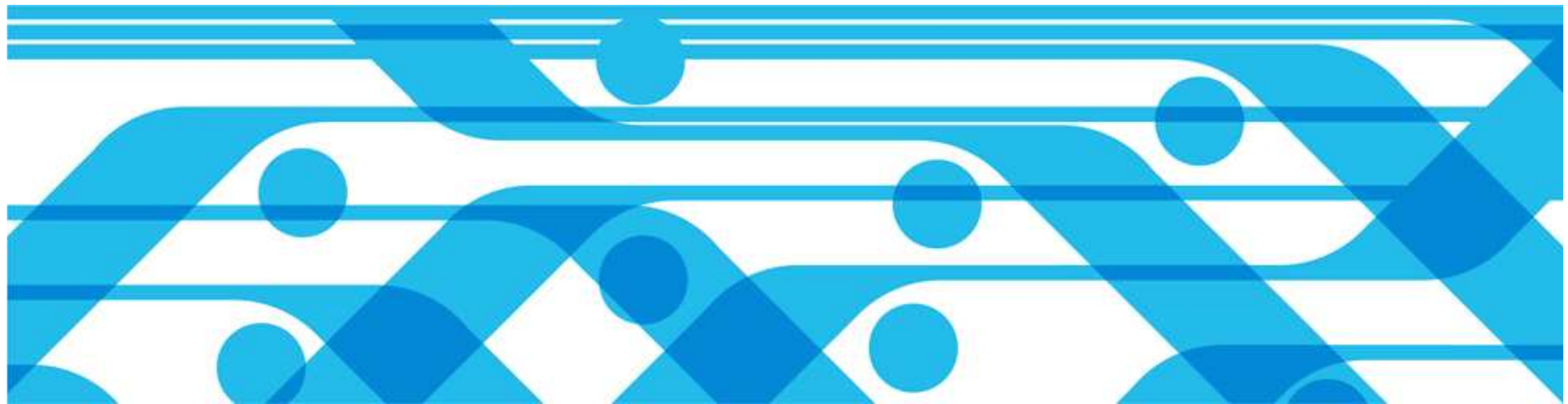


Creating Private Clouds to Deliver New Levels of Service at Reduced Costs – with IBM Tivoli Software and IBM Systems

Sander Smit

15 september 2010



- Positioning of Cloud
 - Why Cloud?
 - Overview of Different Cloud Models
- Private Cloud Solutions
 - Reference Architecture
 - High Level Overview
 - Process Overview
 - Cloudburst
 - Enablement versus provider
 - Gain in Time
- Summary
- Questions



Positioning of Cloud – Why Cloud?



Delivering smart products and services depends on the effective delivery of software

62% of projects failed to meet their schedules

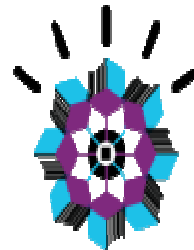
41% of projects fail to deliver the expected business value and ROI

42% of users are satisfied with project quality



Today's new challenges:

- Higher **complexity**
- Dispersed** teams
- Lack of standard **tools**
- Poor **processes**

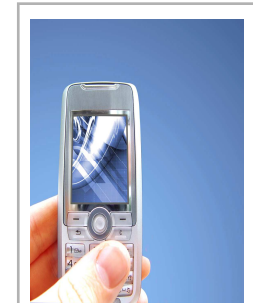


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Positioning of Cloud – Different Stakeholders

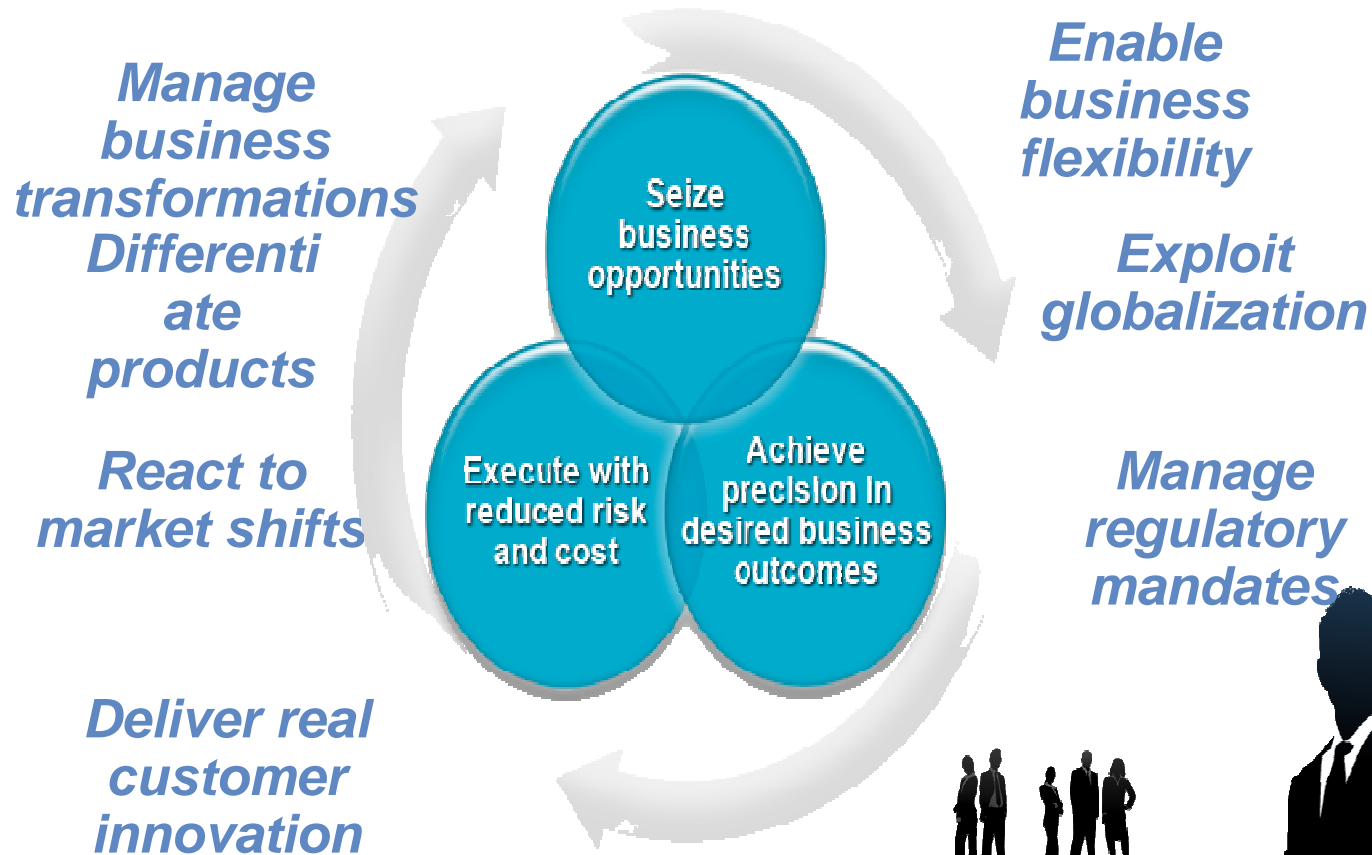


	INFRASTRUCTURE MANAGEMENT	<ul style="list-style-type: none">• Improve Service Quality from the Data Center Infrastructure• Reduce Operating Expense with Rapid Payback• Provides New and/or Faster Routes to Market
	IT STRATEGY	<ul style="list-style-type: none">• Instantiate a Private Cloud• Prove a cloud computing model• IBM's Strategic Roadmap provides:<ul style="list-style-type: none">✓ Massive Scalability✓ Workload-specific offerings
	APPLICATION DEVELOPMENT	<ul style="list-style-type: none">• Gain improved service response time to configuration change requirements in fast changing environments• Assured optimized systems resources keep developers productive
	OPERATIONS	<ul style="list-style-type: none">• Simplify infrastructure management headache• Gain happier users• Reduce labor dependencies and risks through automation



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Positioning of Cloud – Why Cloud?



Successful businesses will use software to drive innovation and competitive differentiation



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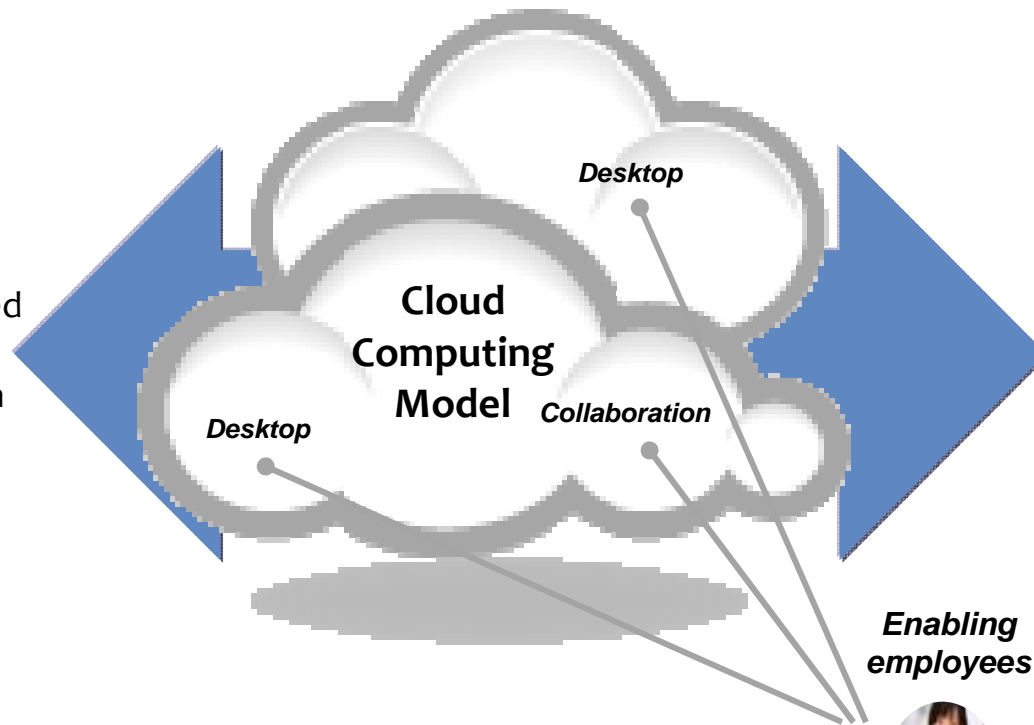
Positioning of Cloud – Overview of Different Cloud Models



Private ...

- Privately owned and managed.
- Access limited to client and its partner network.
- Drives efficiency, standardization and best practices while retaining greater customization and control

.... Customization, efficiency, availability, resiliency, security and privacy



Public ...

- Service provider owned and managed.
- Access by subscription
- Delivers select set of standardized business process, application and/or infrastructure services on a flexible price per use basis.

.... Standardization, capital preservation, flexibility and time to deploy

Hybrid ...

- Access to client, partner network, and third party resources

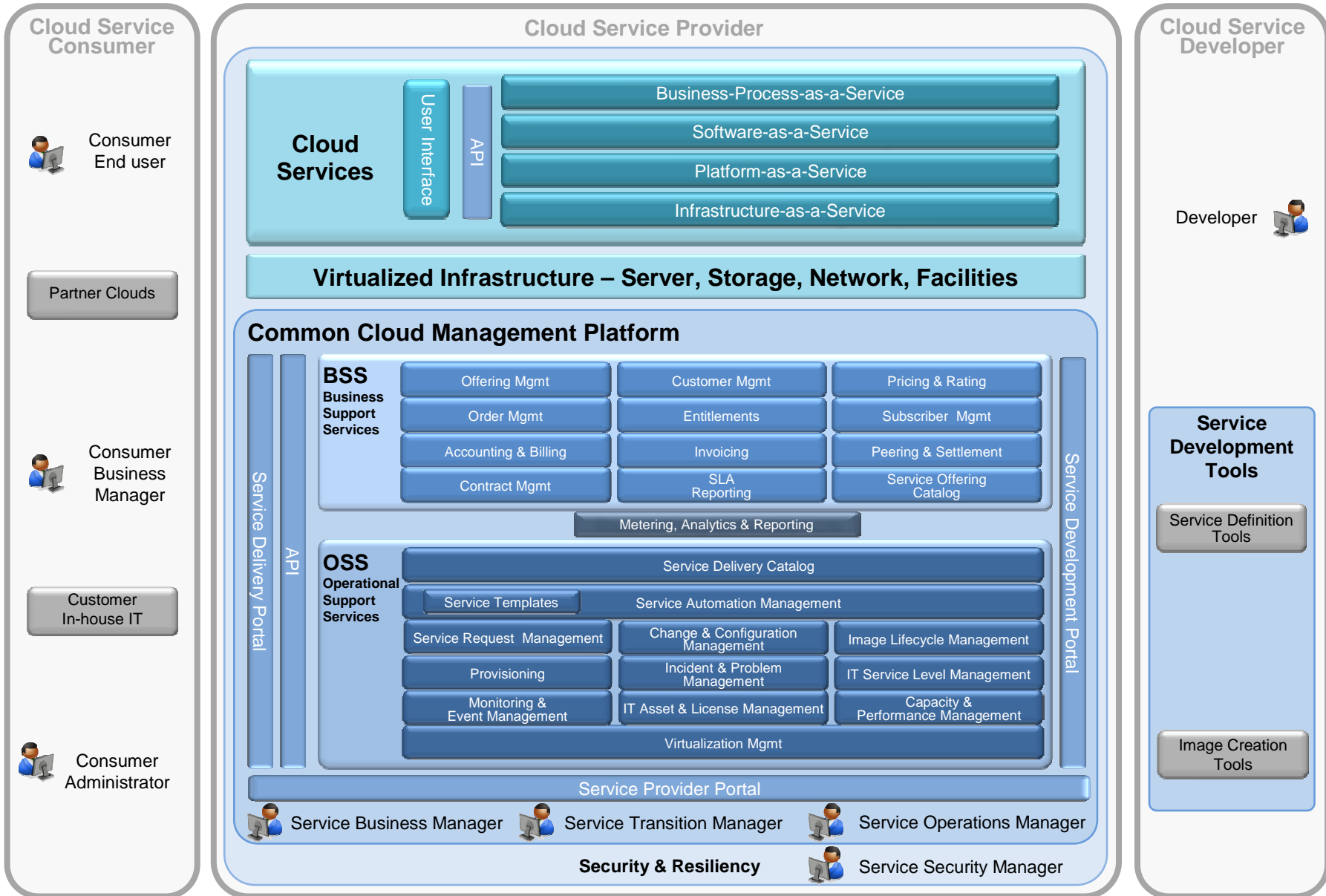


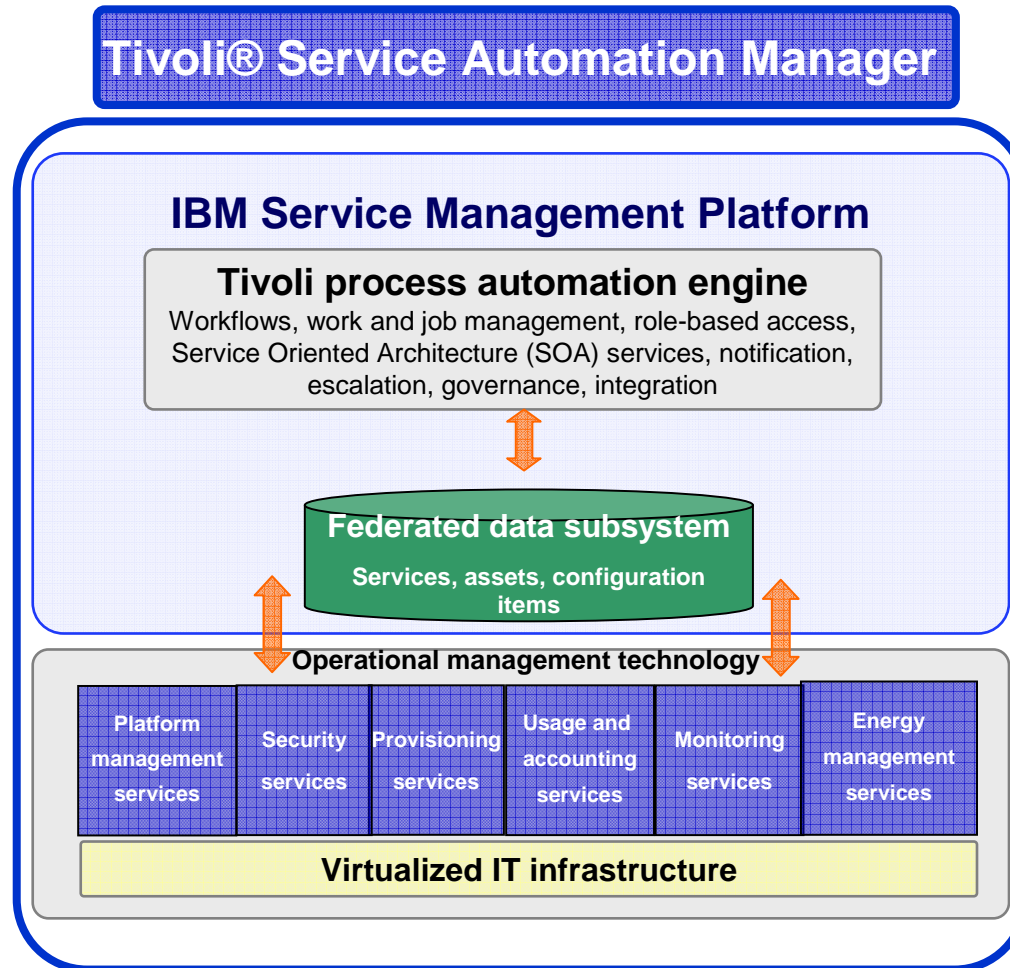
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Cloud Solutions – Reference Cloud Architecture

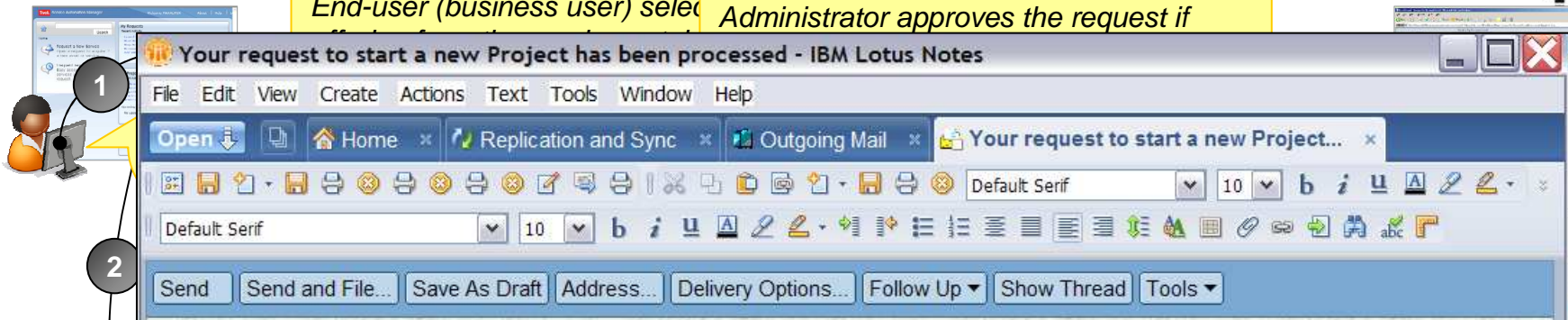




TSAM Web UI

End-user (business user) selects request Administrator approves the request if

TUAM UI



De-provisioning / cleanup process?

pHyp H

The user of group ACCOUNT has been notified.

Regards,

Your Service Automation Team

CPU

Memory

Disc

Network

CPU

Memory

Disc

Network

ervisor

Cloud Solutions – Look & feel



The screenshot displays the IBM Smart Business Development & Test interface. At the top, there is a navigation bar with 'Overview', 'Control panel', 'Account', 'Support', and 'About'. The main content area is titled 'My Projects' and includes a progress bar, a summary of project statuses (Operational: 1, Decommissioned: 35, Canceled: 11, Total: 47), and a 'Recent Activity' list. A 'Show details' tooltip is visible over the 'HYB Project 01' entry. Below the activity list, there is an 'Upcoming Projects' section showing 'No upcoming projects'. The interface also features a search bar for instances by tag name, a 'View Asset Catalog' button, and an 'Add Instance' button. A table at the bottom shows instance details, including 'Instance name', 'Created on', and 'Status'. The status 'Provisioning' is highlighted in blue.

Instance name	Created on	Status
BINSTANCE_AT_Fri Mar 12 14:27:22 E:51	Mar 12, 2010	Provisioning



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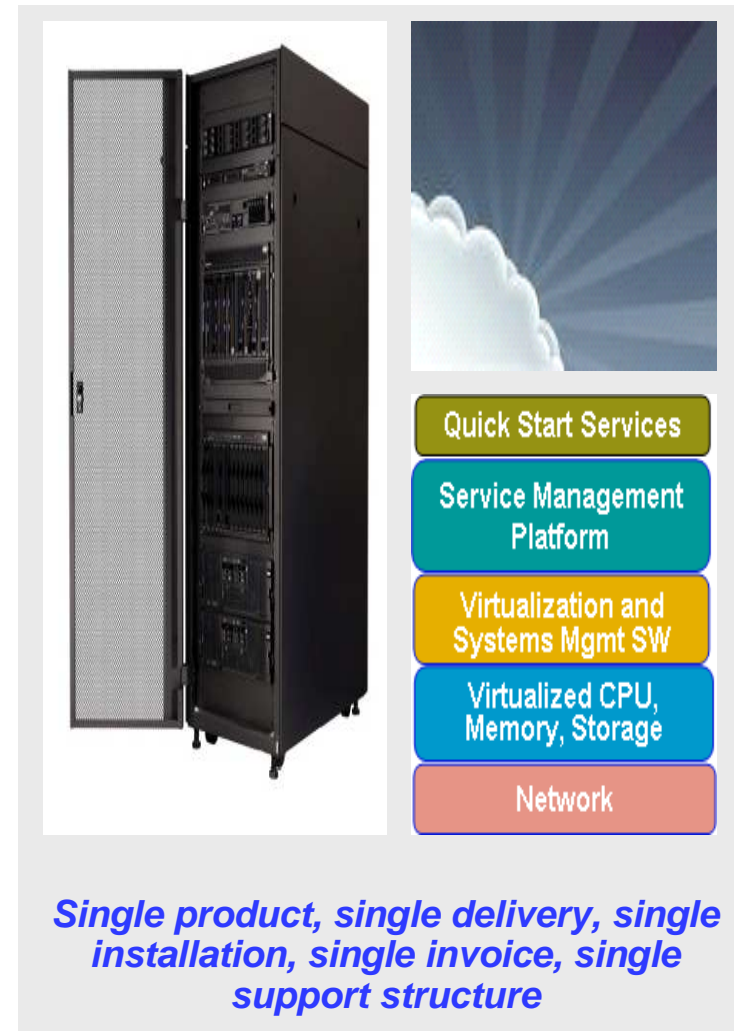
Cloud Solutions – Cloudburst



An integrated service management platform with network, servers, storage, quickstart services that enables the fastest Private Cloud Deployment Today

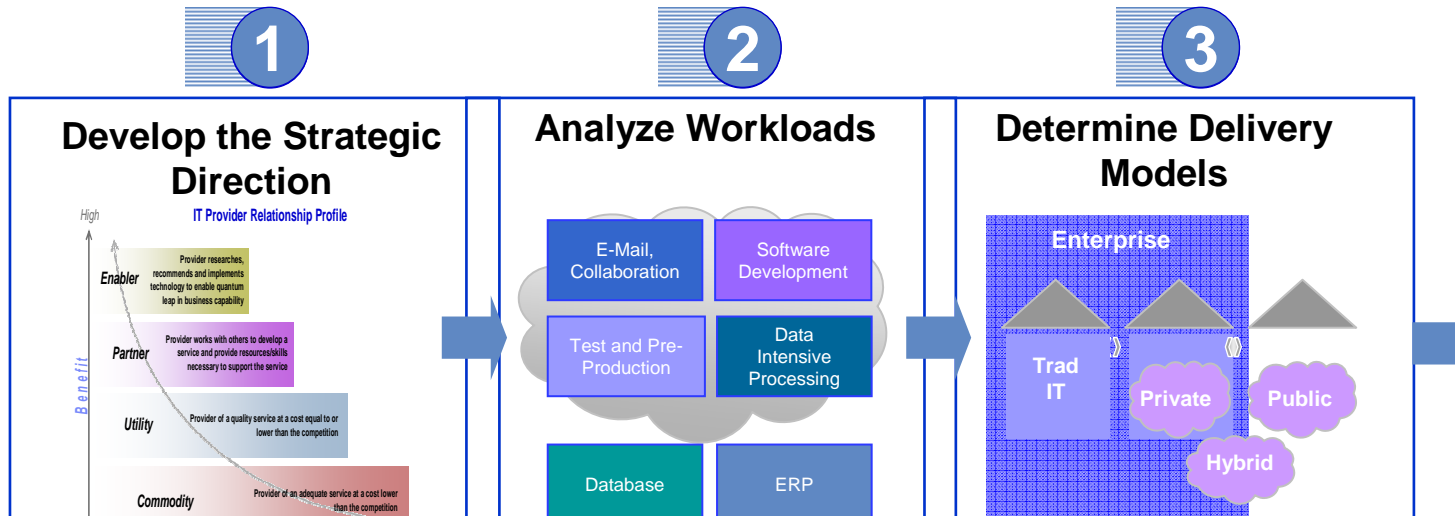
Customer Benefits

- ✓ **Improved time to value-** Quickly deliver a private cloud using a preloaded and integrated system
- ✓ **Improved innovation-** Dramatically improve business value and IT's effect on time-to-market by delivering services faster
- ✓ **Decrease capital expenses** – Maximize capital usage and reduce added capital expense.
- ✓ **Reduce complexity and risk-** With automation and standardization the human error factor is minimized.
- ✓ **Scales to the enterprise** – Able to scale and manage additional Platforms and Workloads (x86, UNIX ...)



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Cloud Solutions – How to ‘enable’ IT in 6 steps?



IBM can help you enable your cloud!

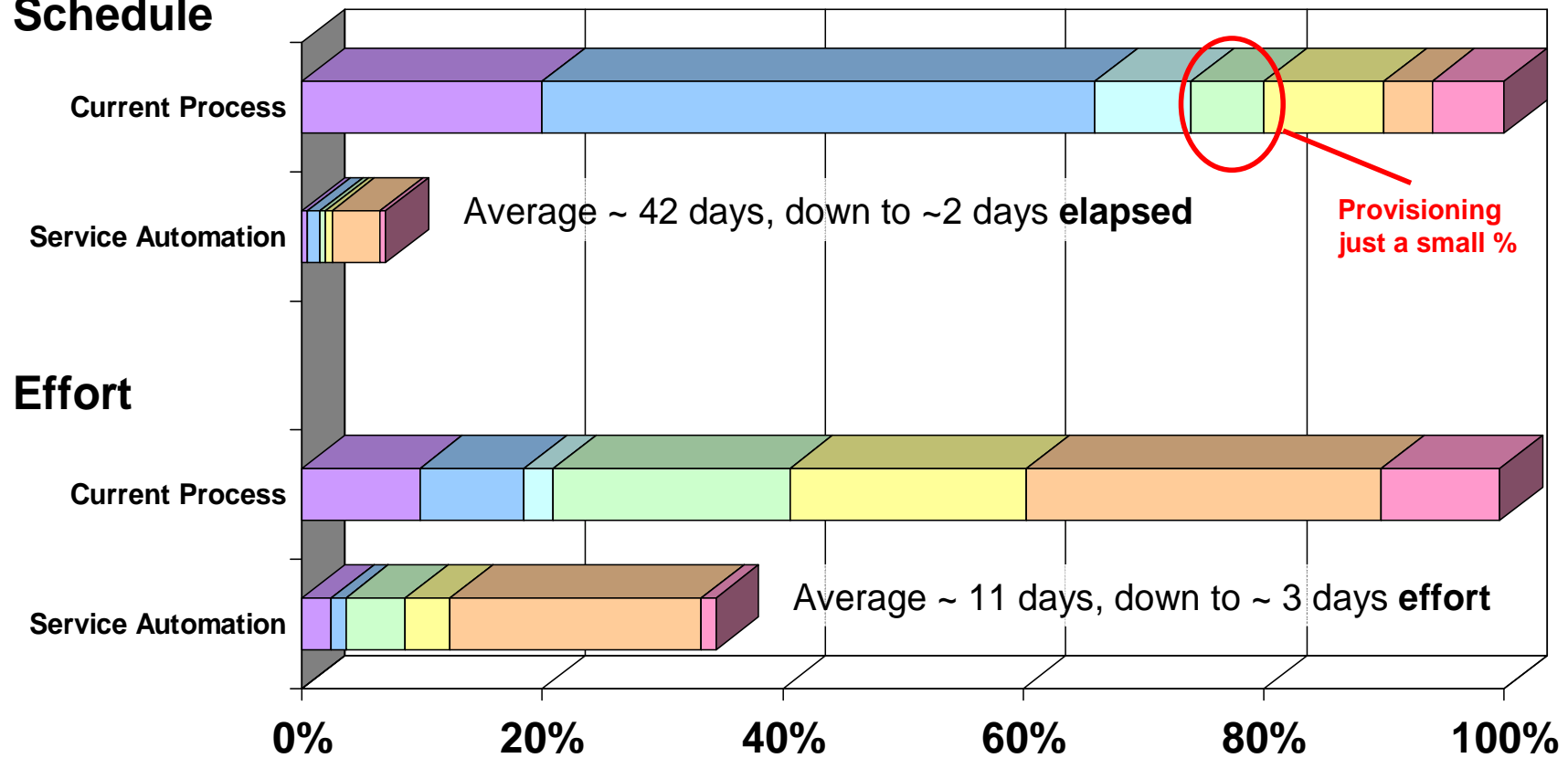


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Cloud Solutions – Effort & schedule savings through realising Cloud delivery



Schedule



Private Cloud Solution – References



Business Background

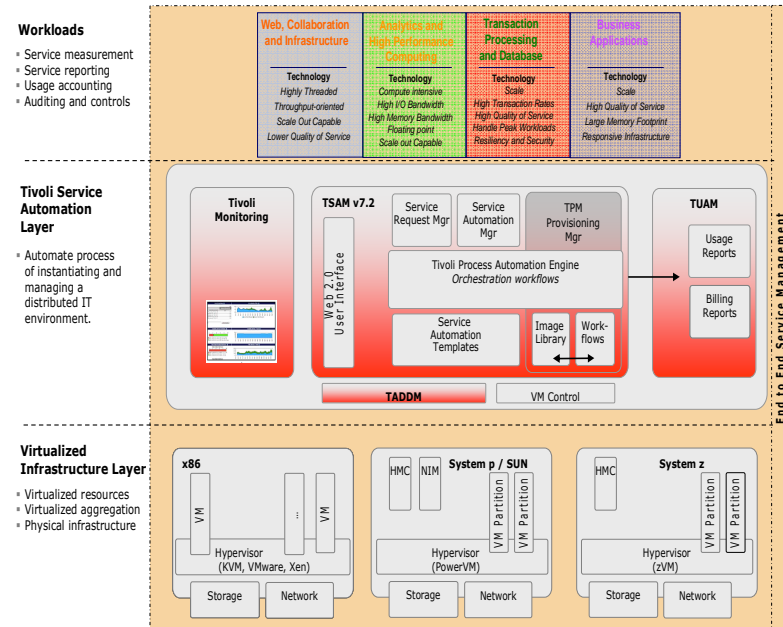
- Large world-wide operating financial institution offering clients banking, insurance and asset-management services (HQ in Amsterdam, Netherlands), ~100,000 employees
- Bank needs to drive down IT costs dramatically and intensively improve their time to deliver new IT environments to the business
 - *Bank is in the process of transforming towards a “new world” IT landscape (besides their legacy “old world” IT), in which they can benefit from the advantage of a private cloud concept*

Cloud Business Benefit

- Large efficiency improvement in time and cost to deliver new IT environments
- Massively improved predictability (regarding time to deliver new environments and future availability of required IT capacity, enabled by reservation)
- Visibility into where resources are allocated to
- Improved customer experience (i.e. quality of service) through standardisation and increased agility.
- Transparent cross-charging ability for provided IT services

Solution Overview

- Automated delivery of standardized “stacks” (OS up to app, single VM) and “solutions” (distributed environment, multiple stacks),
- Tivoli Service Automation Manager-based private cloud implementation, management across System p and x86 (VMware vSphere), additional platforms will be added
- Restructuring of existing IT delivery / mgmt processes & IT landscape to enable large efficiency gain. New processes implemented in TSAM mgmt plans
- Integrates with internal mgmt systems where needed and appropriate (e.g. Corporate Directory Server & Identity Mgmt System, agents to integrate with backup & monitoring get deployed & configured automatically)

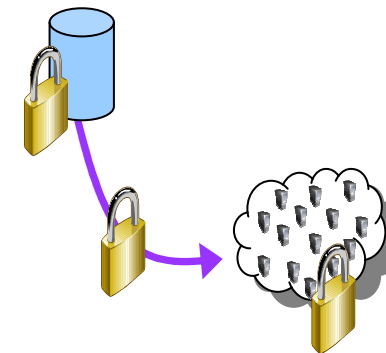


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Cloud Solutions – Summary



- Drastically reduce set up and configuration time (\$\$\$)
 - New environments in minutes on different platforms!
- Reduce risk by codifying infrastructure
 - Freeze-dry best practices for repeated, consistent deployments
- Security throughout the entire lifecycle
- Simplify maintenance and management
 - Flexibly manage and update the components of your patterns, including application mobility
 - Ensure consistency in versions across dev, test, production
- Spend less time administering, more time developing new solutions
- Better utilisation of resources positively impacting TCO and ecologic forces (**GREEN**)



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Thank you!



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