

1.2 Scope → Describes the scope of builds, projects and team involvment

1.3 Reference and → Includes all the references and links that pertain to the SCM Plan.

1.4 Acronyms and → Includes configuration items, Software configuration management configuration management engineer Subversion cruise control

1.5 Outstanding → Includes all outstanding to do's tasks

## Section 2 (Responsibilities)

2.1 Role → Includes all the responsibilities for each role.

2.2 Sections (List out all the various tools being used and their versions)

3.1 Configuration → Version numbers

## Section 4 (Describe the process)

4.1 Production → Describe production code procedures.

4.2 Development → Describe development code procedures.

## Section 5 (Describe the guidelines)

5.1 Build Servers → Describe the build environment

5.2 Security and → Describe the security and permissions surrounding the Build environment.

## Section 6 (Describe the process)

6.1 Build process → Describe the build process

6.2 Build versioning → Describe the build identification of Version Strategy.

6.3 Build Schedule → Describe the build schedule and rules around building.

6.4 Build logs for → Describe the build logging and tracking, requirements and reporting.

6.5 Build Scripts → Describe the build scripts and configuration files including how the responsibility is broken out.

Between the software configuration Management Team and the Support Team.

6-6 Build → Describe the build maintenance and server cleanup.

6-7 Artifacts → Describe the process and the storage of the build artifacts.

6-8 Development → Layout the development process for the version management environments & software configuration plan.

## # Risk and Risk types

Risk → Risks are those factors that may present the attainment of a set goals. In software engineering, risk is a measure of the inability to achieve overall program objectives within defined cost, schedules & technical constraints.

Risks are future uncertain events with a probability of occurrence and a potential of loss risk identification and management are main concern in every software project. Effective analysis of software risks will help of effective planning of assignments of work.

- Risk is the probability of loss. It is a function of both the probability of an adverse event occurring and its impact. (the impact multiplies itself in a combination of financial loss, time delay and loss of performance)
- A risk is the precursor to a problem: the probability that, at any given point in the life cycle, the predicted goals cannot be achieved within a available resources. Risk cannot be eliminated from a software project but it can be managed.

## ⇒ Components of Risk

There are two components of risk —

- the probability of failing to achieve a particular outcome and
- the results of failing to achieve that outcome.

## ⇒ Risk Type

There are 6 types of risks in software, these are following—

- 1) Technology — The database used in the system may cannot process as many transaction per second as expected.
- 2) Software — Components, which should be released may contain defects which limits their functionality.
- 3) People — may key staffs are ill and unavailable at critical times or may required training for staff is not available.

4) Organizational — May the organization is resource that different management is responsible for the / OR

May organizational financial problems force rework in the project budget.

5) Tools — May the code generated by CASE Tools inefficient or May case tools cannot integrate.

c) Requirements — May requirements changes, which major design work (rework) are needed may customer fail to understand I of requirement change.

7) Estimation — May the time required to develop software is underestimated or the defect repair is underestimated. Or of the software is underestimated

## II

### Risk Breakdown Structure

Risk Breakdown structure is a hierarchical list of risks.  
Risk Breakdown structure helps to identify and manage project risks.

In risky project we can define different risk breakdown structure at the project level and for each separate task or resource. Each risk is defined by its chance of occurrence, outcome and time of occurrence.

### RISK BREAKDOWN STRUCTURE

- Risks affecting whole company/ division
  - Budgetary risks
  - Environmental risks
  - Legal risks
- Resource risks
  - Lack of knowledge of the specific area

- Lack of knowledge of tools
- Staff turnover
- Risk related to the competence of the management:

- Requirement / client relationship
  - New or update requirement
  - Risks related to interpretation of requirements
  - Requests are not accepted by the client
  - Risks related to communication with the client
- Risks related to h/w or IT infrastructures
  - If/w performance or other parameters are not suitable for the project.
  - Risks related to communication infrastructure.
- Problems with development tools
  - Selected software tools are not suitable for particular task
  - Selected third party are not suitable for particular task.

→ Other risks

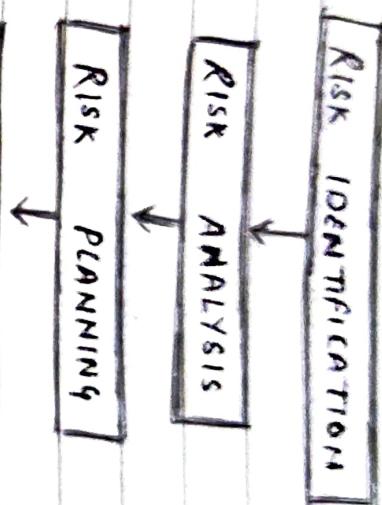
- Critical bugs are discovered
- Configuration Management issues
- chosen S/w architecture is not suitable.

## The Risk Management

Risk Management is the identification, assessment of prioritization of risks followed by coordinate of economic application of resource to minimize, monitor and control the probability and for impact of unfortunate events or to maximize the realization of opportunities. Risk Management's objective is to ause uncertainty does not affect the endeavor from the business goals.

## Risk Management Process

Risk Management process includes following steps —



I Risk Identification — Risk identification is to identify project, product and business risks. Risk to a software project must be identified.

One way to identify software project risks is to follow the most common risks types.

The other way is using a questionnaire known as risk identification questionnaire. Three questions concerning risks should be periodically reviewed, this allows for the identification of most risks in a software project.

Numerous other approaches are available to the project manager.

- 1) Checklist — The project manager can utilize a checklist to help identify which risks are applicable.
- 2) RBS — By RBS project manager identifies a hierarchy of risks by category.
- 3) Brainstorming — A non evaluating group exercise to think on potential risks.
- 4) Delphi technique — Approach iteratively builds consensus within a panel of experts.
- 5) Interviewing — Dialog with relevant corporate & industry personnel to build up a potential list of risks.
- 6) SWOT — Strength, weakness, opportunity & threat analysis.

Risk Analysis — The purpose of analysis is to convert the data into decision making information. Analysis is a process of examining the risks in detail to determine the extent of the risks & how they relate to each other, and which one are the most important.

Risk reduction involves three types of strategies:

## Cost Benefit Analysis

The most common way of carrying out an economic assessment of a proposed information system, is by comparing the expected costs of development and operation of the system with benefits of having it in place.

Assessment focuses on whether the estimated income due other benefits exceed the estimated costs or not.

→ The standard way of evaluating the economic benefits of any project is cost-benefit analysis, consisting three steps:-

1) Identifying and estimating all of the costs and benefits of carrying out the project and operating the audience application; these include, the development costs, the operating costs, and benefits, that are expected to accrue from the new system.

2) where the proposed system is replacing an existing one, these estimates should reflect the change in costs,

and benefits due to the new system.

A new sales order processing system, for example, could not claim the benefit on organization by the total value of sales — only by the increase due to the use of the new system.

→ Development cost — includes the salaries and other compensation costs of the staff involved in the development project and all associates costs.

→ Setup cost — include the costs of putting the system into place. This consists mainly of the cost of any new hardware and ancillary equipments but will also include costs of recruitment and staff training.

→ Operational cost — consists of the costs of operating system once it has been installed.

\* The unit of cost benefit analysis is Money (Rs).