## SOLUTION BUILDERS

Designing Resilient Solutions for an Operational Edge

Satisfy emerging edge application requirements while becoming more competitive and generate more revenue helping customers support greater automation, connectivity, and protection of data, systems, and processes.

The Edge is a Continuum of Several Domains

OT (Operational Technology) environments demand technology platforms that are optimized for the

software-defined edge and its unique requirements and considerations.

In-field computing spans a variety of different environments and hardware platform types from the near

edge closer to IT infrastructure to the far/rugged edge where more resilient solutions are needed.

The OT/Distributed Edge IT Edge

Edge Cloud & Multi-Cloud Field-Grade Micro Data Computing **Endpoints Systems** Compute Centers **Segments** Operational/ Servers/HCI/ **Tactical Platforms** Thin Clients **Appliances** Enterprise Storage/Data Rugged Appliances **Hardware** Gateways Servers/HCI **Platforms Protection** Rugged Laptops & Storage & HCI **Industrial PCs Modular Data Tablets** & Workstations Center



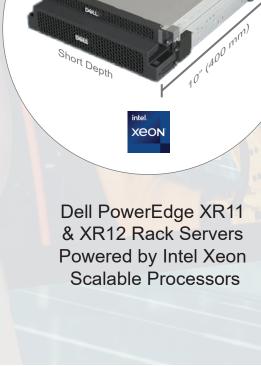












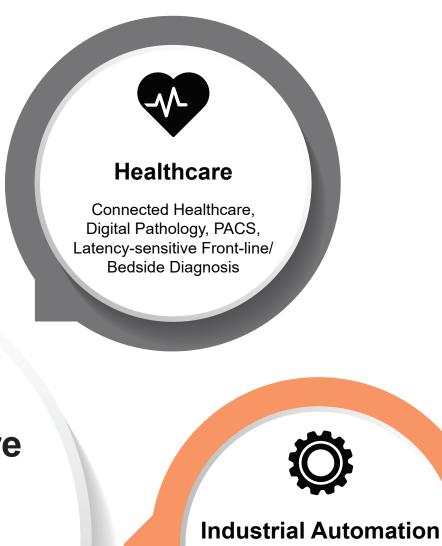






5G, embedded AI, containers,

virtualization, and HCI.





Rugged Hardware Components &





Autonomous/Smart

Manufacturing, Cloud-based

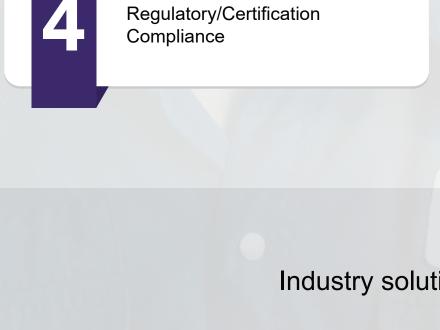
SCADA, Connected Supply

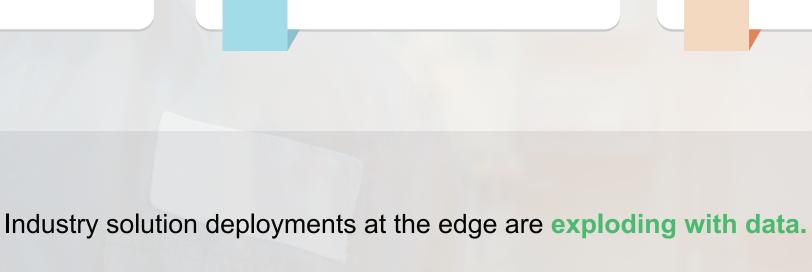
Chain, Robotics

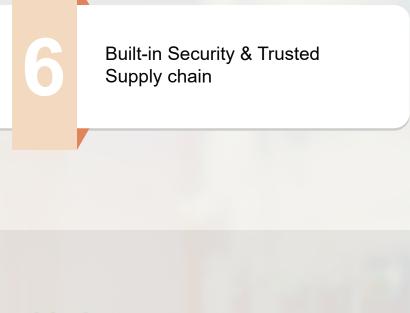
## Hyperconverged Infrastructure & Systems (temperature-extended Open Device Management Software-defined Architectures support, environmental Platforms/Services protection, etc.)

**Architectures** 

Repeatable & Scalable









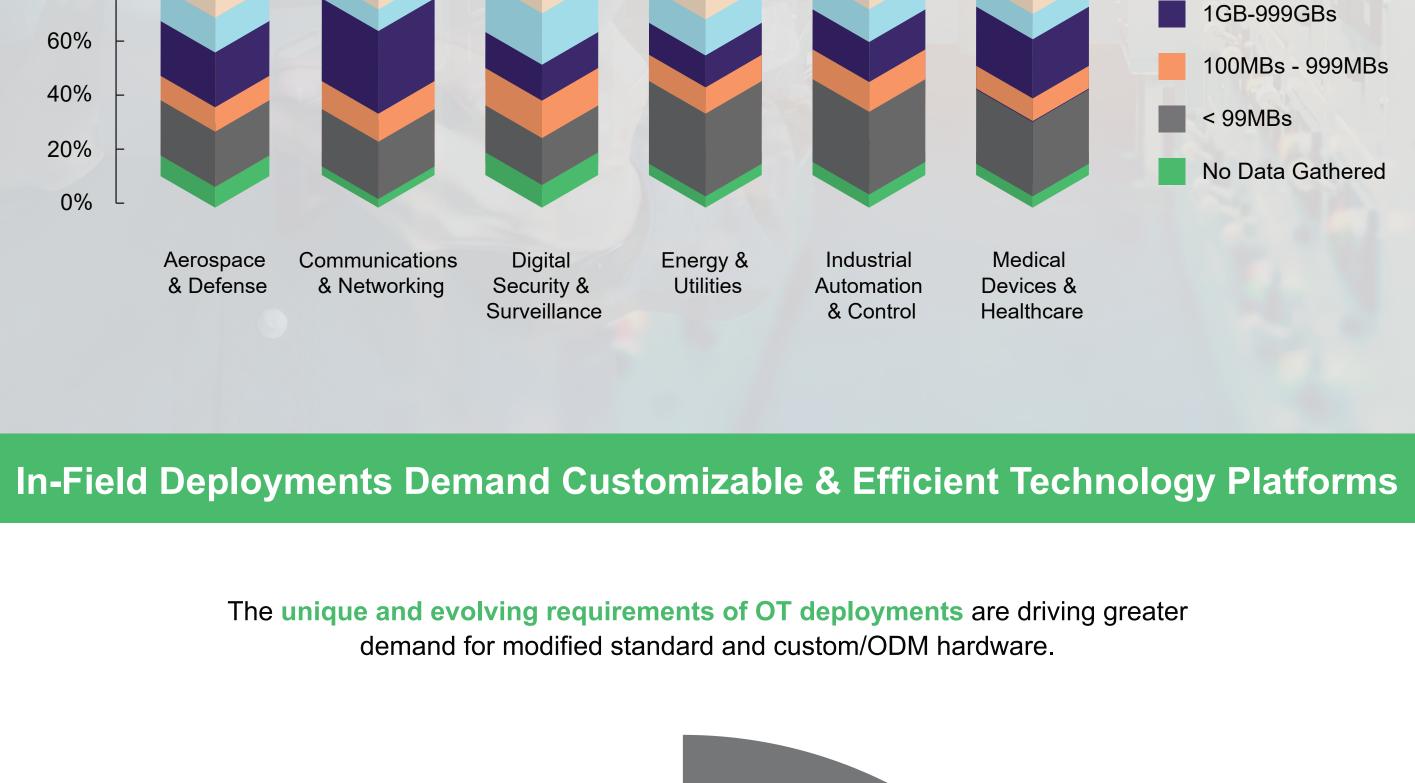
100%

80%





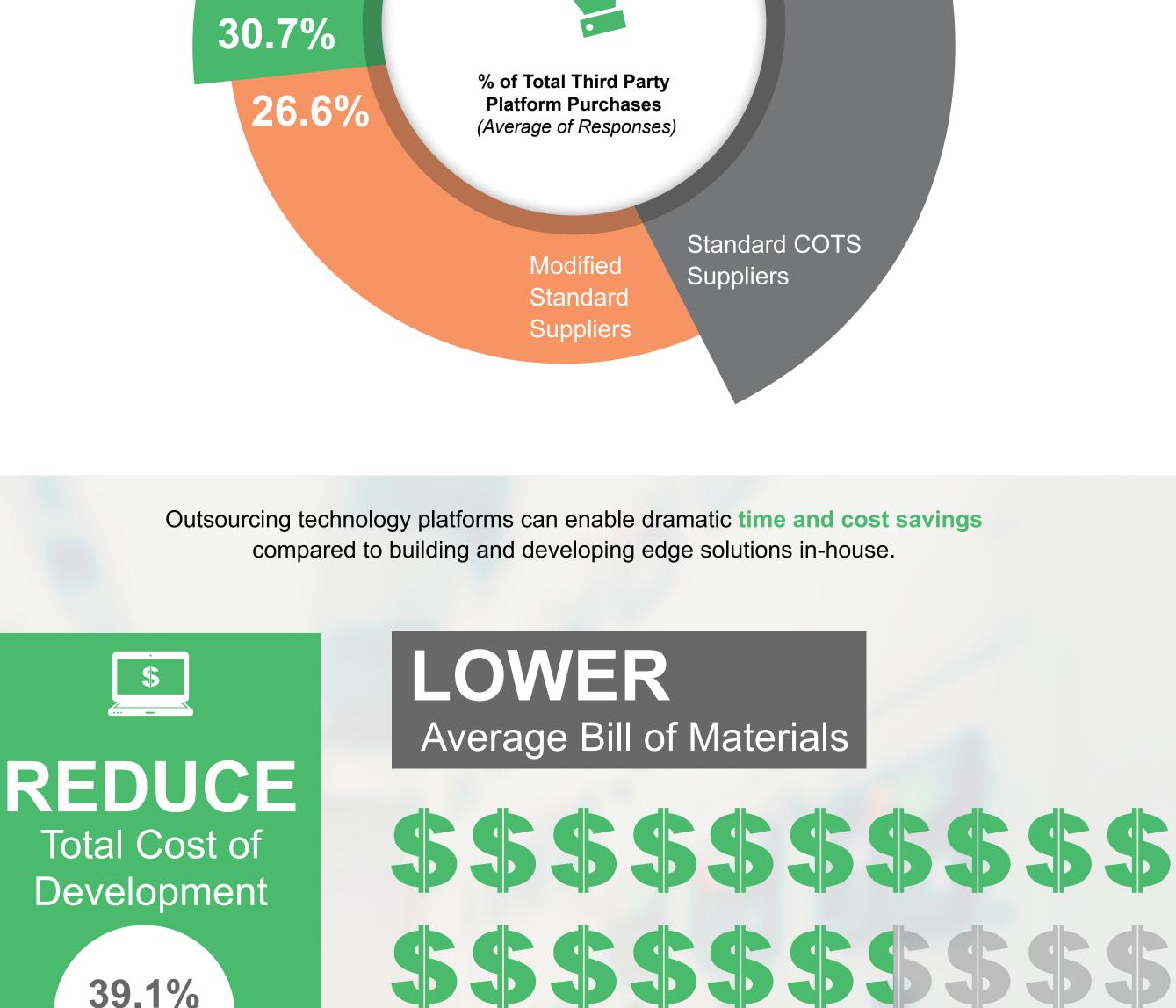
> 999GBs



42.7%

Custom/ODM

Suppliers

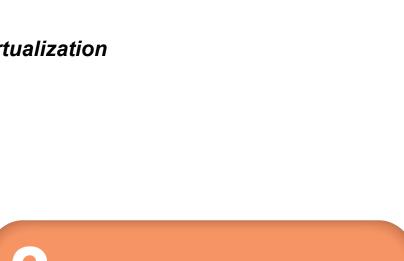


36.5% Savings

SAVE TIME on Project Length

39.1%

Savings



Extending Legacy Embedded/Edge Technologies for IoT

Commercial Security-

enhanced Operating System



Leading Overall Challenges in Developing IoT/Edge Solutions

(Percent of Respondents; Top 10 Results Shown)

**Reducing Cost** 

Lack of Manpower/Technical Skills

Specifying & Understanding Customer Requirements

Cloud/Datacenter Integration

Coordination w/ External Solution Providers or ISVs

Improving Performance

**Enabling Greater Security** 

Lack of Mature Commercial Development Solutions

10.9%

10.6%

9.6%

8.0%

8.0%

7.7%

7.0%

6.2%

5.4%

5.4%

Minimizing Connectivity Expenses Cyber Security & Cyber-Resilience are Critical to Resilient OT/Edge Platforms

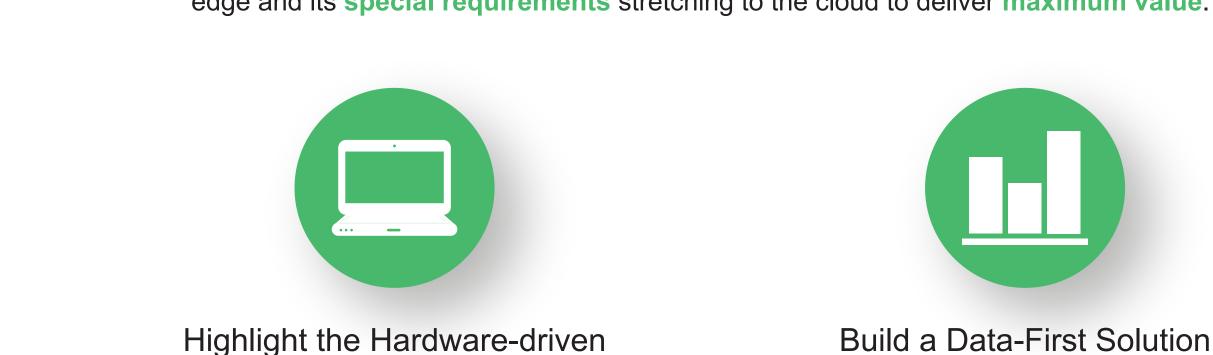
Data and systems protection for intelligent systems ranges from embedded hardware/software deployed in the

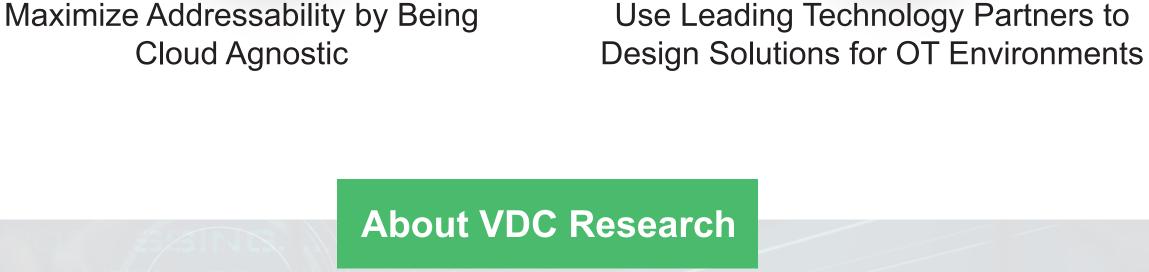
field up into the cloud environment to prevent a wide range of detrimental effects from exposed vulnerabilities.

Types of Embedded Security Solutions Used in Current Projects (Percent of Respondents; Ranked 1-5)



**VDC's View** 





Global survey of over 700 product dev professionals **VDC** Research

Researching product dev technologies for 50 years

intel

10.3% Savings Software-Defined Edge & OT Clouds Offer Many Benefits Virtualization and containers have emerged as effective technologies for minimizing application complexity and enabling hybrid cloud architectures. Leading Factors Driving the Adoption/Use of Containers & Virtualization (Percent of Respondents; Ranked 1-5) **CONTAINERS** System Security **Development Flexibility** Deployment/OTA Updates Application Isolation/ **Application Portability Across** Heterogeneous Architectures Scalability **VIRTUALIZATION** Multicore Architecture System Security **IP Protection Application Portability** Multiple OS on Single Core Solution Builders Have to Make New Architecture Decisions The standalone systems or appliances of the past still fill an important role, but face a number of limitations compared to hyperconverged infrastructure for enabling resilient edge solutions.

> Edge solution providers need optimized technology platforms for the software-defined edge and its special requirements stretching to the cloud to deliver maximum value.

Differentiation of Your Edge Solutions

**Protected Execution** 

**Environment** 

Use Leading Technology Partners to

Architecture

**D¢LL**Technologies