



ASUT ANNUAL GENERAL MEETING 2017, 18. MAI 2017

ABB Journey to Digital

New ways of Collaboration with Customers

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Agenda

ABB Group

ABB Ability™ solutions & platform

Project Example

ABB Journey to Digital

ABB Digital Lab

Working within ABB Journey to Digital

ABB in Switzerland

Facts & Figures

ABB Group



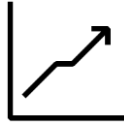
132'000 employees

150 nationalities



Present in 100+ countries

300+ production plants



USD 33.8 billion revenue

in 2016

ABB Switzerland



6'000 employees

80+ nationalities



CHF 2'980 million revenue

in 2016



13 production sites

And a worldwide unique center for power electronics



CHF 270 million investment in R&D every year

20% of global R&D investment



Switzerland's second biggest patent applicant

in 2016



ABB in Switzerland

The pioneering technology leader

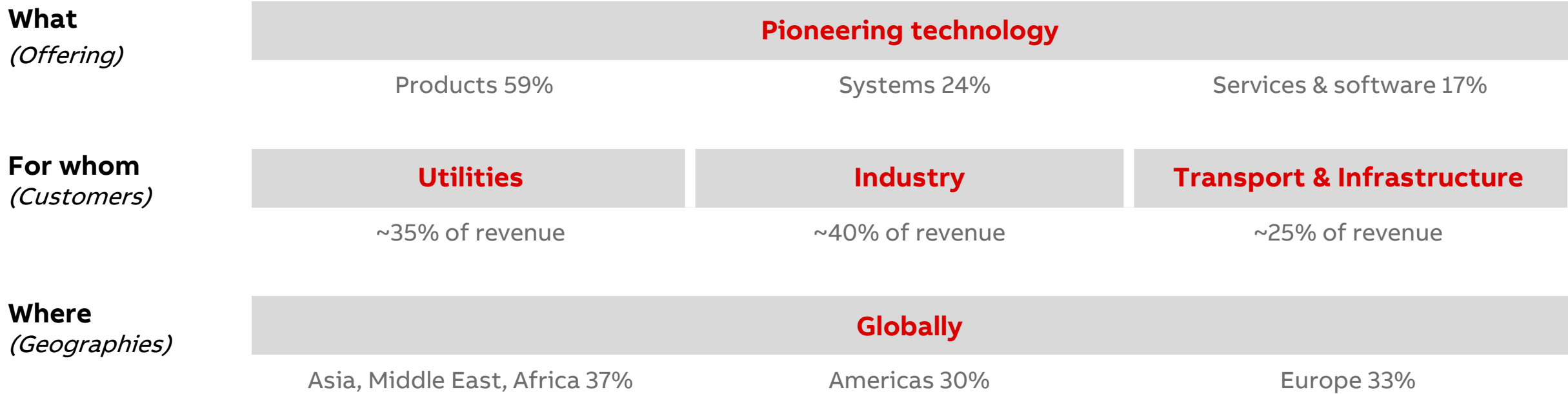


ABB in Switzerland

Our Divisions



Electrification Products

The division offers technology across the full electrical value chain from substation to the point of consumption, enabling safer and more reliable power.



Robotics and Motion

The division provides products, solutions and related services that increase industrial productivity and energy efficiency.



Industrial Automation

The main focus of this ABB business is to provide customers with products and solutions for instrumentation, automation and optimization of industrial processes.



Power Grids

The division offers power and automation products, systems and service solutions across the generation, transmission and distribution value chain.

ABB in Switzerland

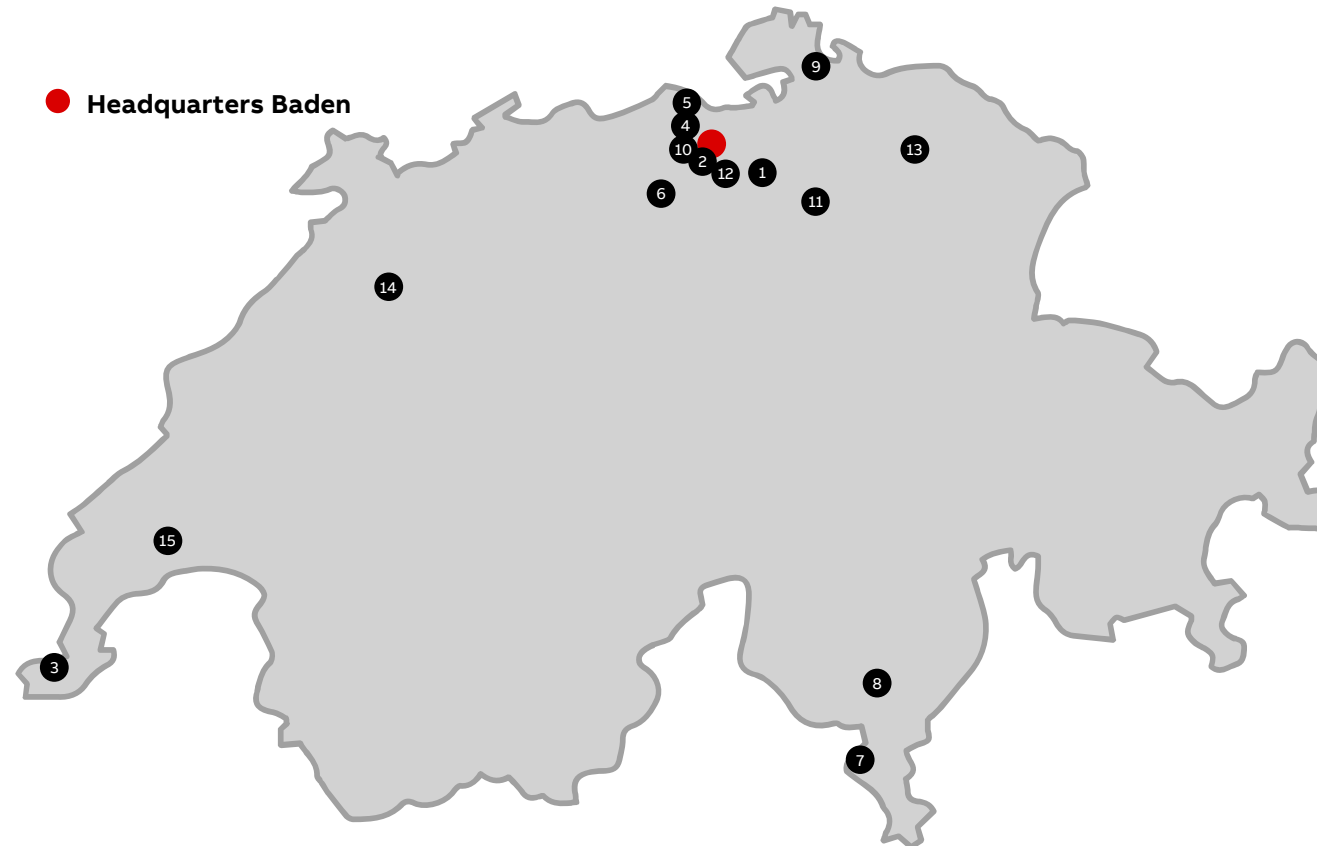
Our locations

Production/Engineering

1. Zürich Oerlikon/Altstetten
2. Baden-Dättwil
3. Genf
4. Kleindöttingen
5. Klingnau
6. Lenzburg
7. Molinazzo di Monteggio
8. Quartino
9. Schaffhausen
10. Turgi
11. Uster
12. Wettingen
13. Zuzwil

Sales&Service

2. Baden
8. Quartino
14. Biel
15. Lausanne



Unlocking the ABB potential in digital

ABB Ability™: industry-leading digital solutions built on a common set of standard technologies

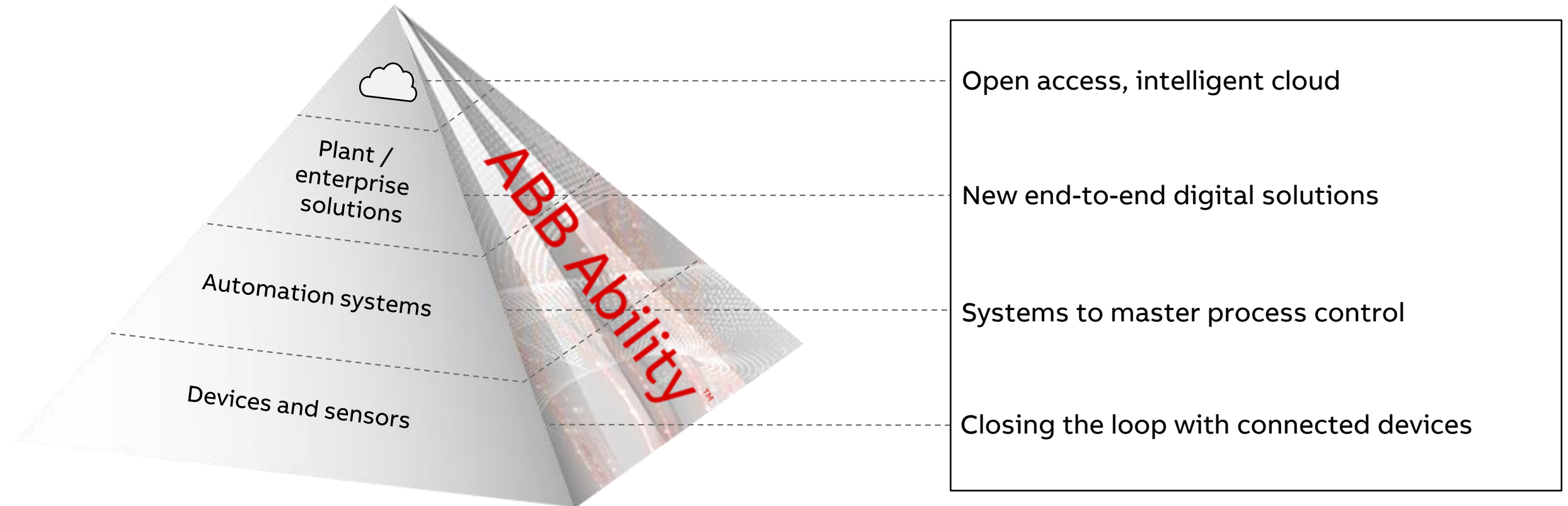


ABB Ability™ solutions & platform

ABB Ability™



What Delivers customer benefit (uptime, speed, yield...)

How Provides ABB with efficiency and scale



Digital services

Software-based services through the complete value chain

Markets we serve

Utilities

Industry

Transport &
infrastructure

Connected hierarchy

Autonomous operations

Remote and integrated operations

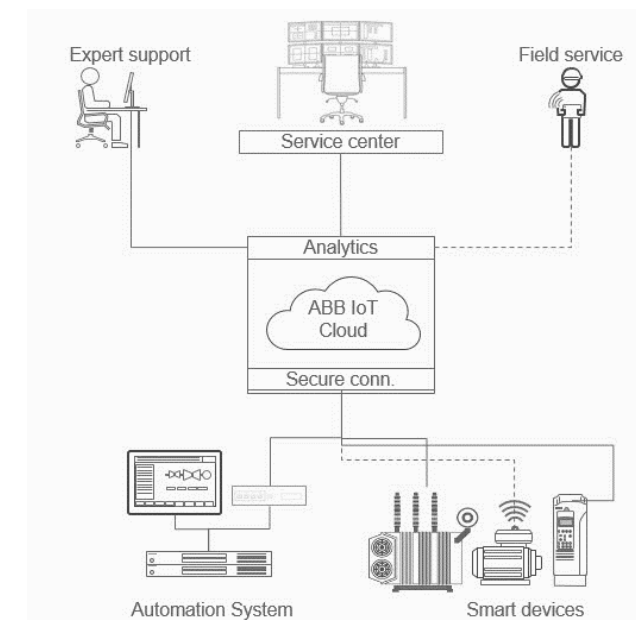
Analytics and advisory

Remote monitoring and diagnostics

Connected systems

Assets, smart devices

ABB Ability™



Uptime, speed and yield – operational excellence

ABB Journey to Digital

Project Example 1: Advanced Service Concept for Large Commercial Building

Need

- Projectable, reduced total cost of ownership during entire product life cycle of ABB Products & Systems
- Maximum performance, efficiency, reliability and availability

Challenges

- Integration into local control systems or other systems
- Technical spec, road map, work packages, methodologies
- System architecture, physical data transport, algorithms, HMIs (web, apps), cloud-platform, cyber security

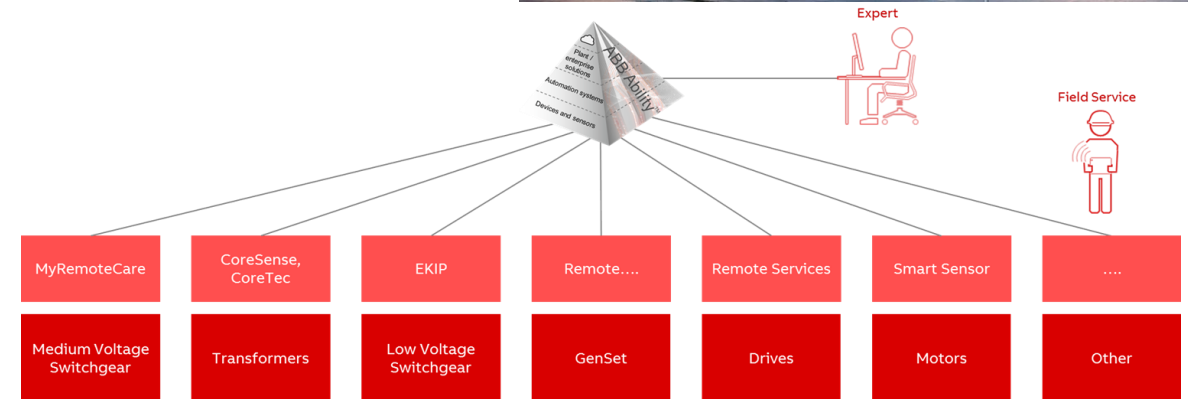
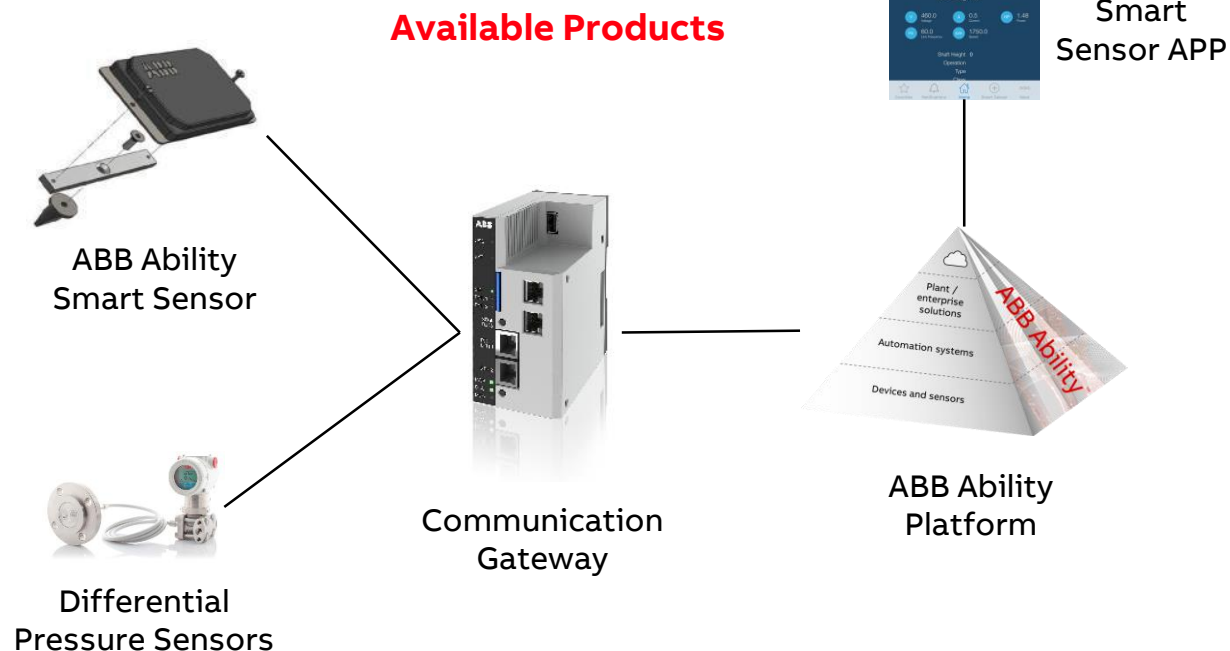


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Project Example 2: Maintenance Free Waste Water Pumps

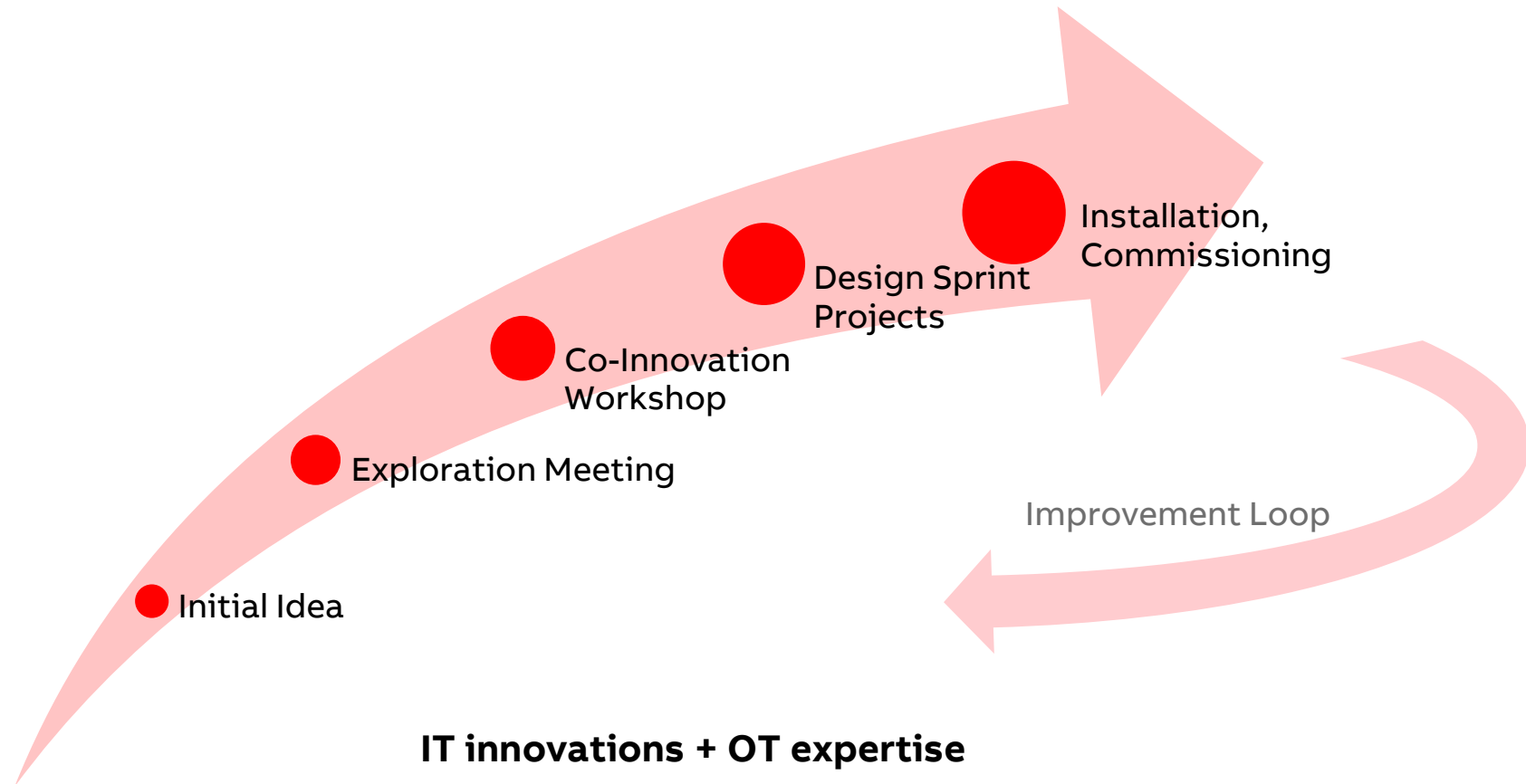


Need

- Early detection of potential problems in pump to trigger actions
- Market launch of solution available by April 2018

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Supporting Customers with ABB Digital Collaboration Lab

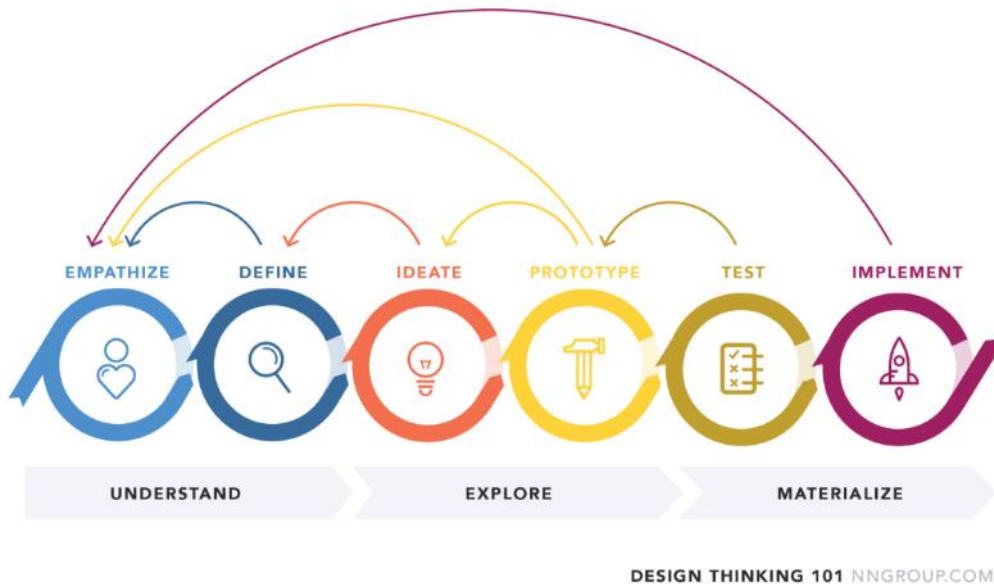


Methodology within ABB Journey to Digital

Speeding up learning and development within established companies

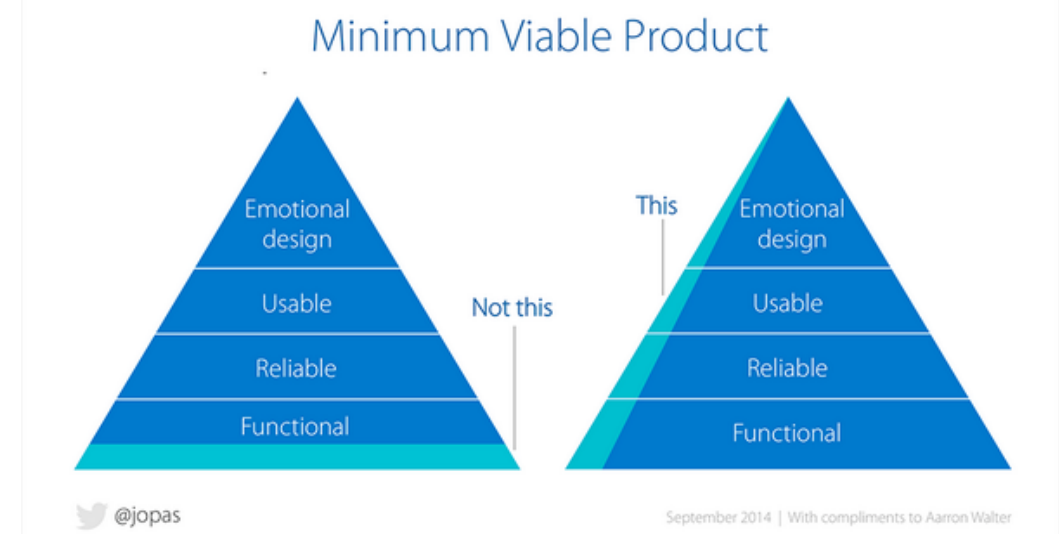
Design Thinking

Design thinking in business uses the designer's sensibility and methods to **match people's needs** with what is **technologically feasible** and what a **viable business strategy** can convert into customer value and market opportunity. (Wikipedia)



Minimal Viable Product

In product development, the Minimum Viable Product (MVP) is a product with **just enough features** to gather **validated learning** about the product and its continued development. Gathering insights from an MVP is often less expensive than developing a product with more features, which increase **costs and risk** if the product fails, for example, due to incorrect assumptions. (Wikipedia)



Digital Lab ABB Switzerland

Collaboration with the customers (currently in proposal stage)

Showroom



Condition Monitoring

MES System

Zenon

Connected Services

...

Digital Lab

Drives

Motors with motor sensor

Robots on track

PLC

...

Design sprint project team1

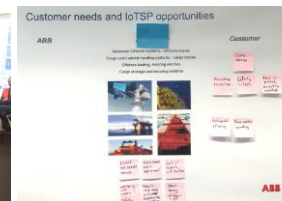


Design sprint project team 2



ABB Digital Co-Innovation Lab

Co-Innovation and training zone

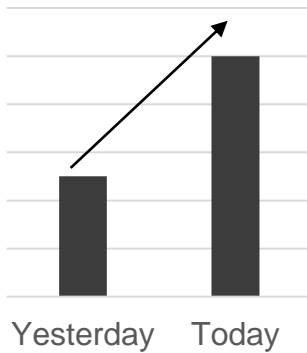


Working within ABB Journey to Digital

Interpersonal and Social Skills gaining high importance

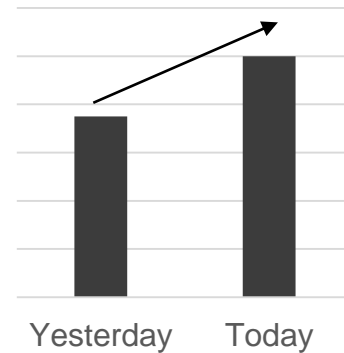
Interpersonal / Social Skills

- Stakeholder management
 - Networking
 - Common framework
 - Rules of engagement
- Equality
- Transparency
- Creativity
- Trust
- ...



Methodologic Skills

- Design Thinking
- Agile Development
- Minimum Viable Product, Roadmap
- Road Map building
- Design Sprint Projects
- Proof of Concept
- Prototyping
- ...

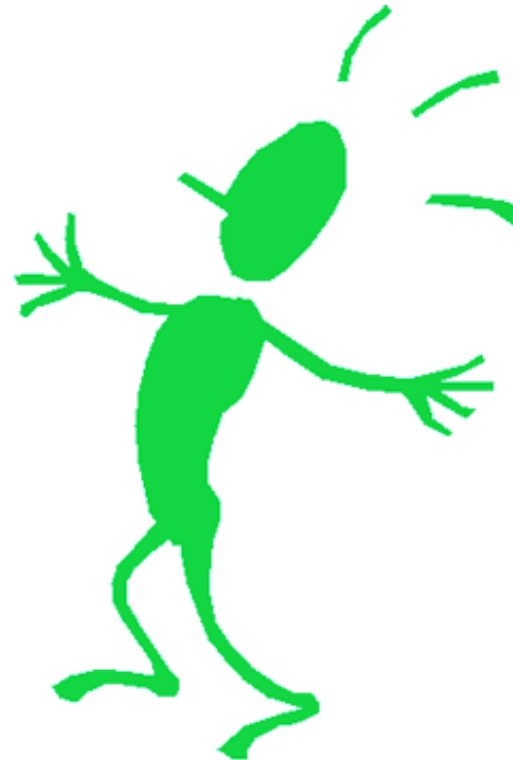


Domain Expertise

- ABB Products
- Sensors
- System architecture
- Physical data transport
- Algorithms /Artificial Intelligence
- HMIs (web, apps)
- Cloud-platform
- Cyber security
- ...



Remarks, Questions and Discussion





ABB