

# The International Association of Outsourcing Professionals® (IAOP®)

**Global Standard-Setting Organization  
and Advocate for the Outsourcing  
Profession**

Addressing the challenges that come with greater levels of outsourcing is going to take a new breed of outsourcing professional.



| Time slot   | Topic  | Presenter  |
|-------------|--|--|
| 3:30 – 3:40 | Chapter Introductions                          | Ken Sharma – GTI Chapter<br>Arijit Sengupta – CC Chapter |
| 3:40 – 4:10 | Savings from multi-vendor Cloud based delivery | Andy Nallappan – Avago Technologies                      |
| 4:10 – 4:20 | Break  |  |
| 4:20 – 4:50 | Outsourcing through Cloud Computing            | Subra Kumarswamy – Oracle                                |
| 4:50 – 5:00 | Q&A, wrap up.                                  |  |
| 5:00 – 6:00 | Networking                                     |  |



- **Global Membership-Based Organization for Customers, Providers and Advisors**
- **Only Professional Quality Standard for the Field of Outsourcing**
- **Proven Track Record of Delivering Value – 85% of Customer Members Credit IAOP for Improved Outsourcing Outcomes**
- **IAOP® is the largest and fastest growing network of outsourcing professionals in the world**



# Most of the World's Top Organizations are Leveraging IAOP's Programs and Services

## **100+ Founding & Corporate Members, including:**

Abbott Laboratories, Accenture, Aegis, Affiliated Computer Services (ACS), Allstate Insurance, Alsbridge, American Express, Anthem BCBS (Wellpoint), Apple Inc, Applied Materials, Assurant, Atlantic Canada Atlantique, AT&T, Avasant Global Sourcing, Belcan Corporation, Best Buy Company, BeyondCore, Bleum, Blue Cross/Blue Shield of Florida, Blue Shield of California, Booz & Company, Boston University, Business Catalyst International, Cal State Fullerton, Cambridge Assessment, Capgemini, Capital One, Carnegie Mellon University, Cassidy Turley, CB Richard Ellis, Chris Disher & Associates, Cinteger LLC, Computer Associates, Copenhagen Business School, CORFO (Chile), Colliers International, CPA Global, Delve Group, Dextrys, Diebold, Discover Financial, Disney Institute, DNL Global, Duke Energy, Duke University, Enlighta, EquaSiis/EquaTerra, Expense Management Solutions, Express Scripts Inc, Fasken Martineau DuMoulin LLP, Firstsource, Foley & Lardner, GASSCOM/E.Services Africa, General Motors, Genmab, Gorrissen Federspiel, GSOS, Hinduja Global Solutions (HTMT), HCL Technologies, Hexaware Technologies, hiSoft Technology International Limited, Hospira, HOV Services, IDA Singapore, Infosys, Innodata Isogen, Insigma Hengtian Software, Intel, Intetics, ISS A/S, Janeeva, Janus Associates, J & J Consumer Group, John Hancock Financial Services, Kelly OCG (BPO), Kenobi SRL, Kenya ICT, Kirkland & Ellis LLP, Kraft Foods, Liberty Mutual, LifeMasters, Loeb & Loeb, Marsh & McLennan Co, Mayer Brown LLP, Microsoft, Morrison & Foerster LLP, Multimedia Development Corp. (MdeC), NCS, Neusoft Corporation, Nike, Nordea Bank, North Dakota Dept. of Commerce, Océ Business Services, Orange Business Systems, Ortho-McNeil Janssen, PepsiCo, Pfizer Inc, Pratt & Whitney/UTC, Pretium Partners, PricewaterhouseCoopers, Procter & Gamble, Procurisource, Prudential, Qantas Airlines, Quint Wellington Redwood, ResourcePro, Rio Tinto, Roche, RR Donnelley, RTM Consulting LLC, Salmat, SAP AG, Service Corporation Intl, Singtel Optus (Australia), Sitel, SPi Technologies, State Farm Insurance, Sun Microsystems, Symantec, Syracuse University, TEKsystems, TeleTech, Thomson Legal & Regulatory, TransUnion Interactive, Trellis, Univ of Missouri, Univ of Salerno, VancelInfo, Vantage Partners, Vertex Business Services, Verve, Visa, Vodafone, Washington Gas, Whirlpool, Wipro Technologies, WNS Global Services, Xceed, and Yahoo!.

**1000+ Professional Members • 100,000+ Affiliate Members**

**40+ Chapters Around the Globe**

**[www.IAOP.org](http://www.IAOP.org)**



# IAOP Structure and Programs

- Strategic Advisory Board & Outsourcing Standards Board
- Research, Training, Services, Advocacy & Outreach Committees
- Geographic, Industry, Topical Chapters
- Online Member Directory, IAOPNetwork & Customer-only IAOPNetwork
- The Outsourcing World Summit®
- Regional Summits - part of the Outsourcing World Summit Conference Series
- Topical Forums as part of the Outsourcing Leadership Series
- IAOP Member of the Year Awards
- Outsourcing Hall of Fame Awards
- IAOP Knowledge Center (Firmbuilder.com®)
- Certified Outsourcing Professional® (COP) Program (Attending a chapter meeting earns COP's 1 CEH towards recertification)
- COP Master Class
- The Global Outsourcing 100® Program (The Global Outsourcing 100 list and sub lists, World's Best Outsourcing Advisors)
- Outsourcing Professional Code of Ethics

- **COP Master Class**

*May 3-5, 2010 – Cal State University, Fullerton, California*

- **COP Governance Workshop**

*May 6, 2010 – Cal State University, Fullerton, California*

- **2011 Outsourcing World Summit – Call for Papers**

*Look for more information end of May – beginning of June*

- **2011 Outsourcing World Summit**

*February 21-23, 2011 – Indian Wells, California*



## New Member Services from IAOP

*At IAOP, we are always looking for programs & services that will add value to your membership and we have three new offerings for you!*

- **Value Health Check Survey** – An exciting new diagnostic tool that will enhance the value of your outsourcing contracts & relationships! Each IAOP Corporate Member receives two complimentary survey's as part of their annual corporate membership – Call us today to learn more!
- **BestOutsourcingJobs.com** – Companies seeking the best talent for outsourcing jobs, as well as professional looking for employment opportunities, can benefit from our new online portal for outsourcing jobs!
- **OperatorEvaluator** – An exciting new solution available as part of our suite of outsourcing skills and professional development offerings. Call us today to find out more about this dynamic service!

*Contact Michael Forbes at [mike.forbes@iaop.org](mailto:mike.forbes@iaop.org) for more detailed information on any of these service offerings!*



***With more than 100,000 members and affiliates worldwide, IAOP® is leading the effort to transform the world of business through outsourcing.***

***If you are not already a member, you can begin taking immediate advantage of IAOP's programs and services by going to [www.iaop.org](http://www.iaop.org).***

**[www.IAOP.org](http://www.IAOP.org)**



# **Global Technology Industry Outsourcing Chapter**

[www.IAOP.org](http://www.IAOP.org)

- The Global Technology Industry Outsourcing chapter of the IAOP will provide a common forum for Technology Industry customers, providers, advisors and academia to share and learn about the various aspects of the outsourcing and offshoring lifecycle.
- With our focus on Technology industry, we will identify opportunities and circumstances that we may encounter, and share best practices to achieve success in an outsourcing and offshoring lifecycle.

## IAOP Global Technology Industry Outsourcing Chapter

### *Chapter Leadership Team – Corporate Members Only*



**Ken Sharma**  
Chair  
Symantec



**Raj Patel**  
Co-Chair  
Oracle



**Rajib Arjun**  
Co-Chair  
PWC

**Role:** Set the overall direction, strategy and operational agenda of the Chapter while coordinating the global resources of the IAOP to deliver the Chapter Charter to our Members.

### *Executive Advisory Committee (EAC) – Corporate Members Only*



**Tom Schramm**  
EAC Member  
Equaterra



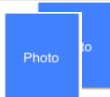
**Nipun Sehgal**  
EAC Member  
Enlighta



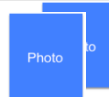
**Anurag Sood**  
EAC Member  
Aegis

**Role:** Be the voice of the IAOP membership and the broader outsourcing industry community representing the interests of outsourcing buyers, providers, & advisors/academia.

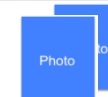
### *Chapter Member Delegates – Professional Members*



**Name TBD**  
Delegate Member  
TBD



**Name TBD**  
Delegate Member  
TBD



**Name TBD**  
Delegate Member  
TBD

**Role:** The Chapter Delegate is a voice of the IAOP membership and is a formal member of the Chapter Team who is actively involved in assisting the Chapter in execution of its Charter.

**IAOP Global Corporate & Professional Membership**

**Global Outsourcing Industry**

**[www.IAOP.org](http://www.IAOP.org)**

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# IAOP Cloud Computing Chapter

Contact: Arijit Sengupta ([asengupta@beyondcore.com](mailto:asengupta@beyondcore.com))



# Agenda

- Introductions
- The Cloud Computing Chapter Charter
- Chapter Governance Team
- Chapter Programs



# Cloud Computing Chapter Charter

- Understand the potential impact of Cloud Computing on the outsourcing ecosystem
- Explore how consumers, providers and advisors of outsourcing can best leverage Cloud Computing to further enhance existing benefits or develop new sources of business benefits from outsourcing
- Collect & document the unique requirements of the IAOP membership and educate the providers of Cloud Computing related technologies and services on these requirements
- Work with the IAOP membership and other leaders in the outsourcing industry to develop & influence best practices for cloud computing
- Disseminate knowledge and best practices related to Cloud Computing to the IAOP membership and affiliate organizations



## IAOP Cloud Computing Chapter

### Customers

### Providers

### Advisors/Academia

### Technology

#### Chapter Leadership Team



**Elliott Ichimura**  
Co-Chair - Microsoft



**James Harris**  
Co-Chair - Accenture



**Open Position**



**Arijit Sengupta**  
Chair- BeyondCore



**Open Position**



**JP Balakrishnan**  
Co-Chair - Infosys



**Open Position**



**Open Position**

#### Executive Advisory Committee (EAC)



**Mark Bluhm**  
Thomson Reuters



**Open Position**



**Kenneth Adler**  
Loeb & Loeb LLP



**Open Position**



**Open Position**



**Open Position**



**Open Position**



**Open Position**



**Open Positions**



**Open Positions**



**Open Positions**



**Open Positions**

#### Chapter Member Delegates



**Professional Members**



**Professional Members**



**Edward Pisacreta**  
Holland & Knight



**Professional Members**

**IAOP Global Corporate & Professional Membership**

As of 4/20/10

**Global Outsourcing Industry**

Chapter Governance Council

Matt Shocklee – IAOP Liaison



# Cloud Computing Chapter Calendar

## Cloud Computing Chapter Calendar (as of 4/21/10)

|                                     |   |
|-------------------------------------|---|
| January 26, 2010<br>3 PM to 6PM EST | <p>Chapter Launch in New York in partnership with New York Chapter</p> <ul style="list-style-type: none"> <li>• Presentation: What is Cloud Computing, and Why Should You Care? A Technology vs. Business Value Perspective</li> <li>• Panel : The Potential Rewards and Risks of Cloud Computing</li> </ul>  |
| February 15 -17, 2010               | <p>IAOP Summit in Florida</p> <ul style="list-style-type: none"> <li>• Microsoft CPO Keynote on Cloud Computing</li> <li>• Cloud Computing Track chaired by Microsoft and BeyondCore <ul style="list-style-type: none"> <li>▪ The BPO Service Value Chain in a Cloud Context</li> <li>▪ Cloud Computing for Service Excellence</li> <li>▪ Beyond Outsourcing – A Client’s Journey in Using Cloud Computing to Realize Business Value from Multi-Vendor Services Delivery</li> </ul> </li> </ul> |
| April 21, 2010                      | Joint Meeting with Global Technology Industry Chapter in Bay Area   |
| July 22, 2010                       | Joint Meeting with Chicago Chapter  |





# **Beyond Outsourcing - A Client's Journey in Using Cloud Computing To Realize Business Value from Multi-Vendor Services Delivery**

## **Andy Nallappan**

Senior Director, Enterprise Applications – Avago Technology  
Global Information Technology

- Managing IT in a highly outsourced environment with strong governance
- Responsible for All Avago enterprise applications – ERP (Oracle), DW (Hyperion, OBIEE), CRM (ModelN), HR applications, etc
- 20+ years of Industry Experience covering Applications, Enterprise Infrastructure, R&D Engineering infrastructure.
- Worked for HP (1994-1999) and Agilent between (1999 – 2005)
- 10 years of experience with outsourcing life cycle from RFP to stabilization to resourcing covering support and development.
- Deployed cloud based services like Google Apps/email, Postini, Enlighta, HR apps, Authentication, MPLS Network.
- Managed Engineering and Enterprise infrastructure (CAD Licenses, license hosting, Hosting, Network, Data Center, end user computing, security, help desk)

## Subra Kumaraswamy

– On-Demand Security Service Architect, Oracle

- Responsible for security and identity services for Oracle's On Demand cloud platform service.
- Has led various security initiatives including identity and access management and cloud security for Sun's public cloud.
- He is co-author of the book "Cloud Security and Privacy - An Enterprise perspective", which addresses issues related to preparing for cloud computing.
- Founding member of the Cloud Security Alliance and co-chair of the Identity & Access Management and Encryption & Key Management workgroups.
- Subra's has held leadership roles at Accenture, Netscape, Lycos and Sun.
- Subra has a Masters degree in Computer Engineering from Clemson University

# The 2010 Outsourcing World Summit®

Disney's Yacht & Beach Club Convention Center • Lake Buena Vista, Florida

February 15-17, 2010



## Beyond Outsourcing

– A Client's Journey in Using Cloud Computing  
To Realize Business Value from Multi-Vendor Services Delivery

**Andy Nallappan**, Senior Director, Global IT  
AVAGO Technologies



# Agenda

1. Avago Technologies – Overview
2. Current Business Challenges
3. Beyond Outsourcing
4. Cloud Computing at Avago
5. Benefits of Cloud at Avago
6. Deploying Cloud – Best Practices
7. Challenges with Cloud
8. Multi Vendor Governance
9. Lessons Learned
10. Key Takeaways



# Avago Technologies – Overview

- Spin off from Agilent Technologies in 2005
- FY09 revenue: \$1.484 billion
- Approximately 7,000 products, Leading global manufacturer of optoelectronics and analog interface components
- Primary Locations: California and Singapore
- Over 40,000 customers worldwide
- Heritage of HP's semiconductor group, with over 5,000 patents and pending applications, and technologies in III-V semiconductor

## Mobile

Wireless handsets  
Wireless  
infrastructure  
Wireless networking

## Digital Consumer

Printers and  
imaging  
Laser and optical  
mice  
Digital TVs:  
-LCD TVs  
-Plasma TV's

## Storage, Computing & Networking

Data storage  
Servers  
Storage arrays  
Switches and routers  
Service provider  
networking

## Automotive

Safety  
In-car infotainment  
Navigation  
Lighting

## Industrial

Factory automation  
Motor controls  
Power generation



# Current Business Challenges

## ■ CEO/BOD directives

- R&D, Engineering, Sales and Marketing are “core”
- All other functions deemed “critical non-core” – ex: IT, Finance, HR, Legal, Mfg, Procurement, etc.
- Non-core functions to maintain effectiveness at **Lowest Total Cost (TCO)**
- IT total cost of ownership at <50% of semiconductor industry average (1.7%)

## ■ Internal customer satisfaction survey feedback

- “Core” users demand higher productivity
- IT solutions should enable “Global” work culture
- IT solutions for Gen X, Gen Y and Beyond

## ■ CIO vision

- Continue to evolve our dynamically-variable model via global outsource providers
- Continue to utilize Cloud computing solutions where possible
- Pursue disruptive technologies and transformations to gain
- Beyond Outsourcing... Fixed Capex to Flexible Opex



# Beyond Firewall - Cloud Models

Software as a Service  
("SaaS") – End User

Internet access to end-user  
applications hosted in cloud

Examples:  
Salesforce.com netsuite.com  
Google apps, Microsoft  
BPOS, enlighta, Taleo,  
workday, Authoria, ADP

Platform as a Services  
"PaaS" - Developer

Offer services that enable  
developers to build, test and  
execute applications that run on  
cloud

Examples:  
Intuit quickbase  
Coghead  
Oracle SaaS  
salesforce.com/platform

Infrastructure as a Service  
("IaaS") – IT backend

Infrastructure "rental" – for  
processing, storage, network, etc –  
for applications. Pay based on  
usage

Examples:  
Amazon Web Services  
GoGrid  
Google Base

# Beyond Labor – Next Frontier of Savings

Multi-Provider Services Delivery Model has resulted in

30%+  
Savings

***Where are the next major savings?***

Optimize, Standardize  
and Automate

Ongoing –  
Owned by  
Functions /  
Businesses

*More or less  
supported by ERP*

Business  
Processes

Software as a Service  
and Rationalization (Saas)

Progress

Supporting  
Applications

Business  
Applications

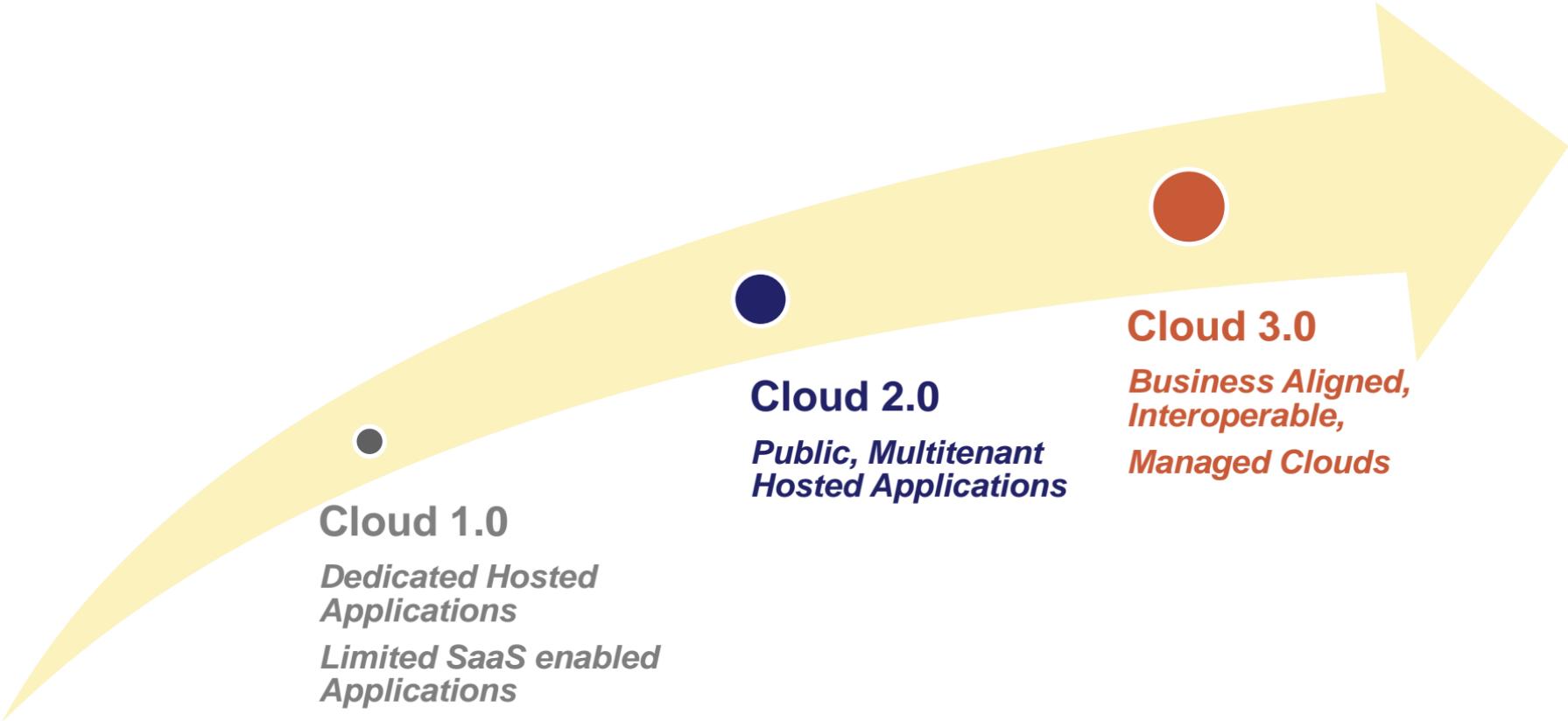
Cloud Delivery Model  
and Consolidation

Progress



70% of current IT spend

# Evolution to Cloud Computing 3.0



**Cloud 1.0**

*Dedicated Hosted  
Applications  
Limited SaaS enabled  
Applications*

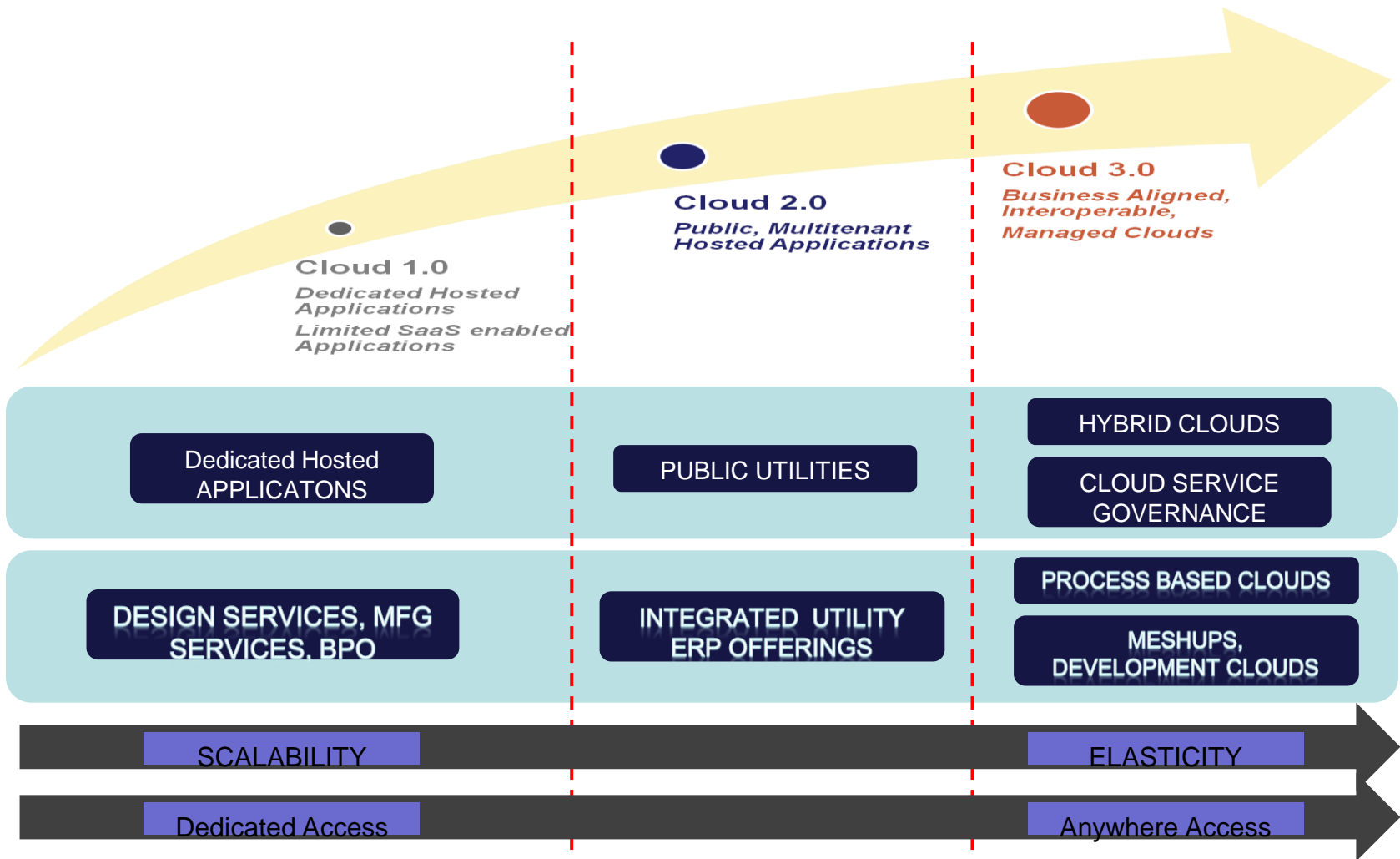
**Cloud 2.0**

*Public, Multitenant  
Hosted Applications*

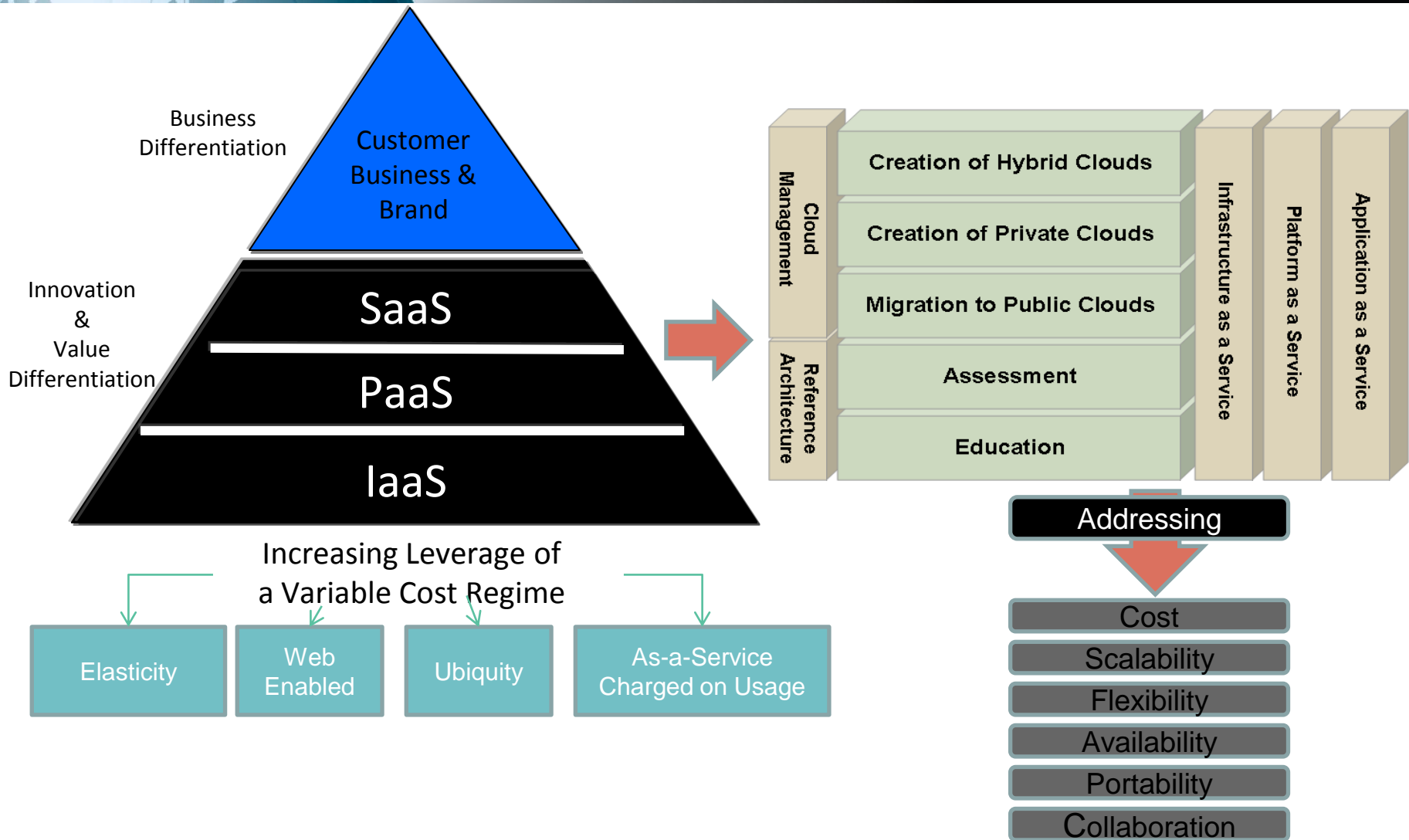
**Cloud 3.0**

*Business Aligned,  
Interoperable,  
Managed Clouds*

# Evolution to Cloud Computing 3.0



# Evolution to Cloud Computing 3.0



# Beyond Outsourcing – Our Journey to Cloud

- IT is always under cost pressure. Persistent goal in IT SPR
- Evolution of IT service delivery, to reduce IT budget

## Within Four walls to Beyond Firewalls: Cloud Computing

2010 – Future: IaaS and PaaS

2004 – Now: SaaS - Cloud computing (Multi Tenant)

2003 – 2007: Out-sourcing, BPO

1999 – 2003: Out-tasking & Off Shoring

Until 1999: Staff augmentation

# Cloud Computing at Avago


- Cloud Computing is Avago's IT strategy
- Cloud is an extension of our outsourcing

| Messaging  | Collaboration   | HR/Emp. Expense   | Infrastructure /Gov   |
|--|---|---|---|
| <br>by Google                   |  Google Talk   |    | <br>Global Services Governance |
|  Google calendar                |  Google docs   |    | <br>ARCOT®                     |
| <u>Google postini services</u>   | Google Contacts   | <br>Make talent count.   |  MPLS Network                 |
|  Email Security                | Google Mobile   | MorganStanley<br>SmithBarney  |   |
|  Email Archival<br>eDiscovery |  Google sites | <br> |   |
|  | Cisco<br>webex  | <br>click. done.™  |                              |



# Operational Benefits of Cloud at Avago

1. Faster time to implement
2. Scalable
3. High Availability - Always Available – 24/7
4. Productivity Improvement
5. Multi Platform Supportability at no extra cost – multiple OS, HW and Browser
6. World (Media) is watching. You are not the only one who will be impacted
7. Access to new features as soon as available at no extra charge or effort
8. Reduction in IT resources (internal and external) required to develop, test, deploy and manage an equivalent hosted capability
9. No backup/restore challenges to deal with
10. Enhanced Disaster Recovery protection. No annual DR rehearsal or test
11. You are always supported and always on the latest patch and release – NO end of life or end of support
12. Better solutions for mobile and remote home users/employees. Better useability



# Financial Benefits of Cloud at Avago

1. Cost Savings
2. No Capital Investment. No asset tracking
3. Predictable financial model
4. Enablement of a variable cost model that aligns with economic cycles and company strategy (e.g. M&A)
5. Cost avoidance of future HW and SW upgrades
6. Realized \$ million+ annual savings from elimination of incumbent client/server-based communication platform (mail)
7. Multi-millions in savings due to cloud offerings and application consolidations due to Enlighta over 5 year
8. Lower implementation cost for deployment
9. Reduced IT cost for M&A
10. Lower allocations to businesses and higher margin



# Key Considerations for SaaS

- Location of data & access to data
- Security
- Portability
- Level of support
- Ability to Influence
- Ability to adapt and cost of change

## Three Phases

1. Pre Implementation
2. Implementation
3. Post Implementation



# Pre Implementation – Best Practices

1. Business and Financial Rationale
2. Evaluation and POCs
3. Legal and Security Clearance
4. Sponsorship

1. Clear Requirements
2. Integration (Design/Build)
3. Validation
4. Preparation – Configure/Setup/Network
5. Change Management (Training)
6. Support Ready - Organic Launch
7. Enterprise cut-over

1. Stabilization
2. Process Compliance – ITIL and others
3. CMDB
4. Vendor Governance
5. Cloud Computing Life Cycle
6. Validation of Business and Finance rationale



# Challenges with Cloud

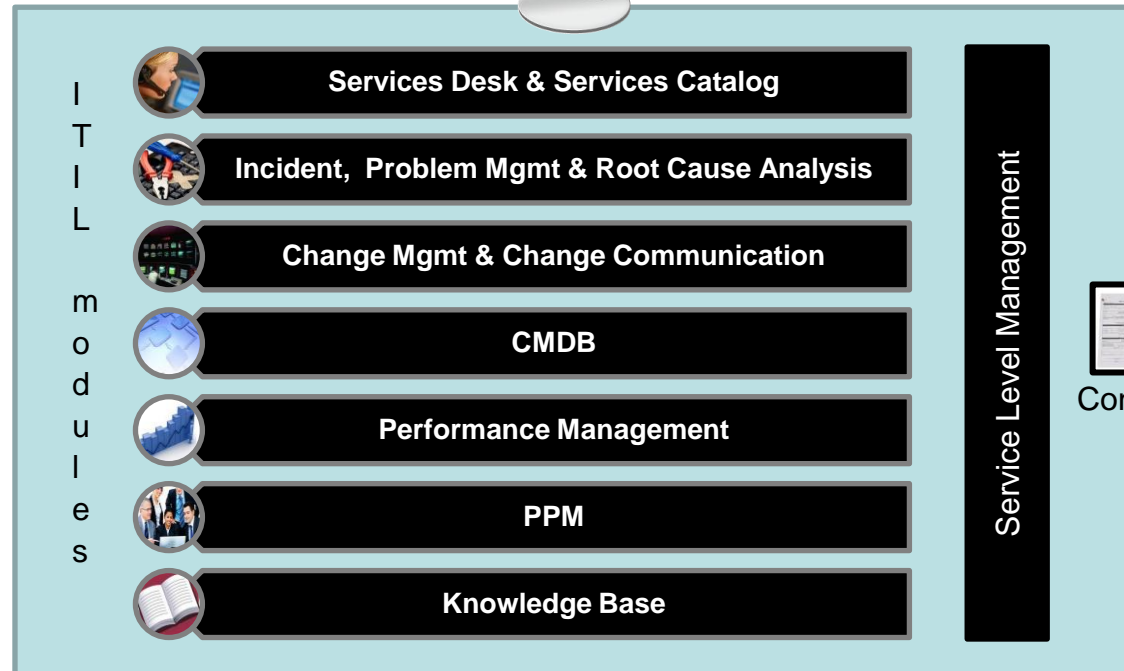
1. Right Cloud Solution/Partner
2. Latency and Response times
3. SLAs and KPIs
4. Contract terms and condition negotiations
5. Local legal compliance – China, Europe, etc
6. Configurations vs. Customizations
7. Ownership of solutions – Business/Functions vs. IT
8. Ever Changing Solution – Surprises
9. Governance
10. Change Management/Culture

# Multi Vendor Governance & ITIL

## Enlighta



IT Management  
Insight & Control



Contracts



Vendor  
Delivery

Integration (HRMS, Oracle apps, Apps monitoring, Asset discovery, SSO, ...)

# Multi Vendor Governance

**enlighta**  
Global Services Governance

Welcome Mike Smith  
IT Executive

My Profile | Preferences | Help | Forums | Logout | Thursday, October 22, 2009 10:41:39 AM PDT

powered by: enlighta

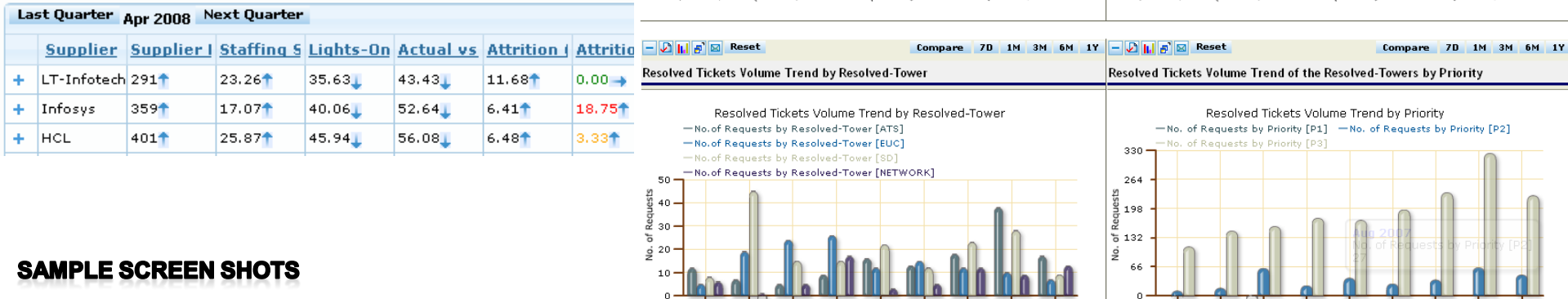
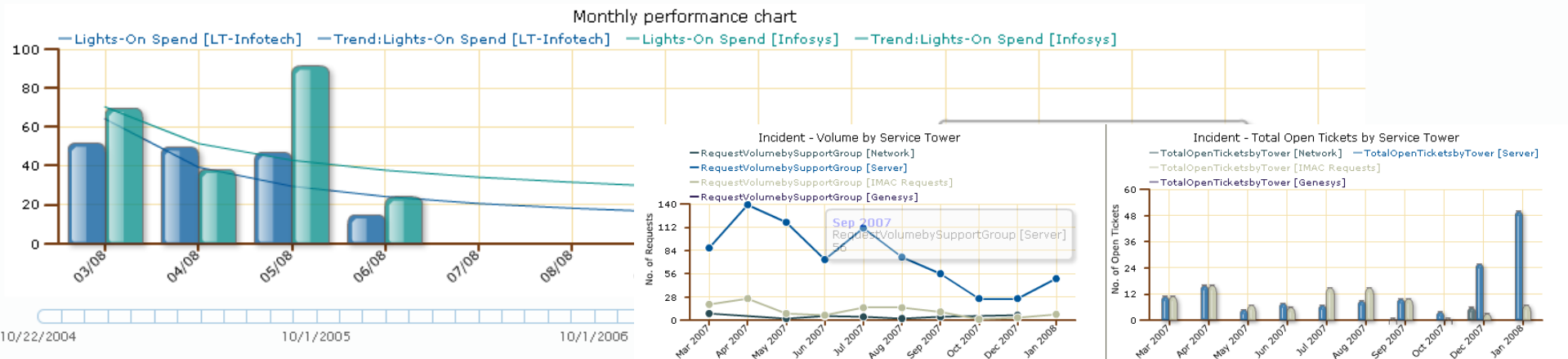
**IT Enterprise Dashboard** | Vendor Catalog | Compliance | Demand | Best Practices | Reports | Documents Search

Alerts | Enterprise Scorecards | Dashboard Contracts | Infrastructure Scorecard | Compliance Scorecards | Services Delivery | Financials | Relationship | Demand | Projects Perform

Supplier | Sector

print | back to list | export to csv | export to excel | export to html | email report | save report | edit config | performance chart

Chart type: Bar and trend | Settings: +



**SAMPLE SCREEN SHOTS**



# Lessons Learned

1. It's a different ball game
2. Different Processes – SDLC, Governance, etc
3. Skills – Breadth vs. Depth
4. Readiness – Network, IT Policies, Security Measures, etc
5. Tops down sponsorship is a MUST
6. Change Management and Training is Critical
7. There will always be some unhappy users
8. All complaints DO stop
9. Communication, Communication, Communication
10. Enables IT to focus on “CORE”



# Key Takeaways

## Why should one go Beyond Outsourcing – Cloud Computing

1. Cloud Computing benefits are REAL
2. Cost Savings are beyond IT
3. Businesses demand
4. Workforce needs
5. Industry enforces
6. Competitive Advantage
7. Enables IT transformation from “critical” to “core”
8. It is NOT one of those IT initiatives.....It is a corporate Initiative
9. Every CIO has this in his/her AOP/SPR

- “Big Switch” – Rewiring the world, from Edison to Google by Nicholas CARR
- [andy.nallappan@avagotech.com](mailto:andy.nallappan@avagotech.com)
- Work Tel: 408 435 4244



**ORACLE®**

## **Cloud Computing – Outsourcing Perspective**

Subra Kumaraswamy  
On Demand Security Service Architect



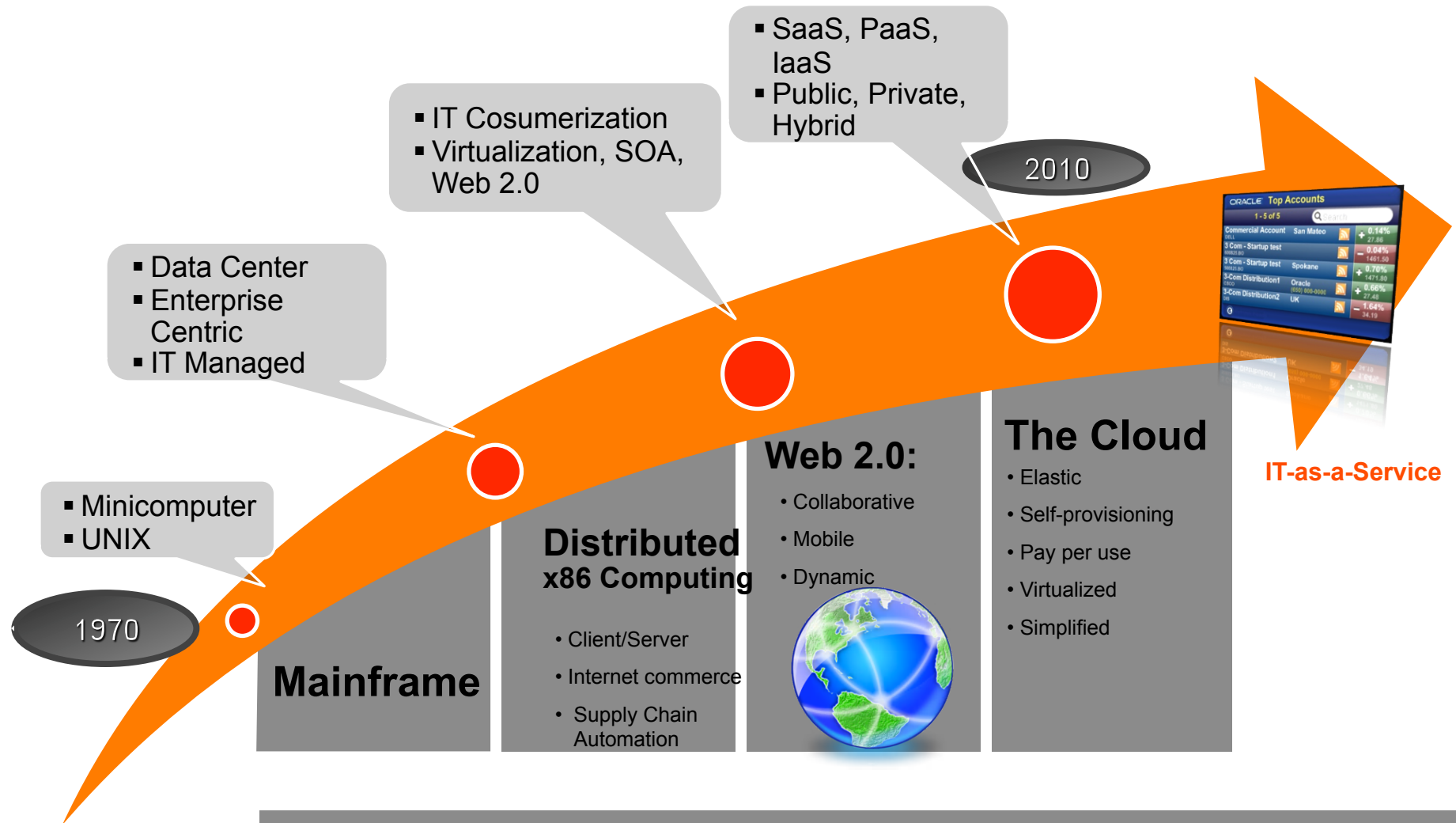
# Agenda

- Cloud Computing definition and models
- The Business Case for Cloud
- How is Cloud impacting IT?
- Cloud Computing Considerations – Customer Perspective
- Cloud Computing – Vendor Perspective

# Are Clouds Disruptive?

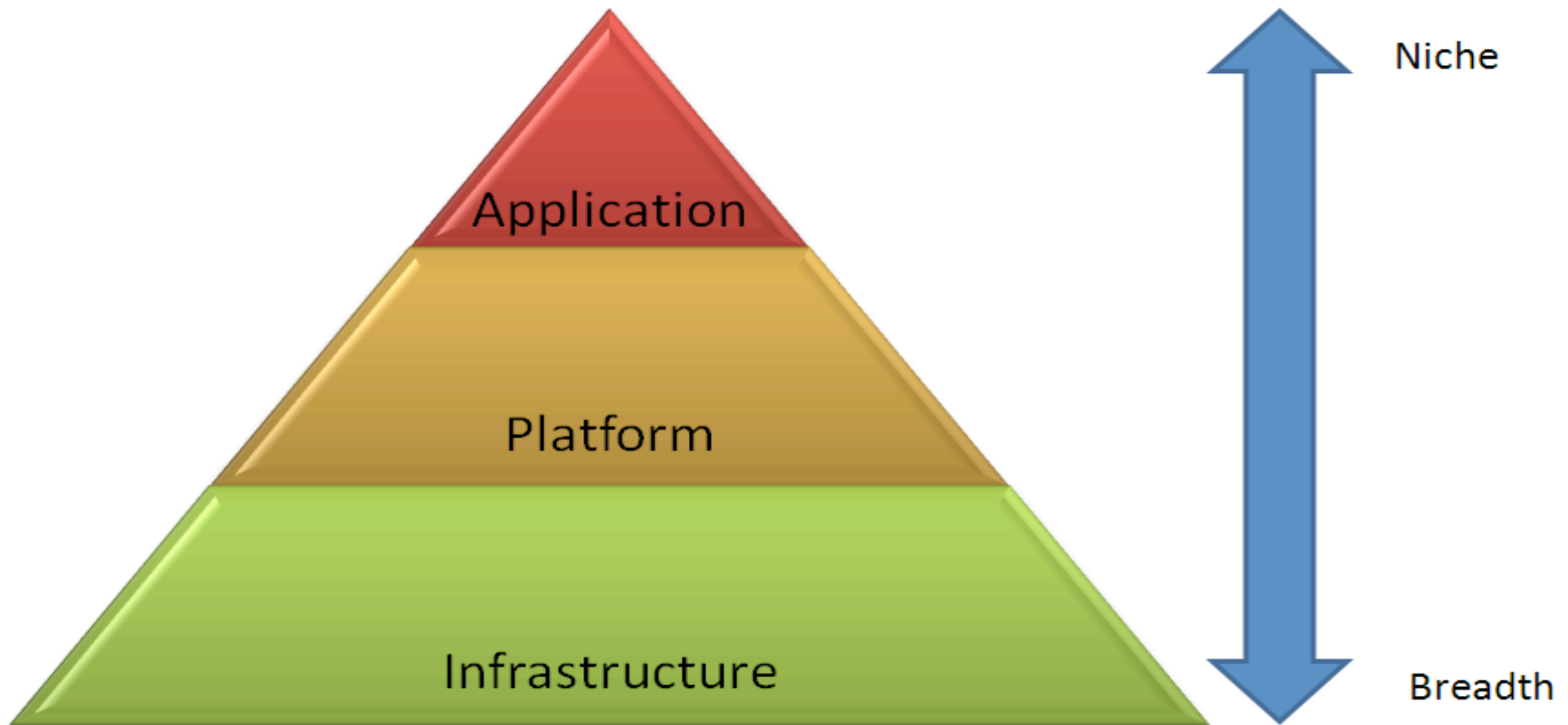


# The Evolving Computing Paradigm



*Economic shock has accelerated the pace of change*

# Cloud Pyramid of Flexibility





# Cloud = SaaS, PaaS, IaaS



Software as a Service


Applications delivered as a service to end-users over the Internet

Platform as a Service

App development & deployment platform delivered as a service


Infrastructure as a Service

Server, storage and network hardware and associated software delivered as a service

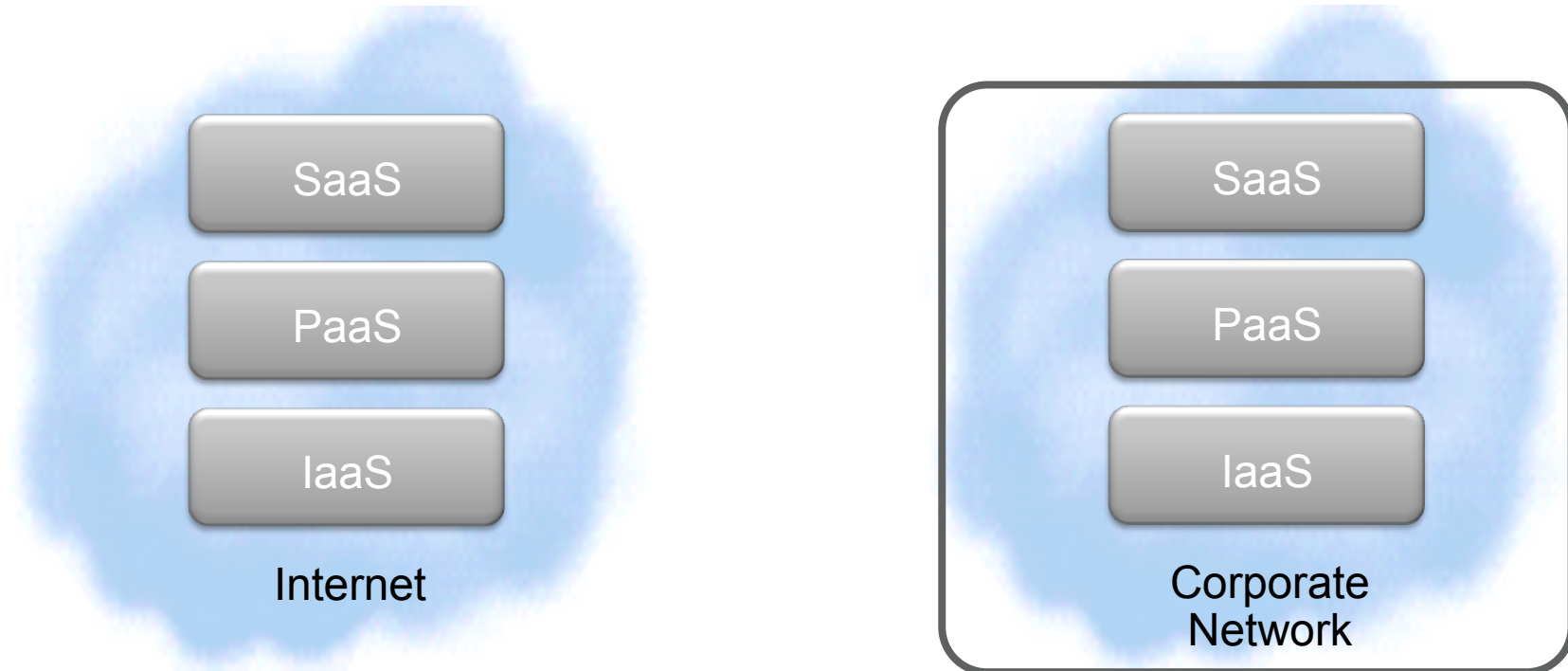




# 4 Cloud Deployment Models

- Private cloud
    - enterprise owned or leased
  - *Community cloud*
    - *shared infrastructure for specific community*
  - *Hybrid cloud*
    - *composition of two or more clouds*
  - Public cloud
    - Sold to the public, mega-scale infrastructure
- 

# Cloud Deployment



## Public Cloud:

- No infrastructure setup
- Minimal management
- Lower *upfront* costs
- OpEx

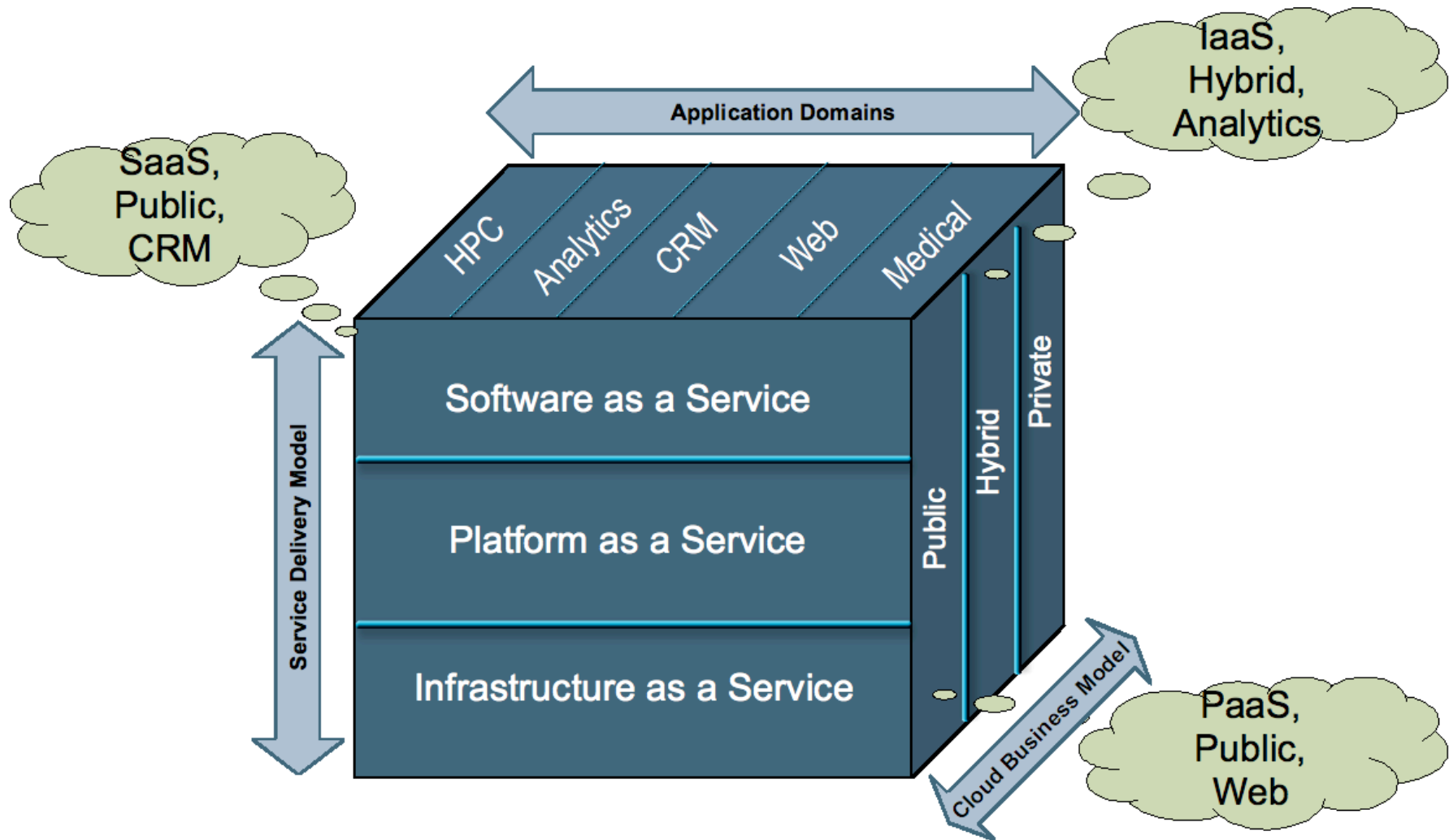
## Both offer:

- High efficiency
- High availability
- Elastic capacity

## Private Cloud:

- Greater control
- Easier to integrate
- Lower *total* costs
- CapEx and OpEx

# Flavours of Cloud Computing



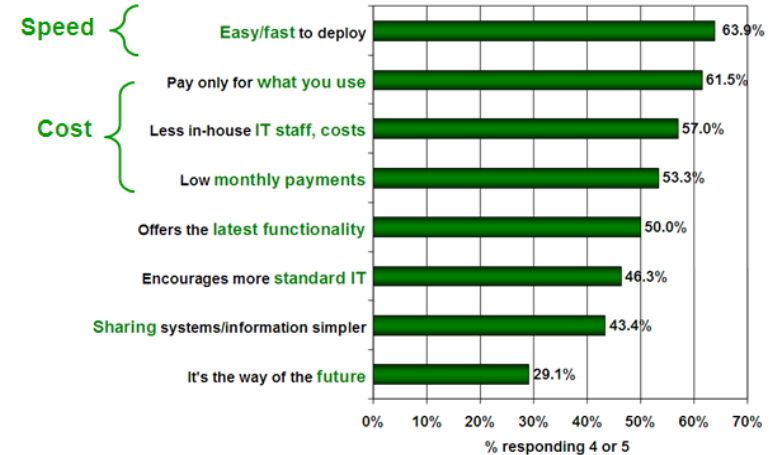
# Cloud Benefits and Challenges

## Cloud Attributes

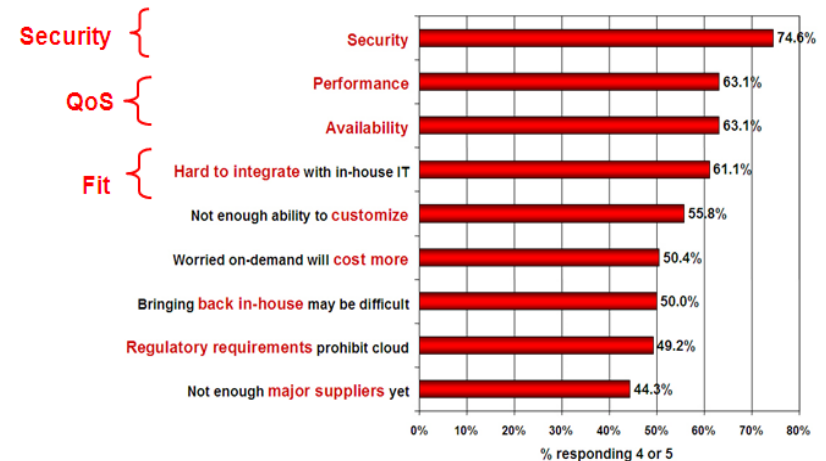
- Service-based
- Scalable and Elastic
- Shared
- Metered by Use
- Uses Internet Technologies

(Source: Gartner)

Q: Rate the **benefits** commonly ascribed to the 'cloud'/on-demand model  
(1=not important, 5=very important)



Q: Rate the **challenges/issues** ascribed to the 'cloud'/on-demand model  
(1=not significant, 5=very significant)



Source: IDC Enterprise Panel, August 2008 n=244



# The Business Case for a Cloud

## Hard Dollar Benefits

- Ability to charge back for IT resources
- **Increase resource utilization** – and delay new hardware purchases
- Delay data center expansion
- Data center consolidation/reduction
- Eliminate licensing/support fees for redundant capabilities

## Soft Dollar Benefits

- Simplified management
- Standardized technologies – and skill sets
- **Leveraging shared services** across the enterprise

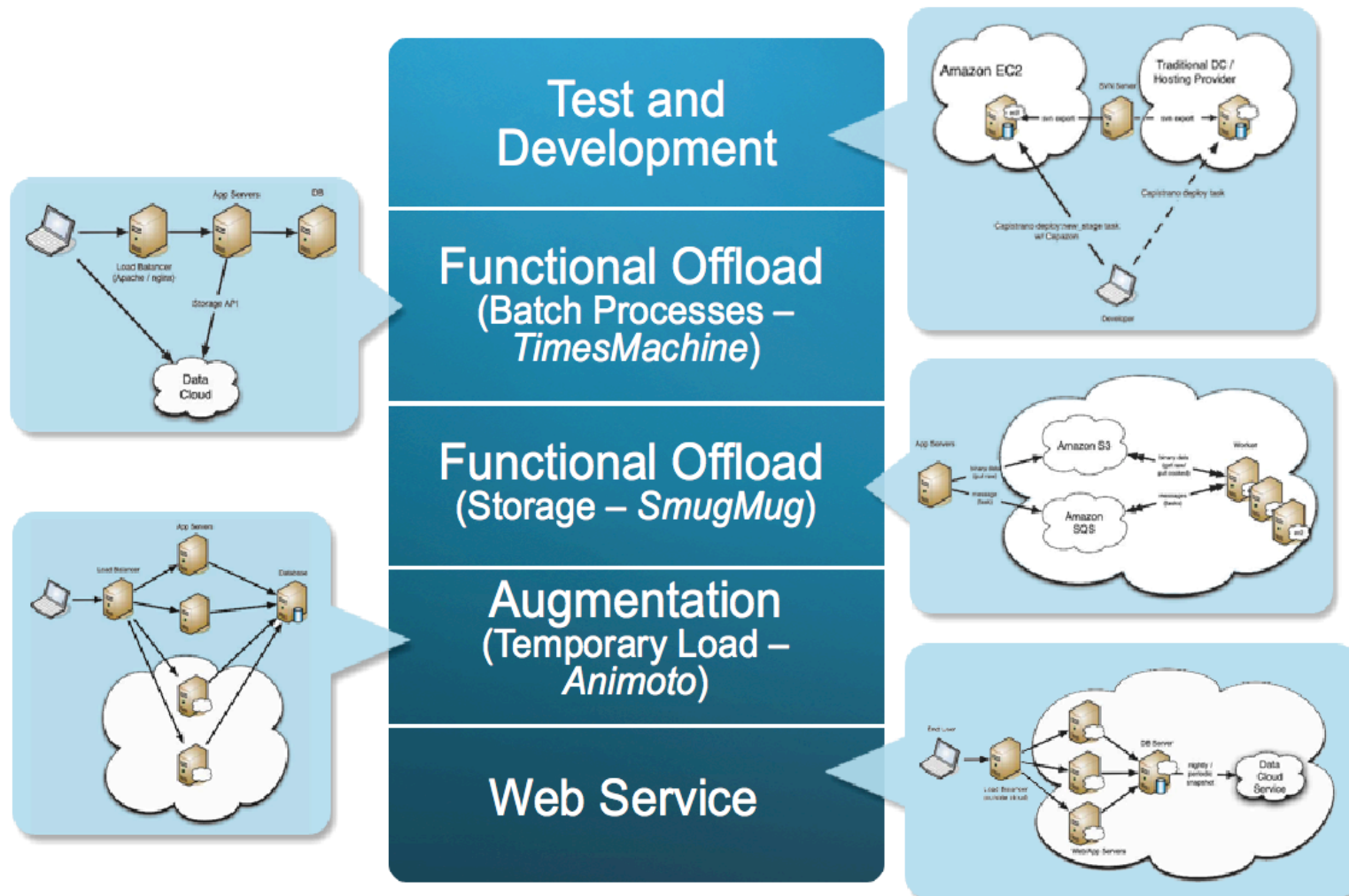
## Speed

- What would the ability to **assimilate acquisitions** much more rapidly give you?
- What would you get from the ability to **deploy new services** much more rapidly?

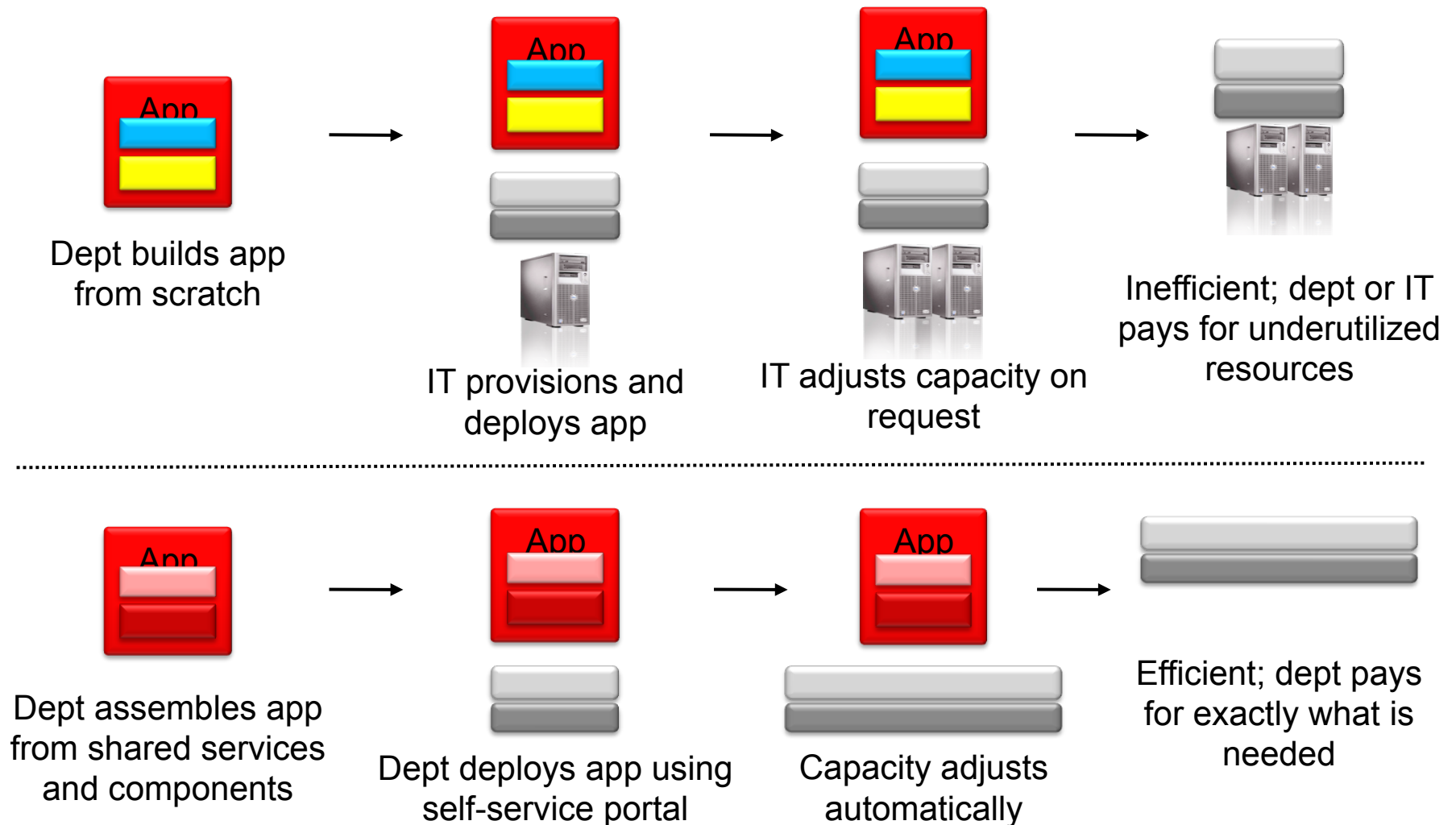
## Innovation

- When you free up resources performing redundant, manual tasks – what can you now do with them?

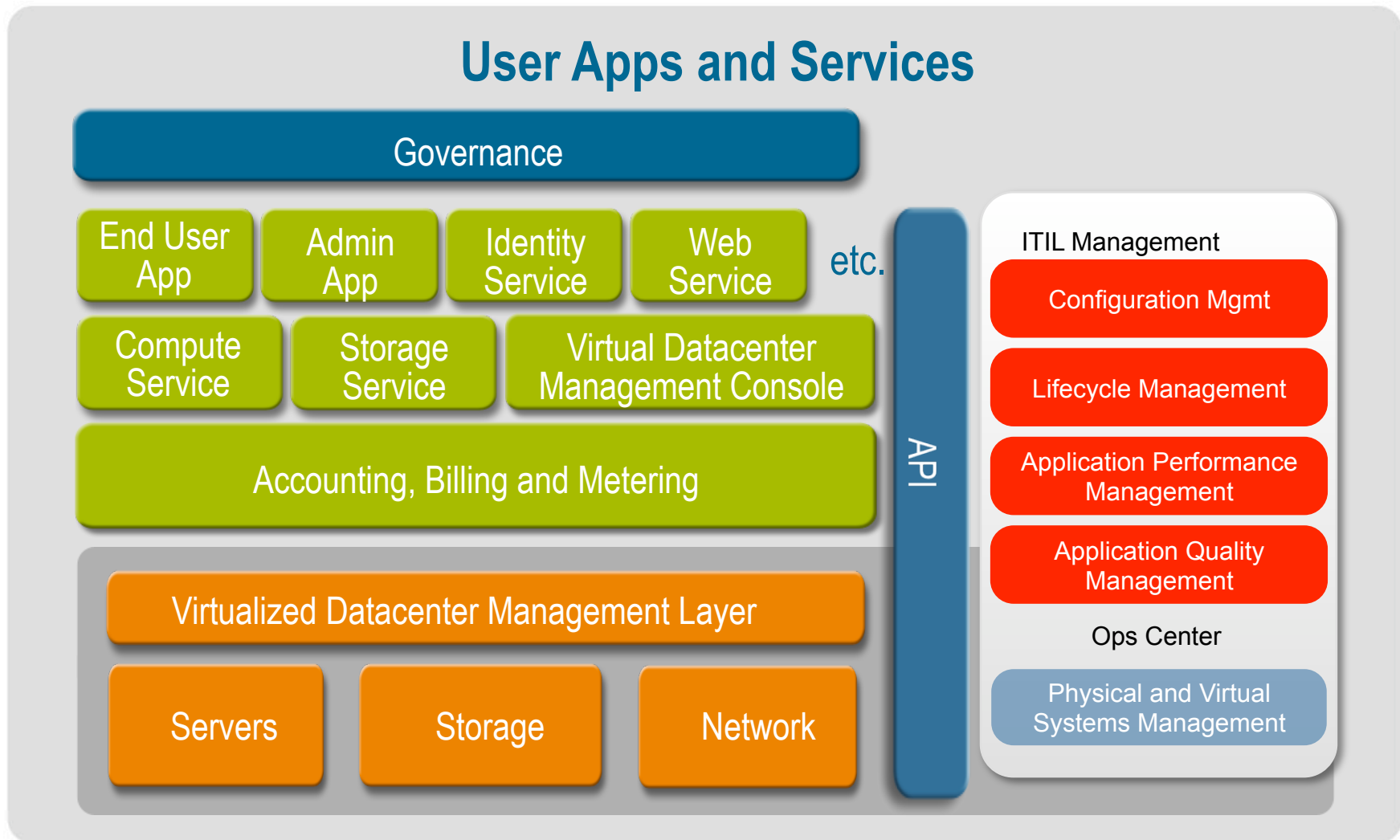
# The Cloud: How are people using it?



# Old Lifecycle vs. New



# Cloud Architecture



# General Security Challenges



- Trusting vendor's security model
- Lack of operations and architecture transparency
- Customer inability to respond to audit findings
- Obtaining support for investigations
- Indirect administrator accountability
- Proprietary implementations can't be examined
- Loss of physical control



# Privacy Considerations

- **Transborder data issues may be exacerbated**
  - Specifically, where are cloud computing activities occurring?
- **Data governance**
  - Encryption is not pervasive
  - Data remanence receives inadequate attention
  - Public cloud providers absolve themselves of privacy concerns:  
“We don’t look at your data”

# Audit & Compliance Considerations

- **Effectiveness** of current audit frameworks questionable (e.g., SAS 70 Type II). NIST and 27002 frameworks preferred
- **Cloud customers need to define:**
  - their control requirements
  - understand their provider's internal control monitoring processes
  - analyze relevant external audit reports
- Issue is **assurance** of compliance




# Impact on Role of Corporate IT

- **Governance** issue
  - Internal IT becomes “consultants” and business analysts to line of business
  - Cloud will involve much more direct business unit interaction with service providers than with other providers previously
  - **Delineation of responsibilities** between providers and customers much more nebulous than between customers and outsourcers, collocation facilities, or ASPs




# Impact on Outsourcing

- **Governance, compliance, interoperability, portability** can be barriers for customer adoption
  - Dependency and cascading impact on suppliers will require new approaches to meet customer SLAs
  - Right to audit clauses can dampen the enthusiasm
  - Licensing issues when applications are virtualized
  - Innovation required in self service support models, IT automation, capacity planning and SLA management (ITIL functions)
  - User management, Access Control, Encryption need to be baked into the architecture
- 



# Opportunities for Outsourcers

- **Business model innovation** in aggregating services. E.g. smorgasbord of pay-as-you-go apps
  - **Proactive Security, Privacy and Transparency** capabilities can act as competitive differentiator
  - **Trusted Advisors** – understand customer business, evaluate customer risk tolerance and the knowledge necessary to move to a cloud models
  - **Value proposition** should be aligned with cloud models for business benefits and financial metrics
  - **Leverage** other clouds for economics and agility but factor risks and service level predictability
  - **Demonstrate success** with non-mission critical use cases with measurable business benefit to customers
- 



# Final Word

**“the great power of IT  
now comes from its  
becoming  
a shared infrastructure  
that allows you to transact  
business easily with other  
companies”**

*“Does IT Matter? Information Technology  
and the Corrosion of Competitive Advantage”*

- Nicholas Carr



# Questions

