# Chapter 11 Decision trees

## Key terms

- 1. Back data: data obtained from a previous time period.
- Chance node: a point on a decision tree diagram(represented by a circle) where a number of outcomes are possible.
- 3. Decision tree: a technique which shows all possible outcomes of a decision. The name comes from the similarity of the diagrams to the branches of trees.
- 4. Expected value: the numerical value of an outcome multiplied by the probability of that outcome happening
- 5. Probability: the chances of an event happening.
- 6. Rollback technique: the process of working back through a decision tree(from right to left) calculating the expected values at each node.

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# 1. Decision trees; a technique which shows all possible outcomes of a decision.

#### Decision trees combines 1. decision points

- 2. outcome
- 3. probability or chance

#### Advantages of decision trees

- 1. It shows possible courses of action not previously considered.
- 2. It places numerical values on decision. This tends to improve results.
- 3. It allows management to take account of the risk involved in decision
- 4. People may get better ideas.

### Limitation of decision trees

- 1. Probability is estimated and it may be inaccurate.
- 2. People's opinion cannot always be shown by numerical value.
- 3. Decision makers may manipulate data to reach the decision they want.

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