LET THE TRANSFORMATION BEGIN
Why you need an IoT strategy

By 2018, 33% of all industry leaders will be disrupted by digitally enabled competitors.

“Digital is the main reason just over half of the companies on the Fortune 500 have disappeared since the year 2000.”

Pierre Nanterme
CEO of Accenture

Source: IDC - IoT and Digital Transformation: A Tale of Four Industries
IoT business value

- Operational Efficiency
- Customer Experience
- Mitigate Risks (Safety)
- New Revenue Models
Falling costs and modern technologies are fueling IoT solutions

It is an ecosystem where sensors, devices and equipment are connected to a network and can transmit and receive data for tracking, analysis and action.

Sensor Cost
RFID sensor cost fell 40% to $.10 last year

Power Efficiencies
Solid state batteries have 10x less leakage and last 4x longer

Rise of Cloud
WW spending on public cloud to grow 19.4% to 2019

Wireless Growth
1.2B LTE subscriptions growing 150M/quarter

Ubiquity of Mobility
There are 3.2B mobile subscribers and 2.2M Android apps

Big Data/ Analytics
Big Data software sales are expected to grow 9% year on year
Unlock the potential of the unconnected by bridging IT and OT

Dell EMC brings 30+ years of IT heritage, 15 years of customizing Dell technology for OT environments through OEM, and 50+ partners offering OT expertise.
The challenges and risks can seem overwhelming

Where do I start?

Security & data governance
90% of all IT networks will have an IoT-based security breach

Confusion on use cases, ROI
*Tops Gartner Hype Cycle*³

Diversity of niche providers & solutions
*300+ IoT Platforms*

IT and OT partnership
2/3 of all IoT projects managed outside IT¹

Data volume & analytics complexity
*Worldwide data will reach 44 zettabytes by 2020 growing from 4.4ZB in 2013*²

Lack of data protocol standards
*~50 IoT Alliances and Consortia*

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1 - Source: TECHnalysis Research’s Enterprise IoT survey
2 - Source: The EMC Digital Universe study, created in conjunction with IDC
3 - Source: Gartner Hype Cycle for the Internet of Things, 2016, Alfonso Velosa | W. Roy Schulte | Benoit J. Lheureux, 14 July 2016
IoT practical approach

Industry’s broadest infrastructure portfolio

Curated technology and services partner program

Proven use-case specific solution blueprints
The leading infrastructure provider for enterprise IoT
# The leading infrastructure provider for enterprise IoT

<table>
<thead>
<tr>
<th>EDGE/FIELD</th>
<th>FOG</th>
<th>CLOUD</th>
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<tr>
<td><strong>Embedded</strong></td>
<td><strong>Gateways</strong></td>
<td><strong>On-Premise Appliances</strong></td>
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<tr>
<td>Embedded Box PCs to connect unconnected machines &amp; Software to manage intelligent devices</td>
<td>Edge Gateways to aggregate data from sensors and equipment, complete local analytics for real-time decision making, and securing both connected devices and northbound data</td>
<td>Edge-optimized converged infrastructure, as well as standalone computing, networking, and storage appliances for on-site real-time big data processing, analysis, and store &amp; forward</td>
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## Manageability:
Asset management, provisioning, and orchestration

## Security:
Identity, Privacy, Governance, Risk Control, and Compliance

## IoT Solutions Partner Program:
Analytics and Integration

## Global Support, Deployment, & Financing
Value of the Fog

Adding compute at the Edge offers **3 advantages**

- Real-time decision making through Edge Analytics
- Reduced data transfer cost through compression & cleansing
- Improved security and data continuity through local operations
Value of the Cloud/Datacenter

Which complements existing cloud/datacenter advantages

- Big Data analytics to get to greater insights for your business
- IT system integration to reduce data silos
- Data continuity improved on a broad scale
Get to market faster with Dell’s curated partners

Dell IoT HW/SW Ingredients

Technology Partners
- Vertical Expertise
- Platforms
- Analytics
- Data Visualization
- Wide Area Connectivity
- Security

Vertical Solutions

Services Partners
- Last Mile Delivery
- Solution Support
- System Integration
- Deployment
- Project Design
- Procuring Accessory
Accelerating deployments with Blueprints

Dell Technologies infrastructure offering + Curated partner software and hardware = Validated use-case specific solutions

Realize ROI quicker through validated solutions
Reduce deployment risks with actionable best practice guides
Predictive maintenance

Real-time quality control

Factory Optimization
Transportation/logistics

Fleet management

Cold Chain Logistics

Supply Chain Management
Energy

Building automation

Oil & gas asset management

Utilities smartgrid
We are turning the promise of the IoT into reality for our customers

Smart Manufacturing
ALPS

Smart Buildings
KMC

Oil and Gas
Petroflow

Energy Management
IMS Evolve
Building Management

Majid Al Futtaim - The regions leading mall developer recognised the importance of implementing an environment of open protocol systems across 18 malls.

Dell and ISV/SI Partner provides a fully integrated solution which seamlessly allows for technical upgrades and a single integrated system.

The challenges;
- Numerous BMS/IBMS closed protocol systems
- Stand alone independent chiller management system
- Multiple Vendors
- Metering and monitoring
- Locked Lighting System
- Lack of naming convention and prioritisation.
Smart Petrol Station

One of the largest fuel stations founded in the UAE in 1993, pumping hundreds of thousands of litres of fuel a day across the Emirates.

The challenges;
• Many siloed systems across the forecourt
• Needed to integrate their complete forecourt to a centralized platform
• High water and energy consumption per station
• Each station operated independently – no centralized control
• Legacy systems led to inefficiency
Discover what’s in the Dell IoT Lab Limerick
Dell.com/iot

Dell.com/iotedge