# Xcelerate your digital journey

Data Center Forum 2023, Stockholm



**SIEMENS** 

## A rapidly-changing industry creates significant challenges and opportunities for your business

#### **Artificial Intelligence**

Rising density per rack



#### **Sustainability Regulations**

New obligations

#### **Talent Gap**

Resource limitations



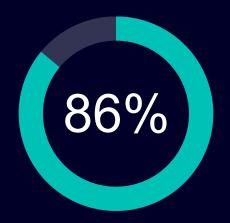


Digitalization is the enabler for tackling these challenges and staying competitive ...

... but uncertainty and lack of experience are driving forces in the requests for advice and simplified implementation.

## Most digital transformations fail, but the world is still waiting on an easy digitalization concept

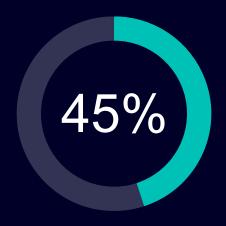




have avoided critical projects due to complexity of legacy systems

## Interoperable solutions

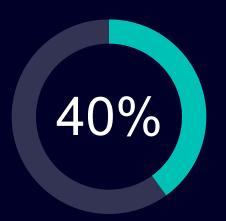
ensuring that solutions work seamlessly together across digital threads



don't know where to begin to adopt IoT

## Community of experts

to drive innovation and cocreation with deep domain know-how and digital transformation experience



struggle to find digital partners with experience in their industry

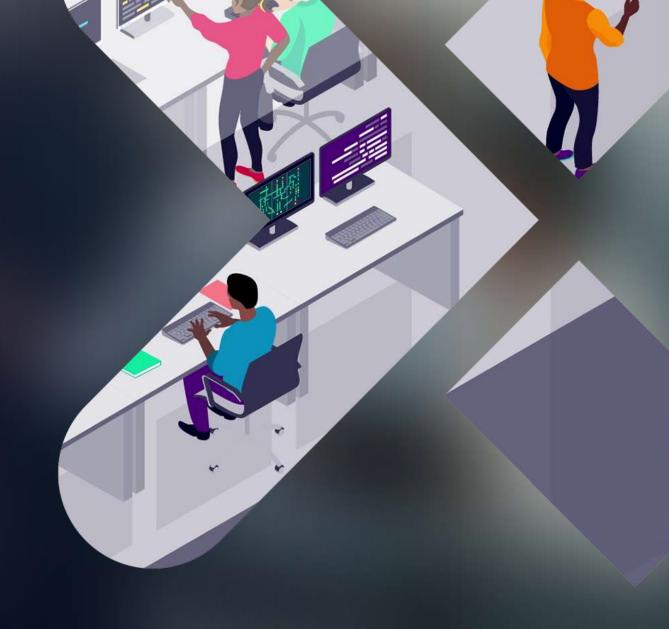
## Partner ecosystem

bringing together the best-in-class players in the market

Source: The Forrester Wave: Global IoT Services for Connected Business Operations, Harvard Business Analytic Services Internet of Things Report for Siemens

# Siemens Xcelerator

Digital transformation made easy, flexible open



#### **Siemens Xcelerator**

Designed to accelerate the digital transformation of our customers



A comprehensive, curated **portfolio** that includes digital and IoT-enabled offerings from Siemens and certified partners

A continuously growing, powerful **ecosystem** of partners

An evolving marketplace that enables education, exploration, exchange and transaction within a community of customers, partners and experts

#### **Siemens Xcelerator**

The open digital business platform designed to meet your digitalization needs

#### **Portfolio**

to connect the real and digital worlds

### **Ecosystem**

to help you build the right partnerships for your digital journey

### **Marketplace**

to put everything at your fingertips



## Siemens Xcelerator Integrated Portfolio for Data Centers

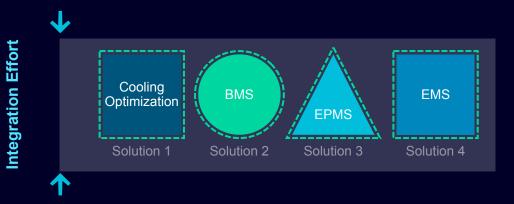




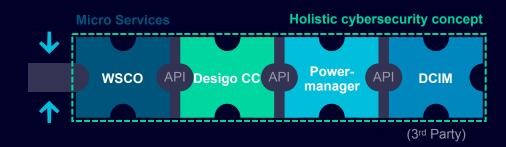
#### **Siemens Xcelerator**

#### Simplifying our clients Infrastructure Architecture

Traditional monolithic architecture



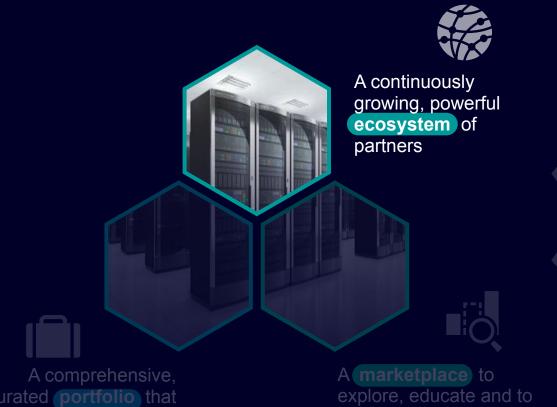
Modularized functionality and API's





We are starting the journey towards next-generation software architecture to significantly reduce integration effort and complexity

#### **Siemens Xcelerator** An opportunity for new Partners



curated **portfolio** that includes digital and IoTenabled offerings from Siemens and 3rd parties

solutions and services

#### **Enable & Run**

**Major IT/cloud partners** and infrastructure services providers









#### **Consult & Service**

**Consulting and service** partners experienced in digitalization

## **Deloitte.** accenture

#### **Build & Sell**

**Partners** 

Exemplary

**Vertical solutions** complementing Siemens solutions

















## **Siemens Xcelerator**The Marketplace



A comprehensive, curated **portfolio** that includes digital and IoT-enabled offerings from Siemens and 3<sup>rd</sup> parties

A marketplace to explore, educate and to purchase products, solutions and services

#### Learn

what technologies can help to fix your business problem for specific industries or applications

#### **Find**

all offerings also from 3<sup>rd</sup> party at your fingertip

#### Exchange

with a community of specialist around the world to find answers for your business problem

#### Buy<sup>1</sup>

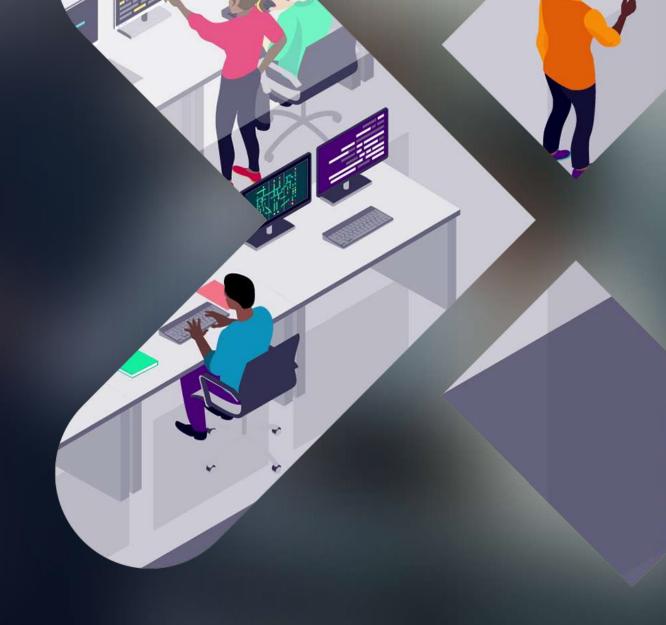
Marketplace

Get access to the necessary portfolio with one click

<sup>1</sup> Planned for future development

# Reference Cases

Examples of successful digital journeys



#### **Improving Sustainability Measures** Reference Case at Greenergy (EE)

#### **Project Timeline**



#### Q4/22

Workshop to map out the customer needs

#### Q3/23

submittal

Business case Final decision re: evaluation and Digital Twin and microgrid solutions

#### Q4/23

Installation and commissioning

**TBA** 

#### **Customer Needs**

- Reduce dependency from the grid
- Improve asset and workflow management
- Keep leadership in the region

#### **Customer Engagement**

- Planning investment in renewables generation
- Dematerialize operations with Digital Twin (use cases mapping ongoing)
- Business case

#### **Proposed Solution**

Invest in renewable generation with **PV plant** 

- Store and Manage renewable energies with BESS also for grid stabilization
- Controlling and optimization of battery usage with grid software
- Improve existing Integrated Management Suite with **Digital Twin**





The Customer

Greenergy is a colocation company that has built the largest and most powerefficient purpose-built data center in the Baltic region. Customer data have the smallest possible ecological footprint while utilizing the benefits of secure large-scale data management.

Source: Public website



## Improving Data Center Uptime

Reference Case at Large Colocation Operator (APAC)

#### **Project Timeline**



#### Q2/22

Project kick-off and several workshops to understand the requirements

#### Q1/23

Technical workshop and joint development of the final solution

#### Q2/23

SW and HW tests running at the partner facility

#### Q1/24 (exp)

Connecting HA IBMS to the end-customer cloud

#### **Customer Needs**

- Single/Unified platform Management Software for BMS/CPMS/EPMS
- Hot & Parallel Redundant (Active-Active) for IBMS application, OS and DB Servers
- Operational Excellence for maintenance management

#### **Customer Engagement**

- Unprecedent levels of service availability
- Ability to develop SW, incl. Dashboards
- 24/7 encrypted mobile access
- Smart Analysis using Smart SCADA-RCA (Root Cause Analysis)
- Efficient planning, management, execution and control of maintenance work and breakdown remedy

#### **Proposed Solution**

- Scalable Architecture with 10M+ tags
- Hot Standby HW and SW Redundancy (from I/O units to application level, passing through PLCs)
- Integrated solution for all the electrical, security, fire, cooling and third-party systems, including Advanced Maintenance Suite (AMS)





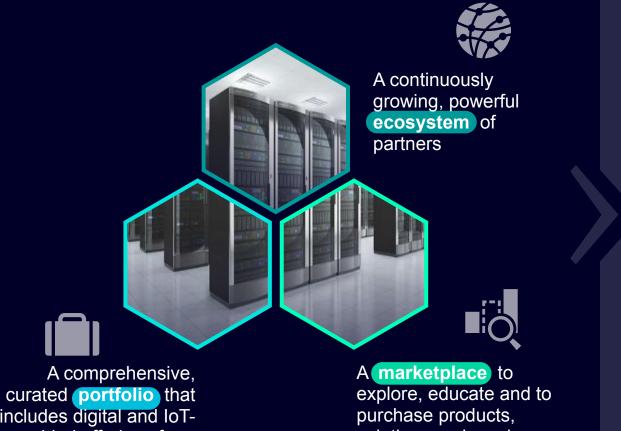


# Focus on Digital Services

Evolution of the Siemens Xcelerator Portfolio



#### **Siemens Xcelerator** Focus on Digital Services



includes digital and IoTenabled offerings from Siemens and 3<sup>rd</sup> parties

solutions and services

Thermal Optimization Cybersecurity Services Digital Twin / BIM in Operation Digital Services ↑<del>...</del> **Predictive Maintenance Electrical Services** On-prem Analytics

# White Space Cooling Optimization Dynamically matches cooling to IT load

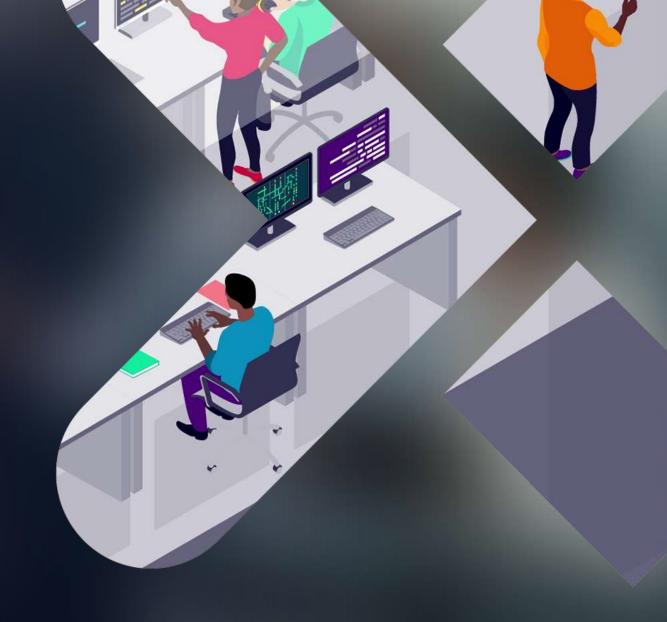


## Lifecycle Twin in Operations





## Conclusions

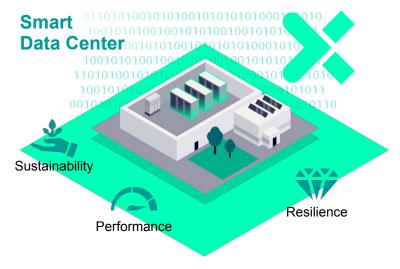


#### No matter where you are on your journey

Siemens Xcelerator helps you - Easier, faster and at scale

### Traditional Data Center





Various management tools, siloed disciplines

From ...



- Reactive on-site service
- On-site solutions
- Siloed management and analysis tools
- Significant manual reporting work

Transformation started, not yet completed

#### Across ...

- Condition based maintenance
- Solution landscape from multiple vendors, not compatible
- Legacy systems to be considered
- Siloed progress of digital transformation

Fully integrated management landscape

#### To ...



- Predictive and prescriptive maintenance
- Al-enabled optimizations
- OT/IT integration and streamlined management tools
- As a Service and remote connectivity



#### **Siemens Xcelerator**

#### Summarizing what makes Siemens Xcelerator unique

Access to the broadest and deepest domain expertise

Most holistic OT/IT integration capability on the market

Easiest access & user interface and personalization potential

Supporting customers across the whole digital transformation value chain

A unique business platform combining expertise across major industries



Comprehensive proven track record



Reduced complexity of organization and processes







## Join us and Xcelerate your digitalization journey



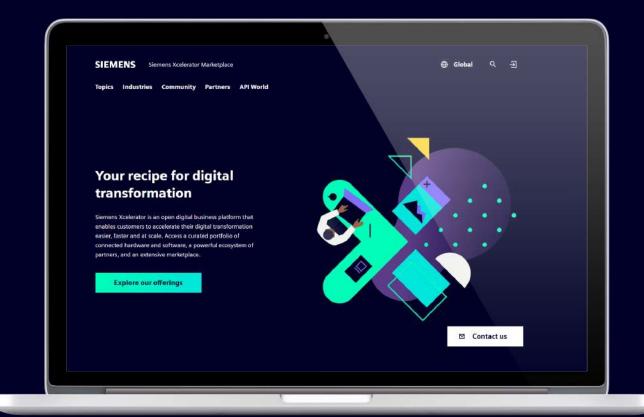
Join the marketplace



Explore the communities and engage with experts



Let's Xcelerate your digital transformation



# Q&A





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