**Use data to generate added value for operations and service**
**Our intelligent Industrial IoT solutions provide answers**
Let's connect.

Weidmüller

## Digitalisation is not an end in itself

### Acquire, understand and utilise data with Industrial IoT Solutions

Many companies already have basic knowledge of Industrial IoT applications, however they often lack the know-how to implement them independently. Therefore, data is initially acquired and stored, but often it is not used further for a specific purpose. However, specific, measurable value is first achieved from the collected data through logical linking and evaluation. The opportunities brought about by Industrial IoT can be used in many different and individual ways

Data-driven services use your data to create added value.

Weidmüller helps industrial companies discover the individual potential of Industrial IoT applications, develop needs-based solutions and successfully integrate them in existing structures, for example, for location-independent machine commissioning, an improvement in overall equipment effectiveness (OEE) or the generation of automated reports on energy consumption. It is therefore important to define a specific goal in advance.

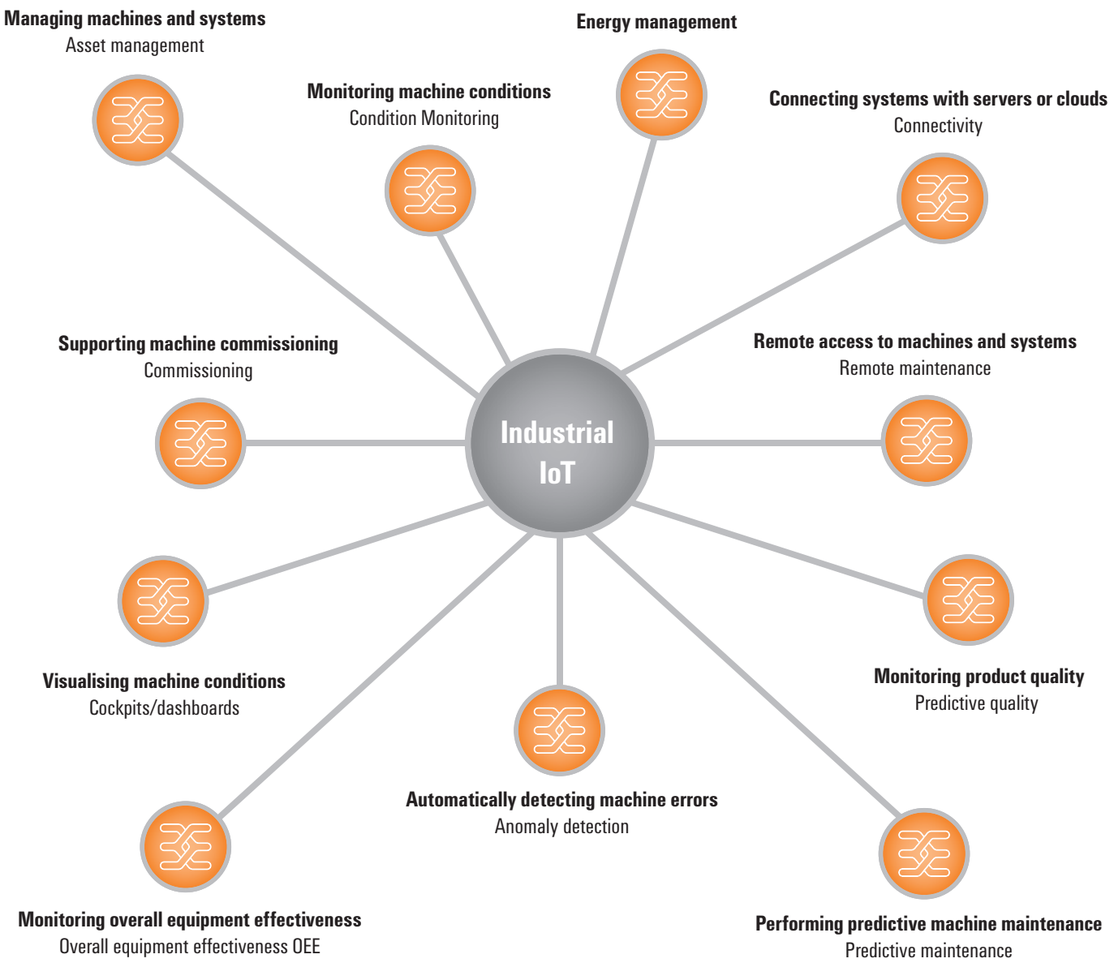


## How do you want to benefit from Industrial IoT

### We explain the application fields

Essentially, there is a distinction between greenfield and brownfield projects. For greenfield projects, this involves constructing a completely digitalised machine/plant, whereas with brownfield projects the plant / machine fleet is not yet compatible with Industrial IoT. The latter currently applies to the majority of the installed base. Therefore, digital retrofitting of machines and plant is nowadays of fundamental importance. No interventions are carried out on the installed automation technology, instead parallel structures are built up.

In the overview below are a number of use cases, which can be implemented in either a brownfield or a greenfield environment.

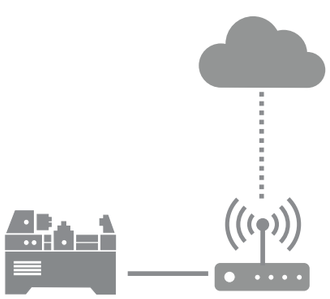


# Use case
## Machine/system connection to the cloud

### Initial situation
As a machine manufacturer or system operator, I want to:

- Connect machines to an existing IoT platform or service platform
- Be able to directly connect new machines and upgrade existing machines
- Develop a new IoT platform or service platform and offer special services

### Our solution



**Short description**

- Acquisition of data by means of additional sensors or via interfaces to many controls and machines
- Data processing through standardised web-based engineering: u-control web with IoT functionality
- Data communication: via mobile radio or across networks with security routers, efficient networking of different participants within a network with managed and unmanaged switches
- Creation of added value through data analysis and individual, platform-independent services

### Your customer advantage

- Transparency for your data
- Standardised IoT solutions despitedifferent controls
- Enabling new service models

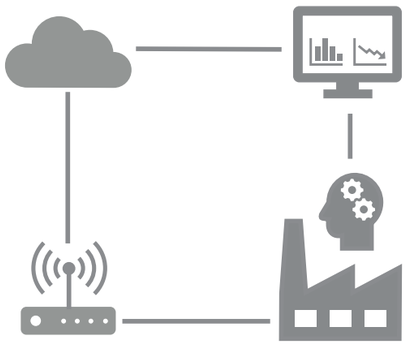



# Use case
## (energy) monitoring as a service

### Initial situation
As a start-up company in the field of energy management, I want to

- Provide machine operators with automated reports on their energy consumption
- Advise machine operators and identify energy-savings potential
- Provide machine operators with the necessary reports for ISO50001 certification

### Our solution



**Short description**

- Acquisition and pre-processing of energy, process and condition data
- Flexible communication thanks to state-of-the-art data transmission and interfaces
- Retrofit solution that is easy to integrate into an existing infrastructure


### Your customer advantage

- Enabling new service models
- Focus on your core competences

# Use case
## IoT Service platform

### Initial situation
As a machine manufacturer, I want to:

- Offer my customers a service that meets their needs
- Implement more efficient service planning and processing
- Offer new service models
- Improve customer retention

### Our solution

**Short description**

- Simple implementation of a total solution from a single source
- Customised solution for the optimal implementation of business processes and services
- Investment protection thanks to maximum transparency (e.g. through service statuses that can be called up at any time)
- An optimal basis for new services including Industrial Analytics

### Your customer advantage

- One-stop shopping
- Enable new business models
- Individual implementation

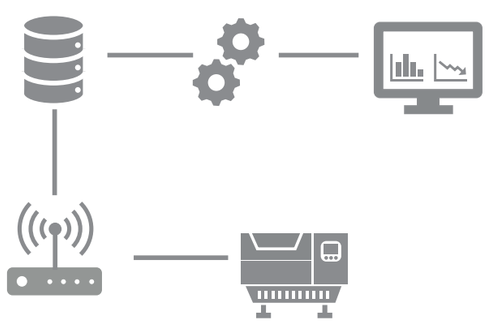



# Use case
## Predictive maintenance

### Initial situation
As a machine manufacturer, I want to:

- Plan maintenance work based on specific requirements (not based on intervals)
- Provide my production-based customers with information on any impending machine failures

### Our solution



**Short description**

- Anomaly detection: detect anomalies in your machine to prevent failures
- Classification: identify causes of anomalies that have occurred
- Predictive maintenance: recognise when a machine failure threatens to occur

### Your customer advantage

- Greater efficiency of your machinery
- Greater availability of your machinery
- Enabling new service models

# Create the basis for digital value-added services

## Extensive portfolio for data acquisition and pre-processing

### Acquire data reliably

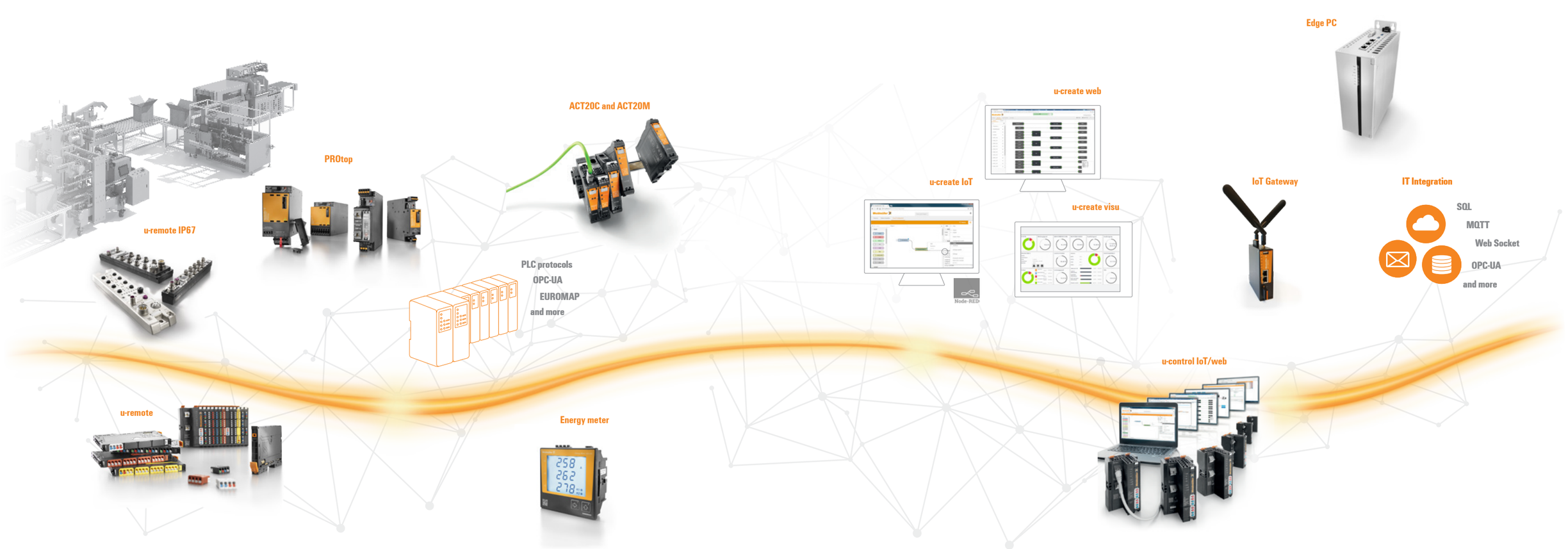
**Gain access to valuable data and information in greenfield and brownfield applications**

- Digital data acquisition via interfaces to many controllers and machines
- Acquisition of sensor data with the I/O system u-remote (IP20 and IP67)
- Provision of energy data and process information via Energy Meter or PROtop power supplies
- Acquisition and replication of analogue signals using analogue signal converters

### Pre-process data locally with IoT Edge technology

**Reduce data flows and costs, while generating initial insights on the spot**

- Uniform web-based engineering for pre-processing and visualisation
- Data acquisition and pre-processing with u-control web with IoT functionality (optional real-time data processing)
- IoT Gateway for Industrial IoT solutions with mobile interfaces
- High performance integrated into compact IPCs with Intel® Core™ i3, i5 and i7 processors



# Transfer and analyse data to create added value

## Take advantage of our IT communication infrastructure and software solutions for maximum added value

### Transport data reliably via network infrastructure

**Provide the IT systems with valuable information from the plant**

- Cross-network communication at the highest security level with the security routers
- Efficient networking of a wide range of network participants with managed and unmanaged Switches
- Establishment of wireless network connections for mobile end devices via Industrial WLAN

IoT Gateway with mobile communications

WLAN access point

Managed and unmanaged switches

Security router

### Creating added value through data analysis

**Achieve concrete added value in your use case with data-driven, digital services**

- Individual, platform-independent services for your specific application with the cloud platforms
- Consolidation and analysis of your resource and energy usage through optimal resource management
- Generate maximum added value from data based on artificial intelligence using Industrial Analytics
- Fast, worldwide service without the need of in-depth IT knowledge with the Remote Access u-link

**Weidmüller – Your partner in Industrial Connectivity**

As experienced experts we support our customers and partners around the world with products, solutions and services in the industrial environment of power, signal and data. We are at home in their industries and markets and know the technological challenges of tomorrow. We are therefore continuously developing innovative, sustainable and useful solutions for their individual needs. Together we set standards in Industrial Connectivity.

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