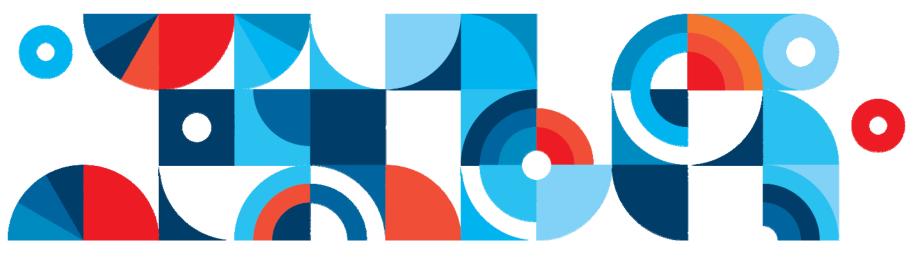


Dennis Kwok, Senior I/T Architect 4 December 2012

# **Guiding the Cloud decision**

Time to value and speed deployment of infrastructure

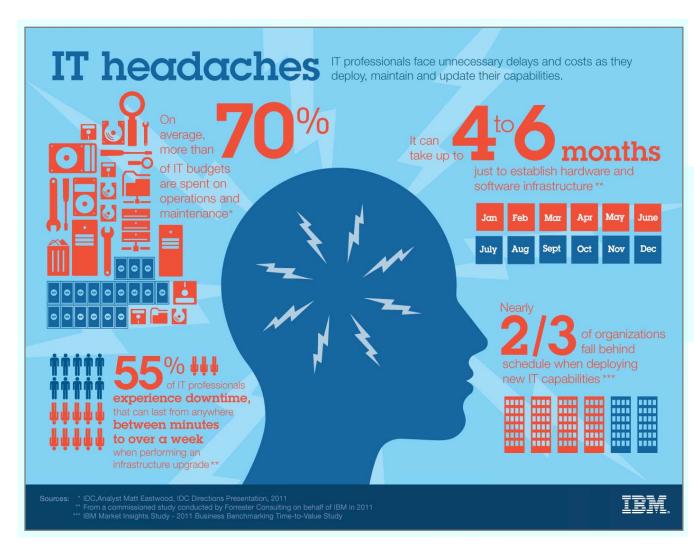


Rethink IT. Reinvent Business.

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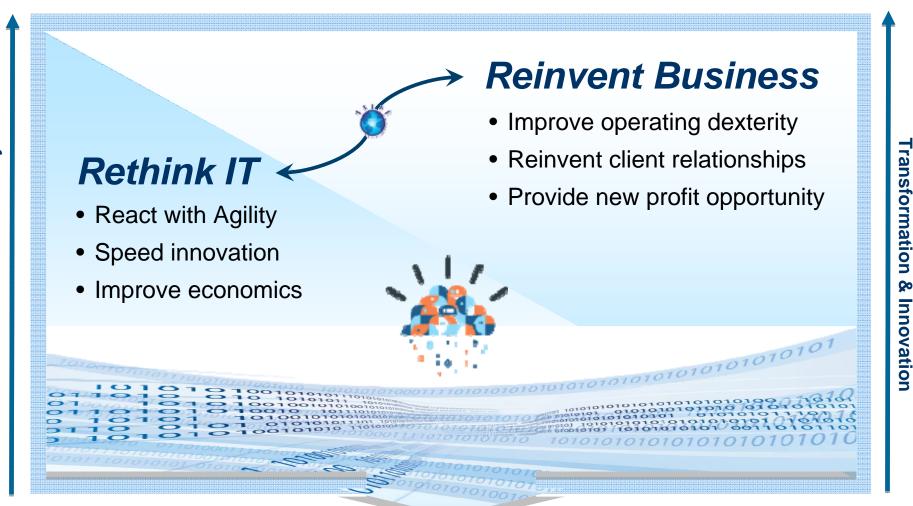
Organizations must transform IT from cost centers driving on-going operations to <u>strategic centers of business innovation</u>



Today's business infrastructures are becoming inhibitors to business change.

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Thus, organizations are creating business-IT partnerships to apply technology in new, innovative ways

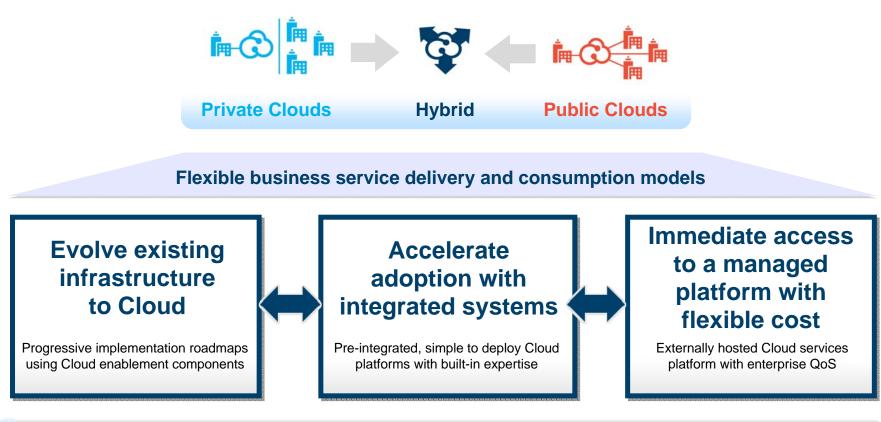


The Economics of Computing are Changing

© 2012 IBM Corporation

#### Smart**Cloud** Organizations are now moving beyond virtualization to higher value stages of Cloud Computing **Business Transformation Cloud focuses** on eased service consumption, management & **Consumption based** delivery metering and dynamic capacity optimization Virtualization underpins End-to-end real time Cloud monitoring and optimization **Application development & integration Business service catalogs & self service** Service delivery automation Virtualization management

Requires flexibility in delivering, integrating, and consuming Cloud capabilities, enabled by open standards





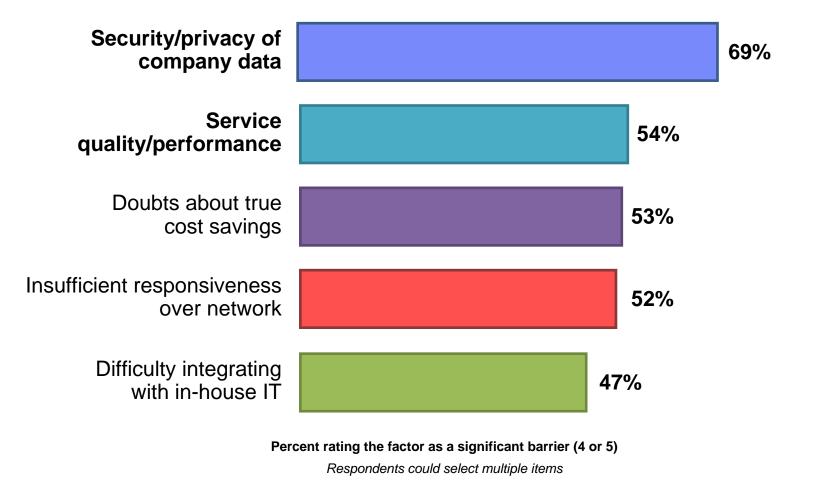
#### **Common Cloud platform built on an open standards reference model**

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# Concerns about data security and privacy are the primary barriers to public cloud adoption

What, if anything, do you perceive as actual or potential barriers to acquiring public cloud services?



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### Key building blocks of Clouds are familiar...

Simplification/ Consolidation



- Consolidation, systems management, and monitoring
- Reduce infrastructure complexity, staffing requirements, and costs
- Improve business resilience and utilization

#### Advanced Virtual Resource Pools



- Remove physical resource boundaries
- Allocate less than physical boundary
- Improve scalability, increase utilization
- Reduce hardware costs

Advanced Service Management



- Service catalog, metering, and automated deployment of virtualized resources
- Integrated virtualization management with IT processes
- Reduce overhead, improve productivity

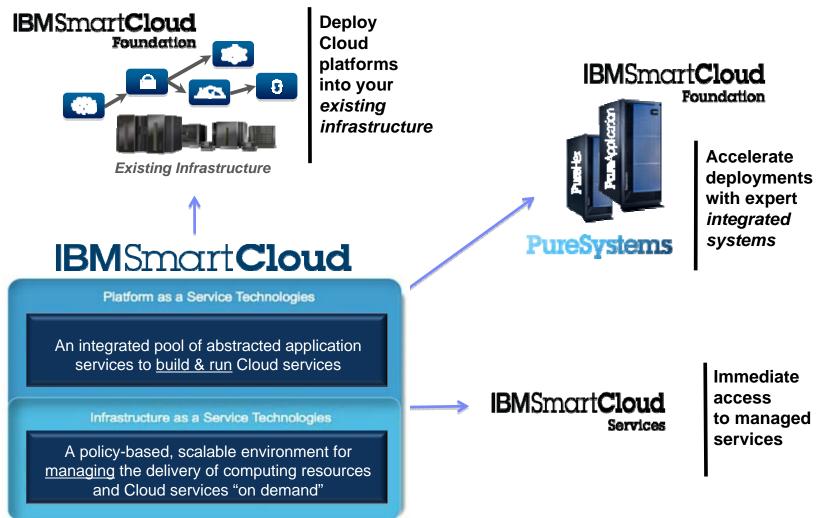




- Centralized, robust, self serve portal for 24X7 access to tools, information, IT and business services
- Improve user satisfaction & productivity
- Control and manage delivery, support & administrative costs

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### Flexible deployment options to enable enterprise cloud platforms



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# The time has come for a new breed of systems

Systems with integrated expertise and built for cloud

#### **Built-in Expertise**

Capturing and automating what experts do – from the infrastructure patterns to the application patterns



# Integration by Design

Deeply integrating and tuning hardware and software – in a ready-togo workload optimized system

### **Simplified Experience**

Making every part of the IT lifecycle easier - with integrated management of the entire system and a broad open ecosystem of optimized solutions

IBM. 🕉

### Announcing the first two members of the IBM PureSystems family

## **Pure**Flex

*Infrastructure System:* Expert at sensing and

anticipating resource needs to optimize your infrastructure





#### Built-in expertise - Integration by design - Simplified experience

## IBM PureSystems integration by design



Networking

#### **Optimizes the complete solution stack:**

- All hardware and software components factory integrated and optimized
- Single point of unified lifecycle management
- Integrated monitoring & maintenance
- Integrated and elastic application and data runtimes
- Application patterns allocate system resources for optimal performance, security and reliability
- Fully virtualized and built for cloud
- Storage tuned to data needs



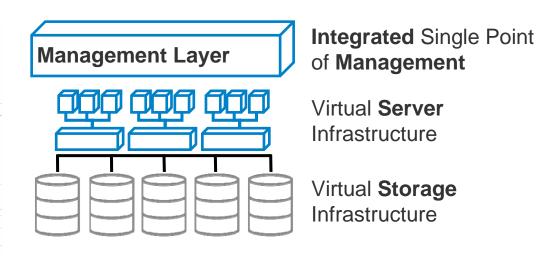
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**Storage is essential to an integrated platform** *Storwize V7000 and PureFlex System V7000 storage are virtualized* 

#### The Problem:

Digital data has grown 10x from 2007 to 2011, causing storage requirements to grow 20 - 40% per year.

This growth has made the **integration**, **management**, and **virtualization** of storage resources critical.



#### Virtualized Servers Require Virtualized Storage

- Consolidate diverse storage infrastructure
- Common Access point
- Single point of management and provisioning
- Can serve as a bridge from traditional infrastructures to cloud

# Simplified management experience with advanced automation



Reduced risk through integrated platform management

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|  |                |        | 11.000  |

- New user interface and configuration automation brings new components online faster\*
- Cross-resource integration and automation enables transformation from managing resources to managing applications, services and workloads
- Works with the management you have other IBM platform tools, Tivoli and third party enterprise management (e.g., CA, BMC, HP, etc.)
- Easier monitoring, alerts and problem management through automated resolution processes with integrated expertise

#### **Global Find**



#### **Chassis Map**



#### **Remote Presence**



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## IBM Flex System Manager for Android, BlackBerry, and iOS

Designed optimized and simplified for mobile scenarios and handheld limitations, gives you access to

- Health and Status Monitor health problems and check the status of managed resources
- Event Log View the event history for chassis, compute nodes, and network devices
- Chassis Map (hardware view) Check the front and rear graphical hardware views for a chassis
- Chassis List (components view) View a list of the hardware components installed in a chassis
- Inventory Management See the Vital Product Data (VPD) for a managed resource (for example, serial number or IP address
- Authentication and Security Manage connections across secure and persistent protocols such as SSL and secure persistent credentials on your mobile device

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| Free<br>Category: Business<br>Released: Nov 30, 2012<br>Version: 1.0<br>Size: 3.5 MB<br>Languages: English, German,<br>Northern Sami, Spanish<br>Seller: International Business<br>Machines Corp. (STG)<br>© 2012 IBM Corporation<br>Rated 4+<br>Requirements: Compatible<br>with IPhone, iPod touch, and<br>iPad. Requires IOS 5.1 or<br>later. |              | Chas<br>IBM Flex Syn      | sis 1 - Demo<br>average Character of Character<br>1000-10<br>1 - 1<br>1 - 1<br>- 1 |  | Chassis 1<br>Free System Electronic Control Contr | nterprise Chassis |         |
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# IBM PureSystems "patterns of expertise"

**Patterns of Expertise:** Proven best practices and expertise for complex tasks learned from decades of client and partner engagements that are captured, lab tested and optimized and then built into the system

Patterns deliver superior results:

- Agility: Faster time-to-value
- Efficiency: Reduced costs and resources
- Simplicity: Simpler skills requirements
- Control: Lower risk and errors

#### Through *unmatched expertise in*:

- System design
- Infrastructure management
- Application deployment
- Data management
- Datacenter management
- Application management

- High availability
   and scalability
- Security
- Storage optimization
- Networking
- Cloud





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| IBM PureFlex  |  |
|---|--|
| IBM PureSystems extensible<br>Including built-in cloud capability |  |
| IDM Dura Curatara a sutara sila lu                                |  |

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|  | IBM PureFlex<br>System                   | IBM PureApplication System  | Strandled Experience                          |
|--|--|---|---|
| Application<br>Patterns and<br>Images<br>Available patterns<br>images from IBM<br>and Partners |  | 100+ ISV business applications<br>Business intelligence<br>Business process management<br>Web experience<br><i>More to come in 2012</i> | Available<br>through<br>PureSystems<br>Centre |
| Platform<br>Patterns<br>Expertise across   | Images<br>available for<br>client tuning | Web application deployment<br>Database deployment   | )   |
| the middleware<br>and infrastructure   | Clou                                     | Id platform management  | Built-in                                      |
| Infrastructure<br>Patterns<br>Expertise across<br>the compute<br>resources                     |  | Provisioning<br>Storage optimization<br>Scalability<br>Upgradability  | with<br>flexibility                           |

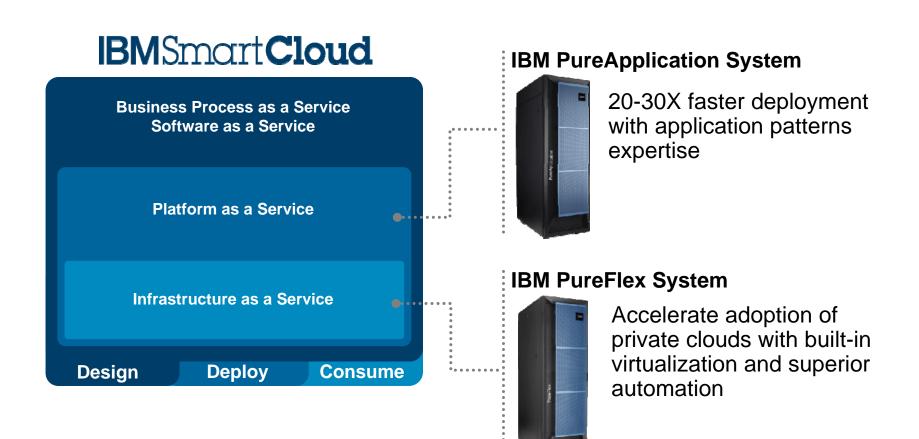
#### Smart**Cloud**

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Expert integrated systems



#### Built for cloud





### Extensibility from the broadest ecosystem is made easy



#### **New IBM PureSystems Centre:**

- Gain access to a broad community of IBM and certified partner expertise
- Download optimized, deployable application patterns from 100+ leading ISV partners
- Search by solution area, industry or system

# Also run your existing applications today\*





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\* Unix/Linux and Windows applications

### IBM. Ö

## The business and IT press is taking notice of IBM's leadership

# **Forbes**

#### IBM Could Become the Biggest Player in the Cloud

Last week, IBM unveiled a new offering – IBM SmartCloud Foundation – to help companies speed up delivery, lower risk and better control the move to deploy cloud alongside their existing production environments. The new offering will allow organizations to install, manage, configure and automate the creation of cloud services in private, public or hybrid environments with higher level of control than before.

IBM's offering has come after a recent study by IBM Institute for Business Value that found that 90% of organizations expect to adopt or substantially deploy a cloud model in the next three years

# InformationWeek

#### Cloud Computing Can Drive Business Innovation

Cloud is an enabler of new business models, but too many companies are just experimenting or improving existing processes and not taking full advantage of the technology, says IBM.

Cloud computing is assumed to be an IT staff initiative at most businesses. But business strategists at IBM have concluded that it needs to be a top management priority.

Too many companies are experimenting lightly with cloud computing. They're using it to tweak existing operations, as opposed to thinking about how it could revise or re-invent the fundamental way they sell their goods and services, said Saul Berman, global strategy consulting leader in IBM's global technology services.

# ZDNet

# IBM SmartCloud software promises more control

Summary: IBM's new SmartCloud software is being touted for offering businesses more control when developing private, public or hybrid cloud environments.

**IBM** has unveiled its new **SmartC loud** software suite for private, public or hybrid cloud environments.

Together, these new solutions are designed for the development and management of clouds. The difference, IBM assures, with these offerings is that the SmartCloud suite promises more control with less risk than comparable options provided by competitors.

### THE HUFFINGTON POST

When It Comes To Cloud Computing, It's Deja Vu All Over Again

#### By Lauren States, IBM CTO of Cloud Computing

It seems like everywhere we look someone is talking or writing about "the cloud." The recent <u>Consumer Electronics Show</u> featured everything from <u>3D</u> televisions to cars connected to the cloud. For someone like <u>me</u>, this is great to see and it's an extremely exciting time to be in the technology field.

While talking to my niece last week, I came to a realization. She asked, "Aunt Lauren, what do you do at work now?" I replied that I help companies use cloud computing and went into details that no young adult should suffer through, which ended with me asking whether she understood.

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