PROJECT MANAGEMENT

Alliance Software Inc

February 26, 2022

SCHEDULE

Session	Date	Day	Time
Session 1			
Session 2			

COURSE OUTLINE

Session	Course
Session 1	Basics of Project Management
	Project Planning
	Estimation and Scheduling
Session 2	Project Execution Monitoring and Control
	Importance of Communication
	Project Closure

OBJECTIVES

- At the end of Session 1,
  - Participants will be able to understand the basics and concepts of project management.
  - Participants will be able to identify the things needed during project planning.
  - Participants will be able to understand the concepts of estimation, work breakdown structure, and schedule creation.
- At the end of Session 2,
  - Participants will be able to understand the concepts on managing project information, monitoring and controlling project work.
  - Participants will learn how to properly communicate statuses to the higher management and how to implement team communication.
  - Participants will be able to apply the learnings through case studies and exercises.

Session 1

BASICS OF PROJECT MANAGEMENT

What is a PROJECT?

- A temporary endeavor undertaken to create a unique product, service or result.
- Has a beginning and end.
- A successful project is one that meets the expectations of your stakeholders.

What is a STAKEHOLDER?

- Someone with a vested interest in the project

What is PROJECT MANAGEMENT?

- the application of knowledge, skills, tools and techniques to project activities to meet project requirements.
- brings together a set of tools and techniques, performed by people– to describe, organize, and monitor the work of project activities.
- carefully planned and organized effort to achieve a specific goal.

The PROJECT MANAGER

- Focuses on specified project objectives
- Controls the assigned project resources to best meet project objectives
- Manages the constraints (Scope, schedule, cost, quality) of the individual projects

Roles of a Project Manager

- Responsible for achieving the project objectives.
- The link between the strategy and the team.
- Must have the following competencies:
  - Knowledge: what he knows about project management
  - Performance: what he is able to accomplish while applying his PM knowledge
  - Personal: how he behaves when performing the project

INTERPERSONAL SKILLS of a Project Manager

- Leadership
- Team building
- Motivation
- Communication
- Influencing
- Decision Making
- Political and cultural awareness
- Negotiation
- Trust building
- Conflict Management
- Coaching

What are the 4 BASIC ELEMENTS OF PROJECT MANAGEMENT?

1. Resources – people, equipment, material
2. Time – task durations, dependencies, critical path, milestones
3. Money – costs, contingencies, profit
4. Scope – project size, goals, requirements

I. SCOPE

- It is the definition of what the project is supposed to accomplish and the budget (of time and money) that has been created to achieve these objectives.

II. RESOURCES

- Managing the people resources means having the right people, with the right skills and the proper tools, in the right quantity at the right time.
- It also means ensuring that they know what needs to be done, when, and how. And it means motivating them to take ownership in the project too.

III. TIME

- Any project can be broken down into a number of tasks that have to be performed.
- Project manager has to figure out what the tasks are, how long they will take, what resources they require, and in what order they should be done.

IV. MONEY

- a project budget is composed of the estimated cost, plus the contingency and design allowance, plus any profit.
- The project manager's job is to keep the actual cost at or below the estimated cost, to use as little of the design allowance and contingency as possible, and to maximize the profit the company earns on the project.
- To maximize your chances of meeting your project budget, meet your project schedule.

Why do we need PROJECT MANAGEMENT?

- Team is required to meet the demand with quality and standard.
- Improved control over the project
- Improved performance
- Improved budget and quality

IMPORTANCE OF PROJECT MANAGEMENT

- Delivery of the project while balancing the following constraints:
  - Scope
  - Schedule
  - Quality
  - Resources
  - Customer Satisfaction
  - Risk
- Management of these scenarios:
  - If time is extended, the cost of the project will increase.
  - If time extended with the same cost then quality of the product will reduce.
  - If scope is extended then cost and time will also extend.

5 BASIC PHASES OF PROJECT MANAGEMENT

The process of directing and controlling a project from start to finish may be further divided into 5 basic phases:

1. Project conception and initiation

- if the project can realistically be completed

2. Project definition and planning

- prioritize the project, calculate a budget and schedule, and determine what resources are needed.

5 BASIC PHASES OF PROJECT MANAGEMENT

3. Project launch or execution

- Resources' tasks are distributed and teams are informed of responsibilities

4. Project performance and control

- compare project status and progress to the actual plan

5. Project close

- project tasks are completed and the client has approved the outcome

1. PROJECT Conception and Initiation

The initiating processes determine the nature and scope of the project

The initiating stage should include a plan that encompasses the following areas:

- analyzing the business needs/requirements in measurable goals
- reviewing of the current operations
- financial analysis of the costs and benefits including a budget
- stakeholder analysis, including users, and support personnel for the project
- project charter including costs, tasks, deliverables, and schedules

Project Charter Samples

- Reference:
  - http://project-charter-template.casual.pm/

2. PROJECT Definition and Planning

After the initiation stage, the project is planned to an appropriate level of detail.

The main purpose is to plan time, cost and resources adequately to estimate the work needed and to effectively manage risk during project execution

Project planning generally consists of

- determining how to plan
- developing the scope statement;
- selecting the planning team;
- identifying deliverables and creating the work breakdown structure;
- identifying the activities needed to complete those deliverables and networking the activities in their logical sequence;
- estimating the resource requirements for the activities;
- estimating time and cost for activities;
- developing the schedule;
- developing the budget;
- risk planning;
- gaining formal approval to begin work.
- Additional processes, such as planning for communications and for scope management, identifying roles and responsibilities, determining what to purchase for the project and holding a kick-off meeting are also generally advisable.

PROJECT PLANNING

What is a PROJECT PLAN?

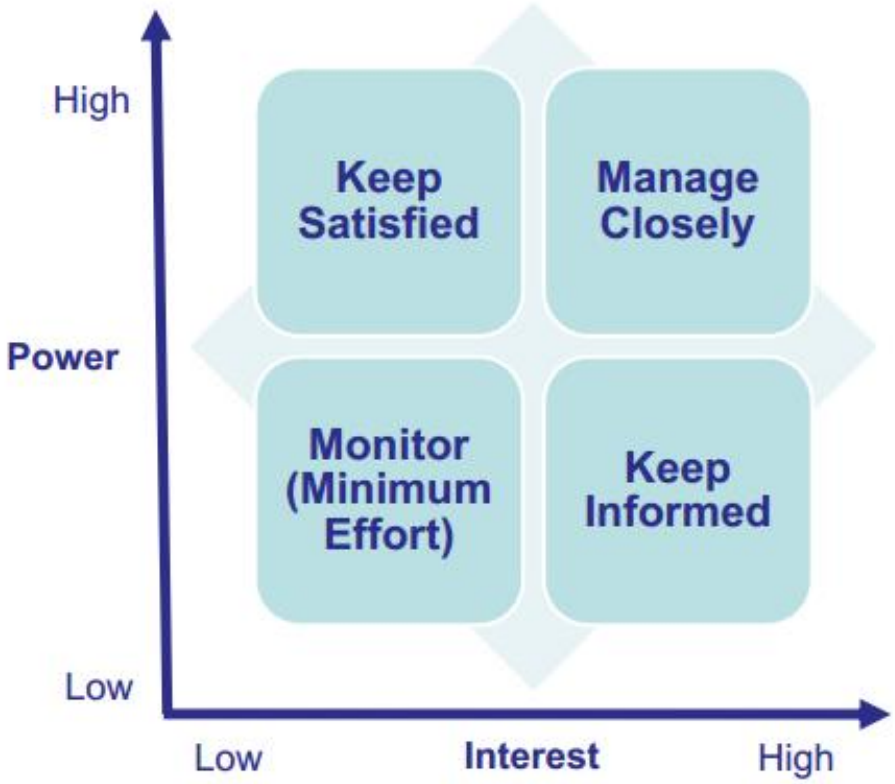
- according to the Project Management Body of Knowledge, is: "...a formal, approved document used to guide both *project execution* and *project control*.

- to document planning assumptions and decisions, facilitate communication among *stakeholders*, and document approved scope, cost, and schedule *baselines*.

Identify your STAKEHOLDERS

- Who will be affected by the project?
- Who can exert influence on the project?
- Who are interested in the project?

Prioritize your STAKEHOLDERS



Understand your KEY STAKEHOLDERS

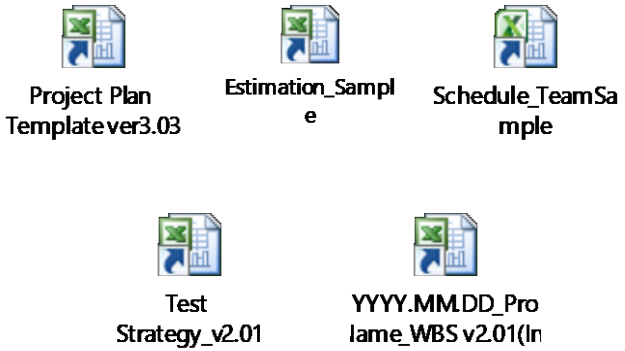
- What financial or emotional interest do they have in the outcome of your work? Is it positive or negative?
- What motivates them most of all?
- What information do they want from you?
- How do they want to receive information from you? What is the best way of communicating your message to them?

Contents of a PROJECT PLAN

- Processes to be used
- The life cycle for each phase of the project
- Methods for executing the work of the project
- Change management methods
- Configuration management plan
- Performance baseline validation
- Stakeholder communication
- Management reviews of content, issues, and pending decisions

Sample Files

- WBS Estimate
- Project Schedule
- Project Plan



ESTIMATION AND SCHEDULING

What is WORK BREAKDOWN STRUCTURE?

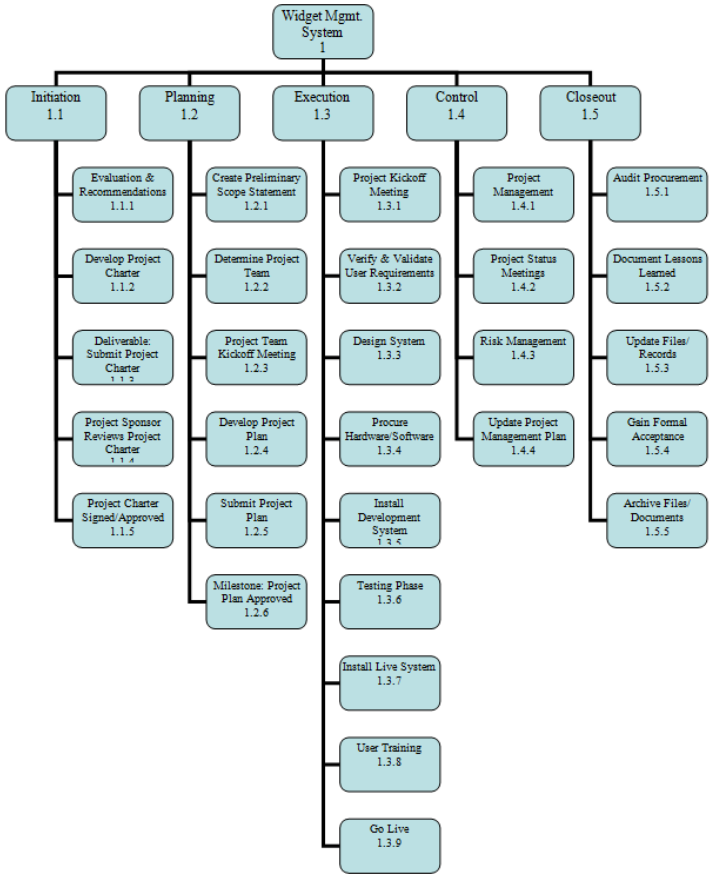
- is a deliverable oriented decomposition of a project into smaller components.
- It is an essential tool for planning and executing the project. Use the WBS to define the work for the project and to develop the project's schedule, resource requirements and cost.
-

WORK BREAKDOWN STRUCTURE

WBS sample: Outline View

i. **Master modules**
   i. **Country**
      i. *List*
         i. Search
         ii. Clear
         iii. Mass Delete
         iv. Add New
      ii. *Create*
         i. Save
         ii. Cancel
      iii. *Edit/Update*
         i. Save
         ii. Cancel
      iv. *View*
         i. Edit
         ii. Delete
         iii. View change logs

WBS sample: Tree Structure View



What is ESTIMATION?

- is the process of finding an approximation, which is a value that is usable for some purpose even if input data may be incomplete, uncertain, or unstable.

PROCESSES in making estimates

- Compartmentalization (i.e., breakdown of tasks)
- Educated assumptions
- Examining historical data
- Identifying dependencies
- Risk assessment
- Structured planning

TOOLS used in Estimation

- Expert Judgment
- Analogous estimating – uses a similar past project to estimate the duration or cost of your current project.
- 3-point estimating – uses a weighted average of three numbers to come up with a final estimate.
- Group decision making
- Reserve Analysis – “buffer”

3-Point Estimation

- The most optimistic (O) case where everything goes right.
- The most likely (M) case given normal problems and opportunities.
- The most pessimistic (P) case when everything goes wrong.

- Weighted average = (O+4M+P)/6

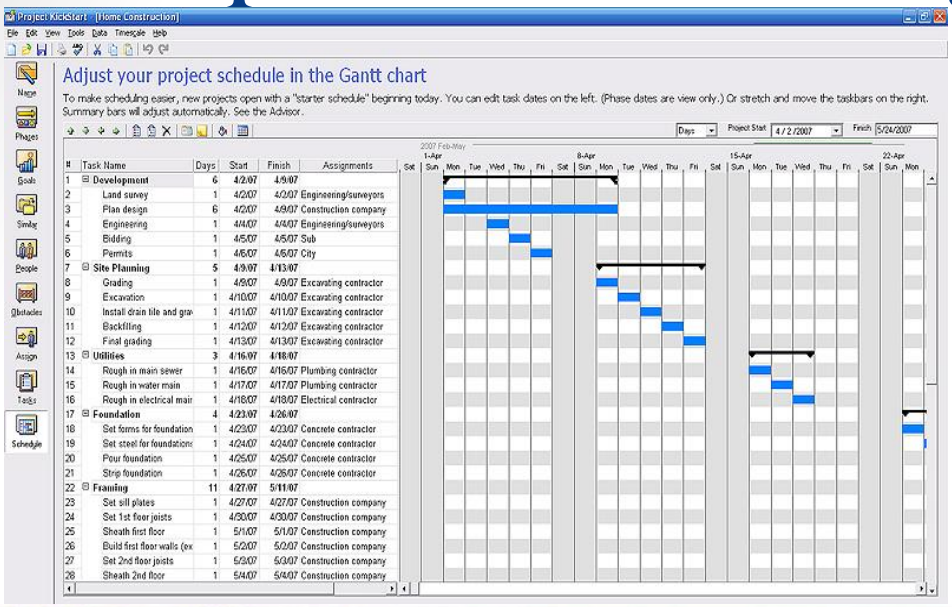
Example: (in MD)

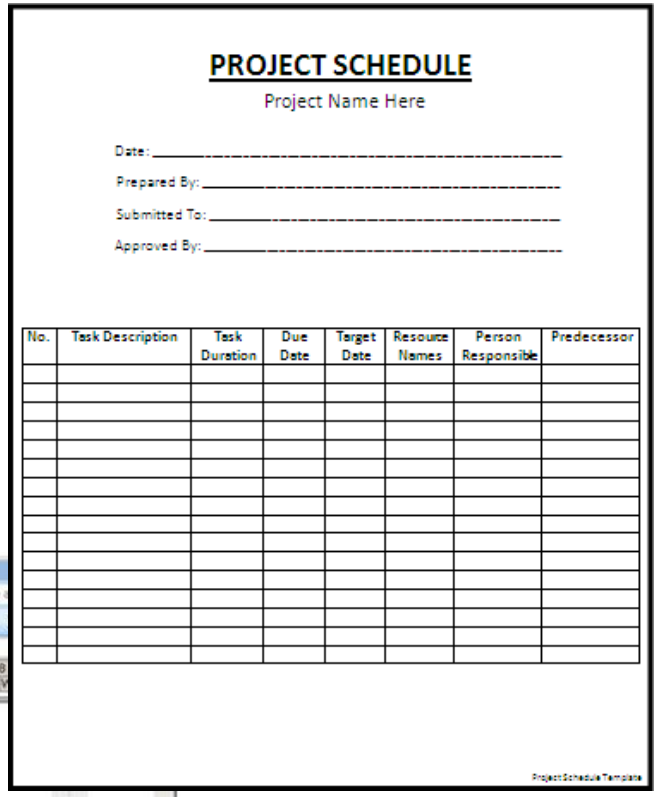
	O	M	P	ESTIMATE
Country				
List				
i. Search	0.25	0.5	1	0.55
ii. Clear	0.25	0.5	1	0.55
iii. Add New	0.25	0.5	1.25	0.58
iv. Mass Delete	1	1.5	2	
Create				
i. Save	1	1.5	2	
ii. Cancel	0.25	0.5	1	
Edit/Update				
i. Save	1	1.5	2	
ii. Cancel	0.25	0.5	1	
View				
i. Edit	0.25	0.5	1.25	
ii. Delete	1	1.5	2	
iii. View change logs	2	3	4	

SCHEDULING

- In Project Management, a **schedule** is a listing of a project's milestones, activities, and deliverables, usually with intended start and finish dates. Those items are often estimated in terms of resource allocation, budget, and duration, linked by dependencies and scheduled events.
- Consider the following during scheduling:
  - size of team
  - complexity of the scope
  - skills of your developers

Sample : Scheduling





PROJECT SCHEDULE

Project Name Here

Date: _____

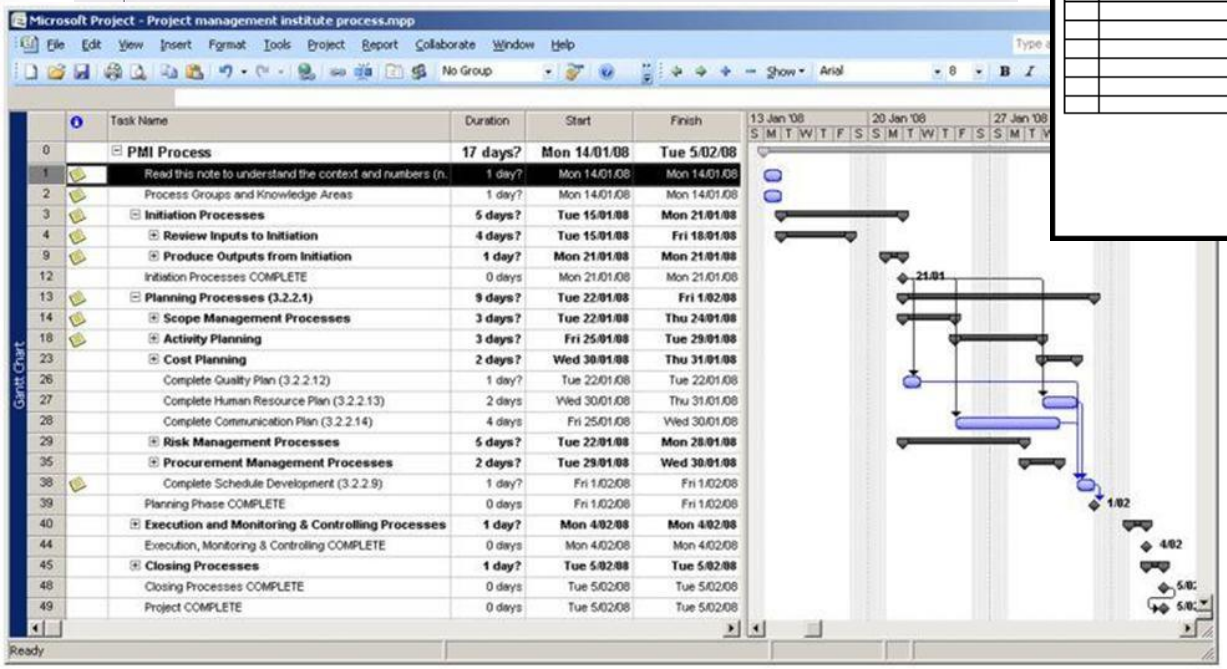
Prepared By: _____

Submitted To: _____

Approved By: _____

No.	Task Description	Task Duration	Due Date	Target Date	Resource Names	Person Responsible	Predecessor

Project Schedule Template



3. Project Launch or Execution

- The execution/implementation phase ensures that the project management plan's deliverables are executed accordingly.
- This phase involves proper allocation, co-ordination and management of human resources and any other resources such as material and budgets.
- The output of this phase is the project deliverables

4. Project Performance and Control

- or *Monitoring and Controlling*
- consists of those processes performed to observe project execution so that potential problems can be identified in a timely manner and corrective action can be taken, when necessary, to control the execution of the project.
- The key benefit is that project performance is observed and measured regularly to identify variances from the project management plan.

5. Project Close

- Closing includes the formal acceptance of the project and the ending thereof. Administrative activities include the archiving of the files and documenting lessons learned.
- This phase consists of:
  - **Contract closure**: Complete and settle each contract (including the resolution of any open items) and close each contract applicable to the project or project phase.
  - **Project close**: Finalize all activities across all of the process groups to formally close the project or a project phase
- Also included in this phase is the Post Implementation Review.

SESSION 2)

(1) PROJECT EXECUTION/IMPLEMENTATION

Project Launch or Execution

- Once a project moves into the Execution Phase, the project team and the necessary resources to carry out the project should be in place and ready to perform project activities.
- The Project Plan should have been completed and baselined by this time.
- The project team and specifically the Project Manager’s focus now shifts from planning the project efforts to participating in, observing, and analyzing the work being done.

Project Execution Phase

- In this phase, you will build the physical project deliverables and present them to your customer for signoff.
- This is usually the longest phase in the project life cycle and it typically consumes the most energy and the most resources.
- Activities
  - Time Management
  - Cost Management
  - Quality Management
  - Change Management
  - Risk Management
  - Issue Management
  - Procurement Management
  - Communications Management
  - Phase Review

SESSION 2

(2) MONITORING & CONTROL

MANAGING PROJECT INFO

- Status reports
- Project meetings
- Review meetings
- Information Management Tools
- Performance Reporting
- Lessons Learned
- Project Closure Report

MONITORING & CONTROL

- oversees all the tasks and metrics necessary to ensure that the approved and authorized project is within scope, on time, and on budget so that the project proceeds with minimal risk.
- Reporting and comparing actual project results against the plan
- Analyzing performance data and determining whether corrective or preventive action should be recommended
- Monitoring the project for risks
- Documenting all appropriate product information
- Monitoring approved change requests

MONITORING & CONTROL

- *Where we are?*
  - Measuring the ongoing project activities
- *Where we should be?*
  - Monitoring the project variables (cost, effort, scope, etc.) against the project management plan and the project performance baseline
- *How can we get on track again?*
  - Identify corrective actions to address issues and risks properly

Exercise #4:
Monitoring & Control (Case Study)

SITUATION 1:

- PL needs to manage schedule / resource to maximize them.

QUESTION:

- How to monitor the schedule and resources to make sure that their use is maximized to meet schedule, cost, quality objectives; How to monitor resources to ensure they are efficient?

Exercise #4:
Monitoring & Control (Case Study)

SITUATION 2:

- PL not holding regular (1/wk) status meetings with the team to monitor the progress of the project.

QUESTION:

- What is the most effective way to communicate with your team members to assess the progress of your project? How often should the communication occur?

SESSION 2

IMPORTANCE OF COMMUNICATION

Successful PM COMMUNICATION

- is about being there for everyone, **being in touch with the real challenges** of the project,
- **understanding the real issues within the team** who must deliver the project as well as understanding the issues of the sponsors who the team delivers the project for.
- **Being present, visible and engaged with everyone is IMPORTANT** - during the good times and the challenging times.

Successful PM COMMUNICATION

- Communication is not only about speaking to and hearing from people, it's about **understanding the complete message**.

PM Communication ISSUES

- Communication of the **VISION** - the reason for the project, how we will successfully deliver it, and what new benefits it will provide.
- Progress - communicating where the project is relative to where it should be.
- Presentations of the project's status.
- Methods of communication.
- Listening and being there.

How to COMMUNICATE EFFECTIVELY?

To be effective, we must focus on the **needs of the receiver**.

1. **Put yourself in their shoes**
   - if you're the client, what information do you need?
   - prepare a detailed data to back-up the information, but only present it if asked.

2. **Be a proactive project manager**
   - if a problem is raised, provide a few potential solutions (and their pros and cons)

3. **Keep it simple**
   - communicate the message in as few words as possible.

Tips in Presenting STATUS REPORTS (Good example)

Hi Sam,

Here's the status update of the project.

Status: **Delayed for 2 Days**
*Team can catch up on Monday.

1. Done Tasks

- IT Test on Property (Residential)
- IT Test case creation - Rover

2. Pending Tasks

- IT Test Results Review on Property

3. Ongoing Tasks

- IT Test case creation - Valuation (to be finished by Monday)
- IT Test case creation - Client List
- IT Test case creation - Report
- IT Test case creation - Sales

4. Issues

- RPT (Rational Performance Tester) - still acquiring them

We will schedule an IT Test on Valuations DB next week.
If you have any concerns, please let me know.

Tips in Presenting STATUS REPORTS (Bad Example)

Hi Sam,

Good Day!

I would like to apologize for the misinformation I provided on my previous email.
I previously mentioned that my team will be posting on Mantis the bugs that we may find during the testing process. And that we cannot proceed to the next testing process not until your team of developers fixes the bugs. This may no longer be the case since we have agreed to test the VIPA system based on the October 1 release only. We shall proceed to the other testing processes without waiting for your team to fix the bugs. If we wait for the bugs to be fixed, it would bring us back to our first dilemma of retesting the affected modules, which may consequently affect the schedule.

Also, I have mentioned on my previous email that every time my team posts any updates on Mantis, email notifications will be sent to your email inbox. But we may arrange this to be minimized or on how you would want to be notified of the updates. Aside from the weekly report I will be sending to you regarding on the status of the project, I will be sending to you the results of the tests done on the modules. Hence, I wish to know on how you would want to be informed of the results of the tests. Should it be done every after testing a set of modules or after performing all tests on all modules? Or if you have other suggestions in mind, please do inform me.

If you have any clarifications, please let me know.

Tips in Presenting STATUS REPORTS

- Use bullets (instead of paragraph sentences)
- Start with Overall Project Status (**On Schedule**, **Delayed**, **Ahead of Schedule**)
- If **Delayed**, indicate target date when team can catch up.
- Indicate percentage of completion of project (e.g. 50%) – optional, especially if difficult to measure
- Categorize tasks (**Done, Ongoing, Pending, Delayed Tasks, Goals for the Week**)
- Indicate target end dates, especially for Ongoing, Pending, and Delayed tasks.

Creation of MEETING MINUTES

- Use template, if available.
- Use bullets (instead of paragraphs) in ‘Summary’.

Date: October 23, 2015

Time Started: 09:00 AM Time Ended: 10:30 AM

Venue:

Presiding Officer:

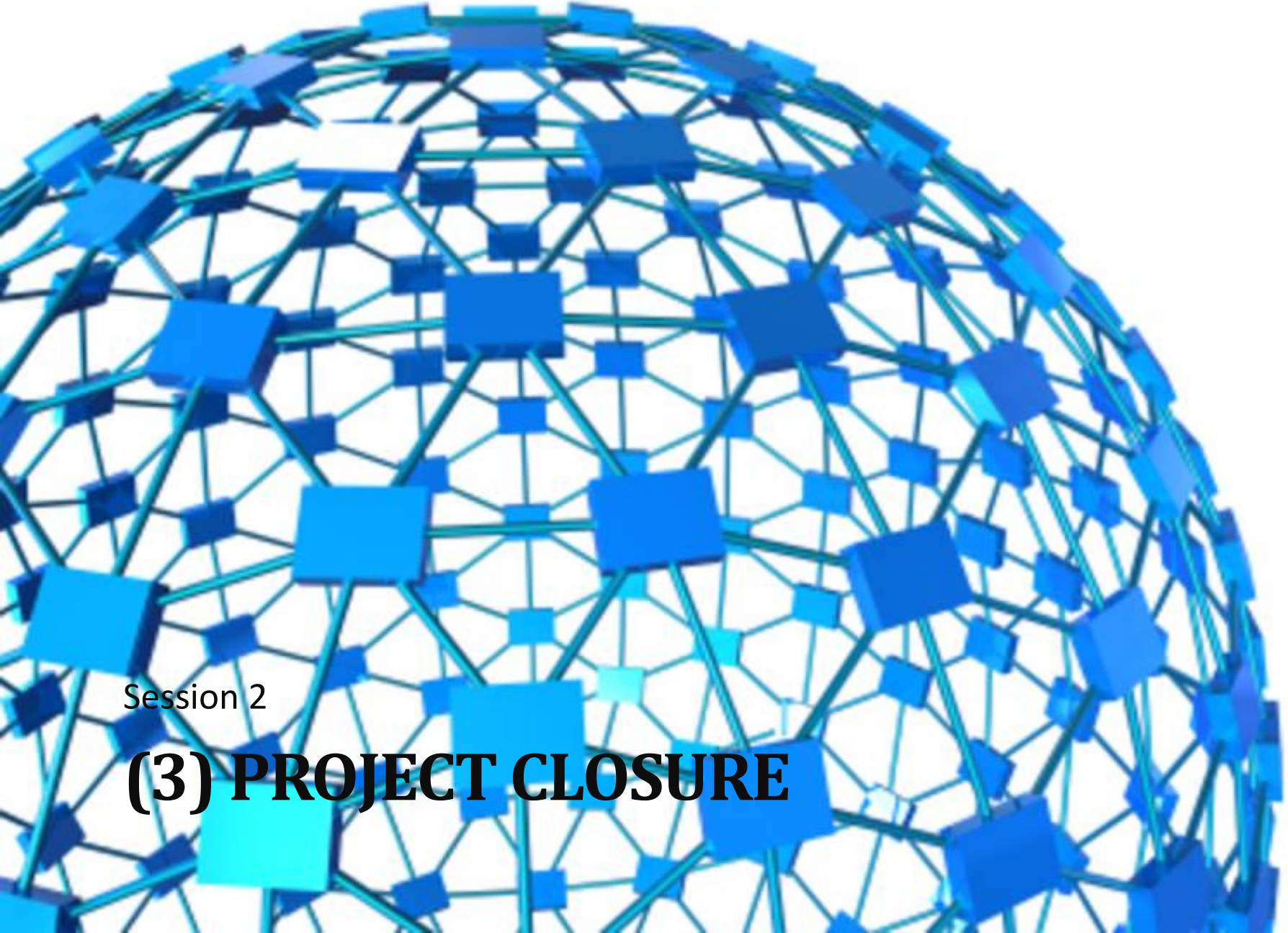
Attendees:

Agenda:

(1) Status Report

(2) Issues Encountered

Summary:



Session 2

(3) PROJECT CLOSURE

5. Project Close

- Closing includes the formal acceptance of the project and the ending thereof. Administrative activities include the archiving of the files and documenting lessons learned.
- This phase consists of:
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  - **Project close**: Finalize all activities across all of the process groups to formally close the project or a project phase
- Also included in this phase is the Post Implementation Review (Post Mortem Review).

Post Mortem Review

- Lessons Learned
- Things to note for the next project
- Good, Bad and Ugly

Back-up

(1) RISK MANAGEMENT

What is RISK MANAGEMENT?

- It is the process of identifying, analyzing and responding to risk factors throughout the life of a project and in the best interests of its objectives.
- Proper risk management implies control of possible future events and is proactive rather than reactive.

The RISK ANALYSIS PROCESS

1. IDENTIFY THE RISK

How to identify risks:

(a) Past experiences regarding the likelihood of occurrence

(b) Gut feel

(c) Lessons learned

(d) Historical data

- Categorize then prioritize risks

The RISK ANALYSIS PROCESS

2. ASSESS THE RISK

(a) What would cause this risk?
(b) How will this risk impact the project?

3. DEVELOP RESPONSES TO THE RISK

(a) What can be done to reduce the likelihood of this risk?
(b) What can be done to manage the risk, should it occur?

The RISK ANALYSIS PROCESS

4. DEVELOP A CONTINGENCY PLAN OR PREVENTIVE MEASURES FOR THE RISK

(a) Convert into tasks, those ideas that were identified to reduce or eliminate risk likelihood.

PURPOSE of Risk Management

- Identify possible risks.
- Reduce or allocate risks.
- Provide a rational basis for better decision making in regards to all risks.
- Plan.

SOURCES of Risk Management

PROJECT MANAGEMENT

- Too many projects going on at one time
- Impossible schedule commitments
- No functional input into the planning phase
- Poor control of design changes
- Problems with team members.
- Poor control of customer changes
- Wrong person assigned as project manager
- No integrated planning and control
- Organization's resources are overcommitted
- Unrealistic planning and scheduling
- Conflicting project priorities

SOURCES of Risk Management

EXTERNAL

- *Unpredictable*
  - Unforeseen regulatory requirements
  - Natural disasters
  - Vandalism, sabotage or unpredicted side effects

- *Predictable*
  - Market or operational risk
  - Social
  - Environmental
  - Inflation
  - Currency rate fluctuations
  - Media

SOURCES of Risk Management

EXTERNAL

- *Technical*
  - Technology changes
  - Risks stemming from design process

- *Legal*
  - Violating trade marks and licenses
  - Sued for breach of contract
  - Labour or workplace problem
  - Litigation due to tort law
  - Legislation

SAMPLE: Risk Management

RISKS	PROBABILITY	CONSEQUENCES	PREVENTION	MITIGATION
Unclear specs - aside from those indicated in HLD, there are other affected functions/ modules / reports.	HIGH	Extended project schedule and cost.	Proper management of additional specs / specs change.	For additional specs / specs change, they will be provided a different schedule and cost estimate.
Weather - since July is a rainy season, may affect DEV's availability to work.	MEDIUM	Delayed tasks / project schedule.	N/A	To avoid further delay, Dev is expected to render OT to cover hours of leave.
Assigned developer is a newbie with slow learning curve in understanding the system.	LOW	Delayed tasks / project schedule.	Close monitoring of tasks. Assign a senior developer to assist.	Provide enough buffer in internal schedule for the developer's adjustment period.