Network Diagram

Three important pieces of information derived from the Network Diagram are the Project Duration, Amount of Float in each path, and the Critical Path, which are used for Effective Project Time Management.

• Project duration: The shortest required time to complete the project.

• Float: The amount of time the start of a task can be delayed without impacting the schedule.

• Critical Path: The longest path through the network or the path with zero float. This path identifies the tasks that have to be managed closely so that no slips to the schedule occur.

Gantt charts are developed after the network analysis is completed. They are used for:

• Showing beginning and ending points for each of the project tasks.
• Graphically depicting project progress against the project baseline.
• Communicating project progress to stakeholders.

Milestone

A milestone is a significant event on a project.

• To ensure that all major activities are accounted for, project teams often create a milestone list.

• It often takes several activities and a lot of work to complete a milestone.

• A milestone itself is like a marker to help in identifying necessary activities. There is usually no cost or duration associated with a milestone.

• Milestones are also useful tools for setting schedule goals and monitoring progress, and project sponsors and senior management often focus on major milestones when reviewing projects.

What can Microsoft Project do?

• Calculate the start and finish dates for you.
• Indicate whether assigned resources are actually available.
• Inform you if assigned resources are under-allocated or overworked.
• Alert you if you have an upcoming deadline.
• Calculate how much of the budget you’ve spent so far.
• Draw your project tasks as a Gantt chart or network diagram so you can get a visual picture of your project.

Limitation of Microsoft Project

• Cannot negotiate a more reasonable finish date.

• Won't complete a difficult and time-consuming task for your team

• Cannot motivate an uninspired team member

• Microsoft Project can only help you facilitate all processes in the project management life cycle.

Uses of Microsoft Project

• Create a model, or blueprint, of your project.

• Enter tasks, resources, assignments, and other project-related information.

• Organize and manage project information

• Provide exact project information needed at any given time
The Eight-Stage Process of Managing Major Change

1. Establishing a Sense of Urgency
2. Creating the Guiding Coalition
3. Developing a Vision and Strategy
4. Communicating the Change Vision
5. Empowering the Change Vision
6. Generating Short-Term Wins
7. Consolidating Gains and Producing More Change
8. Anchoring New Approaches in the Culture

The Importance of Communication

- Communication is cornerstone of successful change
- Activities to effective change communication and management
- Tactics to increase acceptance of change

Problem 8

What is Risk?

According to the Project Management Body of Knowledge (PMBOK), a risk is defined as “an uncertain event or condition that, if it occurs, has a positive or negative effect on a project’s objectives.”

- Risk has two parts – Probability – Consequence
- Risk Management has 2 components: Proactive – Continuous process

Who is Involved in Risk Management?

- Customer
- End-user
- Management
- Project Team
- Subcontractors
- Suppliers
- Related projects

Types of Risks in Events

- Low-risk events
- Medium-risk events
- High-risk events

Risk Management Plan

- There are 5 stages to risk management:
1. Establishing the Context
2. Risk Identification
3. Risk Analysis*
4. Risk Evaluation
5. Treatment of Risk*
Risk Analysis

<table>
<thead>
<tr>
<th>Consequence</th>
<th>Insignificant</th>
<th>Minor</th>
<th>Moderate</th>
<th>Major</th>
<th>Catastrophic</th>
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<td>M</td>
<td>H</td>
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<td>L</td>
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</tbody>
</table>

Legend:
E – extreme risk (immediate action required, e.g. do not proceed with activity until the level of risk is reduced)
H – high risk (attention required)
M – moderate risk (attention required; 2nd in priority as compared to high risk)
L – low risk (managed by routine procedures)

Risk Response Strategies

• Risk management plans include a risk strategy.
• There are four potential strategies: – Accept the risk – Transfer the risk – Mitigate the risk – Avoid the risk

Risk Management Process Steps and Related Questions

<table>
<thead>
<tr>
<th>Risk Mgmt Process Step</th>
<th>Questions raised by Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establish the context</td>
<td>What are we trying to achieve?</td>
</tr>
<tr>
<td>Identify the risks</td>
<td>What might happen?</td>
</tr>
<tr>
<td>Analyse risks</td>
<td>What might that mean for the project’s main criteria?</td>
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<tr>
<td>Evaluate risks</td>
<td>What are the most important things?</td>
</tr>
<tr>
<td>Treat the risks</td>
<td>What are we going to do about them?</td>
</tr>
<tr>
<td>Monitor and review</td>
<td>How do we keep them under control?</td>
</tr>
<tr>
<td>Communicate and consult</td>
<td>Who should be involved in the process?</td>
</tr>
</tbody>
</table>

Risk Management Process Summary
PLANNING DEVELOPMENT

• Identify stakeholders
  – Primary vs Secondary
  – Affected vs Responsible

• Involvement of stakeholders
  – Ensure planning process includes them
  – Cover loopholes at stakeholder’s end

Plan Development

TRAINING

Presentation of Plan

- Present plan on paper
- Provides good overview
- Effective to Persons-In-Charge
- Able to solicit feedback
- Processes not tested

- Detailed deliberation of each process/step
- Tests communications and tactical response
- Faster method to involve more people in scrutinizing processes
- Cannot appreciate terrain impact on processes

- Full deployment of staff at venue
- Familiarization of terrain and detailed processes by all staff
- Simulate the activities and processes
- Uncover unforeseen problems
- Tests communications and tactical response in greater detail