

Ignite

Ignite Your
Cisco Career

Dr. Cherif Sleiman
Dir Technology Architecture

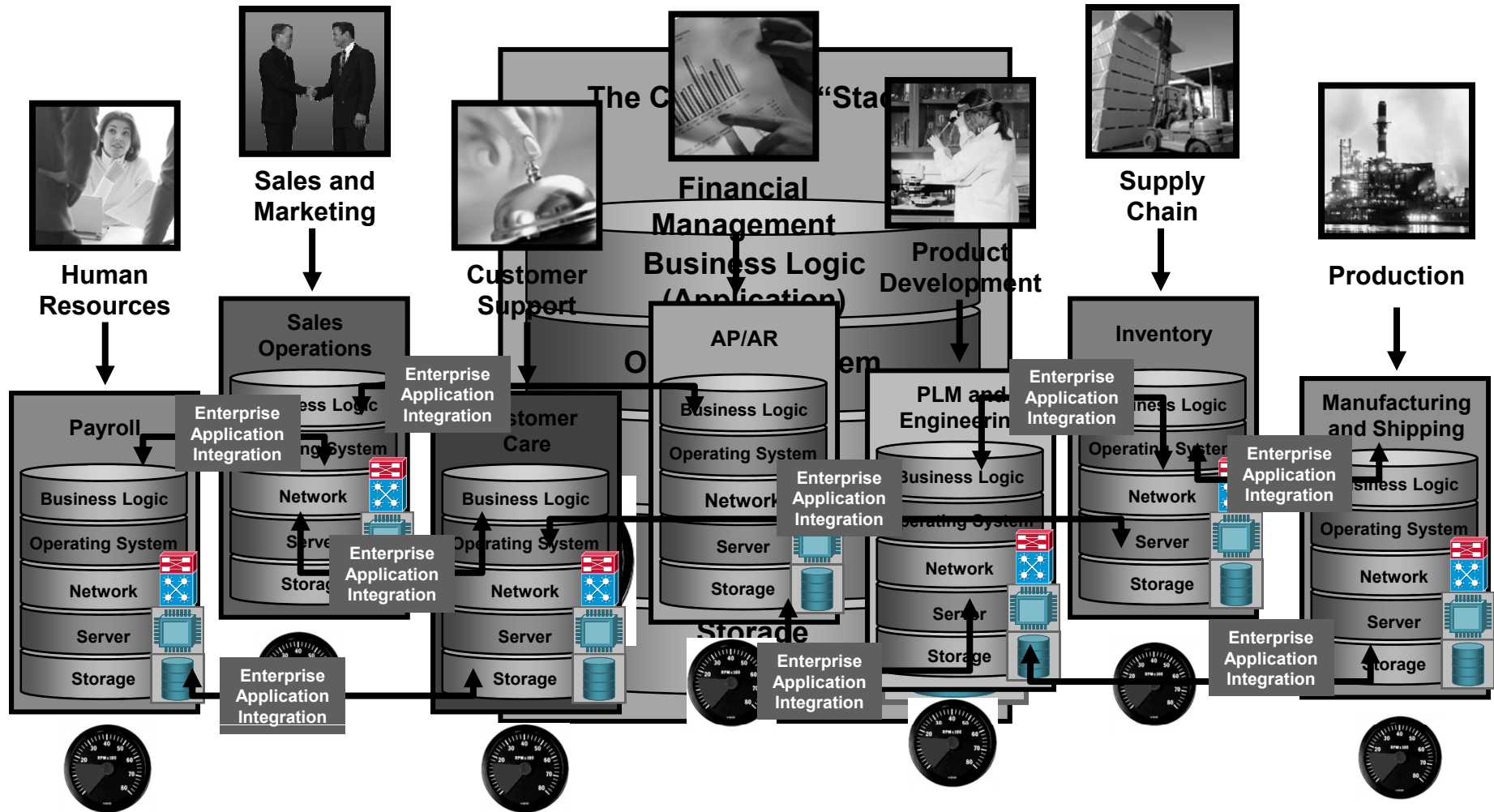


Data Center Challenges

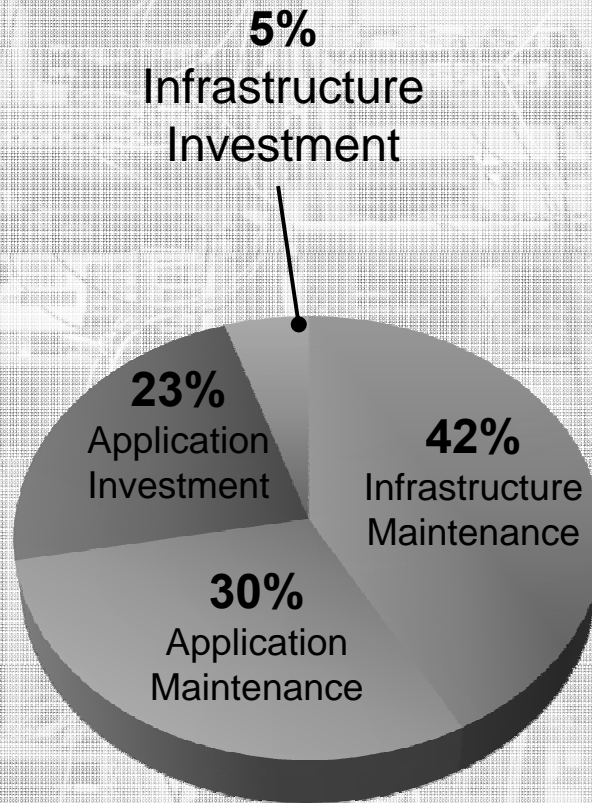
- Increased operational costs across the board
 - Increased end-user and line-of-business expectations
- Business continuance and disaster recovery
 - 9 to 18-month ROI on new projects
- IT assets obsolete data center facilities every 5 years



Traditional IT Applications and Infrastructure Slow Business Responsiveness and Growth



Where IT \$\$ Spent



Cause

- Overwhelming complexity
- Reliance on brittle infrastructure

Effect

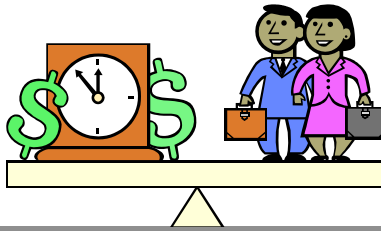
- >70% of IT budgets just “maintaining” status quo
- <30% of IT budgets goes to innovation and competitive advantage

***Business Agility
Depends on IT Agility***

Source: VMware Fortune 100 Customers

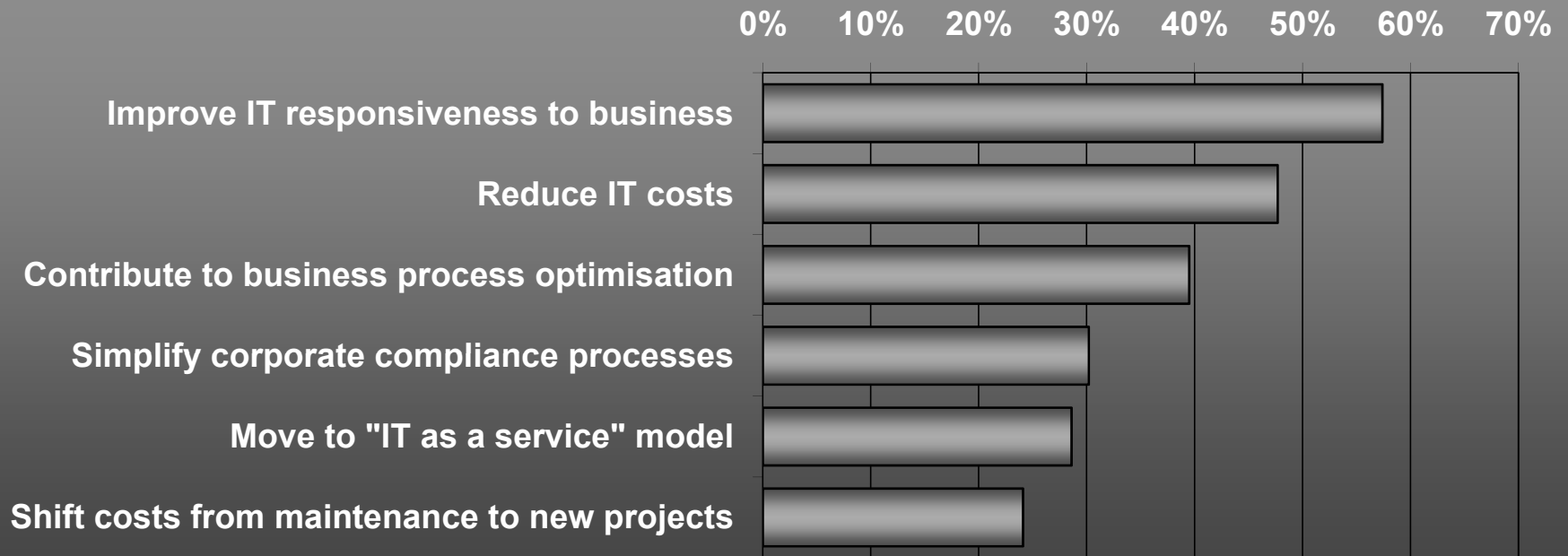
Responsiveness is #1 IT goal followed by cost control

Efficiency, cost control



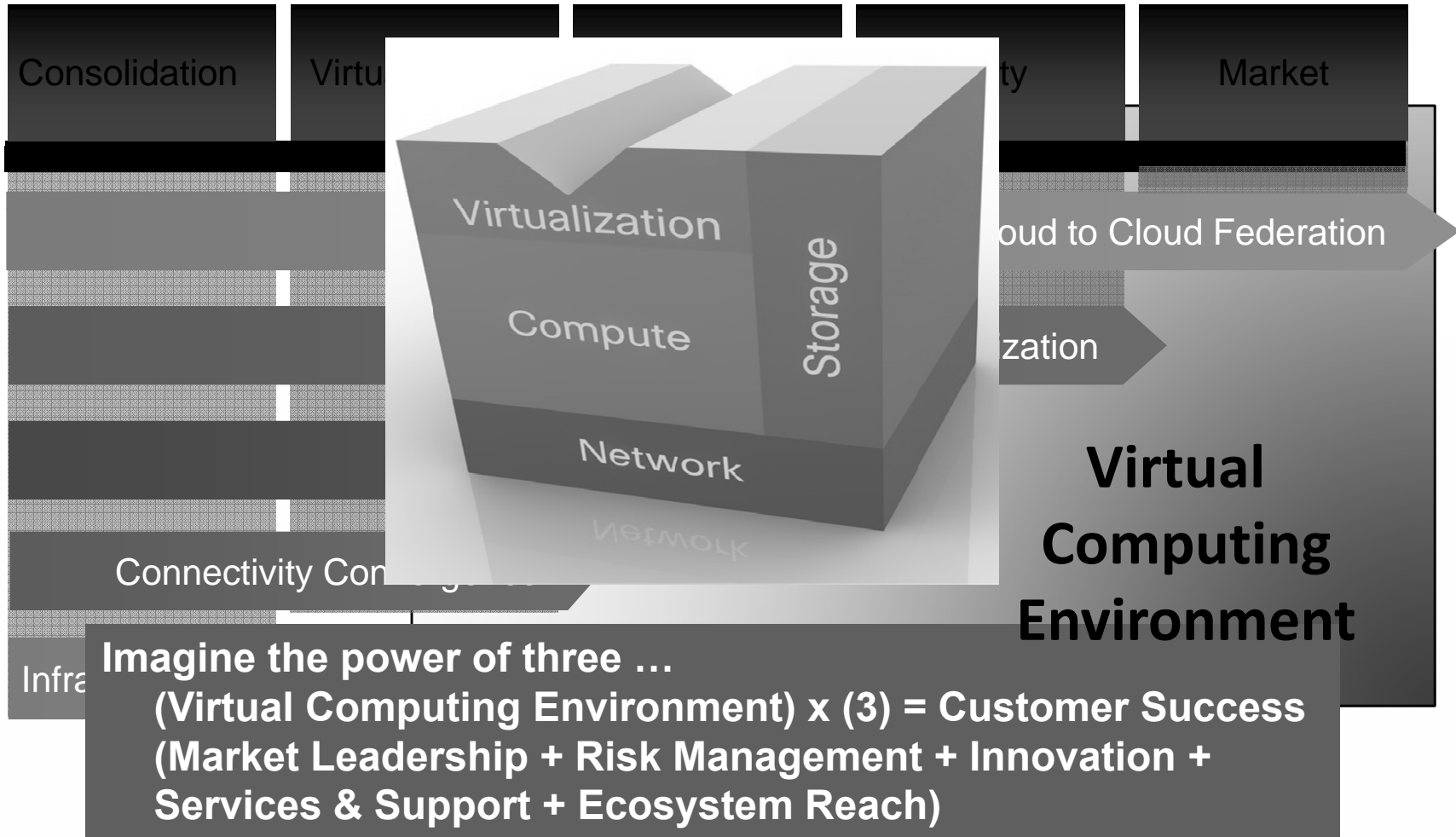
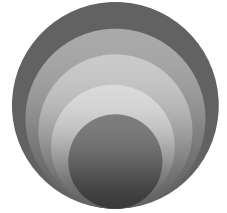
IT innovation, flexibility, responsiveness

What are your IT organization's top objectives during 2009?



Virtual Computing Environment Journey

Navigating the journey to virtualization and private cloud



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**

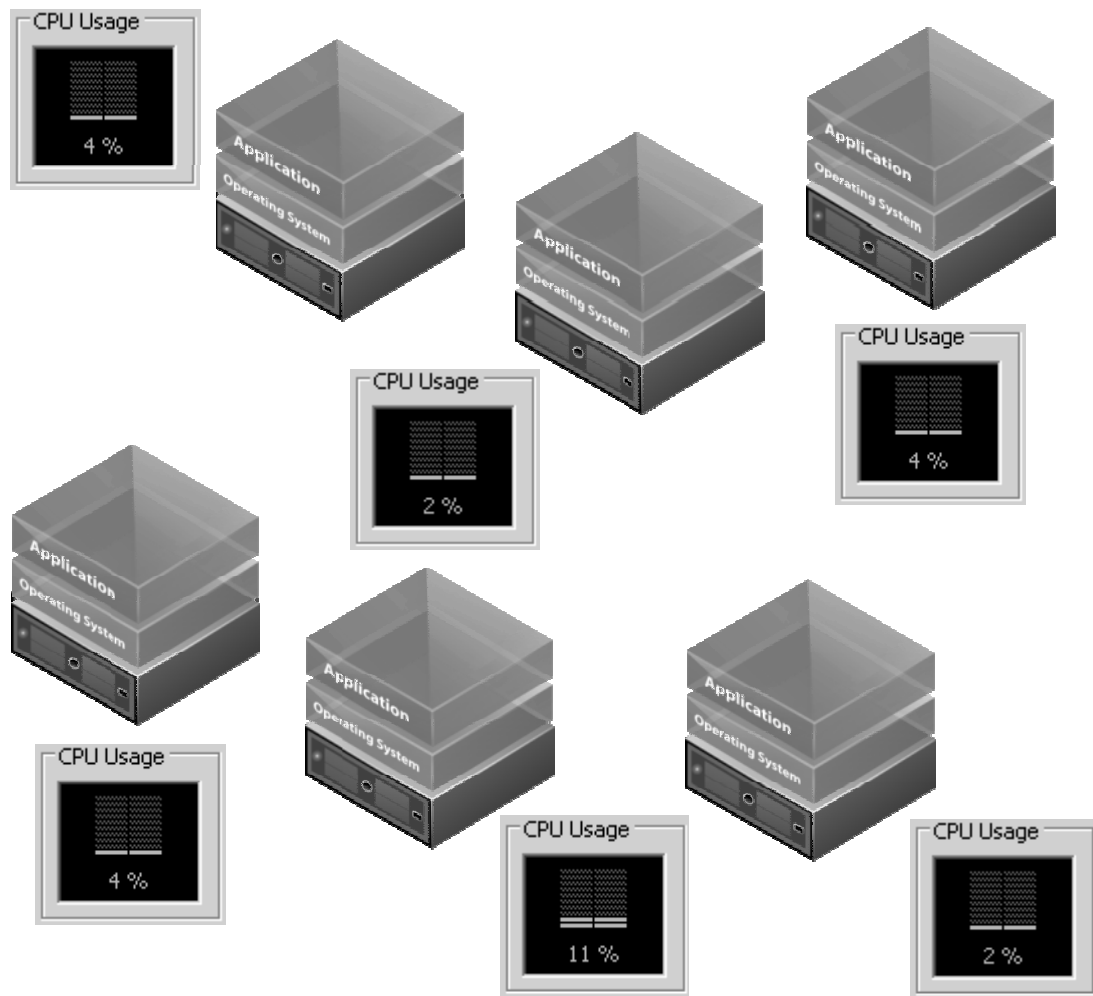
**Application and Infra-
structure Automation**

**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

Without VMware



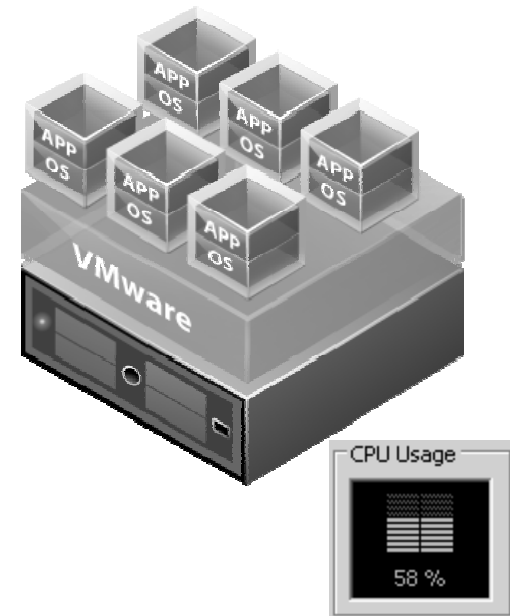
Single components require:

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



- **Flexibility**
- **Rapid provisioning**
- **High Availability**
- **Disaster Recovery**

- **Automation**
- **Systems Management integration**
- **Adaptive Datacenter**





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



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

Trusted

Control

Reliable

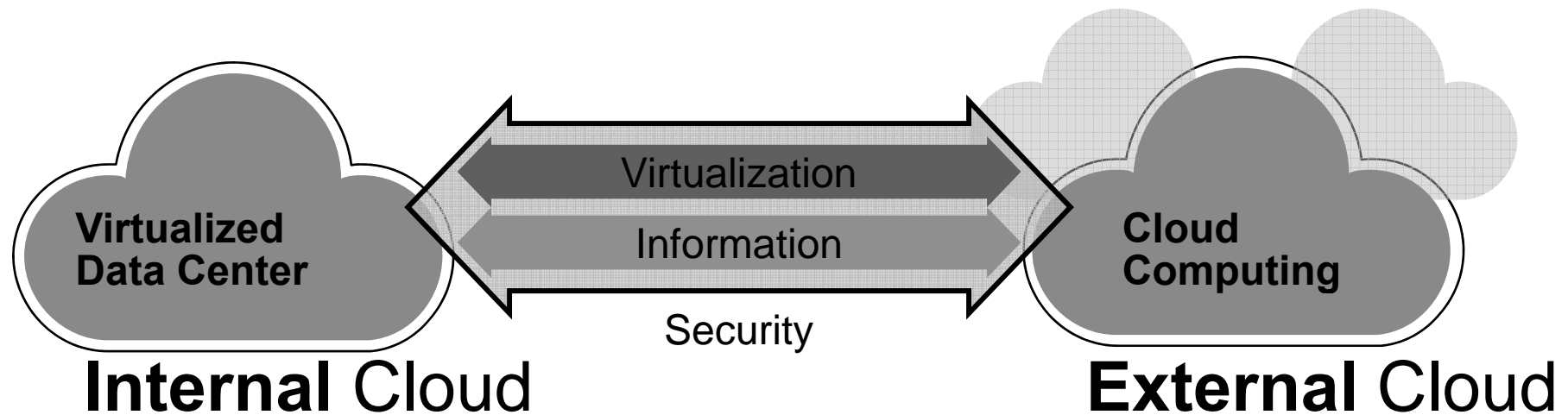
Secure

Flexible

Dynamic

On-demand

Efficient





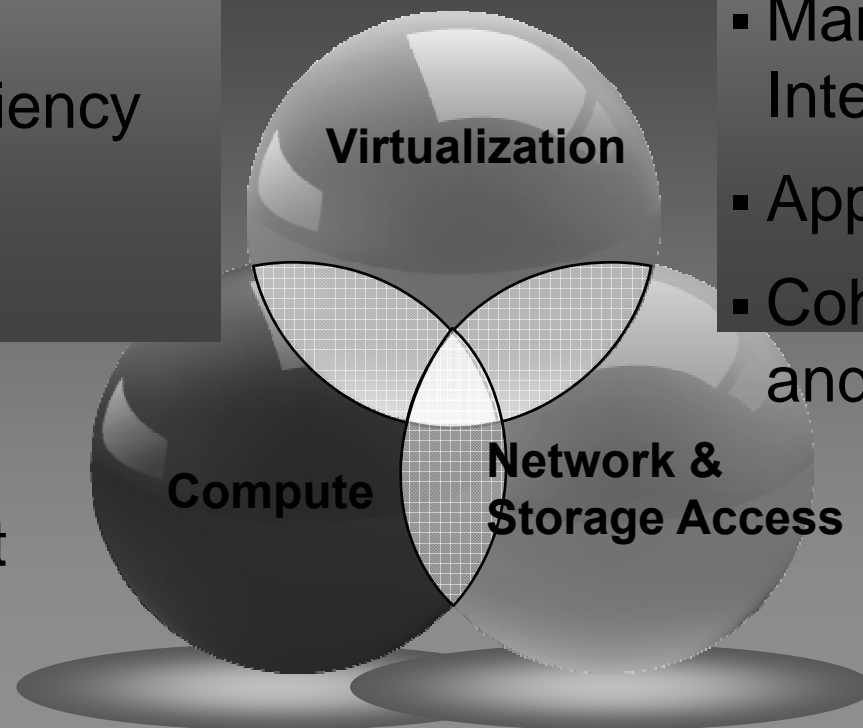
The Data Center is at a Market Transition

Transformation

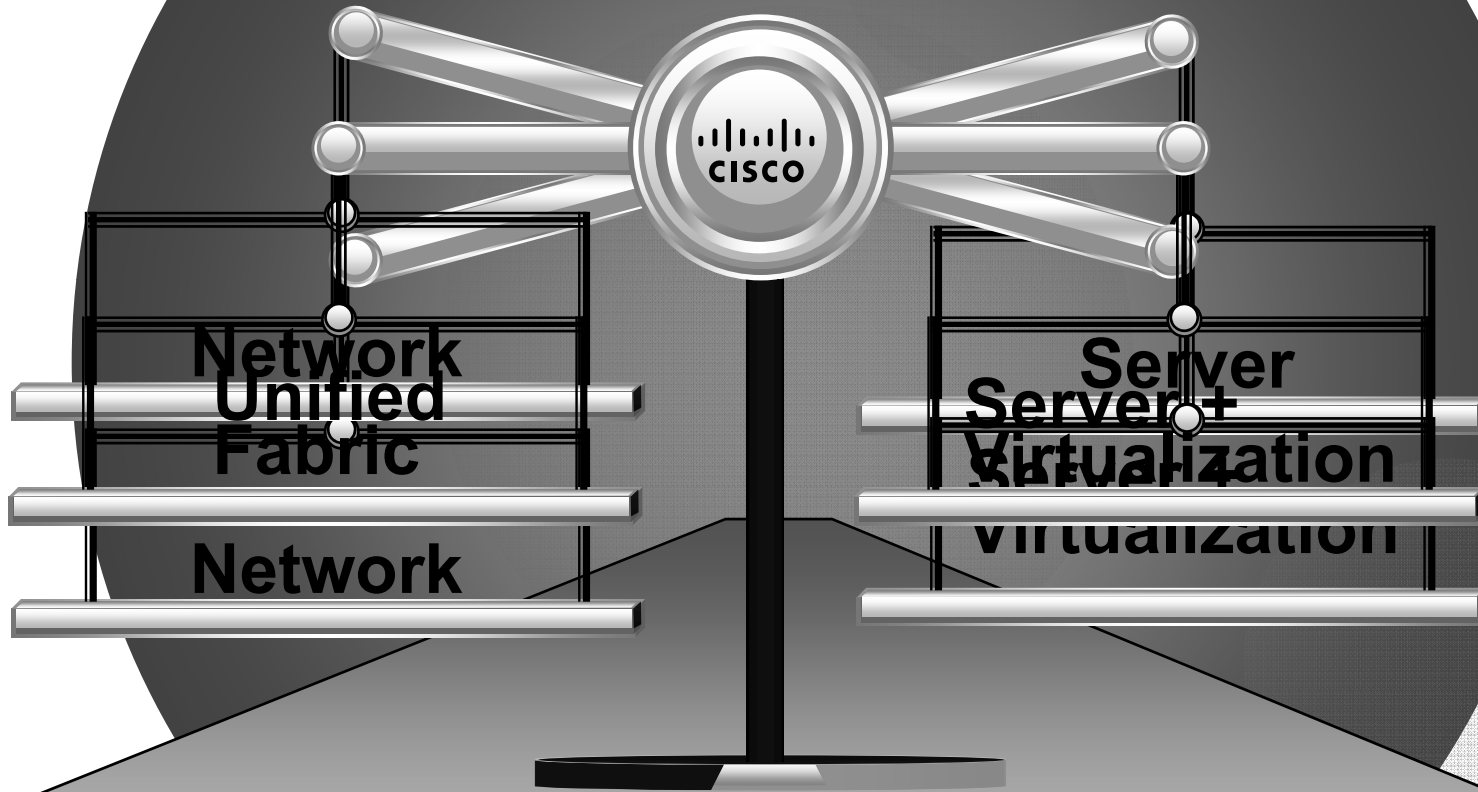
- Technology Advances
- Energy Efficiency
- Economic Efficiency
- Dynamic Business Environment

Challenges

- Scalability
- Management Integration
- Application Migration
- Coherent Policies and Security

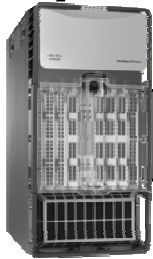


Transparency and Balance to Virtualization



Serve Any Workload, Any Server, Any Operations

Rapid Data Center Innovation and Integration



Nexus 7000
Lossless Fabric



Nexus 5000
10GbE DCB & FCoE



Nexus 2000
Fabric Extender



Nexus 1000V
VM-Aware Networking



Cisco UCS
Integrated Compute Platform



Cisco MDS
VM-Aware Storage

8GB FC



2008

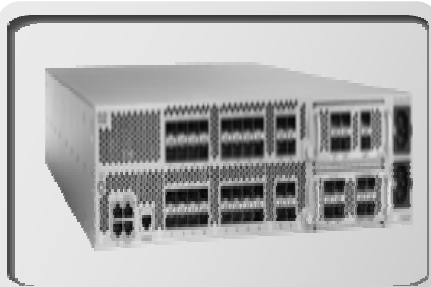
June

2009

June



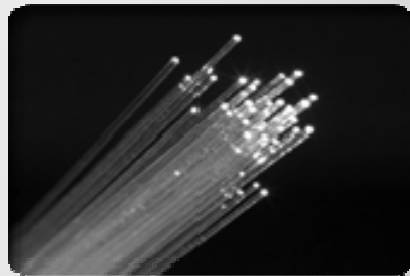
Technology Journey Leading To a Unified Data Center



1/10GE Lossless Ethernet

Nexus 5K, 2K-FEX

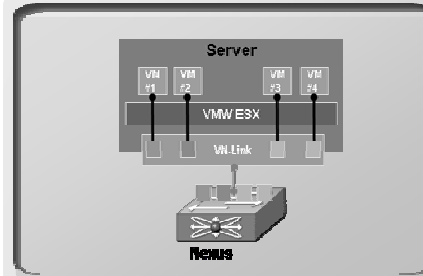
- Add Nexus 5k/2k for 1/10GE Ethernet
- Server access switch



Unified Fabric

Nexus 5K, 2K-FEX

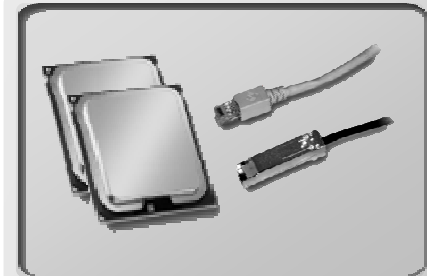
- ToR server access
- Wire once infrastructure
- Low-latency lossless
- Virtualization aware
- Standards-based



Server Virtualization

VN-Link, Nexus 1K

- Virtualization aware access layer
- Compatible with switching platforms
- Combine VM and physical network ops
- Standards-based



Unified Computing

UCS

- Industry Standard x86
- Platform for stateless computing and virtualization
- Standards-based

Unleashing the Full Potential of the Data Center

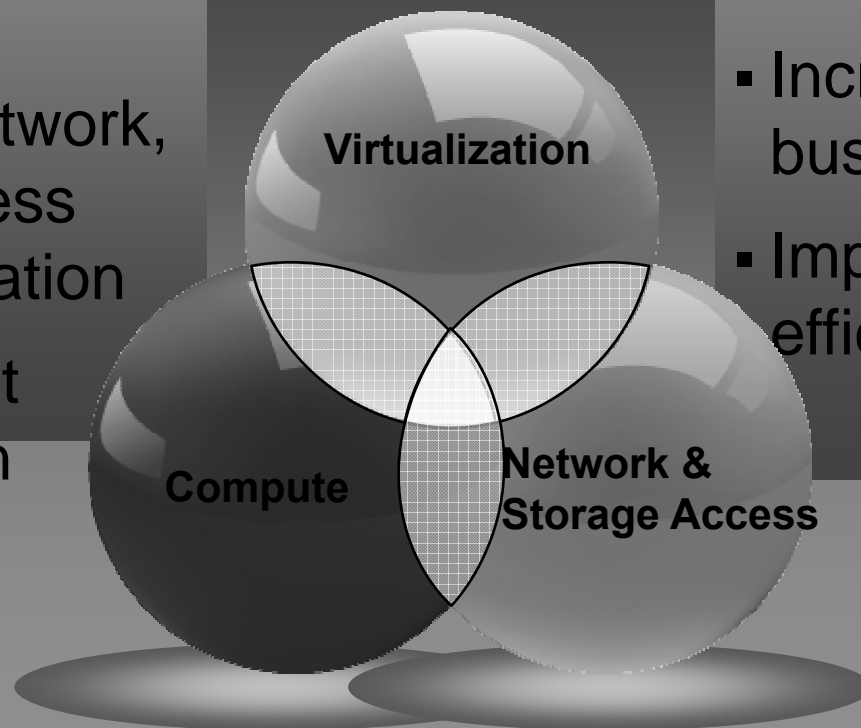
Unified Computing

Solution

- Cohesive system that unites compute, network, storage access and virtualization
- Management simplification

Benefits

- Reduced TCO
- Increased business agility
- Improved energy efficiency



Unified Computing System

A single system that unifies

- Compute: Industry standard x86
- Network: Unified fabric
- Virtualization: Control, scale, performance
- Storage Access: Wire once for SAN, NAS, iSCSI

Embedded management

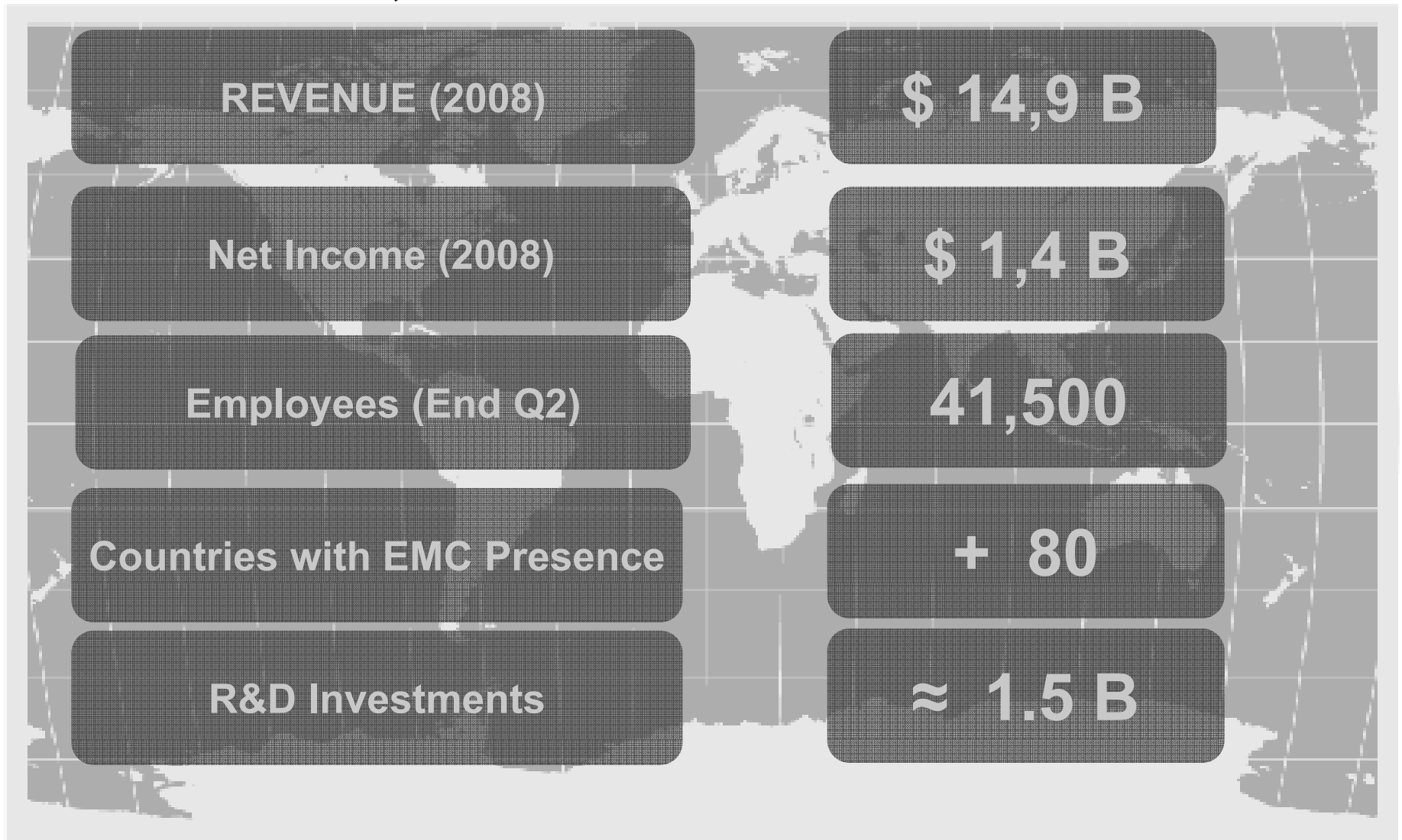
- Increase scalability without added complexity
- Dynamic resource provisioning
- Ability to integrate with broad partner ecosystem

Energy efficient

- Fewer servers, switches, adapters, cables
- Lower power and cooling requirements
- Increase compute efficiency by removing I/O and memory bottlenecks



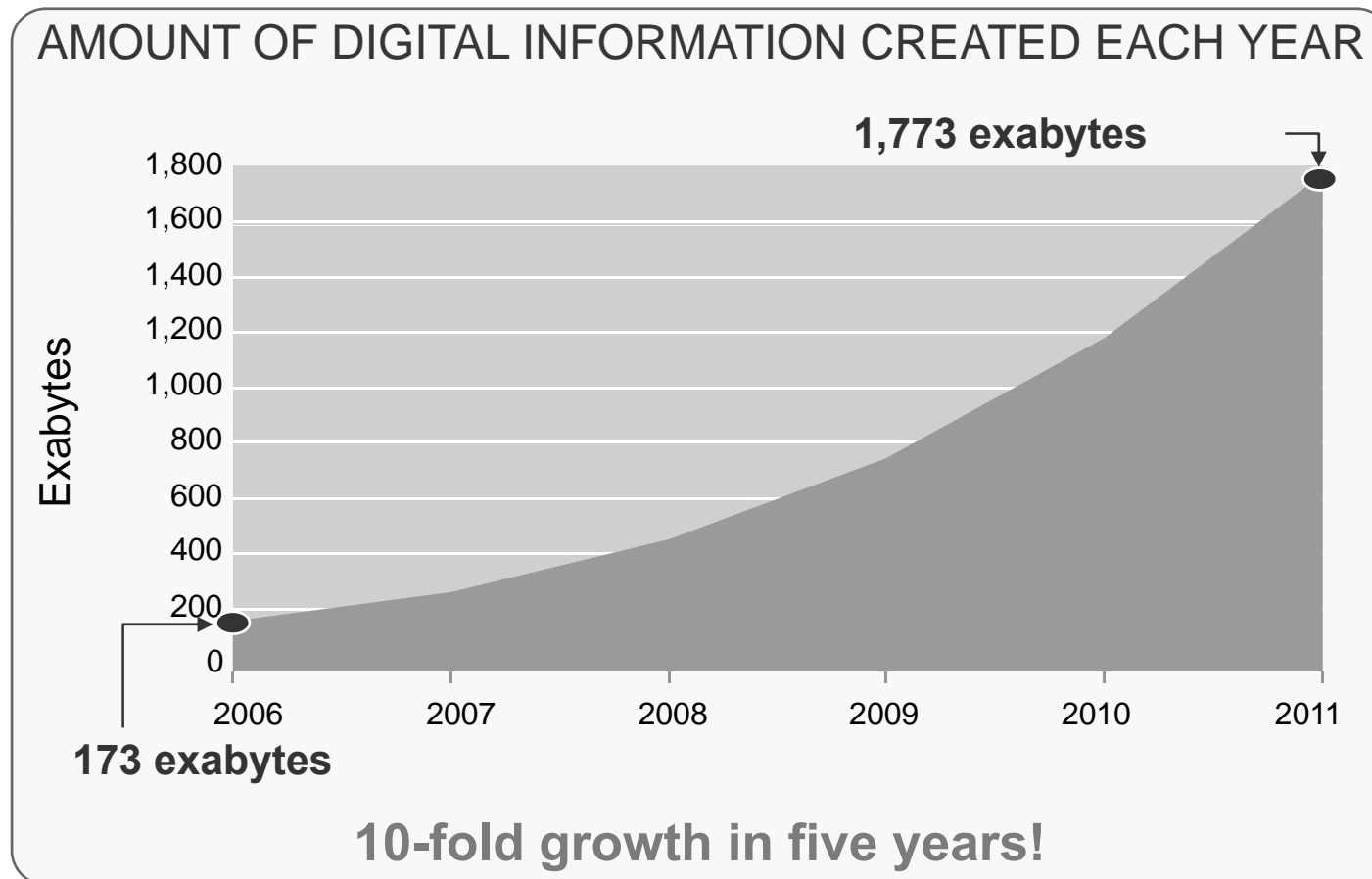
EMC : Robust, Solid and Reliable



EMC TEAM @ the center of investments



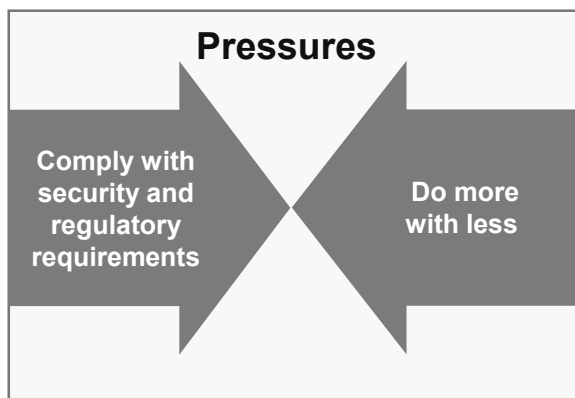
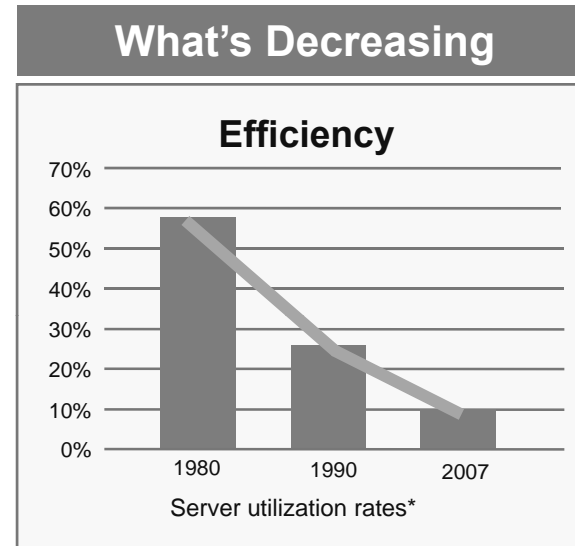
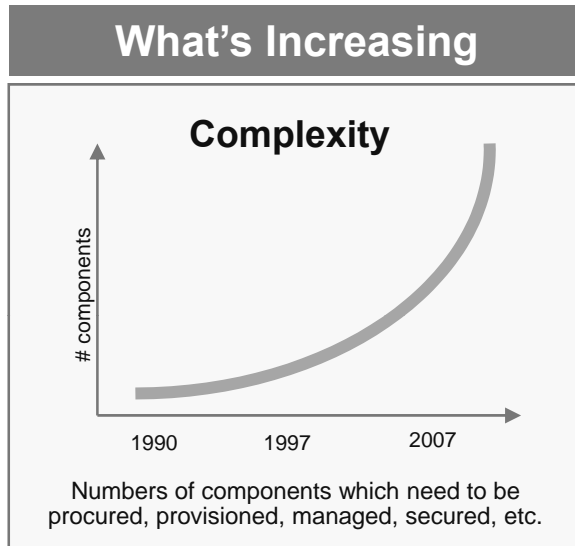
Information is Growing Exponentially



“Digital Growth – challenges and hopes”



Today's IT Reality



*Source: VMware, November 2007

Manage IT as a service

Dynamically monitor IT services and automate key processes

Quality of Service

Information

Securing Information from within

Security

IT infrastructure

Dynamically respond to IT changes in a controlled and efficient manner

Agility

Virtualized Data Center

Effective and Efficient Resource Utilization inside the next generation DC

Reduce Cost

EMC Innovation Technology areas

intelligent storage

widest set of storage choices

full VMware integration

“single giant array”

fully automated storage tiering

information management

deduplication

integrated business cont.

archiving

Optimized Backup

resource management

Centralized Provisioning

Automated Discovery

VM-aware ITIL workflows

VM-aware IT compliance

information security

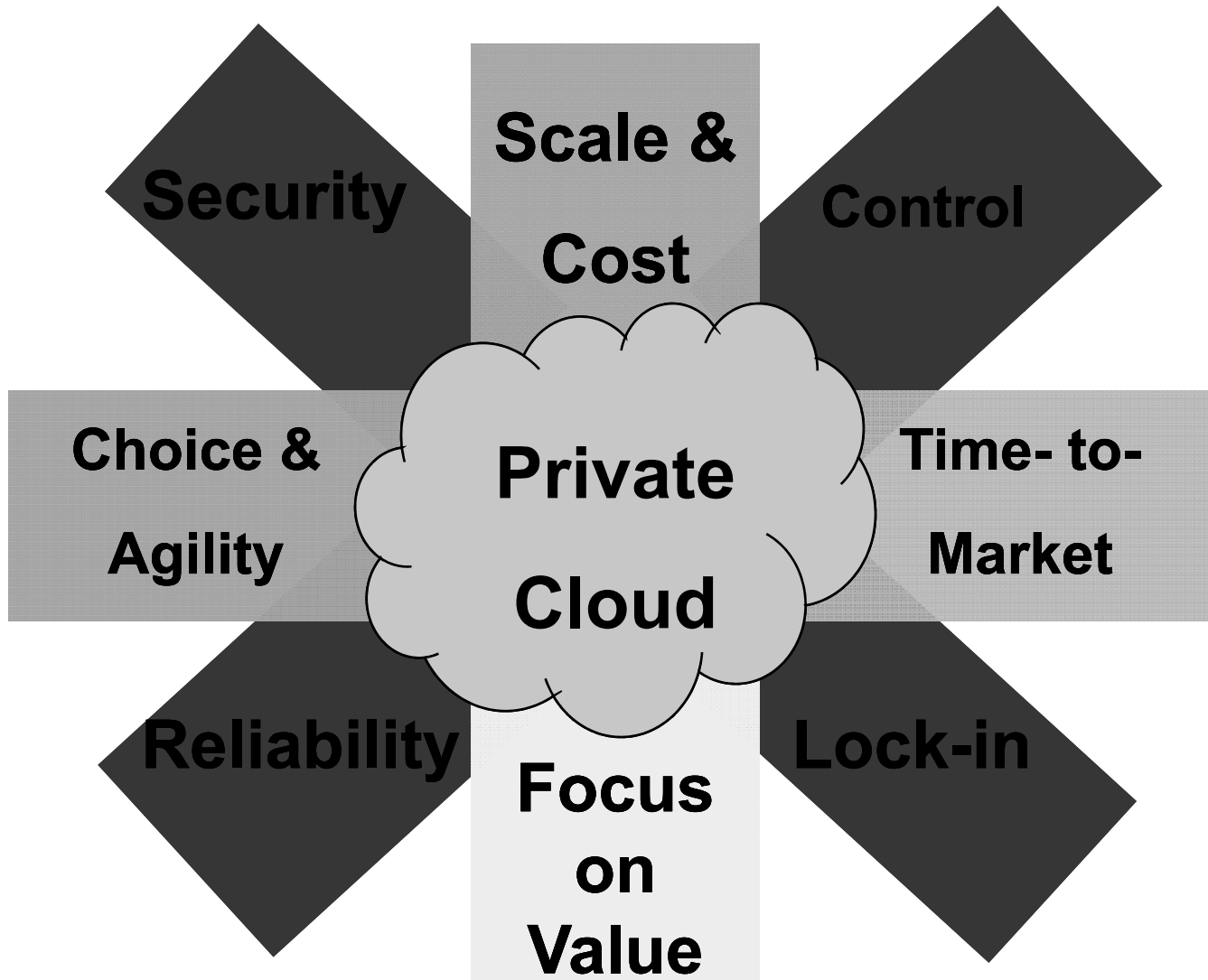
Privacy Control

advanced authentication

data loss prevention

auditing and compliance

Accelerating Benefits



Virtual Computing Environment Coalition

The top of the slide features the logos of the three coalition members: Cisco (a stylized bar chart), EMC (with the tagline 'where information lives'), and VMware.

Industry Transitions

- Virtualization
- Cloud

“Speed / Scale / Flexibility / Replicate”

Customer Driven

- Candid Feedback
- Opportunities / Challenges
- Customer Satisfaction
- De-Risk... Accelerate

Coalition

- Best-of-Breed
- Designed Together
 - Development
 - Unified Sales / Services / Support
 - Partnership Ecosystem
 - End-to-End Accountability

Innovation

- Build
- Acquire
- Partner





Vblock Infrastructure Packages

Core platform details

Vblock 2 (3000 – 6000+ VMs)

- A high-end configuration that is completely extensible to meet the most demanding IT needs of large enterprises or service providers

Vblock 1 (800 – 3000 VMs)

- A mid-sized configuration to deliver a broad range of IT capabilities to organizations of all sizes

Vblock 0 (300 – 800 VMs)

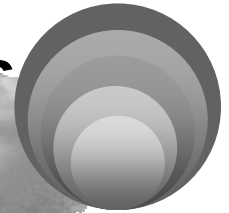
- An entry-level configuration to meet the IT needs of small datacenters
- Test/development platform for Partners and customers



Imagine the power of three ...

Scaling virtualized datacenter infrastructure backed by single support model

Virtual Computing Environment Coalition Services



Virtualization & Private Cloud

Executive Advisory Services

- Private Cloud Strategic Impact Advisory Service
- Cloud-based Business Advisory Service

Architecture Advisory Services

- Private Cloud Architecture Impact Advisory Service
- Virtual Desktop Advisory Service

Strategy Services

- Cloud Computing Strategy Service

Design and Implementation Services

- Vblock Design and Implementation Service

Value & Strategy

Architecture & Design

Deployment & Execution

Imagine the power of three ...

Dedicated service professionals aligning strategy with execution

Imagine the power of three...

Committed to customer success in the journey to pervasive virtualization and private cloud

The Virtual Computing Environment coalition, formed by Cisco and EMC with VMware, is an unprecedented collaboration to accelerate the journey to private cloud and its compelling efficiency and agility. This includes the joint development of solutions, services and partner enablement that minimize risk and speed time-to-value.





Q & A