

Risk Management Planning

INFORMS/TEPM Master's Curriculum

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A Little Philosophy

- **What risks are managed on a technical project?**
 - **Every uncertainty that might affect the project should be managed**
 - **Vast majority identified before project start - addressed in various Management Plans**
 - **Formal Risk Management for those risks not imagined at project start**
- **When do identified risks start costing schedule and budget?**

Immediately!

A Little Plan Philosophy

- **What is a Management Plan?**
Really just another risk management plan
- **Who should write the RM Plan?**
Whoever is in charge of RM
- **When should the RM Plan be finished?**
At start of the project
- **Can an RM Plan change during the course of a project?**
Of course, the RM Plan should be placed under **Configuration Management**

More Plan Philosophy

- **What is in the RM plan?**

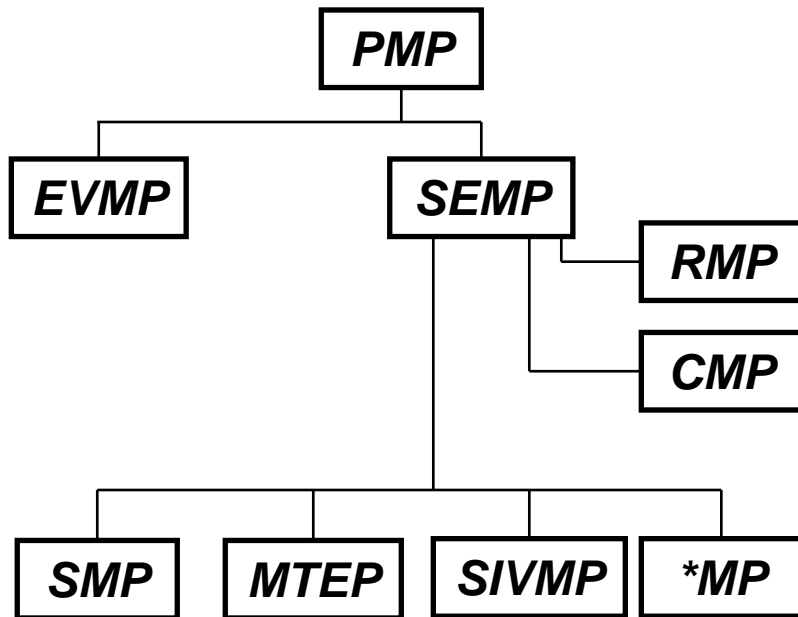
The author decides how they want to run RM on the project, and writes it down, and does it

- **Should the RM manager's performance be judged against the RM plan?**

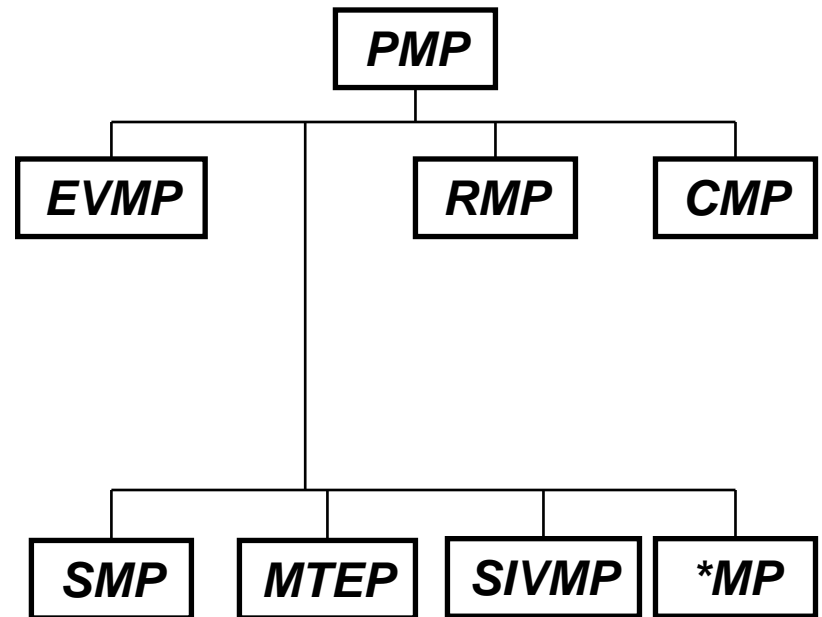
Absolutely – the RM manager should insist on it, it can be the key to advancement

A Secret: No management plan longer than about 50 pages will ever be used.

RM Plan Importance



With Systems Engineering



Without Systems Engineering

Decisions for the RM Manager

- **Remember: the RM plan is nothing much more than a collection of these**
- **RM organization**
 - **Roles and responsibilities**
 - **Interfaces**
 - **Responsibility Assignment Matrix**
 - **Authority/Responsibility Matrix**
- **Mechanism for project personnel to communicate a risk to RM team**

More Decisions

- **Risk workflow Template**
 - **How long to validate an identified risk**
 - **How long to do initial assessment**
 - **When to communicate assessment to PM**
 - **How long to develop risk monitoring and/or risk mitigation plan - *A New Project!***
 - **When to present monitoring/mitigation plans to PM**
 - **Periodic reporting to management team on plan progress**

Even More Decisions

- **Risk Register**
 - Best to use a database tool
 - Tool development or purchase
 - Schema for relational links to requirements, budget, schedule, action items, issues, positions, etc.
- **Process to perform assessments**
 - Qualitative/Quantitative, or what distinguishes a choice
 - Math tools to use
 - Decision support graphics
- **Define Risk Terminology for the entire project, maybe use an RM standard**

A Few More Decisions

- **Risk Management Metrics**
- **Recommendations to CSE and PM on RM budget and schedule allocations/reserves**
- **Process to manage RM allocations/reserves**
- **Interface with Project Controls**

The Risk Management Plan

- **Before project start, collect and organize these decisions, and write them down**
 - **Adapt to/Augment company outline for management plans**
 - **Find a template to use for a starter**
- **Get CSE or PM Approval, with signature for submittal to CM**
- **Execute in accordance with the plan**
- **Modify via CM procedures as things evolve**

Some RM Heuristics

- **Worth repeating:**
Any management plan over 50 pages will never be used!
- **No management plan should ever be written or expected to be used as an education tool**
- **Any decently managed project should never have more than about a dozen open risks at any time**
- **RM, just like CM, has to be an active part of the management team to help the project**
- **Most commercial RM tools are not worth the money**
- **RM team must be heavily integrated into and knowledgeable about entire project**

RM Pitfalls

- **Project Management team does not create a comfortable environment for identifying new risks** ***Shoot the Messenger Syndrome***
- **Managing risks and “opportunities” separately**
- **Lack of discipline**
- **Reticence to provide bad news**
- **Not hiring seriously technical and experienced people for RM**

Summary

- **Risk Management planning is critically important**
- **Good Risk Management planning is incredibly effective**
- **Good Risk Management execution can save projects**
- **Building a good Risk Management Plan is hard work**

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