

### A Unified Platform for Industrial Analytics

Powering the future of Industry 4.0

Operational Excellence in a Cyber-Physical World

The fourth industrial revolution — Industry 4.0 — is primarily driven by data and AI. Thanks to IoT and automation, companies have access to unprecedented volumes of data about their assets and process. Legacy data architectures and analytical tools, however, are falling short in putting this data to full use. The right platform, on the other hand, can dramatically accelerate the time-to-value in Industrial AI and IoT implementations.

# BENEFITS OF INDUSTRIAL ANALYTICS

# Full Visibility into Operations

 by combining process, asset and business data

#### **Lower Operational Costs**

- by up to 40% through data-driven optimization

#### **Increased Product Quality**

using predictive quality control models

#### Discover Future Revenue

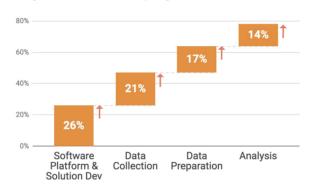
 growth and new business models

### **Industrial Analytics for Digital Transformation**

Industrial Analytics (IA) is continuous collection and usage of data generated in industrial operations for optimizing costs, increasing efficiency and eventually gaining a competitive advantage through differentiated products & services.

Companies today acknowledge the huge importance of industrial analytics but only very few are completely setup.

#### Major costs in IoT projects



will be abandoned before deployment due to lack of data management and analytics capabilities adapted for IoT.

One-third of IoT solutions

- Gartner, How IoT Impacts Data and Analytics, March 7, 2018

Biggest skill gap is Data Science followed by IoT/M2M infra

### **4POINTX PLATFORM**ADVANCED CAPABILITIES

Self-service Machine Learning for anomaly detection and forecasting

**Big Data stream analytics engine** with hot and warm storage

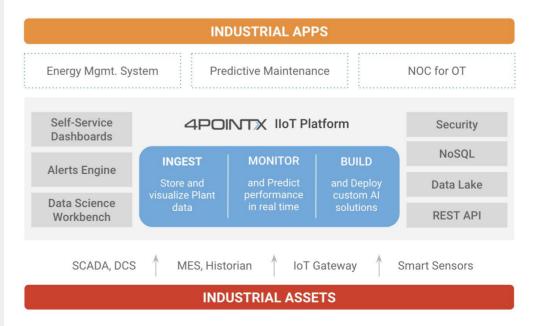
**Self-service reporting** for custom dashboards and live shop floor KPIs

**Data Science Workbench** for custom algorithms and ML solutions

**Secure sharing** of data with other applications

### 4Pointx Platform for Industrial Analytics

The 4Pointx Platform converges the three crucial technologies - IoT, Big Data and AI - into a unified architecture that enables collection, storage and analysis of industrial operations data at scale. A DIY approach, on the other hand, requires high CapEx, OpEx and can take 18 months to production.



#### **4POINTX PLATFORM DIFFERENTIATORS**

- Flexible Deployment & Scalability: 4Pointx Platform can be deployed on premises, on cloud or accessed as SaaS. Integrates with your SCADA, DCS and MES. Features multi-plant tenancy and scales to 1000's of equipment.
- One Platform. Many Solutions: 4Pointx Platform can host multiple solutions that thrive on real-time process and asset data. E.g., Energy Mgmt, CBM, Predictive Maintenance, Quality and other process optimization solutions.
- Enterprise-grade Security:
   4Pointx Platform features
   role-based access control
   (RBAC), integrates with AD/LDAP
   authentication, and provides data
   encryption and audit logging.
- Developer Friendly & Open Architecture: 4Pointx Platform uses standard REST APIs and JSON, and supports many languages such as Java and Python for building custom algorithms specific to your ops.

### 4POINTX

#### Case Studies

A Large Steel Pipes
Manufacturer that supplies
to oil rigs was able to
increase equipment
availability and reduce
welding defects within six
months of rolling out the
4Pointx Industrial Analytics
Platform.

Equipment Availability increased by 22%

Defects reduced by 17% pe pipe-mile

### Industry 4.0 Solutions on the 4Pointx Platform

4POINTX

Industrial

Analytics

## PREVENTING UNPLANNED DOWNTIME

#### 4Pointx Predictive Maintenance

solution uses advanced anomaly detection (based on asset behavioral signatures) to predict equipment failure well in advance.

Our solution beats legacy statistics- & physics-based models by preventing even rare failures.

# ICS SECURITY & ADVANCED VISIBILITY

Gain visibility into your ICS/ SCADA network, track utilization of HMI and Level 3 systems, and monitor uptime of IT services within OT.

**4Pointx OT SOC & NOC solution** integrates with leading ICS security tools viz Nozomi, Sentryo & Claroty.

## OPTIMIZING ENERGY CONSUMPTION

#### 4Pointx Energy Mgmt. System

helps reduce wastage, align production output with energy consumed, and optimize electrical loads without impacting process.

> Prerequisite: Smart Meters deployed

# PRODUCTION PROCESS OPTIMIZATION

#### 4Pointx Data Science Workbench (DSW) helps

Process Engineers to rapidly build and automate custom algorithms and ML pipelines on real-time process data to optimize the shop floor operations. A Large Steel Wires
Manufacturer contacted
4Pointx to consolidate their
legacy EMS's into a unified
process-aware integrated
EMS.

4Pointx EMS Benchmarking tool guided the operators on ideal consumption for a given product/ process spec. Timely alerts on abnormal consumption helped minimize wastage.

4Pointx Platform Data Science Workbench & Self-service Reporting helped deliver advanced energy insights for continuous monitoring.

Energy cost reduced by 7.2 kWh/ton for WRM mill

Energy Demand Variation (plan vs. actual) reduced to 6%

#### **CONTACT US**

Visit: www.4pointx.com
Twitter: twitter.com/4pointx

Email: info@4pointx.com Phone: (+1) 844 4POINT1

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