MODERNIZE
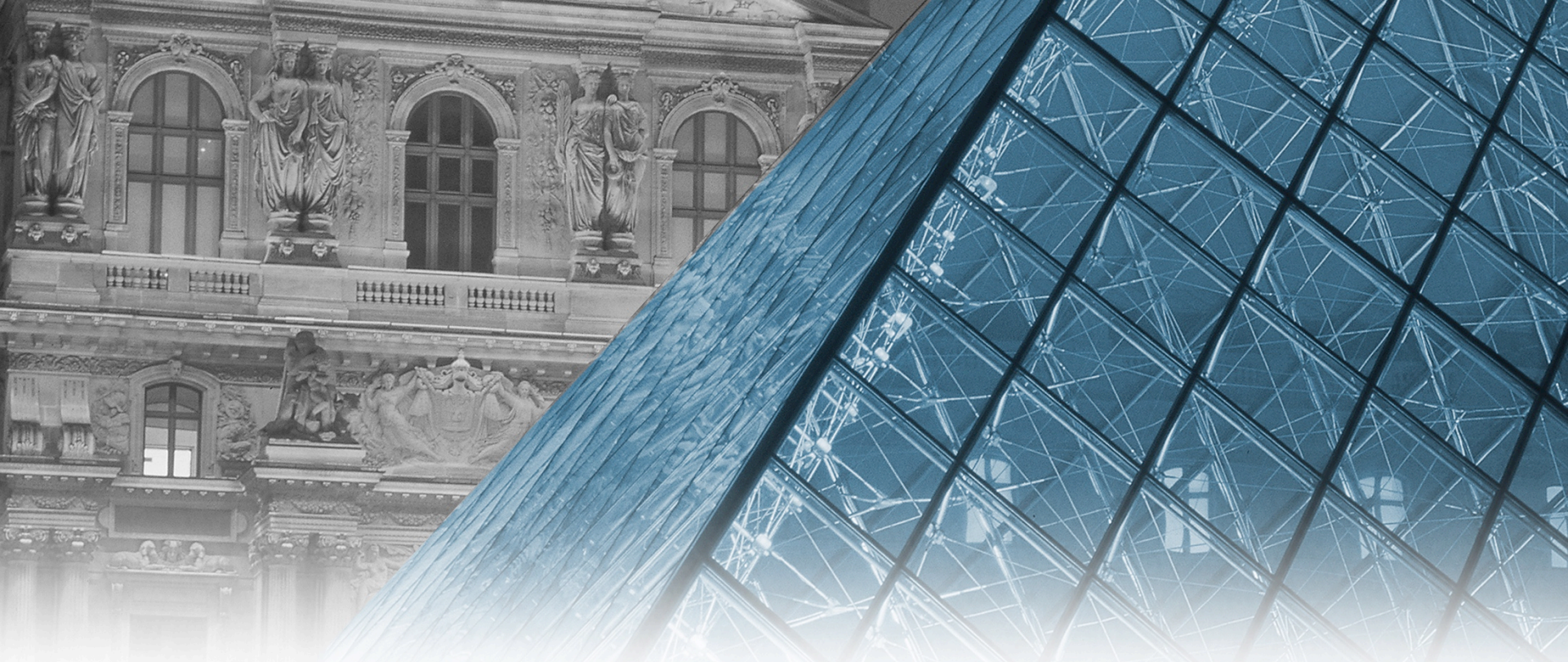
EMC WORLD 2016

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EMC END-USER COMPUTING SOLUTIONS

MARK ORTH, PRASANNA RAJAGOPAL, TONY FOSTER

7 BILLION
PEOPLE

30 BILLION
DEVICES

44ZB
DATA BY 2020

BETTER DESKTOP
CONTROL OR A
BETTER USER
EXPERIENCE?

BUILD IT
OURSELVES IN
18–24 MONTHS?

CAN'T WE USE
WHAT WE
ALREADY HAVE?

HELP.

IDC, The Digital Universe of Opportunities, April, 2014

Gartner Forecast: Hosted Virtual Desktops Worldwide 2014 Update

EMC Converged Platforms | VCE

EMC²

AGENDA

The Challenges

A Modern Data Center

EMC Portfolio of Converged Infrastructure for EUC/VDI

Customer Stories

eHealth Saskatchewan

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BUSINESS CHALLENGES

Distributed desktops across organization

Lesser control over corporate data

Additional staffing requirements and logistical complexity

Added costs of maintaining and upgrading physical desktop hardware

5

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TECHNICAL CHALLENGES

Provide latest desktop hardware for each user in the organization

Less control over installed components in the physical desktop

Maintain desktop hardware for each user

Less secure

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OPTIONS

BUILD YOUR OWN INFRASTRACTURE

MODERN DATA CENTER

EMC Converged Platforms VCE
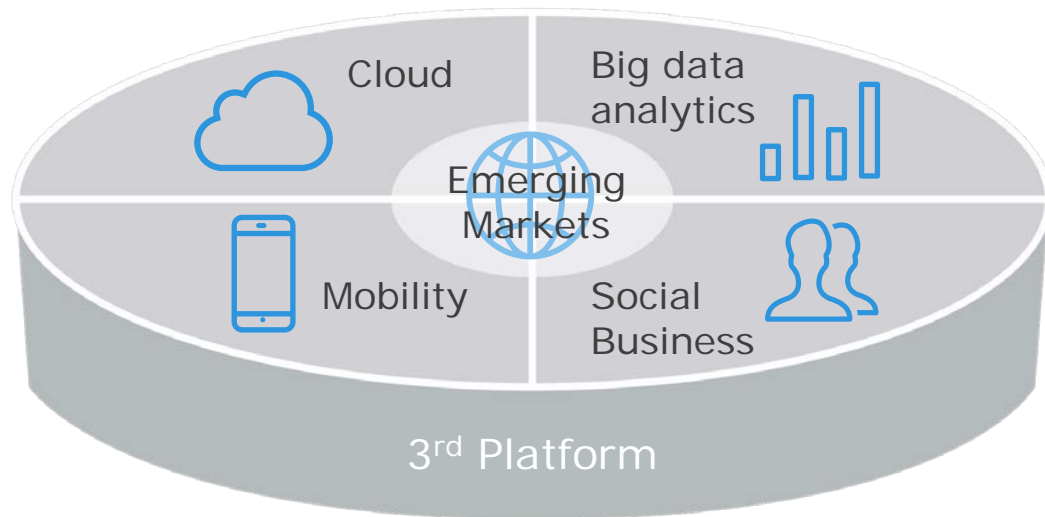
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EMC END-USER COMPUTING

EMC CONVERGED PLATFORM DIVISION

Integrated, tested, and validated hardware and software solutions

Single-call support

Designed for linear scaling and simplified, automated IT management

Built for reliable, consistent user experience

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EMC Converged Platforms

VCE

Industry-leading security architecture

EMC CONVERGED PLATFORMS
DELIVERING THE MODERN DATA CENTER

EMC²

THE EVOLUTION OF CONVERGENCE

Better Results. Lower TCO.

Build Your Own	Reference Architecture	Converged Infrastructure System
Select each component	EMC² DELL CISCO Microsoft vmware CITRIX	VBLOCK
75% of time and budget spent "keeping the lights on"	One-stop shopping for enterprise customers, but not transformative	Fastest deployment. Eliminate many ongoing operational burdens

EMC²

WHY CONVERGED SOLUTIONS?

Converged Platforms

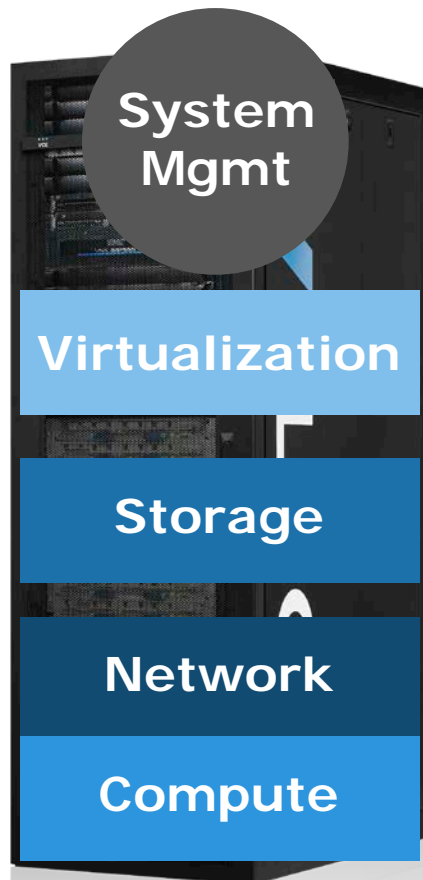Go Beyond Infrastructure

Converged Platform Leadership

"*Solutions (EHC, BDL, EUC) are a higher-order form of the same core brand promise*"
– Chad Sakac

Converged Platform Delivery

Across Rack, Appliances, & Block

BEST OF BREED

System Mgmt

Virtualization → **vm**ware®

Storage → **EMC**²

Network

Compute → CISCO™

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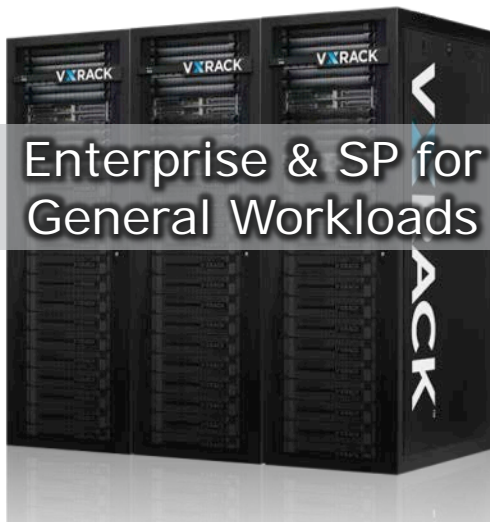# MODERNIZE WITH CONVERGED INFRASTRUCTURE

FUNDAMENTAL SHIFT FROM BUILDING TO BUYING INFRASTRUCTURE

Traditional Workloads

Enterprise & SP for General Workloads

SME and ROBO

BLOCKS

RACKS

APPLIANCES

MODERNIZE WITH CONVERGED INFRASTRUCTURE

PROVEN UNPARALLELED EFFICIENCY, AGILITY AND RELIABILITY

5X MORE APPLICATIONS DEPLOYED

4X FASTER TIME TO MARKET FOR NEW SERVICES

96% REDUCTION IN DOWNTIME

41% LESS TIME ON KEEPING THE LIGHTS ON

BLOCKS

RACKS

APPLIANCES

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VBLOCK SYSTEMS FAMILY

VBLOCK 200
for mid-sized
organization

VBLOCK 300
for mission critical
enterprise apps

VBLOCK 500
First All-Flash Converged Infrastructure

VBLOCK 700
SAP, Oracle, Mixed Workload

VCE VBLOCK SYSTEM 540 SERIES PLATFORM

Next-generation
Cisco Unified
Computing System

EMC XtremIO
all-flash storage

Flexible
Expansion

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WHY VBLOCK® SYSTEM 540 FOR EUC?

ALL FLASH
Performance for VDI Resource Scheduling, High-Availability, Migration

INDUSTRY FIRST

SUPERIOR FLEXIBILITY
Concurrently Deploy & Recompose Thousands of Desktops

OPERATIONAL EXCELLENCE
Superior Desktop Delivery with Low CPU & Storage Utilization at Scale

Maximizing Business Outcomes through **Rapid Desktop Delivery**

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WHY VXRAIL ™ FOR EUC?

START SMALL — Start with < 100 Desktops

INDUSTRY FIRST / **LINEAR SCALABILITY** — Add More Desktops By Adding VxRail nodes

PERFORMANCE AT EDGE — ROBO Deployment

Breakdown the Barriers of Entry to Desktop Transformation

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EUC ON VBLOCK® VS. VXRAIL ™

Provide Desktops for 1000's

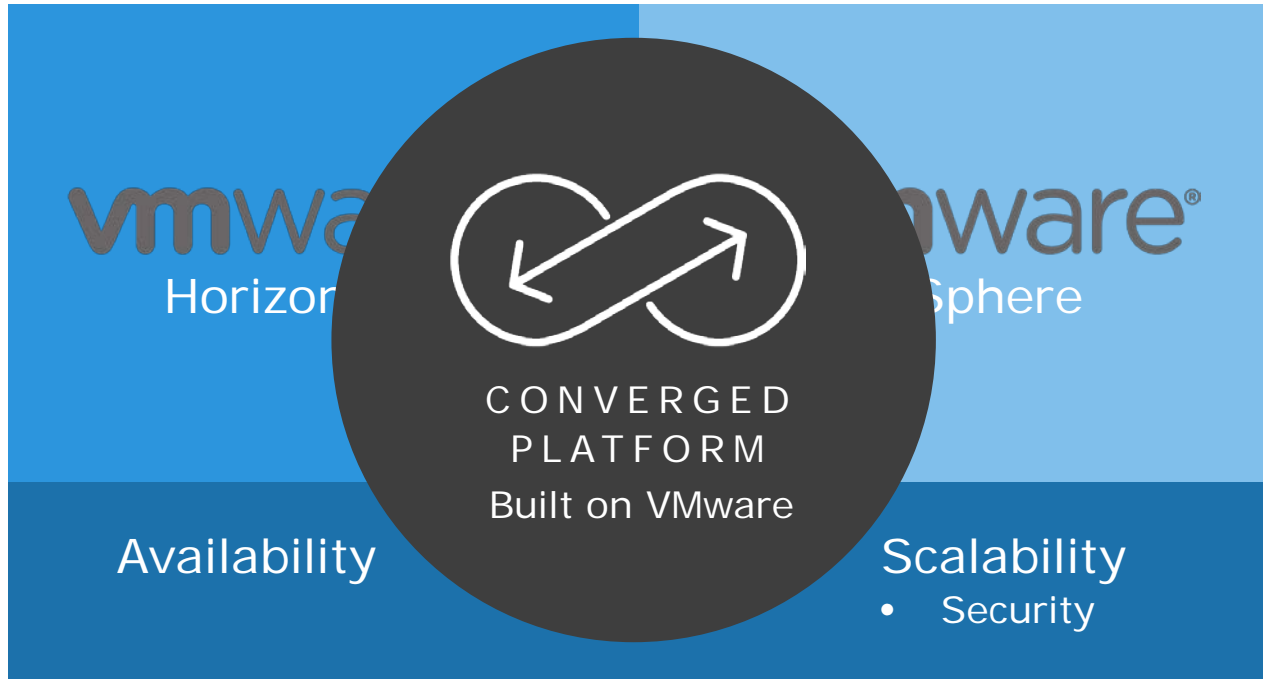Performance at Scale

Low-Cost Operational Excellence

VS.

Starts Small

Scale Hundreds of Desktops

SME & ROBO Deployment

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VMWARE END USER COMPUTING

VCE CUSTOMER BENEFITS

RESULTS OF IDC RESEARCH STUDY, SEPTEMBER 2013

VBLOCK

ROI: 294%
PAYBACK PERIOD: 11.6 MONTHS

4X FASTER TIME TO DEPLOYMENT
- 160 days down to 40
- 79% less staff effort

2X FASTER TIME FOR NEW SERVICES
- 10 days down to 5 days

96 % REDUCTION IN DOWNTIME
- 10.7 hrs/yr to 0.4 hrs/yr

50% REDUCTION OF ANNUAL DATA CENTER COSTS

Source: IDC White Paper, September 2013: "Convergence with Vblock Systems: A Value Measurement"

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STRONG VDI TRACK RECORD

Broad Range of Reference Customers

colt
smarter / faster / further

Hunter

iTi Tyler ISD
Tomorrow's Education Today

MOLINA HEALTHCARE

Solutions Built on Industry-Leading EUC Technologies

CITRIX® OR **vmware®**

More than 25% of VBlock® Systems Deployed for EUC/VDI

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EMC EUC BENEFITS

RAPID DEPLOYMENT

SECURE MOBILE WORKFORCE DATA

SIMPLIFIED OPERATIONS, LOWER COSTS

GREAT USER EXPERIENCE

ENSURED SCALABILITY

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eHEALTH STORY

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eHEALTH SASKATCHEWAN

eHealth
Saskatchewan

Maintains electronic health information systems for the province

Supports more than 1 million Saskatchewan residents

Manages all diagnostic imaging, lab, prescription, immunization, clinical encounter, pharmaceutical, tele-health, public health, and related data
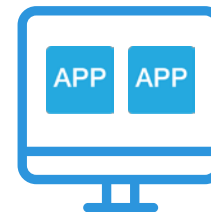
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eHEALTH CHALLENGES

eHealth
Saskatchewan

IMPROVE end-user
consistency & security

MISSION
CRITICAL

SIMPLIFY and
centralize control

APP APP

HAD TO MOVE QUICKLY

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WHY VDI FOR eHEALTH

Meets desktop security needs

Delivers high performance

Meets compliance requirements

Saves time with rapid provisioning

Delivers high performance

WHY EMC FOR eHEALTH VDI

eHealth Saskatchewan

Experience and commitment

Committed to our timeframes

One strategic partner—one strategic outcome

Understand our challenges

Their people

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THANK YOU

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RESOURCES

- Big Ideas EUC Roadblocks:
  - https://www.youtube.com/watch?v=VdbdyzVjpqc

- VCE VDI:
  - http://www.vce.com/solution/applications/vdi

- VDI Storage Navigator:
  - https://www.emc.com/en-us/storage/vdi-storage-navigator/index.htm

- Backup/Recovery for VDI:
  - http://www.emc.com/collateral/solution-overview/h14938-back-and-recovery-for-vdi-environments.pdf

- Windows 10 Best Practices:
  - http://www.emc.com/collateral/white-papers/h14854-optimizing-windows-virtual-desktops-deploys.pdf

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MORE RESOURCES

- VCE Vblock and VxBlock Systems 540 Architecture Overview
  - http://www.vce.com/asset/documents/vce-540-gen2-1-architecture-overview.pdf

- Vblock System 540 and VMware Horizon View 6.1 Solution Architecture
  - http://www.vce.com/asset/documents/540-view6-solution-architecture.pdf

- VCE Solution for VDI with Citrix XenDesktop 7.6 and Citrix XenApp 7.6
  - http://www.vce.com/asset/documents/vce-solution-for-vdi-with-citrix-xendesktop.pdf

- A Practical Guide for Evaluating the Value of VCE Converged Infrastructure
  - http://www.vce.com/asset/documents/forrester-guide-for-ci-evaluation.pdf

- VMware Desktop Virtualization
  - http://www.vmware.com/products/desktop-virtualization.html

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