

AAPA 2013 – Cloud Computing

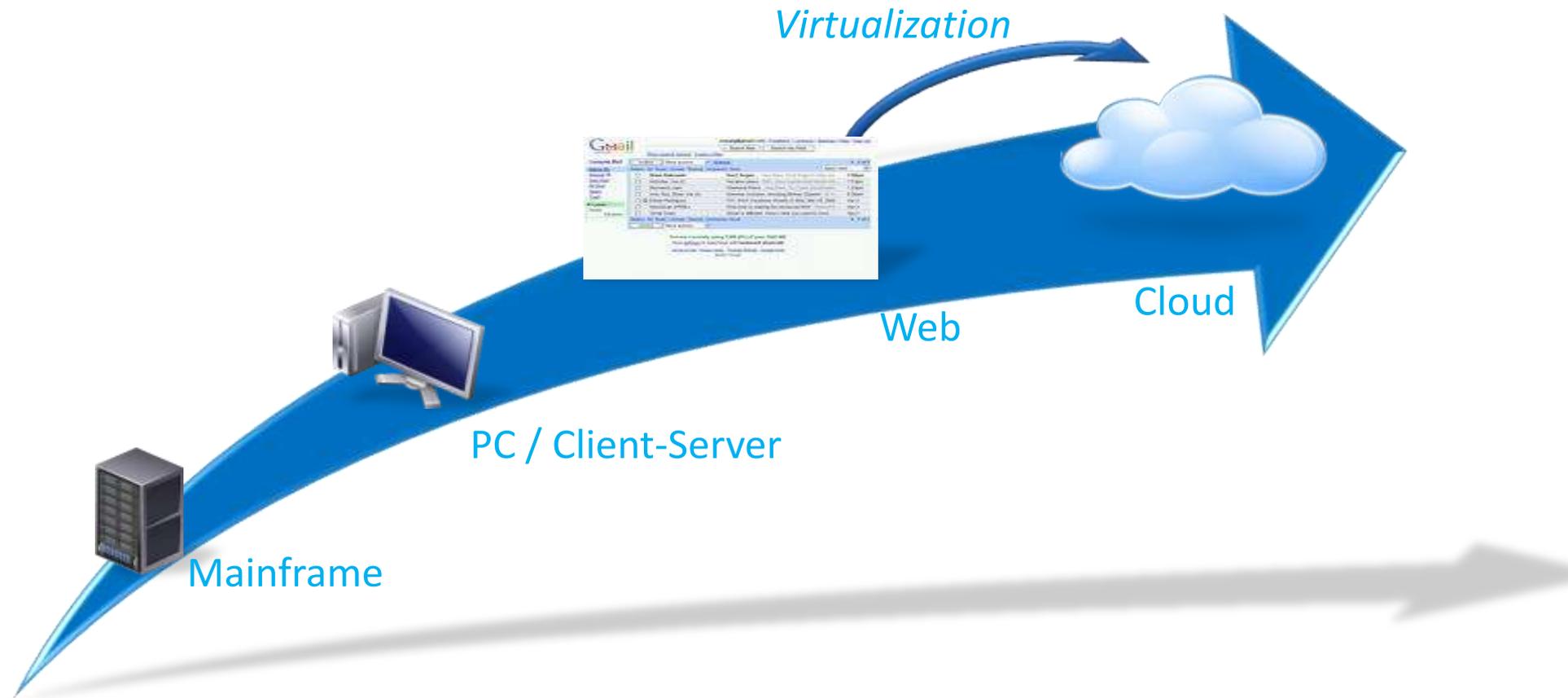
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Bio

- Chief Technology Officer, Sigma Solutions
- Over 15 years of corporate IT experience
 - Strategic thinker, visionary and consultant
 - Speaker – Synergy, VMworld, CampIT...
 - Analyst/Author – 6 books and counting...
 - Columnist – InformationWeek
 - Blogger – Forbes, Virtualization Review
- Recognized by VMware as a vExpert
- Recognized by Citrix as a CTP



Evolution



**Cloud Computing will transform
the delivery and consumption of IT services**



Private Cloud

Hybrid Cloud



Public Cloud

Enterprise IT Services

Scale-up

Assume reliable infrastructure

High cost

IT mgmt-centric 1:100

Fixed costs



Cloud Services

Scale-out

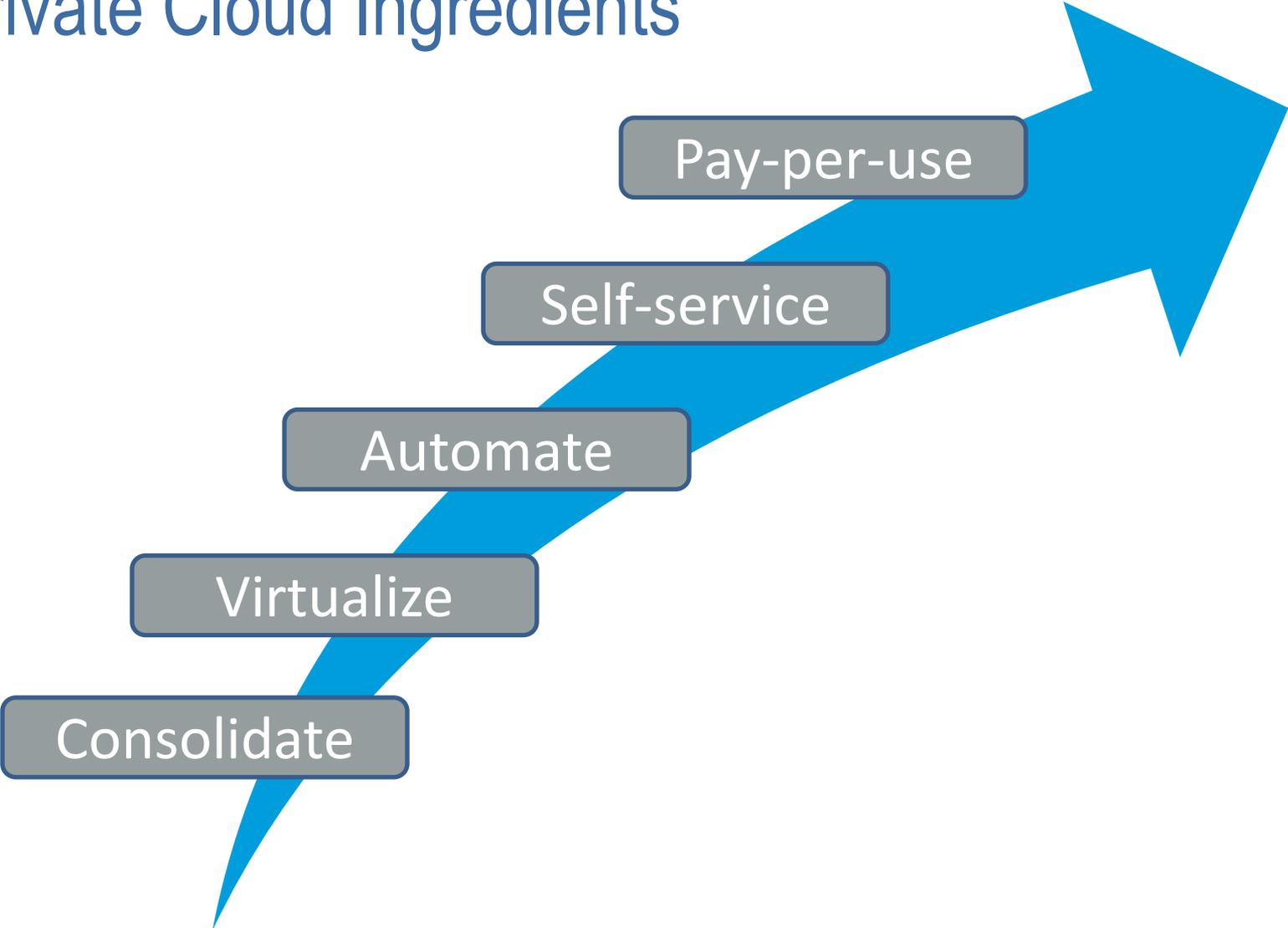
Expect Infrastructure Failure

Self-service experience

Automatic 1:1000's

Usage-based costs

Private Cloud Ingredients



WINDOWS
ON-DEMAND

DEV
& TEST

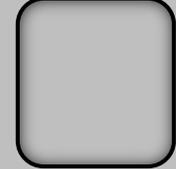
DISASTER
RECOVERY

BRIDGE &
GATEWAY

BYO
PLATFORM

INFRA-
STRUCTURE

YOUR
SERVICE



Identity ^ Access Management

Centralized Management,
Integration & Operation

Self-service Portal

Service Catalog

Capacity
Management

Change
Management

Lifecycle
Management

Chargeback

Policy-based
Resource
Allocation

Performance
Optimization

Public Cloud Connector

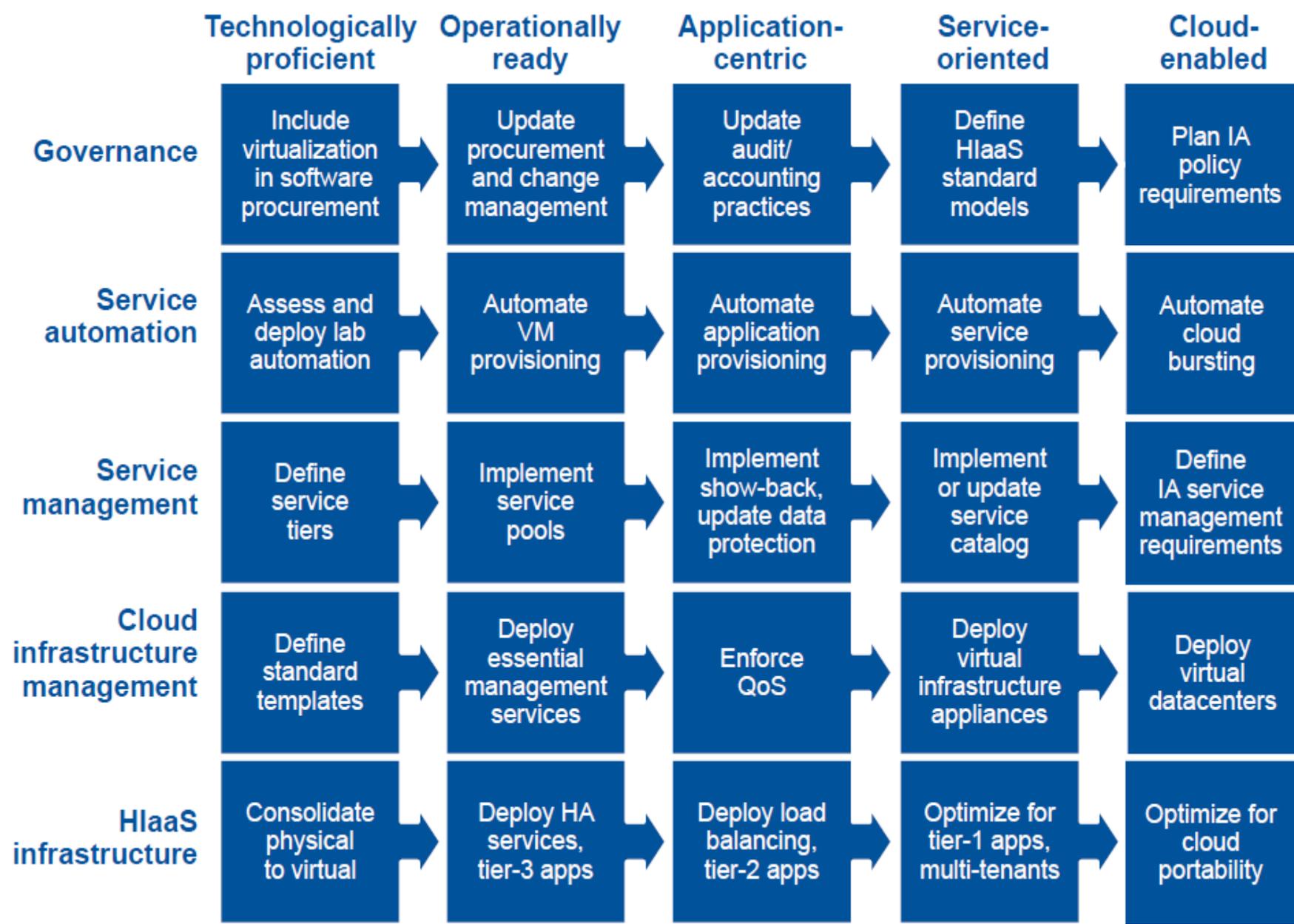
Orchestration

Infrastructure Authority

Management Layer

Virtual Infrastructure

Physical Infrastructure



Phased Approach

- IT department organizational structure change
- Tier-1 application virtualization
- Build service catalog
- Implement self-service portal
- Implement chargeback / showback
- Implement orchestration
- Implement automation

Organizational Process Change

- Virtualization platform support is a requirement in RFPs
- Negotiate support policies for explicit clarification on how virtualization is supported by vendor

Service Catalog / Self-Service

- Establish Standards (VM Size, Supported OS)
- Enforce Standards
- Create Liaison role to aide application onboarding
- Provision Services, not VMs
- Standard Service Tiers:
 - VM Size
 - High Availability
 - Backup
 - Disaster Recovery
 - Security/Compliance

Chargeback & Showback

- Showback is required, Chargeback is optional
- Many organizations' finance groups are not equipped to handle automated IT chargebacks
- Billing should allocation-based not consumption-based
- Consumption-based billing is a public cloud model
- VM cost metrics needed for public vs private cloud business decisions

SLAs or SLEs?

- SLAs are difficult to enforce, Service Level Expectations are more realistic in a private cloud
- Multiple SLEs (service tiers) are preferred:
 - Backup
 - HA
 - DR
 - Security / Compliance

Cloud Assessment

- How virtualized is the environment?
- How many different types of OS are there?
- Are tier-1 applications virtualized?
- How much virtual standardization is implemented?
- Any processes in place today?
- Any converged networking or infrastructure?
- Are any lab automation tools implemented?

Sigma's Cloud Offerings / Services

- Sigma Enterprise Private Cloud
- Sigma DRaaS (Sep. 2013)
- Sigma Hosted Collaboration (HCS)
- Sigma IaaS
- Cloud Assessment
- POC s
- Automation & Orchestration
- Co-managed Cloud



Enabling transformation through IT as a service

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