

The future of food & beverage electrification

ABB Ability™ building tomorrow's food & beverage plant



ABB Ability™ solutions for Industry 4.0



1712 – Industry 1.0
Thomas Newcome builds
the first steam engine

158 Yrs.



1870 – Industry 2.0
Electricity is used for
Industrial Production

99 Yrs.

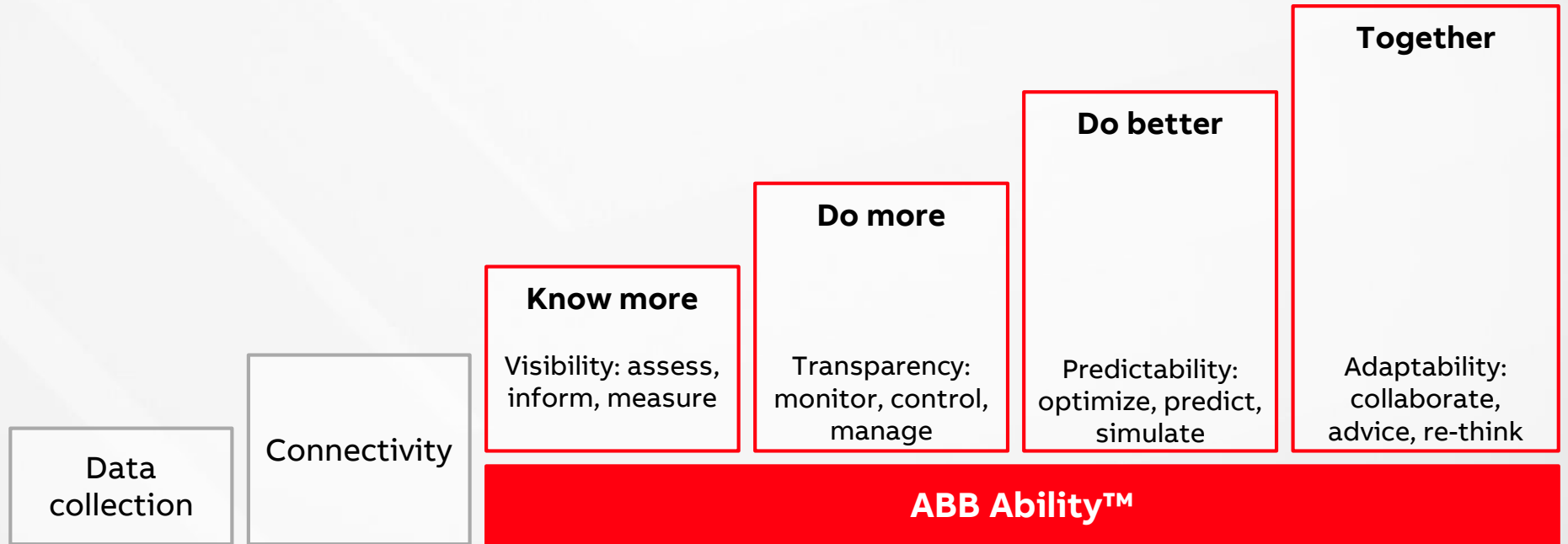


1969 – Industry 3.0
Programmable logic

47 Yrs.



Today – Industry 4.0
Communications between people,
services, and things



Food & Beverage factories

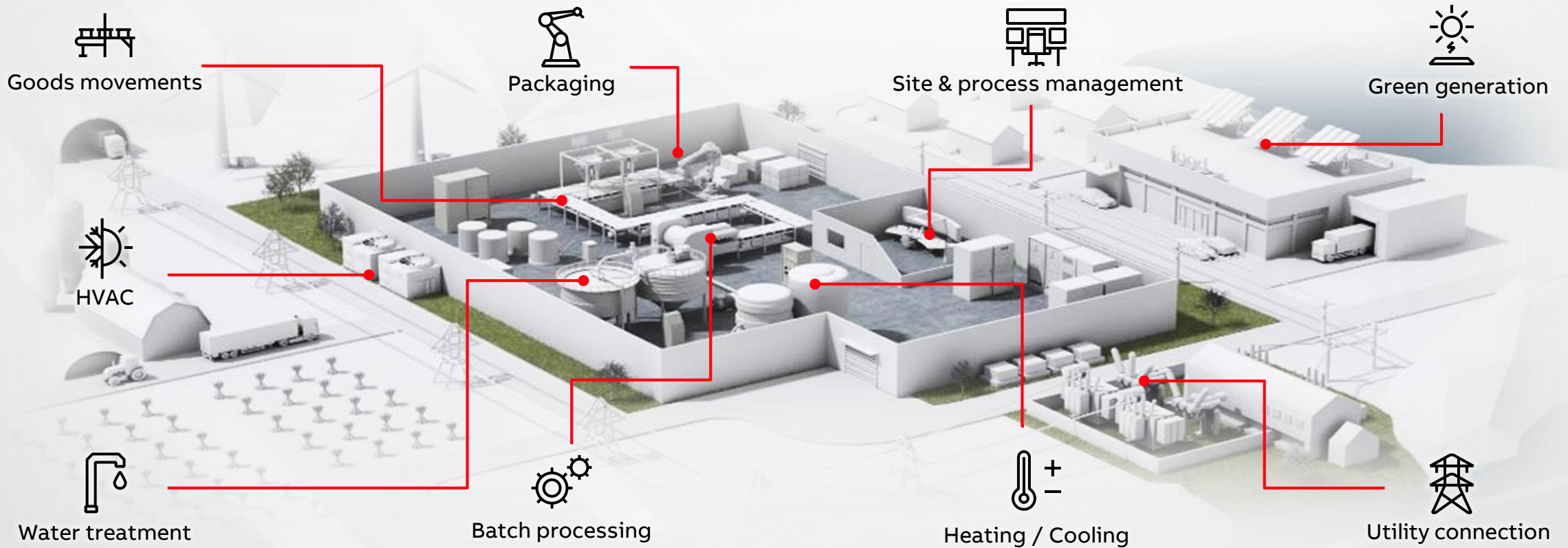
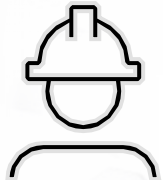


ABB Ability™ values for Food & Beverage electrification

Food & Beverage factories of tomorrow



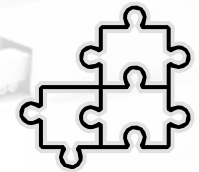
Safety



Production continuity
& Energy management



Asset performance
& Optimization



Flexibility
& Sustainability

Scalability

Safety

People protection

MV and LV certified switchgears against internal electrical arc fault.

Active people and equipment protection

Fast acting and coordinated arc protection systems applicable on MV and LV systems, and on new and existing switchgear, to increase safety and minimize downtime.

Digital asset

Personnel not exposed to high-voltage with sensor technology during testing
Self-monitored digital communication bus and devices



Production continuity and energy management

Power quality and stability

Integrated capacitor banks for power factor correction.

Modular and combined Uninterruptible Power Supply solution.

Energy management

Energy monitoring and reporting to evaluate and compare consumption.

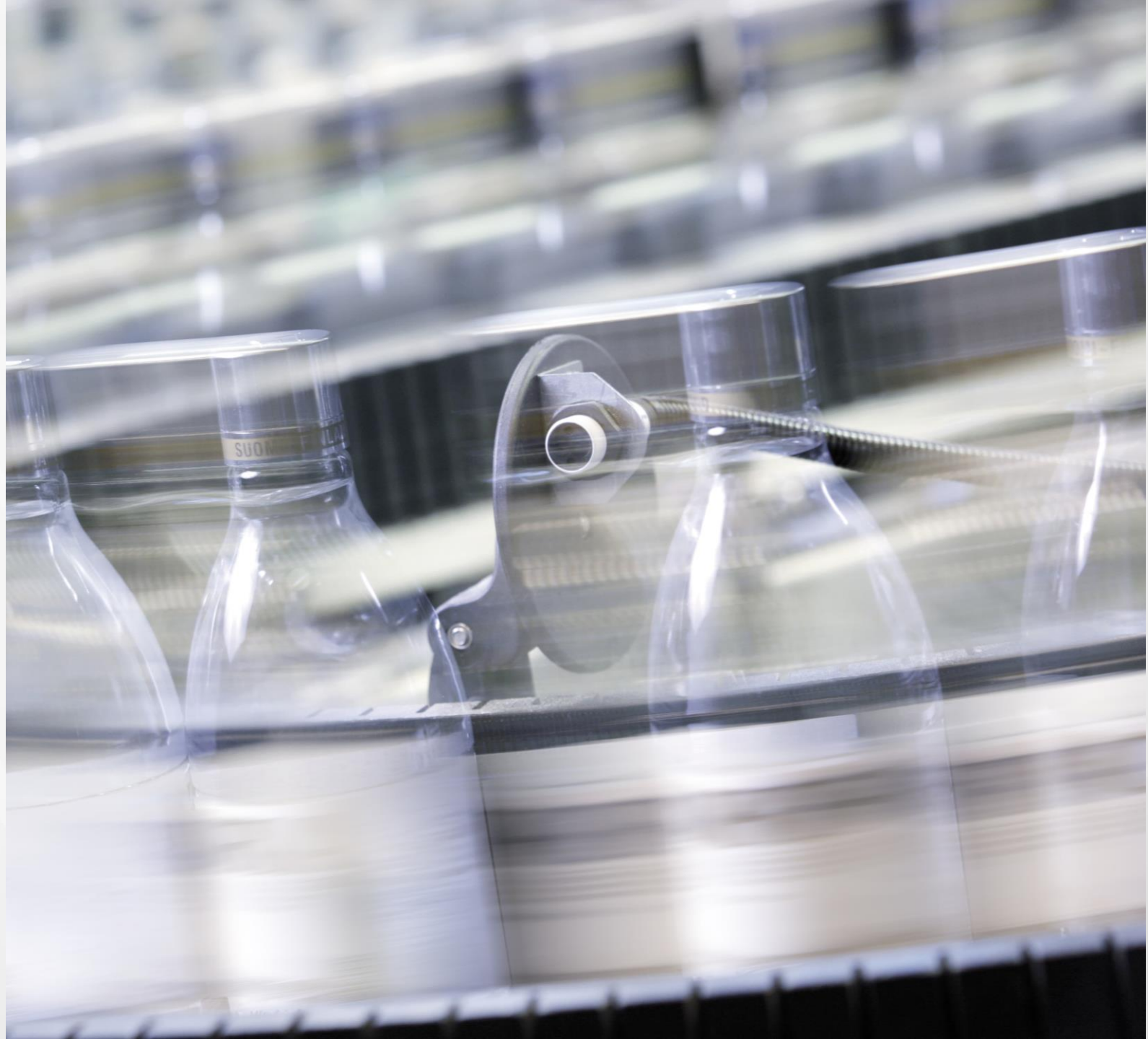
Full control of energy flow, integrating utility, renewables and production.

Power availability

Load-shedding and peak-shaving to keep up a running critical loads and avoid extra-costs.

Automatic transfer switch ensuring power supply.

Full power management for critical processes.



Asset performance and optimization

Condition monitoring

Sensors to detect possible failure causes.
Switchgear condition monitoring to support troubleshooting and drive service activities.

Predictive maintenance

Site and multi-site asset health analysis to predict and notify potential faults, minimizing maintenance, while increasing safety and asset lifetime.

Cyber asset management

Electronic devices inventory, configurations traceability, security firmware updates notification, plant data and documentation back-up.



Flexibility and sustainability

Digital switchgear

Highly configurable and easily upgradable during lifetime.

Advanced sensor technology to lower switchgear power consumption and minimize spare parts.

All-in-one protection

Modular hardware and software solution to protect the electrical network, and adapt easily
Easy integration of renewables with automatic-synchronization function.

Smart substation protection and control

Centralized substation protection and control, ready to follow the evolving grid, with extensive application coverage.

Fully modular and upgradable software.



Scalability

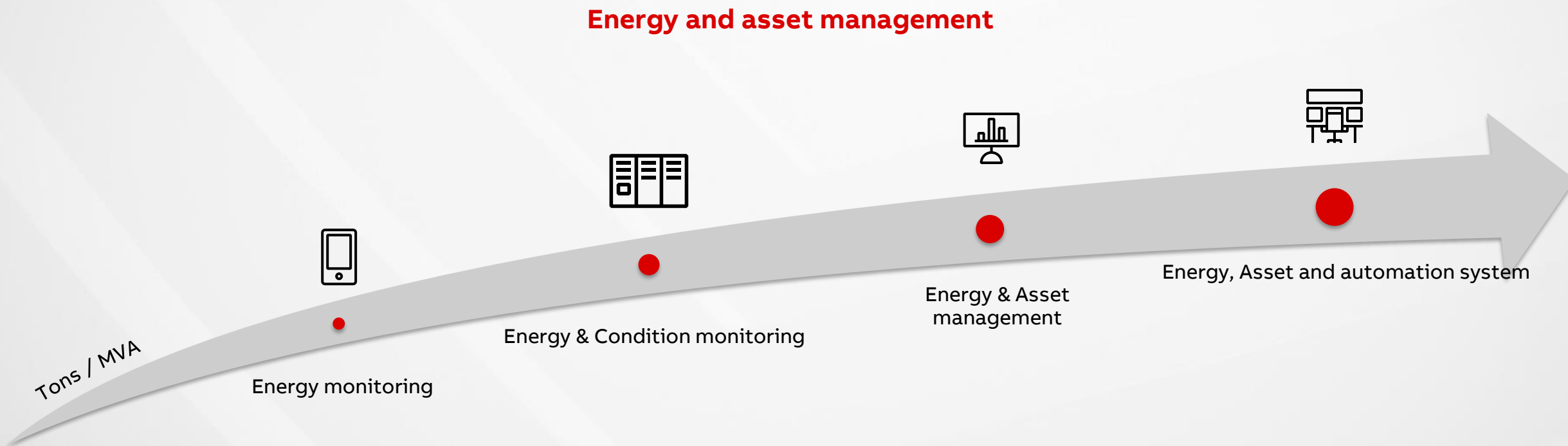


ABB Ability™ global and local support

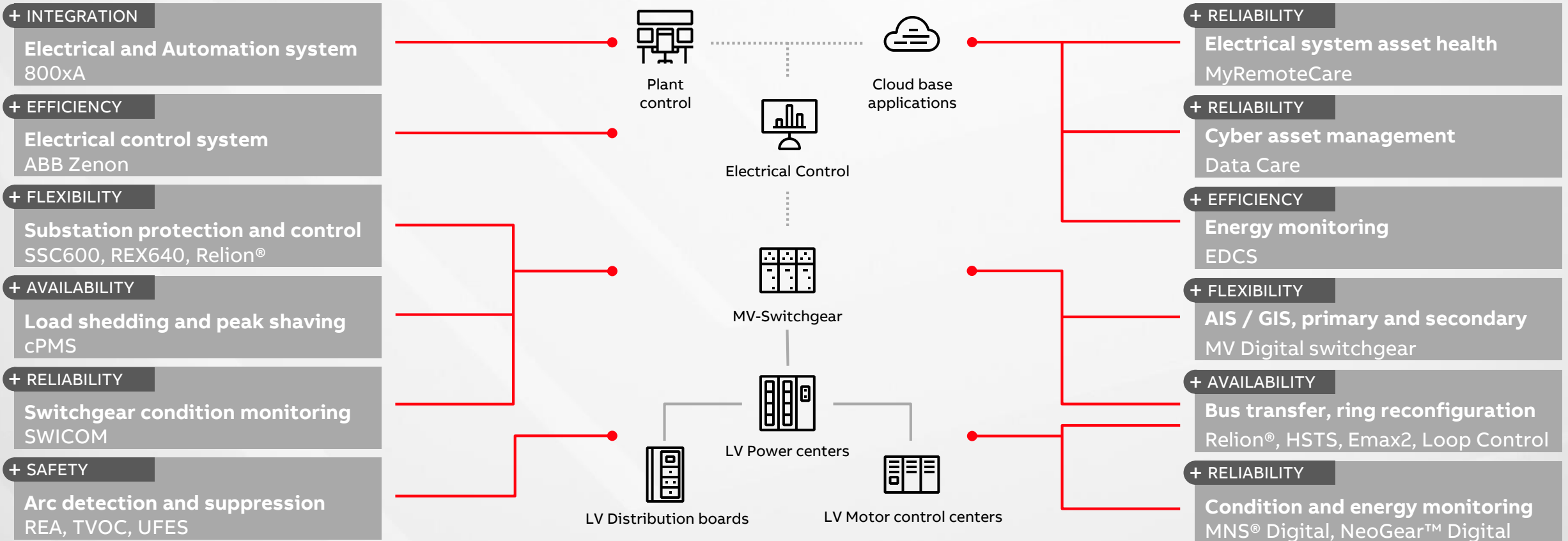


10 Digital solution centers



40 Digital service centers

ABB Ability™ electrification offering



ABB