## Operations Management Simulation

# PROCESS ANALYTICS

**FOR COURSES IN:**

- **Operations Management**
- **Service Management**
- **Logistics**

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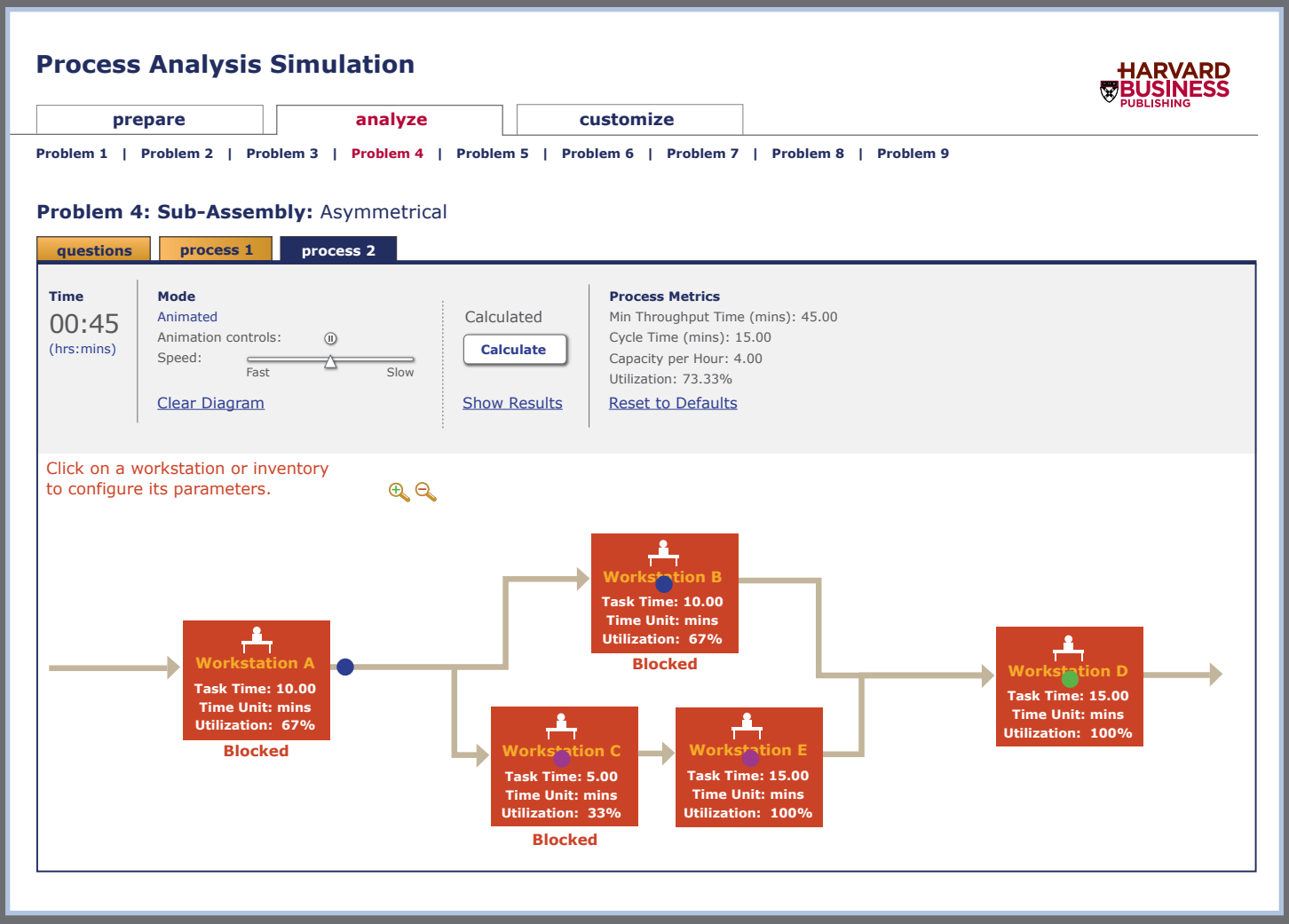
# **Operations Management Simulation:** Process Analytics

**Process Analytics provides an engaging, interactive environment for students to explore and master the fundamental concepts behind creating an effective operating process.** Each discrete process is brought to life through an animated model. Problem sets guide students' exploration of the model.

Students develop their intuition by experimenting with different process parameters and observing how the effects play out in the animated models. They can test assumptions and validate results by calculating key performance metrics.




*Animated models allow students to visualize how changing parameters affect process flow.*

### ANIMATED PROCESS MODELS

The simulation provides interactive tools for learning highly academic material. Students can animate each process model to study throughput time, cycle time, capacity, and utilization.

### WIDE VARIETY OF MODELS

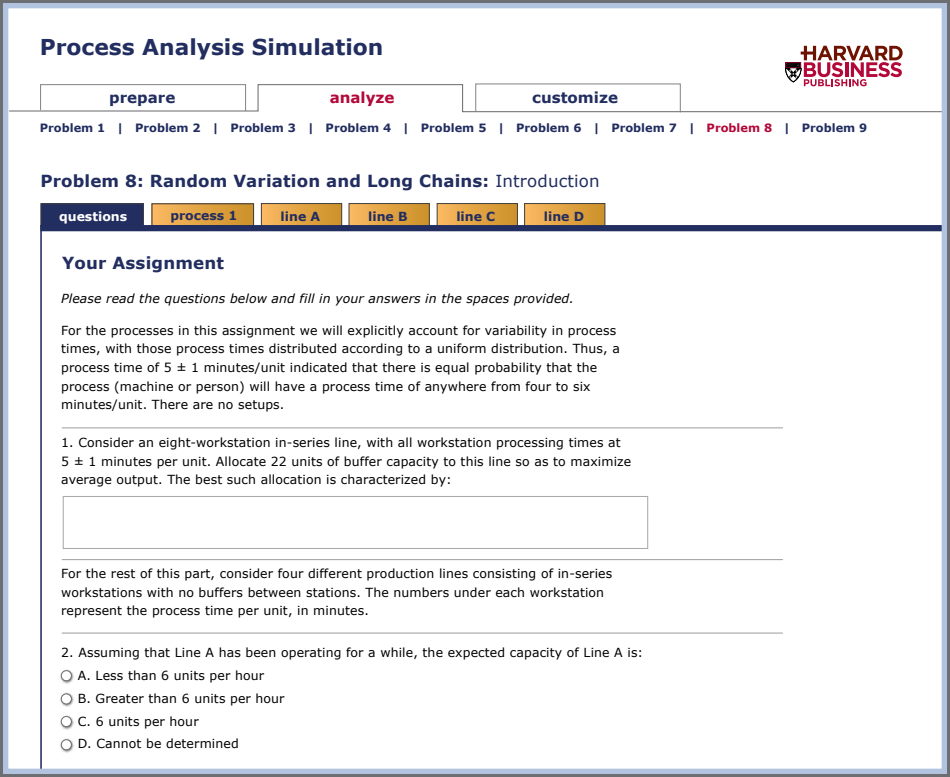
Includes a wide variety of process models: three-step process, four-step process, batch process, sub-assembly process, inventory management, scrap and rework, random variations.

### EXAMINE BOTTLENECKS

Students can examine the causes of bottlenecks and learn how changing parameters such as batch size or inventory levels affects performance metrics.

## PROBLEM SETS AND QUESTIONS

The simulation is organized around a multi-part problem set. Each problem in the set includes at least one process model and a series of questions designed to guide students' exploration of the scenario. The questions ask them to analyze changes in parameters, calculate metrics, or predict the change in performance measures. Through this guided exploration, students challenge their assumptions and develop intuition about the factors that improve or degrade product flow.

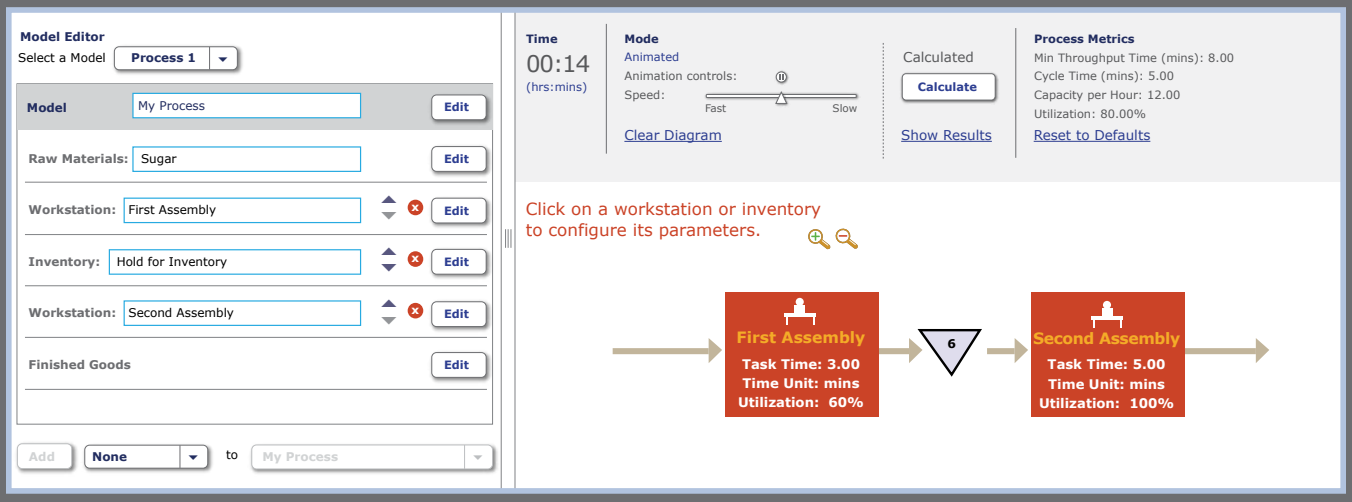



*Assignment questions guide students through different scenarios and test their knowledge.*

## CUSTOMIZATION OPTIONS

The simulation includes a complete problem set with nine problems with increasing levels of difficulty. Faculty can assign the supplied problems and questions or they can create new processes, design new problems, and write questions to support their particular course objectives.

In addition, faculty can allow students to create their own process models. With this additional flexibility, students explore specific aspects of process analytics in more depth at their own pace.




*Students can create their own models and test their own scenarios.*

ADMINISTRATION TOOLS ON NEXT PAGE →

# **Administration Tools** for Faculty

**A comprehensive Facilitator's Guide covers key learning objectives, including:**

- Exposing students to the fundamental concepts in process analytics in a dynamic, experiential manner.
- Increasing student intuition in understanding the interplay among the various elements of process analytics.
- Allowing students to learn process analysis through experimentation and through the proactive creation of simulation models.

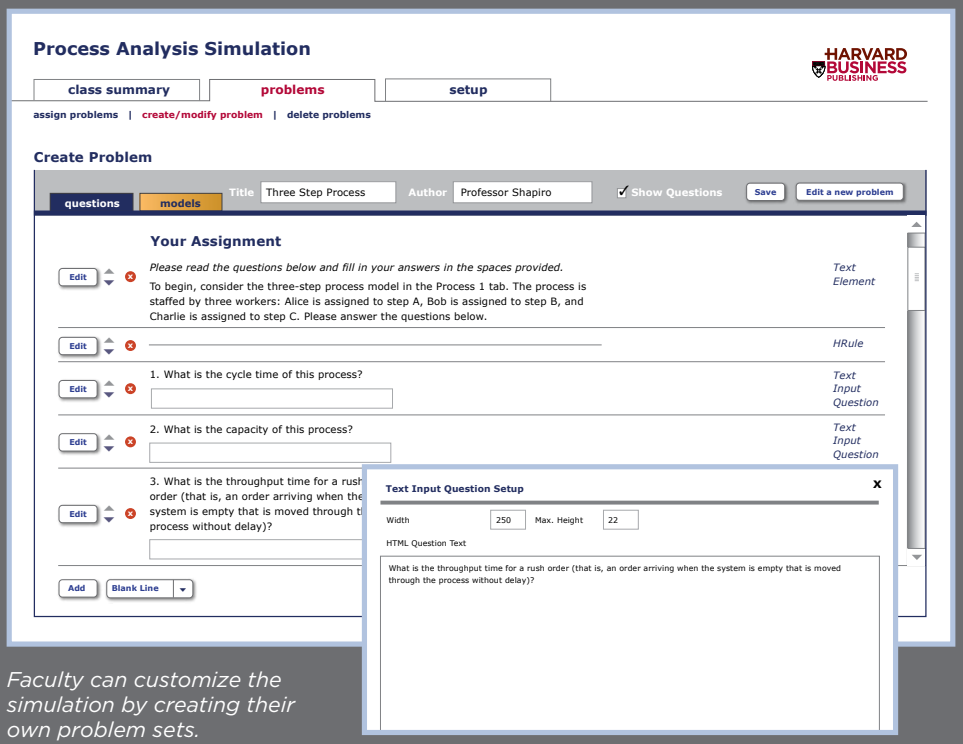
**Process Analytics offers:**

- **Flexibility**—customize the problems and enable different model parameters to control the simulation environment.
- **Easy setup**—includes a complete problem set ranging from simple to complex.
- **Laboratory environment**—animated process models allow students to test assumptions and observe results.
- **Lecture tool**—use a particular problem to illustrate a point.

## DESIGN AND EDIT PROBLEM SETS

Faculty can determine the level of difficulty and customize the student experience by designing their own process models and adding them to the problem set. They can also use custom models as lecture tools.

Faculty can customize the questions used in each problem set or create new questions to go along with any process model.




*Faculty can customize the simulation by creating their own problem sets.*

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