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Presentation

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GARTNER AT A GLANCE

This data is accurate as of **March 10, 2016.**

Founded in 1979 and currently employing more than 7,900 associates, Gartner delivers the technology-related insight necessary for our clients to make the right decisions, every day.

We serve clients in more than 90 countries. Clients outside the U.S. provided 40% of our 2015 $2.0 billion revenue.

Our interactions with **clients in more than 10,000 distinct enterprises worldwide** enable us to make connections, understand patterns and discover trends that no other research firm can envision.

Our community of more than **1,100 analysts** engaged in over **230,000 one-to-one client interactions** in the past year.

3.1 million end-user searches per year and **4 million end-user document page views** give business leaders in high-tech and telecom enterprises intelligence about their customers, competitors and markets to help them grow their business.

We field 850 media inquiries per month worldwide from leading business and trade publications, online news portals and broadcast media interested in what we have to say about the business of technology.

The Wall Street Journal, The Economist and The Financial Times, along with more than 30 other leading business publications worldwide, consider Gartner a trusted, independent source. **They quote us an average of 70 times every week.**

74% of the Fortune 1000 and 75% of the Global 500 support their key technology decisions with Gartner advice. These varied and worldwide connections produce insights that benefit all our clients.

Each year, **50,000 technology and business professionals from around the globe attend our 60+ worldwide conferences.** They benefit from our market-leading research, unique insight and unsurpassed peer networking. **We are the world's leading IT conference provider.**

Gartner **clients have access to a terabyte of continually updated market data,** covering 2,000 vendors across 175 technology markets in 100 countries.

End users, technology providers and investors use **Gartner Hype Cycles** to **track and monitor the commercial viability of over 2,000 technologies in 110 IT, business and consumer markets.**

Gartner clients continually monitor their provider portfolios with **the Gartner Magic Quadrant,** a methodology that has become **a standard for market analysis in 150 technology segments.**

Gartner analysts had more than 19,000 briefings with more than 3,500 distinct vendors in the past 12 months, helping IT buyers, sellers and investors make the right decisions about their investments in markets, products and customers.

Gartner Executive Programs clients get customized advice and participate in peer networking opportunities as **members of the world's largest community of CIOs.**

The annual CIO Agenda, published by **Gartner Executive Programs and Gartner Research, is developed from the responses of 2,944 CIOs, representing $250 billion in CIO IT budgets and 84 countries.** It provides insight into trends in CIO priorities and investments.

$400 million in aggregate cost savings to clients are produced from the **3,200 engagements delivered each year by the 600 Gartner consultants.**

Clients improve business performance by benchmarking their spending and best practices against our IT performance repository, the largest in the industry, **drawing on more than 5,000 IT benchmarks a year.**

Clients use gartner.com and our various product portal sites to easily access our insight for help in making both daily and long-term decisions. Each year, **thousands of active users search 119,246 documents across 1,350 technology and business topics on our websites.**

Multinational clients get consistent global insight from **an analyst community that speaks 50 languages.**

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Cloud Management in the Age of Digital Business

Dennis Smith

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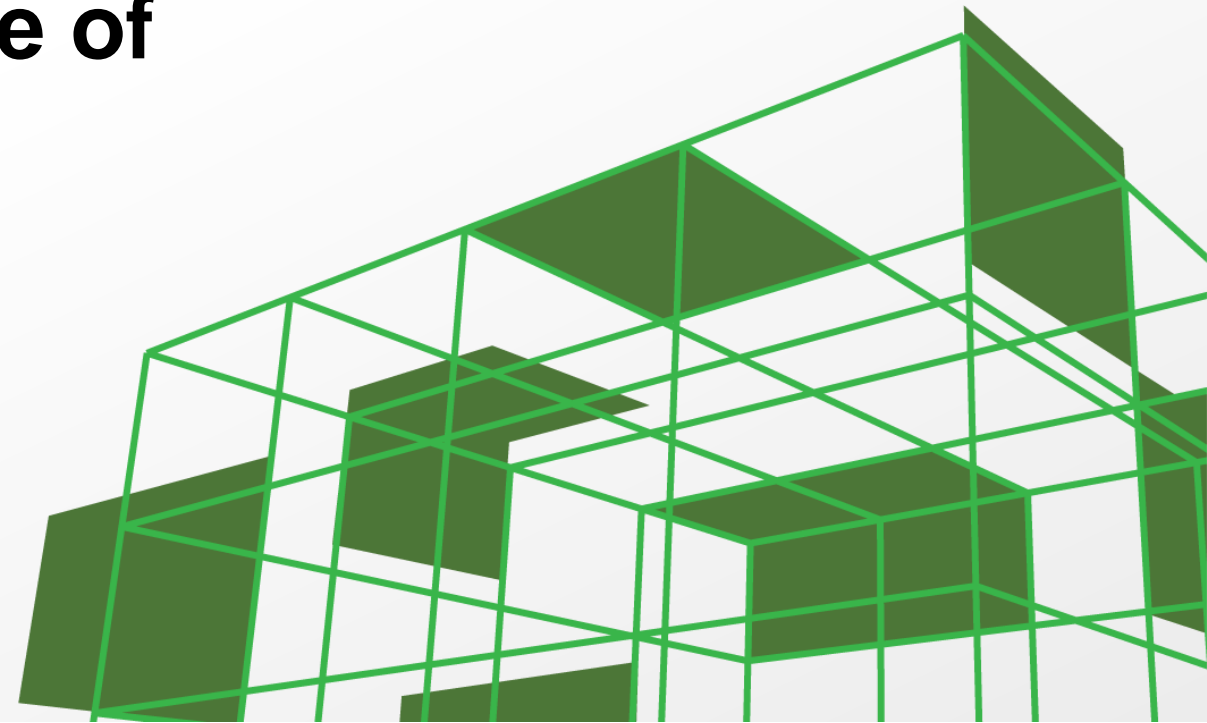
It Seems That Everybody's Doing Cloud Computing Now, How Are You Going to Manage It?

58%

Of 6,700 surveyed were currently using or deploying cloud services by year-end 2015

IaaS PaaS SaaS   IaaS PaaS SaaS

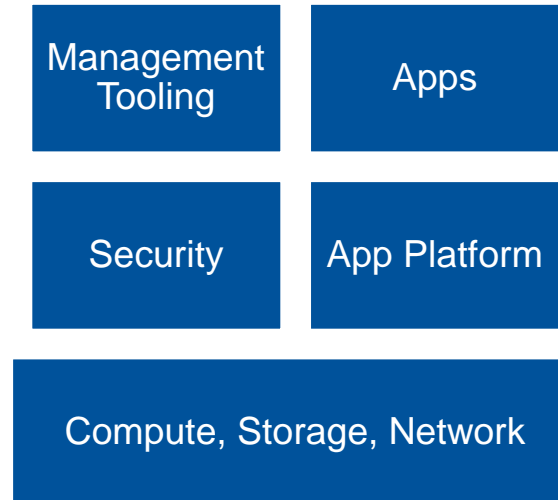**Public**   **Private**

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Key Issues

1. Why is cloud management important, and how does it differ from traditional IT operations management processes?

2. What technologies are available for cloud management?

3. What best practices should be pursued for success with cloud computing and cloud management?

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Cloud Management Provides New Methods for Automated Service Request, Provisioning and Life Cycle Management

Management Tooling	Apps
Security	App Platform

Compute, Storage, Network

Dev.

Test

Prod.

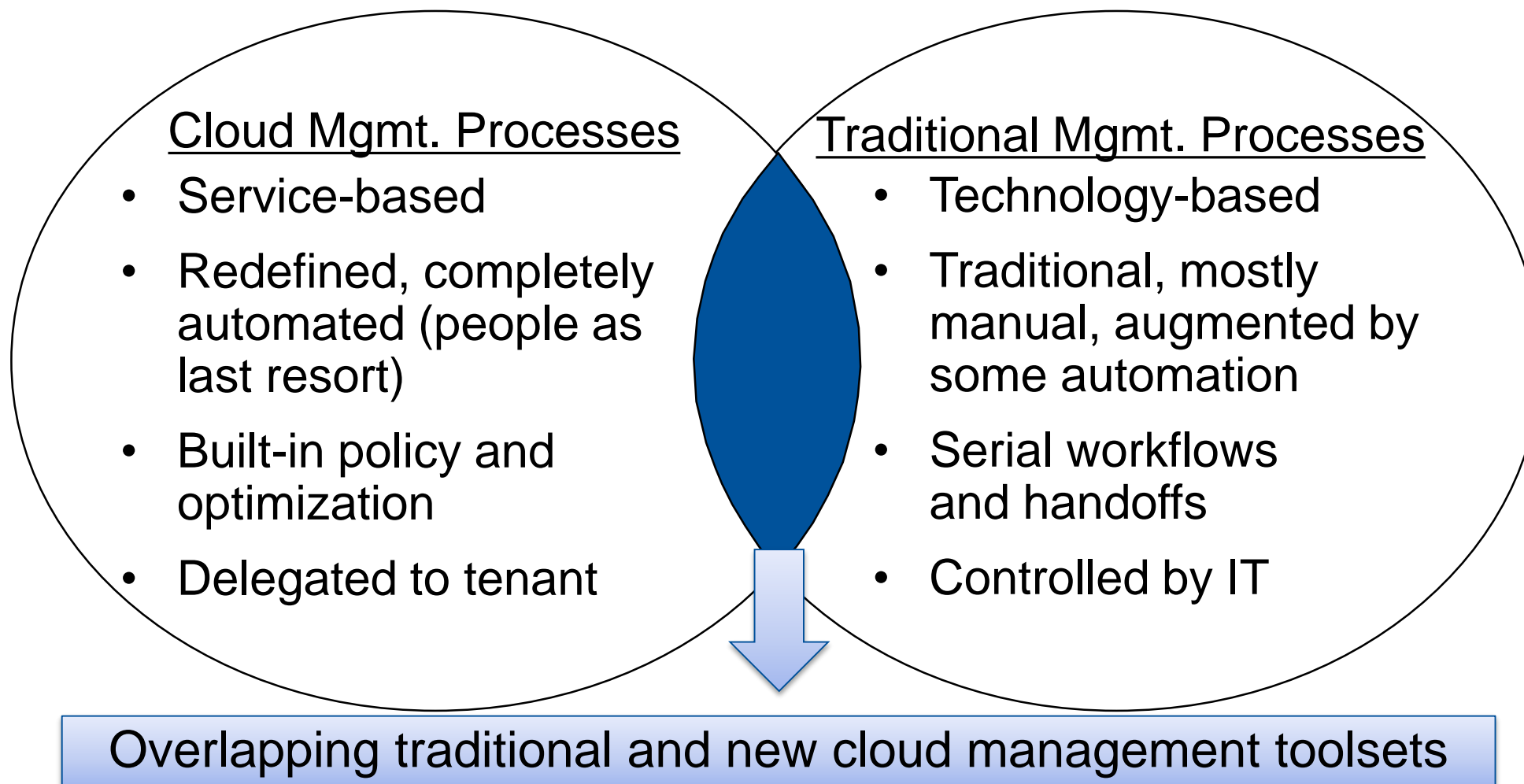**Self-Service Request:**

No More Tickets!

Brokered Cloud Services.

Automated Provisioning to the Right Place

No More Delays!
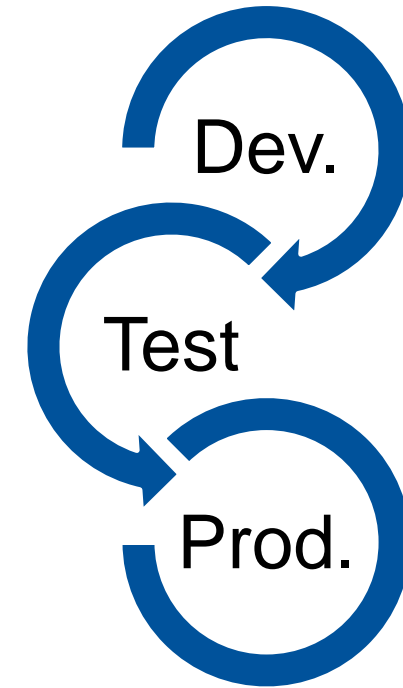
Support Continuous Integration and Delivery (DevOps)

Faster Releases!

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Cloud Management Processes Built for Policy and Automation

Cloud Mgmt. Processes

- Service-based
- Redefined, completely automated (people as last resort)
- Built-in policy and optimization
- Delegated to tenant

Traditional Mgmt. Processes

- Technology-based
- Traditional, mostly manual, augmented by some automation
- Serial workflows and handoffs
- Controlled by IT

Overlapping traditional and new cloud management toolsets

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Key Benefits of Cloud Management

✓ Increase business and operational agility

✓ Enhance operational service levels

✓ Broker and orchestrate IT services across providers

✓ Enforce standards and policies

✓ Optimize SLAs and costs

✓ Offload or delegate responsibilities

✓ Govern access and budgets

✓ Reduce lock-in

Source of graphic: www.istockphoto.com/photo/colorful-striped-birthday-gift-41332572?st=751fb1c

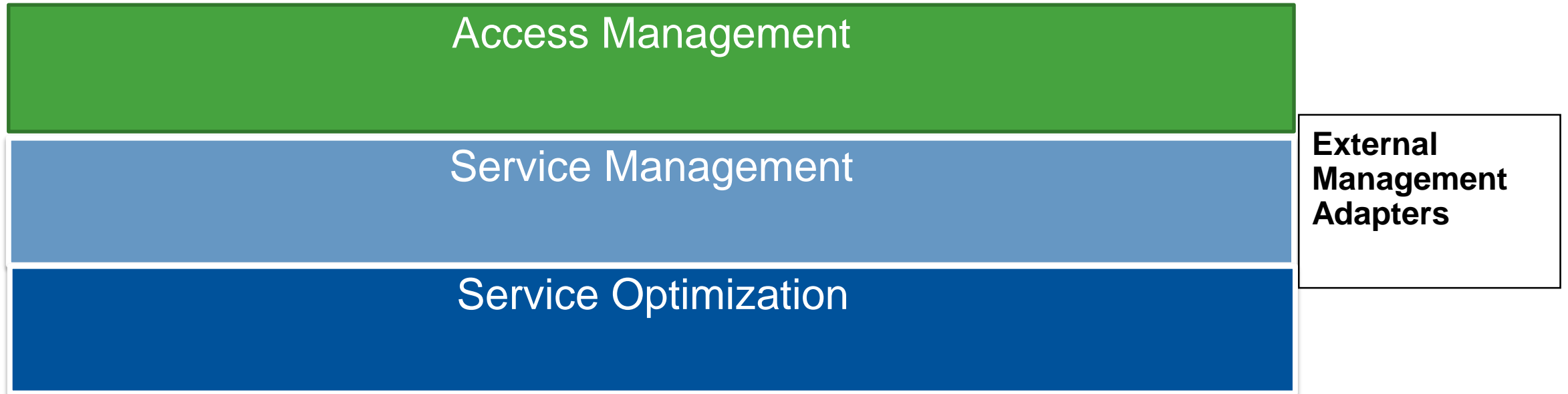**Gartner.**

Polling Question

What best describes your cloud strategy?

1. We have developed a cloud strategy and have begun executing (i.e., using a range of cloud services)

2. We are now developing our cloud strategy.

3. We have yet to commence work on developing our cloud strategy.

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Key Issues

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Cloud Management Platforms: Offering Suite of Functionality

Access Management

Service Management

Service Optimization

External Management Adapters

Hybrid Cloud Infrastructure and Platforms

Sample providers

CMPs Tend to Do a Good Job With Either Private or Public Cloud Management
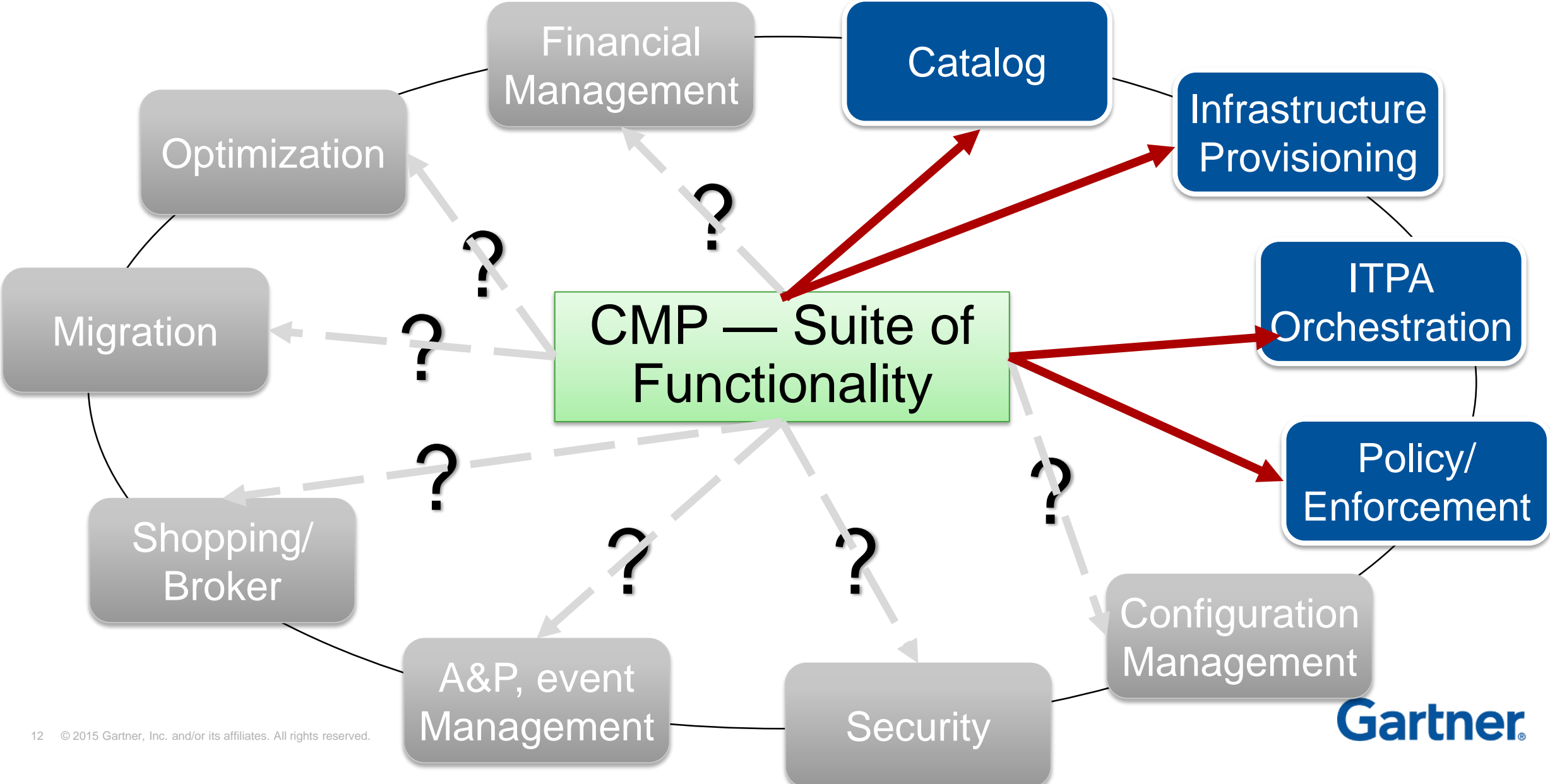
Born in the Public Cloud

Born in the Private Cloud

- Gigaspaces Technologies (open source)

- Microsoft

- RightScale

- Scalr (open source)

- BMC

- Cisco

- HP

- IBM

- Red Hat (open source)

- VMware

Gartner Estimates No Vendor Has More Than 20% Market Share

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Cloud Management Tool Categories

Strategic Planning Assumption

By 2019, 80% of large enterprises will require at least three tools to effectively manage cloud services up from 25% in 2015.

WHY

- Realization occurs after deploying cloud services that management is needed

- Entry points for managing public cloud are different than private

- Suites are never best-of-breed in all areas

- Technologies are shifting quickly

WHY NOT

- Suites may improve — it's a large addressable market

- Enterprises are rapidly developing cloud strategy so they may become more proactive with management

- The market is fluid, and there will be consolidations including of functionality for broader suites

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Where Do You Get Cloud Management Tooling?

IaaS/PaaS Provider

- Native tooling
- Generally for their own platform or ecosystem, not broad hybrid cloud capabilities
- Gaps in management breadth and depth

CMP

- Suite of mgmt. functionality
- Multicloud mgmt.
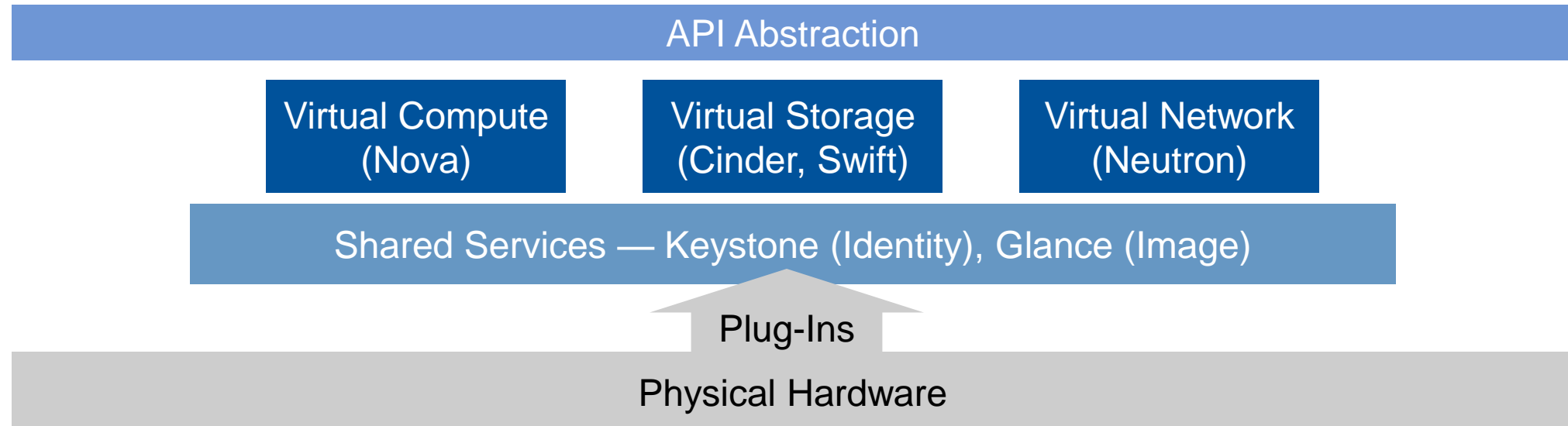- Portable apps if limit functionality use in public cloud

Other Cloud Mgmt. Tools

- Best-of-breed point tools for cloud mgmt.
- Single or multicloud mgmt.
- Tends to be less complex than full CMP
- Must stay two steps ahead of public cloud providers

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OpenStack Is Not a CMP, but Has Some CMP Features

*Look Like
Public Cloud*

API Abstraction

Virtual Compute (Nova)	Virtual Storage (Cinder, Swift)	Virtual Network (Neutron)

Shared Services — Keystone (Identity), Glance (Image)

Plug-Ins

Physical Hardware

OpenStack is an open source framework for IaaS software. It offers SDDC from the users' point (not the providers') of view. It is the best chance for de facto standard private cloud APIs.

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Containers Are Shifting the Cloud Landscape

- Immutable infrastructure is a best practice

- Horizontal scalable components that are ephemeral and replaceable

- DevOps drives app delivery best practices toward a CI/CD model

- Loosely coupled composition is desirable

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Key Issues

1. Why is cloud management important, and how does it differ from traditional IT operations management processes?

2. What technologies are available for cloud management?

3. **What best practices should be pursued for success with cloud computing and cloud management?**

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Gartner Recommended Best Practices for Success With Public and Private Cloud

Know your stakeholders

Define your success metrics (with stakeholders)

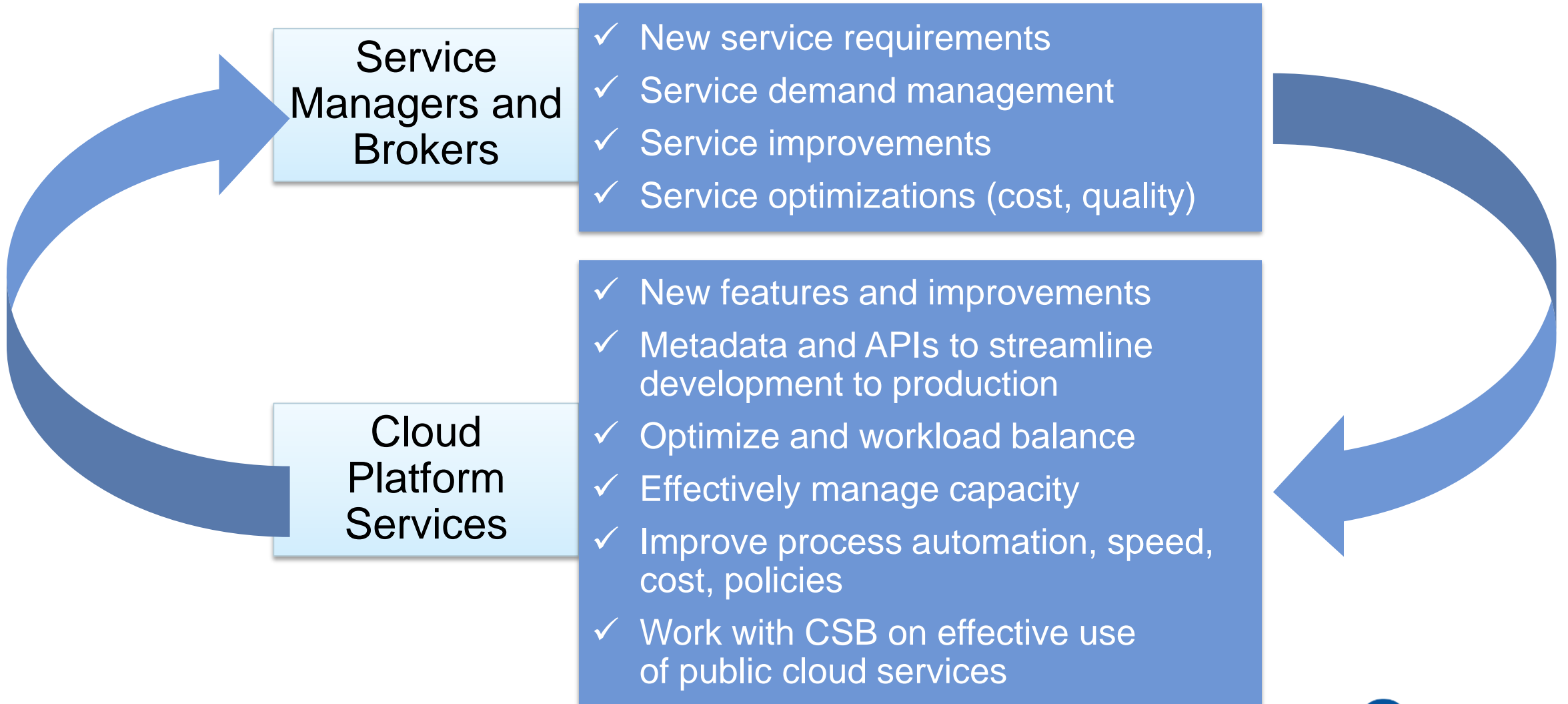Agility/Speed; cost; flexibility (meeting new requirements); quality

Benchmark against the alternatives (brokering)

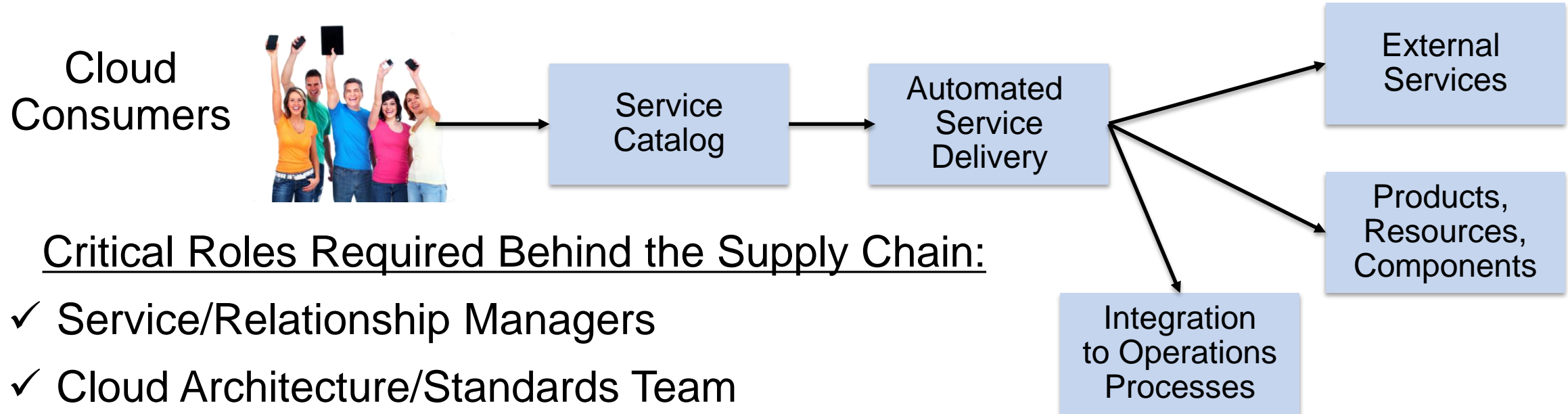Don't forget capacity management (for private cloud) and optimizing on metrics

IT is not free: Showback/Chargeback

Implement new roles; start small and evolve; continually optimize

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Continuously Improve and Optimize

Service Managers and Brokers

- ✓ New service requirements
- ✓ Service demand management
- ✓ Service improvements
- ✓ Service optimizations (cost, quality)

Cloud Platform Services

- ✓ New features and improvements
- ✓ Metadata and APIs to streamline development to production
- ✓ Optimize and workload balance
- ✓ Effectively manage capacity
- ✓ Improve process automation, speed, cost, policies
- ✓ Work with CSB on effective use of public cloud services

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Think Supply Chain and the Roles That Are Needed to Exploit Cloud Services

Cloud Consumers

Service Catalog → Automated Service Delivery → External Services / Products, Resources, Components / Integration to Operations Processes

Critical Roles Required Behind the Supply Chain:

✓ Service/Relationship Managers

✓ Cloud Architecture/Standards Team

✓ Cloud Service Engineering and Delivery Team

✓ Cloud Platform Services (for Internal Delivery)

✓ Cloud Supplier Management Team

✓ Cloud Service Broker

✓ IT Finance

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Action Plan for I&O Leaders and Cloud Architects

Monday Morning:

- *Gain* visibility into cloud usage across your enterprise.
- *Identify* desired business outcomes from your cloud initiative.

Next 90 Days:

- *Invest* in roles to assure success with cloud computing management and governance.
- *Identify* your workloads, and where they should run (private or public).
- *Select* cloud management tools to enforce policy and governance over cloud services.

Next 12 Months:

- *Execute* on your cloud computing strategy focusing on key stakeholders and outcomes.
- *Optimize* cloud architecture and services.

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Recommended Gartner Research

▶ **Technology Building Blocks for a Successful Private Cloud Deployment**
Dennis Smith (G00269969)

▶ **Exploring Cloud Management Trends and the Actions to Take**
Donna Scott, Dennis Smith and Milind Govekar (G00236106)

▶ **When IT Leaders Should Select Private Over Public Cloud Services**
Donna Scott (G00273092)

▶ **Market Guide for Cloud Management Platforms: Large, Emerging and Open-Source Software Vendors**
Dennis Smith, Donna Scott and Milind Govekar (G00271709)

▶ **Improve Cloud Computing Success With Cloud Management**
Donna Scott (G00279902)

For more information, stop by Gartner Research Zone.

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The world's most important gathering of CIOs and senior IT executives

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- ITxpo exhibit floor with hundreds of top solution providers and exciting startups

March 1 – 3	Dubai, UAE	October 24 – 27	Sao Paulo, Brazil
September 26 -28	Cape Town, South Africa	October 24 - 27	Gold Coast, Australia
October 5 - 7	Tokyo, Japan	November 6 – 10	Barcelona, Spain
October 16 – 20	Orlando, FL	November 15 – 18	Goa, India

Visit gartner.com/symposium
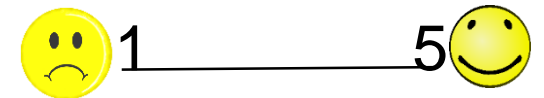
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