

Optimizing the World's Infrastructure

Mark Simpson, Tivoli CTO for Asia Pacific



Business without **LIMITS 2012**

[6th September 2012, New Delhi]



In this new world everything is changing....



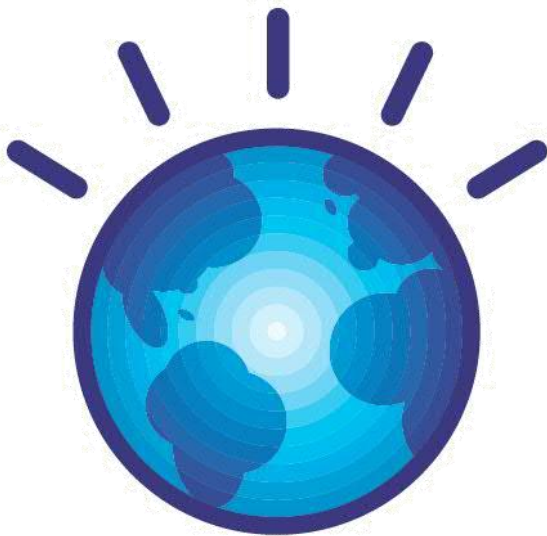
INSTRUMENTED



INTERCONNECTED

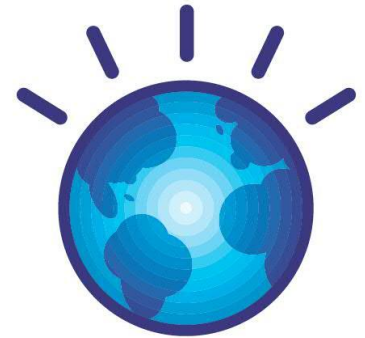


INTELLIGENT



80%

*CEOs anticipate
turbulent change and
bold moves ahead.*



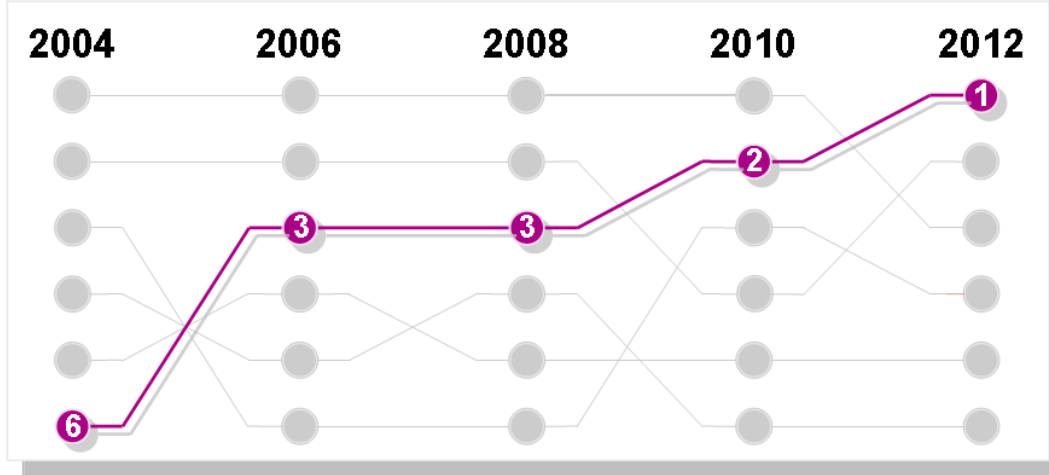
Rethink IT.

- Speed delivery
- Improve economics
- Drive innovation

Reinvent business.

- Improve operating dexterity
- Redesign client relationships
- Uncover new profit opportunities

Technology will play a critical role...



Factors impacting organizations:

- 1. Technology factors**
2. People skills
3. Market factors
4. Macro-economic factors
5. Regulatory concerns
6. Globalization
7. Socio-economic factors
8. Environmental issues
9. Geopolitical factors

Faster Delivery

90% 

view cloud as critical to their plans

Improved Reach

1 Billion 

Smartphones and 1.2 billion mobile employees by 2014

Responsive Operations

20B+ 
Intelligent business assets

New Insights

2.7ZB 

of digital content in 2012, a 50% increase from 2011

A mobile transformation is occurring...

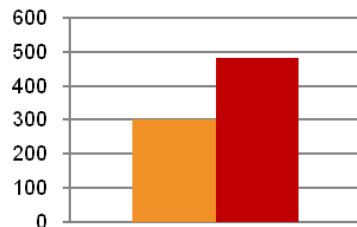


Mobility

Nearly $\frac{1}{2}$ of devices accessing applications will be mobile

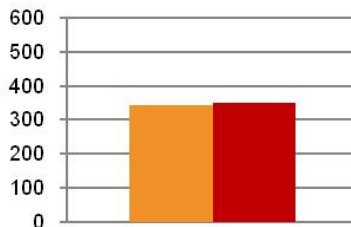
55% growth in smartphone market -- 2011

...sales of Smartphones now exceed laptop & PC sales.



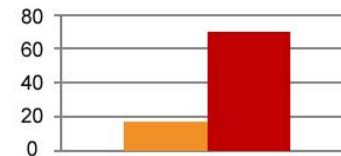
Smartphones

2010 2011



PC's

2010 2011



Tablets

2010 2011

Units shipped (M)

Success is driven through a holistic approach to delivering and managing services that adapts to changing business priorities...



VISIBILITY

*See and understand
your business
in real time*



CONTROL

*Transform and
adapt while
limiting risks*



AUTOMATION

*Standardize best
practices and achieve
greater efficiency*

IBM is helping organizations embrace bold strategies to **Rethink IT**, and **Reinvent Business** services, processes, & relationships...



Optimize with Cloud



Speeding service delivery from 45 days to 20 minutes

Extend to Mobile Devices



Increasing sales with new promotions from 15% to 75%

Deploy Smarter Physical Infrastructures



Recognizing & repairing over 50% of issues before operations impact

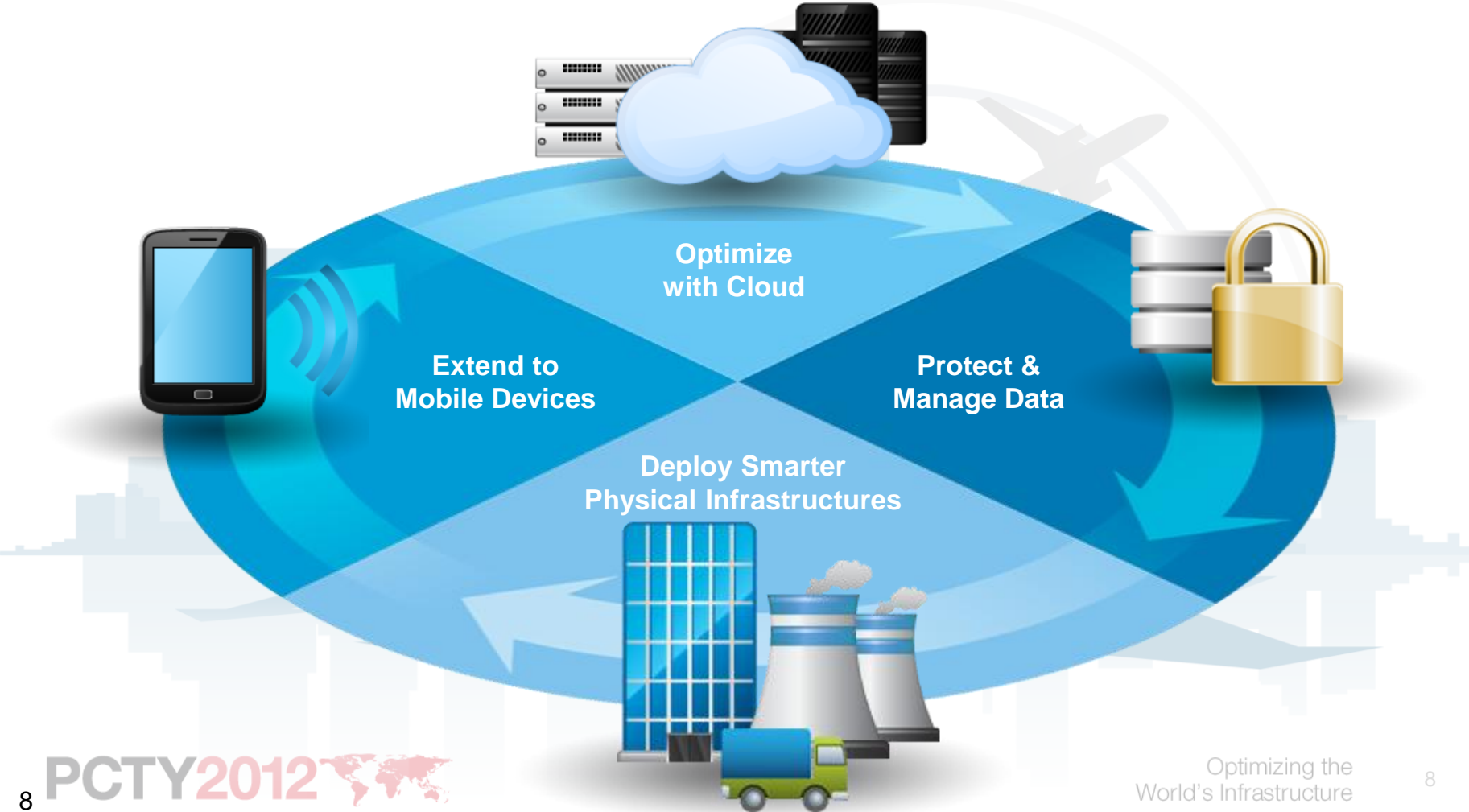
Protect & Manage Data



Reducing the time it takes to backup critical data by 80%

IBM's integrated service delivery & management platform offers the proven capabilities and best practices needed for success.

Service Delivery & Management Capabilities

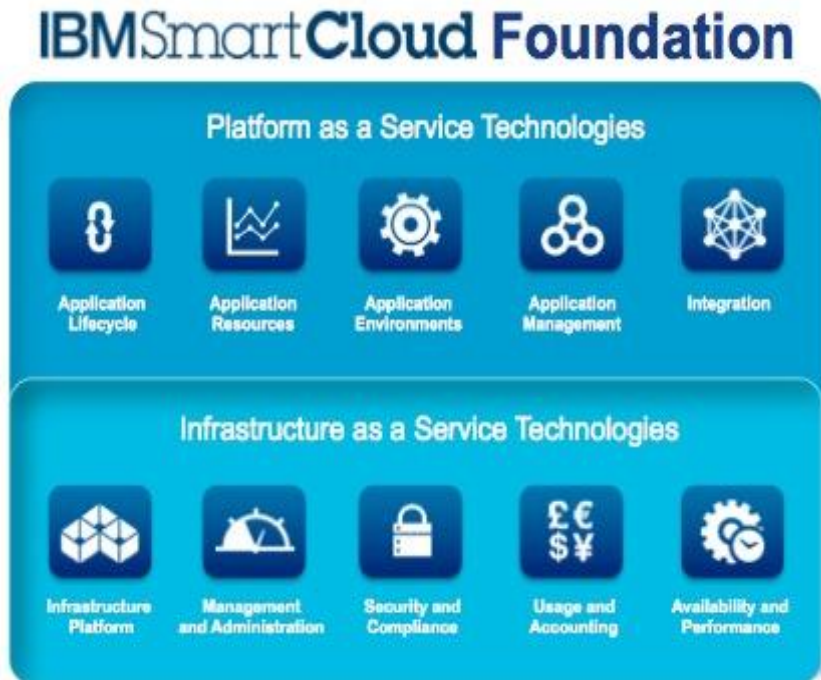


Optimize with Cloud

Nearly 60% of CIOs view cloud computing as critical



- **Resilient** to the velocity of changing business needs
- Enables **choice & flexibility** in hybrid environments
- Provides **enterprise-class**, workload-aware services
- Built-in **analytics** for improved insight and decision making



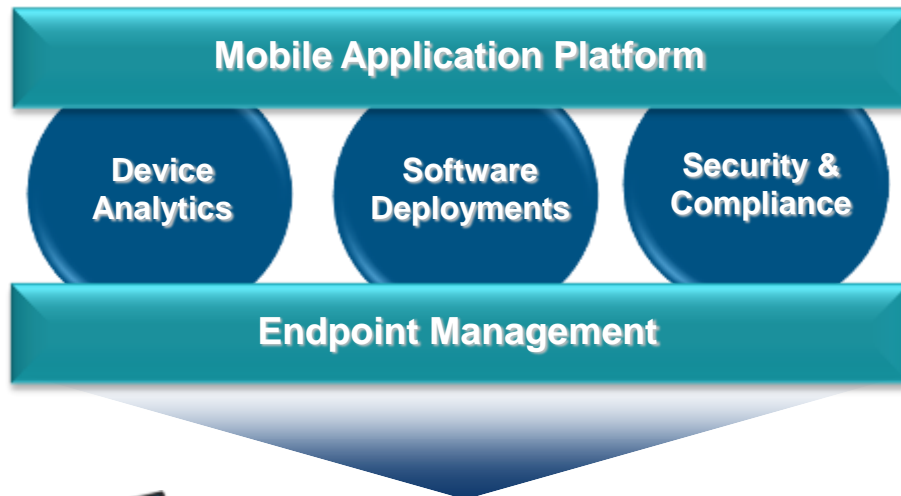
- Speed infrastructure delivery from 45 days to 20 minutes
- Improve server to administrator ratio from 10:1 to 100:1



Extend to Mobile Devices

Nearly $\frac{1}{2}$ of devices accessing applications will be mobile

- Build applications **optimized** for mobile
- Deploy software apps **worldwide** in days.
- Find **all assets** on your network – NOW!
- **Patch** anywhere, anytime over any network.
- Continuously **enforce security** for mobile and off-network devices.



Desktops / laptops / servers



Mobile endpoints



Purpose-specific endpoints



MaaS360[®]
by Fiberlink

- Enables service innovation & 25% yr/growth with cloud endpoint management
- Managing over 500,000 endpoints and still growing

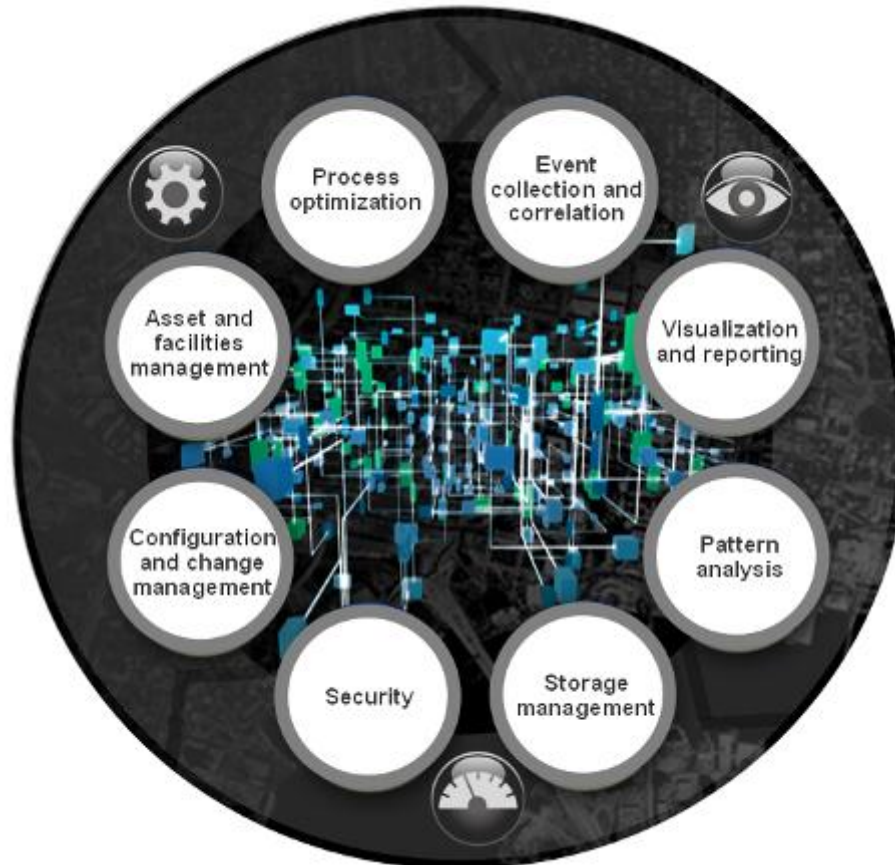


Deploy Smarter Physical Infrastructures

Over 20B machine-centric intelligent devices



- **Predictively** manage the asset lifecycle
- Monitor the **health** of smart infrastructures
- Understand the **impact** of problems on service
- Optimize **workflow** across business & IT operations
- Track key **performance** indicators



- Operational excellence & performance at 100 plants world wide
- Visibility into inventory & demand across sites = huge cost savings

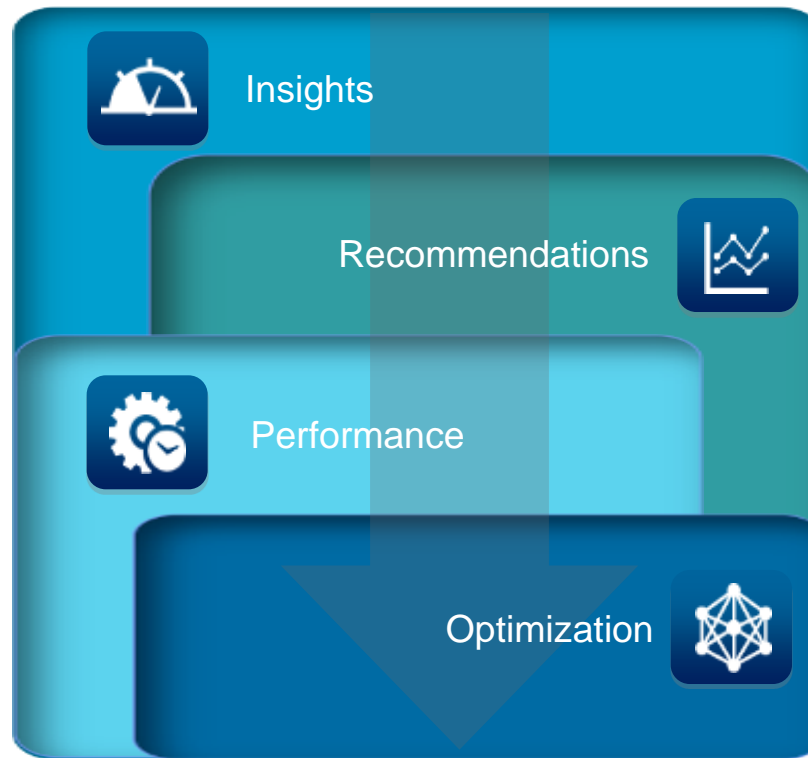


Protect & Manage Data

2.7ZB of digital content, a 50% increase from 2011



- **Data Protection** reducing the amount of data at risk between backups by 90%
- **Unified Recovery Management** to configure, monitor and execute all backup/recovery operations
- **Storage Virtualization** to improve storage utilization by 30% or more
- **Advanced Storage Resource Management** to effectively monitor, manage and troubleshoot
- **Integrated reporting and monitoring** to provide visibility, control and automation



- Perform nightly and full image backups within 8 hours
- Resolve environmental issues
- Increases backup success by 9%



Only IBM brings these capabilities together to enable integrated delivery of business services **across complex, interconnected infrastructures...**

Service Delivery & Management Capabilities



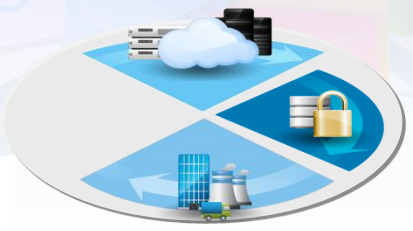
Only IBM brings these capabilities together to enable **integrated delivery of business services** across complex, interconnected infrastructures...



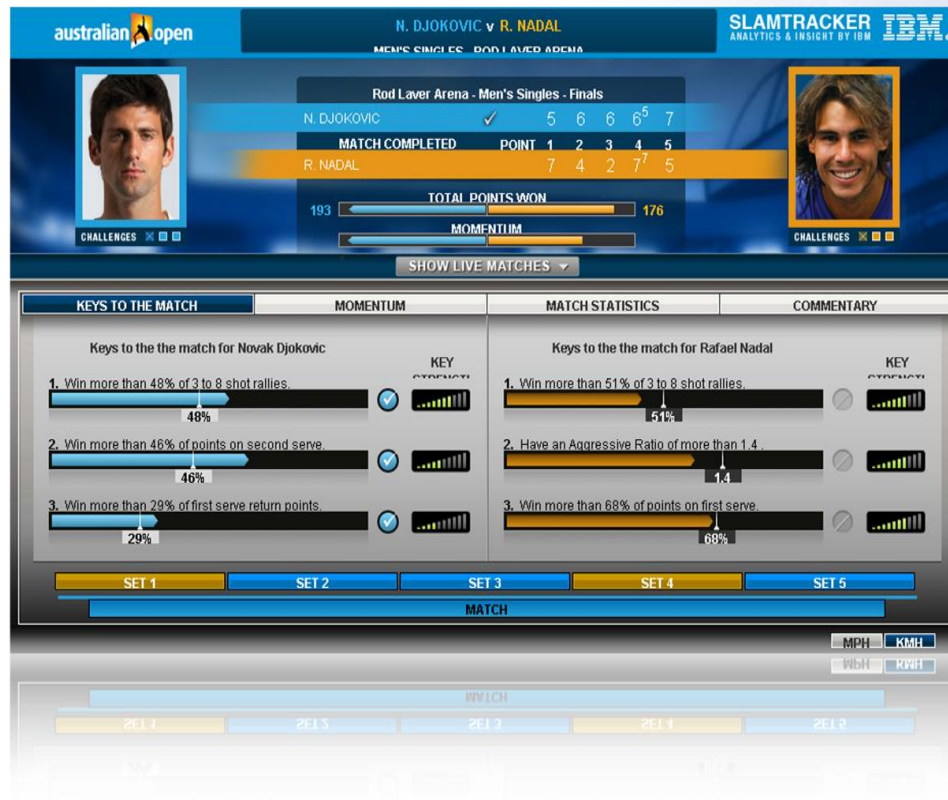
- Transformed supply chain across **5k stores & 54 countries**
- Reduced backorders **85%**

- Increased water leak detection **eightfold** for participating citizens
- Decreased water utilization during pilot **6.6 percent**

- Handling **70 million** pieces of luggage/year
- Increased capacity by **20 million**



Australian Open A Fully Integrated Experience



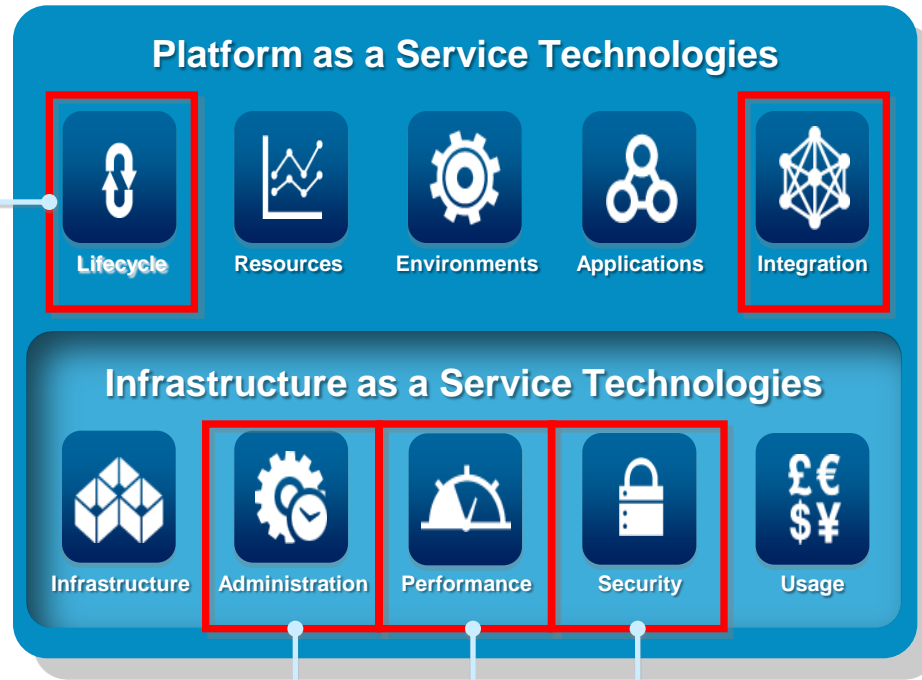
IBMSmartCloud Foundation

Build and scale cloud environments with unparalleled time to market



Automation

- Collaborative development
- Customize workload patterns
- Cloud lifecycle management



Control

- End-to-end IT process integration
- Simplified cloud administration
- Lower costs and improve performance



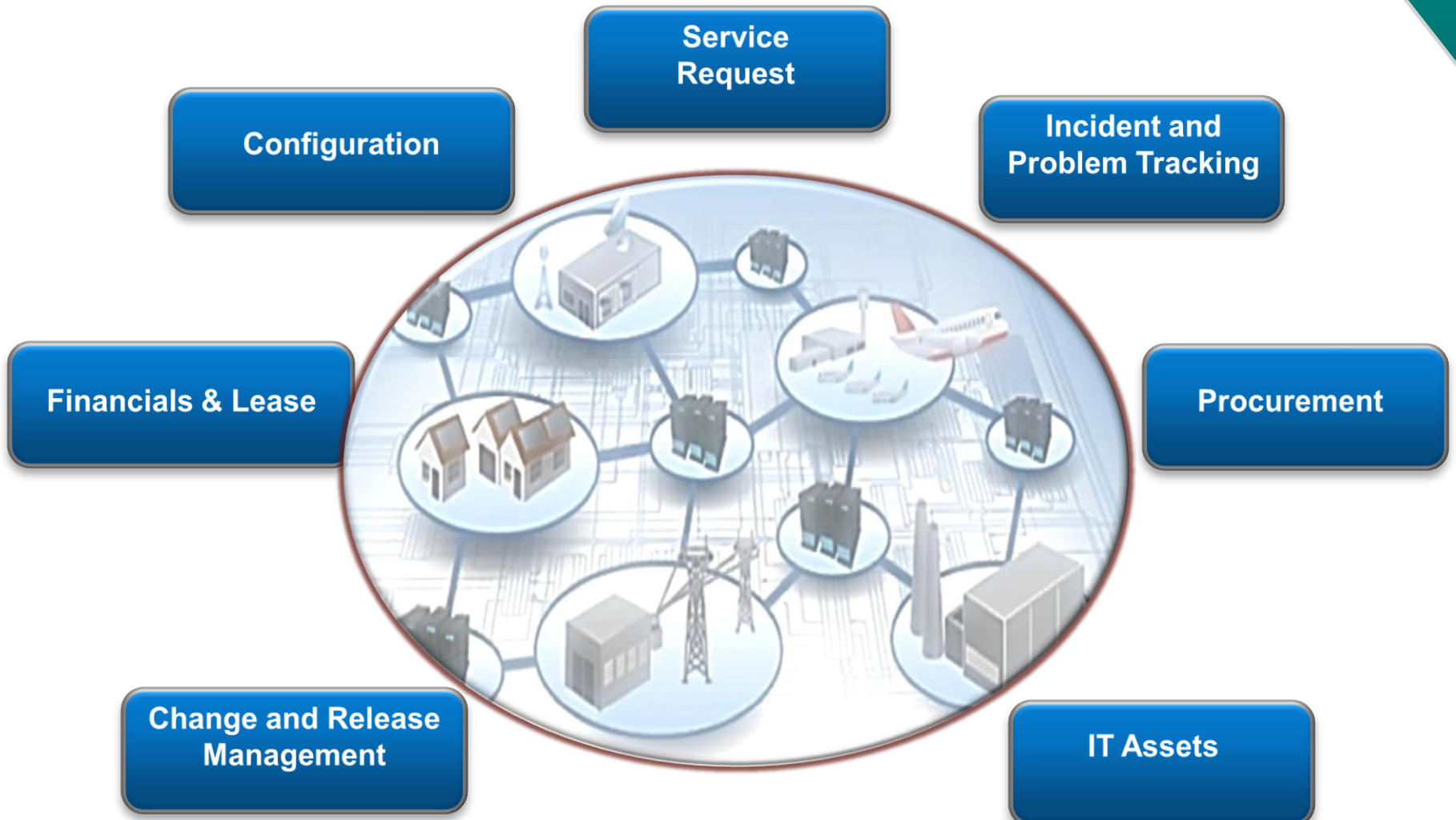
Visibility

- Improved visibility into the cloud
- Health analytics for capacity planning
- Secure the Cloud

IBMSmartCloud Control Desk

New

Holistically controls service management processes



IBMSmartCloud Monitoring and Provisioning

Visibility and Control of Optimized IT Infrastructures and workloads

IBMSmartCloud Monitoring

- End-to-end element visibility
- Proactive problem analysis
- Intelligent workload placement
- License optimization
- Capacity planning

IBMSmartCloud Provisioning

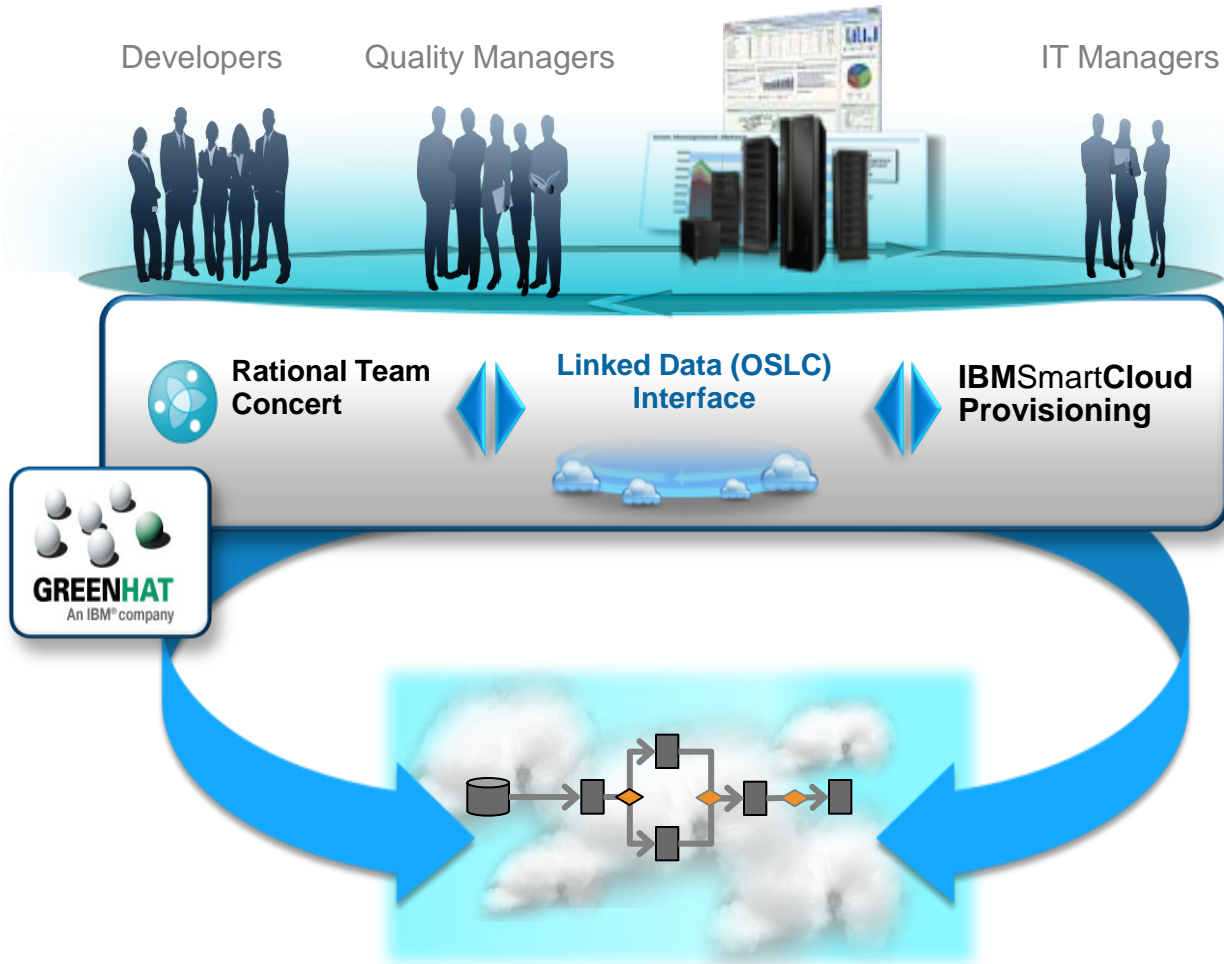
- Highly resilient cloud manager
- Hypervisor agnostic platform
- Advanced image management
- Image lifecycle composition

- Start small and scale up
- Real-time capacity on-demand
- Analytics based optimization

IBMSmartCloud Continuous Delivery

Beta

A simple approach to lifecycle agility



- Accelerate delivery
- Self-service
- Reduce risk
- Improve quality
- Manage change
- Optimize Workload Patterns

IBMSmartCloud Application Performance Management

Optimize end user performance and prevent outages

New



Rapid Time-to-Value

- Out-of-the-box **dashboards** provide KPI at-a-glance
- Execute quickly with new **agentless** transaction tracking technology

Comprehensive Coverage

- Updated support for **DataPower, DB2, WAS, SAP** and more
- Monitor both traditional and cloud-based environments

Leverage IBM Expertise

- Built-in **IBM expert advice** identifies root causes and recommended actions
- **Impact analysis** dashboards enables quick identification of problems and business area that is affected

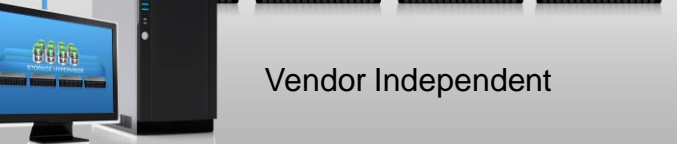
IBMSmartCloud Virtual Storage Center and Tivoli Storage Management Suite

Intelligently controls and optimizes Cloud Storage with pay as you go pricing

New

Tivoli Storage Management Suite

- Data reduction for recovery and retention
- Always on recovery service
- Instant recovery for virtual environments and applications



Early Experience Program

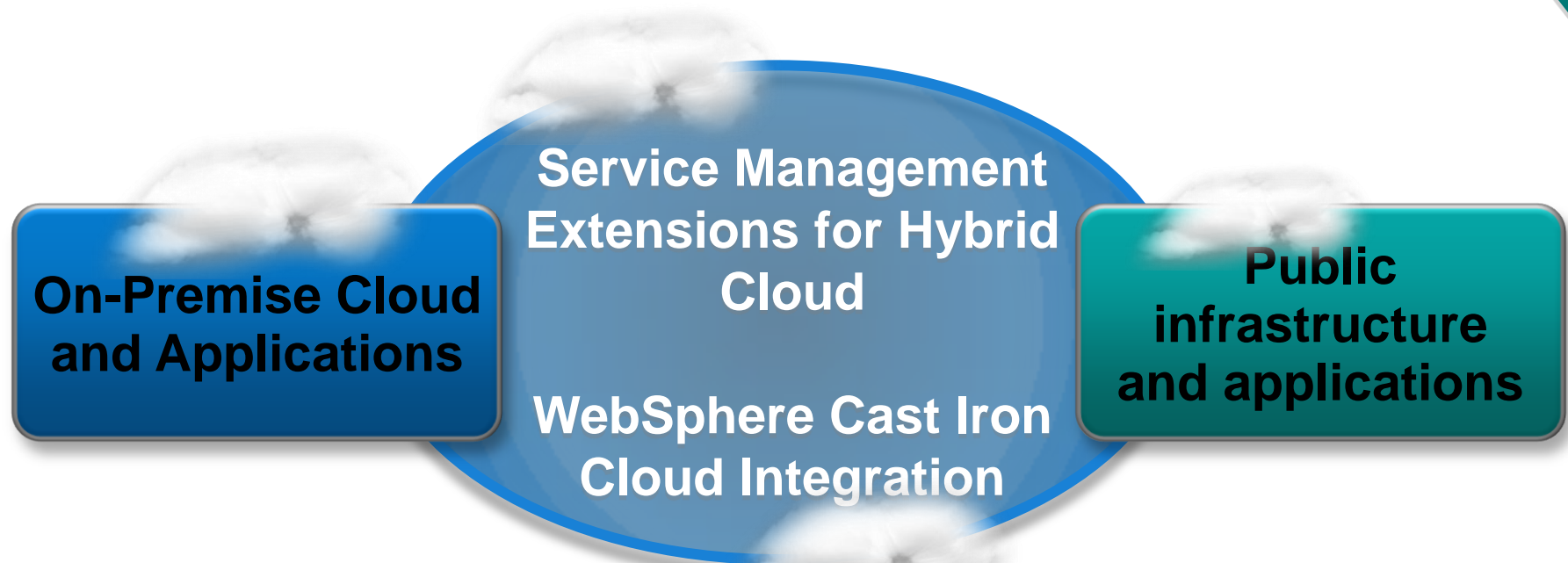
SmartCloud Virtual Storage Center

- Virtualize physical storage resources
- Flexible management of heterogeneous storage
- Central management of virtual storage

Service Management Extensions for Hybrid Cloud

Integrate clouds with centralized monitoring, security and automation

New



- Visibility across all resources
- Control system and security management
- Automate workload flows across clouds

Better Business Outcomes with Cloud



The need

Reduce time to market by accelerating development cycle for 20,000 internal developers

The solution

Self-service request, automated provisioning, and internal chargeback capabilities

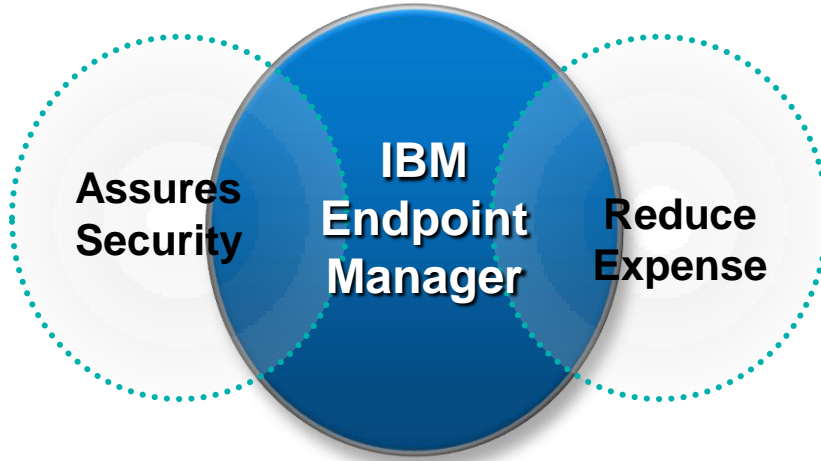
The benefit

Reduced server provisioning times from 45 days to less than 20 minutes.

IBM Endpoint Manager

Extending Enterprise endpoint management to Mobile

New



- Mobile Lifecycle Management
- Security threat detection and automated remediation
- Advanced management for iOS, Android, Symbian, Windows Phone



Extends 550,000 endpoints

Enterprise Servers, Desktop and *now Mobile*

IBM Maximo

Innovating to reach new heights of infrastructure performance and reliability



- Health, Safety and Environment Management
 - Improve employee and public safety, reduce risk to the environment and manage regulatory compliance
- Supply Chain Management
 - Greater control over critical procurement to improve operations and optimize enterprise inventory
- Comprehensive Industry Solutions
 - Transportation, Nuclear, Oil and Gas

IBM Smarter Buildings

Tririga enables a complete solution for facilities optimization

New and
Enhanced



Service Management Connect

On-line community that connects you to the future of service management

- Transparent development
- Product roadmaps
- Code downloads and demos
- Access to the experts
- Best practices
- Submit requirements

IBM. English Sign in (or register)

developerWorks. Technical topics Evaluation software Community Events Search developerWorks

developerWorks > Technical topics

Service Management Connect

Technical communities for Integrated Service Management professionals

View Communities

Overview Executive Corner Partner Connect

Connect, learn, and share with Integrated Service Management (ISM) professionals in **Service Management Connect**. Get access to developers and technical experts who provide their perspectives and expertise to help you implement ISM solutions.

For general discussion about ISM, and to learn about tips and tools to assist you in your ISM journey, join the [Integrated Service Management group](#).

Communities

Show community details | Hide community details

- Application Performance Management
- Asset Management
- Business Service Management
- Cloud/Virtualization Management
- Data Center Automation
- Endpoint Management
- Integrated Service Management
- Network and Service Assurance
- Process Automation
- Security and Risk Management
- Storage Management
- System z

Community Content | Technical Library | Media Gallery

Show descriptions | Hide descriptions

COMMUNITY CONTENT

Subscribe to the newsletter

Receive quarterly updates on all the latest content. [Subscribe to the newsletter today!](#)

Follow Service Management Connect

- Follow on Twitter
- Join the Facebook group
- Watch on YouTube

Request Product Enhancements

Your ideas for Tivoli products.

Submit your own idea for a new Tivoli product request for enhancement! Our...

- › **4 million hits** since launched at Pulse 2011
- › **700+ blog entries** from IBM experts
- › **100 featured IBM expert profiles**

Please note:

- IBM's statements regarding its plans, directions, and intent are subject to change or withdrawal without notice at IBM's sole discretion.
- Information regarding potential future products is intended to outline our general product direction and it should not be relied on in making a purchasing decision.
- The information mentioned regarding potential future products is not a commitment, promise, or legal obligation to deliver any material, code or functionality. Information about potential future products may not be incorporated into any contract. The development, release, and timing of any future features or functionality described for our products remains at our sole discretion.
- Performance is based on measurements and projections using standard IBM benchmarks in a controlled environment. The actual throughput or performance that any user will experience will vary depending upon many factors, including considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve results similar to those stated here.

Acknowledgements, disclaimers and trademarks

© Copyright IBM Corporation 2012. All rights reserved.

The information contained in this publication is provided for informational purposes only. While efforts were made to verify the completeness and accuracy of the information contained in this publication, it is provided AS IS without warranty of any kind, express or implied. In addition, this information is based on IBM's current product plans and strategy, which are subject to change by IBM without notice. IBM shall not be responsible for any damages arising out of the use of, or otherwise related to, this publication or any other materials. Nothing contained in this publication is intended to, nor shall have the effect of, creating any warranties or representations from IBM or its suppliers or licensors, or altering the terms and conditions of the applicable license agreement governing the use of IBM software.

References in this publication to IBM products, programs or services do not imply that they will be made available in all countries in which IBM operates. Product release dates and/or capabilities referenced in this presentation may change at any time at IBM's sole discretion based on market opportunities or other factors, and are not intended to be a commitment to future product or feature availability in any way. Nothing contained in these materials is intended to, nor shall have the effect of, stating or implying that any activities undertaken by you will result in any specific sales, revenue growth, savings or other results. All statements regarding IBM future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only.

Information concerning non-IBM products and services was obtained from a supplier of those products and services. IBM has not tested these products or services and cannot confirm the accuracy of performance, compatibility, or any other claims related to non-IBM products and services. Questions on the capabilities of non-IBM products and services should be addressed to the supplier of those products and services.

All customer examples cited or described are presented as illustrations of the manner in which some customers have used IBM products and the results they may have achieved. Actual environmental costs and performance characteristics may vary by customer and will vary depending on individual customer configurations and conditions. Nothing contained in these materials is intended to, nor shall have the effect of, stating or implying that any activities undertaken by you will result in any specific sales, revenue growth or other results.

Prices are suggested U.S. list prices and are subject to change without notice. Starting price may not include a hard drive, operating system or other features. Contact your IBM representative or Business Partner for the most current pricing in your geography.

IBM, the IBM logo, ibm.com, Tivoli, the Tivoli logo, Tivoli Enterprise Console, Tivoli Storage Manager FastBack, and other IBM products and services are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both. If these and other IBM trademarked terms are marked on their first occurrence in this information with a trademark symbol (® or ™), these symbols indicate U.S. registered or common law trademarks owned by IBM at the time this information was published. Such trademarks may also be registered or common law trademarks in other countries. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at ibm.com/legal/copytrade.shtml