| | ProModel For Pharmaceutical Manufacturing | | cturing | | |
|--------|---|--|------------|--|--|
| rtical | Manufacturing Pharmaceutica | al Healthcare Portfolio | | | |
| Genre | Case Study | | | Value Proposition | |
| | Does your manufacturing site struggle with any of the following issues? | | | | |
| | Missed or late deliveries to customers | | | | |
| | Costly expiration of Work-In-Process Implementation of Six Sigma, Lean, or Right First Time Initiatives | | | | |
| | Adding new product lines to an already over-utilized facility | | | | |
| | Outsourcing decisions | | | | |
| | Facility expansion decisions | | | | |
| | Communicating the solution across the organization | | | | |
| | If so, you are not alone. ProModel's Pharmaceutical Manufacturing Team has partnered with most of the top 10 Pharma Manufacturers to provide customized simulation technology based solutions to these problems and many others. Partial Pharmaceutical Client List: | | | | |
| | | | ore Squibb | Novartis | |
| | Pfizer | Bristol My | | • NOVALUS | |
| | PfizerMerck | Bristol MyProcter & | | Sanofi Aventis | |
| | Merck Amgen | Procter &Teva | | Sanofi AventisGlaxoSmithKline | |
| | Merck | Procter & | Gamble | Sanofi Aventis | |

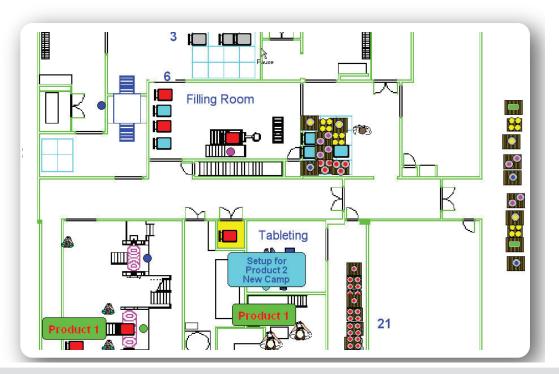
Pharmaceutical Manufacturing Applications:

- Drug Manufacturing Facility Design & Optimization
- Drug Packaging Line Design & Layout
- Automated Storage and Retrieval System Design
- · Operational Scheduling & Simulation Analysis
- Capacity Planning
- Vaccine Manufacturing Capacity Optimization
- Biologics Manufacturing Capacity Optimization
- Production Trains Optimization
- Biopharmaceutical Batch Manufacturing Capacity Optimization
- Many Others...

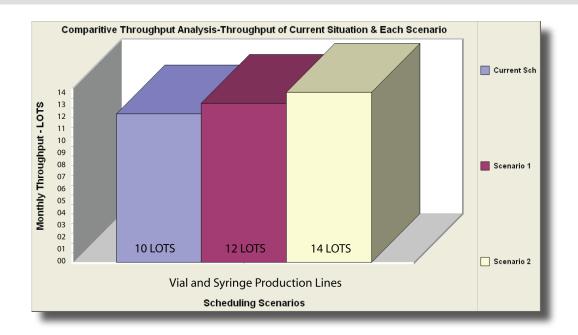
ProModel has been implementing simulation technology-driven solutions in the pharmaceutical industry for more than 15 years, helping leading companies improve their decision making capability. ProModel's VAO (Visualize, Analyze, Optimize) solution methodology combines consulting with innovative simulation technology designed to address the multitude of highly variable decision metrics inherent in the Pharmaceutical manufacturing.



Visualize your business process and model variability and interdependencies. Leverage the power of animation for true visualization.



Analyze how the business would react in advance by running time based "What If" Scenarios using a powerful dynamic simulation capability.



Optimize overall systemic performance - PREDICT the impact on cycle time, throughput, cost, service level and other key metrics using the dynamic power of Simulation.