

## Decision problem

You are the manager of the analytical department in a company that is a mobile network operator. Last month, your company carried out a questionnaire in which respondents were asked if they would be interested in buying a new service. Based on the information gathered, you created a model that predicted if the customer would buy a new service. However, you are wondering whether to introduce an additional service that will be insurance for the service you just introduced.

- 1) Build a decision model in silverdecisions and say what result you can expect if:
  - a) Sending an offer to the customer for the purchase of the service costs \$10
  - b) Sending an offer to the customer for the purchase of insurance costs \$5
  - c) Buying a product by the customer means a profit of \$60
  - d) Buying insurance by the client means a profit of \$40
  - e) There is a 30% probability of buying the service by the customer to whom you have sent a service offer
  - f) There is a 30% probability of buying insurance by the client for whom you have sent an insurance offer
- 2) Consider the situation that the profit from buying a service and insurance depends on the age of the client. In the case of the service, the payoff is equal to the age of the client, and in the case of insurance 100-age. What will be the result for the client at the age of 20 and what will be the result for the client aged 80?