

Market Entry Strategy: Where to focus resources?

Background

EST, Inc. had core technology in the embedded systems market and had connections in the automotive and telecoms sectors. EST's technology also positioned them well in the as of yet non-existent internet appliances market. Although most of EST's technology had been developed in-house but a crucial piece of intellectual property was licensed. Final negotiations on the IP were on-going. EST needed to know where to concentrate its resources and needed to present a convincing case to investors. DPL helped provide them with this information. The final version of the model developed in DPL is included overleaf (Figure 4).

Sensitivity analyses were run in DPL to prune the model to its final version. After assessing probabilities, gathering data for the variables in the model and iterating, the Risk Profile in Figure 1 was generated.

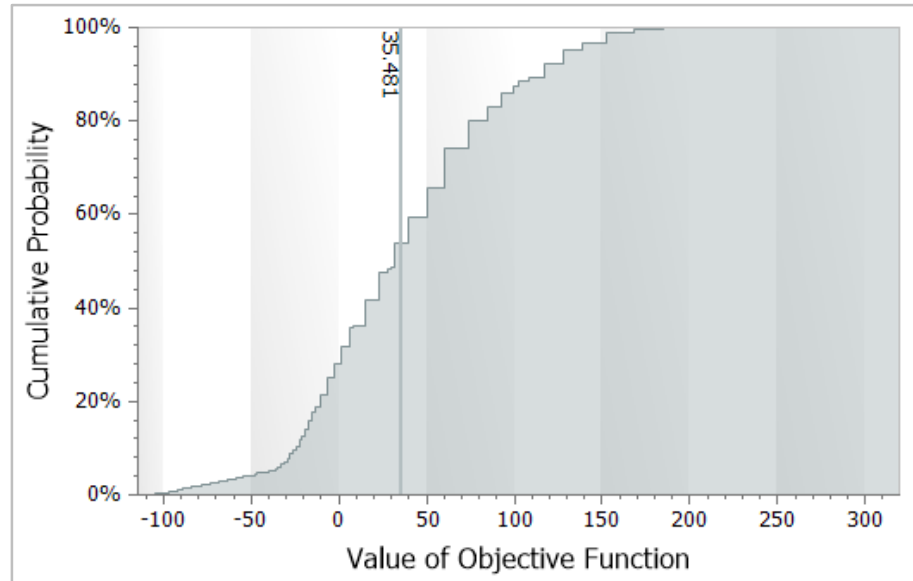


Figure 1. DPL Risk Profile Chart

As the Risk Profile indicates, expected NPV was positive (the vertical black line). There was approximately a 25% chance of losing money and 80% of the probability mass fell between roughly -25 and 75 million. EST believed and the data indicated that there was a fair bit of upside in the business with a 10% chance that the business was worth 125 million or more. But where was the money coming from?

DPL's Policy Summary™ output (Figure 2) indicates which decision alternative is optimal for the initial decision and how often each decision alternative is optimal in downstream decisions.

The Policy Summary™ output indicates that the internet appliance "option" has value. Management should not completely drop the internet appliance market but should keep the option open. This is indicated by the fact that in none of the cases should EST drop the internet appliance market in the Resource Allocation Decision in Period 2. But when should EST exercise the internet appliance option?

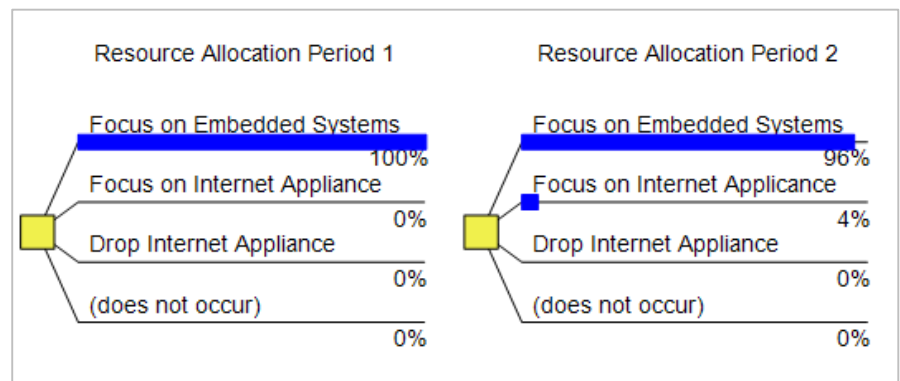


Figure 2. DPL Policy Summary™

DPL's Policy Tree™ output (Figure 3) helps determine under which circumstances to exercise an option (or select a downstream decision alternative). Contrary to what one might expect, EST should not necessarily exercise the internet appliance option when early stage adoption is faster than the central estimate (although the company is more likely to exercise the option in these cases).

The internet appliance market is simply a very long term bet even with faster than expected adoption in the near term. The main driver of when to exercise the internet appliance option is the size of the embedded market and how well the company is competing in it. If the embedded market is smaller than expected and EST's share is lower than expected, then it is time to exercise the internet appliance option by shifting resources to it. The section of DPL's Policy Tree™ output to the right shows (indicated by the bold lines) that EST should shift resources to the internet appliances market if the embedded market size is small and the company's share is low or nominal or if the embedded market size is nominal and the company's share is low (other conditions apply from further back in the tree).

The analysis provided EST with the clarity it needed and helped convince them not to chase the more speculative (yet highly fashionable) internet appliances market. EST stuck to the more established embedded systems market and demonstrated to investors that it had a sound plan.

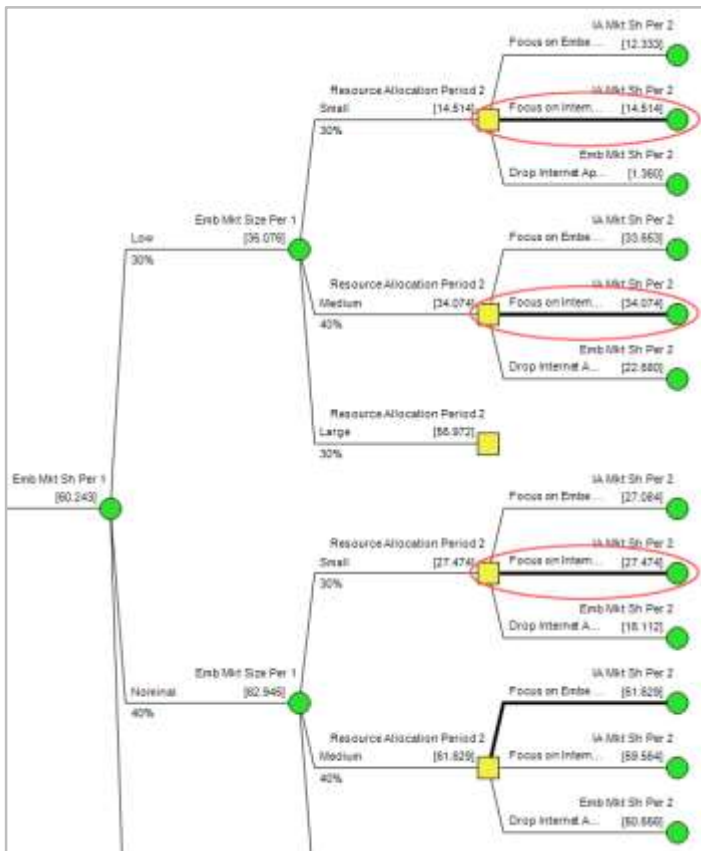


Figure 3. DPL Policy Tree™

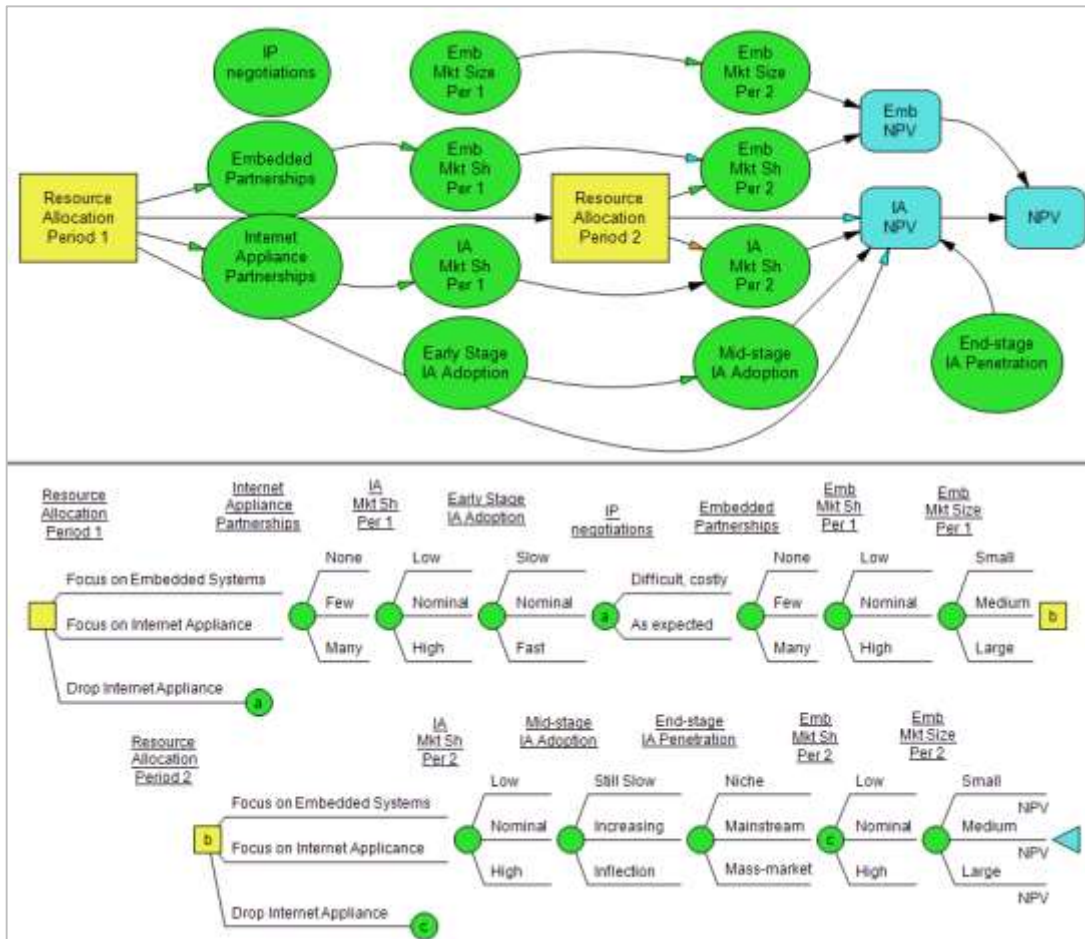


Figure 4. Market Entry Influence Diagram and Decision Tree