The Power of Convergence:
The Dell EMC Converged and Hyper Converged Portfolio

Norbert E. Lamenca, Jr.  
MDC Territory Manager - NOLA

@nlamenca
Key Takeaways

1. Converged (CI) and Hyper-converged infrastructure (HCI) are the fastest and simplest way to modernize the data center.

2. CI and HCI deliver the business agility, scalability, and simplicity needed to stay competitive.

3. Convergence will continue to be a catalyst for transformation – don’t get left behind!
¿Por qué es necesario transformar?

¿Qué influencias del mercado están impulsando el cambio?
Generación Y (Millennials)
¿Cómo ven el mundo?

Controladores de mercado
Cómo socializan
Cómo encuentran un compañero
Cómo banca
Cómo viajan y se aventuran
Cómo compran

Alibaba Group

MR PORTER

eBay

Amazon

Asos

Etsy

Walmart

Nasty Gal

Zappos
Cómo colaboran
Cómo prefieren trabajar
Sponsored by Dell EMC and Intel April 2018
IT Transformation Maturity Study of 4,000 IT Decision Makers

Stage 1 - Legacy
Adoption of Modern Data Center Tech
6%

Stage 2 - Emerging
Adoption of Modern IT Processes
45%

Stage 3 - Evolving
43%

Stage 4 - Transformed
Focus on Business and IT Alignment
6%
81% agree that if they do not embrace **IT TRANSFORMATION**, their firm will no longer be **COMPETITIVE** in their market (10% increase vs. 2017)
Transformed organizations...

8x more likely to be cost competitive vs. public cloud

10x more likely to deploy apps ahead of schedule

2x more likely to beat revenue targets

“98% of Transformed companies use either converged or hyper-converged infrastructure and 86% report utilizing both.”¹

¹ – ESG Research Insights Brief: The Role of Converged and Hyperconverged Infrastructure in IT Transformation
The promise of IT Transformation

| ✓ | Less costly tech refreshes and risky data migrations |
| ✓ | Easier, less costly to monitor, sustain, and support |
| ✓ | Shorter installation and deployment timelines |
| ✓ | Accelerate path to hybrid cloud |
| ✓ | Operational efficiencies managing storage and app silos |
| ✓ | Avoid bottlenecks, hot spots, and lack of scalability |

CI and HCI can make this a reality
Critical elements of a modern data center

All-Flash  Scale-Out  SW-Defined  Cloud-Enabled  Intelligent  Trusted

Traditional and Cloud-Native Applications

Best of Breed Components

Servers
Storage
Networking
Data Protection

Converged
Hyper-Converged

FASTER  |  SIMPLER  |  LESS RISK
Modernizing with CI and HCI Systems

Deliver consistent benefits and customer value – for every size, and for every workload

- Turnkey experience
- Full lifecycle assurance
- Fully tested and pre-configured
- Simplified management
- Single end-to-end support

APPLIANCES
RACKS
BLOCKS

Powered by Intel® Xeon® Scalable Processors
Dell EMC Industry Leadership

Let's talk about HCI

#1 Hyper-converged and Converged
2017 was a breakout year for HCI

**Customer Adoption**
- HCI usage has more than doubled since 2015

**Market Growth**
- $3.78B over last 12 months | 30% of the overall CS market

**Use HCI for Primary Infrastructure**
- Majority of deployments are in the core data center

**Deploying Mixed Workloads**
- Includes both mission-critical and new modern apps

1. ESG Hyperconverged Infrastructure Trends, July 2017
2. IDC Q4'17 System Tracker, April 2018
3. Topline Research, August 2017

Businesses are modernizing with HCI

HCI has crossed the reliability threshold
# Making it real - Dell EMC’s HCI Portfolio

**Powered by Intel® Xeon® Scalable Processors**

<table>
<thead>
<tr>
<th>Software-defined</th>
<th>High automation</th>
<th>Supports most workloads</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rack-scale</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Easiest and fastest way to stand up a VMware SDDC</td>
<td>When performance and scalability are top priority</td>
<td>Purpose built HCI for Microsoft Azure Stack</td>
</tr>
<tr>
<td>VxRack SDDC</td>
<td>VxRack FLEX</td>
<td>Cloud for Microsoft Azure Stack</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VxRack AS</td>
</tr>
<tr>
<td><strong>Appliance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turnkey appliance with full lifecycle simplification</td>
<td>When hypervisor choice is a requirement</td>
<td>When Microsoft Hyper-V is a requirement</td>
</tr>
<tr>
<td>VxRail</td>
<td>XC Series</td>
<td>XC Series</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ready Node</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For existing lifecycle management processes with VMware vSAN</td>
<td>For hypervisor flexibility with VxFlex OS</td>
<td>For Microsoft Hyper-V on Storage Spaces Direct</td>
</tr>
<tr>
<td>vSAN Ready Node</td>
<td>VxFlex Ready Node</td>
<td>Microsoft Storage Spaces Direct</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ready Node</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VMware</th>
<th>Mixed Hypervisor</th>
<th>Microsoft</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Accelerate IT Transformation with Dell EMC VxRail
Powered by Intel® Xeon® Scalable Processors

73% Faster to deploy¹
46% Lower cost of operations²
619% 5-year ROI¹

ACCELERATES TRANSFORMATION
SEAMLESS INTEGRATION
ONE SINGLE END-TO-END LIFECYCLE SUPPORT
FULLY LOADED SERVICES
HIGHLY CONFIGURABLE

¹ IDC Oct. 2017
² Silverton Consulting, July 2017
#1 Hyper-converged and Converged

Let’s talk about CI
## Making it real - Dell EMC VxBlock 1000

### Industry’s Only All-in-One CI System

<table>
<thead>
<tr>
<th>Unprecedented Technology Choice</th>
<th>Simplified Life Cycle Management</th>
<th>Evergreen Architecture</th>
</tr>
</thead>
</table>

#### Broadest range of market-leading storage arrays powered by Intel® Xeon® Scalable Processors
- Data services optimized for all classes of workloads and price/performance objectives

- Dell EMC PowerMax
- Dell EMC Isilon-Gen 6
- Dell EMC Unity
- Dell EMC VMAX
- Dell EMC XtremIO X2

#### 1000-plus compute server configurations
- CPU and memory options to meet every application price/performance objective

- Cisco UCS Rack Servers
- Cisco UCS Blade Servers

#### Market-leading LAN and SAN switches
- High resource scalability with predictable performance

- Cisco Nexus LAN Switches
- Cisco MDS SAN Switches

#### Broadest suite of integrated data protection solutions
- Protection for critical system and production applications and data

- Dell EMC PowerMax Data Protection Suite

#### Converged management, reporting and orchestration
- Simplifies daily operations for IT transformation

- Converged management, reporting and orchestration

---

*25*
VxBlock 1000 – a new CI generation

Business agility
Right mix of resources and data services for evolving application needs

Data center efficiency
Shared resource pool to maximize utilization, eliminate stranded capacity, and increase ROI

Operational simplicity
An engineered system experience with lifecycle assurance enables innovation

Powered by Intel® Xeon® Scalable Processors
Supporting ecosystem for CI and HCI

Simple | Fast | Efficient

Dell EMC CI and HCI Portfolio

- Deploy & Migrate
- Upgrade & Expand
- Global Support
- Data Protection
- Best Practices
- Consumption Models

Simple  |  Fast  |  Efficient
Seamless data protection integration

HCI Appliances and Rack-scale Systems

- Deployed, managed, and supported as ONE
- Eliminates complexity of build your own
- DPS offers enhanced features such as monitoring and analytics

Powered by Intel® Xeon® Scalable Processors
Be ready to run when your infrastructure is ready

Dell EMC Consulting Services

75% Want people and process help

Day 1 outcomes

- IT works more closely with the business
- Improved end user consumption experience
- Automated delivery of infrastructure services
- Prepared for a cloud operating model

Create service-focused IT processes

Organize IT around HCI and service delivery

Provide IT services that the business wants

* Source: Strategic Buyers Research: Customer Intelligence and Strategy – VCE Office of the CTO, 2016
Accelerate deployment

Efficiently move to production

Increase productivity & reduce downtime

Simplify ongoing operations

Deployment Services

Migration Services

Residency Services

Plus/Premiere Support

Hardware Expansion

Additional Services

Consulting Services
Plan, advise and execute your digital, IT and workforce transformations

Education Services
CI and HCI courses, hands-on labs and certifications
Key Takeaways

1. Converged (CI) and Hyper-converged infrastructure (HCI) are the fastest and simplest way to modernize the data center.

2. CI and HCI deliver the business agility, scalability, and simplicity needed to stay competitive.

3. Convergence will continue to be a catalyst for transformation – don’t get left behind!
QUESTIONS?