## INCREASE EFFICIENCY, PREVENT DOWNTIME, AND REDUCE COSTS WITH SPARKCOGNITION INDUSTRIAL AI SUITE

From the energy sector to utilities to manufacturing environments, industrial operators today need reliable systems to improve production efficiency, reduce delays, and prevent equipment downtime. At the same time, they are under constant pressure to control costs while improving sustainability.

But the exponential increase of data flowing from industrial physical assets represents a double-edged sword for managers and IT personnel. Ideally, more data leads to better business intelligence to empower teams and improve profitability. However, too frequently, it leads to information overload and alert fatigue, clouding the picture of what's really transpiring across interrelated systems and processes with huge risks hanging in the balance. Converting your environment's deluge of data into real-time insights requires capabilities only artificial intelligence can deliver.

Whether your company is tapping into the advantages of AI for the first time or ready to scale its value across your organization even further, SparkCognition now provides the breadth and depth of our patented, flexible, and intuitive applications together in one powerful, holistic platform: SparkCognition Industrial AI Suite.

Organizations that rely on continuously available critical assets running at peak performance can use Industrial AI Suite's modular platform—enabling predictive to prescriptive workflows, automated

> *"Using SparkCognition Industrial AI Suite, we can detect and address equipment problems early, avoid unplanned downtime, minimize customer interruption and costs, and potentially extend the operating life of our LNG Terminal assets."*
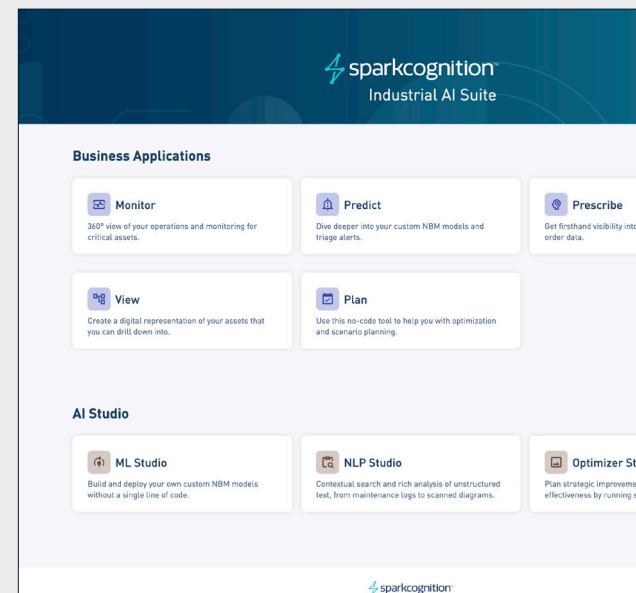>
> **SIMON CULKIN**
> Importation Manager of Grain LNG

data integration and model-building, planning and visualization, and more—to learn from all varieties of structured and unstructured data types, unlocking unprecedented business value, including:
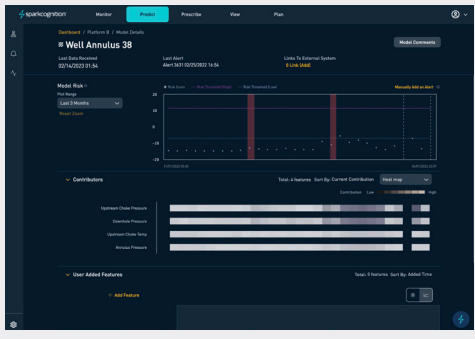
- Early and accurate detection of maintenance issues
- Improved maintenance efficiency with automated root cause analysis and additional lead time for parts/service
- Avoiding unplanned equipment downtime and catastrophic failure events (thus increasing revenue)
- Total operational visibility and real-time KPI monitoring
- Reduced alert fatigue by minimizing false positives
- Safer work environments
- Plus many other high ROI outcomes!

SparkCognition Industrial AI Suite enables you to extract and utilize valuable insights from configurable data pipelines connected to structured and/or unstructured datasets. SparkCognition's proprietary Studio Apps speed time to value to build and deploy powerful AI models, while easy-to-use and extend Operator Apps help asset reliability managers, subject matter experts, and other high-level contributors identify and contextualize risks to critical equipment, analyze maintenance actions, monitor operational KPIs in real time, interpret asset performance over time, use 2D and 3D visualizations of your operational data, etc.
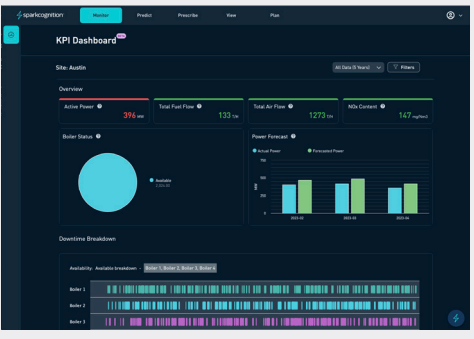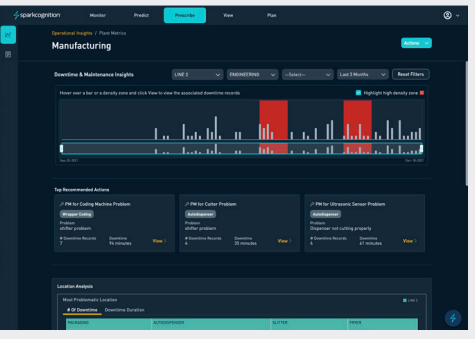
### INDUSTRIAL AI SUITE



**Solutions**

| O&G | PROCESS MFG | DISCRETE MFG | UTILITIES | RAIL |

**AI Platform**

**OPERATOR APPS**
PREDICT: Predictive Anomaly Detection
PRESCRIBE: Prescriptive Maintenance Insights
PLAN: Scenario Optimization
VIEW: Visualize Physical Systems
MONITOR: Dashboard & Reporting

**STUDIO APPS**
ML STUDIO: Model Maintenance
NLP STUDIO: Records Analysis & Prescriptive Insights
OPTIMIZER: Simulation Modeling

**Data Types**

**UNSTRUCTURED**
Alerts | Manuals | Documents | Logs

**STRUCTURED**
Sensors | Historians | Schedules | Environment



**sparkcognition**
Industrial AI Suite

**Business Applications**

**Monitor** — 360° view of your operations and monitoring for critical assets.

**Predict** — Dive deeper into your custom NBM models and triage alerts.

**Prescribe** — Get firsthand visibility into order data.

**View** — Create a digital representation of your assets that you can drill down into.

**Plan** — Use this no-code tool to help you with optimization and scenario planning.

**AI Studio**

**ML Studio** — Build and deploy your own custom NBM models without a single line of code.

**NLP Studio** — Contextual search and rich analysis of unstructured text, from maintenance logs to scanned diagrams.

**Optimizer St...** — Plan strategic improvements effectiveness by running s...

## Contact SparkCognition today at info@sparkcognition.com

*Predict*



*Prescribe*



*Monitor*

Use the Predict app to dive deeper into your custom AI models and triage alerts.

Use the Prescribe app to gain firsthand visibility into downtime and work order data.

Use the Monitor app's configurable dashboards to experience 360° visibility into live operations.

**MONITOR**

Empower expert teams with live monitoring of KPIs and multi-asset, hierarchical, action-oriented visibility. Track operational status across facilities and functions with configurable dashboard and UI options.

**PREDICT**

Dive into normal behavior modeling to identify risks to equipment via gradual or sudden degradation. Compare to previous incidents and retrain models per changing conditions to minimize false positives.

**PRESCRIBE**

Get firsthand visibility into your downtime and work order data. Analyze by system, component, or time to identify failure patterns and initiate recommended maintenance orders with resource estimation.

**PLAN**

Analyze what happens when variable conditions are present. This no-code tool allows you to explore control parameter settings to optimize specific KPIs.

**VIEW**

Create, edit, and extend 2D and 3D asset hierarchy using different image types to enable visualization of operational data for processes and systems.

**ML STUDIO**

Create, validate, deploy, and scale machine learning to predict anomalies with our automated model-building studio that accelerates time to value leveraging AI and facilitates exploratory data analysis (EDA).

**NLP STUDIO**

Integrate otherwise siloed insights from unstructured data (diagrams, maintenance manuals, etc.) with automated natural language processing workflows.

**LLM ASSISTANT**

Chat with a large language model trained on your company's maintenance log data (with no data leakage). LLM assistant brings semantic search, summarization, and citation features for enhanced productivity.

Industrial AI Suite represents the definitive evolution of SparkCognition's award-winning AI technology, deep domain expertise, and product engineering vision. Perfected over ten years of real-world engagements serving the largest brands in oil & gas, manufacturing, transportation, and utilities, the patented technology inside Industrial AI Suite has yielded successful outcomes in past deployments, including:

- 10x ROI improving O&G production efficiency across multibillion-dollar operations investments
- Averting more than $100K in potential downtime costs per predicted failure event for an O&G supermajor
- Delivering a 5% production efficiency gain for a top 50 beverage manufacturer
- Avoiding over $1M in maintenance costs in a single plant deployment for a global food & bev manufacturer

Prioritizing flexibility, scalability, usability, and (above all) capability, Industrial AI Suite is truly in a class of its own with layers of explainable features and integrated functions enabling more effective monitoring, troubleshooting, and proactive maintenance. Schedule a demo today to learn more about our end-to-end solution to improve operational efficiency and maximize production for industrial companies: SparkCognition Industrial AI Suite.

## ABOUT SPARKCOGNITION

SparkCognition's award-winning AI solutions allow organizations to predict future outcomes, prescribe next actions, and help ensure worker safety. We partner with the world's industry leaders to analyze, optimize, and learn from all types of data, augment human intelligence, drive profitable growth, and achieve operational excellence. Our patented AI technologies include machine learning, deep neural networks, natural language processing, generative AI, and computer vision—enabling productivity, driving innovation, and accelerating digital transformation. Our solutions solve critical problems, prevent unexpected downtime, maximize asset performance, enable net-zero initiatives, proactively address safety, and prevent cyberattacks.

To learn more about how SparkCognition's AI solutions can unlock the power in your data, visit www.sparkcognition.com.

Contact SparkCognition today at info@sparkcognition.com