KUKA Industrial IoT offering
— your way forward to IIoT
With our Industrial IoT solution, we raise your factory to the next level of productivity and operational excellence.

We offer you a tailored end-to-end IIoT solution featuring a modular framework comprised of proven standard components. These can then be customized and applied to meet your specific requirements. Powered by online analysis of shop-floor data, we quickly deliver significant operational impact.

**Overall equipment effectiveness**
Boost the performance of your operations to achieve operational excellence as well as to increase equipment lifetime and minimize unscheduled downtime.

**Sales & growth**
Generate new revenue streams by increasing the flexibility and scalability of your operations. Avoid high investments through new service-based business models.

**The KUKA proven toolbox**
The KUKA software range optimizes your complete supply chain. Intelligent combination of software tools and machines creates tailored services for your Industrial IoT solution. Our platform offers software tools such as KUKA Connect, KUKA Xpert, KUKA SmartProduction...monitoring, SynQ.

**Data-driven improvements for your processes**
Learn and analyze your production performance in order to gain precise process insights and thus facilitate data-driven decisions and better allocate your human resources.

**Achieve excellence through performance benchmarking**
Gain transparency and awareness across your internal operational processes. Compare and improve production sites all over the world.

**Maximize returns on your IIoT investment**
With our IIoT pilot, you can evaluate the usability of the application and the connectivity performance, assess data quality and understand the basis for setting up a business case.
Five steps to measurable results
High five on Industrie 4.0

Design
We reduce complexity by designing a clear and user-friendly workflow with you. Dashboards, reports, export functionalities and alarm management are tailored to your application.

Connect
Connect and manage the full variety of data from your assets, production lines or entire plants. Intelligent edge processing allows for secure and optimized assets and factory data for streaming to the cloud.

Co-create
The entire project is based on collaborative co-creation. Fully involving stakeholders in a co-creative process brings diverse perspectives, increases the quality of ideas and instills ownership. Co-creation is the driver for change innovation.

Improve
Together, we increase the value of your processes on a data-driven basis through the use of our advanced analytics and machine learning toolkit to interpret the collected data.

Analyze
We apply our process knowledge to use machine learning and artificial intelligence for the purpose of analyzing and organizing your data. Together, we maximize your window for decision making – by increasing the transparency of your assets, predicting future maintenance and preventing downtime.

Jobs to be done
By connecting our cloud solution to your IT infrastructure, we offer you a solution to make your daily business easier.

World-class UX
Using service design methods to set up the right use cases implemented in a customized user interface.

Operational transparency
See the stability of your production from the top-line view down to a single asset or sensor.

Secure solution
Security-proven connectivity and a platform hosted by your desired infrastructure provider.

Plug and work
With our on-boarding functionalities, we are able to connect your devices very quickly.

Rapid analysis
Distill massive streams of raw sensor and production data into usable insights for expert operators.

End-to-end service asset management

Four steps to measurable results
High five on Industrie 4.0

KUKA Industrial IoT offering – your way forward to IIoT
Getting started
Workshops set

Stage 1

Stage 2

Stage 3

Getting insights
Pilots set

Getting improvements
Data analysis set

2 DAYS
Proof of impact

3 MONTHS
Cell insights

PLUS
Productivity improvements

KUKA IIoT Cell Insights

KUKA IIoT Line Insights

5 DAYS
Proof of impact

6 MONTHS
Line insights

PREMIUM
Process improvements

Following the workshops, it will be clear whether continued investment in I4.0 is appropriate or further preparation and/or resources are required.

You will also understand the use case to initially focus on in order to create an impact for your customers and stakeholders, and to obtain a list of features and an application description.

After the set of use cases and connectivity, you will be able to begin the pilot phase.

During this phase, you can evaluate the usability of the application and the performance of the connectivity. At the same time, you can assess the data quality, understand the basis for setting up a business case and learn about storage volume and IIoT architecture.

Based on the experiences and the data transparency during execution of the pilot phase, the improvement of the cell or line is the logical next step.

The opportunities which are obvious and easy to implement are leveraged in the light version while the full version includes data analytics.

Fast entry into Industrie 4.0
Pick your individual solution
The KUKA offering in details

###SCOPED ANALYTICS PHASE 1
- **1. Service design workshop**
- **2. Programming / reprogramming PLC(s)**
- **3. Predictive maintenance**
- **4. Minimization of machine downtime**

###KUKA IIoT Cell Insights

<table>
<thead>
<tr>
<th>2 DAYS</th>
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**1 Integrator presence and cooperation is required (approx. 2-3 weeks)**

- Connectivity PLC
- Monitoring of asset status
- UX concept: wireframes, interface
- Requirements engineering
- Report functionality
- Detection of potential failure
- IT connectivity concept (edge clients, remote services, etc.)
- Scope analytics phase 1
  - Service design workshop
  - Problems and knowledge scoping
  - Programming / reprogramming PLC(s)
- Predictive maintenance
- Minimization of machine downtime

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###KUKA IIoT Line Insights

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**1 Integrator presence and cooperation is required (approx. 2-3 weeks)**

- Service design workshop
- I4.0 use cases
- UX / UI sketches
- Requirements definition
- Research on client side
- Software toolset validation
- Personas profile analysis
- Stakeholder map analysis
- Connectivity PLC
- Monitoring of asset status
- UX concept: wireframes, interface
- Requirements engineering
- Report functionality
- Detection of potential failure
- Anomaly identification
- Business case prototype
- Data analytics training
- IT connectivity concept (edge clients, remote services, etc.)
- Scope analytics phase 1
  - Service design workshop
  - Problems and knowledge scoping
  - Programming / reprogramming PLC(s)
- Predictive maintenance
- Minimization of machine downtime
- Optimization of spare parts handling
- Increase of equipment lifetime
- Analysis expert functionality
- Business case calculation
Implement IIoT on a new line
Or upgrade your existing facility

Machine availability
With the anomaly detection of our IIoT solutions, this would never have happened.

Improve your availability.
Enhance process performance.

What occurred here
An undetected leak in a pneumatic line causes minor irregularities in clamping of workpieces.

Affected here
The leaking pneumatic line bursts, causing the machine to break down completely.

Comprehensive application set
Our digital application allows you to access data points and data frequency as well as to manage data analytics. Thanks to the live evaluation of data and historical storage you can lower the machine downtime in the individual manufacturing process.
“Quality without results is pointless. Results without quality is boring.”

Johan Cruyff
(Dutch football coach and manager)