

# with Simio's Forward Looking Digital Twin.

Simio provides a systematic roadmap to improve your factory operations, to synchronize and fix the information contained in your Enterprise systems and to harmonize people and processes to finally deliver a production schedule which is fully executable. Schedule feasibility is possible because Simio considers all operational constraints as well as the business logic required to successfully operate the factory concurrently, when creating the schedule.

We provide a 3D Process Digital Twin that is generated and driven by your enterprise data, which simulates the expected outcome into the future to provide predictive and prescriptive analysis of the system and is used to improve both the design and operations of complex systems.



# Prescribe and react with full visibility.

# Visualize the production process

(current & future state)

#### **Evaluate alternatives**

(i.e. operational policies & business rules)

Generate and distribute nearreal time feasible schedules

(task level detail)

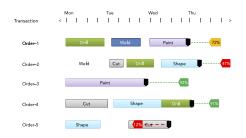
Standardize and correlate your operational data and systems

Harmonize people and processes to align with best practices

Predict and optimize future performance against KPIs

#### **Design and Analyze:**

New product introduction Adding production capacity Inventory policies & more



One key output of this process is a detailed, feasible schedule including a risk assessment of defined targets, such as delivery dates and cost of each order.

### Increased Throughput & Operational Efficiency

- Eliminate siloed planning by concurrently scheduling all the operational areas
- Reduce unplanned downtime by synchronizing all capacity and material constraints to meet demand
- Reduce costs of setups by reducing changeovers without compromising on time delivery

#### Probability of Meeting On Time Delivery & Cost

- Risk Analysis of meeting targets, such as on time delivery or cost
- Constraint analysis of the root causes of delays and inefficiencies (labor, materials, capacity, etc.)
- Avoid late penalties by addressing high-risk orders proactively

## Synchronize the Factory through Global Visibility

- Schedule visibility to the organization & all stakeholders in the supply chain via Azure
- Visibility to suppliers for when and where raw materials and parts are needed (JIT)
- Management dashboards to track performance

#### Dynamic Near-Realtime Event-based Scheduling

- React to events in the system, such as unplanned downtime, signals from sensors or new orders
- Eliminate manual, time consuming planning in Excelbased systems
- Effective what-if analysis and plan comparisons to optimize business KPIs

