



Unified DataCenter

Fernando Miranda
EMC Portugal



Cisco & EMC – A Shared Cloud Vision



Market Leaders in Storage and Networking

Shared Cloud Vision

Deep Technology Alignment

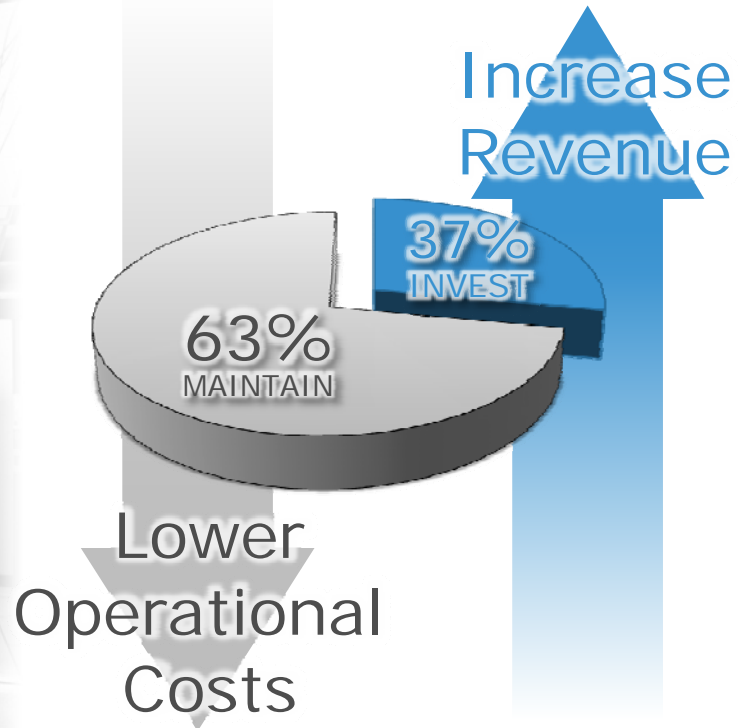
Cooperatively Developed Offerings:
Products, Services, and Validated Solutions

Integrated Routes to Market

Joint Venture: VCE



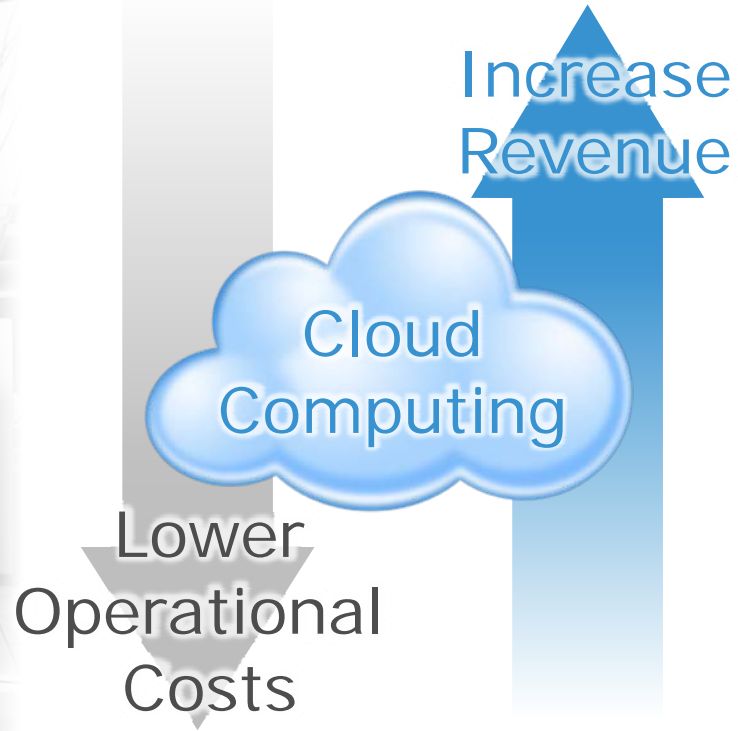
Two Fundamental Challenges



ESG, 2012 IT Spending Intentions Survey, Jan 2012



Cloud Transforms IT



Cloud Transforms IT

Days/Months



Helpdesk



IT-Issued



Flat Tax



Silos



Minutes/ Seconds



Self-Service



Choice Computing

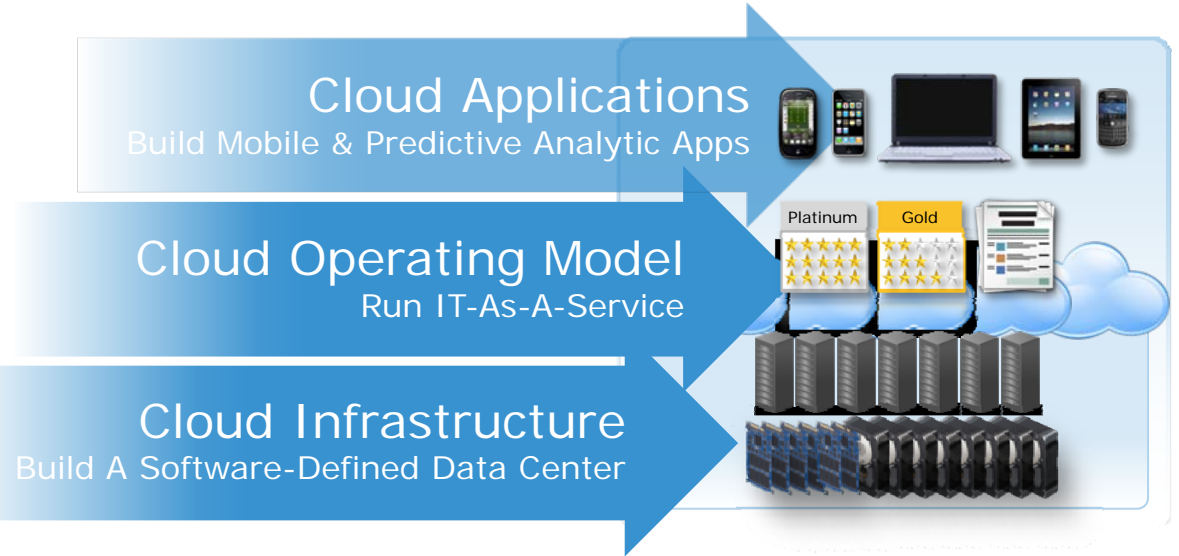
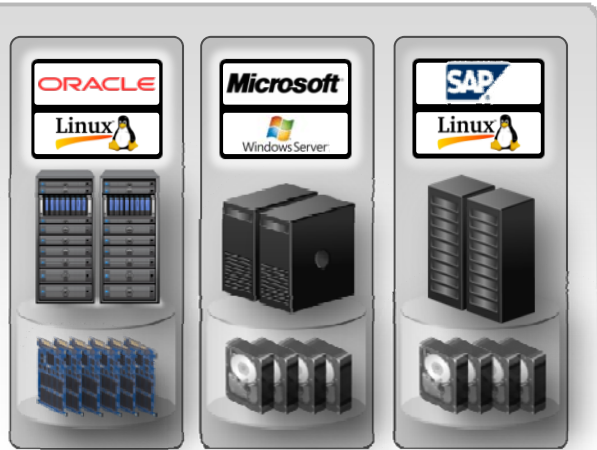


Metered



Services

Steps Of IT Transformation



Infrastructure Matters For Cloud Computing



CLOUD REQUIREMENTS

Low-Cost Operations



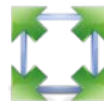
Infrastructure-As-A-Service



Self-Service Consumption Model



Elastic Resource Allocation



Shared Pools Of Resources



IDEAL INFRASTRUCTURE

- Simplified Management
- Lower Service Provisioning Cost

- Integrated Compute, Network, & Storage Resources

- Physical Resources Deployed Through APIs & Policies

- Rapid Scalability Of Virtual & Physical
- Automated Deployment

- Virtualization Optimized
- Resource Abstraction

Three Paths To Cloud Infrastructure

EMC Products



Best Of Breed
Infrastructure Components

Partner VSPEX



Proven
Infrastructure

VCE VBLOCK



Converged
Infrastructure

Simpler, Faster, Lower TCO

Three Paths To Cloud Infrastructure



Building Your Own Takes Time

DESIGN & DEPLOY

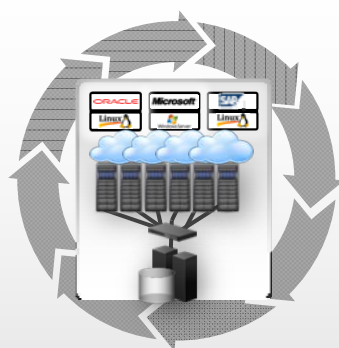


Plan & Design



Build & Test

MAINTAIN



Code Matrix Monitoring

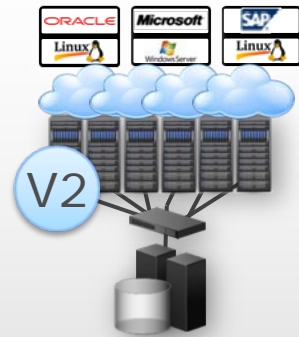


Patch & Validate



Stabilize & Optimize

EXPANSION & UPGRADE



Plan & Design



Build & Test

Cisco Unified Data Center

Infrastructure Solutions Designed For IT-As-A-Service & Cloud



UNIFIED FABRIC

Unified Fabric Solutions

- Nexus Portfolio
- MDS Portfolio (EMC Connectrix)
- L4 To L7 Services Portfolio



UNIFIED COMPUTING

Unified Computing Solutions

- UCS B-Series
- UCS C-Series
- Fabric Interconnects



UNIFIED MANAGEMENT

Unified Management Solutions

- Intelligent Automation
- Network Services Manager
- UCS Manager
- DC Network Manager

The EMC Portfolio

TRADITIONAL APPLICATIONS



GREENPLUM



NEW APPLICATIONS - BIG DATA



VIRTUAL INFRASTRUCTURE

RSA

SMARTS



VNX



VMAX



VSPEX/VBLOCK



VPLEX



ISILON



ATMOS



DATA DOMAIN



AVAMAR



NETWORKER

Three Paths To Cloud Infrastructure

Vblock Systems



Converged
Infrastructure

Vblock Systems: The Fastest Path To The Cloud



Single Product

Single Point Of Support

Managed As Single Product

Integrated Data Protection
Options

vmware[®]



EMC²



Vblock Systems: The Fastest Path To The Cloud

Foundation For The Next Generation Data Center



OPEN



vmware®



EMC²

- Market Leading Components
- Engineered, Factory Tested Physical and Logical System Builds
- Simplified Management With Choice Of Management Tools
- Single Support

The Vblock Difference

DESIGN & DEPLOY



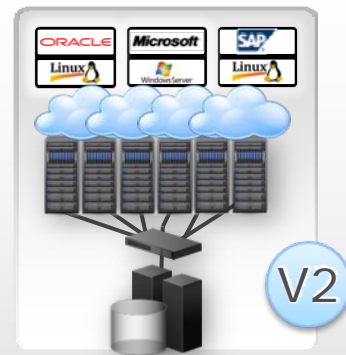
- ✓ Single Product
- ✓ Factory-built & Logically provisioned

MAINTAIN



- ✓ Single Support
- ✓ Converged Operations

EXPANSION & UPGRADE



- ✓ Single Process with Life Cycle Assurance

The Vblock Difference

DESIGN & DEPLOY

MAINTAIN

EXPANSION &
UPGRADE

5X FASTER
DEPLOYMENT

4X LESS STAFF
RESOURCE TIME

83X BETTER
AVAILABILITY

AT 3X LOWER COST


- ✓ Single Product
- ✓ Factory-built & Logically provisioned

- ✓ Single Support
- ✓ Converged Operations

- ✓ Single Process with Life Cycle Assurance

Enabling Converged Operations

Intelligently Inform



vmware®
CISCO EMC²
fluid Operations

OPEN API

About
Vblock™ Systems



VCE Vision™ Intelligent Operations software



Vblock Solutions

Acceleration Suites

Vblock Systems Are Optimized To Deliver World Class Performance And Time-to-market For Mission Critical Work Loads.

Messaging



ERP



ORACLE®

Virtual Desktop

vmware®

Collaboration



Database



ORACLE®

Vblock Systems Data Protection

Industry Leading Data Protection
Based On Data Domain & Avamar

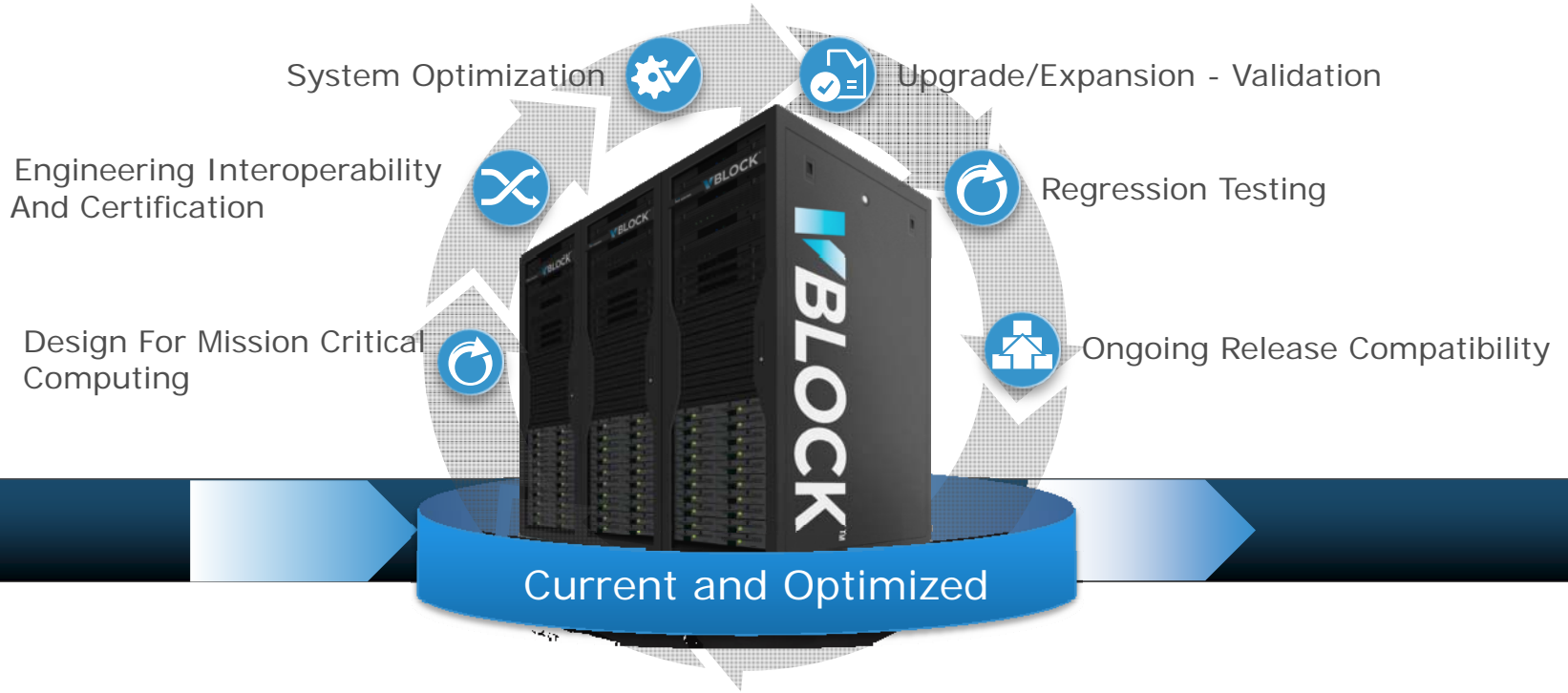
Fast, Repeatable, Low Risk
Deployments

Consistently Implemented Across
Entire Vblock Systems Portfolio



VCE Lifecycle System Assurance

Lowers TCO And Risk



Positioning Vblock Systems

ENTERPRISE DATA CENTER

SMALL TO MID-SIZED DATA CENTER



SYSTEM 100



SYSTEM 200



SYSTEM 320



SYSTEM 720

Standard Configurations

Modular Configurations

Three Paths To Cloud Infrastructure

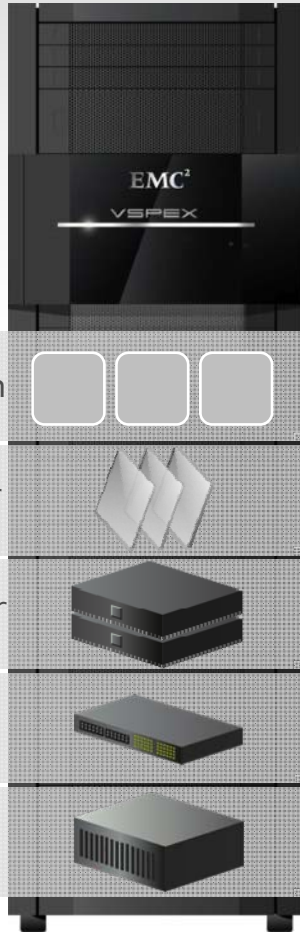
Partner VSPEX



Proven
Infrastructure

EMC VSPEX

SIMPLE. EFFICIENT. FLEXIBLE.



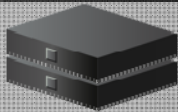
Application



Hypervisor



x86 Server



Network



Storage &
Backup



- Reference Architectures Validated By EMC & Cisco
- Packaged By Partners
- Choice Of Hypervisor And Management

The VSPEX Family

PRIVATE CLOUD



50, 100, 125, 250
VIRTUAL MACHINES



vmware®

END USER COMPUTING



250, 500, 1000, 2000
DESKTOPS

vmware®

APPLICATION SPECIFIC VSPEX



vmware®



vmware®

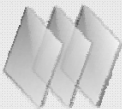


VSPEX - Cisco Validated Designs



PRIVATE CLOUD

END USER COMPUTING



50, 100, 125, 250
VIRTUAL MACHINES

vmware®




Microsoft
Fast Track 3.0



50, 100,
VIRTUAL MACHINES




Windows Server 2012



2000 DESKTOPS

vmware®

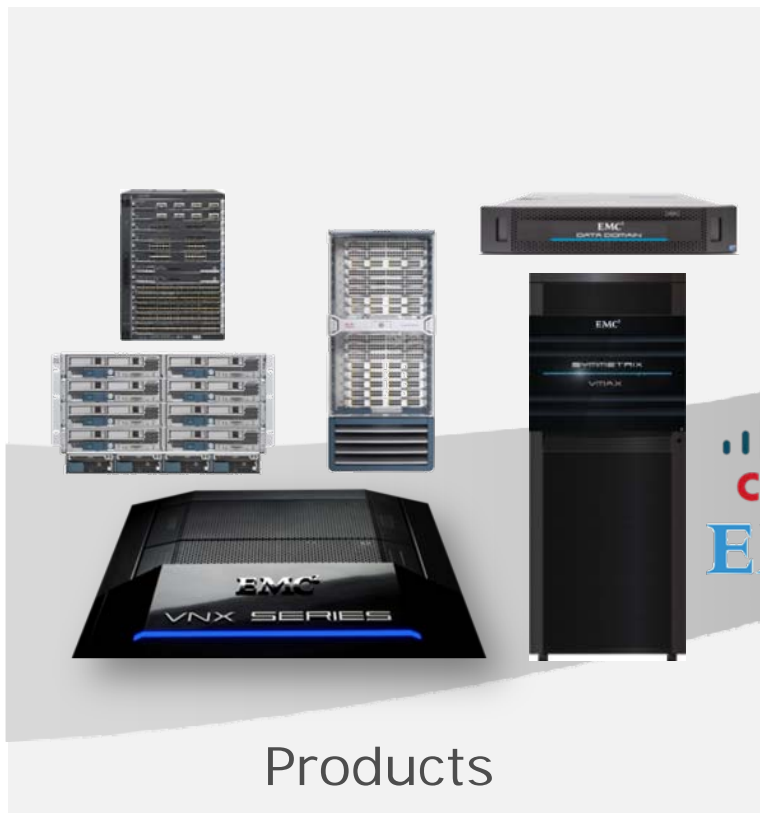


500 DESKTOPS

vmware®



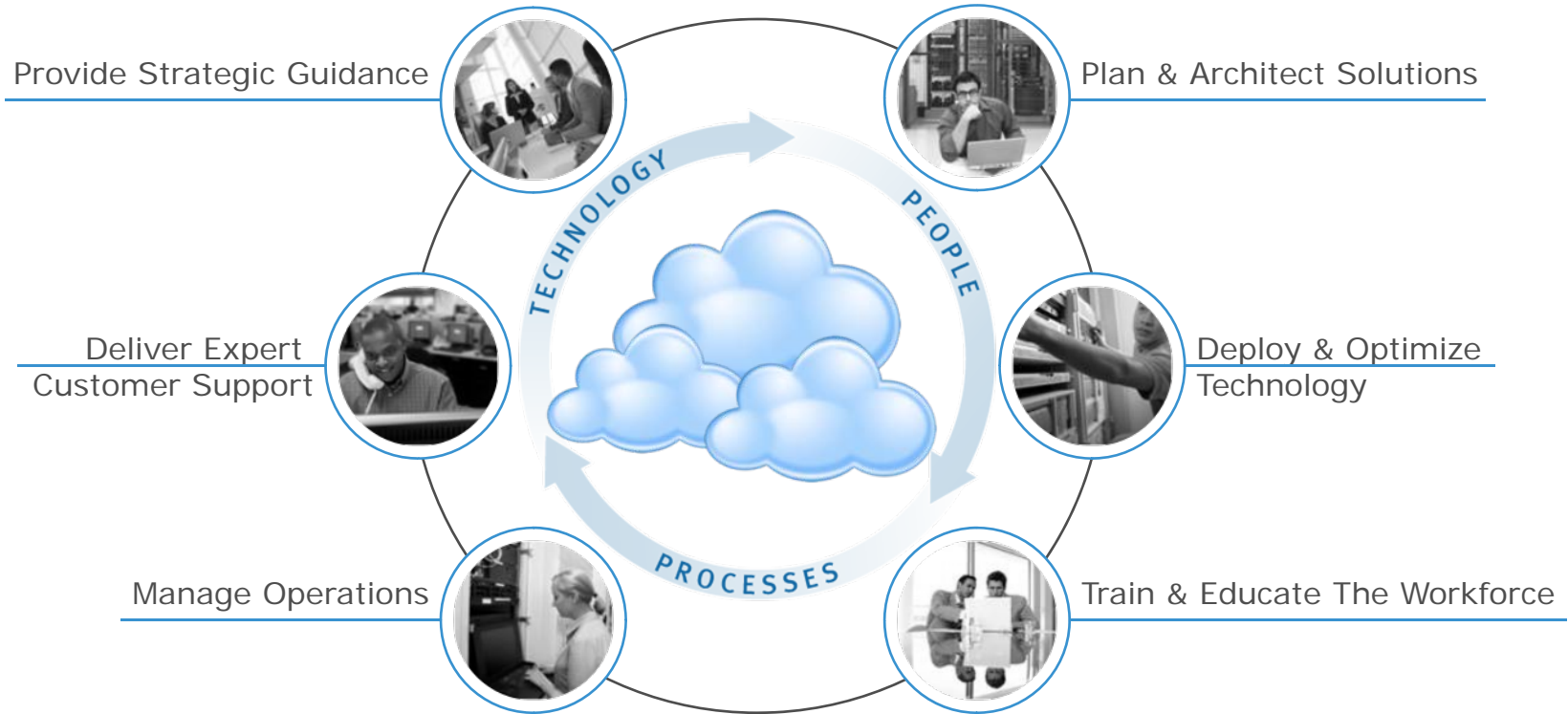
Three Paths To Cloud Infrastructure



Simpler. Faster. Lower TCO.

EMC & Cisco Services

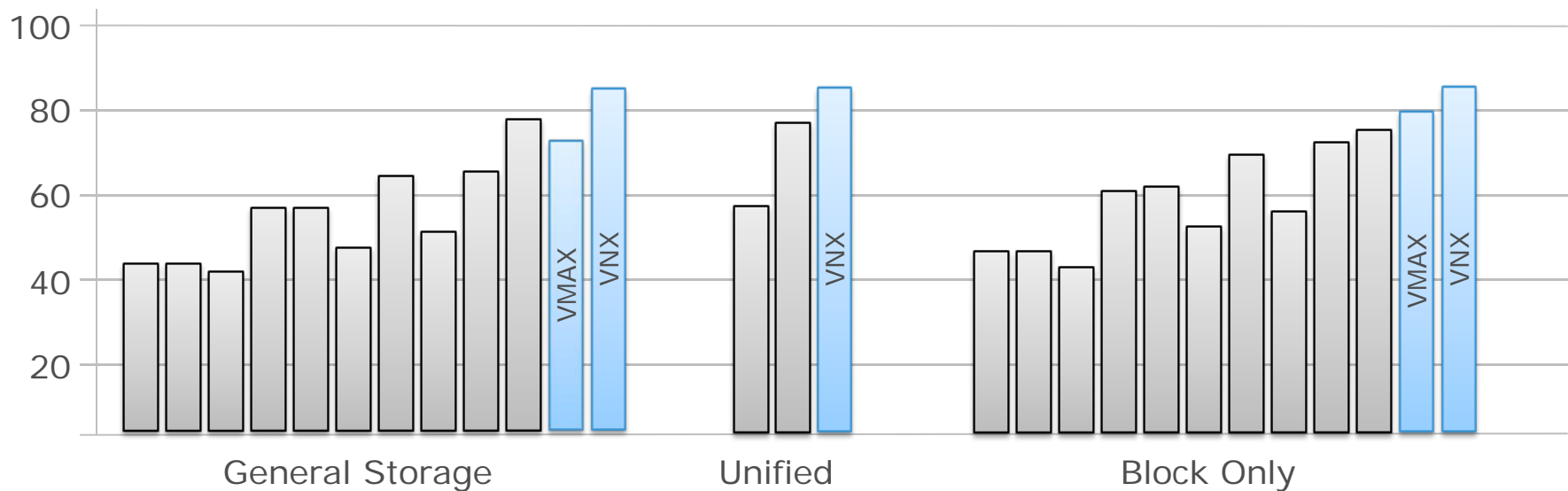
To Plan, Build, Run, & Optimize Our Integrated Solutions



EMC²®

EMC Is The Most Integrated With VMware

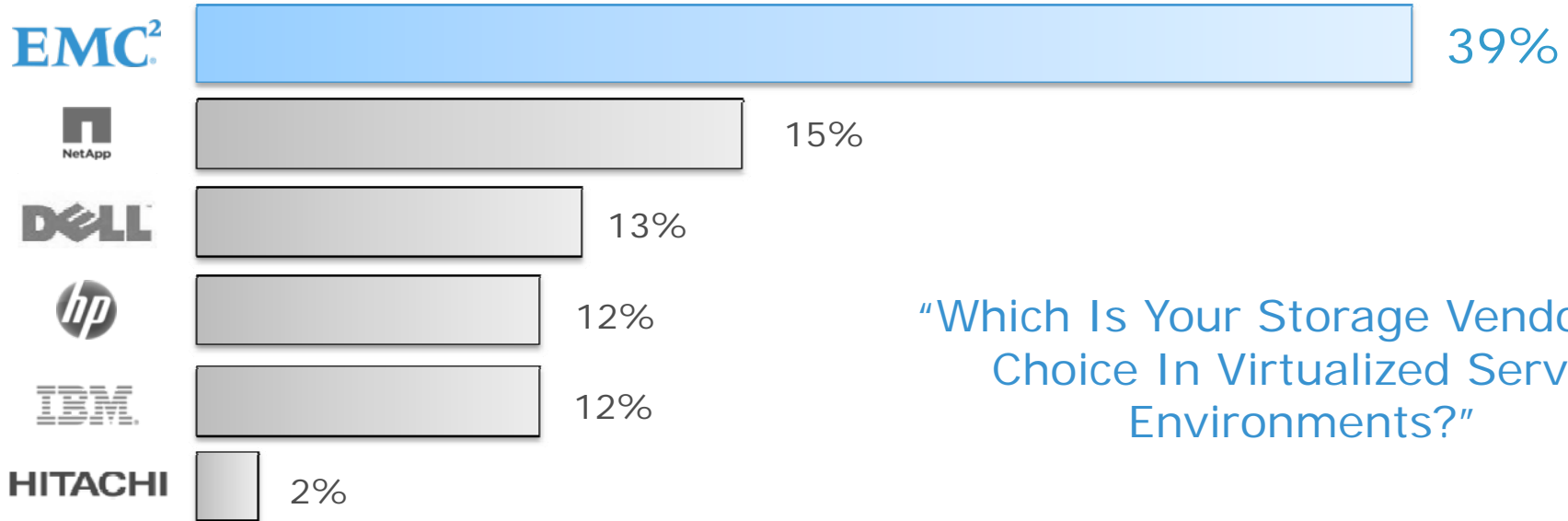
EMC Ranked #1 In All Three Categories Of Storage



Source: Wikibon Analysis & Survey 2012

 **EMC²**  Other Vendors

EMC Is #1 In VMware Environments



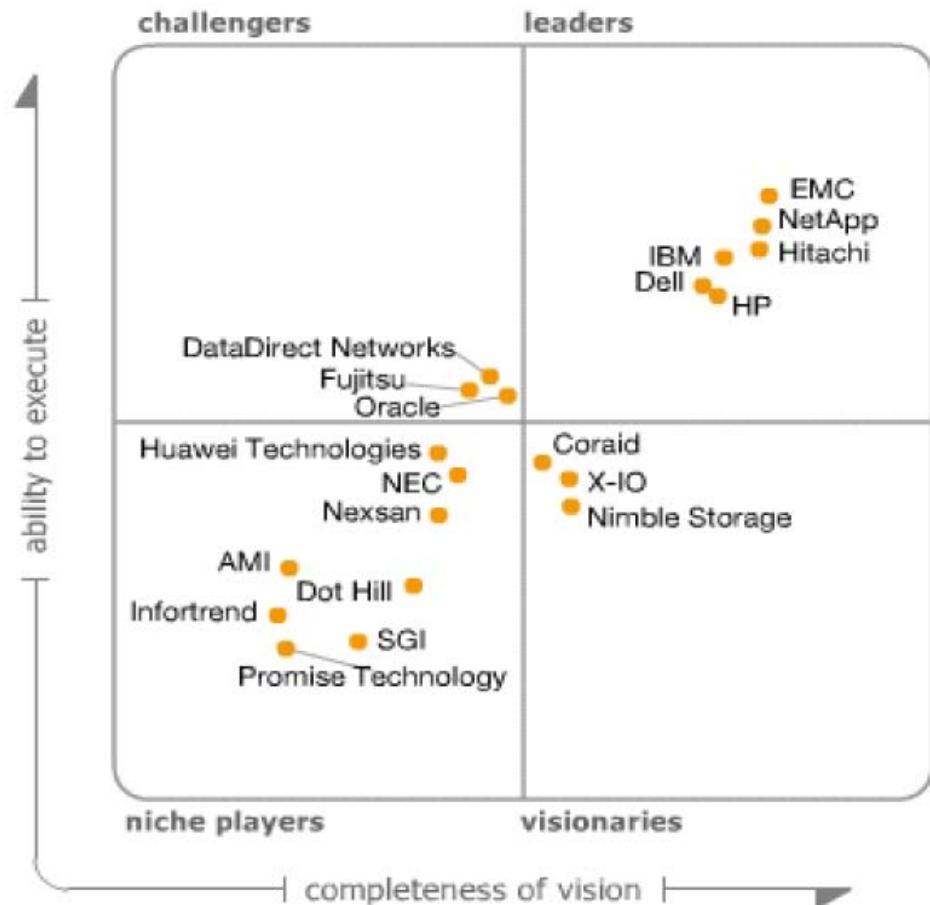
“Which Is Your Storage Vendor Of Choice In Virtualized Server Environments?”

Source: Goldman Sachs IT Spending Survey, July 2012.

The EMC Exabyte Journey



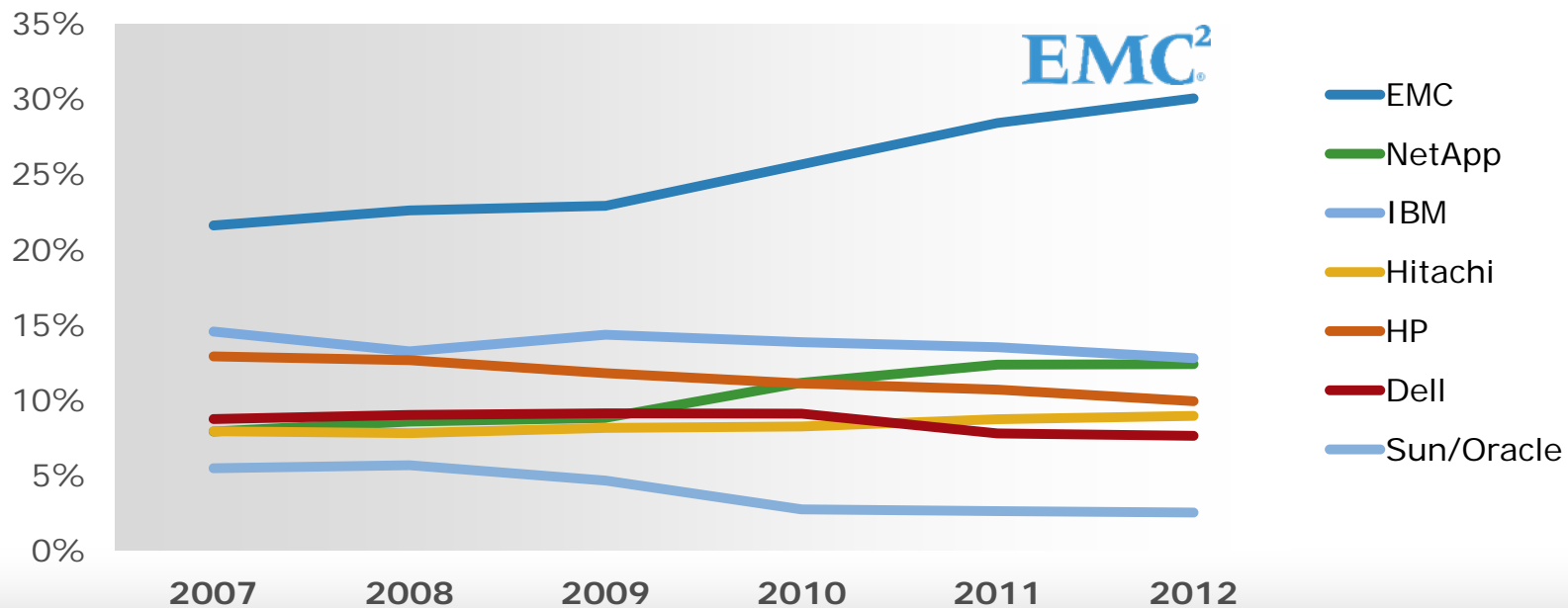
EMC Leading – Vision & Execution



Source: Gartner (March 2013).

EMC Leading – Market Share

Worldwide External Storage Revenue Share



Why EMC & Cisco ?

- Best In Class Products
- Flexibility And Control In Your Cloud Infrastructure
- World-Class Partnership With Shared Vision





Accelerate To The Cloud

