

IBM System z Software Premier Executive Briefing Event



Integrated Service Management across System z and Cloud

Teri Soken
Director, Tivoli z Development

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IBM System z Service Management focuses on addressing customers today and future requirements

1. Reduce costs, manage risk and improve service with enhanced **Visibility, Control and Automation**
2. Enhance Business Resilience capability for your current environment with **Business Service Management and Cloud and IT Optimization**
3. Taking advantage of Dynamic Infrastructure **Business and IT Asset Management** to save money and resources



Integrated service management evolving to support new technologies



VISIBILITY

See and understand your business in real-time



CONTROL

Transform and adopt while limiting risk



AUTOMATION

Achieve greater efficiency & quality by standardizing best practices

Business Services & Assets



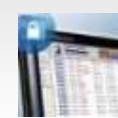
Transitioning to Smarter, flexible infrastructures



Converging Digital & Physical Assets



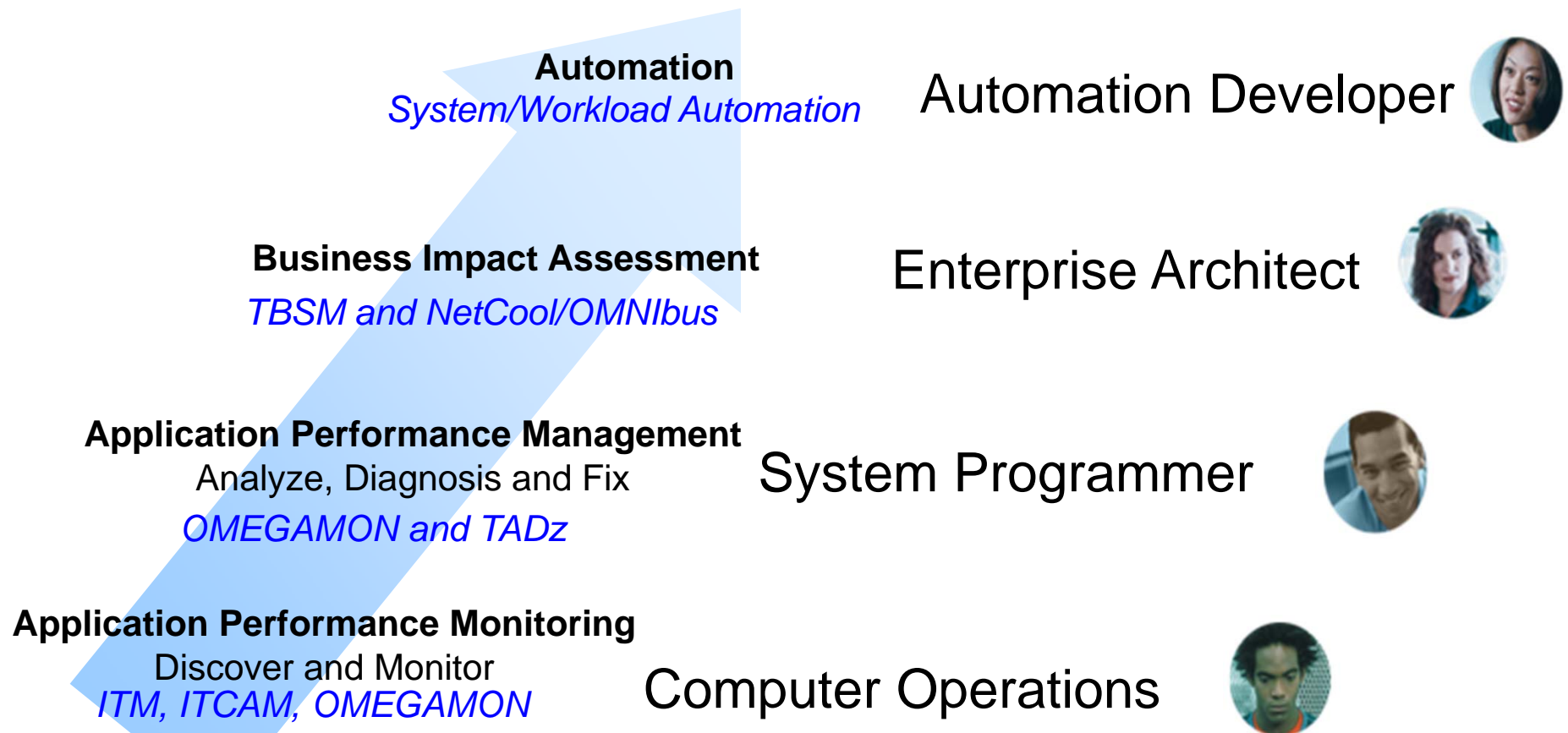
Leveraging Mobile & Web Endpoints



Addressing data growth, threats, & compliance

Business Service Management capabilities provide integrated, hierarchical solution across System z

Cross-Platform collaboration across an Enterprise



Redesigned System z monitoring provides simplified problem determination and reduced resource usage



OMEGAMON V5.1 Product Family

- **Simplify monitoring** with ability to view enterprise summary of multiple sysplexes and subsystems
 - Save 50 to 75% of time needed to find problems
- **Decrease resource usage** by taking advantage of zIIP specialty processor
 - Up to 73% of CICS SLA processing off-loaded
- **Improve availability** with new 'Find' command to easily locate hung users and connections over entire cicsplex
 - Reduce fix times from 90 minutes to 2 minutes



Reduce system and application outages with increased productivity

Based on System, Performance and Beta testing

Bank of Russia: OMEGAMON enabled smooth migration for consolidation of MQ workloads onto System z



Business Challenge:

- Variety of local payment processing systems running on more than 200 distributed servers in 74 data centers across 11 time zones
- Significant challenges in terms of operational efficiency, technical support, and security.

Software Solution:

- WebSphere MQ, WebSphere MQ for z/OS
- OMEGAMON for z/VM to ensure performance & capacity

Business Results:

- **Consolidation of payment processing has reduced costs by 95 percent, saving US\$400 million per year.**
- **Staff workload has been reduced by 85 percent**

Business Resilience and high availability on System z with GDPS

Communications, automation, and monitoring components of GDPS continuous availability solution



Business Value

Ensure resiliency and availability of critical business operations with recovery time objective of less than one minute

GDPS Support

Maintain business operations with improved disaster recovery, maintenance, and system outage with active synchronization to external site



- IBM NetView for z/OS V6.1
- Tivoli System Automation for z/OS V3

FIDUCIA banks: System automation to increase availability System z



Business Challenge:

- Improve availability in their mainframe environment by adding a system automation solution
- Reducing the risk that unplanned outages could threaten availability

Software Solution:

- Tivoli System Automation for z/OS provides policy based automation capabilities
- NetView automated operations so that System z can run almost completely unattended

Business Results

- *Helps to ensure high availability in case of faults or outages*
- *Centralizes system administration and message management*
- *Enables smooth integration with other Tivoli products*

"The IBM system automation solution helps us deliver the high-availability services our customers expect." FIDUCIA IT AG

Cloud implementations can deliver smarter, more dynamic infrastructure

Cloud computing is a service delivery model that enables the automation of shared computing resources.



Private cloud

IT capabilities are provided “as a service” over an intranet, within the enterprise and behind the firewall.



Hybrid

Internal, on-premise and external service delivery methods are integrated.



Public cloud

IT activities and functions are provided “as a service” over the Internet.

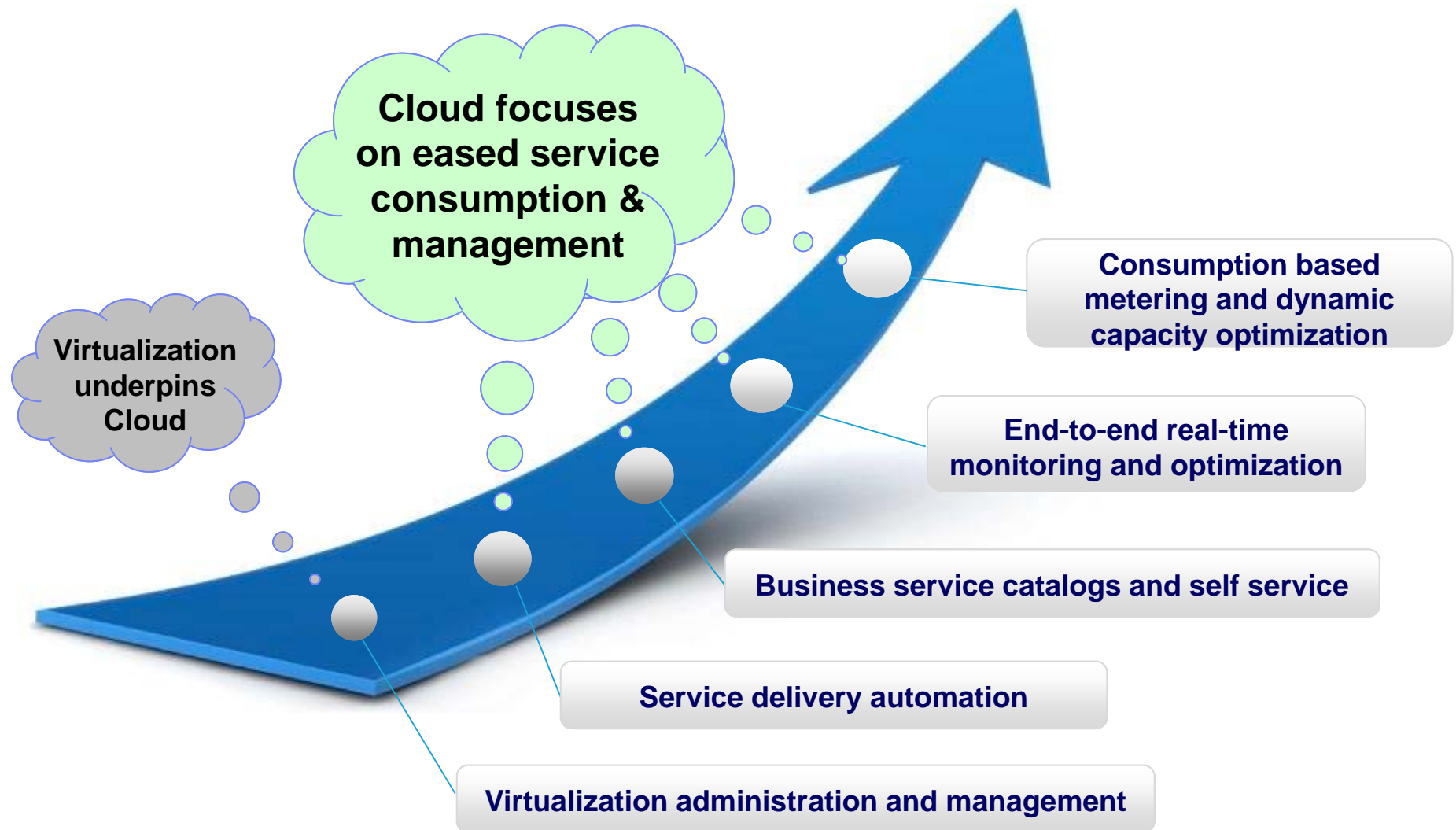
60%

of CIOs plan to use cloud up from 33% two years ago

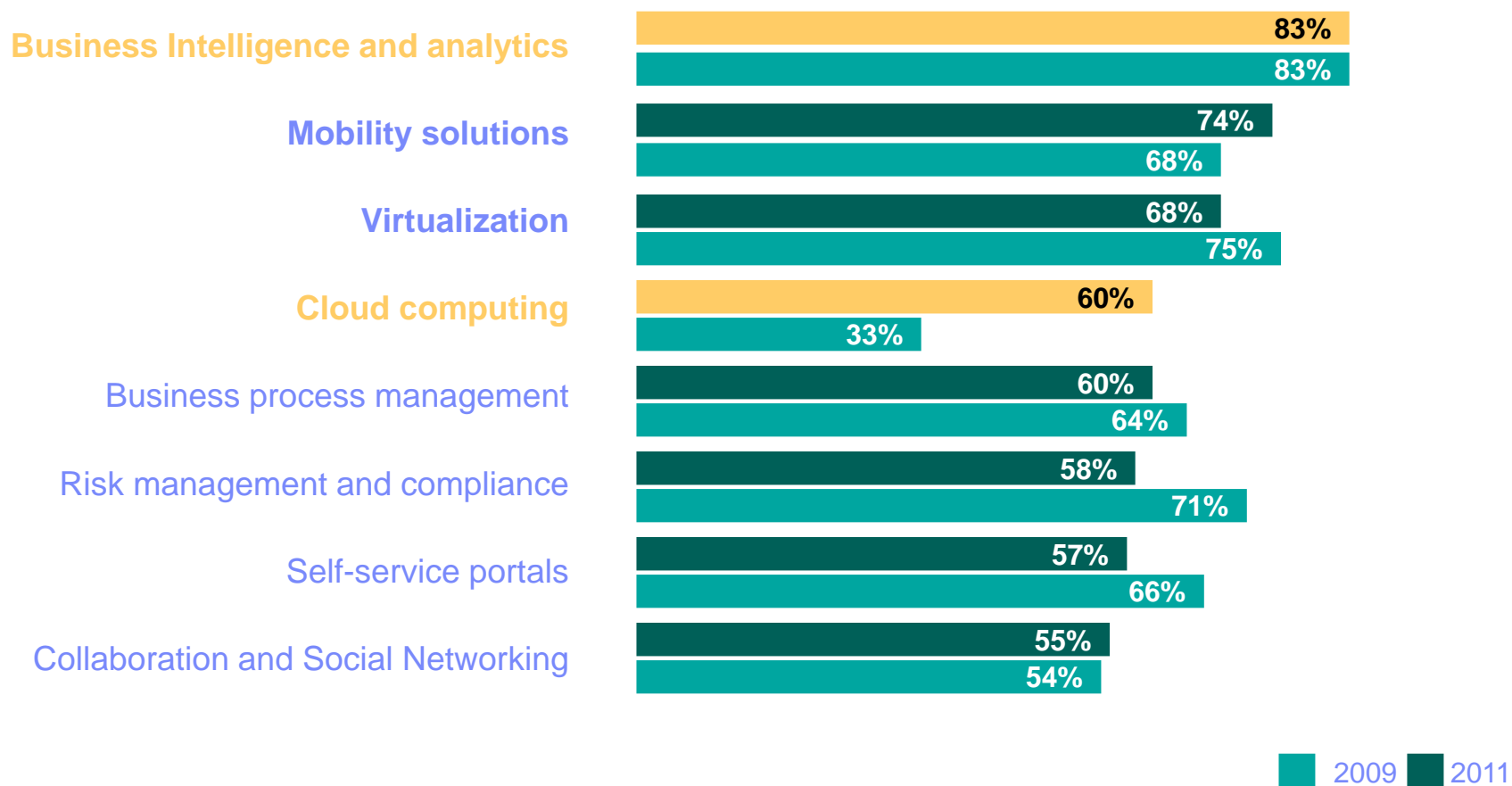
...the majority being hybrid clouds

System z platform for Private and Hybrid cloud

Organizations are now moving beyond virtualization to higher value stages of Cloud



CIO plans are evolving: business intelligence and analytics remain at top with cloud computing moving into top four



Source: 2011 CIO Study, Questions D.C: "To what extent has your organization integrated business and technology to innovate?"; D.E: "What score would the entire senior management team give technology for its contribution to the business?" (n=3,018)

IBM SmartCloud Foundation: Build and scale cloud on z with service management capability

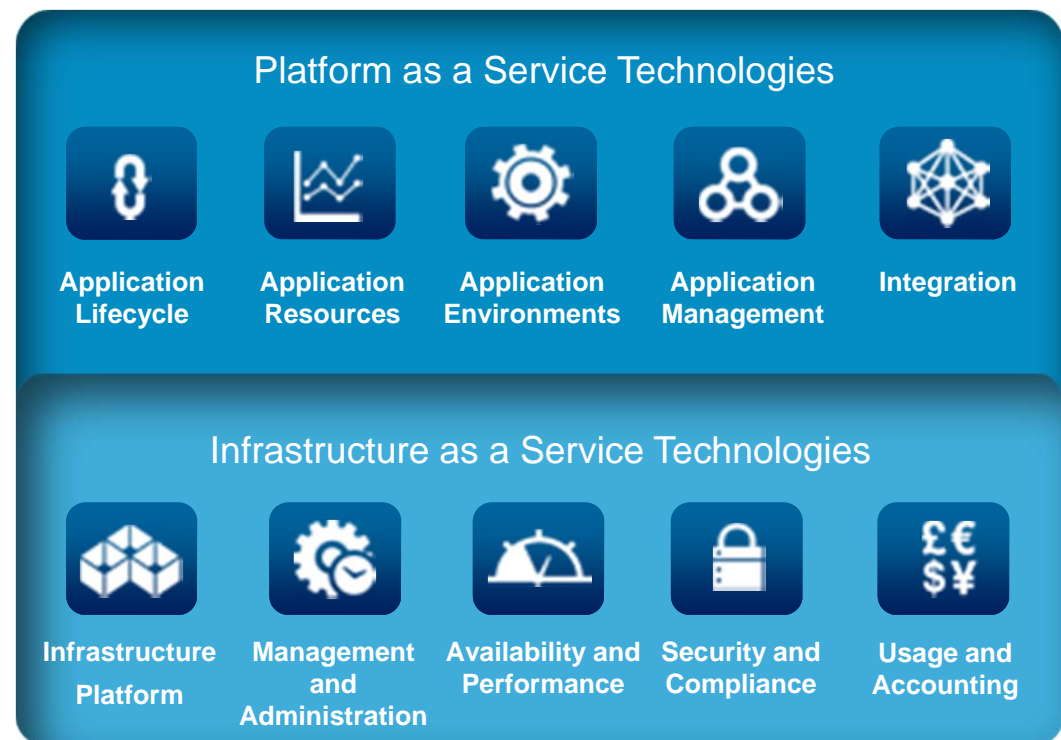
Cloud Challenges

- Compliance/Audit
- Availability
- Data Protection/Integrity

SmartCloud Value

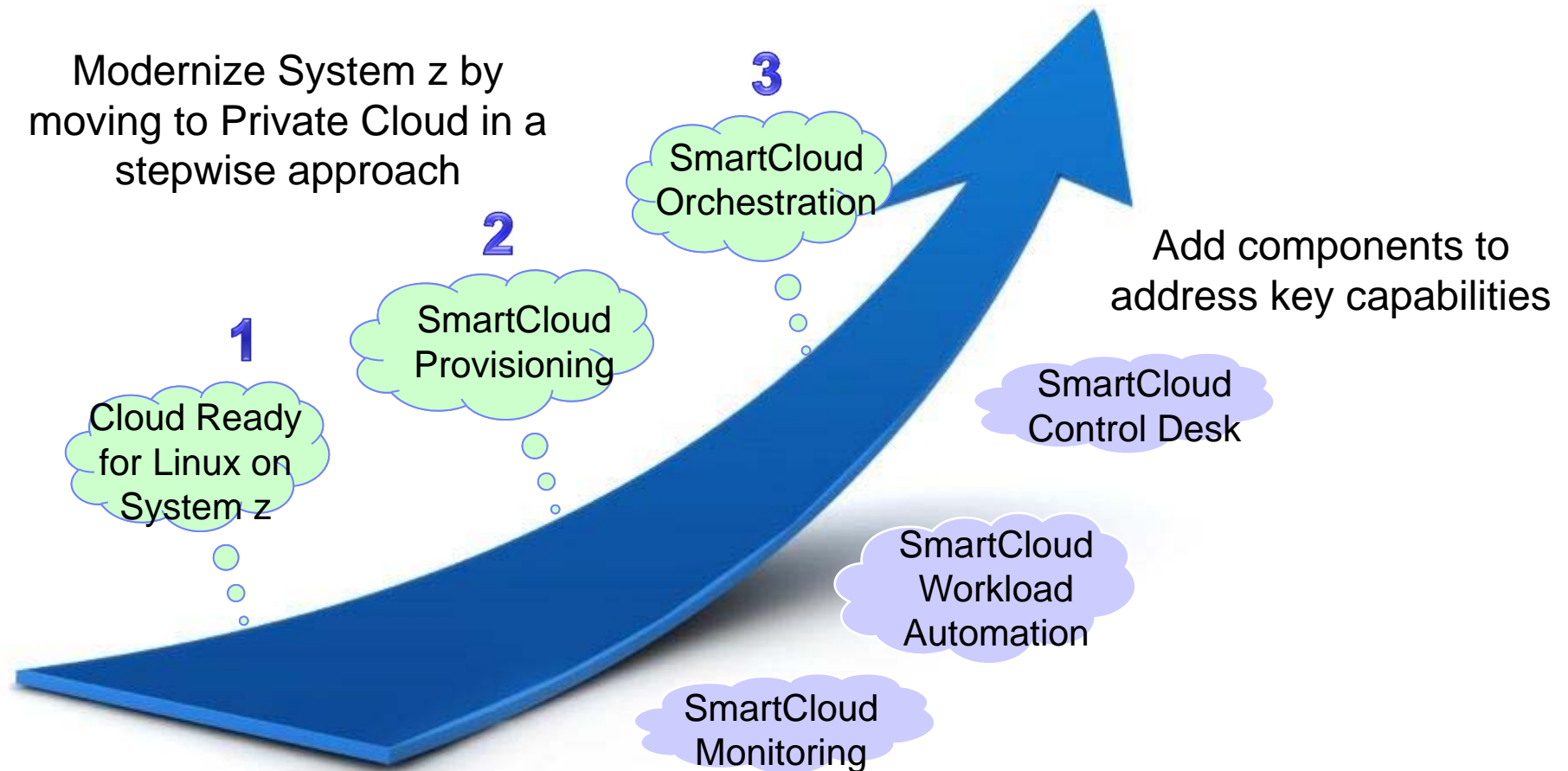
- Elastic scalability
- Rapid provisioning
- Advanced virtualization
- Image management

IBM SmartCloud Foundation



Start small and move cloud capability over time with IBM Linux on System z tools as requirements grow

Modernize System z by moving to Private Cloud in a stepwise approach



Get started quickly with Cloud Ready for Linux on System z

- **Image/SW-based Cloud Service Delivery** with integrated provisioning, monitoring, service catalog & service desk, storage management, and HA
- **Services** to have cloud service management solution up and running quickly

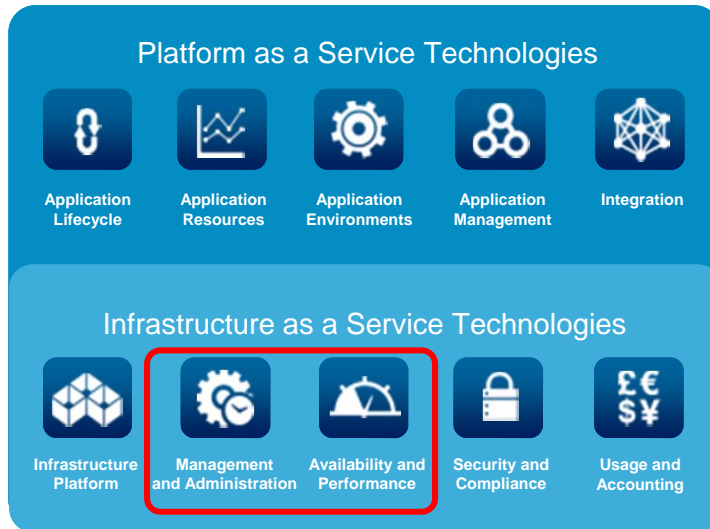
Business value addressed:

- Reduce high administration and capital cost
- Remove inefficiencies due to image sprawl and maintenance
- Move away from manual managements of disparate environments
- Avoid server and workload sprawl with multiple platforms
- Run workloads with superior reliability, security, auditing, privacy, data integrity, automation and full isolation



Smartcloud Monitoring includes capability planning and analytics

IBM SmartCloud Foundation



Cloud Health Visibility and Optimization:

- Performance and availability metric integration for end to end cloud health visibility, optimization and assurance recommendations

Performance & Capacity Analytics:

- Rich capacity optimization recommendations improve resource utilization and cost

Client Success

- Major cloud service provider **consolidates 59 development & test labs into 6** centralized labs.
- Utilizing SmartCloud Monitoring, able to increase utilization significantly, **increasing VM density by 58%**

Marist College supports growing/changing student population with Cloud on System z

Business Challenges:

- Provide environment for fluctuating student population
 - Enhance student learning
 - Develop Workforce skills
- Support growth of z/OS Knowledge Center

IBM Solution:

- zLinux Smart Analytics environment
 - Cognos and DB2`
- Automatic Provisioning with TSAM
 - Project completion deprovisioning

Business Benefits:

- Community-wide collaboration, moving to worldwide
- Expanded System access to other schools



Marist College

- Recognized for excellence by US News and World Report, Time and Princeton Review
- Leadership in use of Technology
- Pioneered hosting IBM Technology with z/OS Knowledge Center in 2002

Significant System z costs savings with IT asset discovery and management capability

▪ Software license cost optimization

- Discover where applications are being used across Enterprise
- Rationalize which applications/products are no longer required

▪ System z hardware and software savings

- Decrease product license fees based on usage
- Understand usage trends for planning and upgrades
- Safely move workloads across LPARs, knowing who is using what applications

▪ z Software upgrade savings

- Optimize products in Enterprise License Agreement (ELA)



Modernization, cost avoidance and investment protection with Maximo on System z

Business Challenge:

- Government agency wanted asset management solution for physical assets (e.g. vehicles, equipment)
- Needed to deploy environment to support 5000 users

IBM Solution:

Software

- IBM Maximo Asset Management for Linux on z
- Oracle DB for Linux on System z

Servers

- System z10 Server with 28 IFLs

Business Benefit:

- Leveraging unused processors on System z
- Deploy in 1/3 time of x86 servers and no additional energy costs
- Software license charges were \$1 million less on System z
- Disaster Recovery was included in the System z, where it would double x86 costs

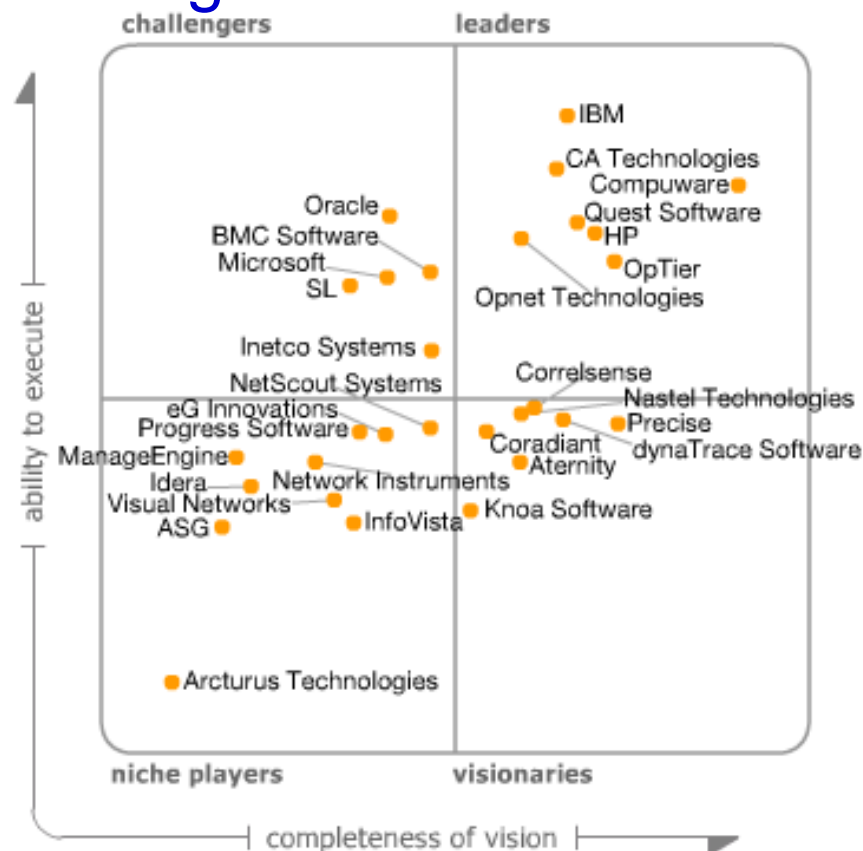


Gartner has recognized IBM as a leader in Application Performance Monitoring

Magic Quadrant for Application Performance Monitoring

Will Cappelli, Jonah Kowall

September 19, 2011



As of September 2011

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IBM Visibility Control Automation recognized as industry leading approach to Service Management on System z

VISIBILITY



See your business services

CONTROL



Manage service risk and compliance

AUTOMATION



Optimize business service delivery

- #1 Overall in Systems / Network Management
- #1 in Overall Performance and Availability Mgt.
- #1 Performance Management
- #1 Event Automation
- #1 Network Management
- #1 Output Management
- #1 Archiving
- #1 Identity and Access Management
- #1 Security and Vulnerability Management
- #1 Enterprise Asset Management

IDC Market Share rankings

Thank
You

The words 'Thank You' are rendered in a large, 3D-style font. Each letter is filled with a different portrait of a diverse group of people, including men and women of various ethnicities and ages. The portraits are set against a light blue background. The text is centered on the page.