Managing Risks to Reap Rich Benefits

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Software projects face the problem of quality, cost and schedule being affected by Risks that are unplanned, unexpected or simply ignored. Structured Risk management deals with as many of the Risks as possible in a cost-effective way to minimize their impact.

Every programmer, senior programmer, quality manager, project manager, team leader, project leader and every chief of the organization should know what are factors affecting the entire project. During the project also the change in requirements is a Risk. It is necessary to synchronize with the change in people, requirements, situation, and technology and to identify the impact on the entire project. Once the senior management and middle order management are trained and they are committed to force a culture through the team then this course can be given for programmer senior programmer and other members of the team. Planning is a very important activity and for planning to be successful it is necessary that we periodically monitor the plan with respect to Risks and contingencies.

Risk versus Opportunity

The opportunity for advancement cannot be achieved without taking Risk. We must learn to balance the possible negative consequences of Risk against the potential benefits of its associated opportunity.

Risk and opportunity go hand in hand.

• Balance potential negative consequence of Risk against potential benefits of its opportunity.

• It is a formal software engineering practice with processes, methods and tools for managing Risks in a software project.

• Provide a disciplined environment for proactive decision- making.

• Emphasis on continuous aspect of Risk Management.

Stages of Risk management are:

Identification, Analysis, Planning, Tracking, Controlling and Communication

What is Risk

• "Risk is potential for realization of unwanted negative consequences of an event"

• "Risk is measure of probability and severity of adverse effects."

• "Risk is possibility of suffering loss" **Uncertainty: An event may or may not happen. Loss: An event has unwanted consequences or losses.**

Given below are some typical problems that can sabotage your project.

1 "There is Risk to the schedule"
2 "Coordination and communication with the client is not easy"
3"The GUI may not be compatible with the other system"
4"Lack of required tools will make coordinating Changes across various modules difficult."
5"Only one team member is familiar with the Prototyping life cycle method"
6 "Frequent loss of project team members due to resignations is not good for the morale"
7"We have committed a bug-free product to the client, yet everyone thinks that it is SQA group's job to ensure this quality - our quality targets may not be met"
8"There have been too many unexpected requirements refinements; we may not be able to deliver the product on time"

There are several categories of risks as Project Risks, Business Risks, People Risks, Technical Risks, Known Risks and Unknown Risks.

Benefits of Risk Management

1 Prevents problems before they occur.
2 Improves quality of the product.
3 Productivity is enhanced by reduction in rework.
4 All resources are used effectively.
5 Teamwork in the execution of the project is the best.

A Complete Risk Statement

The aim for a Risk statement is that it be clear, concise, and sufficiently informative that the Risk is easily understood. It is used for effective communication with management and to the teams. Risk statements in standard format must contain two parts: the condition