

SMART INFRASTRUCTURE

Technology to
transform the
everyday



SIEMENS

Digital transformation has the potential to drive progress and growth and reduce resource consumption in all countries

Industry



50%

material savings can be realized using digital twins and innovative production technologies such as additive manufacturing.

Infrastructure



30%

of energy worldwide is consumed by building operations. Data analytics & automated building mgmt. can unlock large saving potentials.

Mobility



30%

higher network capacity can be achieved through automatic train operation and by optimizing train flows and rail operations.

Healthcare

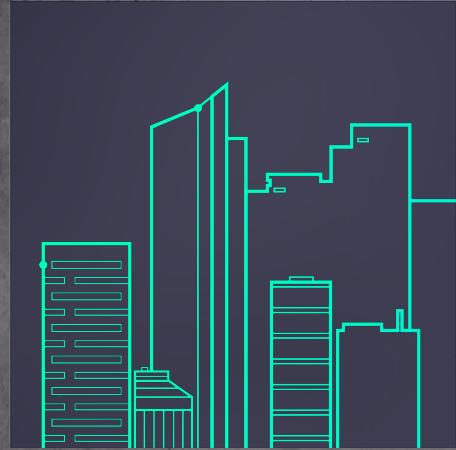


44%

faster door-in-door-out¹ time for stroke patients is possible with AI-supported analysis of brain scans.

¹ Time interval between patient arriving at the hospital and leaving from mechanical thrombectomy
Source: International Energy Agency, Royal Berkshire Hospital NHS Foundation Trust

Smart Infrastructure in numbers



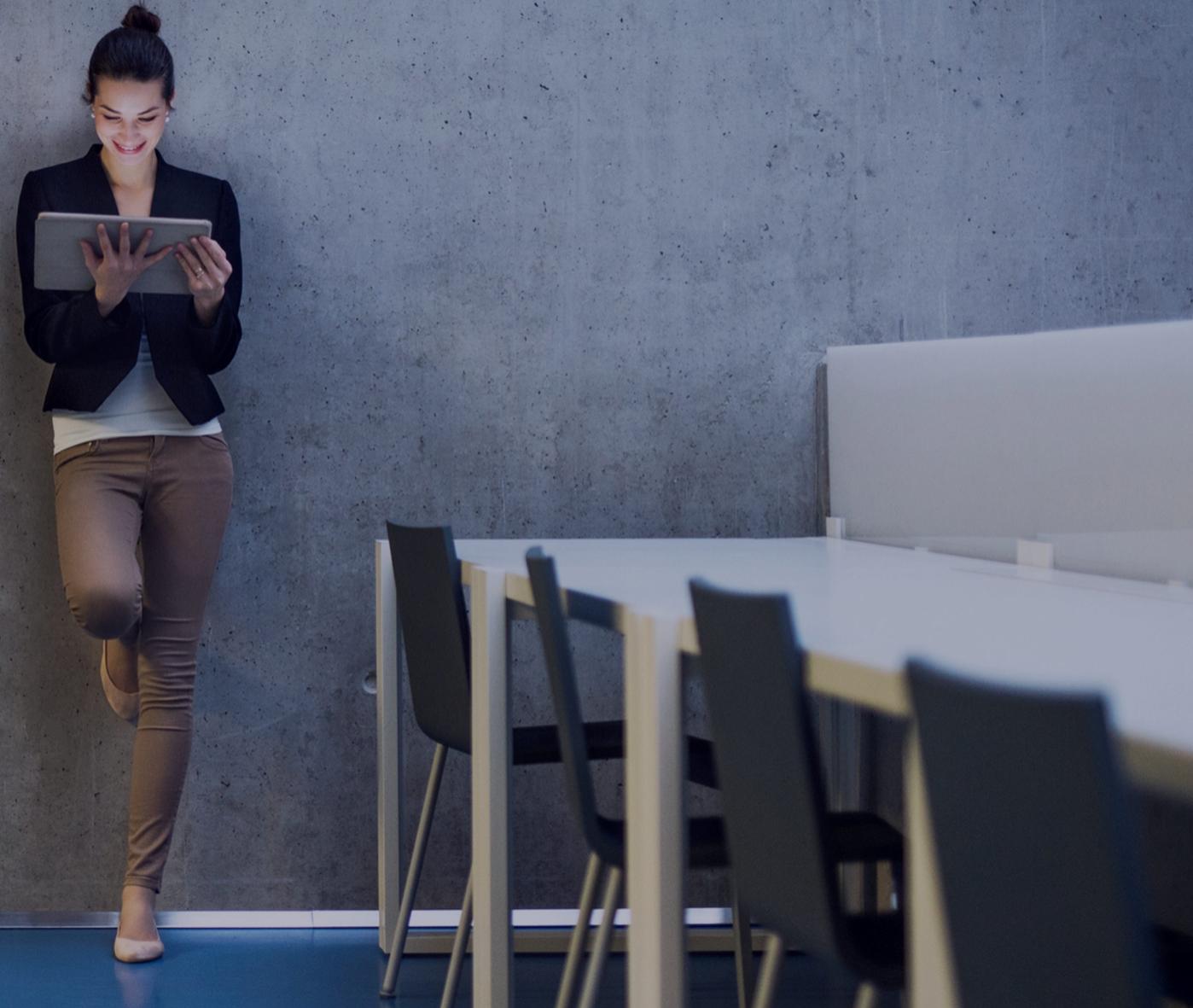
**Profit margin
in fiscal 2023**
15.4%

**Employees
as of Sept. 30,
2023**

75,000

**Revenue
in fiscal 2023**

€19.9 bn



Our comprehensive offering

Electrical Products

- Protection devices like air circuit breakers, molded case circuit breakers, miniature circuit breakers, and motor starter protectors
- Switching devices like soft-starters and contactors
- Measuring devices like PAC-meters¹ and SEM3² measuring device modules
- Monitoring devices like function relays and motor management systems
- Safety devices like safety relays and safety starters
- Software like SENTRON Powermanager and Control Panel Designer
- Low-voltage distribution boards and systems³
- Wiring accessories

Building Products

- Fire safety, including detection, alarming, evacuation, and extinguishing
- Building and room automation, lighting control, and HVAC⁴ OEM automation
- Sensors, valves, and actuators
- Building management software for automation, fire safety, security, and third-party integrations
- Security software, including video surveillance, access control, intrusion detection, and security management
- Cloud applications for smart buildings, including connectivity, data analytics, and building twin

Electrification and Automation

- Medium-voltage primary and secondary switchgear (indoor and outdoor)
- Low-voltage distribution boards, motor control centers, and busbar trunking systems
- Distribution solutions like prefabricated E-Houses
- Digital and classic services for full portfolio of distribution systems like NXpower Monitor
- Photovoltaics inverter systems
- Medium-voltage vacuum circuit breakers, contactors, and interrupters
- Substation automation, protection, power quality, and communications

¹ PAC: Power Analysis and Control ² SEM3: Siemens Embedded Micro Metering Module

³ Low-voltage systems only for UL-standard (UL: Underwriters Laboratory) ⁴ HVAC: heating, ventilation and air conditioning

Electrical Products

Comprehensive low-voltage product portfolio for IEC and UL / CSA markets

INDUSTRIAL APPLICATIONS

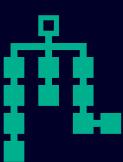


Process industry



Manufacturing industry

UTILITIES



Substations



Industrial buildings

SMART BUILDINGS



Commercial buildings



Residential buildings

OEMs

Panel builders (including franchise partners)

Distributors

Planners

Installation engineers



SIRIUS



SENTRON



Software Products



Wiring Accessories
& Others

SIEMENS

Electrification and Automation

Smart power distribution from medium-voltage to low-voltage

Medium-voltage Components, Systems & Solutions

Components



Primary Air-insulated Switchgear



Gas-insulated Switchgear Prim / Sec



SF6-free blue GIS Prim / Sec



Generator Circuit Breaker Switchgear



Photovoltaic (PV inverter systems)



Low-voltage Systems

Power Distribution Boards & Motor Control Centers

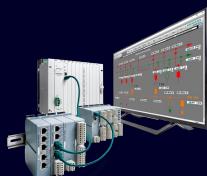


Automation, Protection & Communication for high- and medium-voltage Systems

Protection



Automation



Power Quality



Smart Communication



Outdoor Distribution Systems



Solution Business (E-House systems)

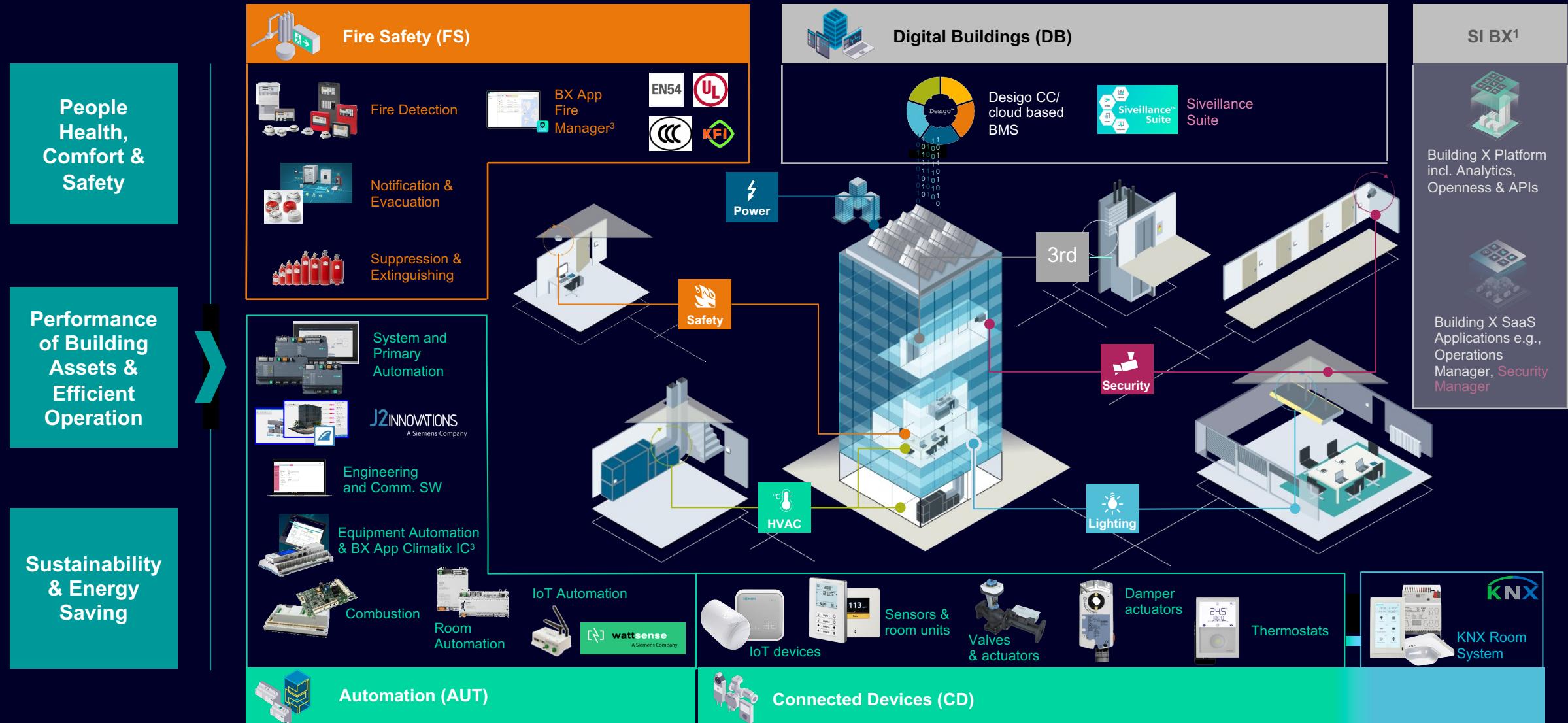


Busbar trunking systems

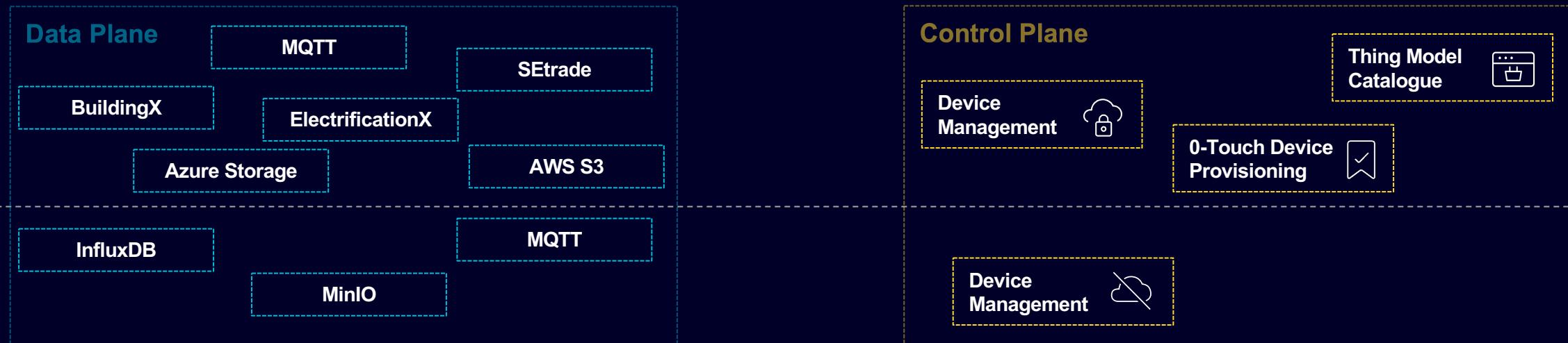


Services

Building Products



How to connect?

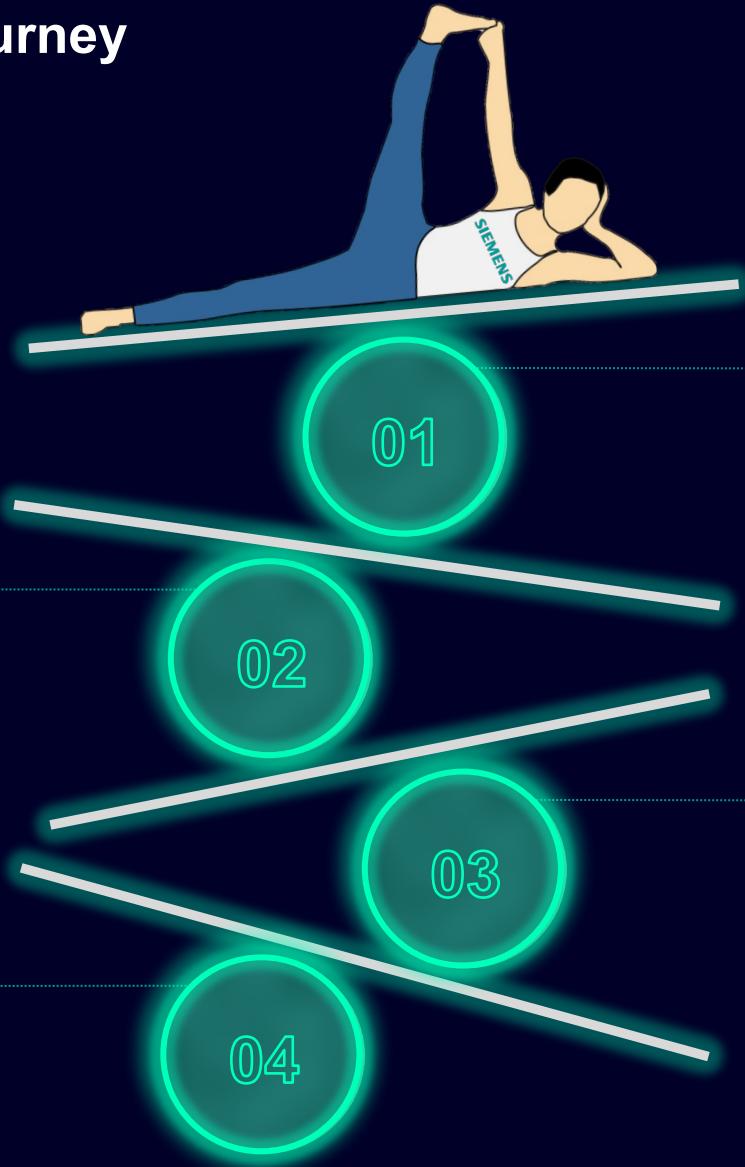


Field Devices



Solving Customer Digitalization Journey

while being stretched too thin?



Lack of Integration API

No API to access device and engineered data at the EDGE independently of the OT protocol.

Multiple EDGE Platforms

More than 2 platforms in operation, following different standards.

Real Customer Problem

Growing number of scalable customer opportunities requiring domain know-how.

Diverse Connectivity Needs

A vast amount of OT protocols and north bound connectors are required for Siemens use cases.

Smart EDGE Connector

Enabling EP's Cloud Journey



I want to **simple provision** devices
and retain **semantic information**!



Effortless Integration

Device provisioning with just a few clicks is made possible thanks to the integrated W3C Thing Model Catalogue, hosting Thing Models generated directly from EP's database.



EDGE Platforms

- BuildingX EDS
- Industrial EDGE
- SICAM APP
- ...



Field Protocol Connectors



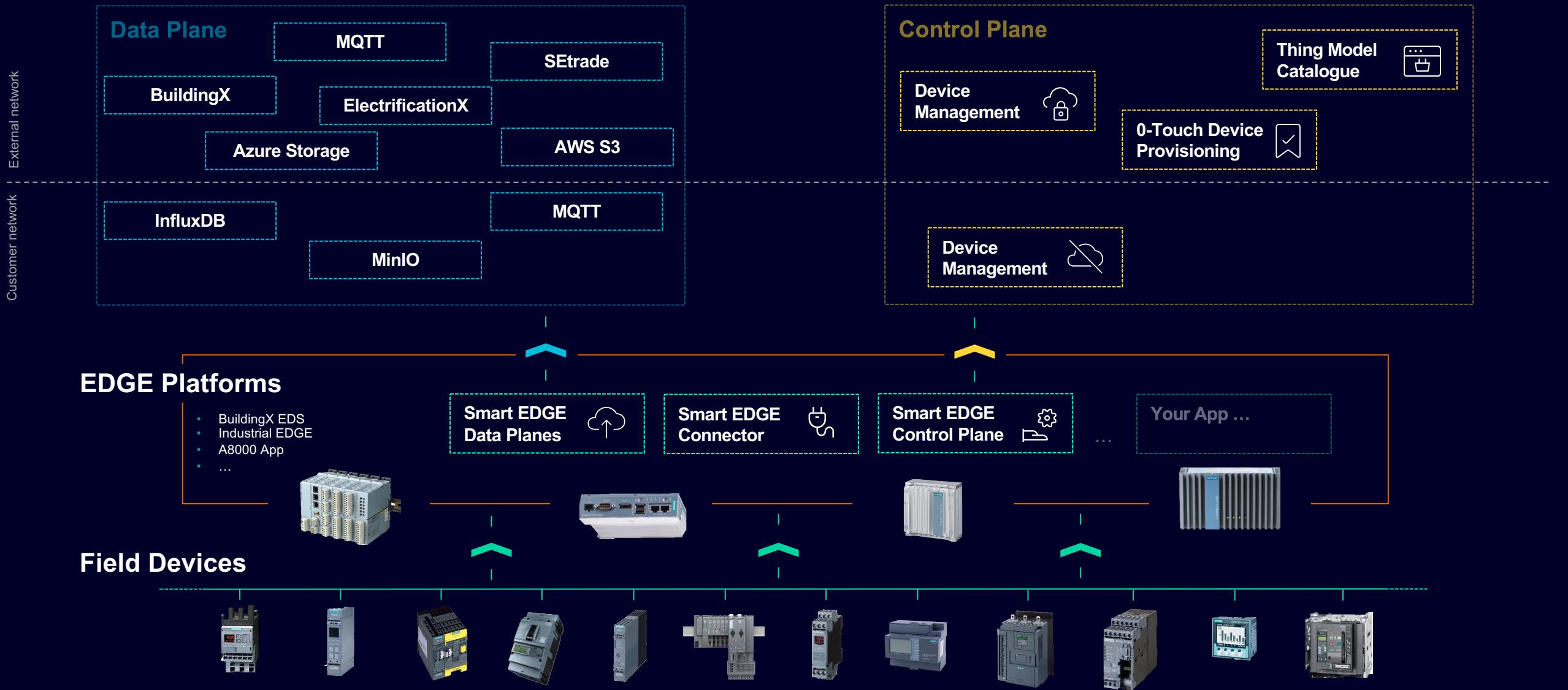
Field Devices



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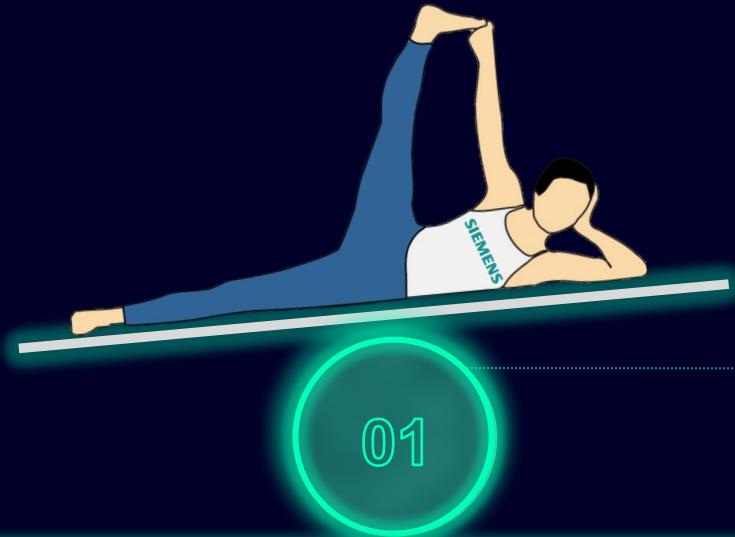
Smart EDGE Connector

Enabling EP's Cloud Journey



Smart EDGE Connector

Cross-collaboration SI CTO Connectivity App



Real Customer Problem
Focus on customer value!

2

Interoperable API

- Integrate against one API to configure or get data from your devices.
- Utilize Siemens Device Catalogue for one-click provisioning.



Thing Catalog

Interoperable API

3

Open Ecosystem

- Deliver data to the destination of your preference, to the cloud or on-premises.
- Reuse existing south-bound connectivity solutions if available.
- Store or process easily data at the EDGE.



Integration

Connectors

4

Deployment Agnostic

- Available on multiple Siemens EDGE Platforms and Devices
- Hardened and cleared versions guaranteed



EDGE

Clearing



**Thank you for
your attention.**

Any questions?