

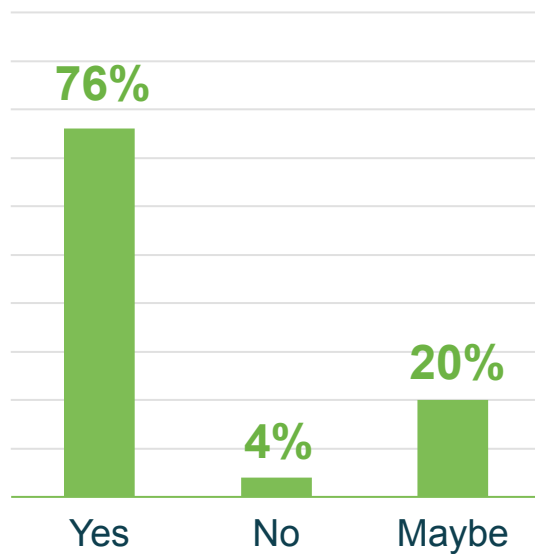


# Cisco Intelligent Automation for Cloud

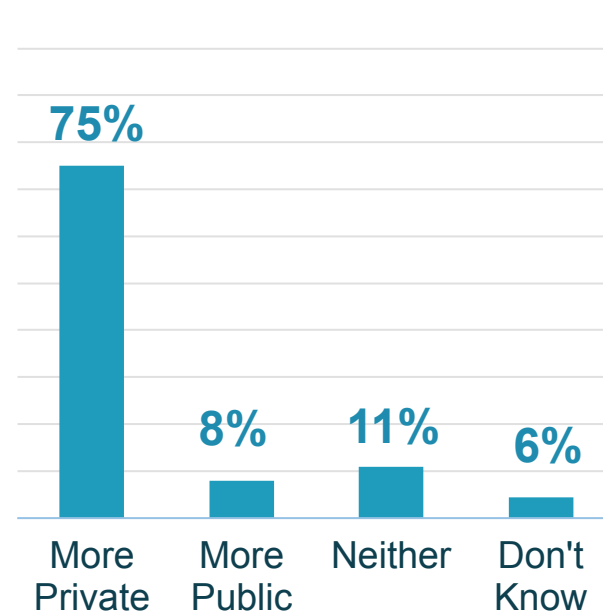
EBC Deck

# Rising Interest in Private Cloud Computing

Interest in pursuing private cloud computing:



Levels of investment in cloud computing:



Gartner: Private Cloud Computing Plans From Conference Polls, April 2010

# Business Drivers for Private Cloud

## Long Provisioning Times for New Services

- Lack of agility
- High cost of IT staff
- Business-it dissonance

## High Capital Costs Due to Provisioning for Peak Loads

- Low capacity utilization
- High operating costs
- Overcrowding of datacenter

## Pressure to Move Towards Proactive SLA Management

- Labor-intensive, manual processes for service management

## Lack of Centralized Control and Governance

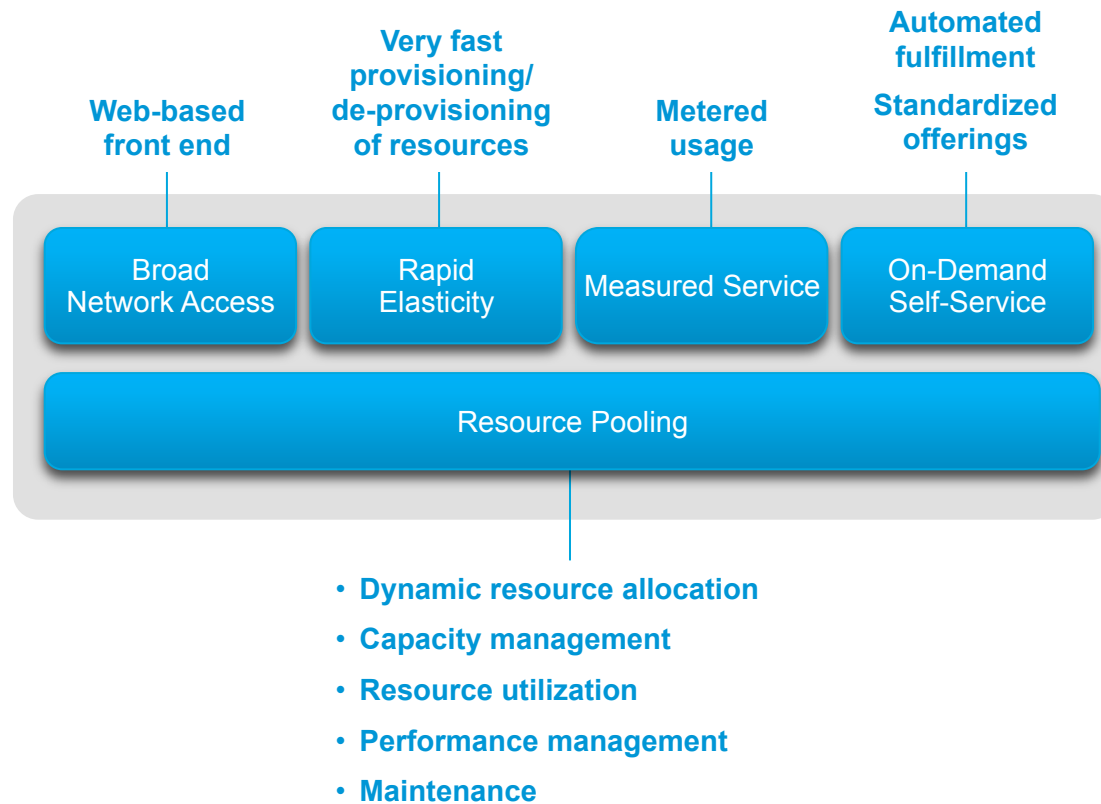
- High error rates due to disconnected processes
- Infrastructure sprawl

Lack of  
IT-Business  
Alignment

# Delivering Cloud Services Needs Automation

## Common Characteristics of Cloud Offerings

Source of 'Common Characteristics of Cloud Offerings':  
NIST Working Definition of Cloud Computing  
<http://www.csrc.nist.gov/groups/SNS/cloud-computing/index.html>

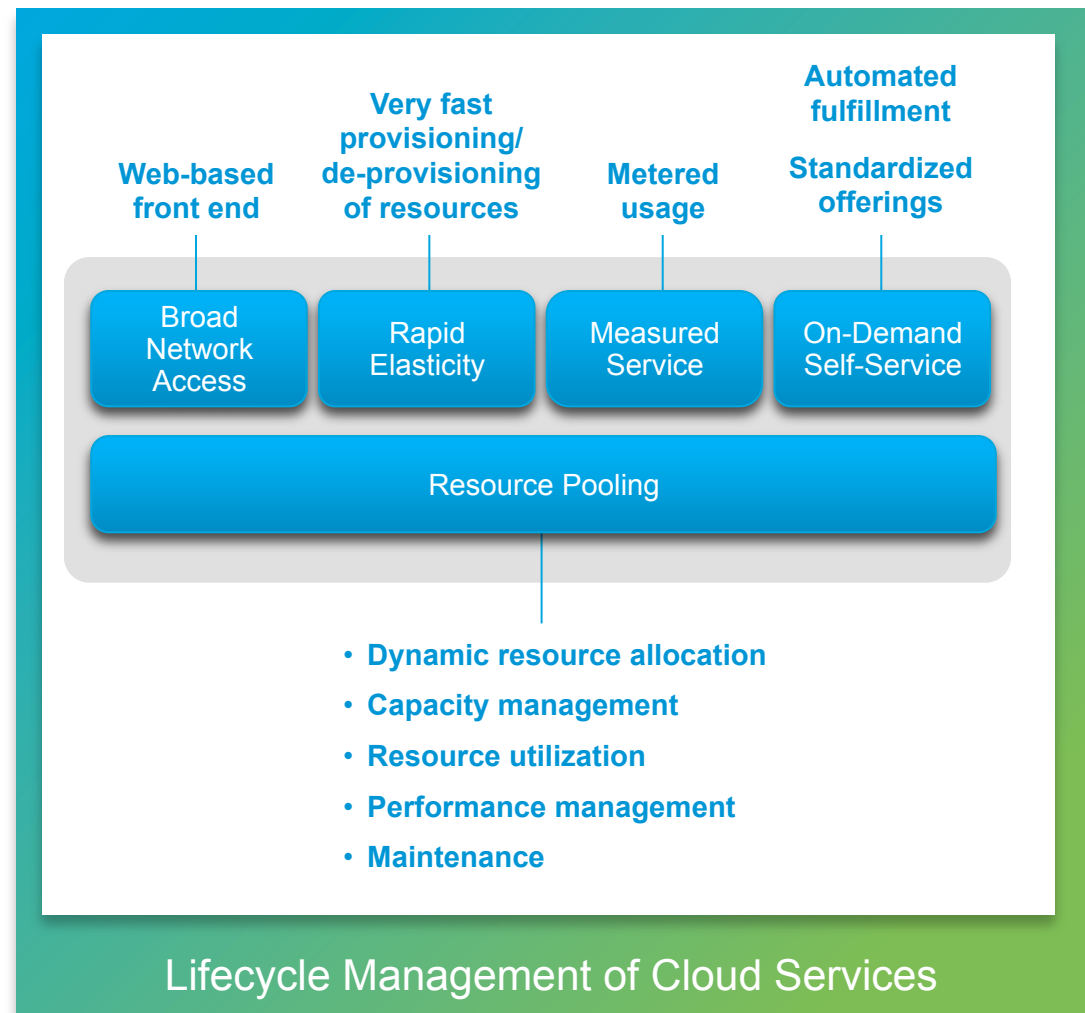


Lifecycle Management of Cloud Services

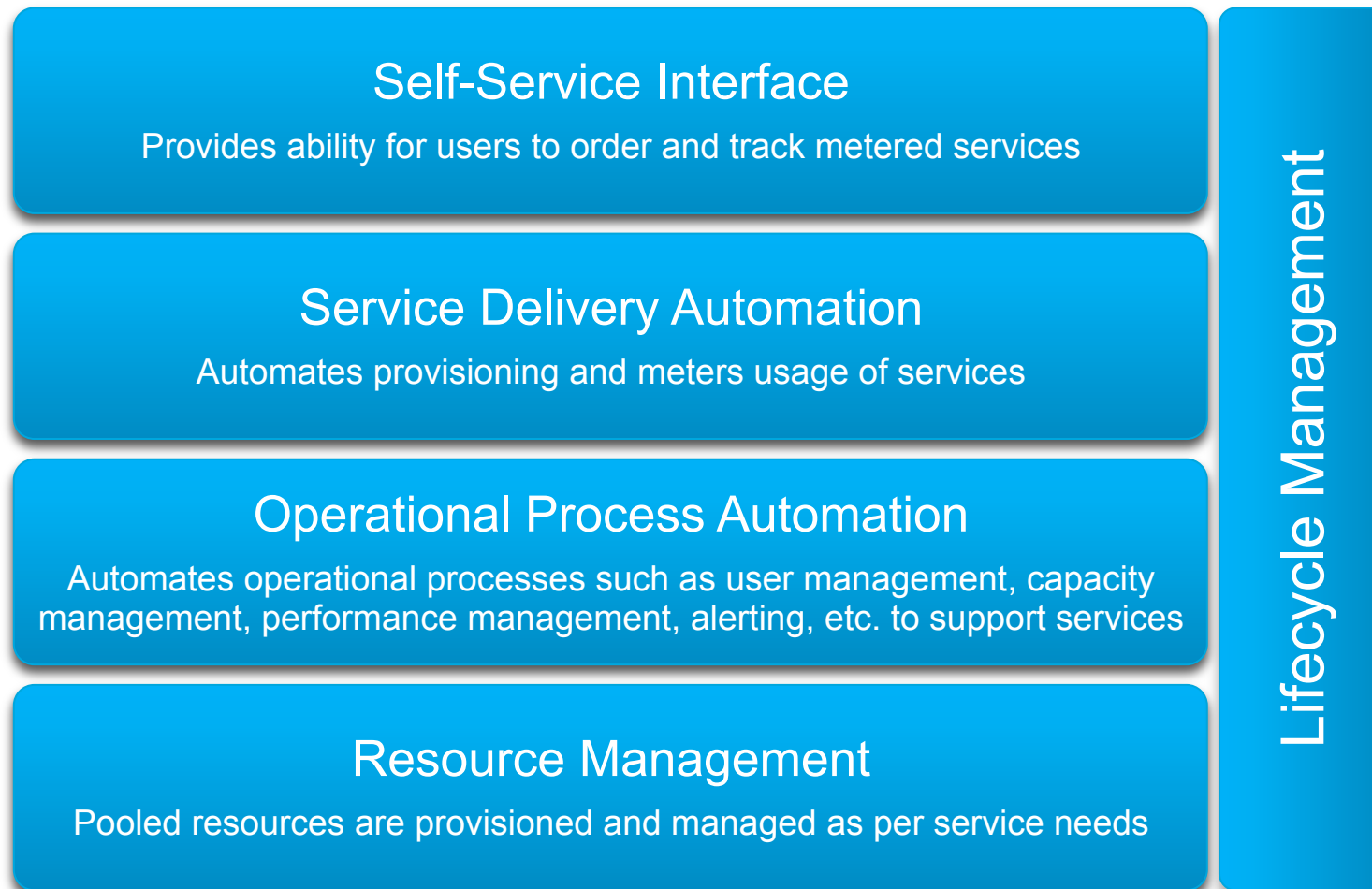
# Elements of Private Cloud Computing

## Lifecycle Management

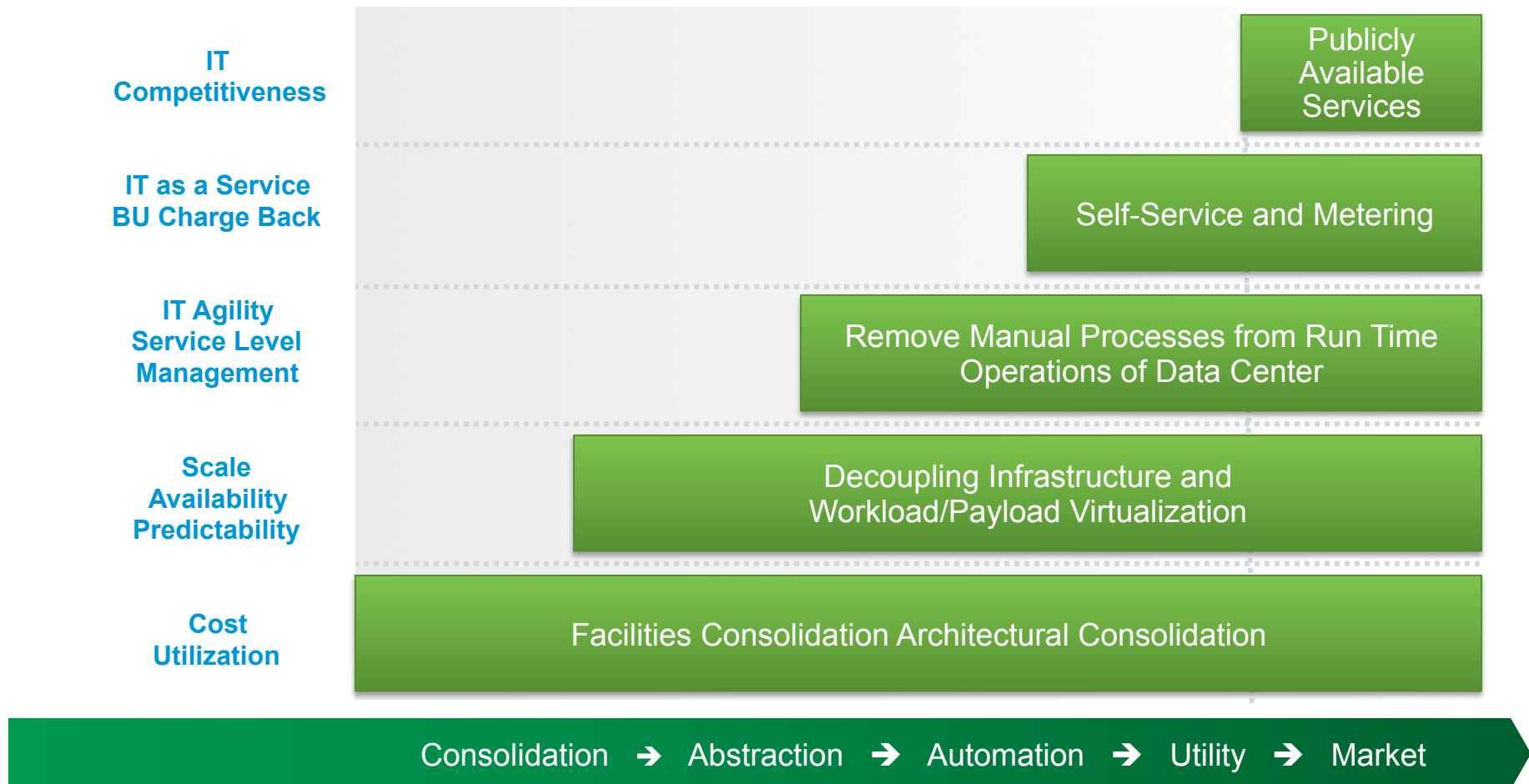
- **Self-Service Interface:** Provides ability for users to order and track metered services
- **Service Delivery Automation:** Automates provisioning and meters usage of services
- **Resource Management:** Resources are provisioned and managed as per service needs
- **Operational Process Automation:** Automates operational processes such as user management, capacity management, service level management, service desk integration, alerting...



# Elements of Private Cloud Computing



# Finding the Right Solution for Your Stage



Cloud Maturity Model (James Urquhart)



# Cisco Intelligent Automation Cloud Offers

## Utility

Non-Technical User Orders a “SQL Server”  
and Everything Is Provisioned

## Compute Automation

Technical User Manages IT Processes Across  
Compute Tools

Cisco Intelligent Automation for **Cloud**

Cisco Intelligent Automation for **Compute**

Supports heterogeneous infrastructure (server, network, storage)—both virtual and physical

Set of sample automation packs

Full Infrastructure as a Service (IaaS) stack

Global orchestration across compute resources: server/  
virtual server, OS and application software,

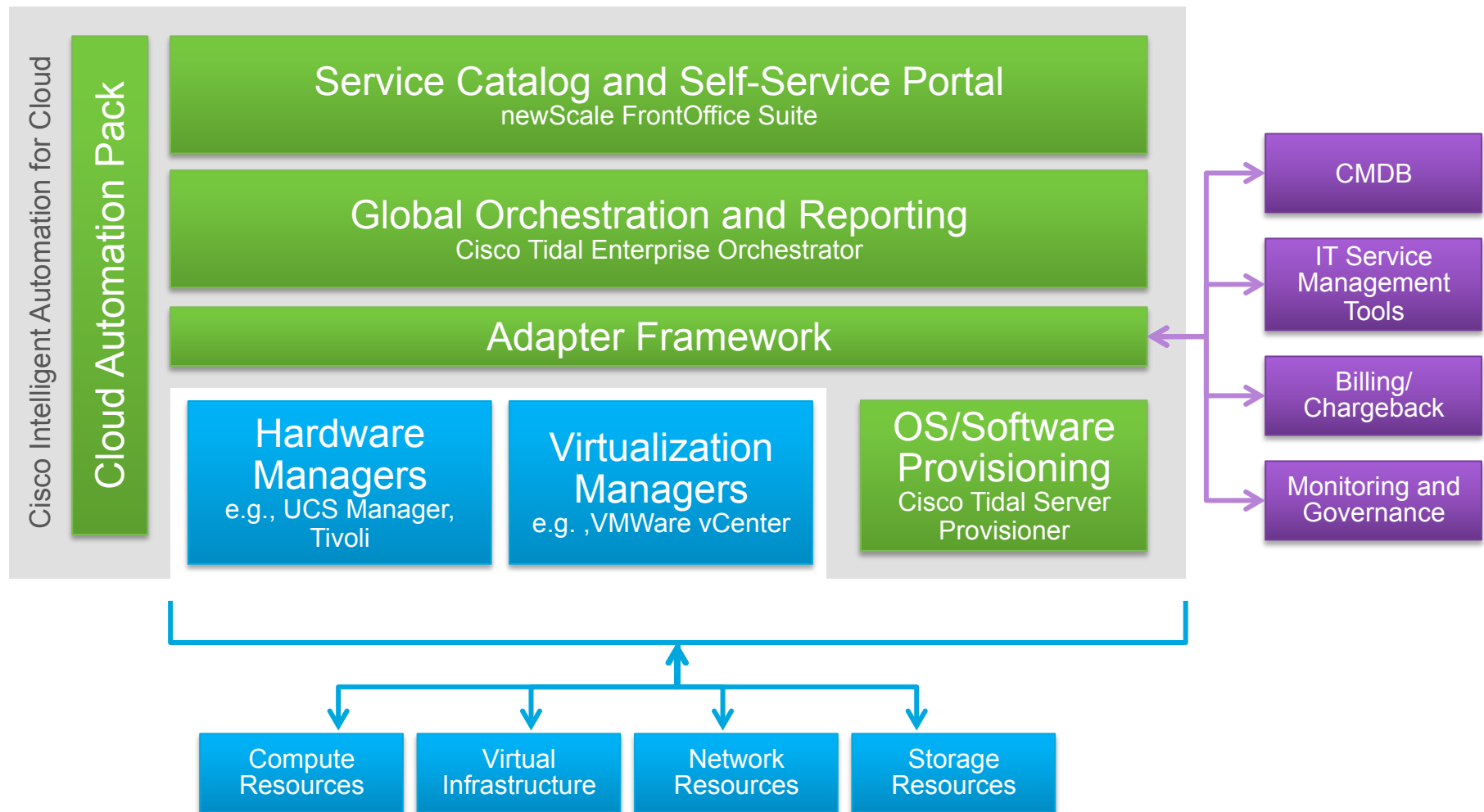
Order to global orchestration to  
infrastructure provisioning

Services engagement for integration for CMDB,  
ticketing, monitoring, etc.

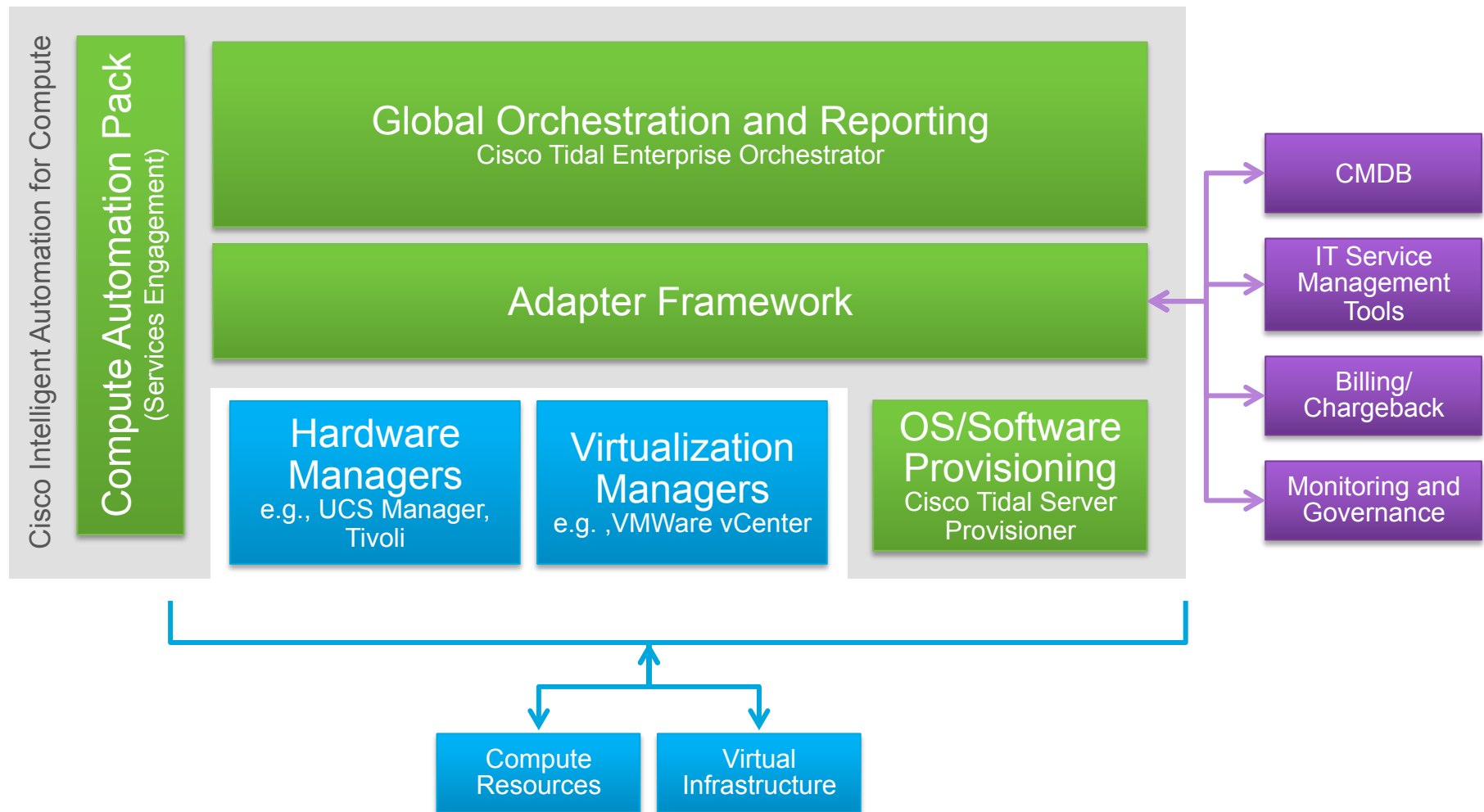
Orchestration of compute, network and storage  
provisioning and deployment, OS and software  
provisioning

Services engagement for setting up automation  
workflows, and integration for metering, chargeback,  
CMDB, ticketing, monitoring, etc.

# Cisco Intelligent Automation for Cloud



# Cisco Intelligent Automation for Compute



# Solution Highlights

## Intelligent Automation for Cloud

Service catalog and ordering portal provides 1-stop shopping for infrastructure as a service

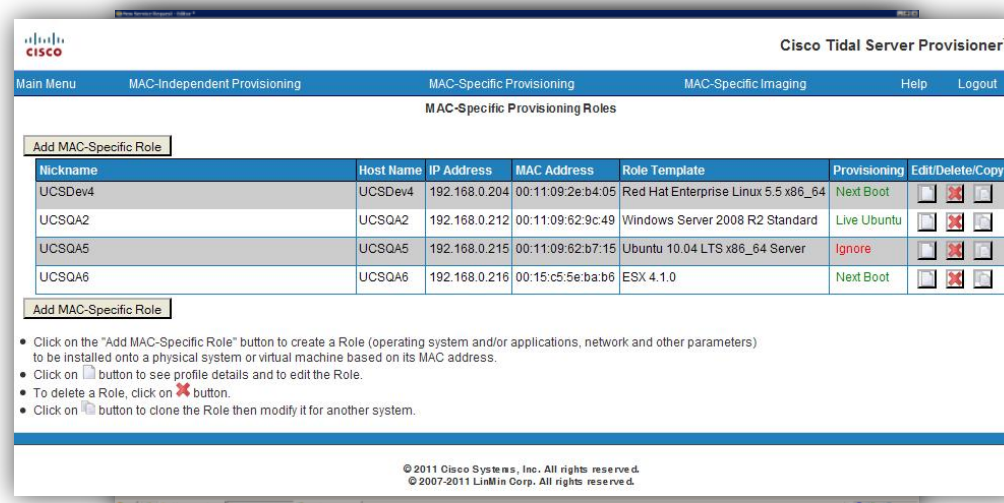
Single point orchestration of provisioning across all required components—compute, virtualization, network and storage

## Intelligent Automation for Compute

Software provisioning including OS and application provisioning

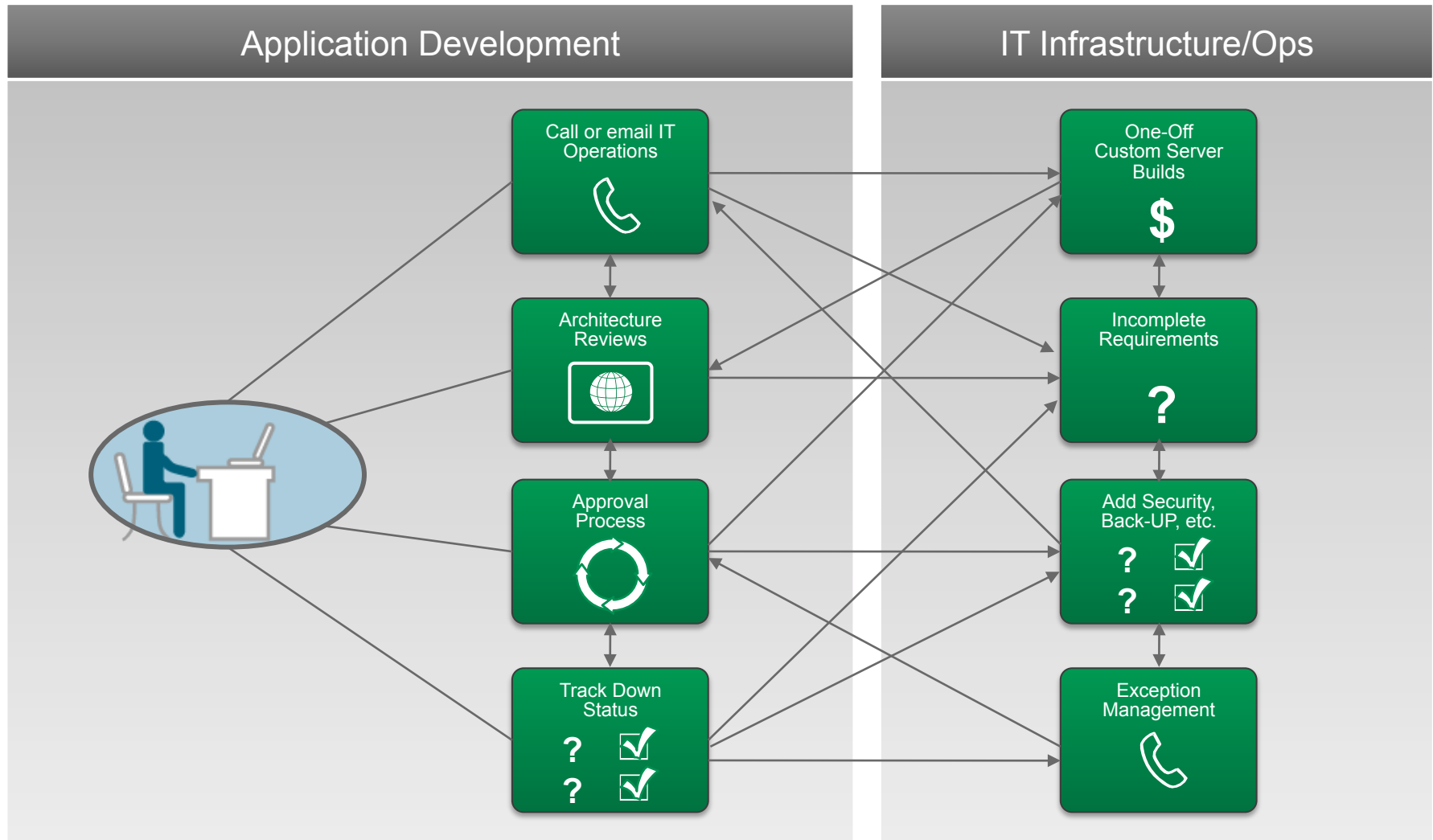
Open Architecture provides for integration with existing CMDB and ITIL investments and tools

Automation of ongoing operations

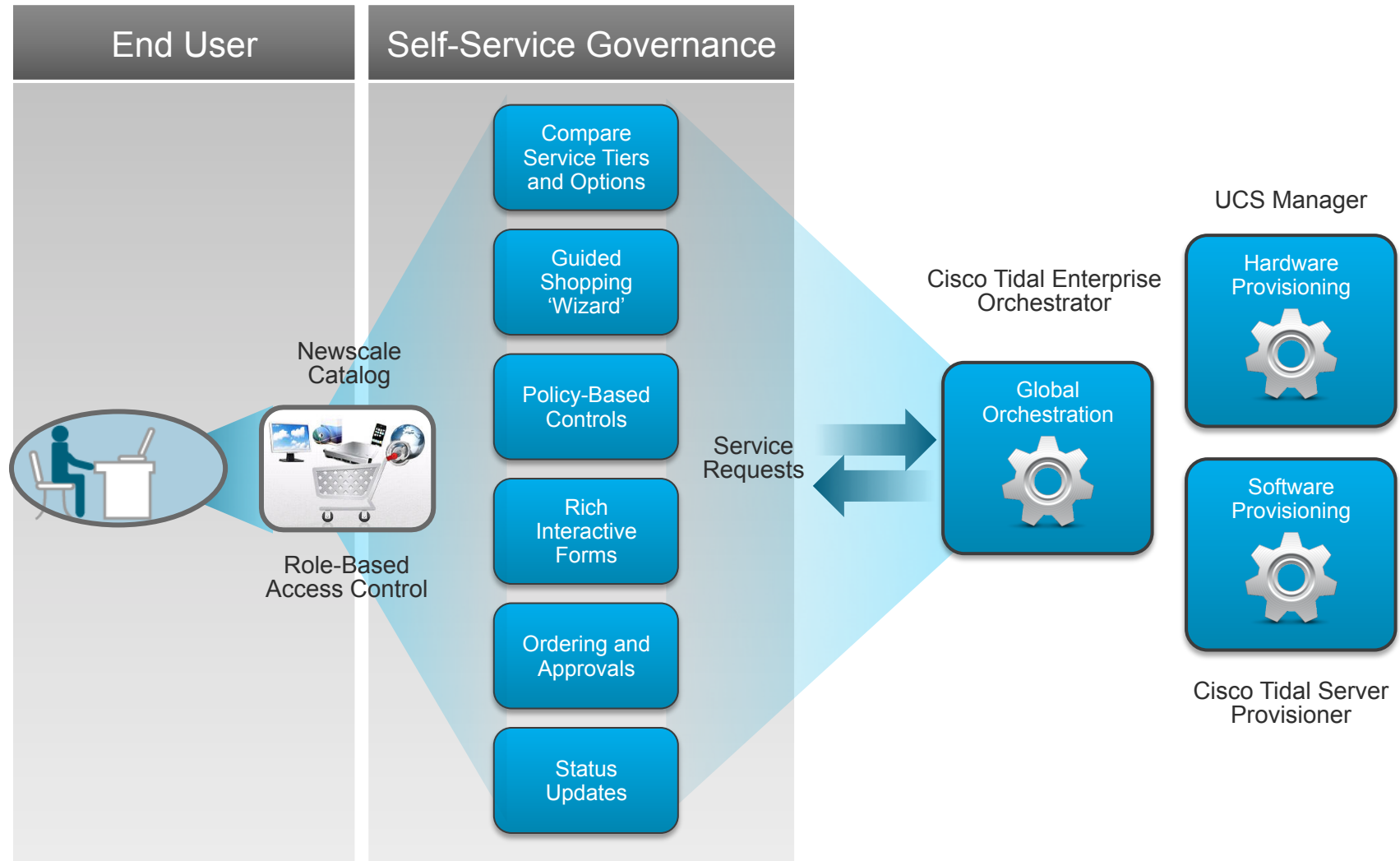


# Use Case: Application Dev/Test

Complex, Time-Consuming, Expensive Provisioning Process



# Service Delivery with Cisco Intelligent Automation for Cloud



# Provisioning Time Benefits

	Current		Private Cloud
<b>Request</b>	7 days	➔	On Demand
<b>Build</b>	75 days \$6,000 labor cost	➔	Less than 2 hours
<b>Deploy</b>	2 weeks for 3 FTEs \$16,000 labor cost	➔	Less than 1 hour
<b>TOTAL:</b>	96 days \$22,000 labor cost	➔	Less than 3 hours \$0 labor cost

# Improve Availability Through Automation

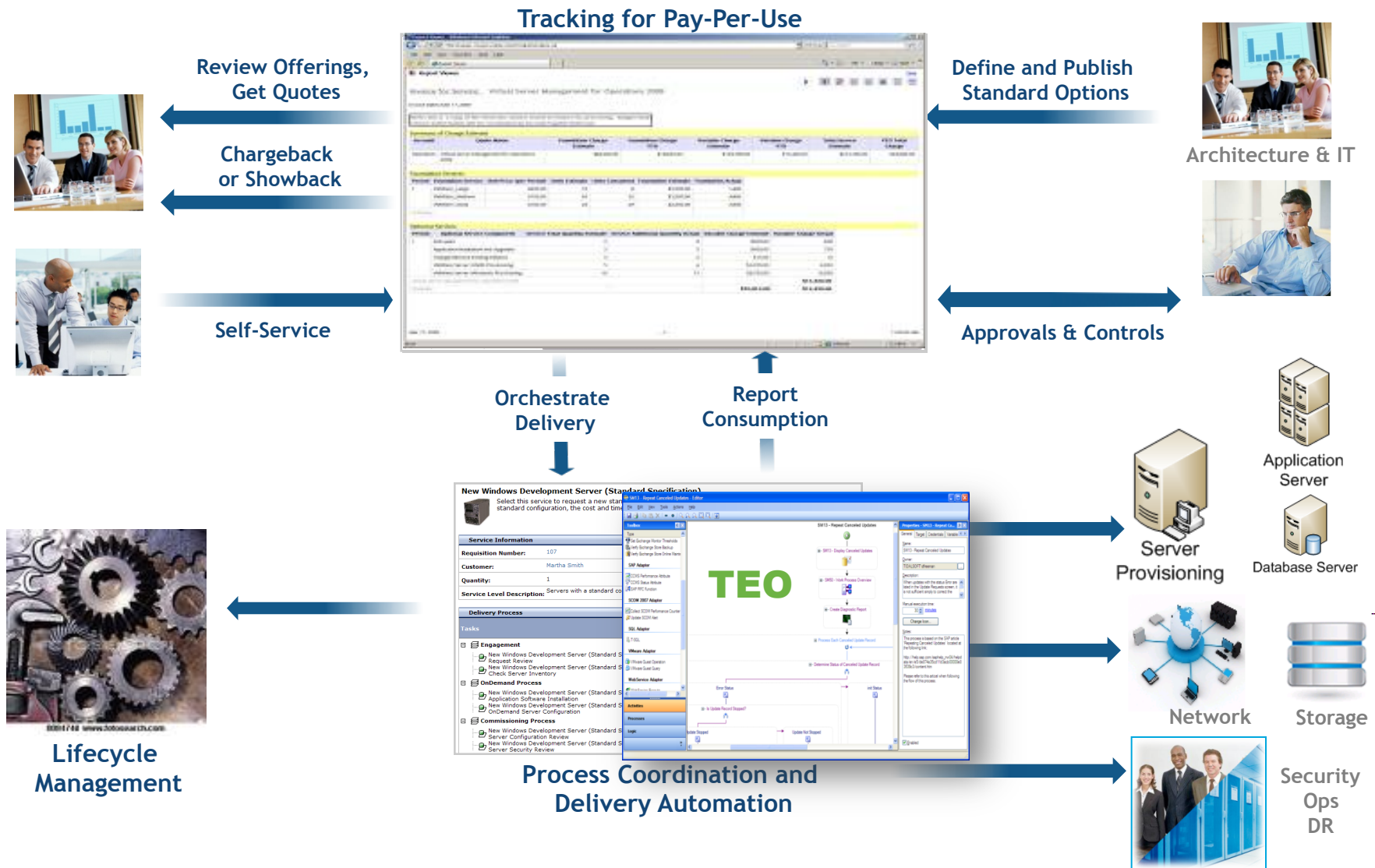
More than 80% of all mission-critical IT service outages are due to people and process errors and failures, with a significant number of those due to a lack of coordination among change, release and configuration management.

Gartner

# Sample operations automated through workflows

- Deployment of Service Profiles
- Change management
- Installation of ESX
- Add infrastructure
- De-provision infrastructure
- Change a resource on a server
- Capacity Check and automate capacity availability
- Evacuate a blade for maintenance
- Routine maintenance

# Our Solution at Work...



# Service Capabilities

