RISK EVALUATION

Risk Evaluation

- Every project involves risk of some form.
- When assessing and planning a project, we are concerned with the risk that the project might not meet its objectives.

Risk Identification and ranking

- In any project evaluation, we should attempt to identify the risks and quantify their potential effects.
- One common approach to risk analysis is to construct a project risk matrix utilizing a checklist of possible risks and to classify each risk according to its relative importance and likelihood.

Risk Identification and ranking

Risk	Importance	Likelihood
Software never completed or delivered	H	---
Project cancelled after design stage	H	---
Software delivered late	M	M
Development budget exceeded<= 20%	L	M
Development budget exceeded>20%	M	L
Maintenance costs higher than estimated	L	L
Response time targets not met	L	H

Risk and net present value

- Where a project is relatively risky, use a higher discount rate to calculate net present value.
- Projects may be categorized as high, medium or low risk using a scoring method.

Cost benefit analysis

- To consider each possible outcome and estimate the probability of its occurring and the corresponding value of the outcome.
- Rather than a single cash flow forecast for a project, we will have a set of cash flow forecasts, each with an associated probability of occurring.
- The value of the project is then obtained by summing the cost or benefit for each possible outcome weighted by its corresponding probability.

Risk profit analysis

- Involves varying each of the parameters that affect the project's cost or benefits to ascertain how sensitive the project's profitability is to each factor.
- With the help of a sensitivity analysis, we can identify those factors that are most important the success of the project.
- Sensitivity analysis demands that we vary each factor one at a time.

Using Decision Tree

- To reject over-risky projects or choose those with the best risk profile.
- Such decisions will limit or affect future options and.