



## IoT Sensors & Software Feasibility Study

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### Scenario:

A customer has an idea for the use of IoT, but no sensors/data/software yet – and wants to know if/how the crucial parameters can be measured and evaluated accordingly.

Questions for this could be:

- “What physical quantities do we need to measure to e.g. make our machinery more efficient and/or enable smarter maintenance cycles?”
- “Which sensor technology do we need to measure the required parameters?”
- “What kind of processing, analysis, or AI can generate the insights that are important to us from the data, in order to e.g. make better, faster, earlier decisions?”
- “How do these new processes fit into our current business process?  
What kind of alerts or visualizations might best support us?”  
(E.g. Display via dashboard or app; alert via email, SMS; feedback into other systems?)

**Proposal:** In joint workshops with the customer, the business processes to be supported are modeled and the feasibility of IoT solutions in hardware and software is concretized. The entire scenario is considered from the perspective of the business process. The required metrics and sensor solutions are developed via the desired improvements and the insights required to achieve them.

Items include but are not limited to:

- Exact flow of the IoT use case including framework parameters.
- Desired improvements to support the processes / business operations
- Functions of the IoT solution required for these improvements (e.g. alarms for best thresholds, visualizations, dashboards, etc.).
- Data and analytics needed for these functions
- Measurement parameters needed for the data to be collected:
  - Which physical quantities need to be measured and where?
  - How often? How accurate? What accuracies, tolerances?
  - Which framework conditions have to be considered at the measurement location? (Energy supply, data transmission, structural space, environmental factors, etc.)

**Format:** Workshop series, online or in person, analysis and conception, final presentation.

### Result:

The customer receives an analysis report and a proposal for a suitable IoT solution across the entire process chain from a suitable sensor solution to data transmission and processing to the required analytics and visualizations/dashboards and embedding in the business processes. In a final presentation the results will be presented and discussed including an outlook on possible field tests with prototypes for hardware and software in the context of a pilot.