

ProModel

VISUALIZE ANALYZE OPTIMIZE

The client's team, working with a ProModel consultant, used project management analysis concepts and tools including ProModel's Portfolio Simulator to help find the most effective solution.

They built a simulated project planning model of the appropriate stages of the existing development and launch process. The model included the costs, variability and interdependence of tasks, personnel, facilities and materials. They validated that the model was over 90% accurate by comparing the simulated results of their current process to the actual results they had experienced. Portfolio Simulator generated the chart to the right, illustrating the accuracy of the simulation.



By visualizing and analyzing the "As-Is" process, they were easily able to find the specific reasons they continued to fall behind schedule. Using this information, they developed and tested a set of potential changes to the product development processes for feasibility and cost effectiveness.

Adding resources often seems like an obvious solution, but it can be very difficult to predict exactly how many resources and what kind are required to meet on-time goals with minimum cost. Portfolio Simulator's optimization capability made it easy for the client by automatically analyzing all possible scenario combinations and determining the top options in ranked order. The team simply defined budget and calendar objectives, directing the optimizer to find and prioritize which changes would gain the most time at the least cost.

Of the possible ranked changes, the team recommended to management a specific solution involving adding two of a certain type of resource at a specific point in the process at a cost of \$600k. This would in turn enable them to launch a full month ahead of schedule resulting in increased projected revenue of \$1.8 million, and a net gain of \$1.2 million. This represents a return of 1100% on the investment in the Portfolio Simulator solution, realized within eight weeks of implementation.

The potential value to the organization had they used Portfolio Simulator from the start of the project was even greater. The client ran a hypothetical scenario as if they had invested in this alternative from the start. When they revised the model to incorporate additional resources at an earlier phase in the launch process, they found they would have only needed one additional resource to achieve their desired performance. The cost would have only been \$200k because they would not have had to pay a premium to expedite the acquisition of that resource. Had they run this scenario and followed Portfolio Simulator's recommendations prior to starting the project, they could have saved 2/3 of the cost in additional resources and launched eight months earlier, thereby increasing projected revenue by close to \$15 million. This would have represented a total return of 14700% on the investment in the Portfolio Simulator solution.

Solution