



Technology Company Regains Control of Its Project Portfolio

Models help managers overcome resource constraints and optimize business results

A global technology company's portfolio of projects was in trouble. The Software Division was responsible for building applications for several business units, or Programs. Almost 90% of the Division's software projects were completed behind schedule, some by many months. Very late projects were often canceled before completion and the time invested in them wasted. The software engineers and their customers (Program Managers) were frustrated.

Software Division leaders resolved to restore their customers' confidence and improve the engineers' morale by reliably delivering projects on-schedule. To reach their goal of 90% on-time delivery, they had to find a way to make realistic project schedules and stick to them.

Small Picture Versus Big Picture

Software project managers did a reasonable job of planning individual projects. The problem was that they operated independently with no information on how the projects related to one another or how they competed for manpower. For example, every project included work from User Interface engineers. The UI Group Leader could roughly add up the work required by all the projects, however...

- He had no systematic way to see all the projects' manpower demands over time
- He did not have the authority to adjust project schedules if he found their demands exceeded his group's capacity
- He couldn't determine how changing work schedules in the UI group would impact other projects and other groups

Similarly, Program Managers made decisions about individual project schedules without knowing how those decisions impacted others. The portfolio as a whole was uncoordinated and thus made the individual project plans unfeasible. The small picture looked OK. The big picture was a mess.

A global technology company

- Completed 90% of its projects on-time
- Restored customer confidence
- Established a disciplined decision-making process

The Software Division leaders and Program Managers offered only narrow ideas to remedy the situation, such as:

- "We need better estimating tools"
- "We need more engineers"

No one was working on the real problem: how to optimize the performance of the entire portfolio.

Discipline Plus Information

ePM consultants designed a two-part solution for the Software Division:

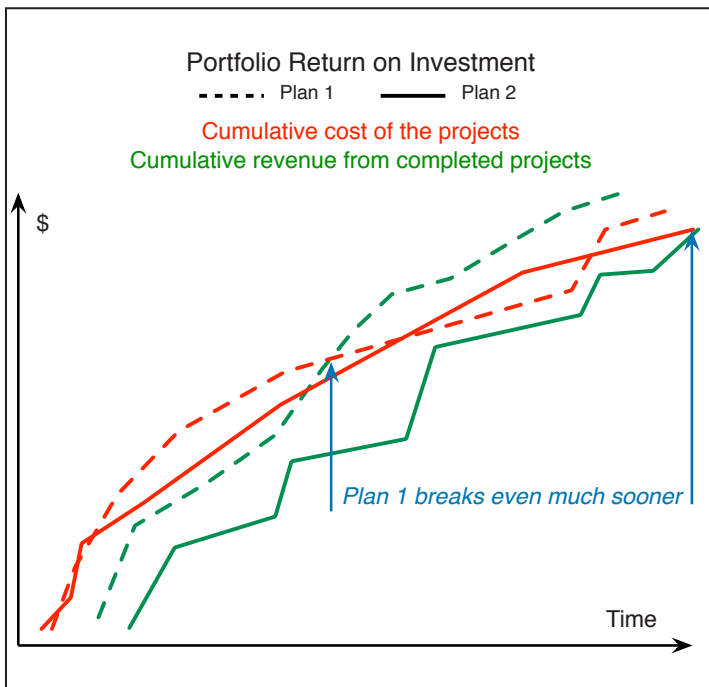
- A disciplined decision-making process
- A portfolio planning model to inform the decisions

We designed a periodic meeting where Software Division managers and their customers would make coordinated decisions about the portfolio:

- Project managers report progress and plans in a uniform way so that results could be compared across all groups and projects
- The Software Division manager gathers change requests and suggestions from his engineers and their customers
- Proposed changes are analyzed in the portfolio model
- Revisions to the portfolio plan are coordinated and negotiated within the group
- A consensus new portfolio plan is approved and implemented
- No changes are made outside the portfolio planning forum.

The key to making disciplined, coordinated decisions was accurate information about demand and capacity across all projects and departments. ePM developed a SimVision® portfolio simulation model to inform the group's decisions.





Engineers and program managers use a SimVision model to maximize the portfolio's profitability

The model:

- Quantified each project's demand on every software engineering department
- Compared engineering labor demand to capacity over time to reveal bottlenecks
- Accounted for projects' skill requirements that could only be met by certain engineers
- Pegged each project to a regular software release window to gauge schedule feasibility
- Optimized the portfolio's overall business value by accounting the revenue or savings that each project would produce

We designed the model to be easily and quickly manipulated so that suggested schedule changes could be evaluated in a few minutes. Many different "What if..." scenarios could be compared and presented to the group. For example:

- If we defer Project A until a later release window, can Projects B and C be moved up to the next release?
- Can we improve the portfolio's business benefit by breaking Project D into two phases?
- If we want to accelerate Project E, what other projects must be deferred and how does that affect the portfolio's business value?
- What is the earliest feasible release window for this new project we are considering?

Coordinated Management Yields Big Returns

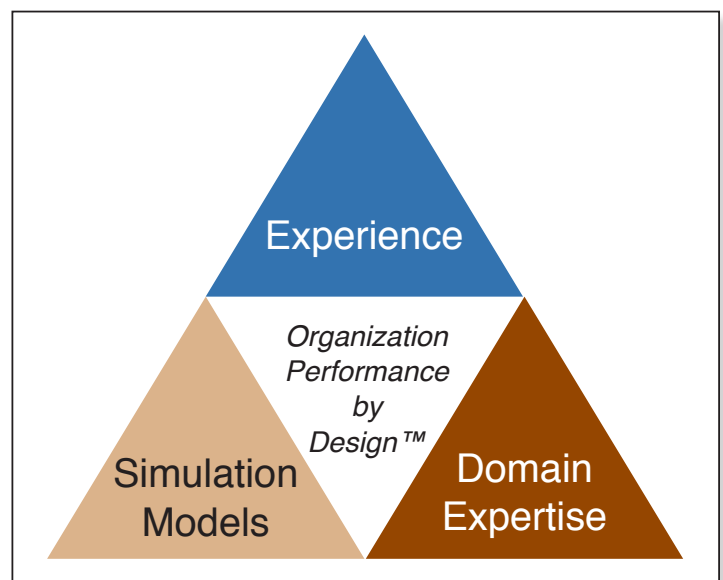
The disciplined decision-making process was a resounding success. On-time project completions increased from 10% to 90%. Software engineers' frustrations diminished. Customers came to trust the reliability of the project schedules.

The ePM Advantage

ePM combines science and experience to engineer high-performance organizations with precision and reliability. We use powerful, proprietary simulation technology to quantify and mitigate organizational risks. We facilitate team coordination and communication to ensure everyone understands goals and expectations. We help leaders to elicit superior performance from their teams.

About SimVision Technology

ePM's patented SimVision® technology is the first and only commercial simulator of team behaviors. It is the result of 25 years of research by Stanford and other universities and 10 years of application by ePM in myriad industries.



ePM uses organization simulation models to amplify the power of experience and expertise

For more Information

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