M4L13. Decision Trees Advantages

Slide #1

I would like to point out some advantages of the decision tree method.

Slide #2
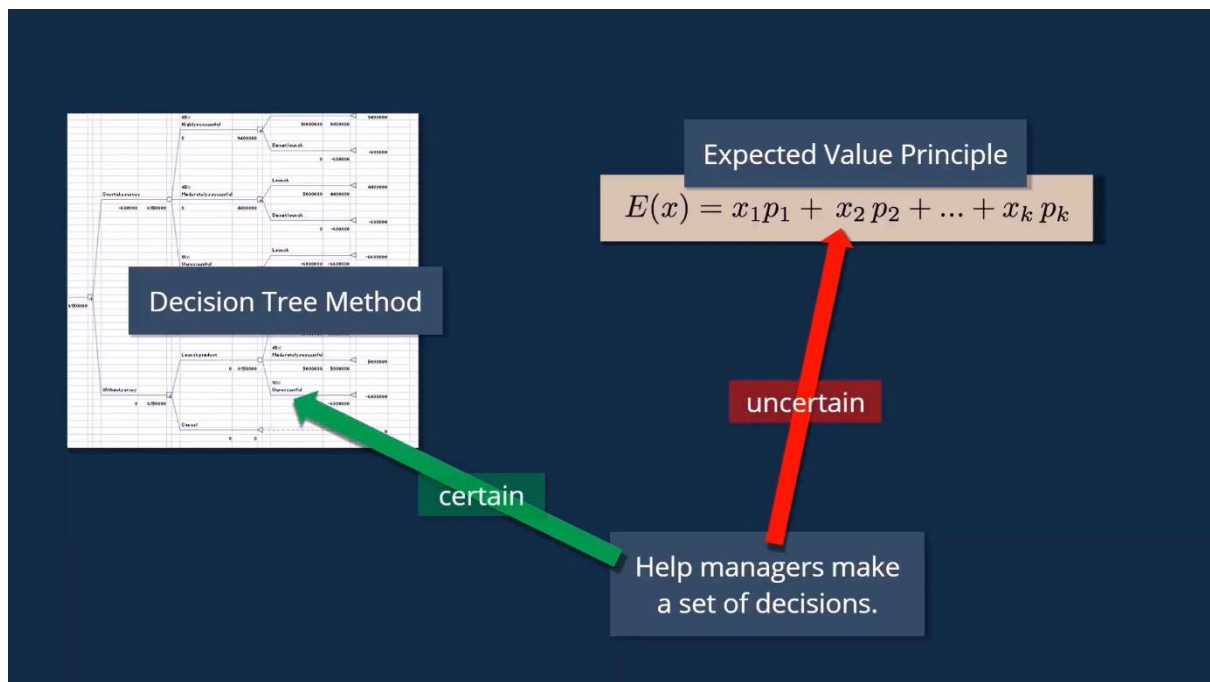
We have discussed the decision tree method and the expected value principle to help managers make a set of decisions under certain and uncertain situations, respectively.

Slide #3
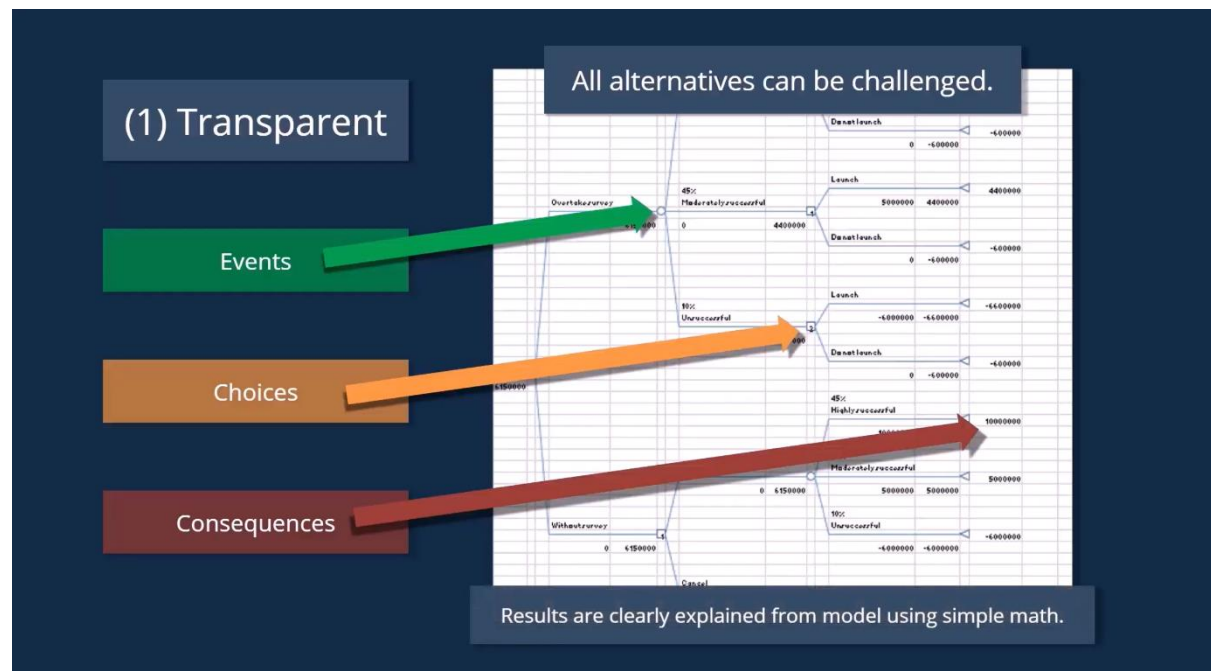
First, the decision tree method is transparent.

The diagrams of a decision tree clearly lay out the events, choices, and the consequences so that all alternatives can be challenged.

The results are clearly explained from the model using simple math.

Slide #4

Second, it also provides an evaluation framework.

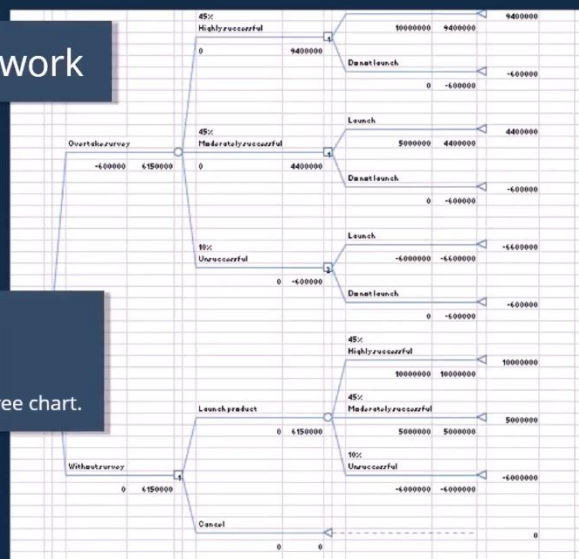The payoff and likelihood of outcomes can be quantified directly on the tree chart.

Slide #5
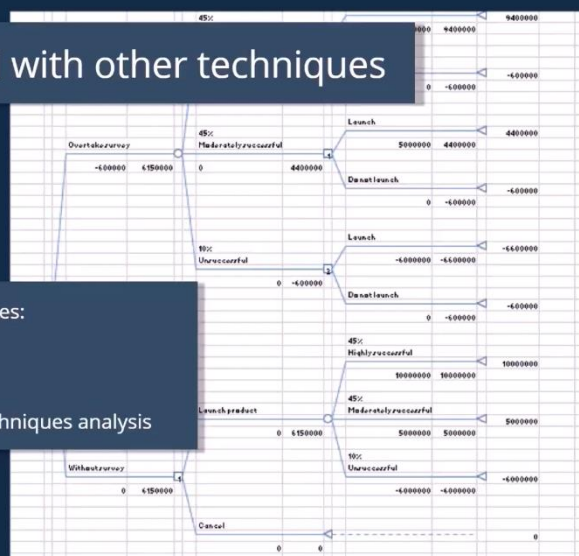
Third, the decision trees can be easily combined with other techniques.

Other decision-making techniques can be used to evaluate specific options through the tree.

Net Present Value and the Project Evaluation Review Techniques Analysis are the common examples that can be combined with the decision-making tree techniques.

Slide #6

Also, the decision tree enables evaluation of information.

Decision trees calculate the value of perfect information or a value of knowing what will happen in the future, like we discussed in the value of survey case.

This can help determine how much to spend on additional research to improve assumptions.

Slide #7

Another advantage of the decision tree method is that it is well suited for collaborative environments.

The structure of a decision tree can be combined with other trees to make bigger trees.

So the managers at different levels of the company can combine the decision trees from their reporting departments and make a bigger decision tree for higher level organization.

The combination can be easily done with the copy and paste functions of any decision tree software.