

THE GRAIN

Applied Data Science for the industry

THINK CREATIVELY. PERFORM EXPONENTIALLY.

Who

What

Impact

Use Cases

Demand Forecasting & Inventory Optimization



Japanese bioscience company



- ✓ Dealing with **aged inventory**
- ✓ Set up order generation system **integrated with SAP**
- ✓ Rework of order principles to reduce inventory in DC
- ✓ Set up a demand forecasting system

- ✓ **Increased efficiency:** process automation and all information centralized in one location
- ✓ More **accurate & detailed forecast**
- ✓ **20% scrap reduction**

Demand Forecasting & Inventory Optimization



Largest Dutch Press Distributor



- ✓ **Daily distribution of perishable goods** over a network of **6,500 retailers**
- ✓ Plan the **optimal assortment** based on sales potential
- ✓ Plan the **optimal distribution** based on POS forecasts

- ✓ **Higher sales and less waste**
- ✓ **Faster decision making** thanks to operational platform put in place
- ✓ **Improved relationship** with stakeholders (publishers & retailers)

Demand Forecasting & Inventory Optimization



Pharmaceutical Wholesaler



- ✓ Daily distribution of **40,000 sku's** - 600 suppliers - 2 DC's - **400 stores**
- ✓ Central warehouse stock management
- ✓ From Days of Stock to statistical order generation
- ✓ Integration with SAP

- ✓ **15% inventory reduction** good for € 2millions of yearly savings
- ✓ Average **stock rotation reduced with 20%**
- ✓ **Increased efficiency:** moving from an Excel world to one central tool

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Production planning & scheduling

SAVERGLASS

French bottle manufacturer



- ✓ Support the **monthly planning process** for 200 sku's and **8 furnaces with each 3-7 sublines**
- ✓ Minimize throughput time, given all production constraints
- ✓ interactive **touchscreen planboard**

- ✓ **Increased efficiency:** focus on reviewing automated planning proposal
- ✓ **Real-time adjustments** through interactive planboard
- ✓ **Less time spend** on gathering information

Process optimization

Production planning & scheduling

SOLVAY
adding more functionality

Global chemical concern



- ✓ Detect features that influence the production time within the different phases of a polymerization batch process (**Golden batch features**)
- ✓ Real-time analysis and decision making

- ✓ **Real-time monitoring** of production flow
- ✓ **Better scheduling** through anticipating bottlenecks
- ✓ **15% increase in throughput**
- ✓ Structural process improvements

Production planning & scheduling

ALCO
LORCA

Belgian food producer



- ✓ Support the **weekly planning process** for 500 sku's and **21 lines** (7 lines x and 3 packaging sublines)
- ✓ **Maximize Line production**, given required production, capacity limitations, machinery constraints & switch times

- ✓ **Maturization in S&OP** Process through Faster & Automated Calculations
- ✓ **Powerfull visualizations** gives better insights in planning process
- ✓ **Better machine utilization** & higher labor productivity

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Use Cases

Predictive Maintenance Process Optimization



Air Cooled Condensers (OEM)



- ✓ Build out an **asset performance management solution** as part of a new service model
- ✓ **Forecast net electrical output**
- ✓ **Predictive alerting** on failures and possible root causes

- ✓ **No more unplanned downtime of ACC**
- ✓ **Better trading decisions** for power plants
- ✓ Supporting the roll-out of a **new business model**

Predictive Maintenance Predictive Quality **SSAB**

Large steel manufacturer



- ✓ **Reduce cobble formation** coils rolling out of the hot strip mill.
- ✓ Build a probabilistic model for cobble formation and a **live operator dashboard** for **immediate intervention**

- ✓ **Reduced production downtime** with 5%
- ✓ **9% reduction in scrap rate (cobbled coils)**
- ✓ **Less maintenance work** because of proactive interventions

Predictive Maintenance Process Optimization



Life Science company



- ✓ Monitor and analyze **product deviations** for a packaging line within medicine production.
- ✓ Using NLP to build a deviations library and a **Root Cause suggestion application**

- ✓ **Increased machine uptime** through structural changes and early notifications of deviations
- ✓ **30% reduction in scrap rate**

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Thank you for your
attention

Stay in touch

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