PHM Technology Development in IoT Device

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PHM (Prognostics and Health Management)

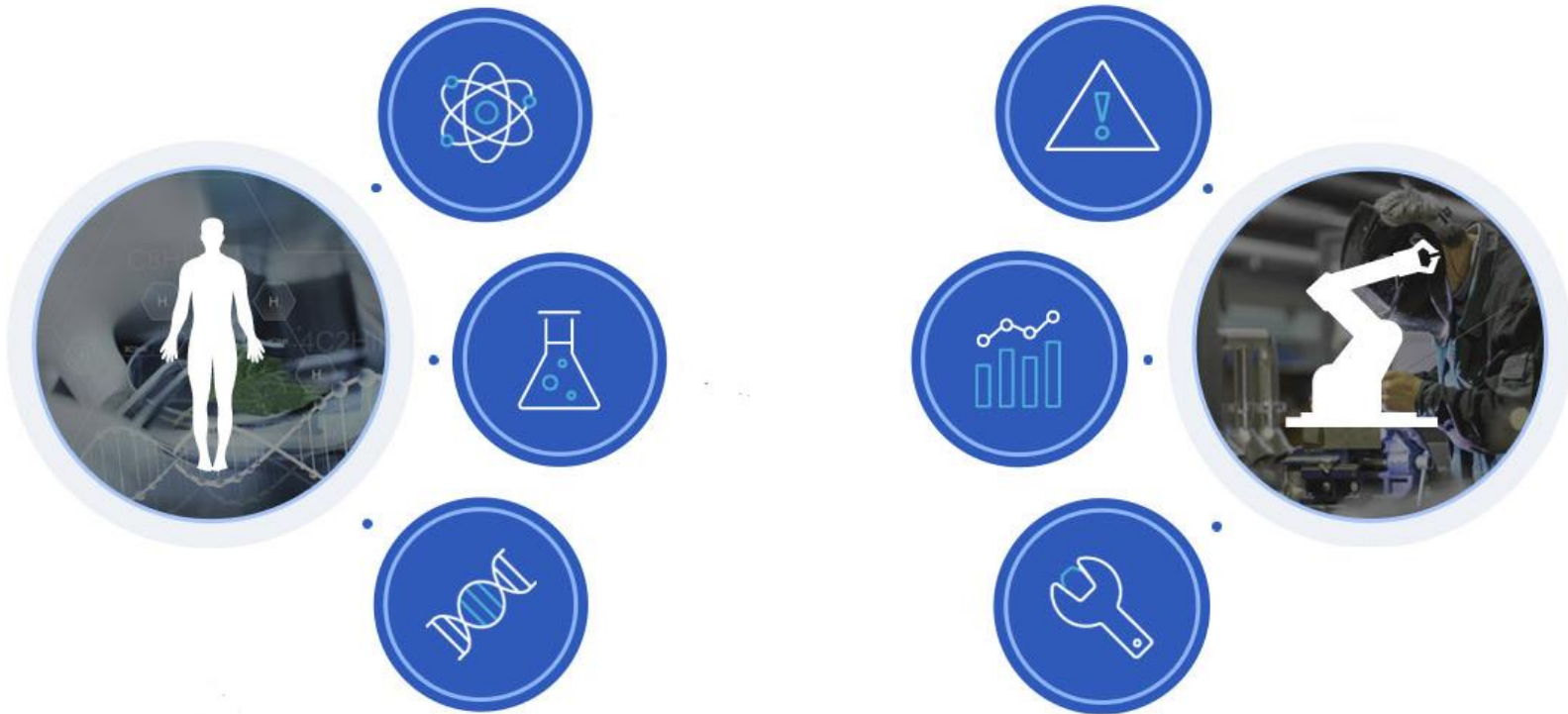**1980s**

Corrective
Maintenance

1990s

Preventive
Maintenance

Nowdays~

Predictive
Maintenance
"PHM"

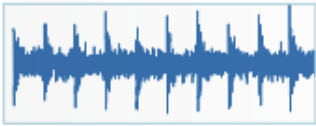# PHM (Prognostics and Health Management)

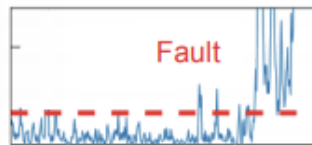**Immune System of Human**   **Diagnosis of industrial facilities**

Steps of PHM
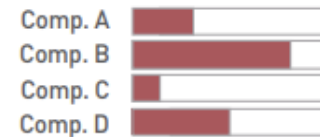

Sensing & Feature Extraction

Data acquisition

Anomaly Detection
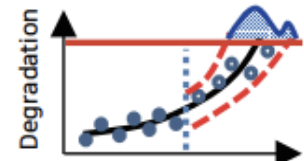
Fault

Normal

Diagnosis

Comp. A
Comp. B
Comp. C
Comp. D

Current Health State

Prognosis

Degradation

Current time

RUL(Remaining Useful Life)

Application field

Application field

Aviation

Plant

Heavy Industry

Semiconductor

Car Engine

Effection

Comprehensive Optimization

Reliability Performance Cost Safety Emission

Schedule

Application Device & Data Selection
Material purchase

Data Analysis
GUI Development

APR

JUN

MAR

MAY

Data Collection

Writing Report
Final announcement

Schedule

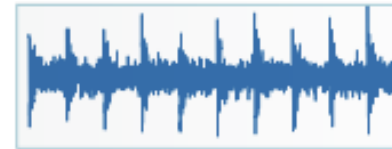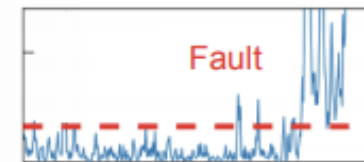**Application Device & Data Selection**

Motor

Factors
- Electric current
- Voltage
- Temperature
- Vibration
- Noise

Data Collection

Data acquisition

Fault

Thank you