

Unified  
Computing  
System  
Launch

# Welcome to Yas Island



Unified  
Computing  
System  
Launch



vmware



**Ammar Halabi**

**Regional Manager  
Data Center & Virtualization**

**Journey to the  
Virtualized Data Center**



# Data Centers are at a Critical Juncture

## Convergence of Traditional IT and new Business Pressures



Empowered User



Realtime Information



Economic Uncertainty



Collaborative Applications

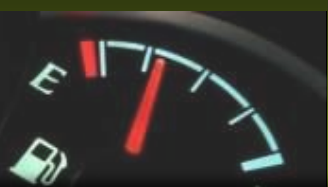
New Business Pressures



Operational Challenges



Energy Consumption



Asset Utilization



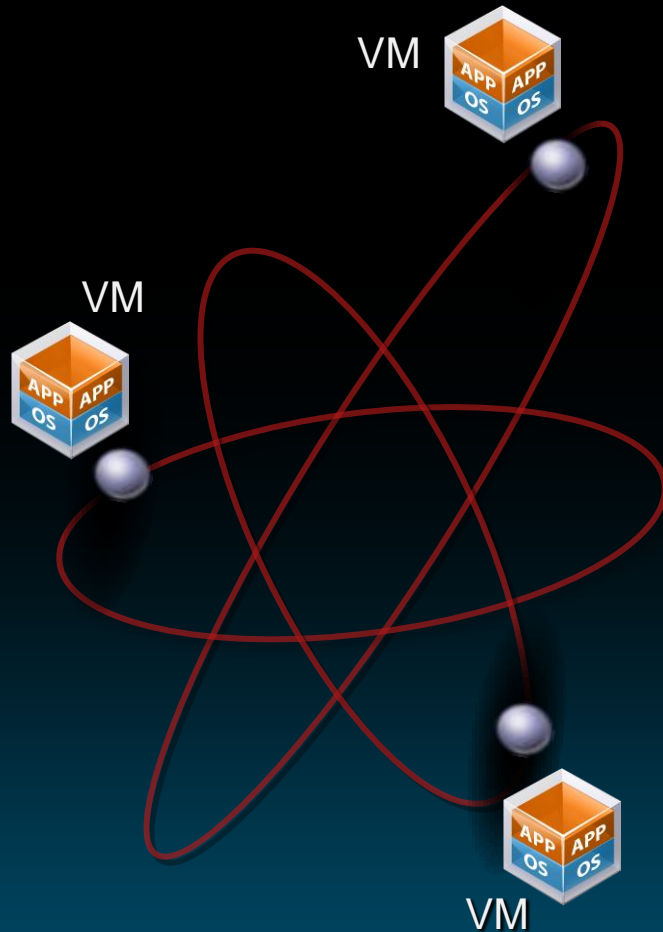
Complex Provisioning, Silos



Time-to-market, Poor Agility

# A New Architectural Approach Is Needed

Tomorrow's Data Center Can't Be Built On Yesterday's Technology



- The data center needs to evolve
  - Both computing and networking have to change
  - Management needs to be native, not an after-thought
- Virtualization is changing the focus
  - Applications no longer tied to server hardware
  - Applications are now fluid objects that can move through the network
  - The Virtual Machine is the new atomic unit of the DC
- Cisco's DC3.0 with the Unified Computing System is a clean sheet approach for next generation virtualized data centers

# Capitalizing on the Market Transition

## Convergence is back!

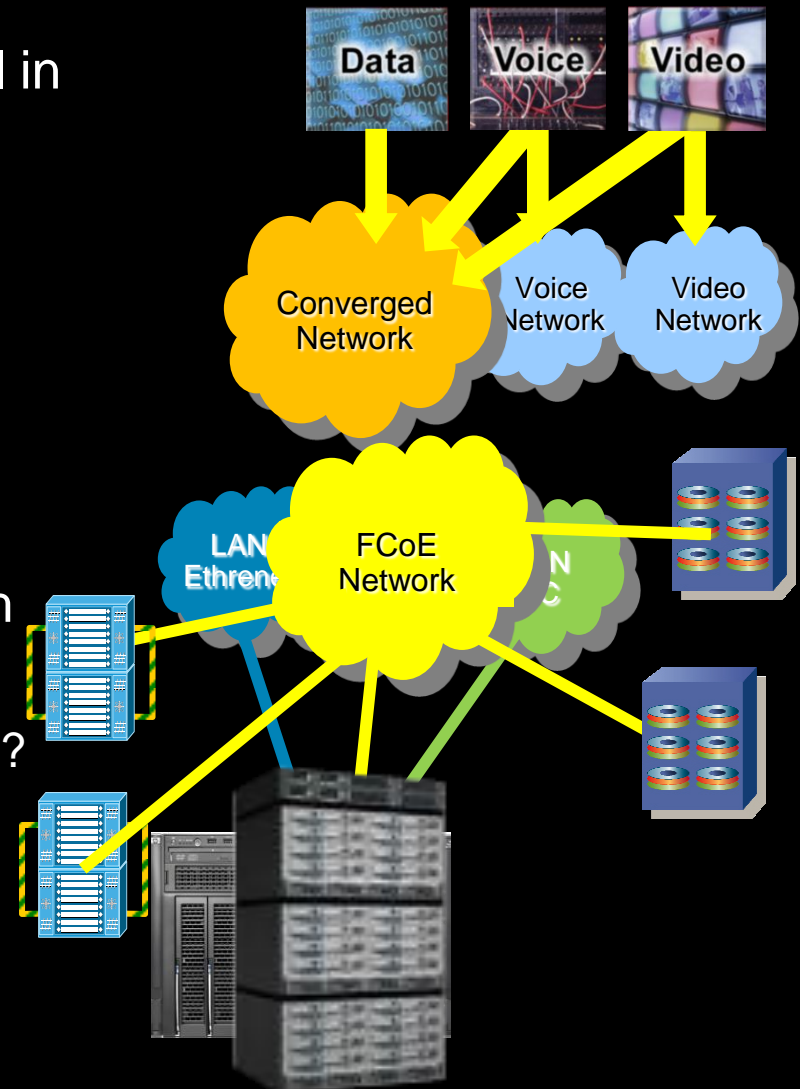
- Cisco has historically been successful in capitalizing on market transitions

Remember the Data, Voice and Video story?

We're doing the same with FCoE and Unified Fabrics for LAN and SAN

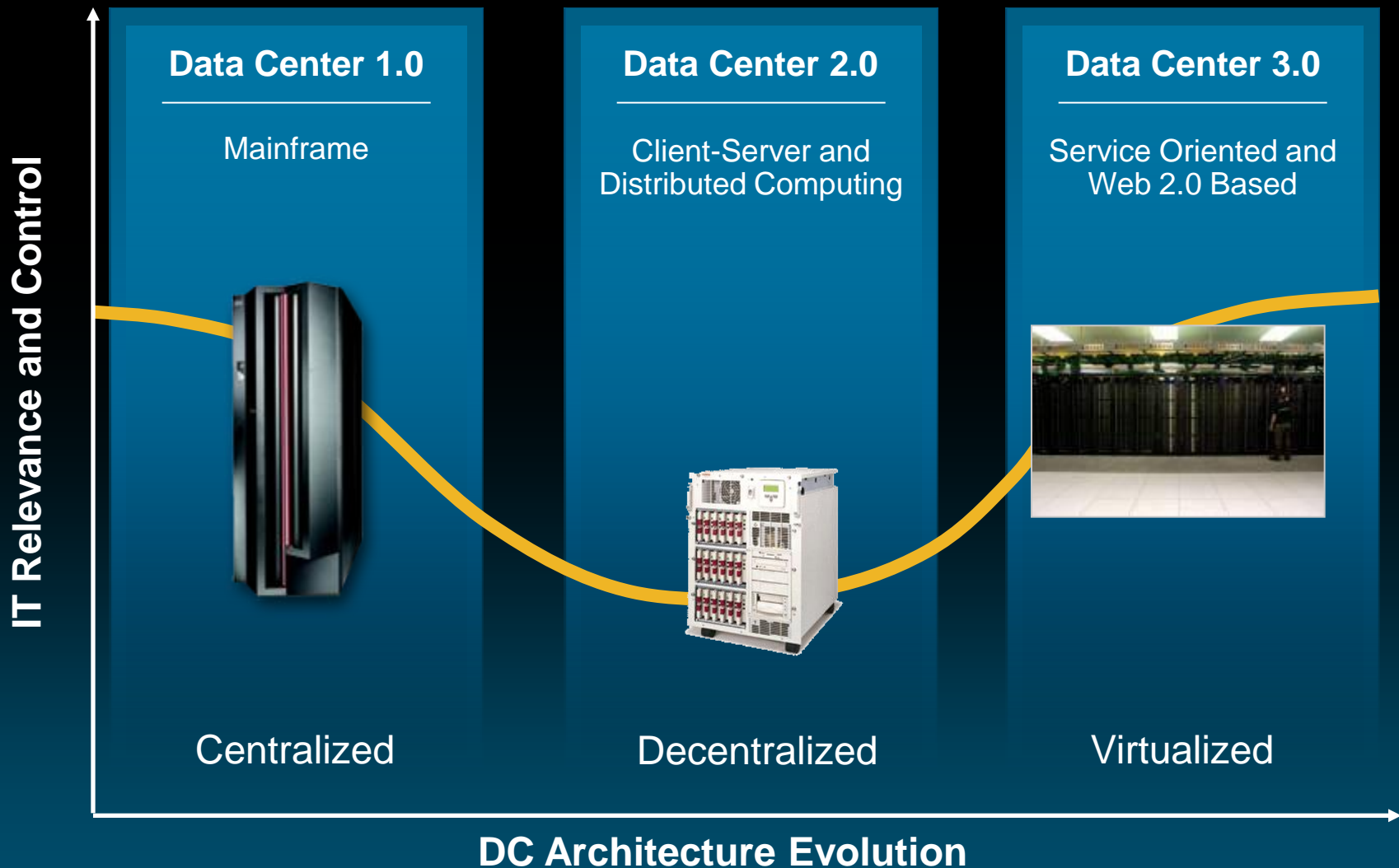
- Totally new approach in Compute with no legacy to drag us down

Remember the early IP Telephony days?



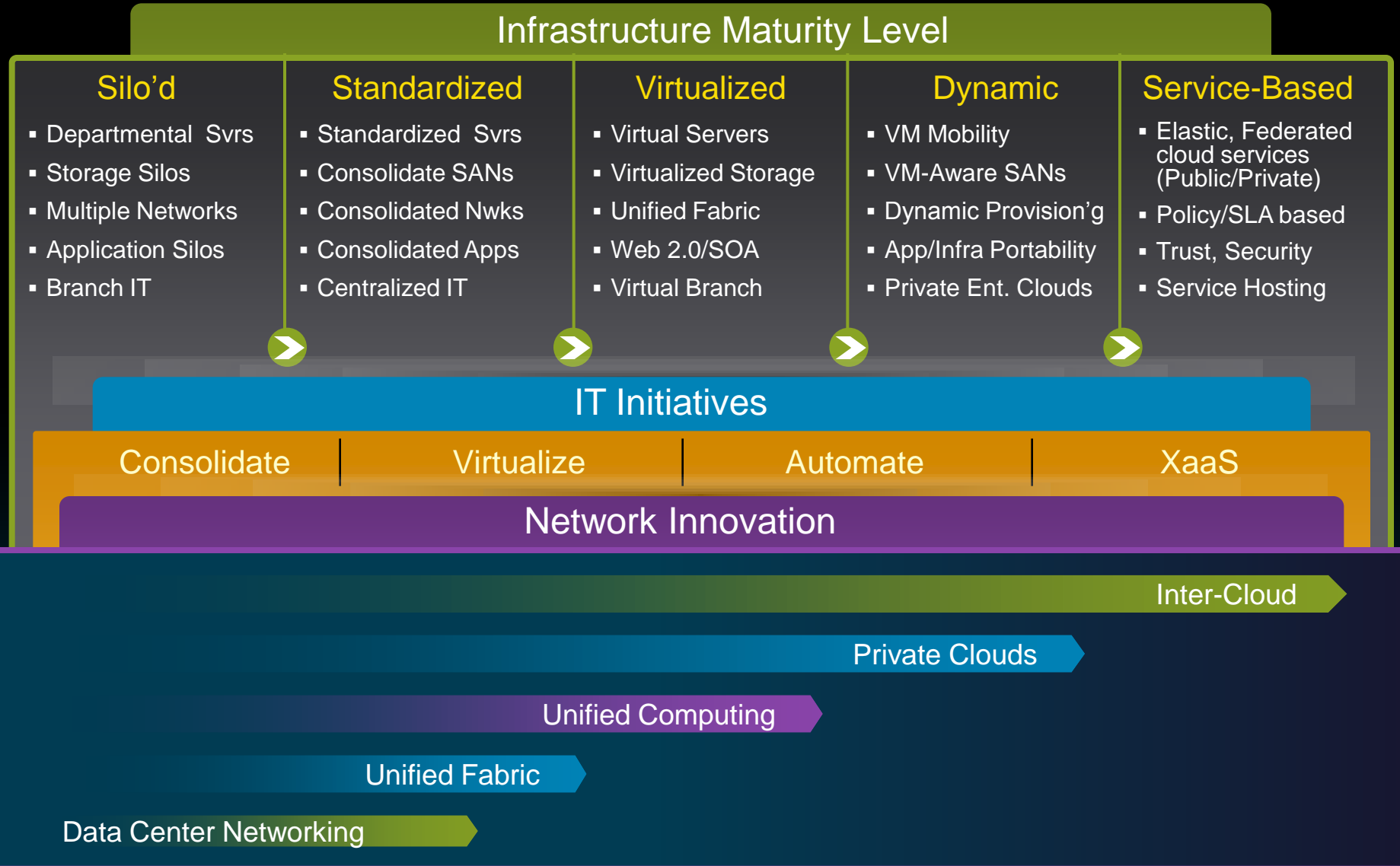
# New DC Architecture

## New Infrastructure



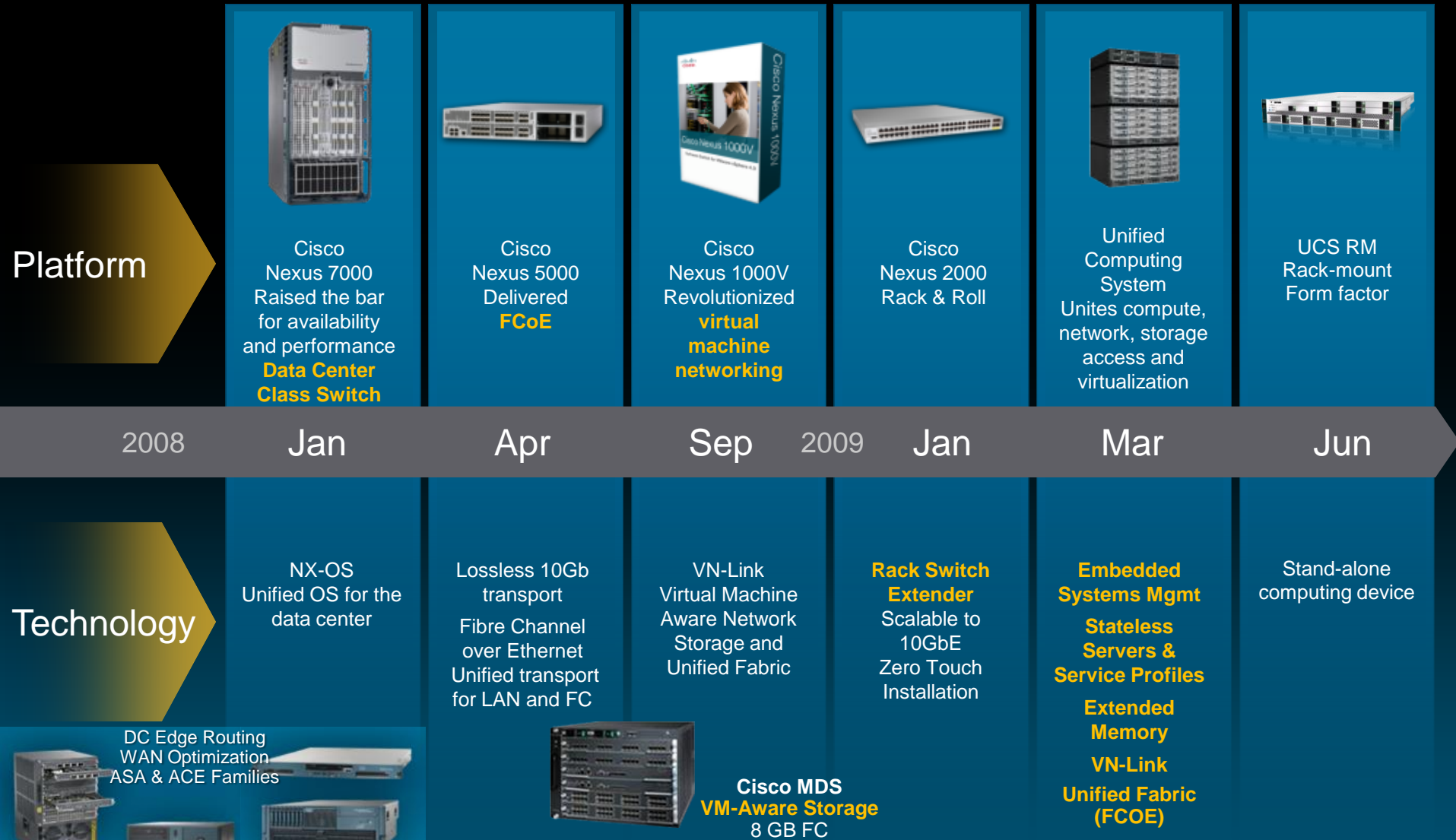
# Pragmatic Adoption Path to Next-Gen DC

Incremental, Architectural Approach from Silos to Services



# An Unmatched Rate of Innovation

## Accelerating Virtualization Across all DC Elements



DC Edge Routing  
WAN Optimization  
ASA & ACE Families



Cisco MDS  
VM-Aware Storage  
8 GB FC

# Building the Cloud



## WHAT IS CLOUD COMPUTING?

IT resources and services that are abstracted from the underlying infrastructure and provided “**on-demand**” and “**at scale**” in a multi-tenant environment

# The Datacenter Today



**Trusted**

**Control**

**Reliable**

**Secure**

# What the Cloud brings to the table

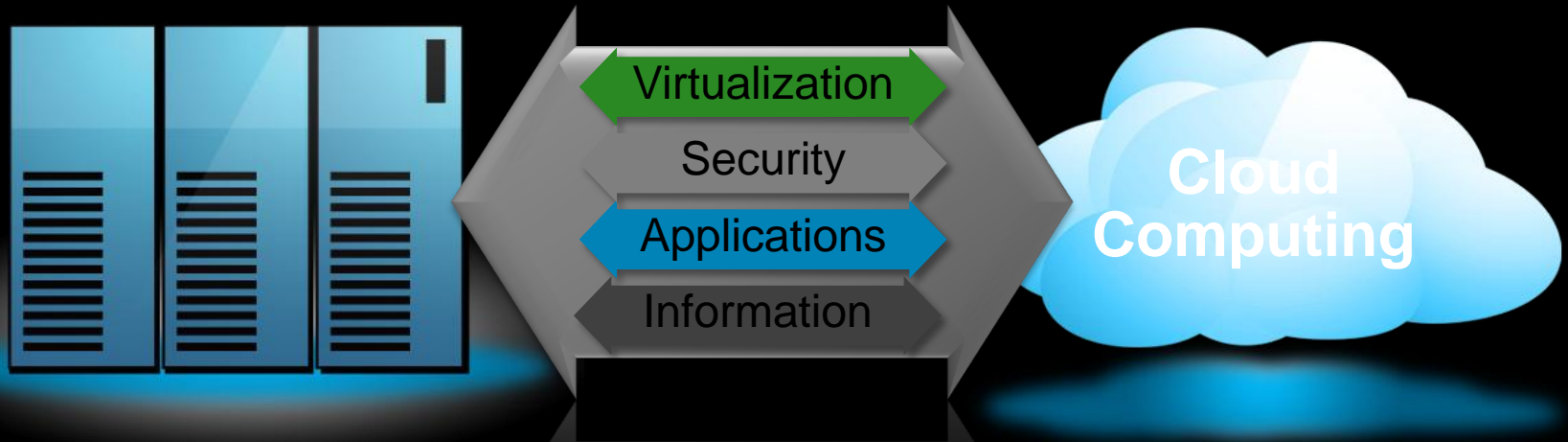


**Trusted**  
**Control**  
**Reliable**  
**Secure**



**Flexible**  
**Dynamic**  
**On-demand**  
**Efficient**

# The Goal...



**Trusted**

**Control**

**Reliable**

**Secure**

**Flexible**

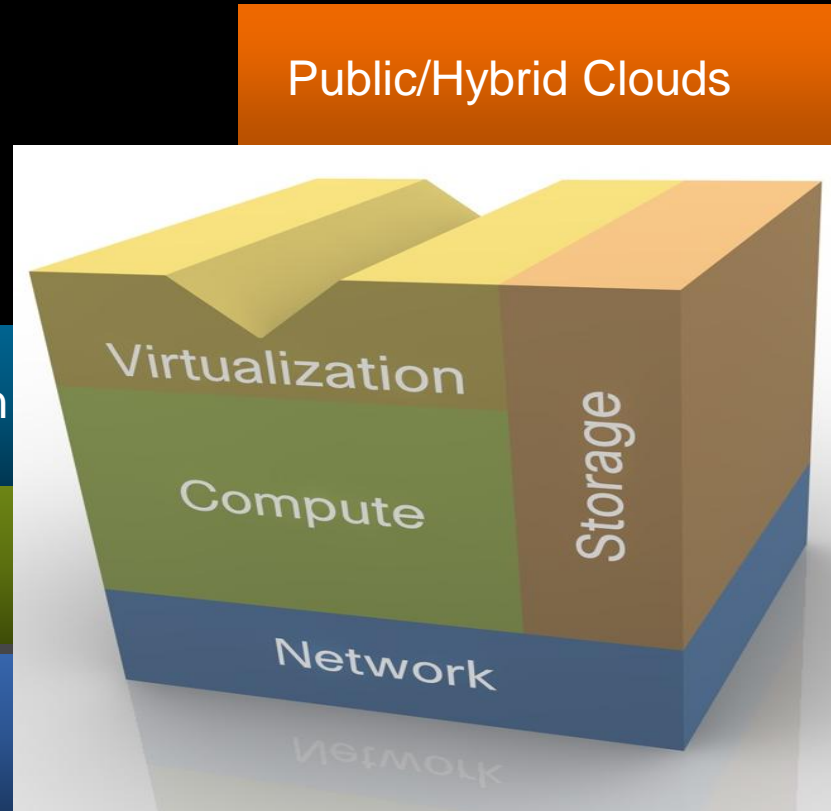
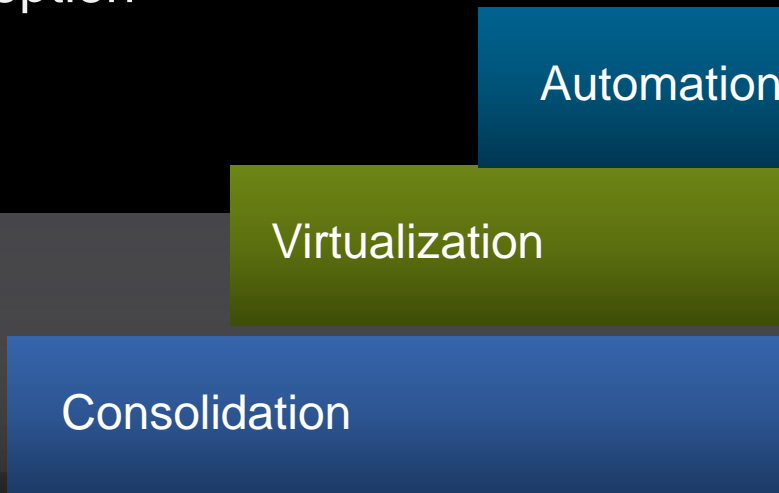
**Dynamic**

**On-demand**

**Efficient**

# The VCE Story

- Reference Architecture for a Secure, Extensible, SLA-driven, Deterministic Virtualized Data Center
- Helps accelerate infrastructure virtualization and private cloud adoption



# Case Study: Business ROI

## Cisco IT Experience From Adopting Data Center 3.0

### Storage

- \$70+ million cost avoidance over 4 years
- TCO: \$0.21/MB → \$0.01/MB
- Managed storage increased from 25 TB to 600 TB per FTE (lower Opex)
- Overall utilization: 20% → 68%



### Server

- \$20+ Million cost avoidance
- 50% existing, 75% new servers virtualized
- Deployment: 8 weeks → 3 days



### Unified Fabric

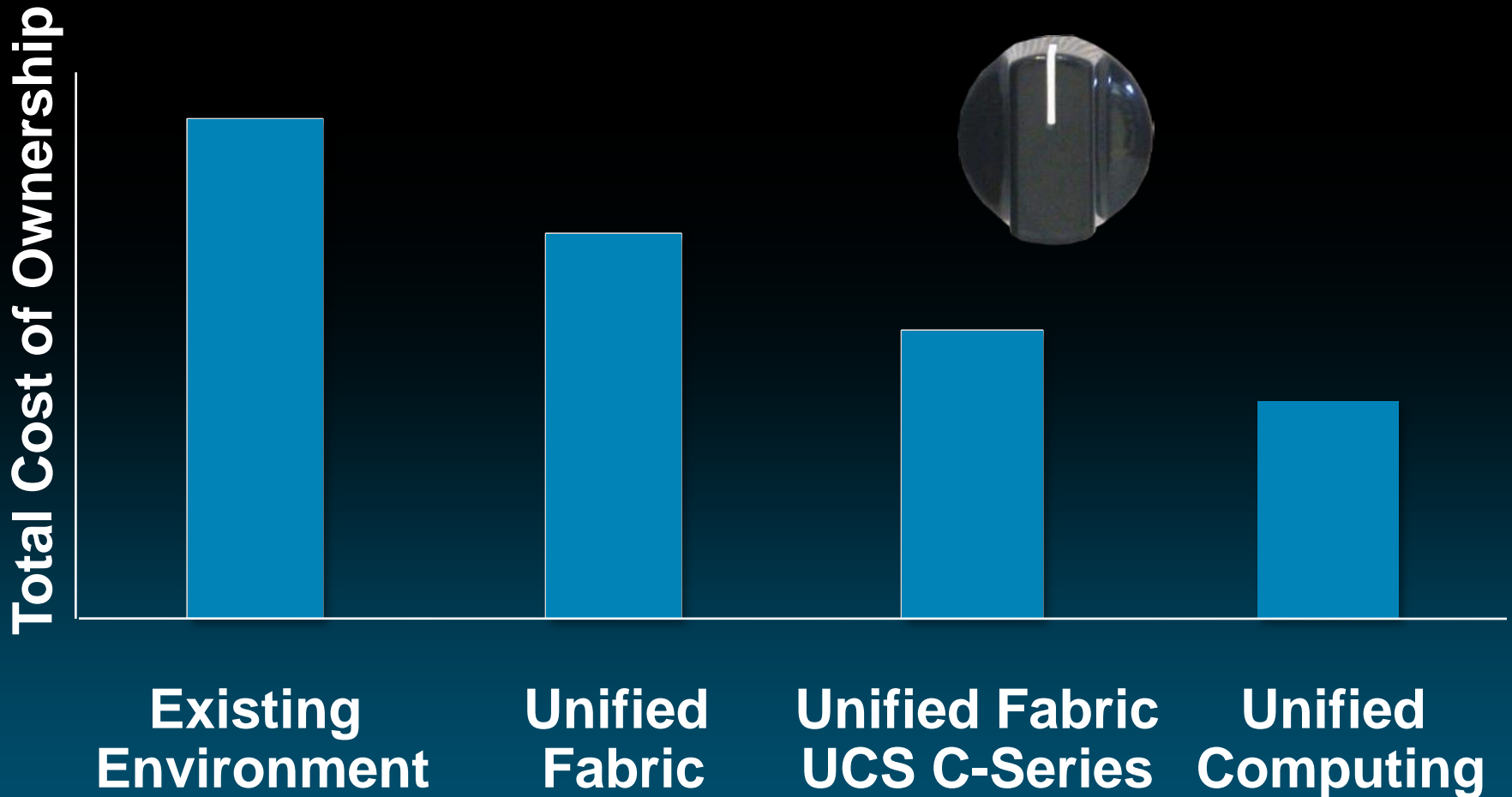
- 66% Reduction in Cabling: \$2M savings
- 30% more Compute capacity: \$50M savings



# Customer Choice: Dial In to Reduce Costs at Any Stage

Every IT organization is unique. Each is in a different place with workloads, environment, budget, and IT investment cycles.

Customers have the flexibility and choice to deploy technology at whatever point makes sense for their environment.





**CISCO**