



Digital Team intro

iExperience Center 4.0 | Digital Industries

**Digitalization
Changes
everything**

This means today's Industry is filled with new challenges in order to face customer's requirements

Speed



Flexibility



Quality



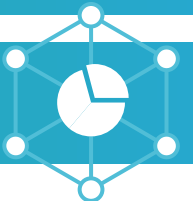
Efficiency



Security – Encryption | Firewall | Network segregation | Patch | Monitor



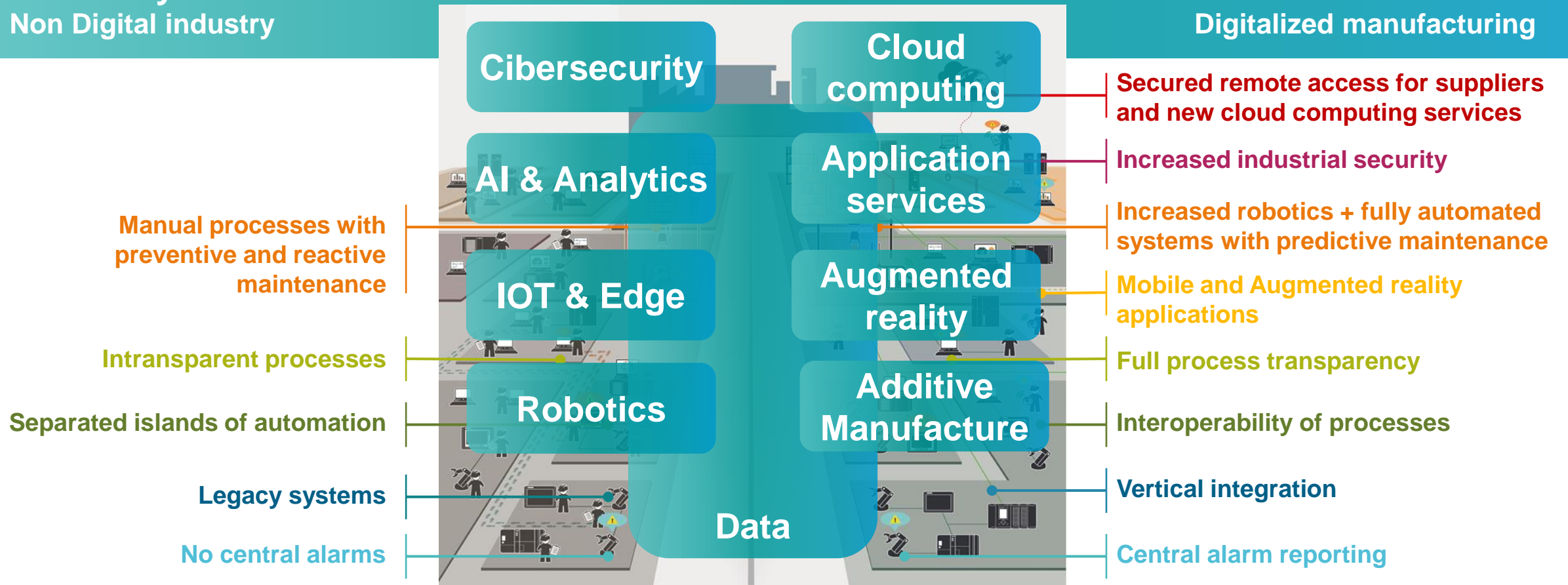
New Business Models - For continuous monitoring and optimization of complete value chain



And new business models in the internet age request new processes and tools

Yesterday
Non Digital industry

Tomorrow
Digitalized manufacturing



Digital Era opens new potential and market opportunities but also new challenges only addressable with operation intelligence

Digital Age Business

From Business Intelligence

- Analysis of historical data over defined periods of time
- implementation of reactive optimization measures

...to Operation Intelligence

- Continuous analysis of process data
- Continuously optimized and predictive operations with cost effective maintenance services

Cloud computing & Analytics

Globally available data lake for aggregated data of all sorts to be evaluated with Analytics and AI tools towards continuous process transparency and optimization

Digital Twins & Simulation

Digital Data models to evaluate, simulate and optimize with process data

IoT & Edge

Continuous connectivity to operation data flows, from sensor to system to edge operations

**But how do we
implement
this change?**

In order to achieve this change, our standard hardware solutions and platforms

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SIMATIC

Scalable industrial automation systems



SINUMERIK

Intelligent solutions for machine tools



SIMATIC PCS 7

Powerful, compact hardware for process industries



SIMOTION

High-end motion control system



SINAMICS

Frequency converter for every drive application



SIMOTICS

Highly efficient electric motors



SIRIUS

Modular industrial controls

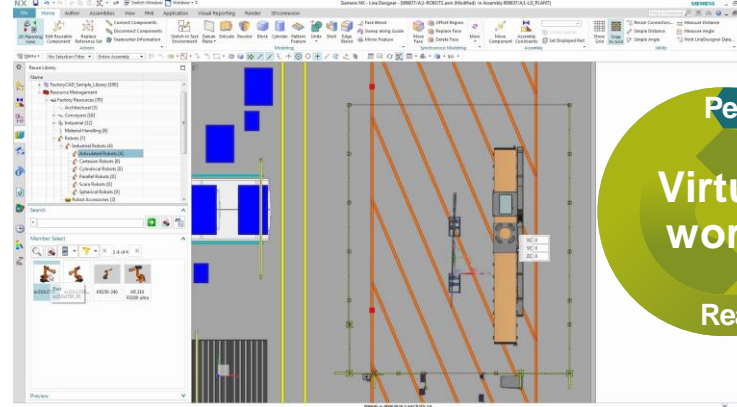
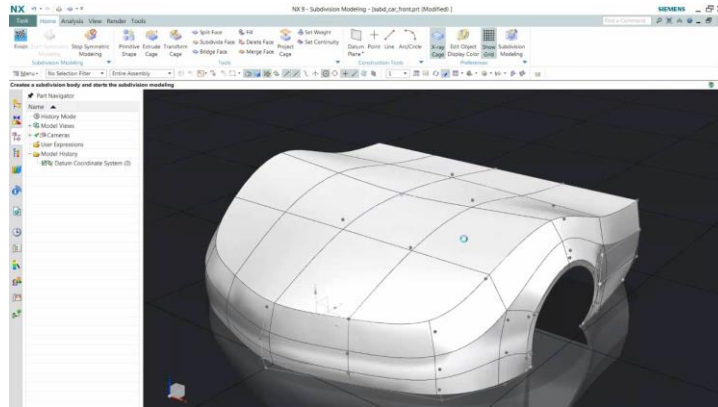


SCALANCE

Reliable industrial communication

Are merging with the software portfolio created over the last 20 years

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MindSphere

NX CAD

Teamcenter
Manufacturing

NX Line Designer/MCD/
Automation Designer

Simatic IT

MindSphere Apps

Polarion

NX CAM / Additive

Simit

Camstar

Digital Lifecycle Service

Simcenter

Tecnomatix

TIA Portal

WinCC/SCADA

Asset Performance
Suite

Mentor Xpedition

Mentor Valor

Simatic PCS7

CNC Shop floor Mgt SW

Mentor Capital

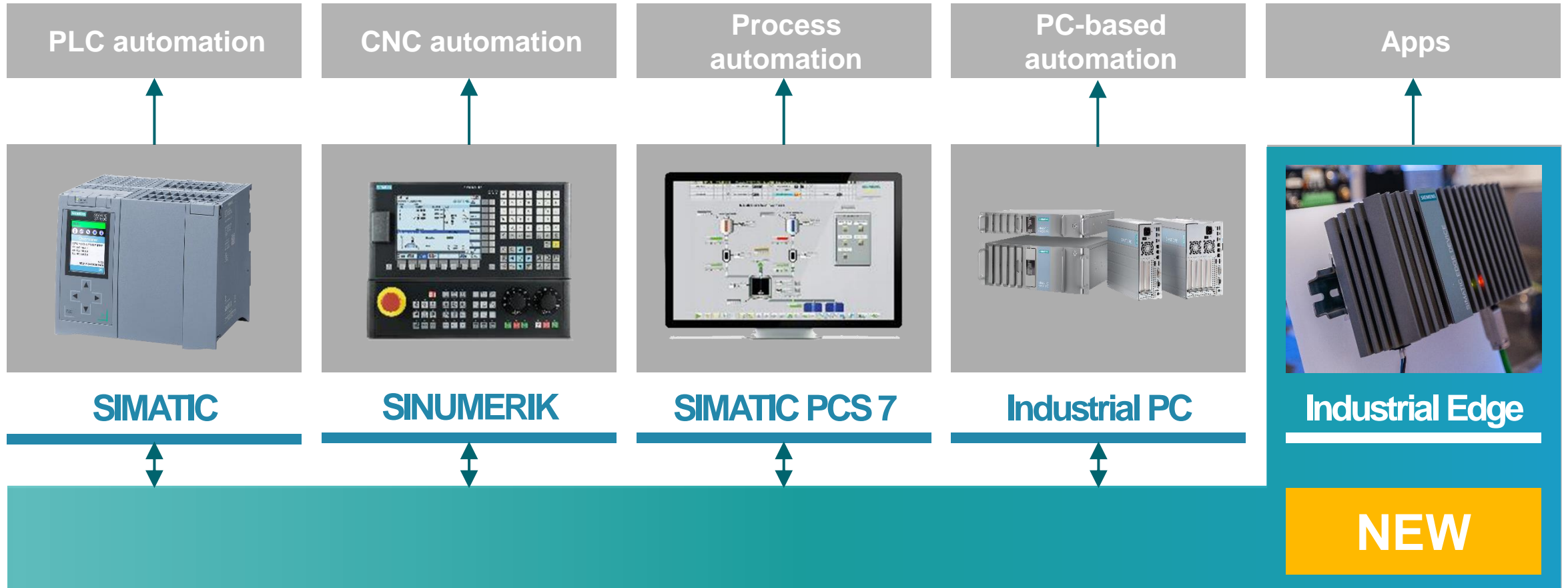
Edge Apps

Mendix LC Engineering

Teamcenter, COMOS, XHQ, PlantSight

Our HW is now enhanced by Edge functionality

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Using our IoT operating system MindSphere now enhanced by Edge and mendix

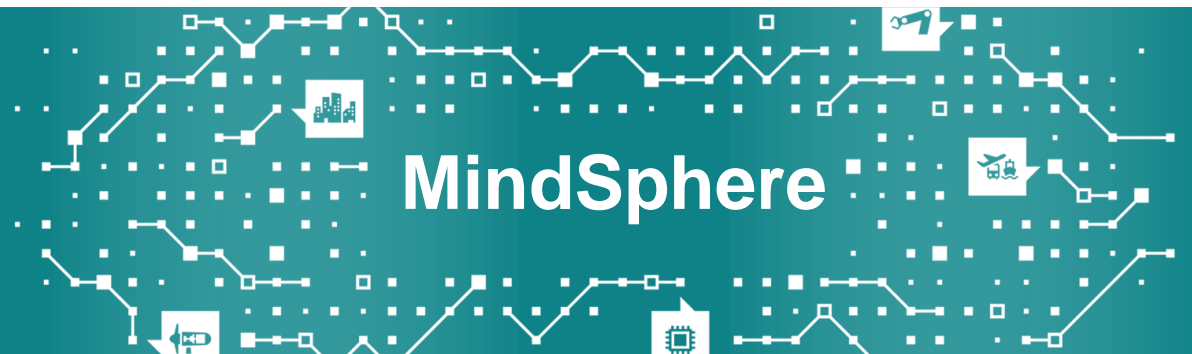
Applications

Powerful industry solutions with advanced analytics



Open PaaS

Develop robust industrial IoT solutions faster with global scalability

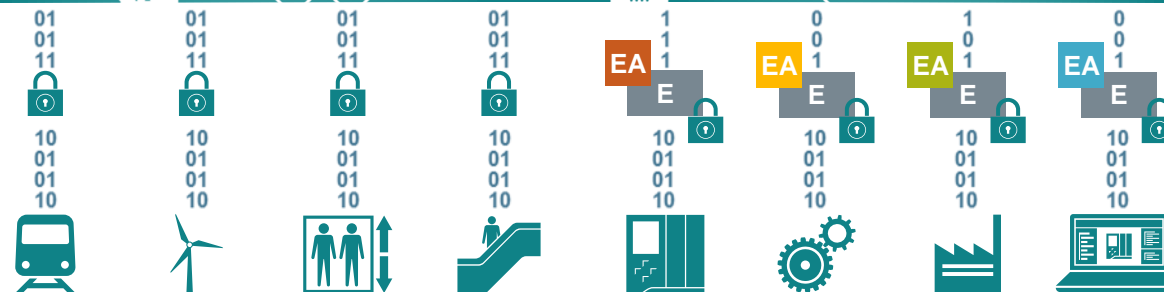


Edge Management

Edge Device Management, Edge App Management, and Edge App Store

Connectivity

Connect products, plants, systems, machines and enterprise applications



Edge Apps

Siemens, partner (OEM), and 3rd-party Edge Apps

Edge Devices

Secure, future-proof basis for running Industrial Edge applications

i-Experience Center
Industry 4.0

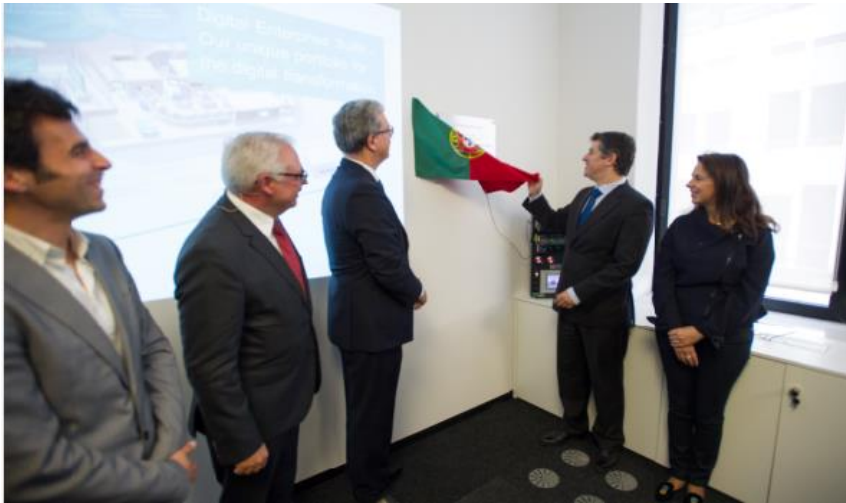
Digital Innovation Hub

Digital Industries

iExperience Center 4.0, our solution to support the change

Industry 4.0 digital transformation hub for universities, partners and customers

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Project Scope

Creation of Digital Innovation Hubs, at Siemens Campus and Universities.

All TIA and Digital Enterprise solutions are available for customers, partners and universities to test and validate added value digital transformation solutions.

TIA Portfolio

TIA Portal, SIRIUS, SIMOCODE, SINAMICS, SIMOTICS, SITOP, SIMATIC, SITRANS, CI, RFID

Network and Cybersecurity

SCALANCE W, X, S, M

IOT & Edge Solutions

SIMATIC IOT2040 (Edge device)
IOT Sensors (BLE, LORA, Wifi)

MindSphere Portfolio

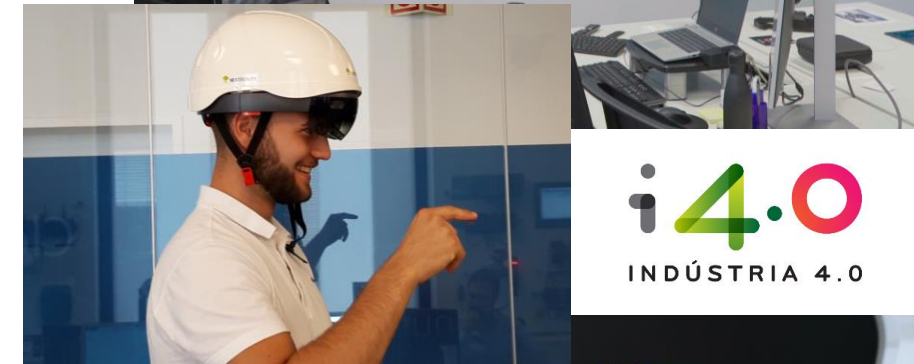
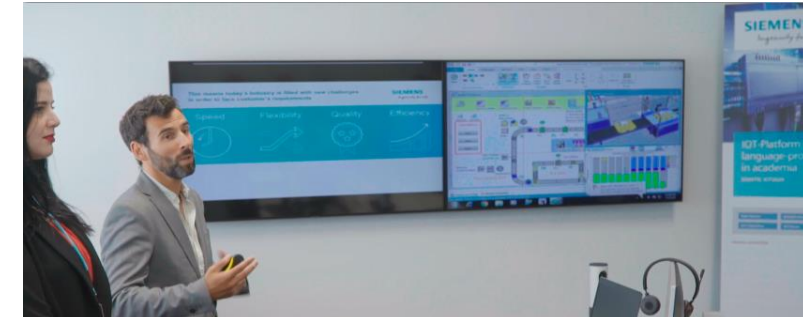
MindConnect IOT2040
MindConnect Nano
MindAccess IoT Value Plan

PLM Portfolio

SolidEdge (3D CAD)
TecnoMatix (Process Simulation)
TeamCenter (Collaborative platform)

Partner Solutions

Edge Applications
3D Printers
Augmented Reality



i4.0
INDÚSTRIA 4.0



Powered by

SIEMENS



CADFLOW

iExperience Center 4.0 - Digital transformation lever

Concept



Incubator for new and existing partners to evaluate and co-create added value Digital Solutions for the Portuguese Industrial Market

Universities

Open
Criativity

IT/Consulting Partners
(mostly new)

New Business
Models

OT Partners
(mostly existing)

Delivery
Capacity

Customers
(new and existing)

Requirements

Co-creative approach to new business models, solutions and applications

From small PoCs to mid-size and large Projects

Digital Transformation Enabler

iExperience Center 4.0

Partner Ecosystem for new business models



Develop a new partner ecosystem to enable a fast deployment and easy scale-up of flexible and new *Digital Solutions* for the portuguese industry

Main Focus Areas for potential new partners and business models

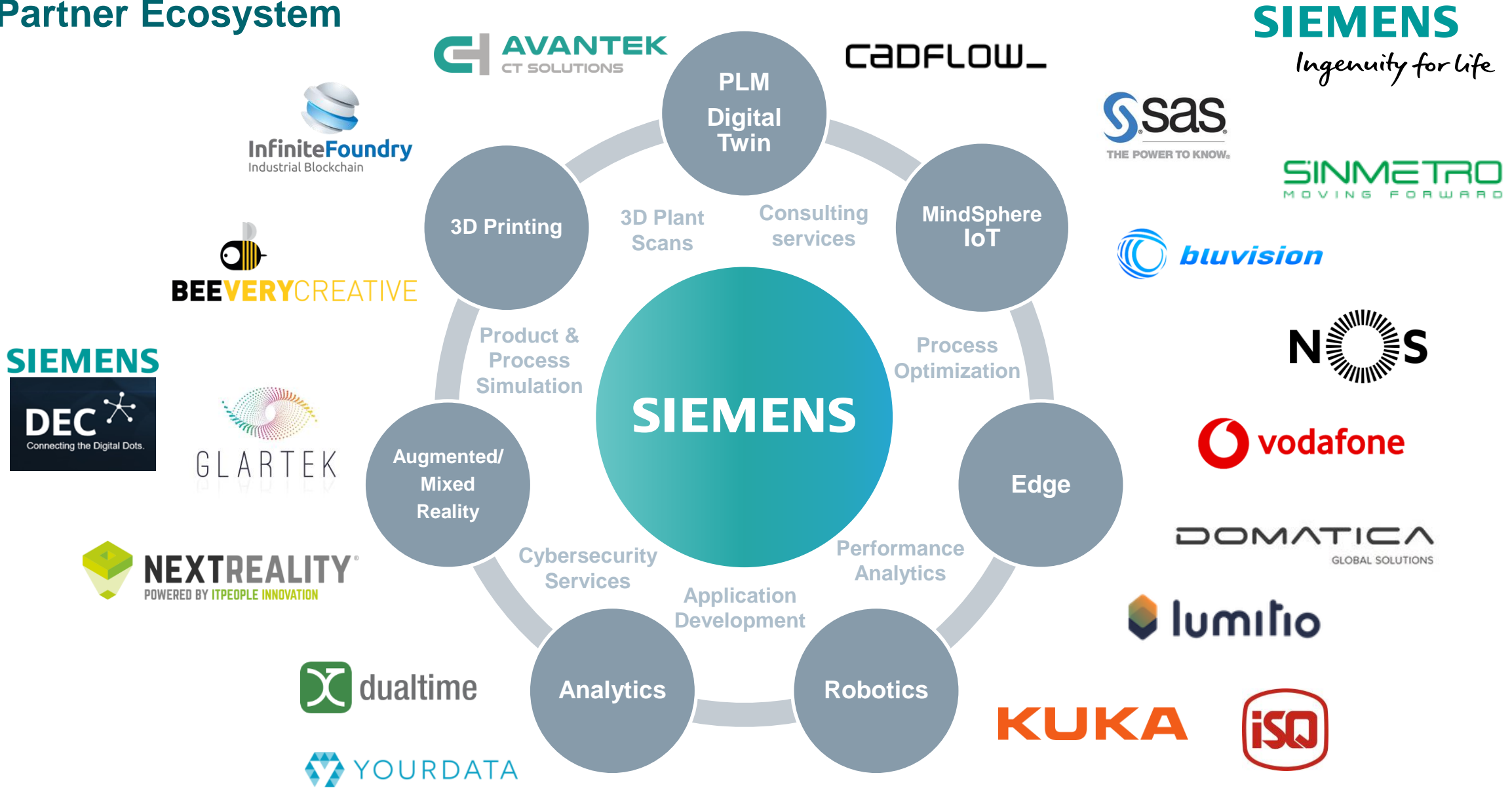
IOT | Edge | Simulation
AR | VR | XR

Application Development |
Analytics (MindSphere)

Industrial Consulting &
Plant Services



Partner Ecosystem



iExperience Center 4.0 Locations

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Universidade de Aveiro *

Porto
SIEMENS

Aveiro

Leiria

Lisboa
SIEMENS



Freixoiro



Alfragide



Politécnico Leiria *

Thank you

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[siemens.com/digitalization](https://www.siemens.com/digitalization)

mindsphere.io

Industrial Circuit Remote services tool

Industrial Circuit

Realtime collaboration platform (audio/video/docs...)



Siemens platform for video, communications and document /whiteboard sharing, applicable to Remote Support and Service scenarios, and highly skilled technicians can provide timely and capable remote support to unskilled technicians located at the customer's premises, wherever they are, to perform dedicated tasks where this kind of support manifests itself as added value.

With this approach, skilled technicians will be able to respond to various geographically dispersed services, with their 'hands on the ground' other technicians with less expertise (and cost per hour).

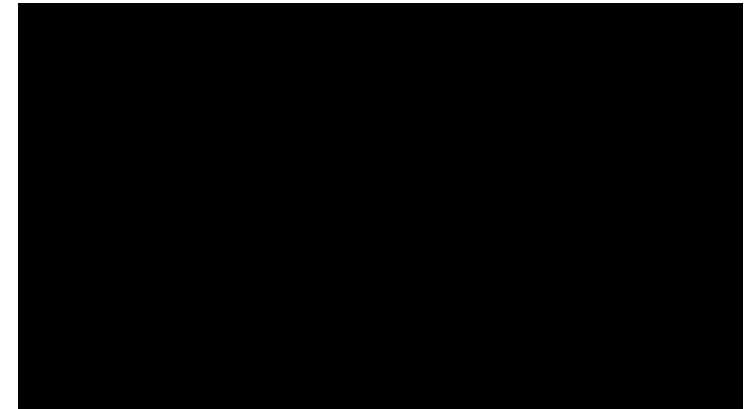
Benefits:

- Higher video resolution and bandwidth (quality of service)
- Easy to use interface ("glove friendly")
- Whiteboard and joint photo annotation
- Better collaboration with non-Siemens users

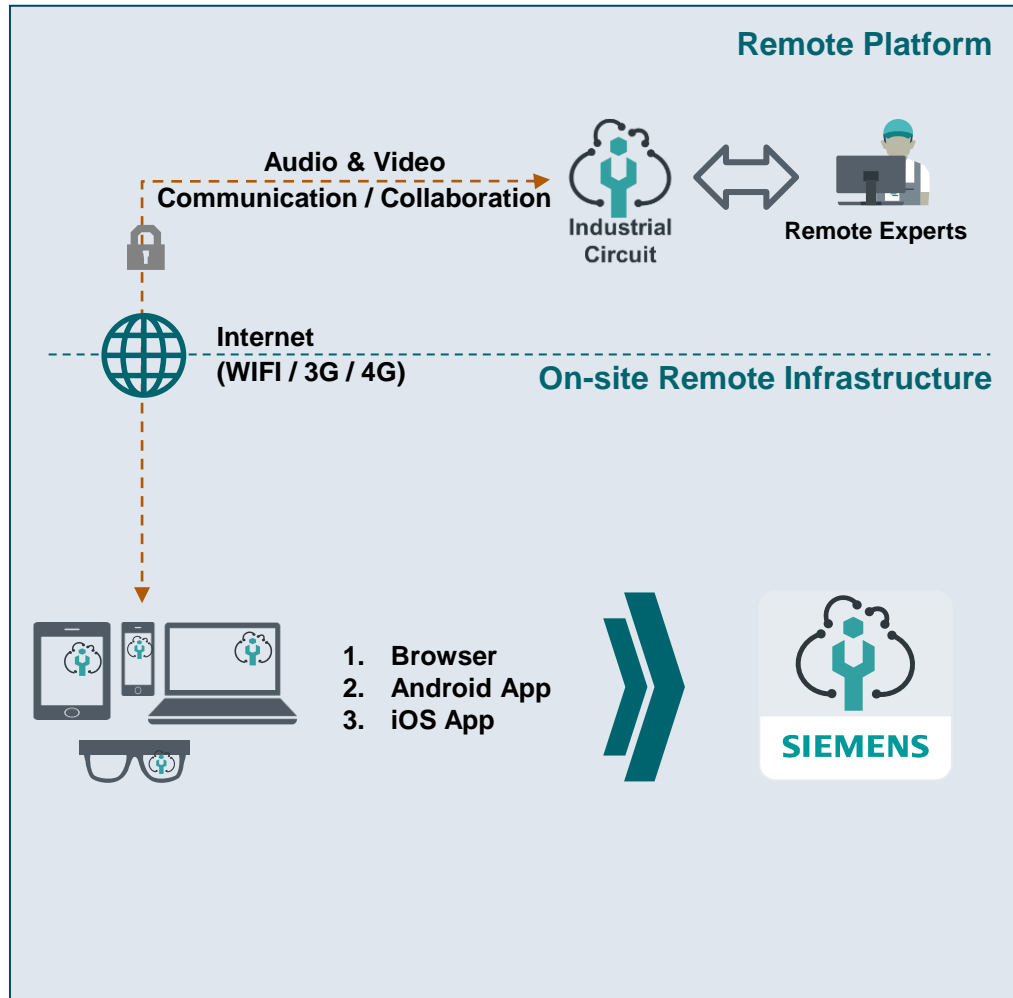
Applications:

- Remote Client Product Acceptance Tests
- Expert Support and Advanced Troubleshooting for Field Service Engineers
- Expert support and enhanced troubleshooting for shop floor workers

Available for IOS, Android e RealWear HMT-1Smart Glasses



Connecting People – Industrial Circuit Application Description



Audio & Video Collaboration – Industrial Circuit

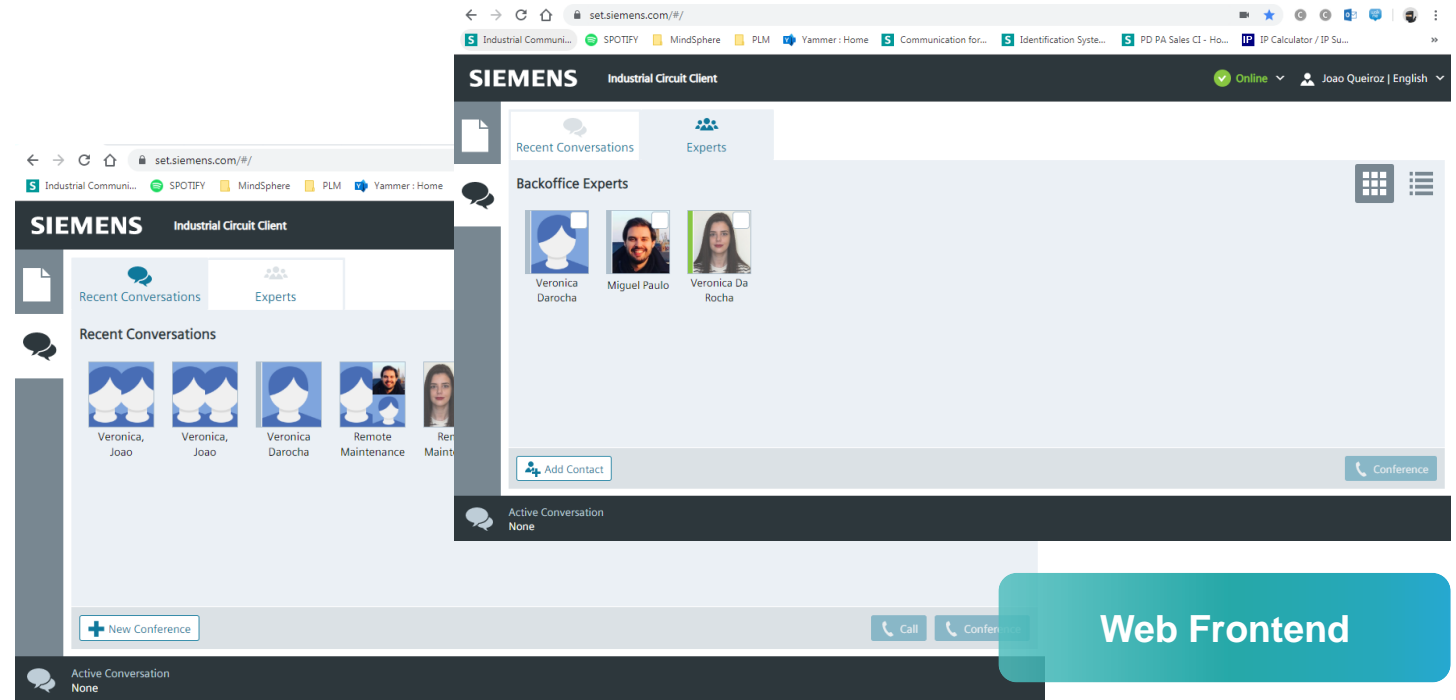
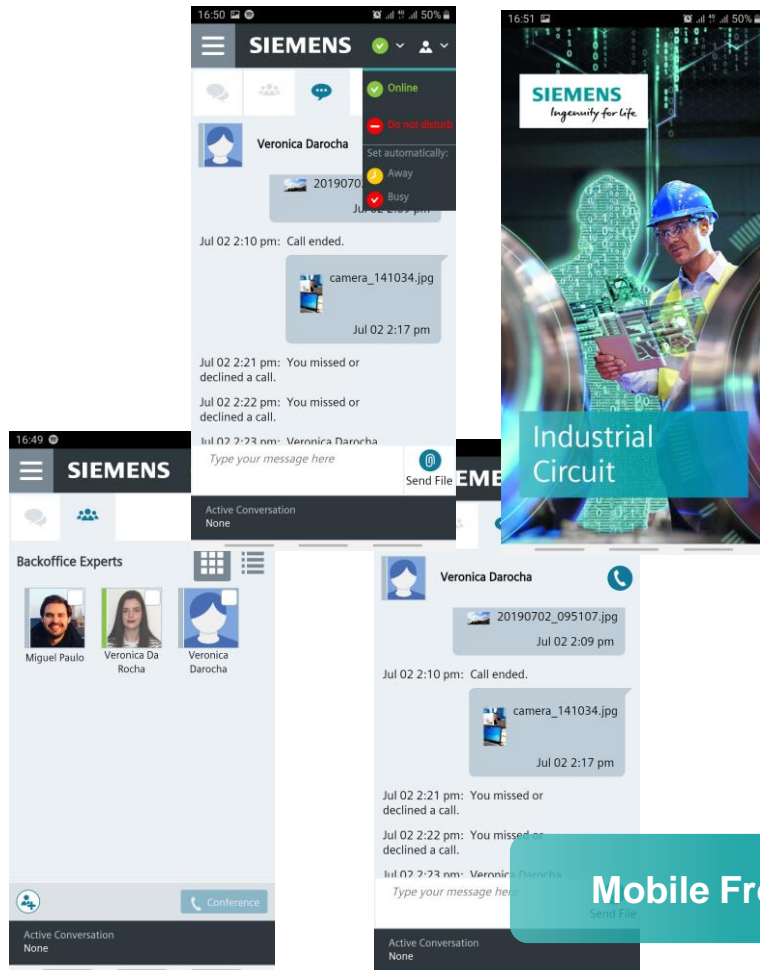
Industrial Circuit enables workers in non-Siemens locations to collaborate with experts around the globe. To enable industrial use, the dedicated client provides additional features which are not part of Siemens standard Circuit. Industrial Circuit drives efficiency, enables new business opportunities and increases customer satisfaction bringing customers and experts closer together.

This solution is suitable for transparent and efficient audio and video collaboration with Siemens Remote Experts and non-Siemens employees.

Value add:

- Transmit high resolution images and videos
- Use video pointer, annotations and whiteboards for illustration
- Enhanced collaboration with Siemens Remote Experts and non-Siemens employees in conversations
- Communicate via hands-free devices (e.g. smart glasses)
- Easy-to-use also in rugged environments

Connecting People – Industrial Circuit Application Demo



Industrial Circuit intranet

<https://intranet.for.siemens.com/wll/0015/en/de/IndustrialCircuit/Pages/Default.aspx>

<https://www.set.siemens.com/#/>