



Master Series:

Everyday Uses of Process Modeling

Masters Series Agenda

Week 1

Week 2

Week 3

OBJECTIVES

- Introduction to simulation
- Understand the basic components of modeling
- The importance of understanding the impact of interactions in a dynamic process

- Transactional and Service models
- Replenishment pull for supplies
- Data collection and model validation
- Techniques to model forecast work, kits of information, batch release, etc.

- Your challenges – email your process model challenges to modeling@moresteam.com
- Social distancing models

HOMEWORK

eLearning course, Kathy's Best Wursts case study, build models from the webinar

Build the Loan Application and Agile Sprint models from today's session, complete the eLearning quiz



Comparing Modeling Techniques

George Box: “All models are wrong, but some are useful” ...

Discrete Event Simulation

- Animated Process Map
- Very Flexible
- Infinite Variation
- Limited ‘brute force’ optimization
- Business/human processes

Continuous Time Simulation

- Define the model as a set of mathematical equations, with knowledge of previous time periods
- Based on probabilities and state variables
- Propagation models: fire, flood, weather, disease

Mathematical Optimization

- Linear, Quadratic, Non-Linear Programming
- Must define the model as a set of mathematical equations, may have knowledge of previous time periods
- No variation
- Guaranteed Global Optimum
- System models: transportation, packaging

Monte Carlo Simulation

- Must define model as a set of mathematical equations
- Assumes independence of events
- Markov process memorylessness
- Stack-up models: tolerance, time

Challenge Models

Thanks to everyone that sent in challenges

Today:

- Blood Test Lab
- MRI with Anesthesia
- Grocery Mini Mart
- Job Shop
- Building Boats

What's Next?

- Download Certificate of Completion: Complete the course & quiz questions
 - VoC: Don't forget to complete your end-of-course survey
- Build your own models
 - 46 days of access remaining
 - Need a little more time? Complimentary 30-day extension available
- Advanced modeling training & expert help available. Contact us!

Contact us...

Today's slides & recording will be available at:

<https://www.moresteam.com/webcasts/process-modeling-master-series.cfm>

Questions about course content or the Process Playground modeling tool?

Contact modeling@moresteam.com

For more information about MoreSteam's products & services:

Contact Kathy Miller at kmiller@moresteam.com

