MindSphere
The cloud-based, open IoT operating system on MS Azure

Unrestricted © Siemens AG 2018

Realize innovation.
IoT is a catalyst for competitive advantage

1. Entry point to digitalization

2. Foundation for development of applications

3. Multiplier for digital services and new business
Digitalization adds tremendous value to Siemens business thanks to the integration of Siemens domain know-how.
Digital Enterprise Suite
Siemens’ answer to customer requirements

- MindSphere
- Totally Integrated Automation
- Product Lifecycle Management
- Manufacturing Operations Management
- Teamcenter

Cloud-based, open IoT ecosystem: MindSphere
MindSphere enables the creation of a powerful Digital Twin through the entire value chain

Collaboration platform: Teamcenter

Digital Twin of the product
Digital Twin of the production
Digital Twin of the performance

feed back insights to continuously optimize product and production
MindSphere – The cloud-based, open IoT operating system

MindApps
Powerful industry applications and digital services for asset transparency and analytical insights. Partners and customers can create MindSphere applications.

MindSphere
Open Platform as a Service (PaaS) for scalable, global IoT connectivity and application development with native cloud accessibility.

MindConnect
Connecting Products, Plants, Systems, Machines, Enterprise applications and Legacy databases with secure plug and play connection of Siemens and third-party products and equipment.
MindSphere – Key capabilities of the IoT operating system
Challenges
• Large Population of Cooling Device Control Cabinets
• Timely and Efficient Operations Data Collection and Analysis
• Inconsistent Maintenance Schedules
• Uniform Visibility of Enclosure Performance Status

Transformation Results
• Virtual Production Hall / Shop Floor Layouts
• Aggregated Status and Performance Rollup and Drill-Down of all Devices
• On-Demand Visual Device and Enclosure Status – Temperature, Voltage, Power Supplies,….

Value
• Improved Predictive Maintenance Management Driving Higher Quality, Efficiency, and Services Offerings
• Real-Time Status Monitoring and KPIs with MindSphere
Challenges
• Multiple Plant Facilities with Silo Data
• Number of Disparate Legacy Systems
• Different Proprietary Protocols
• Realizing World-Class Processes and Practices

Transformation Results
• Industry Standard Integrations and Data Collections into MindSphere Platform
• Common Portal across all Manufacturing Facilities for Ease-of-Use and Repeatability
• Global Cloud-Based Data Access
• Visual Data Analytics Dashboard
• Drill-Down into Outlier Results – Failure, Idle, Process Defects, Reduced Speed ... Yield...

Value
• Monitor OEE of Each Facility, Plant and Line
• Operations Transparency
• New Production and Process Insights Driving Unified Best Practices for Higher Performance
• Higher Quality and Resource Optimization
Challenges

- Stadium Infrastructure Relies on a Great Number of Moving Parts
- Reliable Power Supply and Lightning Protection

Transformation Results

- Automated Facilities Management for Uptime and Availability
- Intelligent Decision Support for Building Automation, Fire Protection and Security
- Aggregated Data Collection on MindSphere IOT Open Platform
- Real Time Monitoring and Visual Status with Performance Rollup and Drill-Down

Value

- Improve Maintenance Efficiency, Safety and Reduce Costs
- Power Supply Sustainability and Resiliency
- Increased Fan & Player Experience
MindSphere with growing open partner ecosystem

Example Partners
- Infosys
- Atos
- Fujitsu
- HCL
- IBM Watson
- Siemens
- Microsoft
- Azure
- Deloitte
- Evosoft
- McKinsey & Company
- TATA Consultancy Services
- Senseye
- Intel
- OMNETRIC Group
- Tata Consultancy Services

Partner Roles
- Consulting/Strategy Partners
- Connectivity Developer
- Application Developer
- Technology Provider
- System Integrator
- IaaS Provider
MindSphere and MS Azure – A strong Combination
Available 2018

MindSphere on MS Azure

Strong partnership to proliferate Industrial IoT
Microsoft Azure: The leader in B2B Cloud
Siemens: The leader in Industrial Digitalization
Unbeatable joint value add for our customers
Thank you for your attention!