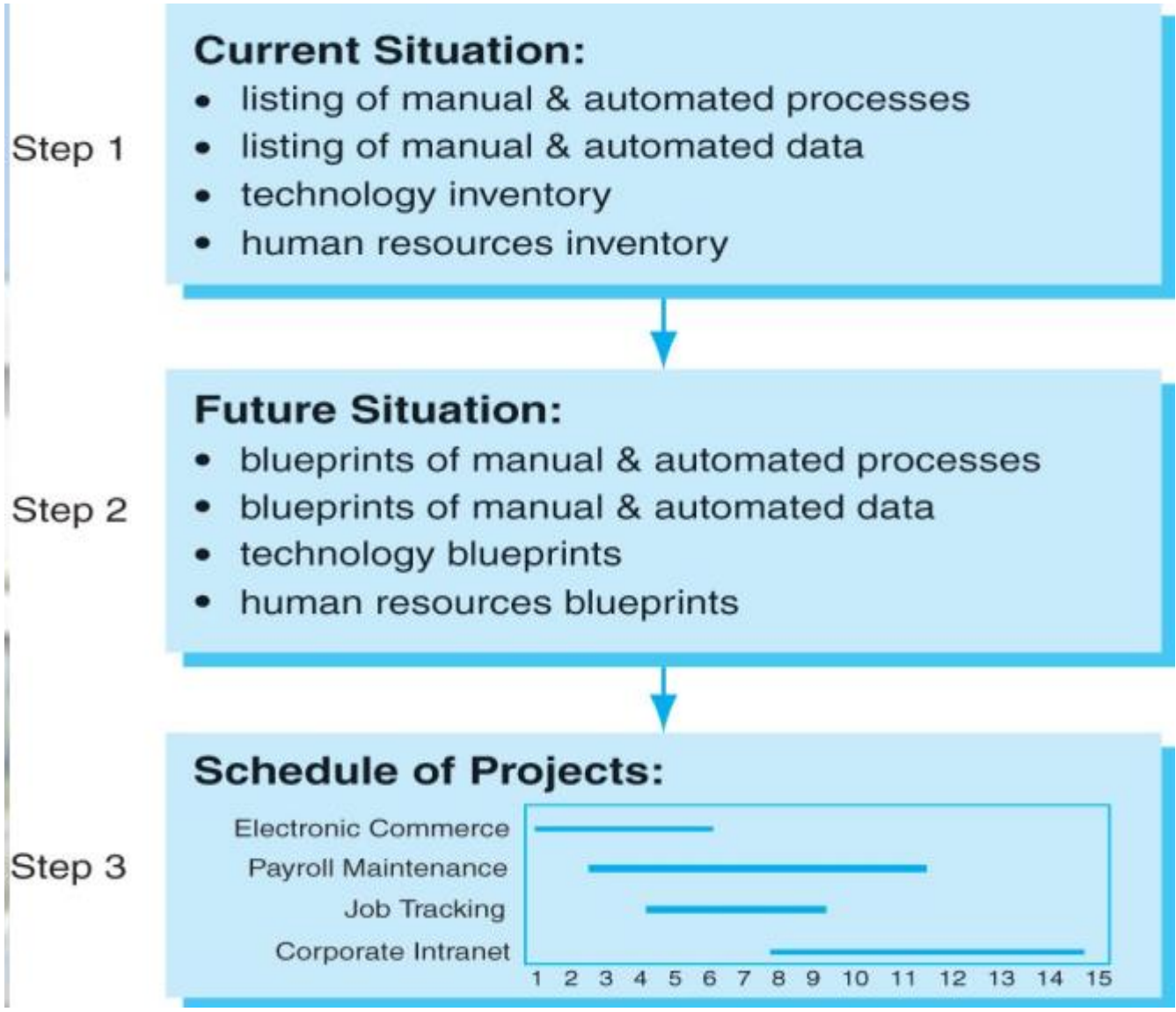
Project Management Life Cycle - Initiation Stage

Stakeholders initiations Registration

Name	Position	Internal/ External	Project Role	Contact Information
Joe Fleming	CEO	Internal	Sponsor	joe_fleming@jwdconsulting.com
Erica Bell	PMO Director	Internal	Project manager	erica_bell@jwdconsulting.com
Michael Chen	Team member	Internal	Team member	michael_chen@jwdconsulting.com
Kim Phuong	Business analyst	External	Advisor	kim_phuong@client1.com
Louise Mills	PR Director	Internal	Advisor	louise_mills@jwdconsulting.com

Project Planning

- An orderly means of assessing the information needs of an organization and defining the systems, databases, and technologies that will best satisfy those needs (to support corporate objectives)
- it involves Three-Step Process



Project Planning

- The main purpose of project planning is to guide execution
- Key outputs included in the project include:
  - A team contract
  - A project scope statement
  - A work breakdown structure (WBS)
  - A project schedule, in the form of a Gantt chart with all dependencies and resources entered
  - A list of prioritized risks (part of a risk register)

Work Breakdown Structure (WBS)

- The Work Breakdown Structure is the foundation for effective project planning, costing and management.
- It is the most important aspect in setting-up a Project
- “A Work Breakdown Structure (WBS) is a hierarchical (from general to specific) tree structure of deliverables and tasks that need to be performed to complete a project.”

- It is the foundation on which everything else builds

Project scope management : WBS Work Breakdown Structure

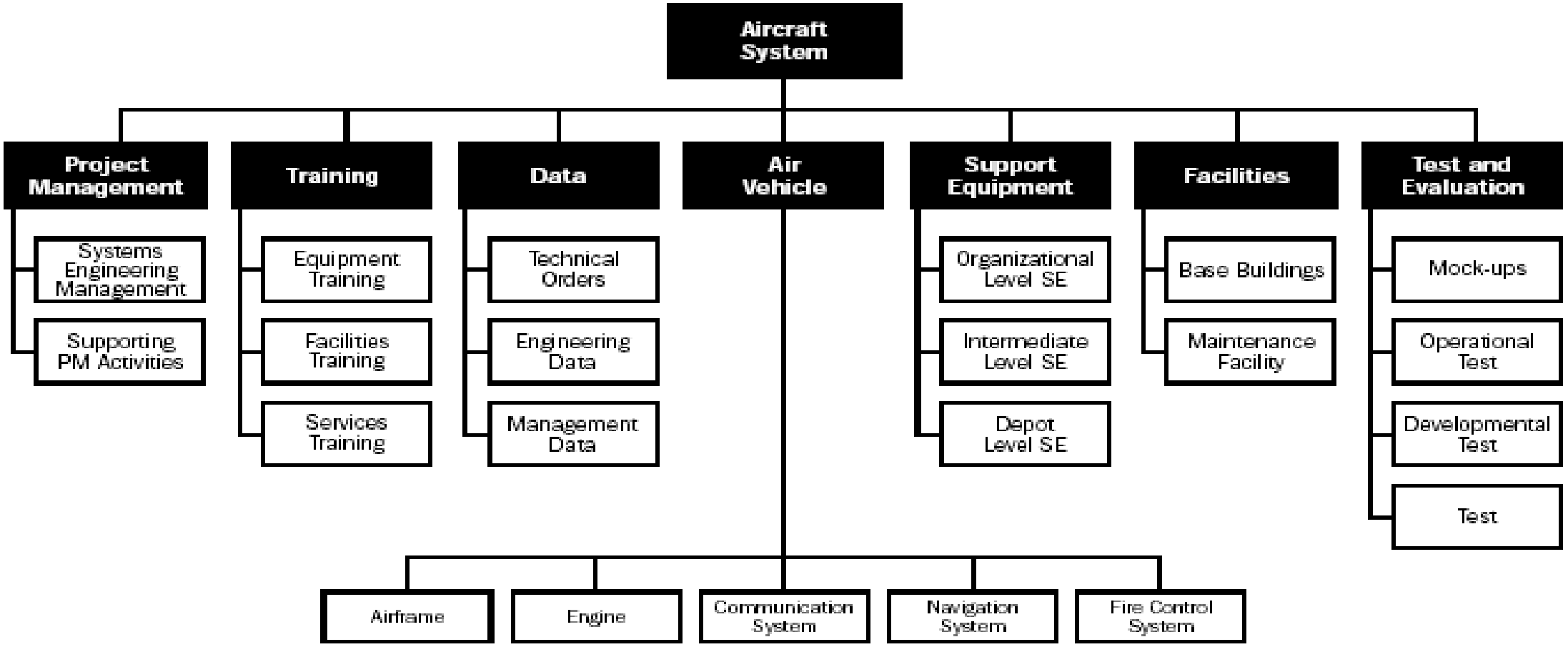
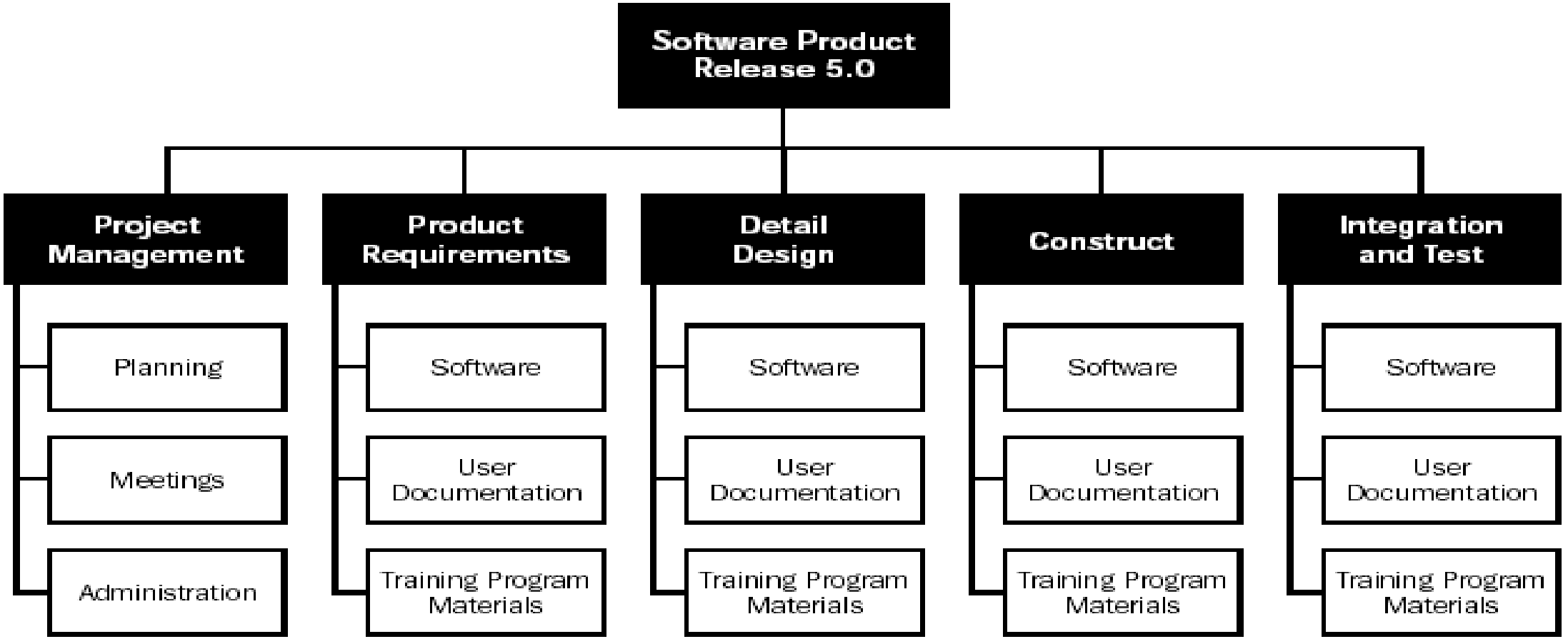


Figure 5-2. Sample Work Breakdown Structure for Defense Material Items

Project scope management : WBS of a software release

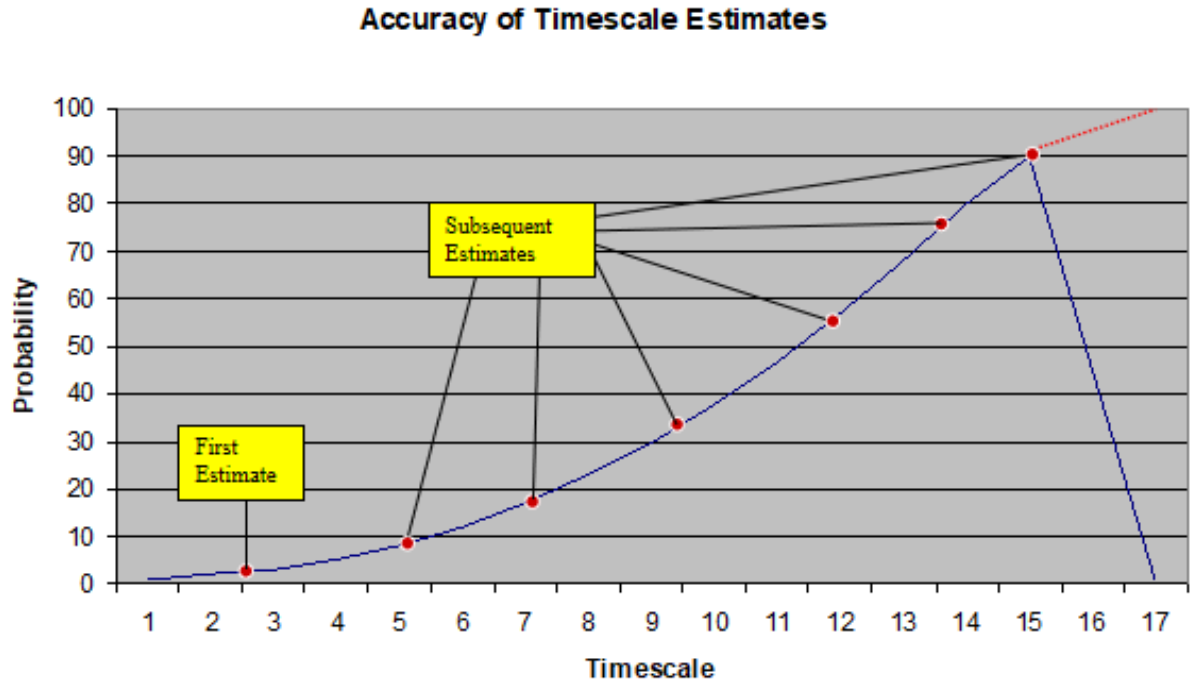


This WBS is illustrative only. It is not intended to represent the full project scope of any specific project, nor to imply that this is the only way to organize a WBS on this type of project.

Figure 5- 3. Sample Work Breakdown Structure Organized by Phase

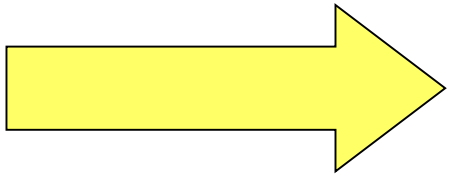
Project Planning

- A word about Scheduling
  - Schedules (task durations) can have a wide variation
  - There is no unique answer. Rather, there is a statistical variation depending on assumptions
  - Need to understand the basis of scheduling (Most challenging; Most likely; Absolute certainty - bet your life on it!)

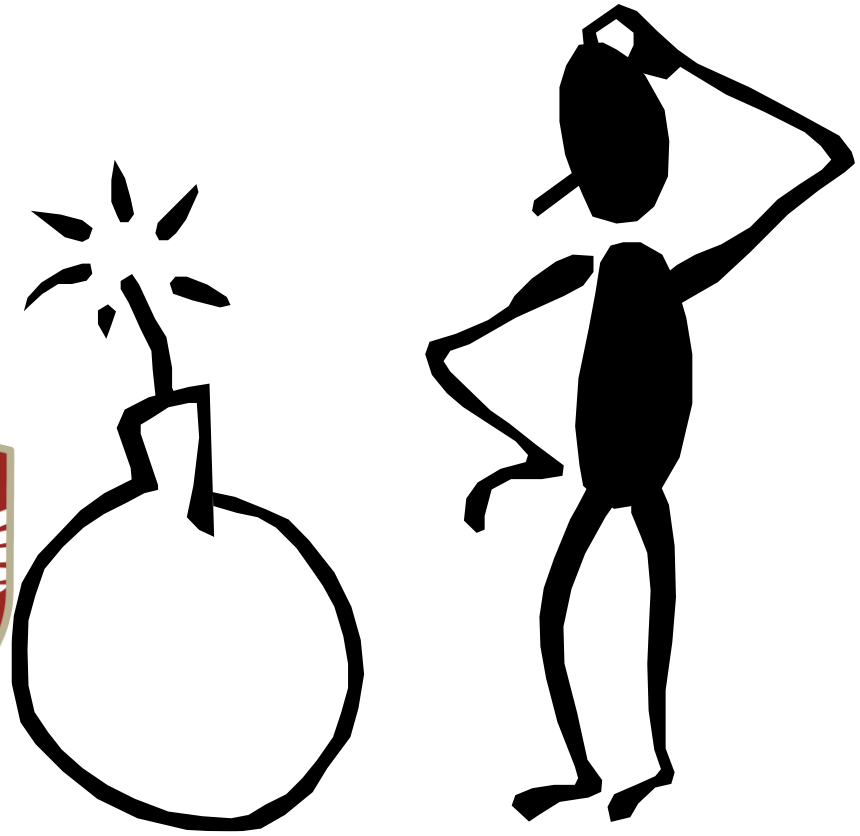


Project Planning

- Adequate planning leads to the correct completion of work
- Inadequate planning leads to frustration towards the end of the project & poor project performance



Project Risk Management



"Project risk is an uncertain event or condition that, if it occurs, has a positive or negative effect on a project objective"

Project risk is an uncertain event or condition, that, if it occurs, has a positive or a negative effect on a project objective (cost, time, quality).

A risk has a cause and, if it occurs, a consequence.

Risk Impact

Threat → Scope → Poor Quality Product

Threat → Schedule → Late Delivery

Threat → Cost → Overspend

- In addition there are health, safety and environmental threats that **must** be managed (CDM Regulations)

Risk Impact

Ranking	Potential Risk
1	Lack of inputs from internal consultants
2	Lack of inputs from client representatives
3	Security of new system
4	Outsourcing/purchasing for the article retrieval and "Ask the Expert" features
5	Outsourcing/purchasing for processing online payment transactions
6	Organizing the templates and examples in a useful fashion
7	Providing an efficient search feature
8	Getting good feedback from Michael Chen and other senior consultants
9	Effectively promoting the new system
10	Realizing the benefits of the new system within one year

Execute the plan

- **Once the plan is drafted, it must be implemented.**
- **Interestingly, people sometimes go to great effort to put together a plan, then fail to follow it. If a plan is not followed, *there is not much point in planning.***
- Usually takes the most time and resources to perform project execution
- Project managers must use their leadership skills to handle the many challenges that occur during project execution
- Many project sponsors and customers focus on deliverables related to providing the products, services, or results desired from the project
- A milestone report can help focus on completing major milestones

Example of a milestone report

Milestone	Date	Status	Responsible	Issues/ Comments
Initiating				
Stakeholders identified	May 2	Completed	Erica and Joe	
Project charter signed	May 10	Completed	Erica	
Project kick-off meeting held	May 13	Completed	Erica	Went very well
Planning				
Team contract signed	May 13	Completed	Erica	
Scope statement completed	May 27	Completed	Erica	
WBS completed	May 31	Completed	Erica	
List of prioritized risks completed	June 3	Completed	Erica	Reviewed with sponsor and team
Schedule and cost baseline completed	June 13	Completed	Erica	
Executing				
Survey completed	June 28		Erica	Poor response so far!

Project Monitoring and Control

- Involves measuring progress toward project objectives, monitoring deviation from the plan, and taking correction actions
- Affects all other process groups and occurs during all phases of the project life cycle
- Outputs include performance reports, change requests, and updates to various plans
- Unless progress is monitored, you cannot be sure you will succeed. It would be like using a roadmap to reach a destination.
- *Control: What are you expected to do as a manager?* If a deviation from the plan is discovered, you must ask what must be done to get back on track, or—if that seems impossible—how the plan should be modified to reflect new realities.

Project Monitoring

- Typical Monitoring Activities
  - *regular reviews of progress against schedule using WBS as basis (Plan against Baseline)*
  - *regular review of actual costs (O/P from SAP) against budgeted costs and Earned Value at WBS level*
  - *regular review of resource loading*
  - *regular progress meetings with project team*
  - *regular meetings with contractors*
  - *production of periodic progress reports*
  - *risk reviews*
  - *inspections/ audits*

Project Control

- Typical Control Activities
  - *assign responsibilities at Work Package level*
  - *staged authorisation of work to be done*
  - *staged release of budgets (staged release of WBS(e) numbers)*
  - *ensure PM has a 'Management Reserve' under his control*
  - *seek corrective action reports when WPs go 'off track' (overrunning or overspending)*
  - *release Management Reserve carefully*

Project Monitoring and Control Summary

- Monitor against the plan – status regularly
- Take a factual approach to decisions
- Identify management action early
- Check that defined controls are being applied – correct if necessary
- Apply change control

Close the project.

- The project is finished, but there is a final step that should be taken.
- The point is to learn something from what you just did.
- What was done well? What should be improved? What else did we learn? We can always improve on what we have done.
- Involves gaining stakeholder and customer acceptance of the final products and services
- Even if projects are not completed, they should be closed out to learn from the past
- Outputs include project files and lessons-learned reports, part of organizational process assets
- Most projects also include a final report and presentation to the sponsor/senior management

Confirm Completion

- Ensure design records are complete and accurate
- Ensure any outstanding actions or issues are addressed
- Ensure Maintenance Records are produced
- Ensure User Manuals are produced
- Hold a formal Post Project review

The Project Management System

- In order to manage projects successfully, it is necessary to have a system. A full project management system consists of seven components.
- If any one of the seven components is not in place or does not function satisfactorily, then you will have some difficulty managing projects.

The seven components are…

- ***Human Factors.***
- ***Method.***
- ***Culture.***
- ***Organization.***
- ***Planning.***
- ***Information.***
- ***Control.***

Human Factors

A project manager must be able to deal effectively with all of the parts of this subsystem in order to be successful.

- **Leadership.**
- **Negotiation.**
- **Team building.**
- **Motivation.**
- **Communication.**
- **Decision making.**

Continue..The seven components

- **Methods refer to the tools of your trade.**
- **The culture of an organization affects everything you do.**
- ***Organization:*** **Every organization must deal with the assignment and definition of each person's authority, responsibility, and accountability.**
- ***Planning:*** **Every organization needs a good methodology for planning projects if it is to be successful.**

Continue… Information & Control

- **Good historical data are needed for planning projects.**
- **The control subsystem is supported by the planning and information subsystems.**

Assignment 2

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