

Predictive Maintenance



Value Proposition

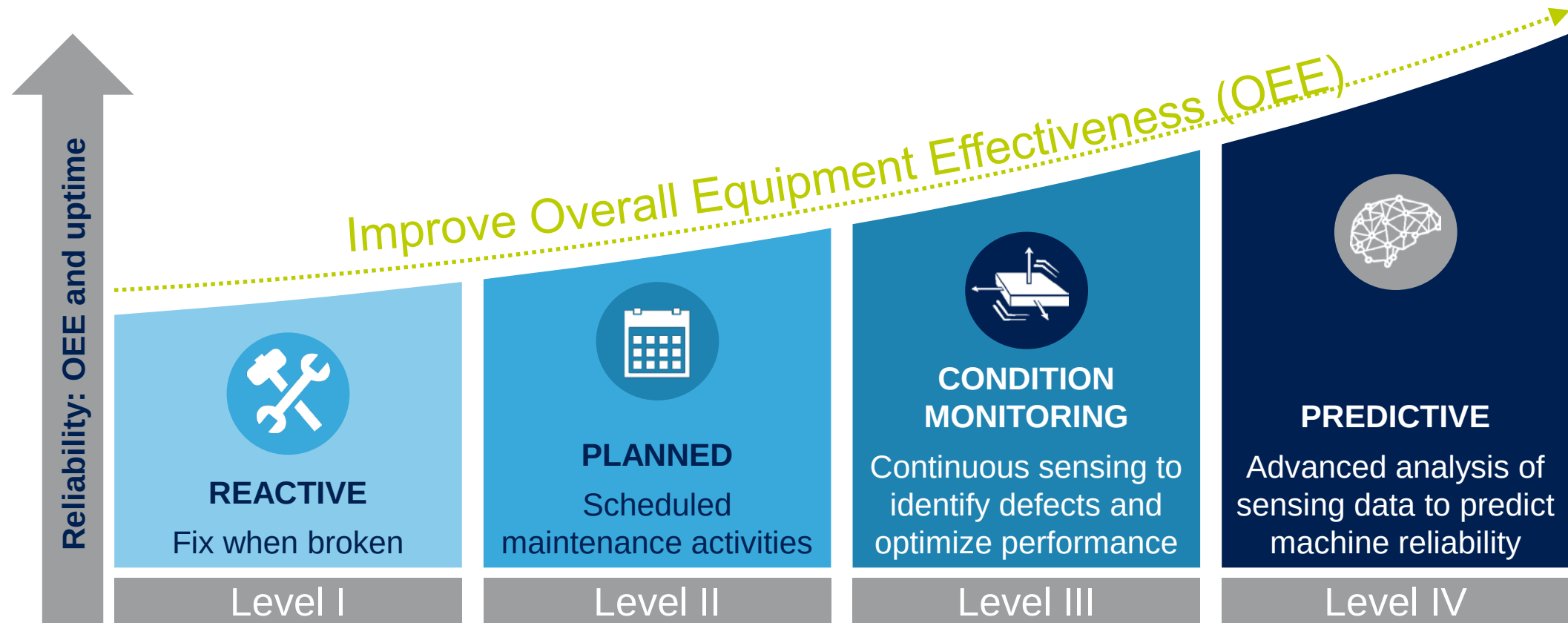
Key Principles

Sensors Type

Node to Cloud Framework

Maintenance Strategy Continuum

Improve Overall Equipment Effectiveness



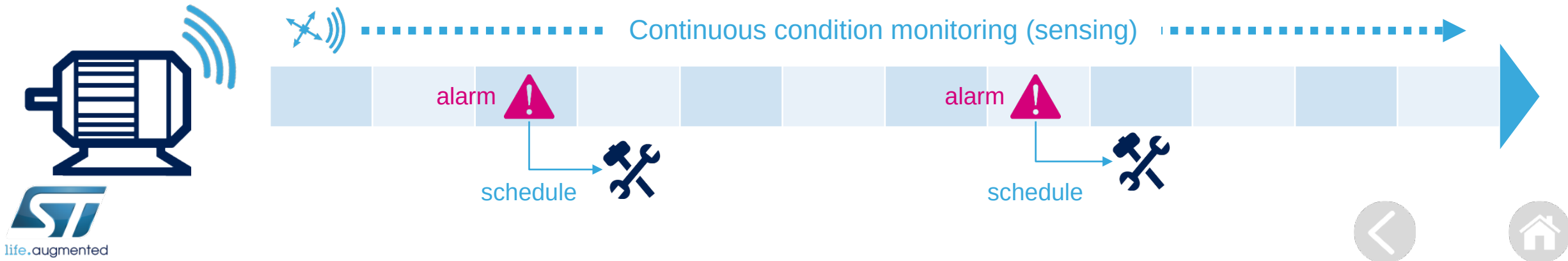
Predictive Maintenance

Minimizes the Impact on Production and Optimizes Cost

Preventive Maintenance (scheduled)

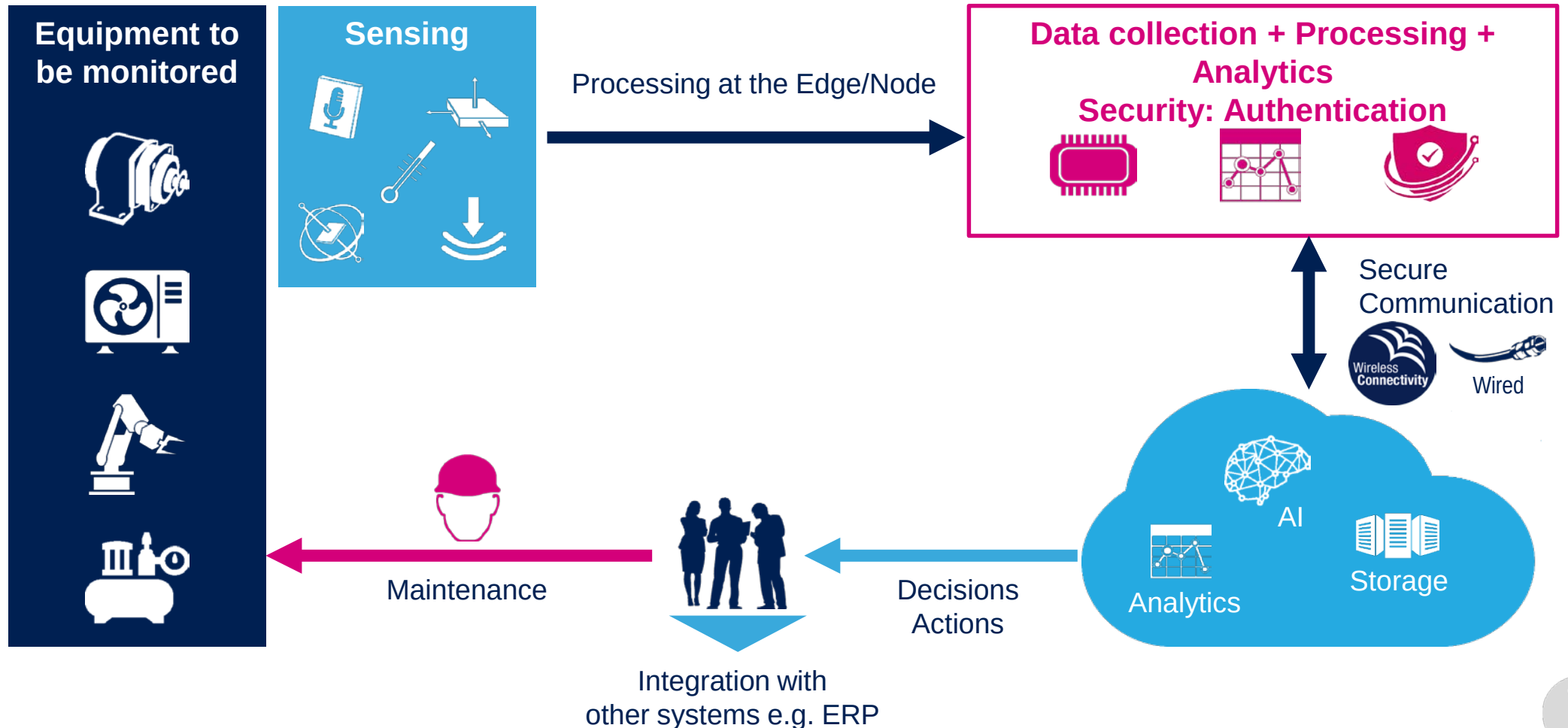


Predictive Maintenance (at the optimal moment)



Predictive Maintenance

Key Principles



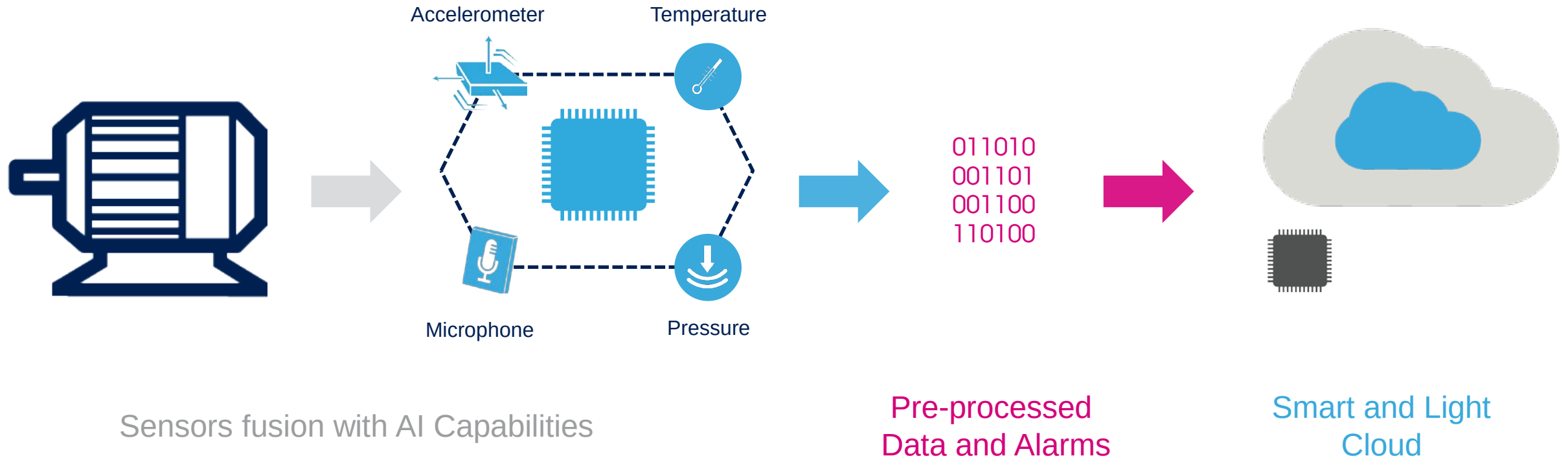
Architecture Optimization

Constraints of Centralized Data Processing



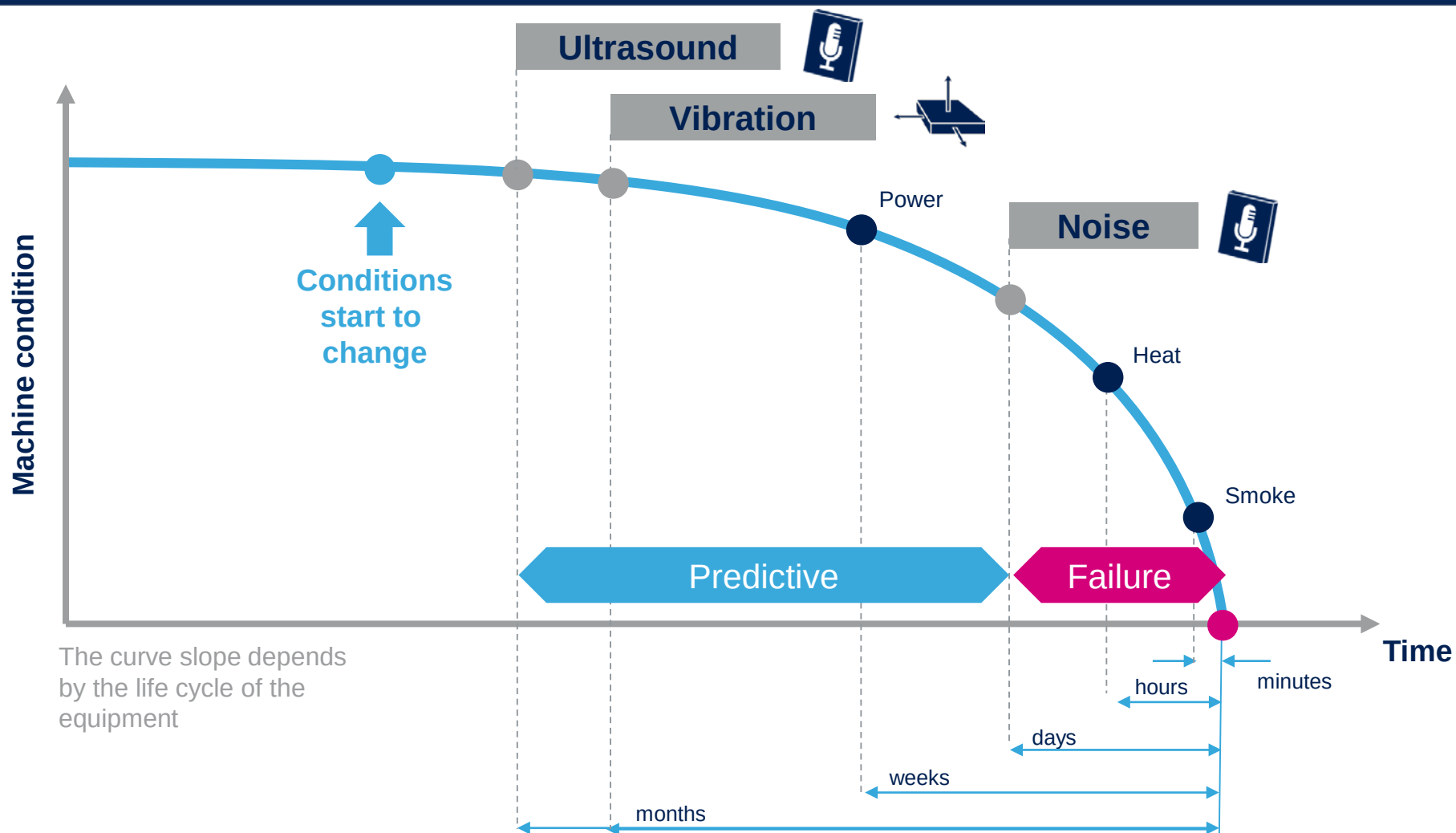
Architecture Optimization

Moving the Intelligence to the Node



Accelerometer & Microphone

Distinctive Sensor Parameters for Predictive Maintenance



Ultrasound, Vibration, Environmental sensing

STM32L475 Discovery Kit IoT Node

(B-L475E-IOT01A)

Ultrasound, Vibration, Environmental sensing



- Out of the box support for Amazon FreeRTOS
- Firmware available on Amazon FreeRTOS Console and GitHub
- AWS IoT Tester Certified
- Enables variety of applications
- Multiway Sensing

- Ultra-Low-Power ARM Cortex-M4 MCU
- Wi-Fi Connectivity
- Motion MEMS and Environmental Sensor



Predictive Maintenance Solutions

Kit with Sensors and IO-Link Capability

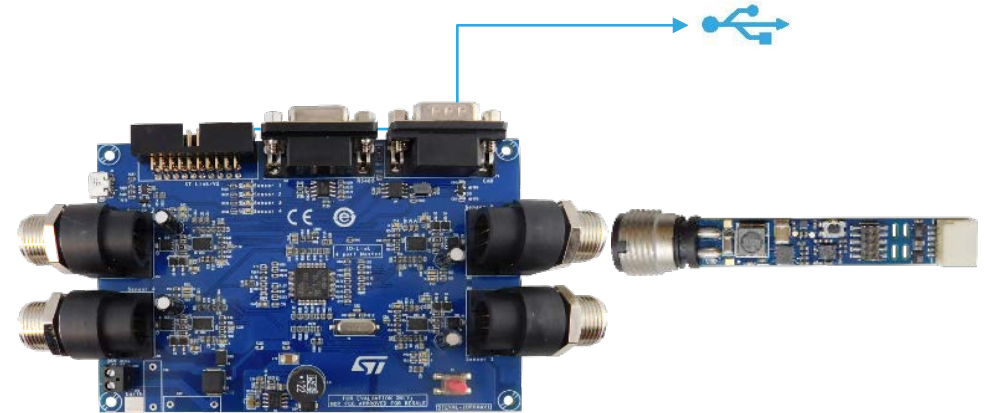


STEVAL-BFA001V1B
Stand Alone Sensor Node



STEVAL-IDP004V1 Expand your capabilities up to

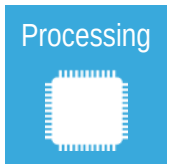
4 nodes



Sensing



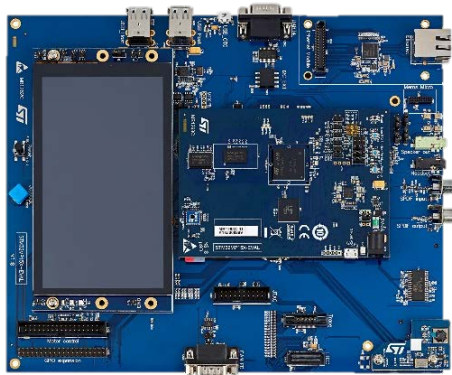
Connectivity



Processing

STM32MP1 Hardware Solutions

Speed-up evaluation, prototyping and design



Evaluation Board

Full feature STM32MP1 evaluation

- STM32MP157A-EV1
- STM32MP157C-EV1



Discovery Board

Flexible prototyping & demo

- STM32MP157A-DK1
- STM32MP157C-DK2
 - + MIPI DSI WVGA display
 - + Wi-Fi/BT combo module



Boards & SoM*s

3rd Parties Boards for prototyping and production

- Board Specification from Linaro (96boards.org)
- Commercial SoM w/ different forms

*System on Module