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Simulation Modeling

Changes to existing processes can be an expensive proposition without first careful study and analysis. Often, testing a proposed change would be too costly, time-consuming or otherwise resource-wasting to execute in real life.

Simulation Modeling determines the optimal change or set of changes before ever touching or modifying the actual system. Efficiency Engineers' experts imitate real-world processes in an environment where they can be accelerated, studied, adjusted and analyzed to achieve desired results or improvements. Simulations handle the complexities of real-world processes that simpler mathematical models cannot accommodate by incorporating random number generation to capture the natural variations of a process within the confines of probability distributions.

Common Issues Where Simulation Modeling Can Help

- Running out of capacity
- Need to improve product quality
- Need to produce additional product without expensive line renovations
- ROI justification of a capital investment

Main Benefits

- Easy to use & affordable
- Improved processes & systems based on desired change or effect
- Produces in-depth knowledge of a system and how the pieces interact
- Careful analysis often reveals previously undetected problems
- Enables a team to try any and all innovative ideas without risk
- Great way to show the realistic benefits to gain buy-in for change

Receive a Process & Systems Report including:

- Guide to improving existing operations
- Identification of issues/problems and a plan for resolving
- Modeled scenarios of improved processes and systems
- Simulation Analysis & Data: current system and scenarios

Efficiency Engineers' Expertise

Due to the complex nature of simulations, the proper design and execution requires training and experience in the conceptual aspects of simulation methodology as well as intimate knowledge on the use and operation of specific simulation software.

We incorporate expertise in process analysis, optimization, probability and statistics, and computer programming in order to provide the most thorough and accurate models yielding useful and reliable results.

Carlo Carlo

Dramatic

Results

Client Testimony: "The simulation justified spending. It proved to be accurate and set the groundwork for spending over \$100,000. We were able to produce more with the same amount of people."