Complete risk assessment


When planning projects, it pays to be paranoid. In other words, plan for the worst and hope for the best.

Project risk management has two related processes. First, you assess the risks and second, you attempt to reduce and/or contain the high risks.

Project risk assessment is a structured evaluation of risk factors that have been shown to affect the project's probability of success. The identification and elimination or reduction of high risk factors associated with the project is a key project planning process.

The following process should be applied to risk assessment:

- using the form opposite each member of the team, stakeholders and project manager completes the risk factors questions from their own perspective;
- the members of the planning session then share their answers and discuss any major areas of difference in each person's risk factor assessment;
- after the discussion, if there is no consensus, a vote is taken on each risk factor with the majority vote being taken as the project risk factor - if the vote is tied then the worst case is selected;
- in the form on the next page, the overall risk is the sum of all risk factors though some factors may be given more weight than others. In other words, while the majority of the risks may be ranked as Medium because the requirements are assessed as unstable and the project has a fixed deadline, the overall ranking may be adjusted to High.

Attempts should be taken during the planning session to try to minimize the impact of any high risk factors. This will involve negotiation with the Project Owner, Steering Committee and project manager. Other actions such as changing the project development strategy could also be required to reduce project risk.

The second process of risk management is to analyse all high risk factors and develop a reduction or containment strategy. Any unresolved high risk factor should be documented as a Risk Memorandum with would include:

- the risk factor;
- the impact of the risk factor on the project;
- potential risk minimization strategies; and
- contingency actions should the risk factor "switch on"

The Risk Memorandums are included in the Business Case. The high risk factors should be monitored closely during the product development cycle. The process of Risk Memorandums is the essential pro-active element of risk management

This is the basic tool for assessing the risks of a project. It is completed during the RAP session.

The risk assessment process should be undertaken democratically with all team members and critical stakeholders being involved.

Business versus Project Risk

The Business Risk of a project is the exposure (legal, financial, image, etc) that your company or organization faces should your project fail. The Project Risk is the factors that could cause your project to fail. Both sets of risk should be analyzed in conjunction with your Internal Audit or Risk Management gurus. Business Risk is clearly the concern of your Project Sponsor. A full model of Risk Management would include Benefits Realization Risk, Production Support Risk and Personal Risk.

Project Risk Impact

Project risk affects all aspects of projects however, the significant impacts are include:

- Estimation accuracy – the higher the risk the more likely initial estimates are incorrect;
- Estimation range – the higher the risk the larger the difference between best and worst case estimates
- Governance – the higher the risk, the more attention and more often the meetings Sponsors and Steering Committees should provide to the project and project manager; and
- Contingency Plans – the higher the project risk, the greater the need for a Contingency or “Get out” plan.

Project :

PRODUCT/SYSTEM RISKS		LOW	MEDIUM	HIGH
1.	Overall system/service/product	Simple	Average	Complex
2.	Logical data (include. files)	Simple	Average	Complex
3.	I/O and enquiries or organisational impact	Simple	Average	Complex
4.	Interfaces to other systems/services/products	Simple	Average	Complex
5.	Functions and processes	Simple	Average	Complex
6.	New business procedures/alterations	None	Some	Extensive
7.	Stability of requirements	Stable	Average	Unstable
8.	Performance requirements (including quality)	Low	Medium	High
9.	Technology requirements	Simple	Average	Complex
10.	Level of technical innovation	None	Some	Innovative

TEAM RISKS		LOW	MEDIUM	HIGH
1.	Intrinsic team skills (general skills)	High	Average	Low
2.	Relevant skill level with application/product	Extensive	Some	None
3.	Project manager experience	Extensive	Some	None
4.	Project staffing level	1 - 5	5 - 10	over 10
5.	Use of contractors/part-time members	None	Some	Extensive
6.	Project development length	1 - 3 mths	3 - 6 mths	Over 6 mths
7.	Schedules/deadlines	Flexible	Firm	Fixed
8.	Priority of project for team	High	Average	Low
9.	Team experience with hardware/software or technology	Extensive	Average	Some
10.	Project team physical/support environment	Excellent	Average	Poor

ENVIRONMENT/TARGET RISKS		LOW	MEDIUM	HIGH
1.	Level of client/user support	High	Medium	Low
2.	Client experience with product/system	Extensive	Some	None
3.	Client Project Sponsor support	High	Medium	Low/None
4.	Impact on client operations (new technology, policy,etc.)	Low	Medium	High
5.	Client/business expert participation	Full-time	Part-time	Ad-hoc
6.	Key (Critical and Essential) stakeholders	1-2	2-10	Over 10

OVERALL PROJECT RISK	**LOW**	**MEDIUM**	**HIGH**

Pro-active Risk Management revisited

All High Risk factors should be documented with a Risk Memorandum which states what the risk is and what mechanisms are available to manage the risk. The Risk Memo *must* be reviewed with the Project Sponsor.

Risk Memos typically identify:

- what is the risk factor?
- what is its impact should it remain unresolved?
- what can be done to manage or minimize the impact of the risk?
- what is the fallback or Contingency Plan should the risk remain an issue?

Develop task list/Product Backlog

The process of task listing should use the organization's product development framework (often called a methodology), if one exists. If Agile development approaches are being used, the relevant Compoments/Features identified during this process typically called a Product Backlog. The following process should be applied to developing task lists:

- using the product development cycle, the team extracts a "first-cut" list of the tasks contained in the product development cycle that are relevant to the project being planned. If there is no organisation standard P.D.C., then the team should brainstorm a "first-cut" task list
- using brain-storming, additional tasks not contained in the product development cycle but that are required for the project are listed
- the "first-cut" list should be broken into smaller tasks and reviewed by as many technical experts as possible.