

Simulation and Modeling

Financial and process simulation and modeling is a powerful decision support technology which Thomas Group uses to test solution alternatives and estimate the impact of operational, cultural, or organizational changes. Modeling is a low cost and low risk approach to validate experimental hypotheses before implementation. When applied early in the innovation process, simulation and modeling can help to ensure the realization of intended productivity and performance improvements through improved design, planning, implementation, training, and sustainability. Thomas Group's unique and integrated approach to simulation and modeling enables organizations to explore potential scenarios and from there choose the exact solution that best meets their needs.



Thomas Group's Approach to Simulation and Modeling

Thomas Group's approach to simulation and modeling ensures that it is totally integrated with other tools to insure maximum data validity and decision resolution. Thomas Group simulation models are linked with and informed by our metrics, mapping, barrier identification, root cause analysis, and portfolio management tools. Our consultants develop and apply models, simulations, and other tools that support not only the decision-making process, but also development activities, exercises and demonstrations, and operations analyses. By utilizing technology, tools, and our structured methodology, we help clients visualize the results of changes before actually implementing those changes. We accomplish these roadmaps through data collection, analysis, and simulated visuals designed to identify potential bottlenecks and resource conflicts, reduce downtime, lower labor costs, and streamline operations, ultimately saving your company considerable time and money.

Below are a few examples of applications and industries where simulation and modeling has proven cost-effective:

- A manufacturer wishes to test various processes to minimize variability, waste, and cost.
- A major flower distributor desires to simulate various operational options in order to determine the one that minimizes spoilage and inventory levels, while resulting in the most just-in-time deliveries.

- A healthcare institution wants to model various approaches to nursing in order to cost-effectively maximize the quality of care provided to patients.
- The US DoD impacts its overall readiness, modernization, force structure, and sustainability through modeling and simulation.

In each case, by employing simulation and modeling, Thomas Group clients were able to identify potential and unanticipated problems, bottlenecks, resource conflicts, or challenges. Simulation makes it possible to do this in a low cost, low risk, virtual environment. As a result, clients can reduce project times and downtimes while lowering costs, streamlining operations, and, over the long term, saving time and money while improving outcomes.

How Thomas Group Can Help

At Thomas Group, we realize that simulation and modeling represents an important tool for delivering improved productivity and overall shareholder return. We have over 30 years of experience in helping company processes realize reduced time and costs by applying our unique approach. Let us help your organization achieve improved results. Through a concentrated effort, we will help you incorporate operational and process simulation and modeling into your innovation cycle by developing and implement business dashboards that provide the critical snapshot you need of your business performance. Our team of experts has both the critical business knowledge and technical expertise to work with you to ultimately deliver the most important business indicators, properly summarized, and powerfully illustrated.

Our business dashboard reports provide:

- A fast, efficient view of business performance
- Top level views and *drill-down* capabilities
- Integrated performance views
- Better data consistency
- Ubiquitous and real-time access to key performance data

Let Thomas Group help your company realize its potential by implementing **Breakthrough Performance through Simulation and Modeling Services.**