

Capturing the silent knowledge of machine whisperers

MANUFUTURE 2017

24.10.2017



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The aging workforce is impacting a number of industries.

The retirement of experienced workers will create a skills gap.

It is crucial that the knowledge and experience accumulated by more senior workers is captured and made accessible to the new workforce.



While younger generations of workers bring new skills, experience-based best practices are easily lost.



How will connectivity, data and the intelligent automation of processes help fill this gap?

APM

Asset Performance Management

a tool for the next generation of machine whisperers

APM: Step 1 of 3



REMOTE
MONITORING

Connectivity

Get real-time access and view your assets, their current state and health

APM: Step 2 of 3



Data model

Get a single source of truth, diagnose assets and predict issues before breakdowns

DIGITAL TWIN &
BIG DATA ANALYTICS

APM: Step 3 of 3



PROCESS
OPTIMIZATION

Digital services

Balance reliability, performance and costs to develop the best strategies

APM: Tool

Digital Twin

a virtual representation of a machines,
enhanced with analytical model.



APM: Digital Twin

MACHINE FEATURES

PLM, CAD

FAILURE HISTORY

OEE, MES

REPAIR HISTORY

EAM, ERP

MACHINE
CONDITIONS

DCS, PLC, SCADA,
Historian,

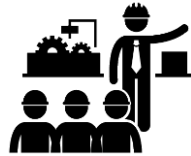
OPERATOR
ATTRIBUTES

MES, ERP, HR

OPERATING
CONDITIONS

Building automation, IoT

Operational
support for
different
stakeholders



PLANT MANAGERS

1. Production status and KPI
2. Drill down into underlying data for root cause analysis
3. Normalized manufacturing KPIs with historical trending

Operational
support for
different
stakeholders



AUTOMATION ENGINEERS

1. Asset and device status
2. Notifications and alerts of device connectivity errors
3. Trend and visualize data for rapid troubleshooting.

Operational
support for
different
stakeholders



SERVICE ENGINEERS

1. Anomaly detection
2. Condition-based monitoring
3. Alerts for service technicians to potential problems that may impact production

Operational support for different stakeholders



PLANT
MANAGERS



AUTOMATION
ENGINEERS



SERVICE
ENGINEERS

Real-time visibility, cyber security, collaboration

Lets build a seamless factory!

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