

Factory ANALYZE



Real-time Insights for Process Optimization

For Operations and Process Experts focusing on continuous improvement, Factory ANALYZE is a suite of manufacturing-specific solutions built on a data foundation. It delivers real-time insights for driving process optimization into:

✔ Asset Health and Availability

Predictive maintenance requires assessing machinery performance in order to identify potential issues, maximize asset availability, and reduce unplanned downtime.

✔ Quality

Effective quality management relies on control measures, inspections, and most importantly, **real-time continuous improvement**.

✔ Performance

Real-time performance metrics such as production output, downtime, and cycle times enable **quick root cause analysis** and loss prevention.

✔ Cost and Sustainability

Sustainable manufacturing and cost management requires a **holistic approach** to production efficiency and waste reduction.

1. View Enterprise, Line, and Machine Metrics in Real Time

Gain **visibility of overall performance** to make data-driven decisions and take proactive measures towards operational efficiency.

- **Real-time dashboards** allow you to view key performance indicators of any line or process in real time through event timelines, histograms, variance analysis, and more.
- **A configurable homepage provides access** to enterprise-wide metrics and analytic tools that allow you to quickly adapt and make informed decisions.

2. Identify High-Priority Losses in Real Time

Real-time analytics allow process engineers to quickly identify problems within production lines and take actions to prevent downtime and failures.

- **KPI Explorer** performs loss tree analysis, enabling you to drill down and determine the focal point for root-cause analysis.
- **Over 20 out-of-the-box analytic tools** built on top of your contextualized data accelerate your problem-solving process.

3. Conduct Continuous Improvement on the Shop Floor

Continuous improvement is critical to improving manufacturing efficiency and achieving productivity improvements.

- **Cookbooks delivers real-time recommendations for optimal machine settings** based on analysis of machine performance, historical quality data, and environmental conditions.
- **Optimal machine settings are continuously updated in real time** to operators on the shop floor through Operator CoPilot.

FEATURE

Cookbooks

Cookbooks delivers real-time recommendations for optimal machine settings based on analysis of machine performance, historical quality data, and environmental conditions.

- › **Cookbooks uses a machine learning algorithm to analyze historical production runs** and identifies optimal process settings – all in real time.
- › **Dynamic Recipes identify machine settings for optimal output in real time**, while taking into consideration conditions such as raw materials or environmental conditions.
- › Once optimal machine settings are determined, they are sent in real time to operators on the shop floor through **Operator CoPilot**.

Name	Last Updated ↑	Product Type	Owner	
F1_PM2: Steam Use Case 14 Assets / 7 Products	2023-01-23 08:37 EST	grade_id F1_Paper_Mill_PM2_Production_Status	Charu Kalluri ckalluri@sightmachine.com	
F2_Paper_Mill: Steam Usage Optimization 9 Assets / 3 Products	2023-01-23 08:36 EST	PM1_Reel_Grade F2_Paper_Mill_PM1_Production_Status	Charu Kalluri ckalluri@sightmachine.com	
Product	Last Deployed	Outcomes	Levera	Condition
KPKT30	2023-01-17 15:59 EST	3	9	0
KPBS30	2023-01-11 13:58 EST	3	8	0
KPBS33	2023-01-11 13:58 EST	3	8	0
F3_Paper_Mill_PM2_Reel: grade_id 15 Assets / 9 Products	2023-01-23 08:36 EST	grade_id F3_Paper_Mill_PM2_Reel	Charu Kalluri ckalluri@sightmachine.com	
F1_Paper_Mill_PM2_Reel: grade_id 13 Assets / 7 Products	2023-01-23 08:34 EST	grade_id F1_Paper_Mill_PM2_Reel	Andrew Home ahome@sightmachine.com	

FEATURE

KPI Explorer

KPI Explorer is a loss analysis tool that enables you to conduct root cause analysis by drilling down into KPIs.

- › **With a few clicks, understand the highest and lowest performing metrics for each KPI.**
- › **Quickly see the greatest losses** with Automated Loss Tree, which automatically shows the top losses as soon as you launch KPI Explorer.

FEATURE

Pre-Built Analytic Tools

Factory ANALYZE provides over 20 out-of-the-box analytic tools such as:

- › **Time-Series Correlation tests for correlation** between one parameter of choice with any number of other parameters.
- › **Curve Fit Analysis investigates** the relationship between two parameters with more granularity.
- › **Statistical Process Control monitors process stability** for improving product quality and optimizing manufacturing processes.

FEATURE

Intelligent Alerting

Intelligent Alerting monitors data and proactively notifies you when configured criteria are met, allowing you to quickly identify and address issues.

- › **KPI alerts** monitor performance indicators for specific machines and time ranges.
- › **SPC alerts** monitor for breaches in specification limits, both upper and lower.
- › **Data Latency Alerts** automatically detect issues that are related to data latency for each workspace.

