

VMware Introduction and Overview

Author (s)	David Hanacek, Product Marketing, dhanacek@vmware.com with input from Ed Wong, Product Marketing, ewong@vmware.com , the VMware corporate deck and Danny Daniels ddaniels@vmware.com on VMware View
Title and general description	VMware Virtualization: Introducing a cool technology and its business benefits to an audience that is not yet familiar with virtualization.
Distribution and Audience type	External Customer, channel partner, alliance partner, analyst
For customer presos: Primary target audience	C-level: CEO, CIO and CFO VPs Server team (managers, directors)
Technical level	Basic (business value)
Time required to present	60 minutes
Date created/ updated	4 Dec 2008/ 22 Sep 2009
Current version	http://vmvault/savo?returnUrl=%7e%2fDocument%2fDocument.aspx%3fid%3d220154%2526view%3d&targetresource=https%3a%2f%2fwww.gosavo.com%2fvmware%2fLogin.aspx%3freturnUrl%3d%257e%252fDocument%252fDocument.aspx%253fid%253d220154%252526view%253d
Related materials	<ul style="list-style-type: none"> - Cost Savings homepage: http://vmware.com/solutions/cost-savings/ - ROI/ TCO calculator: http://www.vmware.com/go/calculator - Making the Business Case for vSphere 4.0 presentation: https://www.gosavo.com/VMWARE/Document/Document.aspx?id=468023&view=



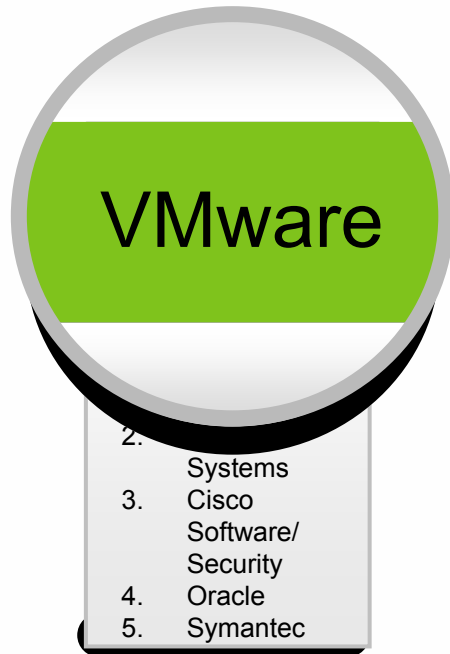
VMware Energize and Save

David Hanacek

Product Marketing Manager EMEA

14. October 2009

VMware Continues to be the #1 Software Investment for CIOs in a Tough Economy



#1

13 Quarters



Which software providers are gaining share of your IT spending dollars?

Source: Goldman Sachs IT Spending Survey, March 9th, 2009

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VMware: Who We Are

vmware®

Product
Over 50 in 2008

Awards
2008

Revenue
Customers

People
All of the Fortune 100

40+ Countries

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VMware's Focus

Reduce Costs with Server Consolidation

With proven datacenter solutions

Desktop Management & Control

For individuals and organizations for more flexibility and security

Business Continuity & Disaster Recovery

For small, medium and large organizations

Application and Infrastructure Automation

Simplifying workflows matching user requirements in call center, test & dev, training environment and others

VMware participates and provides leadership in standards organizations

The Green Grid, Open Virtualization Format (OVF) and many more

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VMware = Product Excellence



Most Reliable: VMware ESX
(#2: IBM Mainframe)

Best Breakout Technology:
VMware

Easiest to Use/Manage:
VMware Workstation

Biggest New Innovation:
VMware Fusion

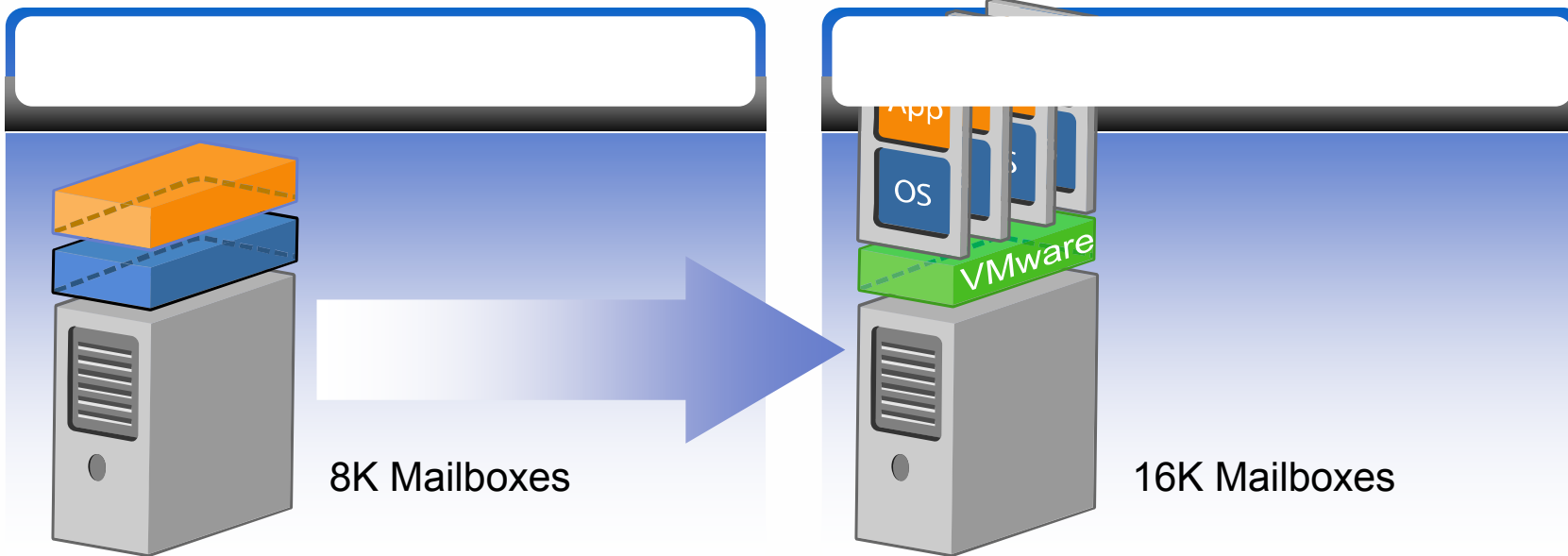
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Record Capacity for Exchange 2007

VMware Sets Capacity Record Running Microsoft Exchange on IBM System x3850 M2 Servers

Microsoft Exchange Virtualized by VMware More than Doubles Native Capacity of Mailboxes on Bare Metal Physical Servers

http://www.vmware.com/company/news/releases/ibm_exchange_vmworld.html



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VMware – The *Proven* Industry Leader

Company Overview

- ~\$1.9 B in 2008 revenue
- Over \$2B in cash
- 20%+ operating margins
- ~7,000 employees worldwide
- 5th largest infrastructure software company

Proven in the Trenches

- 150,000+ VMware Customers
- 100% of Fortune 100
- 100% of Fortune Global 100
- 96% of Fortune 1000
- 95% of Fortune Global 500



*Source: Comprehensive survey of VMware customers conducted in July-August 2008

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VMware – The #1

Company Overview

- ~\$1.9 B in 2008 revenue
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- ~7,000 employees
- 5th largest

Proven

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- 100% of Fortune 500
- 100% of Fortune Global 100
- 96% of Fortune 1000
- 95% of Fortune Global 500

89% of all virtualized applications
in the world run on VMware.
Gartner, December 2008



*Source: Comprehensive survey of VMware customers conducted in July-August 2008

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The Result – Saving Energy

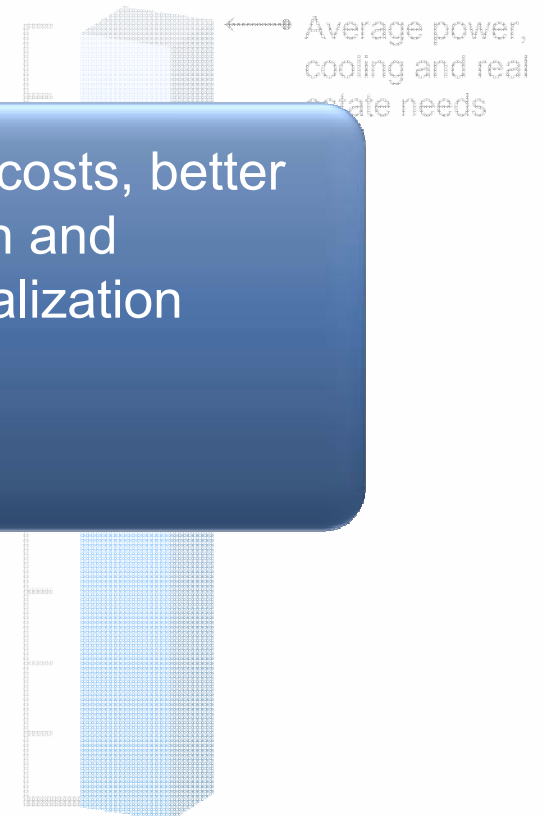
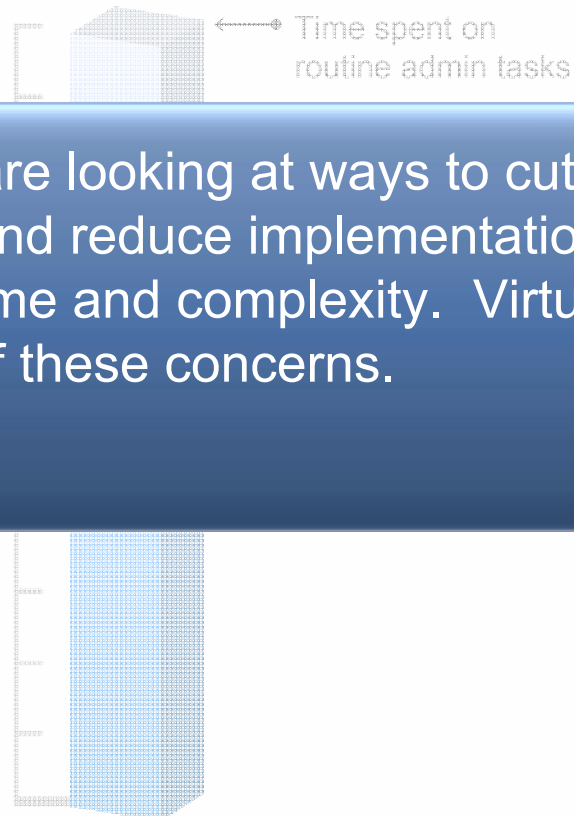
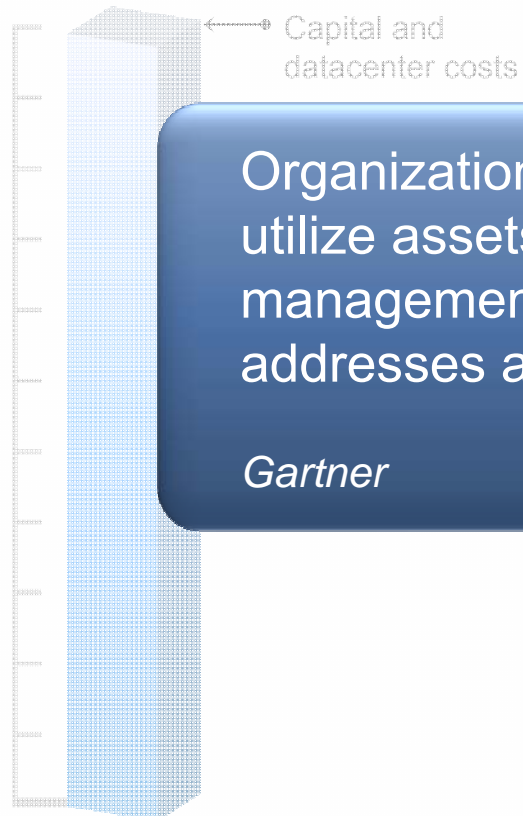
Financial Energy



Human Energy



Earth's Energy



Organizations are looking at ways to cut costs, better utilize assets, and reduce implementation and management time and complexity. Virtualization addresses all of these concerns.

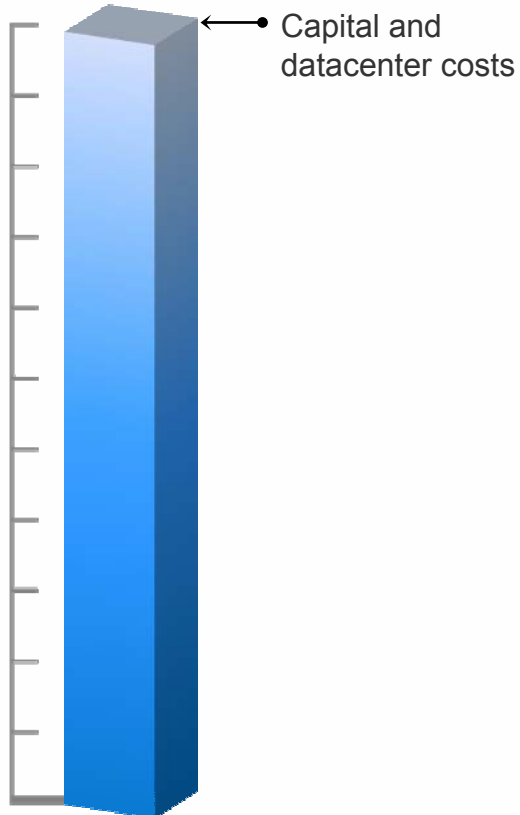
Gartner

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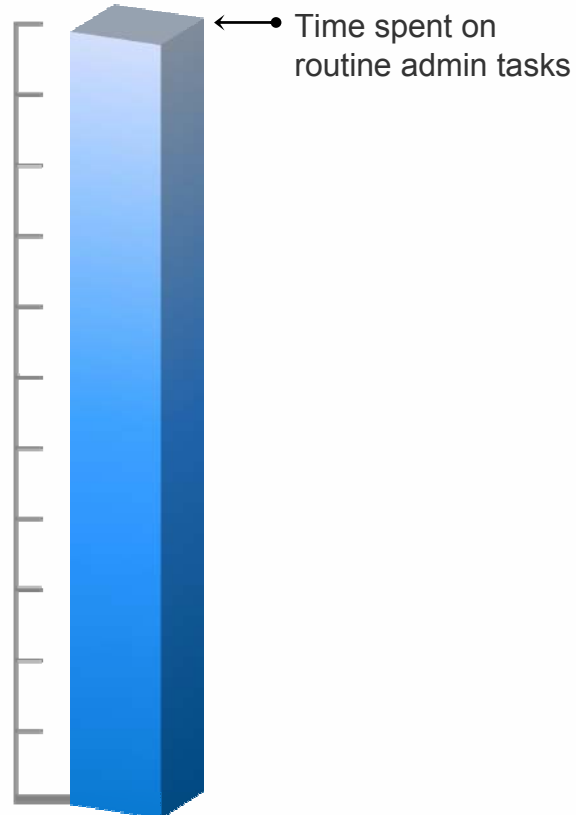
Source: Gartner Dataquest Insight: Virtualization Market Size Driven by Cost Reduction, Resource Utilization, and Management Advantages, Jan09

The Result – Saving Energy

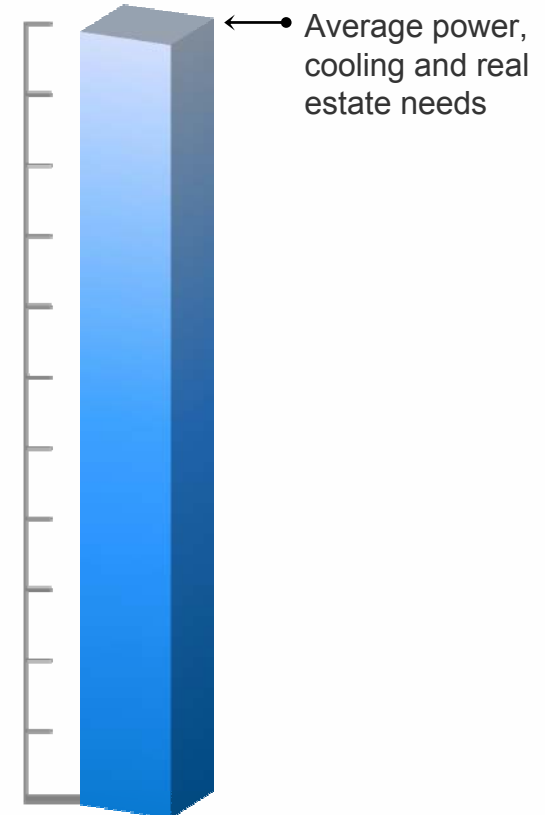
Financial Energy



Human Energy



Earth's Energy

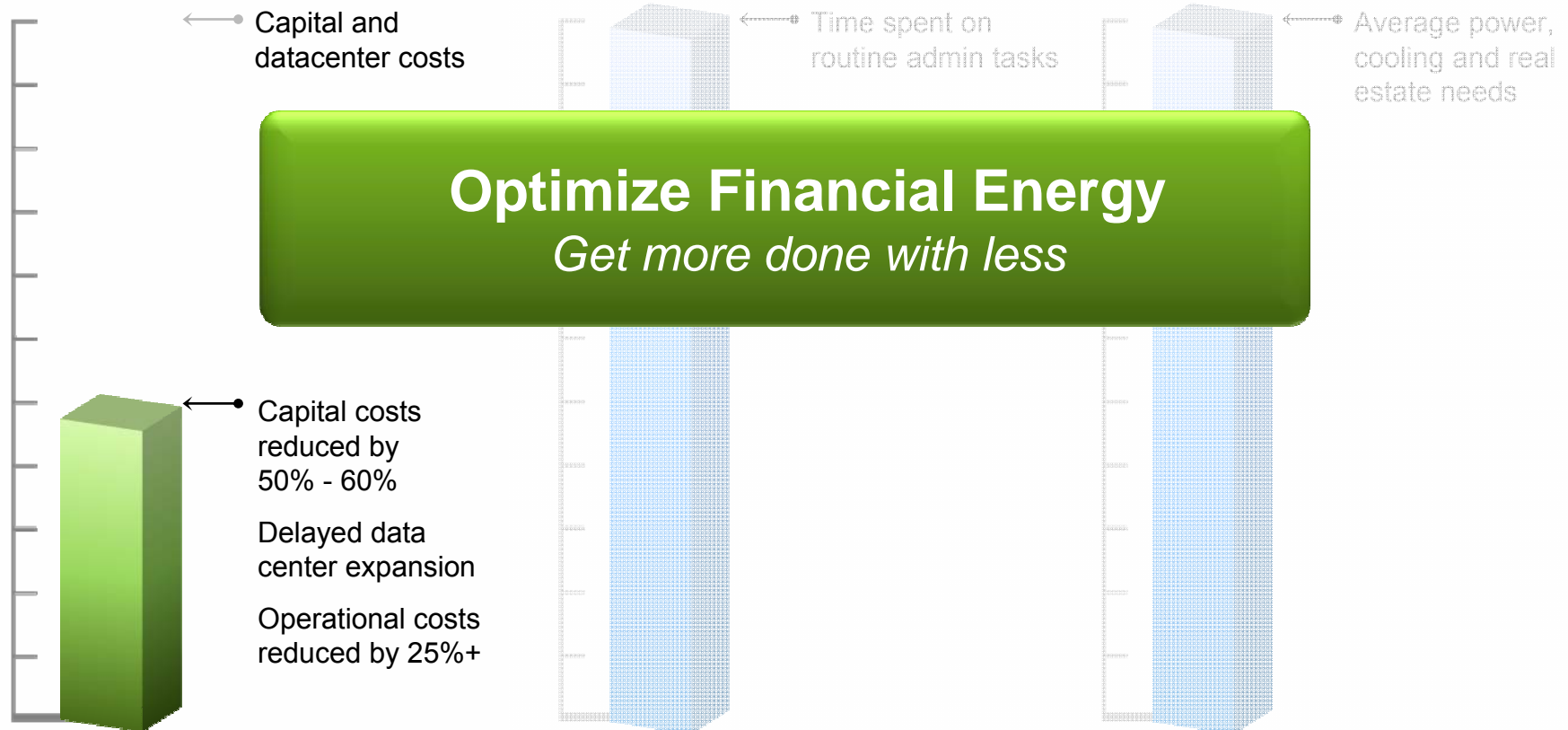


The Result – Saving Energy

Financial  Energy

Human  Energy

Earth's  Energy



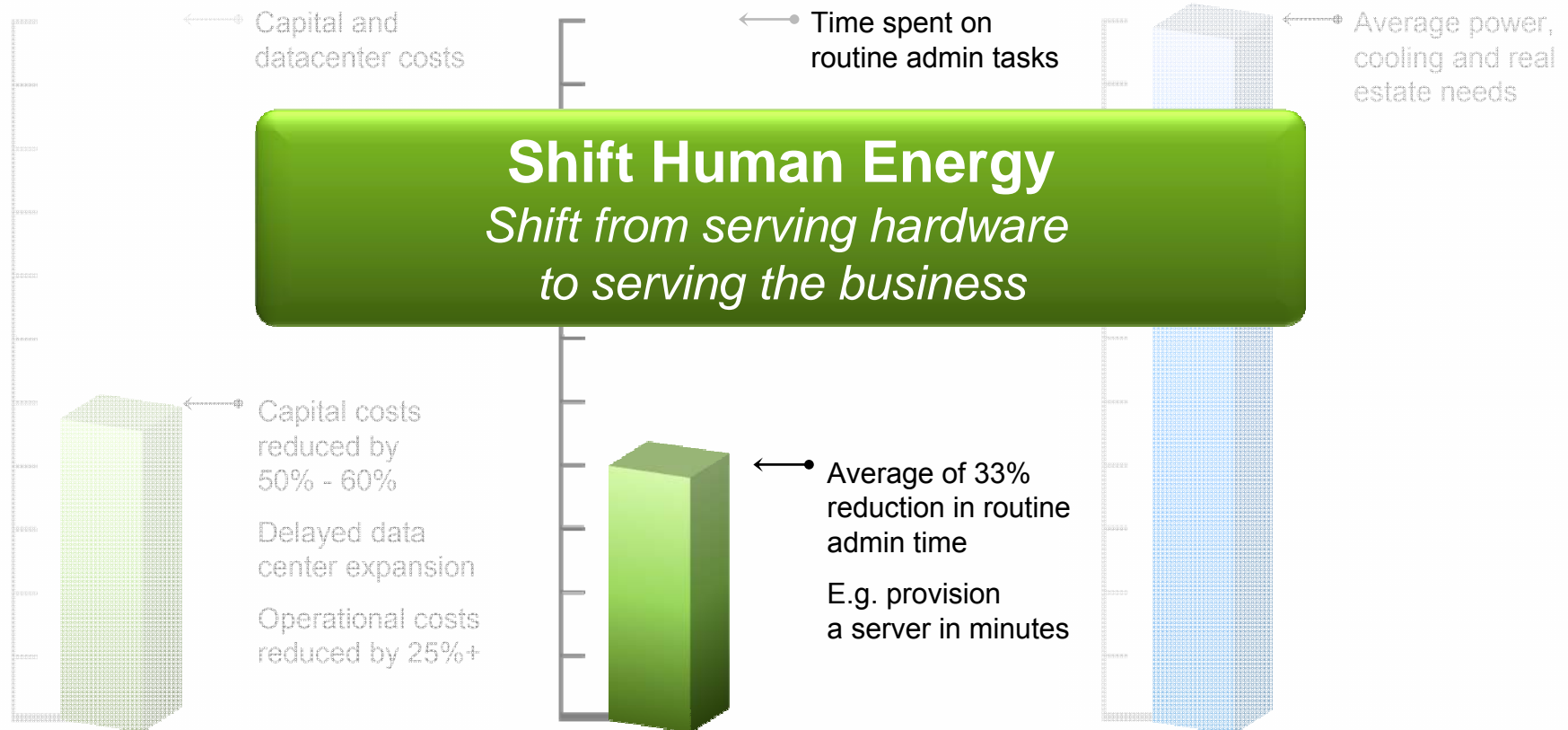
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The Result – Saving Energy

Financial Energy

Human Energy

Earth's Energy



The Result – Saving Energy

Financial Energy

Human Energy

Earth's Energy

Capital and datacenter costs

Time spent on routine admin tasks

Average power, cooling and real estate needs

Save Earth's Energy
Use less, and use it more wisely

Capital costs reduced by 50% - 60%

Delayed data center expansion

Operational costs reduced by 25%+

Average of 33% reduction in routine admin time

E.g. provision a server in minutes

Up to 80% reduction in data center energy costs

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The Result – Saving Energy

Financial Energy



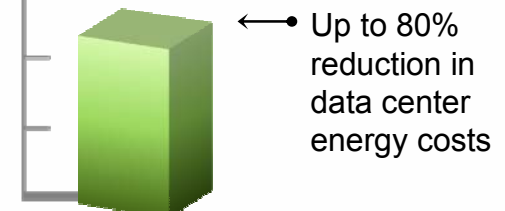
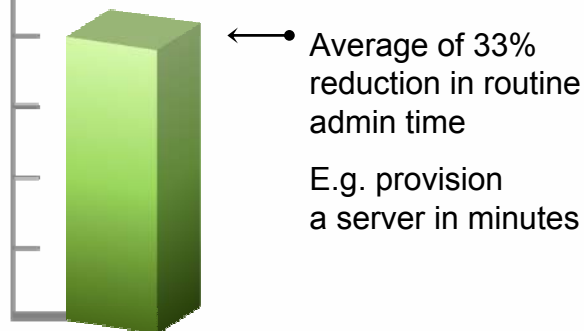
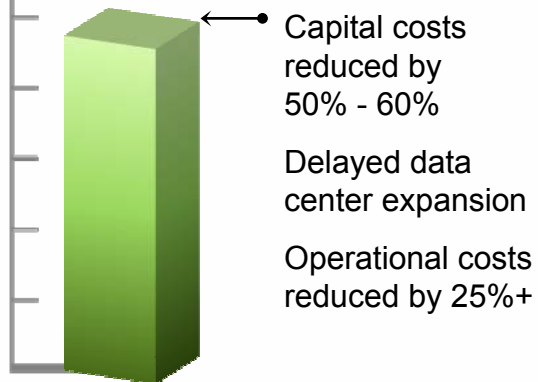
Human Energy



Earth's Energy



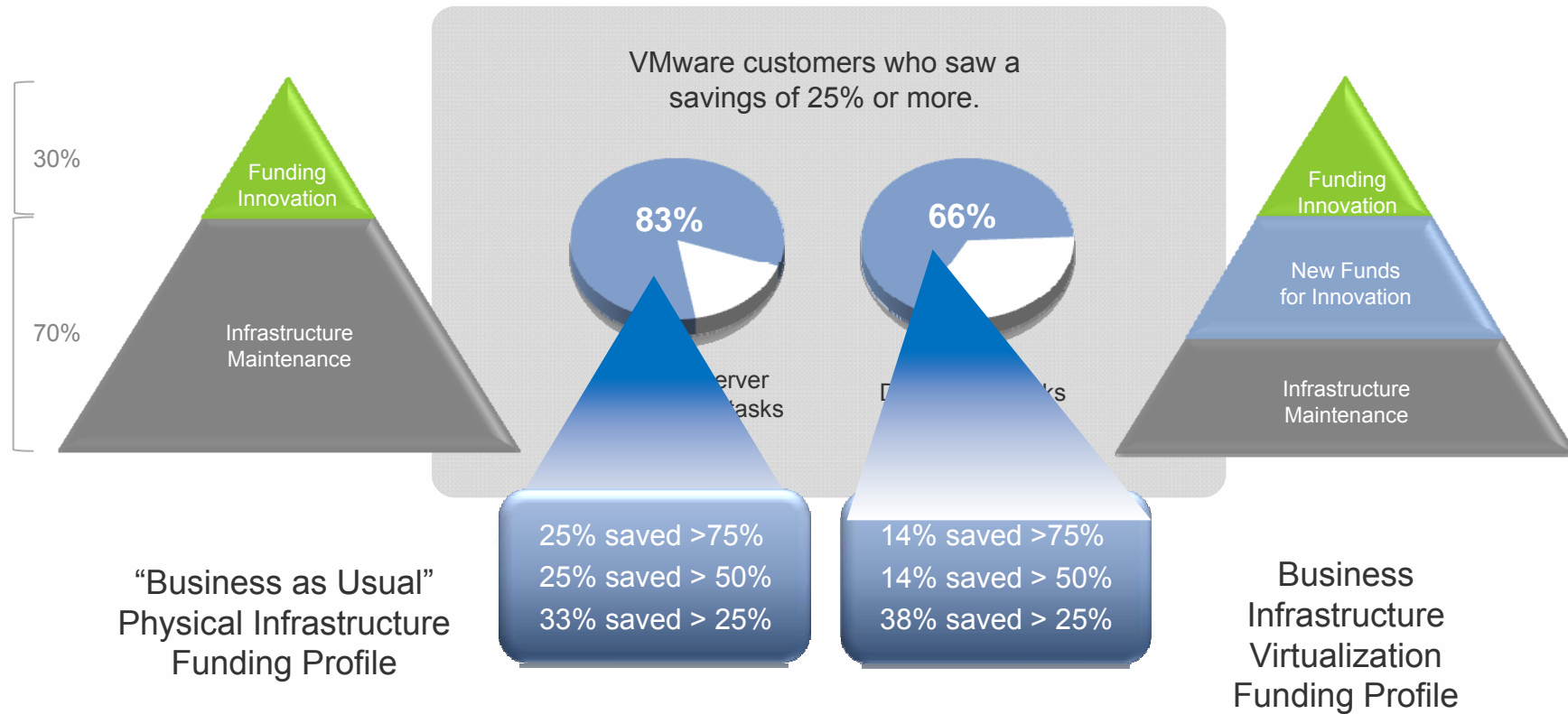
Energize Business Through IT
*Spend more money on innovation,
less on maintenance*



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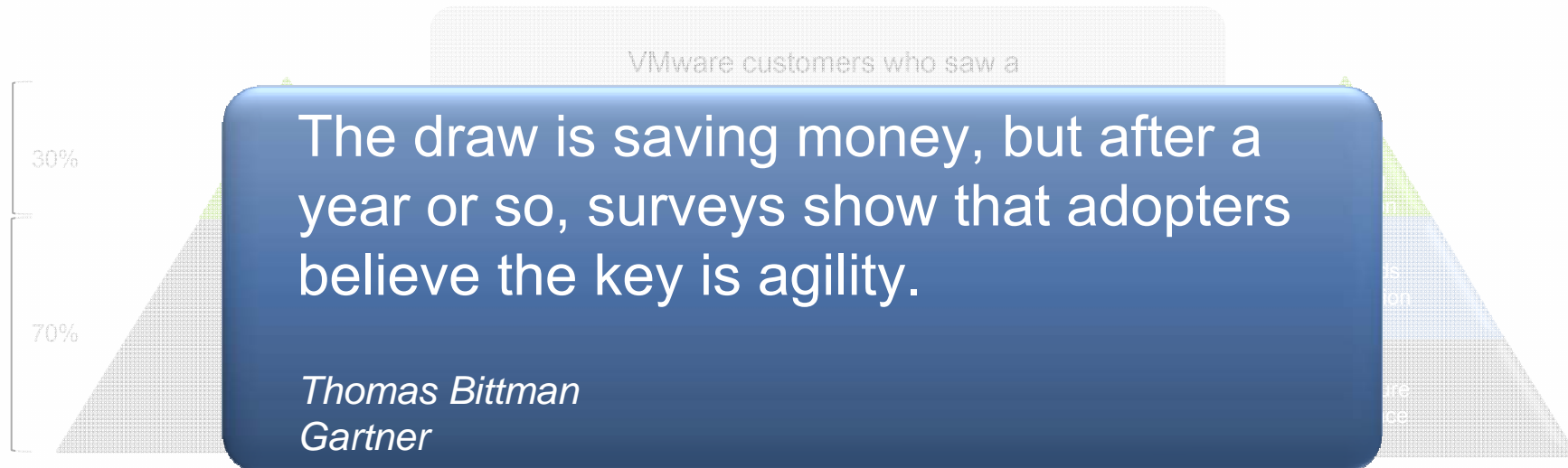
Real Customer Results – Saving Energy

Process and Technology Transformation Reduction in Valueless Activities and Costs Using VMware



Real Customer Results – Saving Energy

Process and Technology Transformation
Reduction in Valueless Activities and Costs Using VMware



The draw is saving money, but after a year or so, surveys show that adopters believe the key is agility.

Thomas Bittman
Gartner

“Business as Usual”
Physical Infrastructure
Funding Profile

25% saved >75%
25% saved > 50%
33% saved > 25%

14% saved >75%
14% saved > 50%
38% saved > 25%

Business
Infrastructure
Virtualization
Funding Profile

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Examples of Productivity using VMware

BEFORE VMware

AFTER VMware

Instant Provisioning	<ul style="list-style-type: none">> 4-6 weeks	<ul style="list-style-type: none">> Fully automated to days
Live Migration	<ul style="list-style-type: none">> Hardware maintenance window; app migration takes days/weeks	<ul style="list-style-type: none">> No maintenance window or planned downtime; migrate app in seconds
Patch Management	<ul style="list-style-type: none">> Patch each host manually with downtime	<ul style="list-style-type: none">> Automated patching with no downtime
Disaster Recovery	<ul style="list-style-type: none">> Weekend testing, uncertain restore	<ul style="list-style-type: none">> Automated testing during day, quick/reliable restore
Service Delivery	<ul style="list-style-type: none">> Slow, error-prone development / testing> Iterative, error-prone release management	<ul style="list-style-type: none">> Automated self-service development / testing> Push-button, precise release management

VMware CEEMEA reference customers

Eastern Europe

Czech Republic



Romania



Serbia



Hungary



Poland



Russia



Israel & Turkey

Turkey



Israel



VMware CEEMEA Customer Quotes

Reduce Costs

“Without VMware Infrastructure we would run out of free space in hosting centers. Total number of servers would become very hard to manage and we would never achieve 24x7 operations with real-time failover if this entire infrastructure was not virtualized. VMware technologies also help us to deliver successful disaster recovery

Ladislav Salat, IT Technical Manager Tesco Stores, CZ



Simplify Management

“VMware has proven itself as an ideal solution for the Eurovision Song Contest press center. We can manage the complete desktop infrastructure centrally, including the maintenance of desktop images and the provision of new virtual machines when increased capacity is required. The VMware solution gave us the freedom and flexibility to try different approaches safe in the knowledge that we could easily undo changes

Nenad Čukalović, Head of System Engineering, Radio Television of Serbia



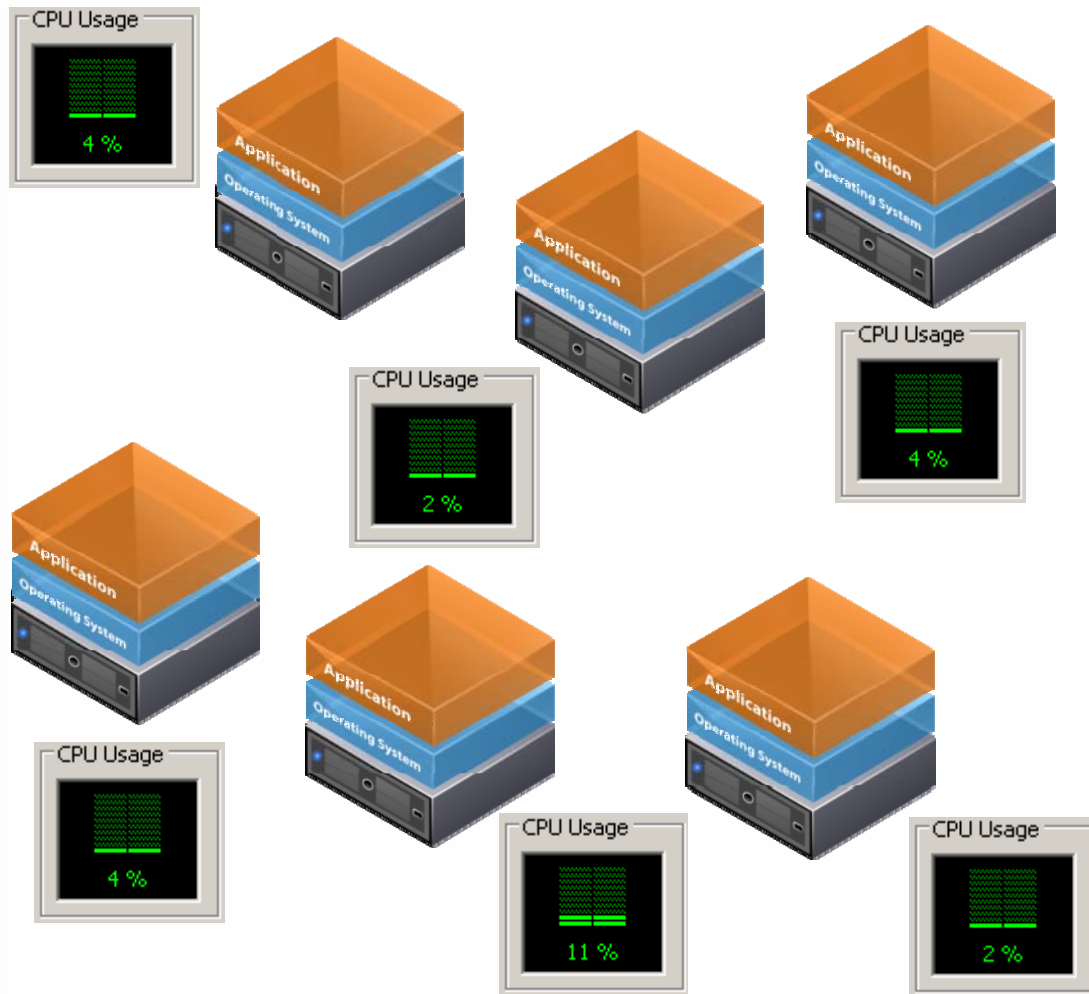
Meet Service Levels Efficiently

*Using VMware virtual infrastructure, we can offer the **same levels of service** and **more flexibility for up to 40 percent lower server and operating costs.**”*

Rob Jones, Director of Technology, ALSTOM



Without VMware



Single components require:

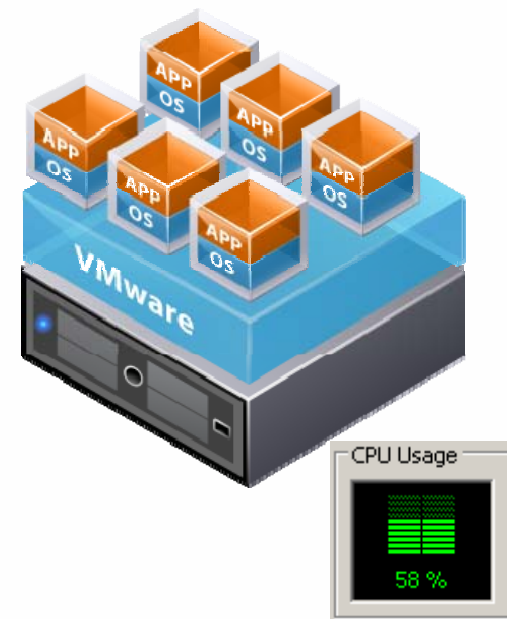
- Power
- Cooling
- Space
- Setup
- Configuration
- Management
- Support



With VMware

- Flexibility
- Rapid provisioning
- High Availability
- Disaster Recovery

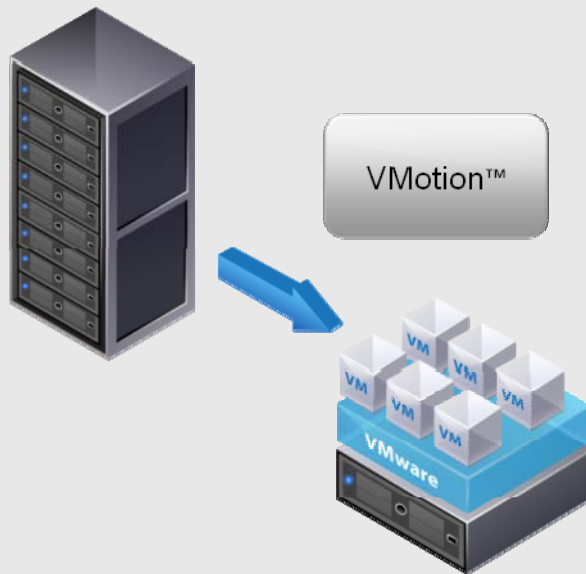
- Automation
- Systems Management integration
- Adaptive Datacenter



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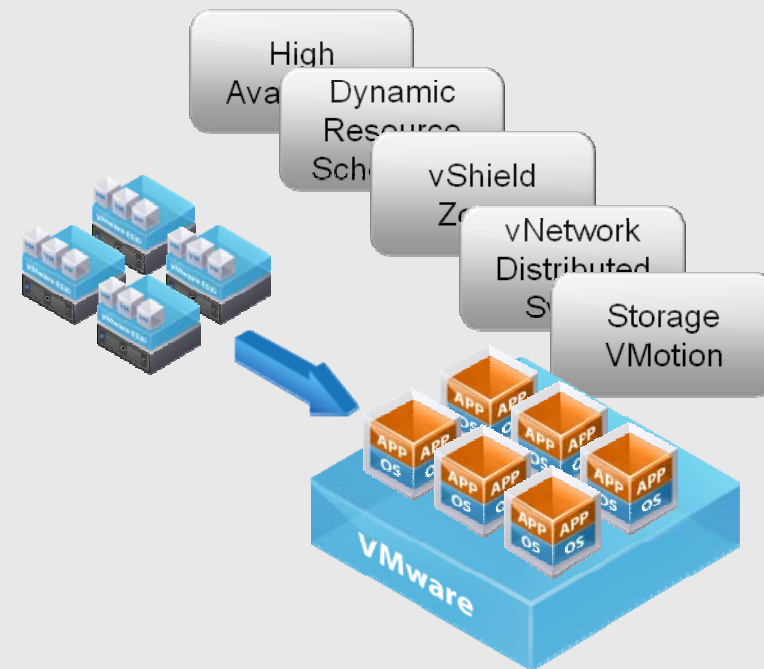
The Power of the Platform

Early Generation Focus *Multiple Apps per Machine*



Key Benefit = Consolidation

Platform Focus *Infrastructure Abstraction*

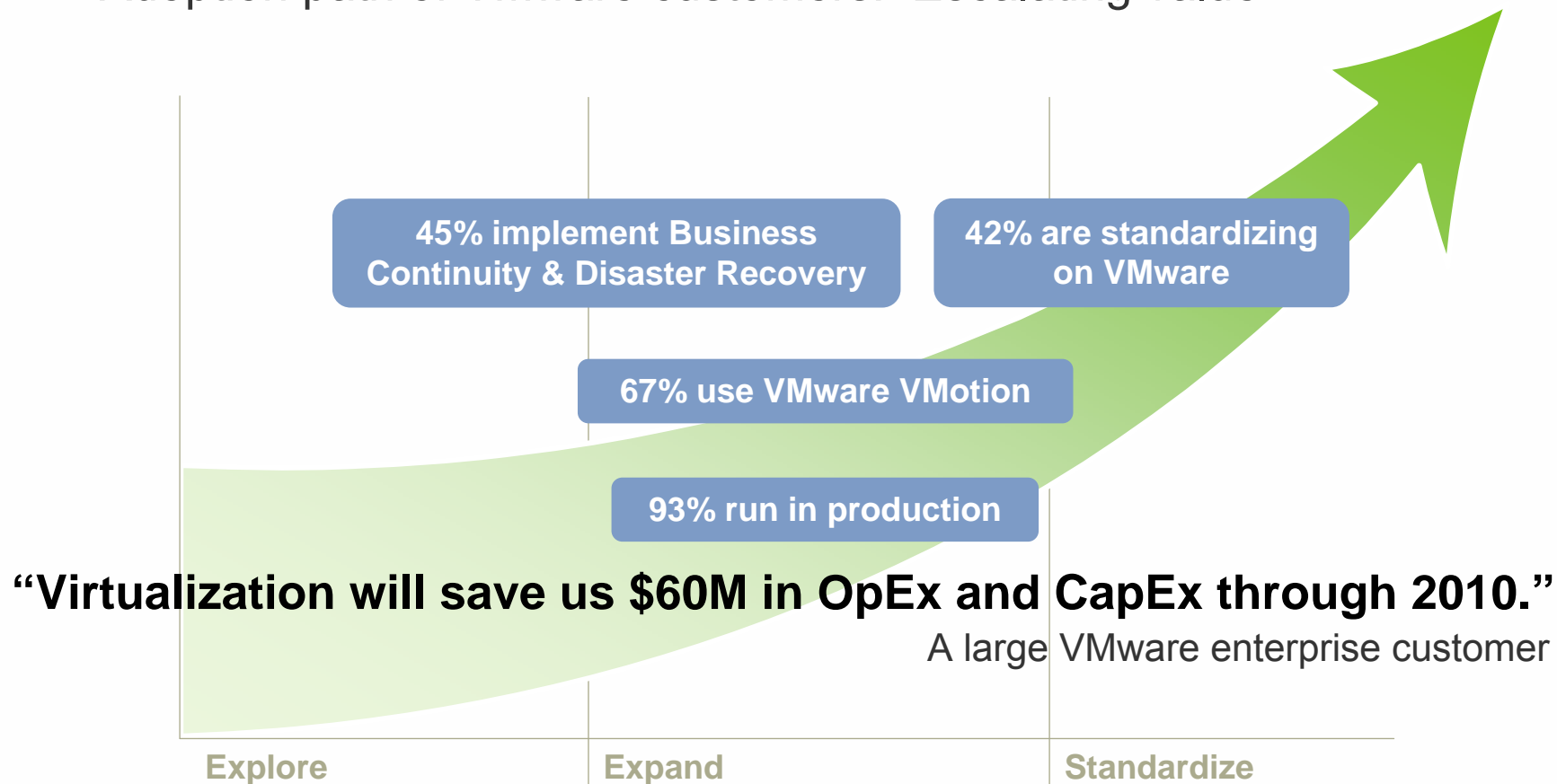


**Key Benefit =
Dynamic, Flexible Infrastructure**

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Start and Scale

Adoption path of VMware customers: Escalating value.



Source: Market Research Survey, 2008

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VMware ESX and ESXi – Serious Availability, available for Everyone

Proven by customers

- > Over 150,000 customers
 - > Over seven years of maturation
 - > Over 93% of customers using for production workloads
 - > Years of continuous uptime at customer sites
- Virtualization Available for everyone**
- VMware ESXi**
- The FREE industry proven virtualization software.

Uptime

1516 days

Name	State	Status	Uptime	Memory Size - MB	CPU Count	NIC Count
hpwesip01.net.bms.com	Connected	●●	1516 days	7886	4	3

Reliable by design

- > ESXi: 70MB of code
- > Less code = fewer patches
- > No dependencies or arbitrary drivers



Redmondmag.com
THE INDEPENDENT VOICE OF THE MICROSOFT COMMUNITY

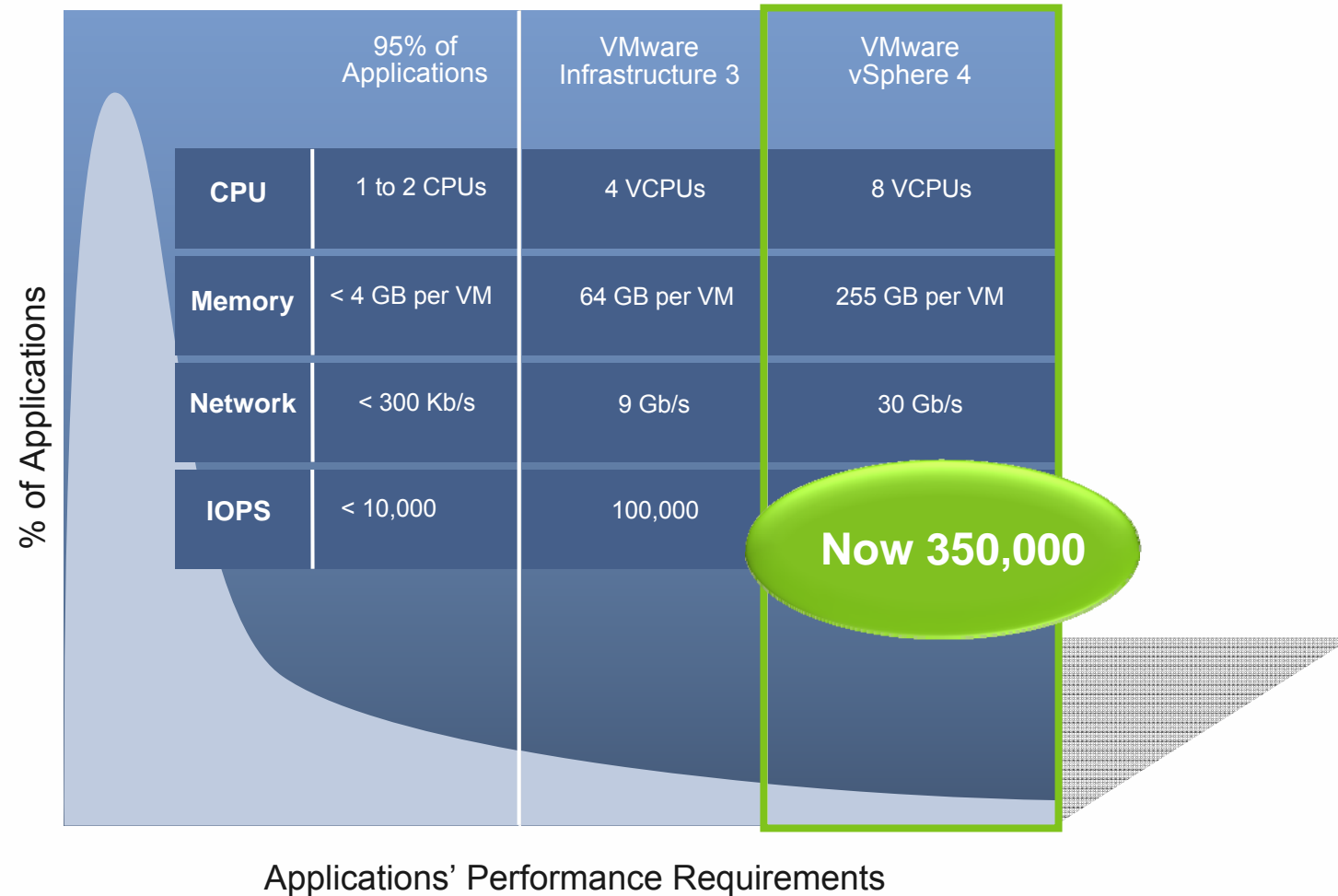


2008 Editor's Choice Awards

Most Reliable Category

1. VMware ESX
2. IBM mainframe, Physical Server

VMware vSphere VMs: Ready to Virtualize All Applications

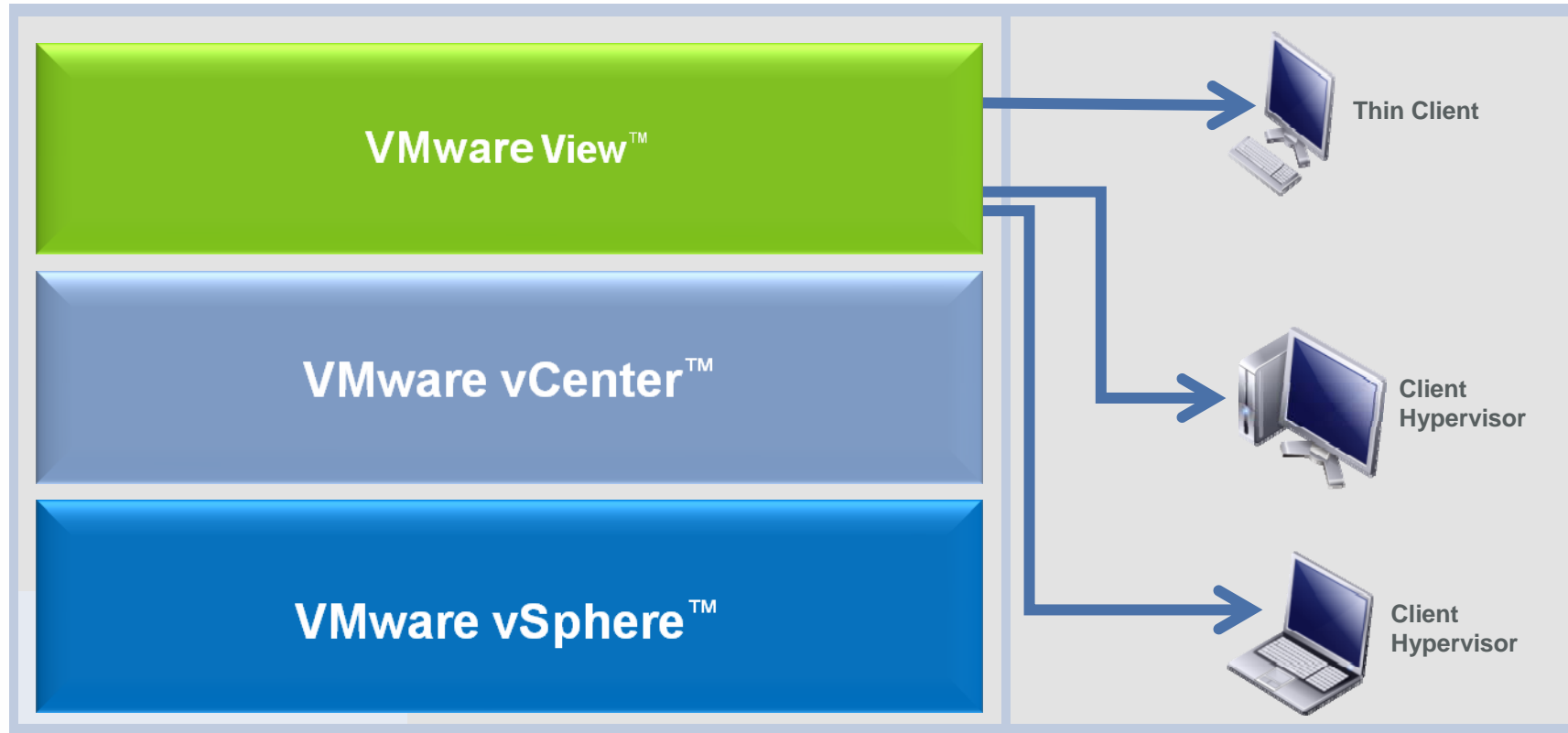


VMware View Enables Desktop as a Service



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VMware View Enables Desktop as a Service



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Centralized Enterprise Desktop Management

VMware decouples Desktop image from the PC

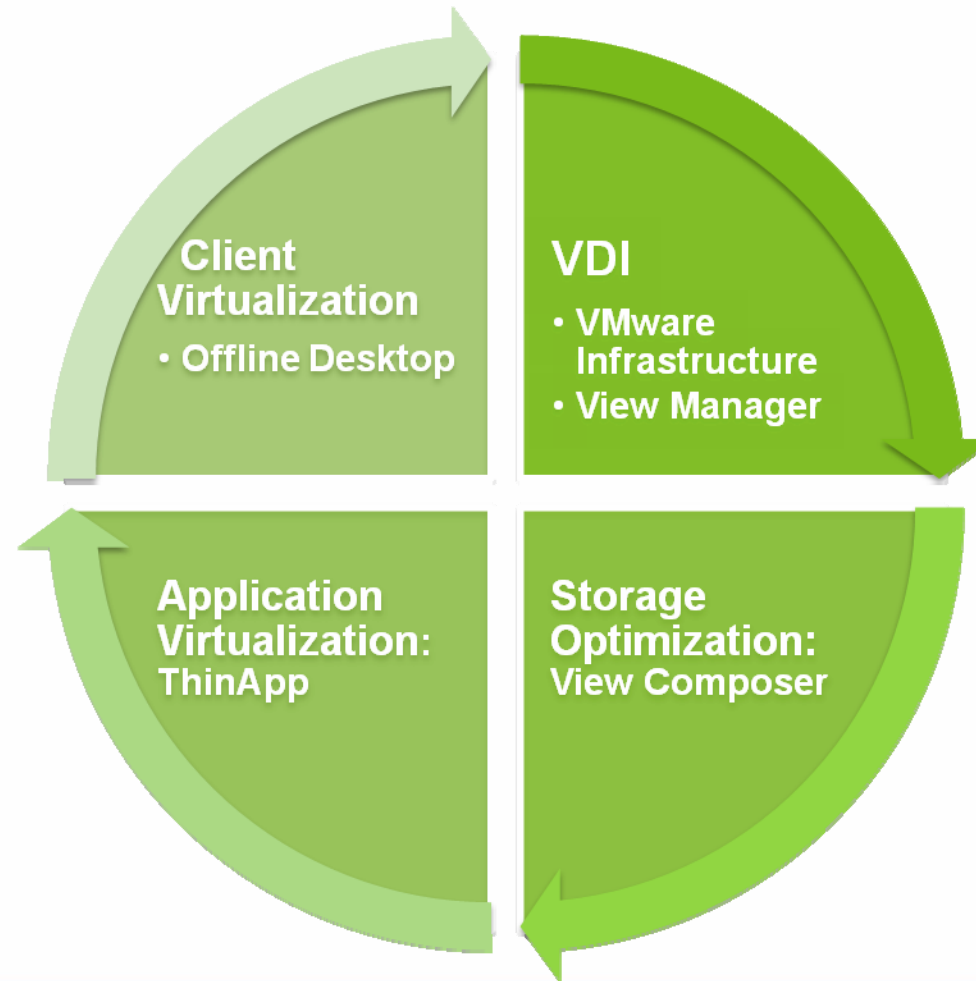
Desktops run in secure datacenter

Present Desktop into clients over Network



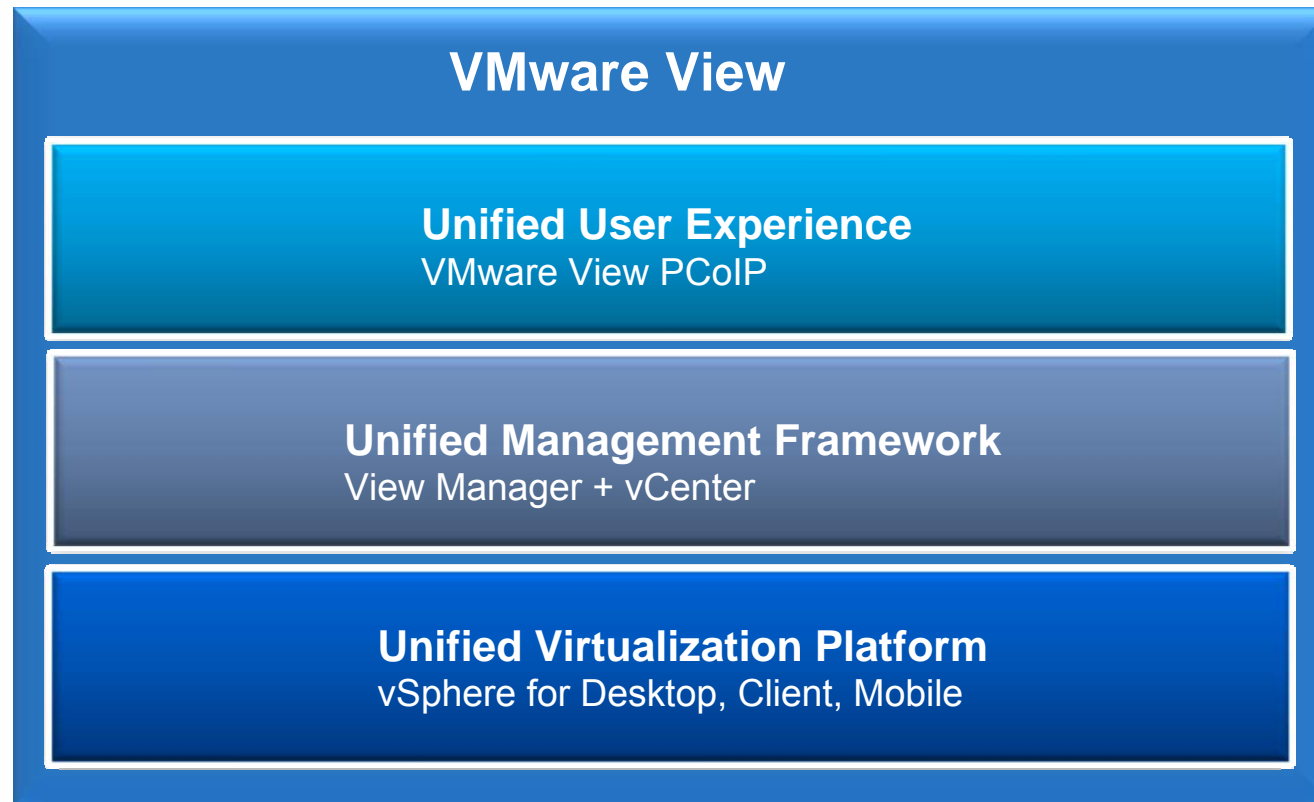
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VMware View 4 - Solution Components



VMware View 4 - Solution Overview

Enables User-Centric computing



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New in VMware View 4

- PCoIP (PC over IP) support (multi-protocol)
- Microsoft Windows 7 (experimental) support
- VMware vSphere 4 support



The Best User Experience to Any Device

From Device-Centric to User-Centric

WAN



“Productive Desktop”

LAN



PC-like User Experience

Local



Rich Portable Desktop



Client
Virtualization (CVP)

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VMware View – Value Proposition

VMware View enables Desktop as a Service



Efficiency

Centralizing management, administration and resources.



Improved Business Agility

Faster provisioning and user flexibility with universal access. User-centric versus device-centric.



Increased Security

Moving data from desktop/laptop devices into the datacenter. Policy enforcement using centralized security policies.

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VMware vCloud Initiative

Enterprise Ready

- Proven robust platform used by 150K+ customers
- Policy-based management, SLA, security, high availability for the cloud



Broad Application Compatibility

- Optimized for new and existing applications
- No need to rewrite or reimplement your applications

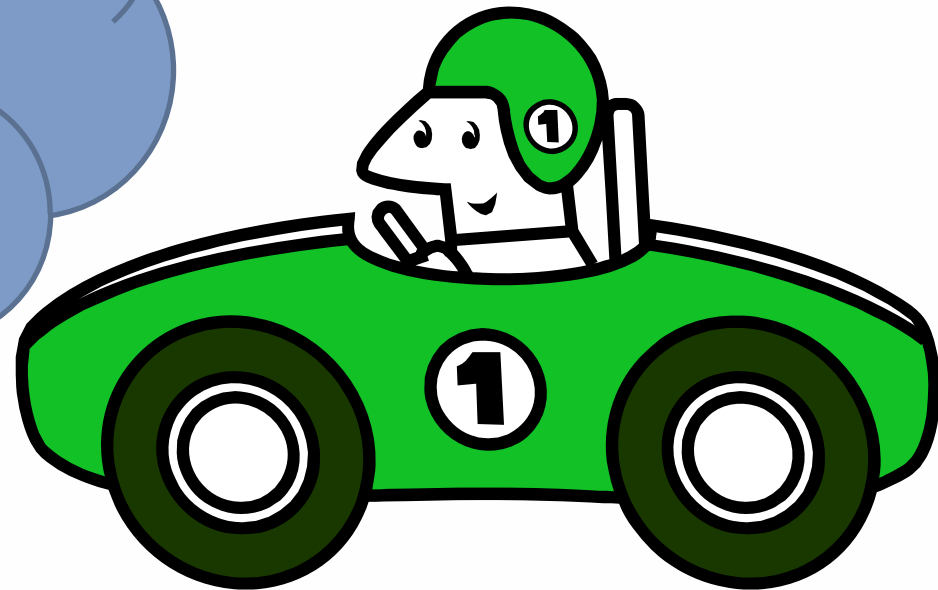
Choice

- Across internal and external clouds
- Broadest ecosystem of service providers
- 1000+ Service Provider Partners
- And now...



Every virtualized application saves...

4 tons
of CO2
emissions



1,5 cars off road

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Next Steps

Start with your next application, server or project with

- VMware ESXi for FREE! <http://www.vmware.com/go/getesxi>
- VMware vSphere 60 day trial
<http://www.vmware.com/download/vi/eval.html>

Get a solid calculation

- TCO Calculator: <http://www.vmware.com/go/calculator>

Is your application and hardware ready?

- Partner Directory: <http://www.vmware.com/partners/directory/>

Why Choose VMware

- Vendor selection checklist to ensure a Complete, Robust, Proven Virtual Infrastructure
<http://www.vmware.com/technology/whyvmware/>

Questions?

Thank You!

Name

E-Mail

Telephone

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Backup Slides

Cost per VM

Market Position (Microsoft, Xen)

Executive Staff Message

VMware ESXi Details

Lowest TCO Per-VM

	Foundation	Enterprise	Hyper-V
2-way server (4GB RAM)	\$6,000	\$6,000	\$6,000
Guest Windows licenses ¹	\$5,998	\$5,998	\$5,998
Virtualization license	\$1,000	\$5,750	\$0
Subtotal	\$12,998	\$17,748	\$11,998
Total VMs (512MB each)	15*	15*	7
Cost per VM	\$866	\$1,183	\$1,714

VMware's cost-per-VM beats even "free" products

¹ List price for 2-socket Windows 2003 Server Datacenter Edition

² Assumes a 2:1 memory overcommit ratio based on VMware advanced memory mgmt technologies

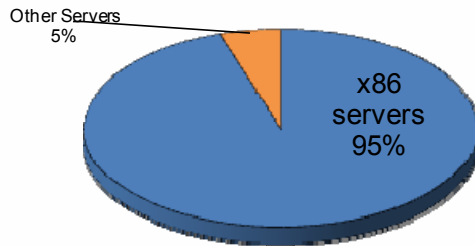
* Assumes 512MB of memory used by "host virtualization SW" for all vendors



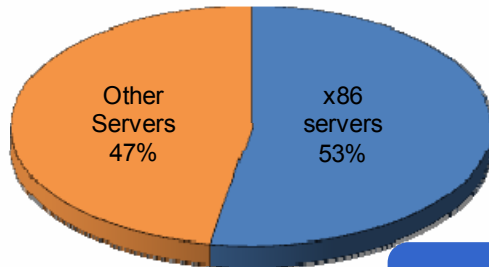
Virtualization Market Overview

The Worldwide Server Market

CY2007: 8M total server units shipped
(x86 server units =7.6M)



CY2007: \$54.4B total factory revenue
(\$28.7B x86 server factory revenue)



Source: IDC Server Tracker

30M x86 Servers In Data Centers Today
Average Utilization = 5 -10%



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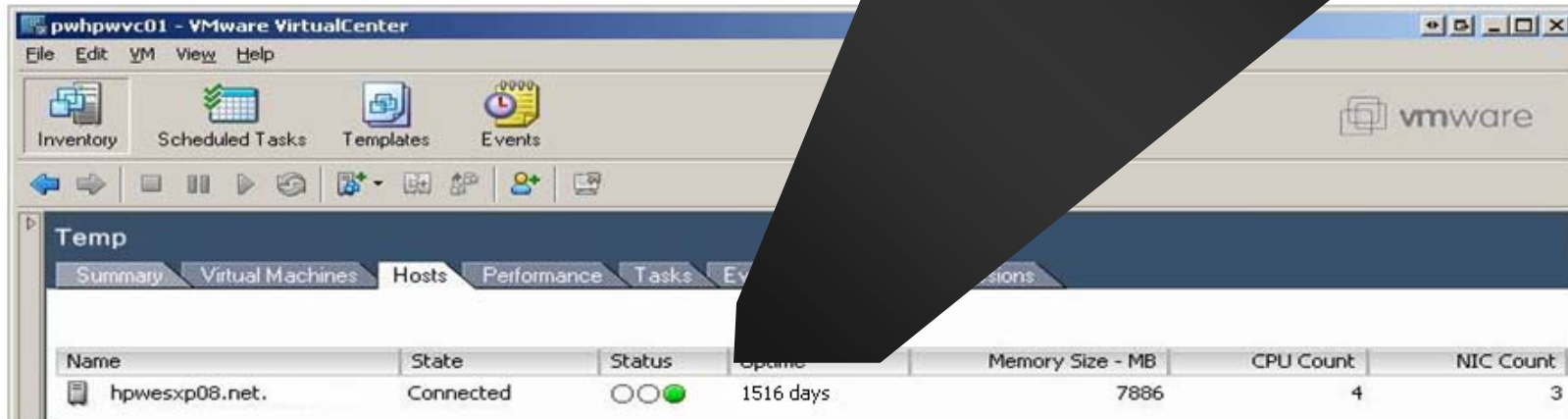
Customers Count on VMware ESX Reliability

VMware ESX: #1 in Reliability


Large pharmaceutical customer: Over four years of VMware ESX uptime!

Uptime

1516 days



The screenshot shows the VMware VirtualCenter interface. A table lists hosts, and a callout box highlights the uptime of a specific host.

Name	State	Status	Uptime	Memory Size - MB	CPU Count	NIC Count
hpwesxp08.net.	Connected		1516 days	7886	4	3

Companies Trust Their Production Servers to Run on VMware

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Size Does Matter



*Windows Server
2008 R2 RC Server
Core with Hyper-V*

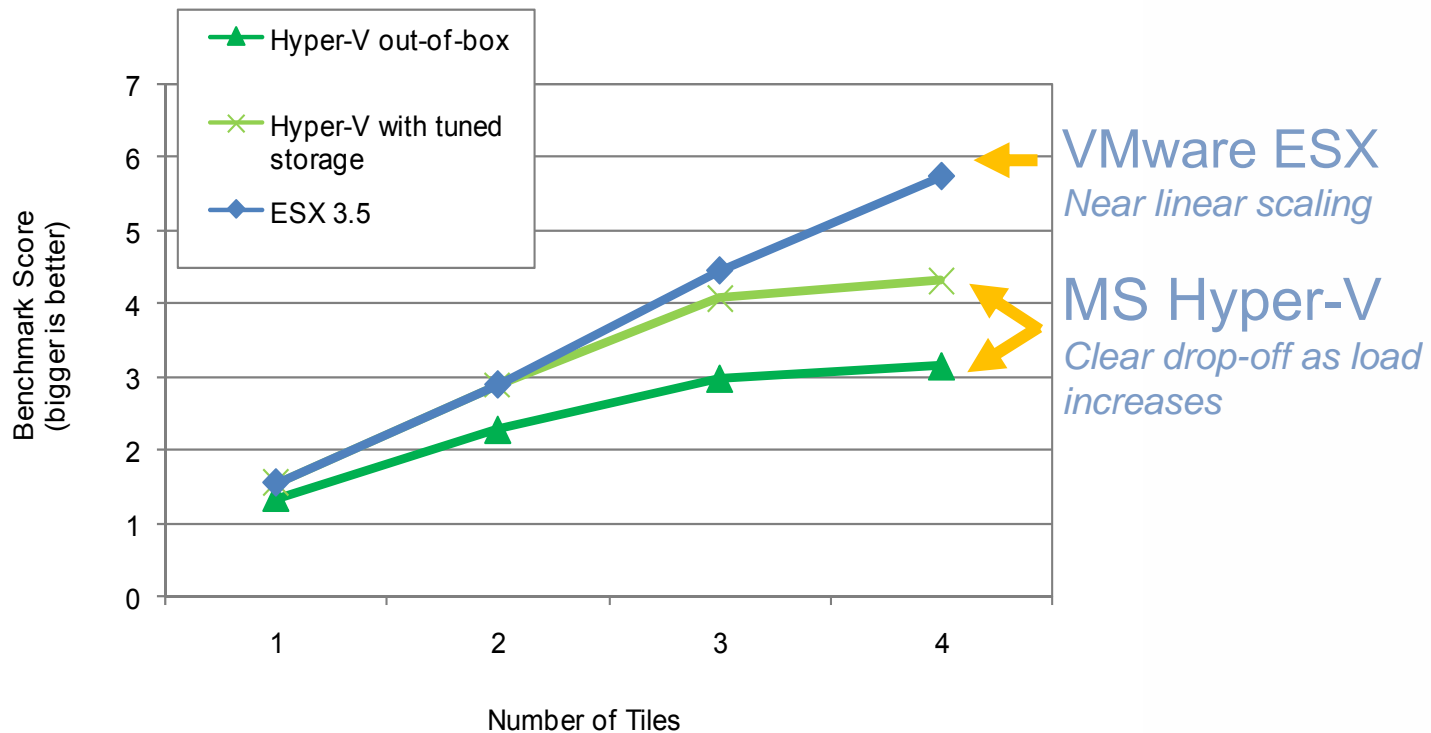
3.6 GB

*Hyper-V Server 2008 R2 RC
is even bigger at...*

4.4 GB

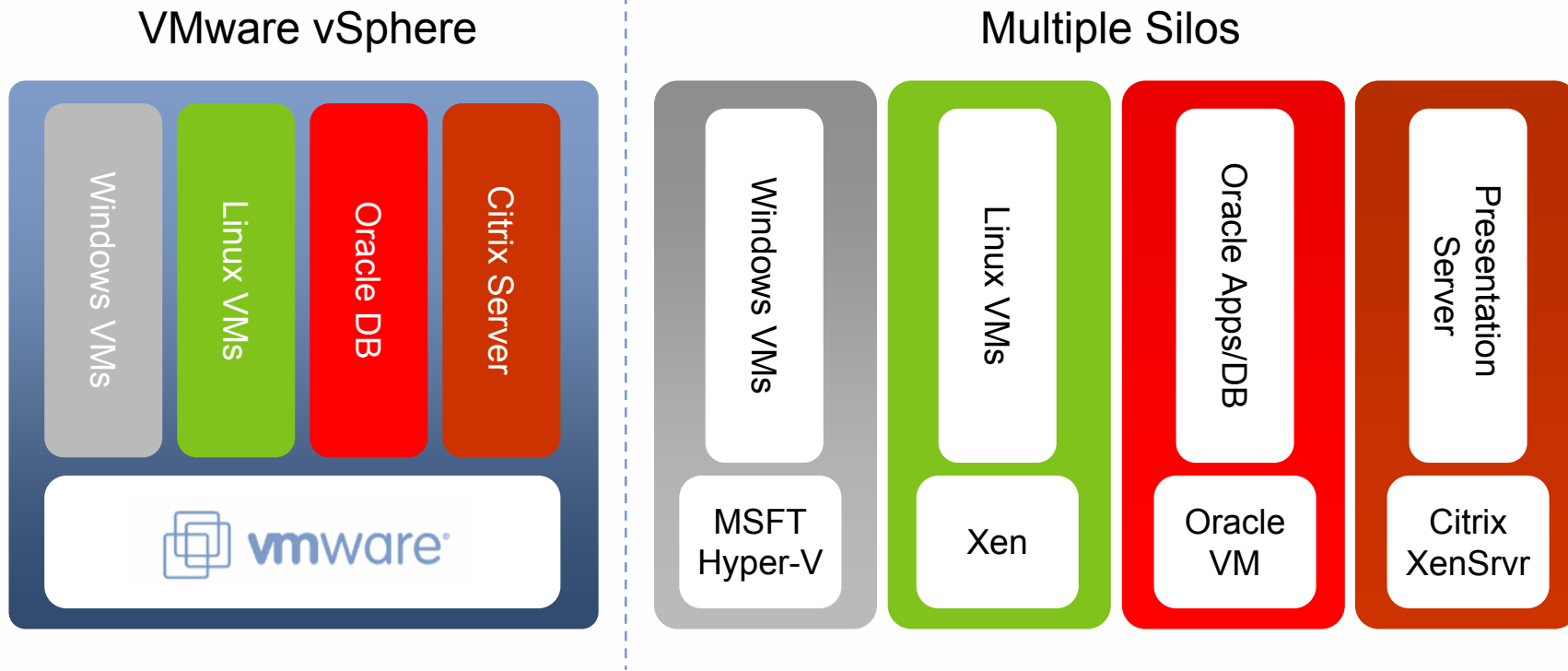
Hypervisor Architecture's Impact on Scalability

Heterogeneous Workload: VMmark Comparison



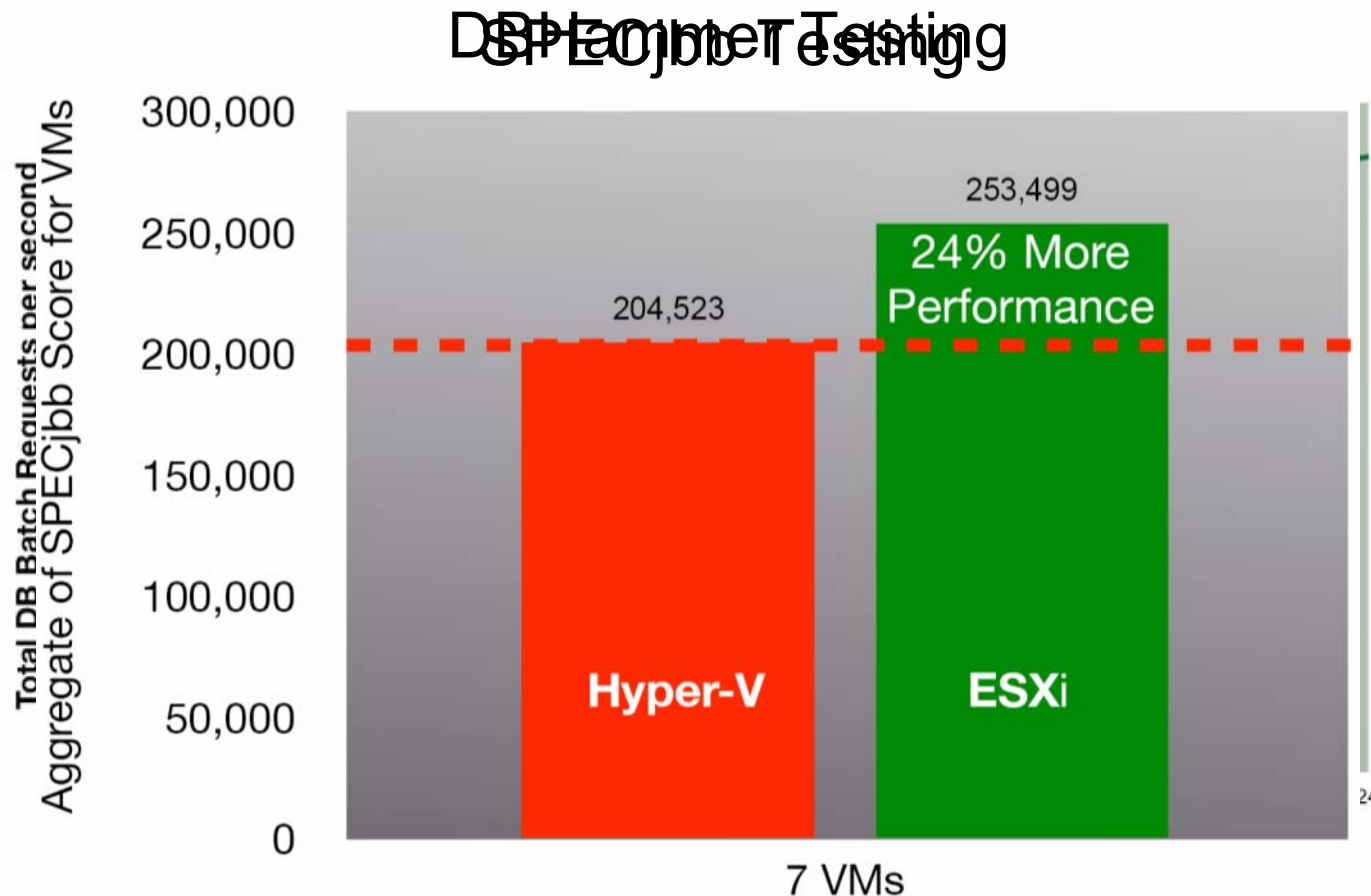
ESX outperforms Hyper-V on VMmark (heterogeneous workloads) by up to 56%
Demonstrates more efficient ESX scheduler and direct driver model

VMware - Single Platform to Support the Entire IT Infrastructure



Standardize on one virtualization infrastructure for all your applications
View your datacenter as a seamless pool of resources

3rd-Party Testing Validates Density Advantage



VI 3 can achieve **twice the VM density** of Windows Server 2008 on a common workload (DBHammer to drive SQL load)

VI 3 gets ~25% higher CPU performance due to more efficient CPU and resource scheduling (SPECjbb test)

[Click here for the full Taneja Group report](#), available on www.vmware.com

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Exec Backup Slides

Building the High Performance Data Center



As the CIO...

With VMware you...

Efficiency

Reduce IT Capital Expense by 50%
Improve Server to Admin ratio by 3 to 1
Reduce IT operational expense

Control

Eliminate planned and unplanned downtime
Drastically improve application QoS and adherence to SLA's
Provide self-service IT services

Choice

Delay expansion of datacenter facilities
Gain the freedom to outsource

So that your business

Reduces the cost of running the datacenter
Has more time for IT innovation
Improves moral by reducing overtime

Provides customers with services on their schedule
More easily meets stricter SLA's

Can choose where to invest

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Realizing the Fiscal Advantages



As the CFO...

With VMware you...

Efficiency

Reduce Capital Expenses
Reduce Operational Expenses
▪ IT FTE, Power, Cooling, Real Estate
Reduce Depreciation Expense

Control

Delay expansion of datacenter facilities
Improve IT cost allocation

Choice

Expand the choices for acquiring IT services

So that your business

Improves its balance sheet
Improves its EIBTD
Improves its Net Income

Defers its capital expenditures
Improves IT cost recovery and reporting

Can choose where to invest

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Increasing Flexibility Without Sacrificing Security



As the Security and Compliance Officer...

With VMware you...

So that your business

Control

Can provide user-oriented desktop services while maintaining control of data and policies

Introduce security below levels available with physical servers – i.e. CPU, memory, storage, and network

Consolidate workloads while maintaining secure isolation

Totally isolate the hypervisor from the operating system and applications

Can better meet its regulatory requirements
Realize less impact from outside attacks
Balance cost savings with secure systems

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Delivering Apps as Dynamic, Cost-Efficient IT Services



As Application Owners...

With VMware you...

Efficiency

Match or exceed physical performance
Reduce hardware and software costs
Accelerate application delivery

Control

Guarantee Application Quality of Service
Guarantee SLA's
Are able to more correctly allocate the costs of services

Choice

Expand the options for where to run your app

So that your business

Reduces the cost of running business critical apps
Realizes benefits of SOA and on-demand services

Realizes unmatched service availability
Improves management of service allocation policies
Can charge end-users for actual costs

Can choose the most cost-effective solution

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Gaining Control and Management of Desktops



As IT Stakeholders...

With VMware you...

Efficiency

Reduce the complexity of managing desktops

Can rapidly provision new desktops and decommission when no longer needed

Control

Have centralized control of data security and use policies

Achieve unprecedented business continuity and disaster recovery

Choice

Allow desktops to follow users regardless of device and location

So that your business

Reduces costs of desktop maintenance and management

Realize improved security and compliance
Reduces impact of disaster recovery

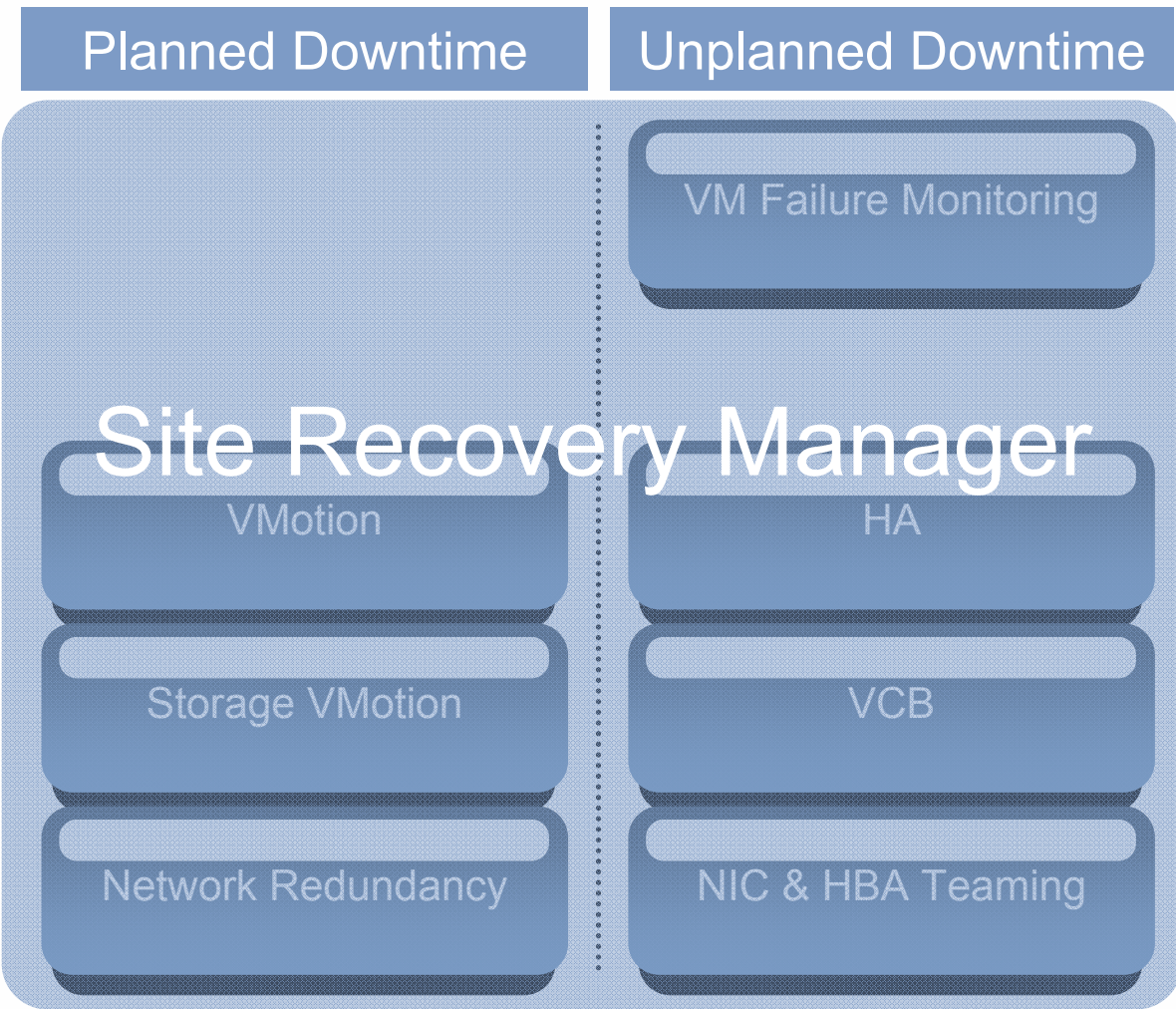
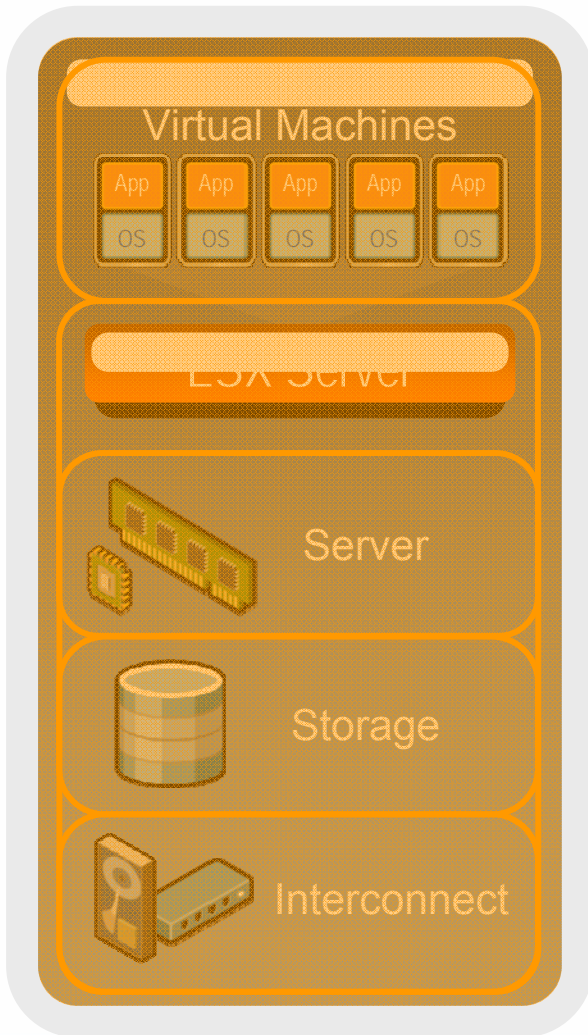
Can realize the maximum flexibility to place its business

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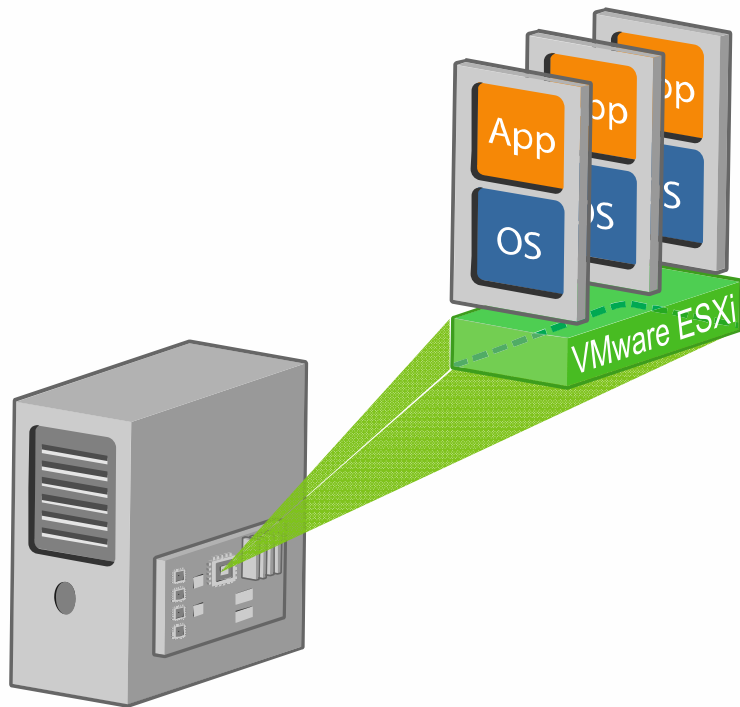
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ESXi and broad solution

VMware Solutions Maximize Uptime



ESXi: Thin, Hardware-Integrated Hypervisor



**70MB footprint:
Increased security
and reliability**

**No installation:
From server boot to
running VMs in minutes**

DELL

NEC

hp
invent

IBM

FUJITSU

FUJITSU COMPUTERS
SIEMENS

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VMware ESXi Distribution

- > Availability as an embedded hypervisor
- > Available on www.vmware.com FREE
 - Download and hard drive install
 - Available standalone or in VI Bundle
- > Additional options available:
 - ESXi e-learning course via vmware.com e-commerce store
 - Virtual Appliances available under “File->Import” in the VI Client

Positive Customer Response

Plug-and-Play Installation, Configuration, and Deployment

- “I bring up a new server every 2 weeks or so. Instead of taking 1/2 day, it takes about 5 minutes! Just plug it in!”
- “This simplifies deployments to my remote branches where there’s local, low-skilled administration”

Hardware Integration

- “Buying virtualization with hardware is a natural way to procure, cuts down significantly on internal certification”

Security and Reliability

- “I like the reduced security exposure and the opportunity to simplify patching and updating”