Software Engineering Project Management

Chapter 2: Project Activity and Risk Planning

Up | Site Map

This chapter serves to provide a background to the history of computing, and a high-level overview of what it is that makes up a modern desktop computer system.

Course Materials

Online Course Material

Please select a subtopic to view its contents.

Additional Materials

There are no additional materials available at this time.

Up | Site Map

COMPUTER SCIENCE AND INFORMATION TECHNOLOGY RMIT University

Software Engineering Project Management

Chapter 2: Project Activity and Risk Planning

Up | Site Map

Enterprise Environmental Factors

Project Activities/Lifecycle

Enterprise Environmental Factors

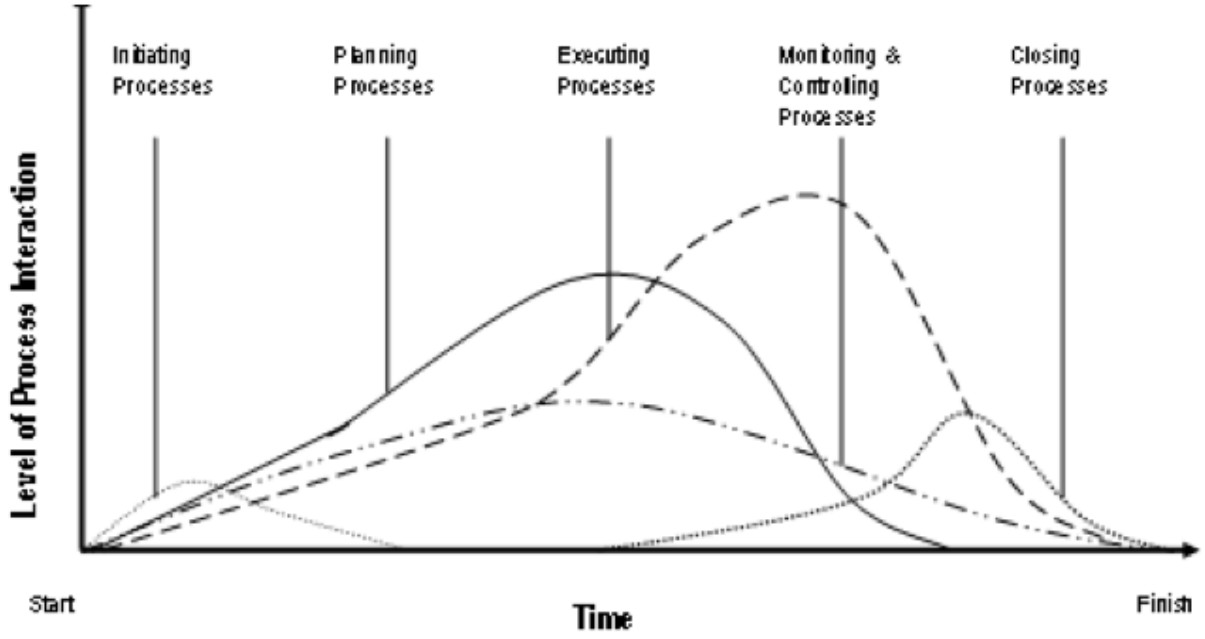
- Referstobothinternalandexternalfactors that surround and influence a projects success.
- These factors may enhance or constrain project management options, with +/- influence on the outcome

- They are considered as inputs to planning processes. They include but are not limited to:
  - Organisational culture, structure, and processes
  - Government and industry standards
  - Infrastructure
  - Existing human resources (skills, discipline, knowledge, laws, etc)
  - Personnel administration
  - Company work authorisation system
  - Market conditions, and Political climate
  - Stakeholders risk tolerance
  - Project management information system (tools,
  - software, etc)

Project Life Cycle

- Collection of generally sequential and some time overlapping project phases - Determined by the
  - management and control needs of the organisation and organisations involved
  - nature of project
  - area of application
- Projects vary in size but can be mapped in to the lifecycle of
  - Starting the project
  - Organising and preparing
  - Carrying out the project and
  - Closing the project

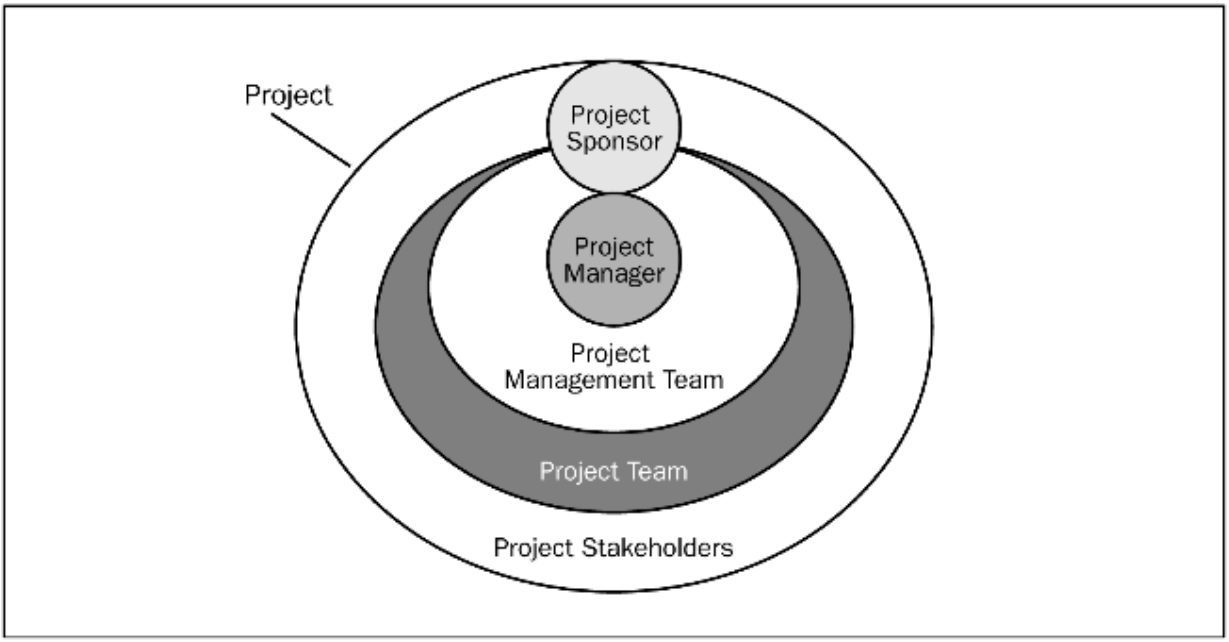
Project Phases and Process Interaction



Project - Stakeholders

- Persons or organisations (incl. customers, sponsors, performing organisation, or the public) actively involved
- Whose interests may positively or negatively influence the completion or performance of the project
- Must identify both internal and external stakeholders to determine project requirements and expectations
- Must manage their influence in relation to project requirements to ensure a successful outcome
- E.G. Customers/users, Sponsor, Portfolio manager, Program manager, PMO, Program review board, Project managers, Project team, Functional manager, Operations management, Sellers/business partners

Project Stakeholders - Relationship Between Stakeholders and the Project



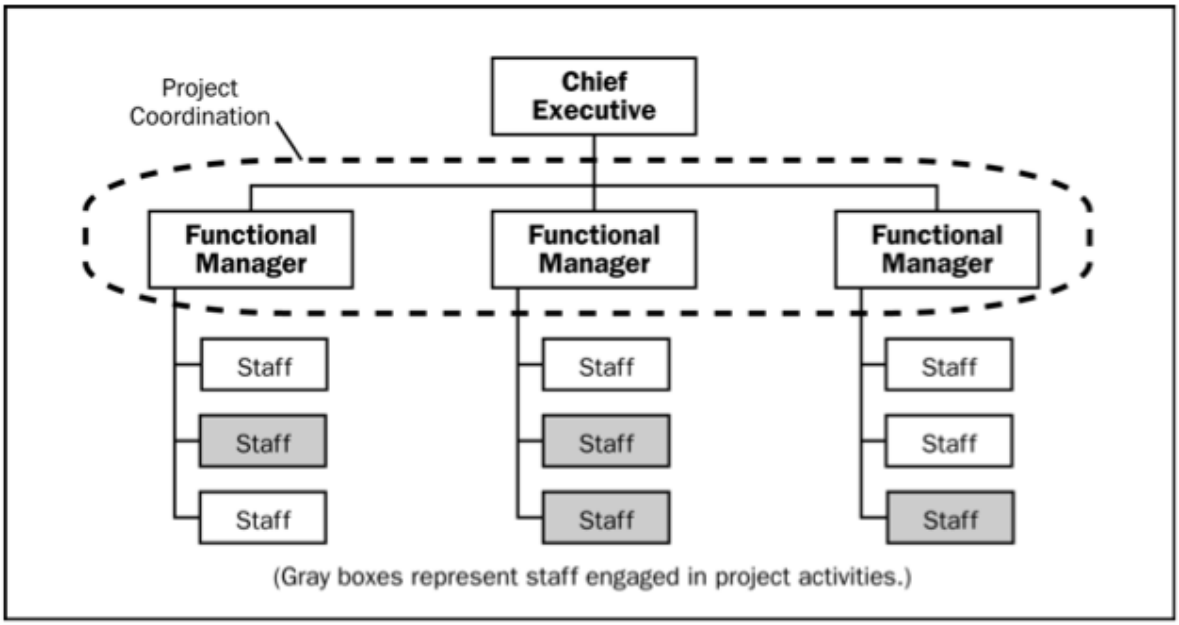
Organiational Influences

- Organisational culture, style and structure influence how projects are performed.
- Culture and style are also known as "norms"
- Degree of project management maturity and systems can also influence, including those of external parties
- Organisation structure would affect the availability of resources and influence how projects are conducted

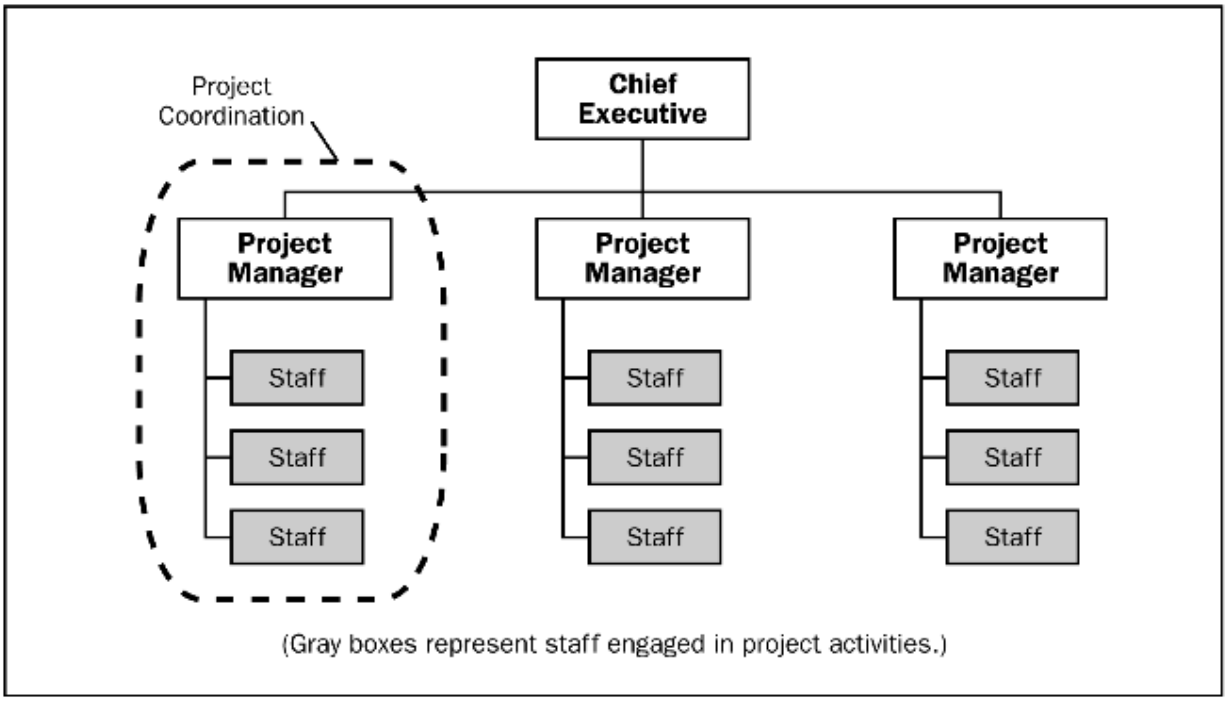
- Organisational structure may range from
  - Functional
  - Matrix = Weak Matrix / Balance Matrix / Strong Matrix
  - Projectised
- Depending on the structure PMs authority, project resource availability, project budget & control, PMs role, project administrative staffing level would vary.

Organization Structure / Project Characteristics	*Functional*	*Matrix*			*Projectized*
		Weak Matrix	**Balanced Matrix**	**Strong Matrix**	
Project Manager's Authority	Little or None	Limited	Low to Moderate	Moderate to High	High to Almost Total
Resource Availability	Little or None	Limited	Low to Moderate	Moderate to High	High to Almost Total
Who controls the project budget	Functional Manager	Functional Manager	Mixed	Project Manager	Project Manager
Project Manager's Role	Part-time	Part-time	Full-time	Full-time	Full-time
Project Management Administrative Staff	Part-time	Part-time	Part-time	Full-time	Full-time

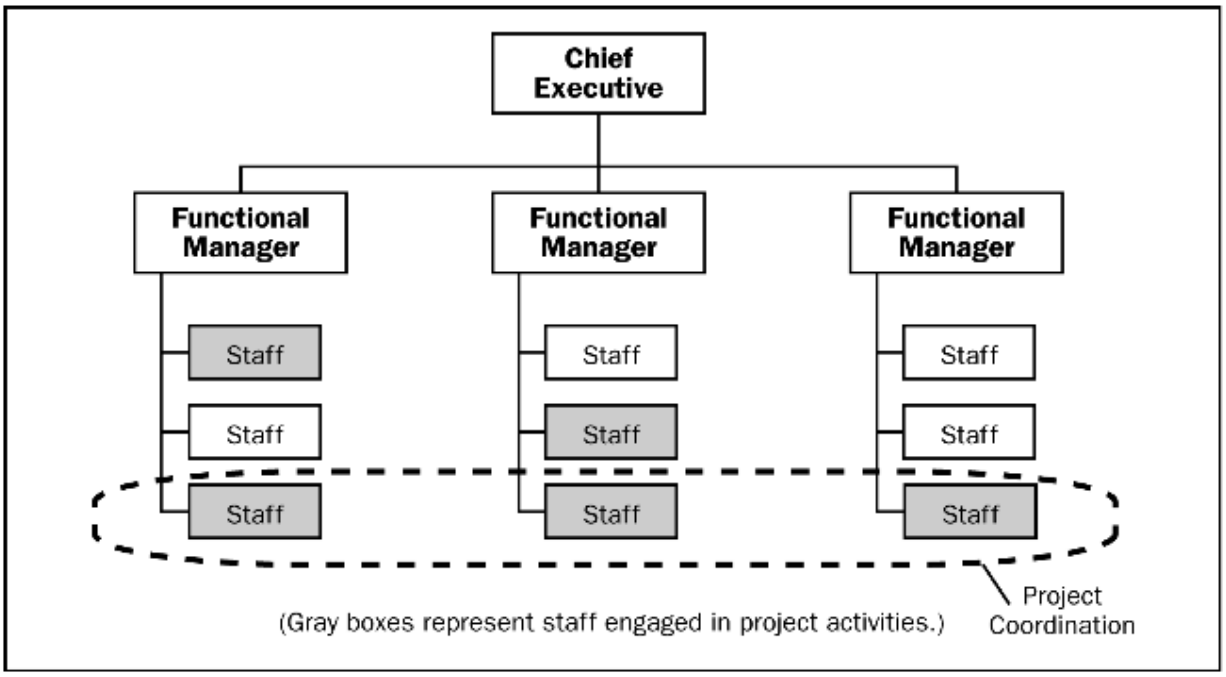
Functional Organisation...



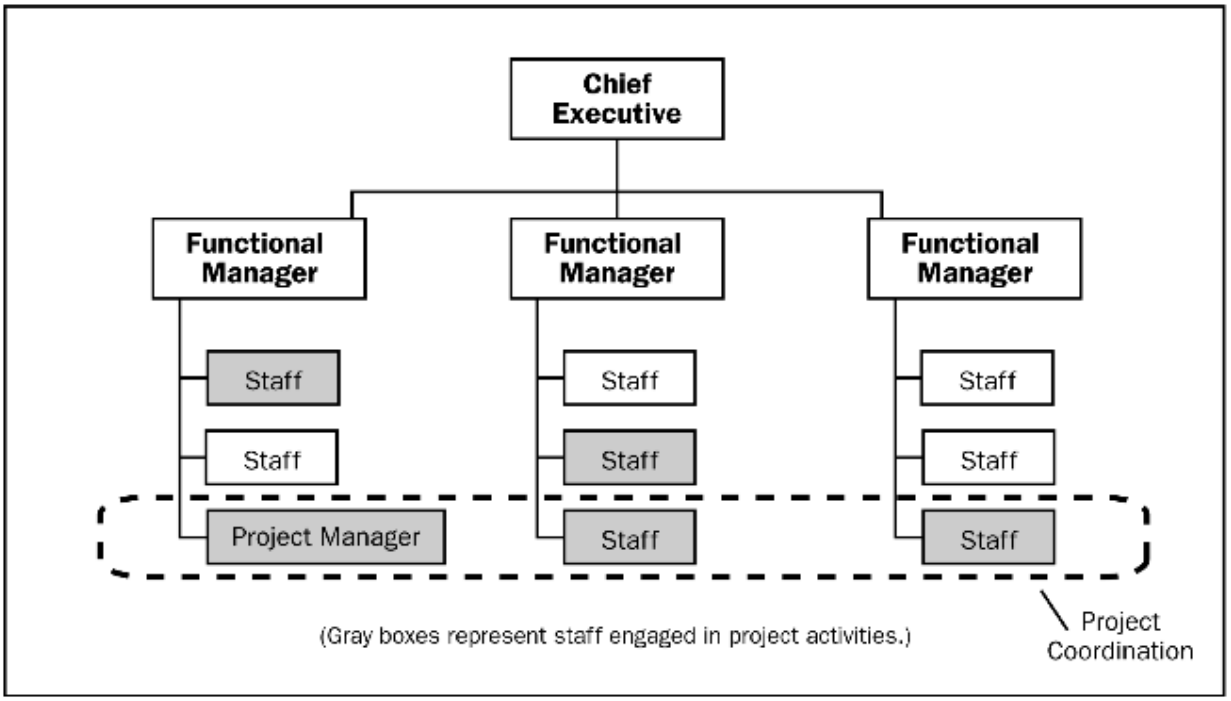
Projectised Organisation...



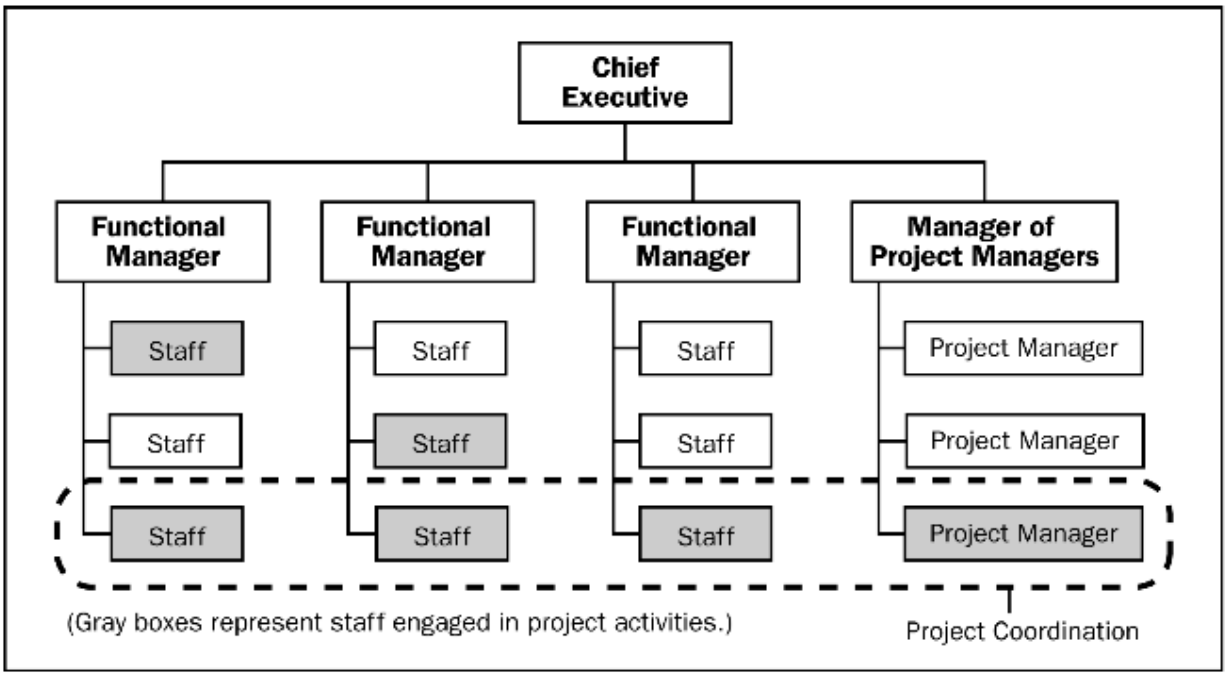
Weak Matrix Organisation...



Balance Matrix Organisation...



Strong Matrix Organisation...

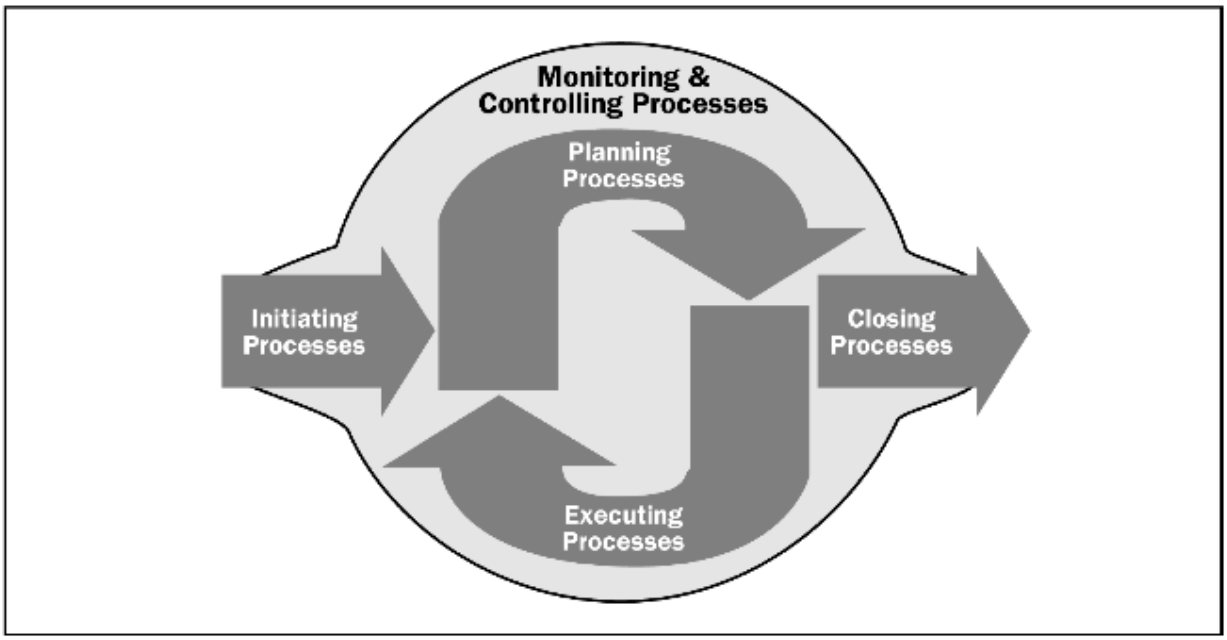


Organisational Influences (Continued)

- Organisational process assets influence the projects performance. This includes
  - formal/informal plans
  - policies
  - templates
  - Procedures, and guidelines
- Organisational corporate knowledge base for storing and retrieving information is also critical for the projects performance. This includes:
  - Process management databases,
  - Project files,
  - Historical information and lessons learned,

Issues and defect management databases,
- Configuration management knowledge databases,
- Financial databases

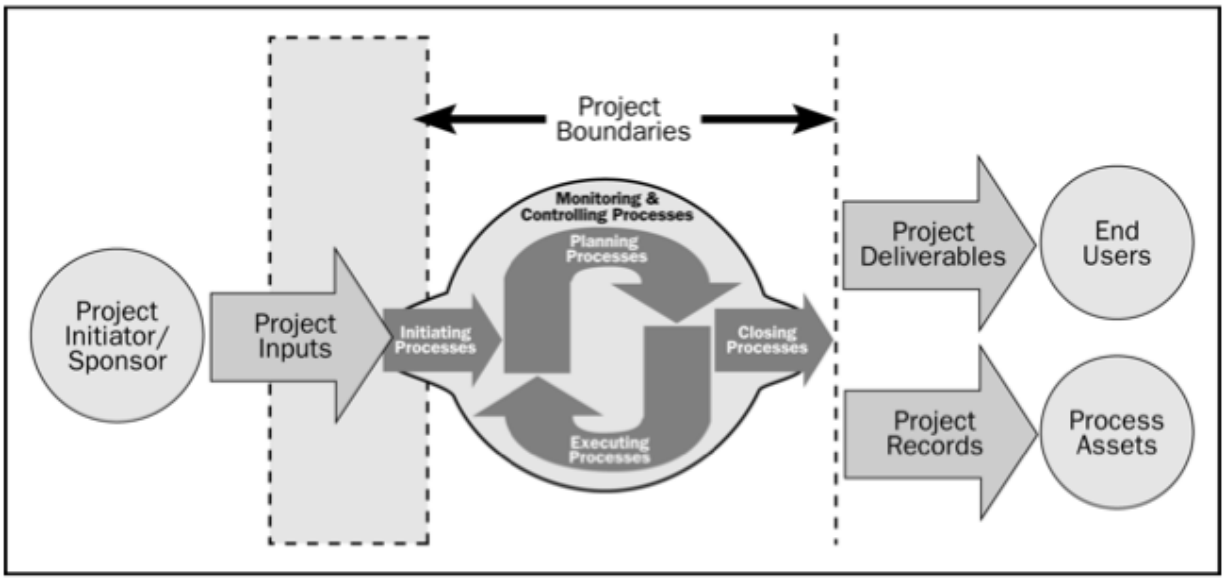
Project Management Processes - PM Process Groups



5 Process Groups

- Initiating Processes - performed to define new project or phase of existing project by obtaining authorisation to start the project or phase
- Planning Processes - performed to establish the total scope of the effort, define and refine objectives, and develop the course of action required to attain those objectives
- Executing Processes - performed to complete the work defined in the project management plan to satisfy the project specifications
- Monitoring & Controlling Processes - performed to track, review, and regulate the progress and performance of the project
- Planning Processes - performed to finalise all activities across all Project Management Process Groups to formally close the project, phases, or contractual obligations

Project Management Processes - Project Boundaries



Project Management Knowledge Areas

- Integration - actions to ensure that the components of a project integrate effectively with each other, and with the wider organisation.
- Scope - actions to ensure that the project includes all and only the work required to meet goals and objectives.
- Time actions to ensure timely performance of all aspects of the project.
- Cost - actions to ensure the project is completed within the approved budget.
- Quality - actions to ensure the project and deliverables satisfy correctness.
- Human resources - actions to ensure the most effective use of people.
- Communications - actions to manage project information.
- Risk management - actions to ensure project risks are identified, analysed and addressed.
- Procurement - actions to ensure the acquisition of external goods and services.

PM Process Groups and Knowledge Areas Mapping

Knowledge Areas	Project Management Process Groups				
	Initiating	Planning	Executing	Monitoring& Controlling	Closing
1 Project Integration Management	- **Develop Project Charter**	-Develop ProjectÂ Management Plan	-Direct and Manage Project Execution	-Monitor and Control Project Work -Perform Integrated Change Control	-Close Project or Phase
2 Project Scope Management		-Collect Requirements -Define Scope -Create WBS		- Verify Scope - Control Scope	
3 Project Time Management		-Define Activities -Sequence Activities -Estimate Activity Resources -Estimate Activity Duration - Develop Schedule		- Control Schedule	

Knowledge Areas	Project Management Process Groups				
	Initiating	Planning	Executing	Monitoring& Controlling	Closing
4 Project Cost Management		- Estimate Costs - Determine Costs		- Control Costs	
5 Project Quality Management		-1 Plan Quality	-Perform Quality Assurance	- Perform Quality Control	
6 Project Human Resource Management		- Develop Human Resource Plan	-Acquire Project Team - Develop Project Team - Manage Project Team		

Knowledge Areas	Project Management Process Groups				
	Initiating	Planning	Executing	Monitoring& Controlling	Closing
7 Project Communications Management	- Identify Stakeholders	- Plan Communications	- Distribute Information - Manage Stakeholder Expectations	-Report Performance	
8 Project Risk Management		- Plan Risk Management - Identify Risk - Perform Qualitative Risk Analysis - Perform Quantitative Risk Analysis - Plan Risk Response		- Monitor and Control Risks	
9 Project Procurement Management		-Â Plan Procurement	- Conduct Procurements	- Administer Procurements	- Close Procurements

Project Management Processes

- PM Process Groups are described in terms of Inputs Tools & Techniques, and Outputs
  - Inputs: documents, plans, designs
  - Tools & Techniques: mechanisms applied to inputs
  - Outputs: documents, products, services

Develop Project Charter : Inputs, Tools & Techniques, and outputs

Project Integration Management

- Includes processes and activities to identify, define, combine, unify, and coordinate the various processes and project management activities within the Project Management process Groups. It comprises of:
  - Develop Project Charter
  - Develop Project Management Plan
  - Direct and Manage Project Execution "Monitor and Control Project Work
  - Perform Integrated Change Control
  - Close Project or Phase
- But before we talk about the Project charter..

Two Extremes Approaches to Planning

- Ready, fire, aim
  - Tom Peters(a management consultant)
- Paralysis by analysis
- There is a happy medium that everyone would like to strike

Up | Site Map

COMPUTER SCIENCE AND INFORMATION TECHNOLOGY RMIT University

Software Engineering Project Management

Chapter 2: Project Activity and Risk Planning

Up | Site Map

Project Charter

Components of a charter

The Basis of a Project Plan-the Project Charter

- Primary function of a project plan is to serve as a roadmap
- Should include the business case and strategic reasons for the project
- Should contain sufficient information to know the status of the project at any time
- Also needs the projects history to date

Categories of Elements Required in the Project Charter

1. Purpose
2. Objectives
3. Overview
4. Schedules
5. Resource requirements
6. Personnel and stakeholders
7. Risk management
8. Evaluation methods

Purpose

- Business case for the project
  - Strategic reasons for the project
  - Expected profitability
  - Competitive effects
  - Desired scope
  - Any other technical results
- Intent is to communicate to stakeholders the reasons for the project

Objectives

- Another name is project mission statement
- More detailed description of the...
  - Scope
  - Deliverables
  - Outcomes
- Communicate to project team members what will be done to achieve the overall project objectives

Overview

- Intended for senior management ! Brief description of project
- Deliverables
- Milestones
- Expected profitability and competitive effects
- Technological and managerial approaches
- Agreements with the client or any third party

Schedule

- Summary of schedules and milestones
- Work breakdown structure (WBS)

- Time to complete each task

Resource Requirements

- Estimates of project expenses
  - Capital and operating
- Costs associated with each task
- Overhead and fixed charges
- Appropriate account numbers
- Project budget

Personnel and Stakeholders

- Stakeholders, sponsor, project manager, and some team members
- Special skill requirements
- Necessary training
- Special legal arrangements
  - Such as non-disclosure agreements

Risk Management

- Listing of potential disasters
  - Major and minor
  - Late subcontractor deliveries, bad weather, unreasonable deadlines, equipment failure, changes in project scope
- Contingency plans are described
  - Does not stop disasters
  - Softens the impact

Evaluation Methods

- Evaluation procedures and quality standards
- Procedures for monitoring, collecting, and storing data on project performance

The Planning Process- Overview

1. Develop and evaluate the concept of the project
2. Carefully identify what project deliverables must have to be successful
3. Create a system
4. Test the prototype
5. Integrate the deliverable into target system
6. Validate the deliverable
7. Let client test it
8. Make sure client understands operating and maintenance requirements

The Planning Process-Nuts and Bolts

- Once approved,project should have a launch meeting
- New project manager should review project objectives
  1. Make sure they understand
  2. Identify important senior managers
  3. Determine if anything is atypical
- Senior manager introduces project to group
  - Project manager chairs launch meeting

Results of the Launch Meeting

1. The projects scope is understood
2. Various functional managers understand their responsibilities and have committed to develop an initial task and

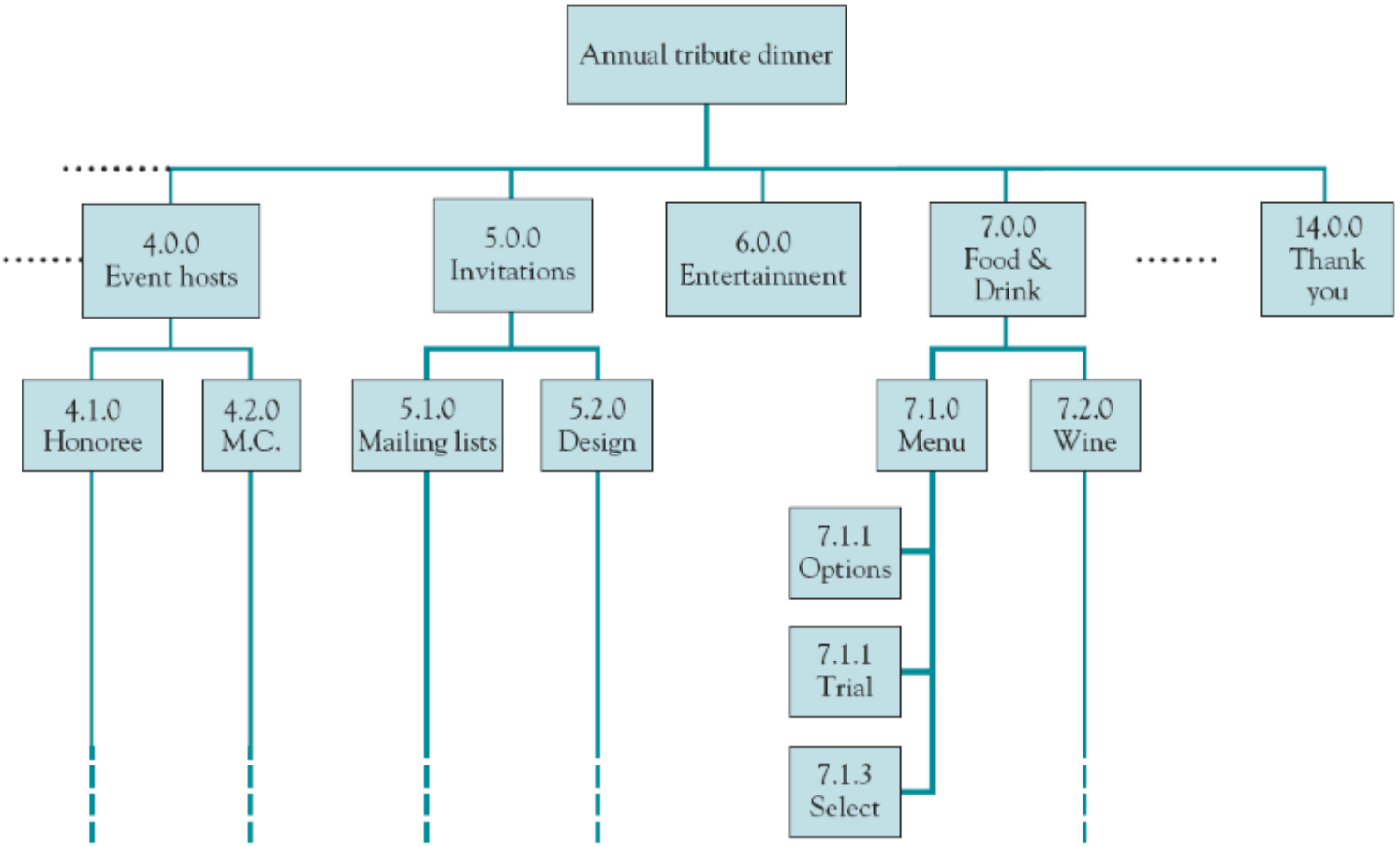
resource plan

3. Any potential benefits to the organization outside the scope are noted

Sorting Out the Project- The Work Breakdown Structure (WBS)

- Inadequate up-front planning is a primary contributor to the failure of a project
- A primary purpose of the WBS is to ensure that no task is overlooked
- Every task, no matter how small, should be listed
  - Along with material and human resources
- This is a non-trivial task

A Sample (Partial) WBS



Notes on WBS

- Microsoft Project (MSP) will make a WBS list at the touch of a key
  - But not a tree-chart
- At any given level, the generality or degree of detail of the tasks should be roughly at the same level
- The breakdown of level 1 tasks should be delegated to someone who will carry out the level 2 tasks
- The job of planning should be delegated to the lowest competent level

Extensions of the Everyday WBS

- WBS generally oriented towards deliverables
- Can be reshaped with some additional data often not included in the WBS
  1. Estimates of resources for each task
  2. Estimates of the time for each task
  3. Who has responsibility for each task
  4. Sequence information for each task
- Increases it orientation toward planning and administration

A Modified WBS for Improving Staff Orientation

Task	Duration	Predecessor	Resources	Assigned To
1. Orientation task force launched	2 weeks	—	Education Manager, Education Staff (3), two Department Managers, three Staff representatives, facilitator	HR Director
2. Compile orientation evaluations for areas of improvement	4 weeks	—		Education Secretary
3. Enhancement proposal prepared				
(a) Draft recommended changes	2 weeks	1, 2	Orientation Task Force	Education Manager
(b) Recommendation presented to execute team	1 week	3(a)	Education Manager	HR Director
(c) Review and finalize orientation enhancements	2 weeks	3(b)	Orientation Task Force	Education Manager
4. Orientation presentations enhanced				
(a) Work with speakers to review presentations	4 weeks	3(c)	Speakers, Education Staff	Education Staff
(b) Facilitate preparation of Power Point presentation	6 weeks	4(a)	IS trainer, Education Staff, Speaker	Education Staff
(c) Facilitate acquisition of videos on certain subjects	6 weeks	4(a)	Education Staff, Speaker	Education Staff
5. Review evaluation tool to measure outcomes	2 weeks	3	Education Manager	Education Manager
6. Facilitate physical changes necessary to orientation room	4 weeks	4	Education Staff, AV Staff, Facilities Staff	Education Manager
7. Implement revised orientation program	0 days	5, 6	Education Staff, Speakers, HR Staff	Education Manager
8. Evaluate feedback from first two orientation sessions	2 months	7	Education Staff	Education Manager

More on the Work Breakdown Structure and Other Aids

- RACI Matrix is a table
- Project tasks derived from the WBS listed in rows and
- departments and individuals in the columns
- Helps organize the project team

The RACI Matrix

WBS		Project Office					Field Operator	
Subproject	Task	Project Manager	Contract Administrator	Project Engineer	Industrial Engineer	Risk/Compliance Manager	Field Manager	
Determine need	A1	I		R	A			
	A2	C	I	A	R			
Solicit quotations	B1	I	C	A		C	R	
Write appropriate request	C1	C	A	I	R	I		
	C2		R	I	A			
	C3	R	C	A			C	
.	.							
.	.							
.	.							

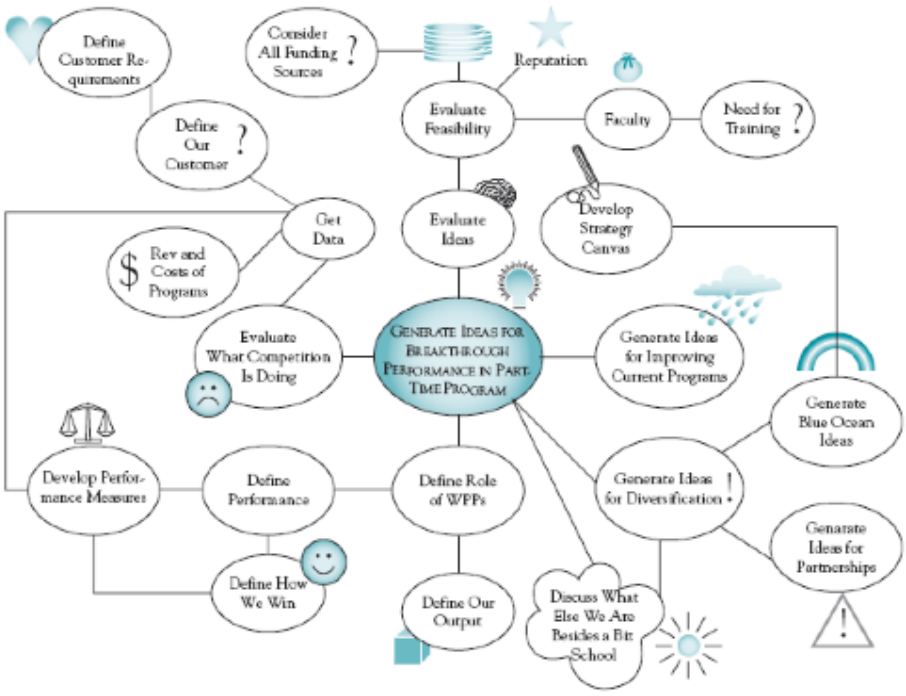
Legend:

A = Accountable C = Consult
R = Responsible I = Inform

A Whole-Brain Approach to Project Planning

- Mind mapping is a visual approach that closely mirrors the way the human brain records and stores information
- In addition to its visual nature, this methodology has the advantage of tapping in to the creative potential of multiple team members
- Mind mapping is an entertaining approach that helps generate enthusiasm and involvement

A Sample Mind Map



Up | Site Map

COMPUTER SCIENCE AND INFORMATION TECHNOLOGY RMIT University

Software Engineering Project Management

Chapter 2: Project Activity and Risk Planning

Up | Site Map

Risk Management

Risk Management

PMBOK devotes chapter 11 to this topic, essentially risk management is about 3 major areas:

1. Risk identification
2. Risk analysis
3. Response to risk

Breakdown into Sub-processes

The field of risk management has grown considerable over the last decade. The project Management Institute's PMBOK (2013) devotes chapter 11 to this topic. In general, risk management includes three areas:

1. Risk identification
2. Risk analysis
3. Response to risk

The process of accomplishing these three tasks is broken down into six subprocesses:

1. Risk Management Planning: developing a plan for risk management activities.
2. Risk Identification: finding those risks that might affect the project.
3. Qualitative Risk Analysis: evaluating the seriousness of the risk and the likelihood it will affect the project.
4. Quantitative Risk Analysis: developing measures for the probability of the risk and its impact on the project.
5. Risk Response Planning: finding ways of reducing negative impacts on the project as well as enhancing positive impacts.
6. Risk Monitoring and Control: maintaining records of and evaluating the subprocesses above in order to improve risk management.

Risk Management Planning

- Like any other planning process
- Must ensure that the necessary resources can be applied in a timely manner
- It is a continuous process
- The factors that cause uncertainty change over time

Risk Identification and Qualitative Risk Analysis

- Steps 2-3 often carried out together
- Scenario analysis
    - Well-known method for identifying risk
    - Involves envisioning likely scenarios and resulting outcomes
- Failure mode and effect analysis (FMEA)
    1. List ways project might fail
    2. List consequences and evaluate its severity
    3. List cause and likelihood
    4. Estimate the ability to detect each failure
    5. Calculate the risk priority number
    6. Sort the potential failures by their risk priority number

Quantitative Risk Analysis

- State outcomes as probability distribution and use distributions to evaluate the desirability of certain decisions
- Objective is to illustrate the risk profile of the outcomes
- Risk profiles are one factor to consider in making the decision
- Techniques for analysis include:
    - Expected value
    - Simulation
- Example: Sydneys M5 East Tunnel project

Sydney's M5 East Tunnel project

- It was constructed under strict budgetary and schedule requirements, but given the massive traffic delays now hampering commuters, the requirements may have been seriously underestimated.
- Due to an inexpensive computer system with a high failure rate, the tunnels security cameras often fail requiring the operators to close the tunnel
- It was build to handle 70,000 vehicles but carries 100,000 so any glitch can be disastrous
- A risk analysis, including the risk of overuse would have anticipated these problems and mandated a more reliable set of computers once the cost of failure had been included.

Risk Response Planning

- Deciding on which risks to prepare for and which to ignore
- Main preparation is a risk response plan
- Risk response plan includes contingency plans and logic charts detailing what to do
    - Contingency plan is a backup for some emergency or unplanned event (plan B)
    - Logic chart shows the flow of activities once a backup plan is initiated

Risk Monitoring and Control

- Monitoring and control are tasks for the parent organization
    - As well as the project
- Must keep records for future projects
- Also must continue to search for new risks

Project Integration Management

Remaining steps from the previous section on Project Integration Management (note: these are not a part of Project charter)

Develop A Project Management Plan

Outputs:

1. Project Management Plan - integrates and consolidates all subsidiary management plans and baselines from the planning process, including but not limited to:

    - Lifecycle selected for the project and processes to be applied
    - Results of tailoring by the PM team of PM processes selected, level of implementation of each process, description of tools and techniques, and how selected processes will be used to manage the project
    - How work will be executed to accomplish the project objectives
    - A change management plan to document, monitor and control changes
    - Note project baselines includes but not limited to Schedule baseline, Cost performance baseline and Scope baseline
    - Subsidiary plans include a Requirements Management Plan and a Process improvement plan in addition

to management plans for each one of the remaining knowledge areas

Direct and Manage Project Execution

- Process of performing the work defined in the project management plan to achieve the project objectives:
  - Activities to create project requirements
  - Creation of project deliverables
  - Staff training
  - Obtain, manage and use resources
  - Implement planned methods and standards
  - Establish and manage project communications
  - Generate project data cost, schedule, quality progress and status
  - Issue change requests and adapt approved changes
  - Manage risks and implement risk response
  - Manage vendors (sellers and suppliers)
  - Collect and document lessons learnt
- Implement approved changes covering corrective action, preventive action and defect repair

Direct and Manage Project Execution

Inputs:

1. Project Management Plan
2. Approved Change Requests
3. Enterprise Environmental Factors
4. Organisational Process Assets

Tools & Techniques:

1. Expert judgement provided by any group or individual with specialised knowledge
2. Project Management Information System

Outputs:

1. Deliverables
2. Work Performance Information, e.g. deliverable status, schedule progress and Cost incurred
3. Change Requests, including those required to undertake corrective action, preventive action, defect repair and updates
4. Project Management Plan Updates, including updates to all subsidiary plans
5. Project Document Updates, including requirements documents, project logs (issues, assumptions, etc), Risk Register, and Stakeholder register

Monitor and Control Project Work

- Process of tracking, reviewing, and regulating the progress to meet the performance objectives defined in the project management plan.
- Performed throughout the project and is concerned with:
  - Comparing actual performance against the project management plan
  - is Assessing performance to determine whether any corrective/preventive actions are indicated, and recommending those that are necessary
  - Identifying new risks and analysing, tracking and monitoring existing risks with appropriate risk response plans
  - Maintaining an accurate, timely information base concerning the projects product (s) and associated documentation
  - Providing information to support status reporting

Providing forecasts to update current cost and schedule information
- Monitoring implementation of approved changes

Monitor and Control Project Work

Inputs:

1. Project Management Plan
2. Performance Reports current status, significant accomplishments for the period, scheduled activities, forecasts, and issues
3. Enterprise Environmental Factors
4. Organisational Process Assets

Tools & Techniques:

1. Expert judgement provided by any group or individual with specialised knowledge

Outputs:

1. Change Requests which may expand adjust project or product scope, including those required to undertake corrective action, preventive action, defect repair and updates
2. Project Management Plan Updates, including the updates to all subsidiary plans
3. Project Document Updates, including Forecasts, Performance reports and Issue logs

Perform Integrated Change Control

- Process of reviewing all change requests, approving changes and managing changes to the deliverables, organisational process assets, project documents and the project management plan
- Includes the following change management activity at the differing levels of details:
  - Influencing the factors that circumvent integrated change control
  - Reviewing, analysing and approving change requests promptly
  - Managing the approved changes
  - Managing the integrity of baseline by releasing only approved changes
  - Reviewing, approving or denying all recommended corrective and preventative actions
  - Coordinating changes across the entire project (e.g. a proposed schedule, cost, risk, quality and staffing), and
  - Documenting the complete impact of change

Inputs:

1. Project Management Plan
2. Work Performance Information, e.g. deliverable status, schedule progress and Cost incurred
3. Change Requests
4. Enterprise Environmental Factors
5. Organisational Process Assets

Tools & Techniques:

1. Expert judgement
2. Change Control Meetings

Outputs:

1. Change Request Status Updates
2. Project Management Plan Updates
3. Project Document Updates

Close Project or Phase

- Process of finalising all activities across all of the Project Management Process Groups to formally complete the project or phase
- Ensures that all project work is complete and that the project has met its objectives. It covers
- actions and activities to transfer the projects products, services or results to next phase or to production/operations
- actions and activities to satisfy completion or exist criteria
- activities needed to collect project or phase records, audit project success or failure, gather lessons learned and archive project information for future use by the organisation

Inputs:

1. Project Management Plan
2. Accepted Deliverables - as part of Verify Scope process
3. Organisational Process Assets

Tools & Techniques:

1. Expert judgement

Outputs:

1. Final Product Service, or Result Transition
2. Organisational Process Assets Updates, such as:
    - Project files
    - Phase or project closure documents
    - Historical information

A Case Study...

- Case study is taken from Textbook, Chapter 2, Page 106- Plymouth Zoos Re-engineering Project

INCIDENTS FOR DISCUSSION

Plymouth Zoo's Re-engineering Project

The Chief Operating Officer of the Plymouth Zoo, Avery Mitchell, was put in charge after the CEO unexpectedly died. Avery was named acting CEO and told by the zoo's Board of Directors that he would be considered for the position permanently if the next few months went smoothly. Avery was very nervous because he knew that the zoo was on the verge of financial troubles. He was not expecting to make the profits that had been projected for the next few months. He knew that admissions were down as a result of recent unrest in the city and nationally.

The deceased CEO had hired a consulting group to help identify cost savings for the zoo. The firm hired was unfamiliar to Avery, and there were rumors around the zoo that the lead consultant was a friend of the now deceased CEO.

The consulting group had been interviewing staff at the zoo for the last two weeks in order to prepare a proposal for work re-design to cut costs. Avery met with the consultants, and they presented him with their proposal. The proposal outlined the cost of the consultants and the projected savings the zoo could expect after the consultants' work was finished. Avery was unclear about precisely how the savings were determined and what would be the redesign project's specific deliverables.

Questions: What should Avery Mitchell do next? What information should he ask the consultants for before accepting their proposal? What project planning tools would you suggest Avery ask the consultants to use to outline the project more specifically and address his concerns?

Time Is Fleeting

A large privately owned retail discount store was having problems with their time clocks. There were six freestanding time clocks in the store for staff use. They were located conveniently at points where staff entered and exited the store. The staff could also clock in and out on the computer terminals that controlled the cash registers.

The time clocks were old and often in need of repair. The *Information Technology* (*IT*) department was responsible for the maintenance of the machines. The IT department could make minor repairs but had to call the clock vendor for the not infrequent major repairs.

The head of *Human Resources* (*HR*) wanted to launch a project to purchase and install new time clocks. He felt that because the current time clocks could not be counted on to work, the accuracy of the staff's working hours and the store's payroll was in question. This bothered him, and he felt the problem was getting worse as the clocks aged.

The head of the IT department wanted to launch a project to get rid of all the time clocks and have everyone clock in and out using the current computer terminals located at each register. This would greatly decrease the costs the department was incurring to maintain the current time clocks. The head of IT knew that the computer terminals were not conveniently located for anyone except the sales clerks, but he thought that he could add some terminals in other locations for less money than maintaining the current clocks. He also felt very confident in his staff's ability to maintain the computer terminals themselves, so the expense of calling in a vendor would disappear completely.

The head of HR did not like IT's idea at all. He had problems already with people clocking in for other staff and knew this would only get worse if every staff had to go to a designated computer terminal to clock in and out. The head of HR also knew he had several staff members who were not computer literate and would have trouble clocking in and out.

The two department heads went to the President, and each asked to set up and supervise a project to take care of the time clock problem.

Question: If you were the President how would you handle this problem?

Lesson Number 2

- Never avoid Risk Management!!
- We've found a way to eliminate risk!

Acknowledgement: YouTube video copyright is held by the YouTube website and the owner, it has been cited for educational purposes.

References

- Project Management in Practice 5th Edition, Wiley Inc.

Reading from textbook

- Chapter 3: Project Activity and Risk Planning
- Pages 76-97; 98-103

Up | Site Map