IoT – The internet of your things
Aufbau einer Ende-zu-Ende IoT Lösung – Key Learnings
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Agenda

• Microsoft Vision
• Digital Business Transformation
• Microsoft IoT reference architecture
• Develop IoT projects
• Reference Demo
• Q&A
“Our industry does not respect tradition — it only respects innovation.”

Satya Nadella
Digital Business Transformation with IoT

Customers transforming their business by building their Systems of Intelligence and leveraging Advanced Workloads

**Engage your customers**

- Generate optimization across value chain
- Improve employee safety
- Improve maintenance efficiency
- R&D Insights
- Improve quality and SLAs
- Reduce Downtime
- Reduce rejection and optimize energy usage
- Use your own insights to improve products

**Empower your employees**

- Reduce churn rate
- F&E Insights
- Faster problem identification & solving
- Increase maintenance efficiency
- Use customer insights
- R&D Insights
- Extend product range

**Optimize Your operations**

- Reduce operation costs
- Inspire employees for new technologies

**Transform your products**

- Reduce operation costs
- Improve building efficiency

**Connected Factory**

- Key Stakeholder: Operations, R&D

**Smart Products**

- Key Stakeholder: R&D, Sales, Services

**Intelligent buildings and city**

- Key Stakeholder: Facility, R&D
Broad portfolio of cloud services

**Security & Management**
- Azure Active Directory
- Azure AD B2C
- Multi-Factor Authentication
- Automation
- Scheduler
- Key Vault
- Store/Marketplace
- VM Image Gallery & VM Depot

**Services Compute**
- Cloud Services
- Service Fabric
- Batch
- RemoteApps

**Web and Mobile**
- Web Apps
- API Apps
- Mobile Apps
- Logic Apps
- Notification Hubs

**Integration**
- API Management
- BizTalk Services
- Hybrid Connections
- Service Bus

**Developer Services**
- Visual Studio
- Azure SDK
- VS Online
- App Insights

**Media & CDN**
- Media Services
- Content Delivery Network (CDN)

**Collaboration**
- Office 365, PowerBI

**Communication**
- Skype for Business

**CRM/xRM**
- CRM Online

**Data**
- SQL Database
- Data Warehouse
- DocumentDB
- Redis Cache
- Azure Search
- Storage Tables

**Analytics & IoT**
- HDInsight
- Machine Learning
- Stream Analytics
- Lake Data
- Data Factory
- Event Hubs
- Data Catalog
- IoT Hub
- Mobile Engagement

**Hybrid Operations**
- Azure AD Health Monitoring
- AD Privileged Identity Management
- Domain Services
- Backup
- Operational Analytics
- Import/Export
- Azure Site Recovery
- StorSimple

**OS/Server Compute**
- Virtual Machines
- Container Service

**Storage**
- BLOB Storage
- Azure Files
- Premium Storage

**Networking**
- Virtual Network
- VM Load Balancer
- DNS
- Express Route
- Traffic Manager
- VPN Gateway
- HTTP Load Balancer
Azure IoT Reference Architecture

Device Connectivity and Management

- IP capable devices
- Low power devices

Existing IoT devices

Gateway

IoT Edge

Data Path

Optional solution component

Azure IoT solution component

Data Processing, Analytics and Management

- Stream Processors
- Storage
- Device Metadata
- Analytics & Machine Learning
- App Backend

Business Connectivity

- Business systems
- Personal mobile devices

Intelligence and Interaction* (HoloLens, Cortana, Oxford, etc)

Device provisioning

Optional solution component

Azure IoT solution component
Start small, be agile, go fast >>>

...and realize value while you move
Microsoft Trust Center

Security – we keep your customer data safe

Privacy: you own and control your data

Transparency: you know how your data is stored and accessed, and how we help secure it

Compliance: We conform to global standards

[Links to Microsoft Trust Center]
What Microsoft brings to the table

- Architecture design session
- Azure Everywhere workshops delivered by Microsoft partners
- Microsoft IoT Lab
- Hands-on experience with Hackathon
- Business Case development support
- PR and Marketing cooperation