Open partnerships for successful Smart Manufacturing Solutions

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Digital Transformation - It's about a new mindset
Stakeholders are key to successful IoT solutions
Compute is **Shifting to the Edge**

- **Mainframe**: Centralized 1960-1970
- **Client-Server**: Distributed 1980-2000
- **Mobile-Cloud**: Centralized 2005-2020
- **Edge Intelligence**: Distributed 2020-
The IoT is **Inherently Fragmented**

<table>
<thead>
<tr>
<th>Domain Expertise</th>
<th>Connectivity</th>
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</thead>
<tbody>
<tr>
<td>Analytics</td>
<td><img src="image1" alt="EdgeX logos" /></td>
</tr>
<tr>
<td>Database</td>
<td><img src="image2" alt="Various IoT standards" /></td>
</tr>
<tr>
<td>Security</td>
<td><img src="image3" alt="Java, Python, JavaScript" /></td>
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<tr>
<td>System Mgmt</td>
<td><img src="image4" alt="Operating systems" /></td>
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<tr>
<td>Services</td>
<td><img src="image5" alt="IoT standards logos" /></td>
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Many different tools and skill sets are required to address myriad industry verticals and use cases. IoT standards work is progressing, but there will always be widespread fragmentation in connectivity.

Variable preferences for coding and application environments among developers. No line of sight to consistent choices across Linux, Windows and embedded/RTOS variants.

*Source: EdgeX Foundry*
A paralyzing number of platforms

Source: Matt Turck, Demi Obayomi and FirstMark Capital
Industry-level interoperability and Open Standards

Best Practices, Reference Architecture, Testbeds
Curated partnerships for domain expertise

Technology
Analytics
Data Visualization
Wide Area Connectivity
Security
Sensors

2017 and 2018 IoT Partner
Ecosystem of the Year

Services
Domain Expertise
Software Development
System Integration
Deployment
Field Support

Curated partnerships for domain expertise
Operational Efficiency
- Asset Management
- Optimize Inventory
- Automated Process & Quality Control
- PLM / Supply Chain

Connected Machines
- Predictive Maintenance
- Remote Management
- Optimize Asset Utility

Green Facilities
- Energy Efficiency
- Global Facility Insight
- Lower Emissions
- Security & Access Control

Productive Work Force
- Improved Safety
- Remote Management
- Increase Efficiency
- Compliance

Digital Manufacturing - Enablement & productivity for transformation
Dell Technologies IoT Engagement Model

- **Discovery**: ~1-4 hrs
- **Workshop**: ~1 day to 4 wks
- **PoC / Pilot Design**: ~2 to 4 wks
- **PoC/ Pilot Execution**: ~6 wks to 6 mos
- **Production Scale**: Ongoing

Partners (e.g. SI, SFI)
Thank you

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