

Software Risk:-

- Risk & Importance of risk

Risk is an uncertain event which has probability of ~~over~~ occurrence but it may or may not occur. If it occurs it brings loss to the project.

Risk management is very important because due to this the success of software depends.

Various kinds of Risk

1. Schedule risk :- risk related to time or delivery of project. This risk mainly indicates the timely progress of project and help to maintain timely delivery.

Reason - 1. time is not estimated perfectly

2. improper resource allocation

3. frequent project scope expansion

4. tracking of resource like system skill staff.

2. Budget risk :- Budget related risk refers to monetary risks mainly it occurs due to budget overrun. Always the financial aspect of the project should be managed as per decided but if not completed this may give rise to a huge problem for company.

Reason :-

1. wrong improper budget estimate

2. cost overrun

3. improper tracking of budget

4. mismanagement in budget handling

3. Operational Risk:-

Operational risk refers to procedural risks that means these are the risk which happens day-by-day operational activities during project development due to improper implement.

Reason - 1. Insufficient resource

2. conflict between tasks & employee

3. No proper plan for project

4. insufficient training

5. Lack of communication & cooperation

4. Technical risk:- This risk is related to functionality of the product or performance risk based on performance of software.

Reason - 1. frequent change in requirement

2. less use of future technologies

3. Less number of skilled employee

4. improper integration of module.

5. Programatic Risk - these are the risk which are unevitable. It comes from outside and it is out of control of program

Reason - 1. rapid development of market

2. running of out fund

3. changes in govt. rules.

4. Loss of contract due to any reason.

Risk Identification

1) Generic Risk → common risk this is available in all types of software.

B TCS S P D.

2) Product specific risk → changes with product (project).

a) business impact. (when one product is made by a company and the same product is made by another company.)

b) technology to the limit - the technology which we are using must be up to the point, i.e. must be latest

c) customer character -

when the requirement of customer is changed.

d) Staff size and experience -

the staff who ever is making the project is less & having less experience then this will delay the development.

e) product size:- we were expecting that product size will be less but it become large function & feature

f) process definition- the process have changed between the development.

g) development environment - change in development environment (may) become a risk

Risk Projection (estimation of risk).

defined by two ways -

- i) probability of risk occurrence
- e) consequences of risk

Impact of risk: -

- negligible impact - 4
- marginal impact - 3
- critical impact - 2
- catastrophic impact - 1

example: -

Risk size estimate	Probability	Impact
may be significantly low	60%	2 critical
Technology will not meet expectations.	30%	1 catastrophic
Staff inexperienced.	30%	2 critical

RAMM PLAN -

Risk mitigation monitoring management.

Risk mitigation:- activity used to avoid problem (risk avoidance).

1. finding out the risk
2. Removing causes that are the reason of risk.
3. controlling document time to time
4. conducting timely reviews for speedy work.

Risk Monitoring:- The project manager monitors the factors that may provide an indication of whether the risk is becoming more or less likely.

1. General attitude of team member based on project pressure
2. interpersonal relationships among team member.
3. Potential problem with compensation & benefit.
4. Availability of jobs within company & outside it.

Risk Management:- Risk management & contingency planning assume that mitigation efforts have failed & risk has become reality. For example, the project is well underway & number of people announces that they are leaving. If mitigation strategy is followed, backup is available, information is documented. This will help to get recover from problem.

Drawbacks of RMM :-

- ⇒ incurs additional project cost
- > takes additional time
- > for larger project, we can't implement RMM because it'll be treated as extra tedious work
- > RMM doesn't guarantee risk-free project.