



## **Analytics for Manufacturing**

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# **Data analytics and insight visualization**

**Analytics for Manufacturing is an enterprise solution for industrial manufacturing which delivers useful insights by applying machine learning and data mining algorithms to data generated by your cyber physical systems (CPS).**

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### **||| Benefits**

#### **Less unplanned downtime**

By applying predictive maintenance, you can reduce the impact of halted production

#### **Longer machine life**

Using predictive analytics, you can raise productivity by extending the working life of the machine

#### **Better feedback correction**

By discerning between normal and anomalous behavior through anomaly detection algorithms, you can improve machine behavior

#### **Dynamic scalability**

You can use cloud services that scale according to your business requirements

Analytics for Manufacturing will work both on your business premises or on-cloud via your choice of Amazon Web Services or Microsoft Azure Services. Moreover, Analytics for Manufacturing handles all steps in the data pipeline: From collecting data generated by your devices, to the storage and analytics phases, and then to the visualization of the right KPIs.

#### **How does Analytics for Manufacturing work?**

Analytics for Manufacturing enables the collection of data generated by your devices in a CPS. Data will be stored in the right database management system (DBMS) either in your data centers or on storage services offered by Microsoft or Amazon cloud providers.

Moreover, Analytics for Manufacturing uses the most relevant algorithms in industrial manufacturing, such as predictive maintenance algorithms, anomaly detection algorithms, and predictive models of the remaining useful life (RUL) of assets or their time to failure (TTF).

Lastly, Analytics for Manufacturing lets you visualize insights by using either our proprietary reporting tool WOW or through other industry leading tools such as Microsoft Power BI or AWS Quicksight.

## Key Features

### Real-time alerts

Get real-time notifications of business related events

### Integrated platform

Devices are connected to the cloud, which handles interactions and events

### Customizable solution

Choose the services that best apply to your business needs



## Highlights

### By using Analytics for Manufacturing you'll have:

**Data collection:** Gather and integrate data from all devices into your CPS and to a storage solution that scales as needed.

**Industrial analytics:** Identify potential failures in advance and monitor the condition of your devices through data mining predictive models.

**Intuitive reporting tools:** Control your business by monitoring the relevant KPIs and by creating fully customized reports for the different business levels.

**Cloud or on-premise architectures:** Our solution will work either on your onsite infrastructure or by using Amazon and Microsoft storage and computing services. You can also lead the adoption of the first hybrid cloud platform Microsoft Azure Stack, and benefit from all Azure services on your data center.

## Results in Analytics for Manufacturing

Enhanced plant capacity, productivity, and throughput

Less downtime due to maintenance related failures, and longer operating life of the equipment

Ongoing alignment with the Industry X.0 revolution

TXT e-solutions is an international, specialized provider of engineering software solutions supporting customers in high-tech markets in their mission- and business-critical core processes and throughout their product lifecycles.

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