



SNS COLLEGE OF ENGINEERING

Kurumbapalayam(Po), Coimbatore - 641 107

Accredited by NAAC-UGC with 'A' Grade

Approved by AICTE, Recognized by UGC & Affiliated to Anna University, Chennai

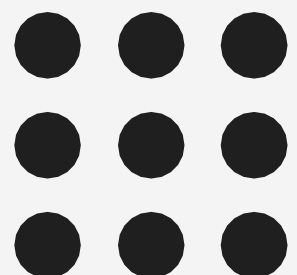
Department of Information Technology

Course Name - IT8075 Software Project Management

IV Year / VII Semester

Unit 1 - Project Evaluation and Project Planning

Topic 8 - Risk Evaluation



Identify the popular Dialogue from the images



Identify the term from the below images



Risk Evaluation

Risk Types

Project Risks

- Project failure

Business Risk

- Products not profitable



Risk Evaluation

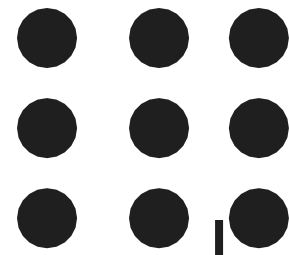
Business Risk

- Delivered products are not profitable.

Risk Evaluation

- Risk Identification and ranking
- Risk and net present value
- Cost-benefit analysis
- Risk profile analysis
- Use of decision trees





Risk Evaluation

Risk Identification and Ranking

- Identify risk and quantify effects
- Project risk matrix
- List possible risks and classify risks based on importance and likelihood.



Risk	Importance	Likelihood
Client rejects proposed look and feel of site	H	—
Competitors undercut prices	H	M
Warehouse unable to deal with increased demand	M	L
Online payment has security problems	M	M
Maintenance costs higher than estimated	L	L
Response times deter purchasers	M	M

TABLE 2.5 A fragment of a basic project/business risk matrix for an e-commerce application

Risk Evaluation

Risk and Net Present Value

- Risky – Higher discount rate to calculate net present value.
- Categorize projects as High, Medium, Low risk
- Use scoring method
- Risk premiums designated for each category.



Risk Evaluation

Cost Benefit Analysis

Method

- Consider each possible outcome and
- estimate the probability of its occurring and
- corresponding value of the outcome.
- Set of cash flow forecast rather than single

TABLE 2.6 BuyRight's income forecasts

Sales	Annual sales income (£)	Probability	Expected value (£)
	i	p	$i \times p$
High	800,000	0.1	80,000
Medium	650,000	0.6	390,000
Low	100,000	0.3	30,000
Expected Income			500,000

Risk Evaluation

Value of project

- Summing up cost or benefit for each possible outcome weighted by its corresponding probability.
- Suitable for large projects
- Appropriate for projects where profits is the primary



Risk Evaluation

Risk Profile Analysis

- Construct risk profiles
- Use sensitivity analysis
- Change parameters that affect projects cost or benefit
- Can identify factors most important to success



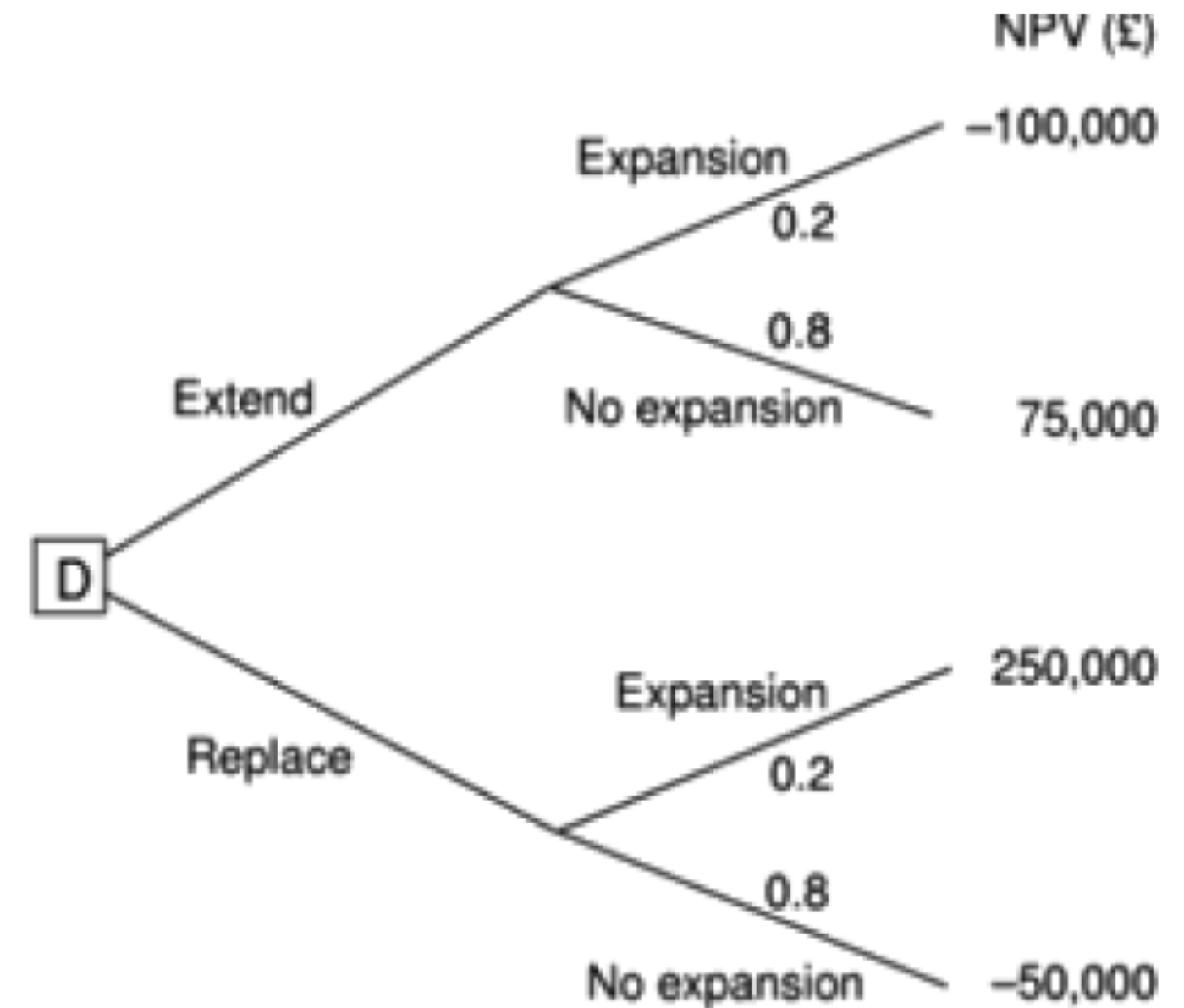
Risk Evaluation

Using Decision Trees

- Evaluate expected benefit (D)
- Expected Value = Sum of the value of each possible outcome * Probability of occurrence.

Example

- Expected value of Extending the system
 $75000 * 0.8 - 100000 * 0.2 = 40,000$
- Expected Value of replacing the system
 $250000 * 0.2 - 50000 * 0.8 = 10,000$
- So extending the existing system will be optimal solution





THANK YOU