



# How ABB Ability™ can make your business more successful

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Technical lead engineer

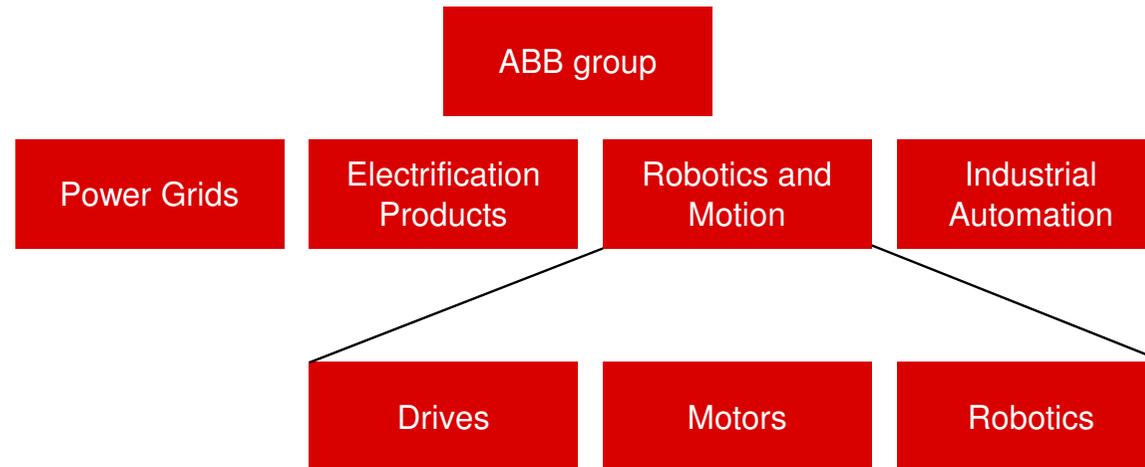


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# What is ABB

ASEA Brown Boveri

- Swedish-Swiss multinational corporation located in Zurich, Switzerland
- Worlds largest builder of electricity grids
- Core business – power and automation
- 34 billion USD
- 134 800 employees



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# Twin disruptions: Energy and Fourth Industrial Revolutions

## The Energy Revolution



## The Fourth Industrial Revolution



Utilities

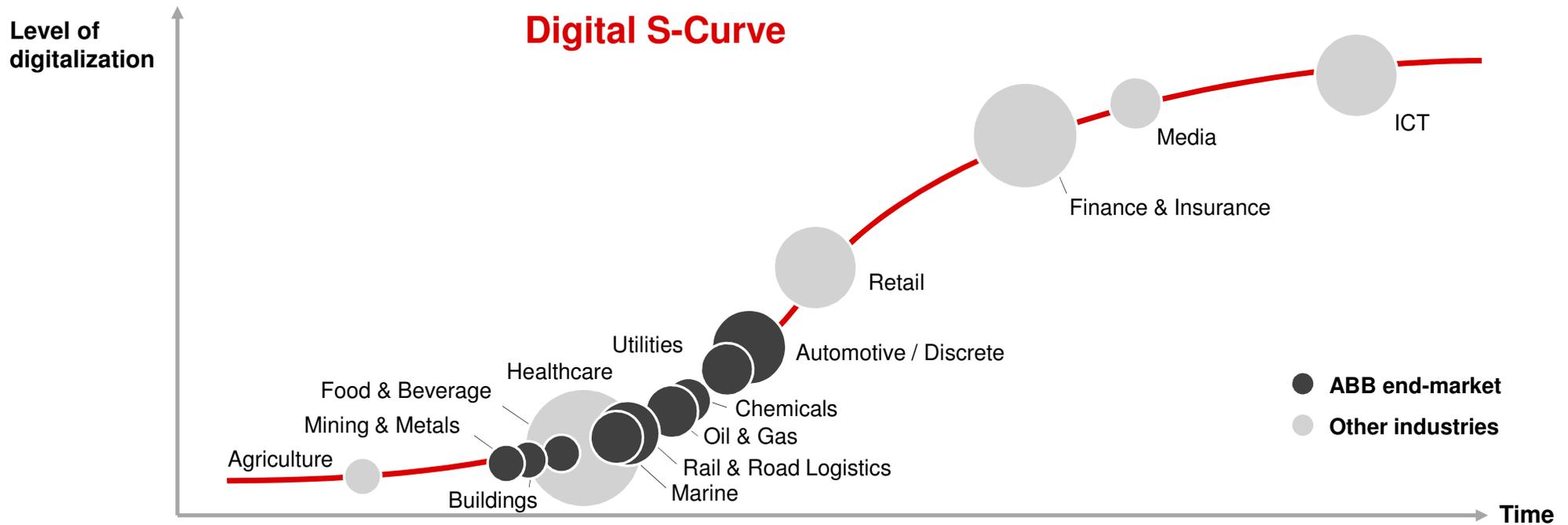
Industry

Transport & Infrastructure

# Lessons of digital transformation from the early adopters...

Computing + connectivity + cloud + analytics set to unlock value

What can we learn from “wave 1” digital disruptions?

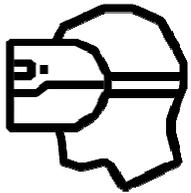


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# Digital technologies are driving new innovation

Media is focused on B2C but the “killer app” is in B2B

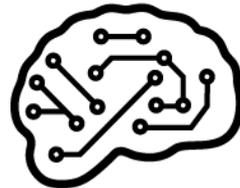
**Virtual/augmented reality**



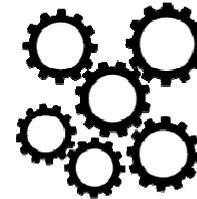
**Software-defined machines**



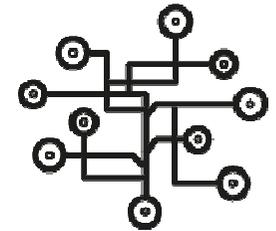
**Machine learning**



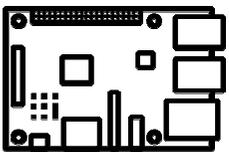
**Time-sensitive networking**



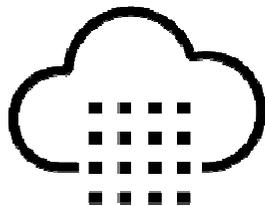
**Big data**



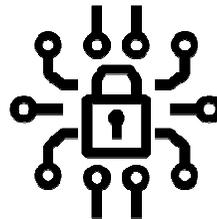
**Inexpensive computing**



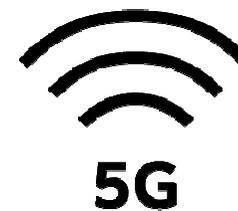
**Cloud computing**



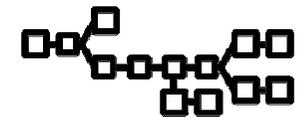
**Cybersecurity**



**Connectivity**



**Blockchain**



# ABB Ability™ solutions & platform

## 210+ ABB Ability™ solutions

ABB Ability™



**What**

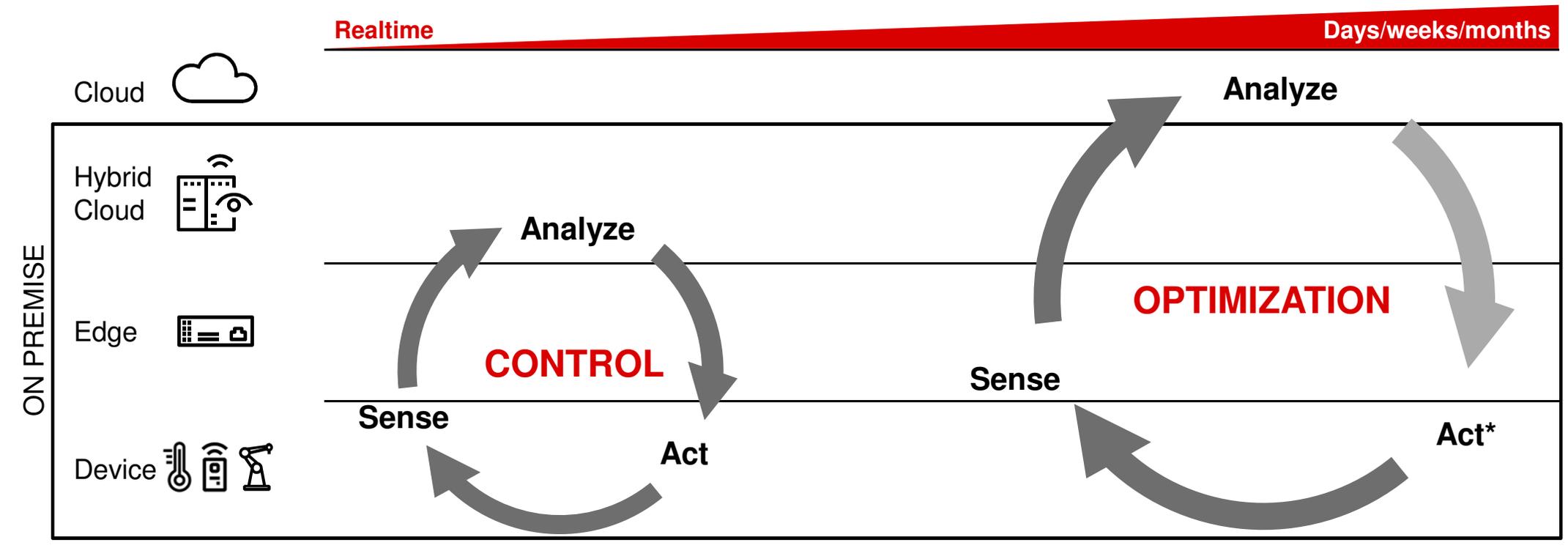
Delivers customer value (safety, uptime, speed, yield...)



**How**

Provides ABB with efficiency and scale

# There are two loops: control loop & asset loop



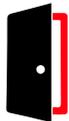
# ABB Ability™ Data Manifesto

An IoT Business Data Bill of Rights



- Your data remains yours
- You know what we do with your data
- We will not disclose your data without your consent
- When you leave, all of your data leaves too

Platform capabilities to support Data Manifesto and GDPR:



Access Control



Data Classification



Secure Storage  
using Encryption



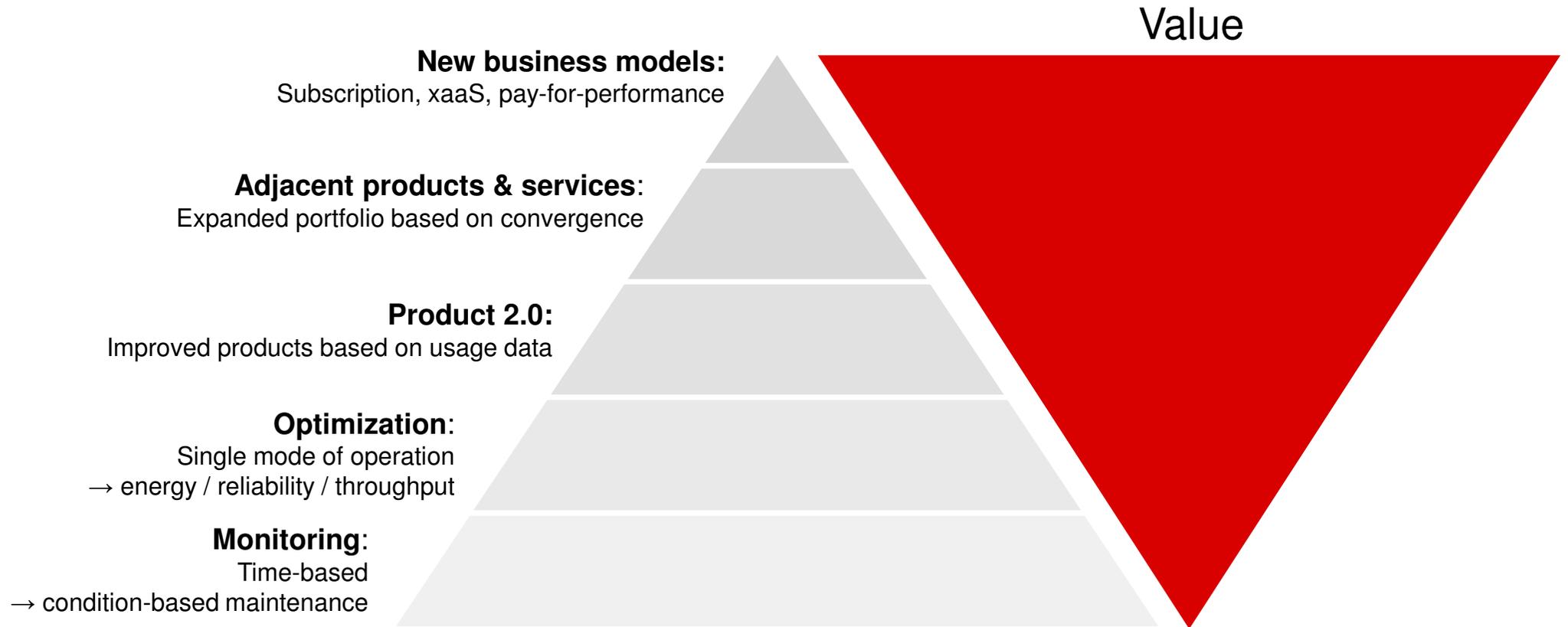
Insight of who  
accessed what



Secure  
removal of  
data

# Value hierarchy of Internet of Things (IoT): aka “Maslow’s hierarchy” for IoT

Creating vs capturing value



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# Connected Services

An application of ABB ability

- Optimization of maintainance
- 25% less incidents and 60% faster reaction time
- Based on Azure

## Difficulties

- To connect the systems. Customers does not have sophisticated IT departments
- Security

## How?

- Embedded in new robots or edge devices

## When?

- Been around for 15 years
- This time its going to be more real-time. Anomaly detection is also coming

**ABB**