Mobile Cloud Architectures
What will YOU make with Mobile this year?

Sal Vella

Vice President, Product Development and Support

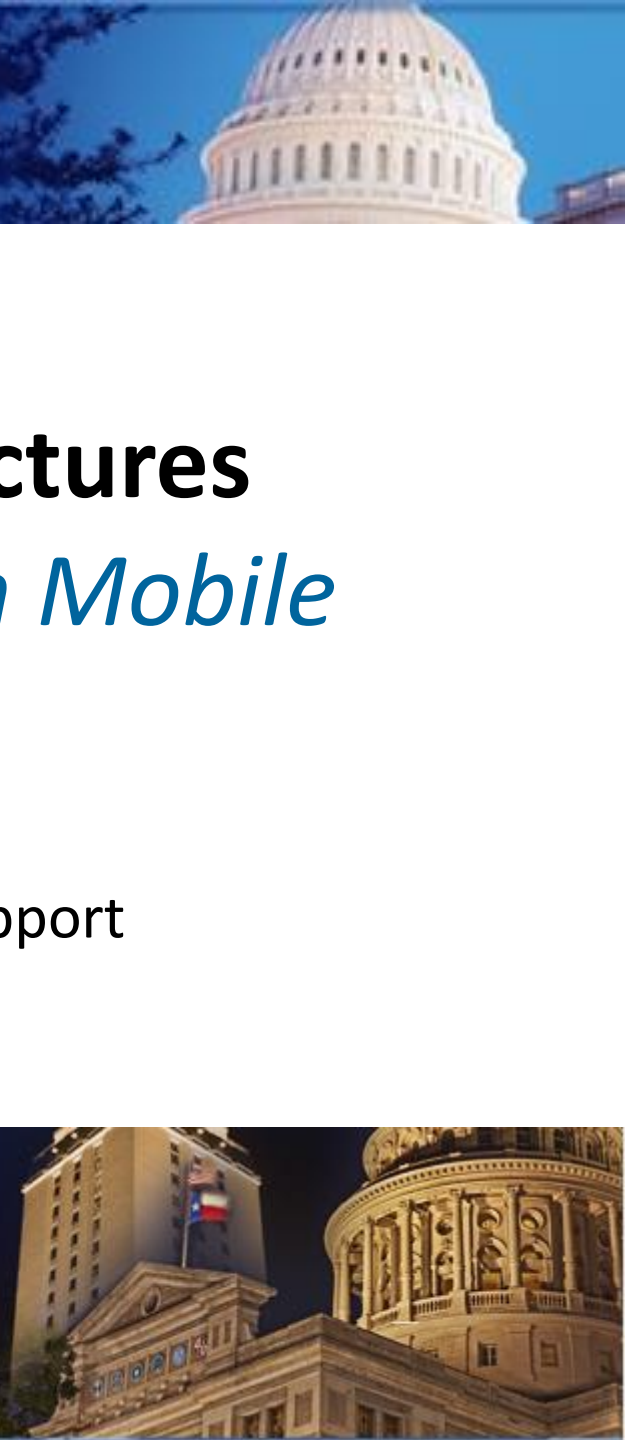*IBM Rational Software*

SYNCHRONY SYSTEMS
RAPIDLY DEPLOYING BART APPLICATION
USING IBM BLUEMIX PLATFORM

Delivering mobile innovation is very different

⇨ Mobile apps are different

⇨ Management is different

⇨ Development is different

⇨ Security is different

IBM Cloud: Think it. Build it. Tap into it.

IBM®

Delivering for mobile is different from the web

Web	Mobile
Monolithic apps	Many task-oriented apps
Mouse & keyboard driven	Multiple sensors driven (touch, camera, GPS, etc.)
Least common denominator browser approach	**Many different endpoint combinations (type, OS, screen sizes, etc.); user experience highly tailored to the device**
Centralized server execution	De-centralized intelligent endpoints
Centralized code distribution & controlled rollout	**Loss of control over distribution (e.g., app stores) and environment (e.g., client OS versions)**
Trusted execution behind the firewall	**Code runs in an environment outside of the enterprise's control (consumers, BYOD)**
Always connected	Many times offline or limited bandwidth
Optimized remote load	Optimized local responsiveness
Static context	Context (e.g., location, speed of travel) varies and is being exploited to create new experiences

The mobile reality: improving our approach

Efficiency
Continuous Delivery

Effectiveness
Continuous Feedback

Achieved through leaner processes, people and platforms.

Requires prioritized decisions based on continuous feedback and better analytics.
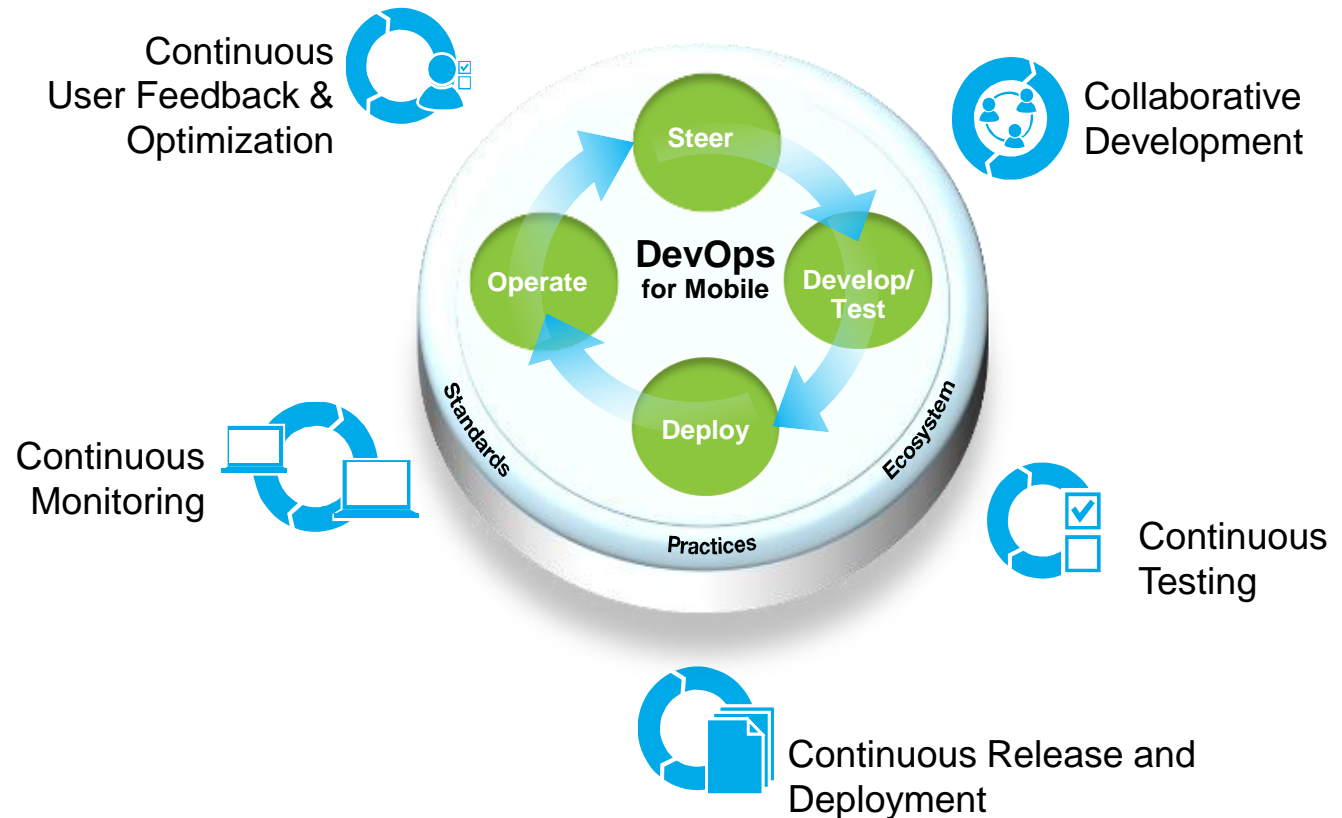
IBM Cloud: Think it. Build it. Tap into it.

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IBM DevOps point of view for mobile
Enterprise capability to improve efficiency and effectiveness

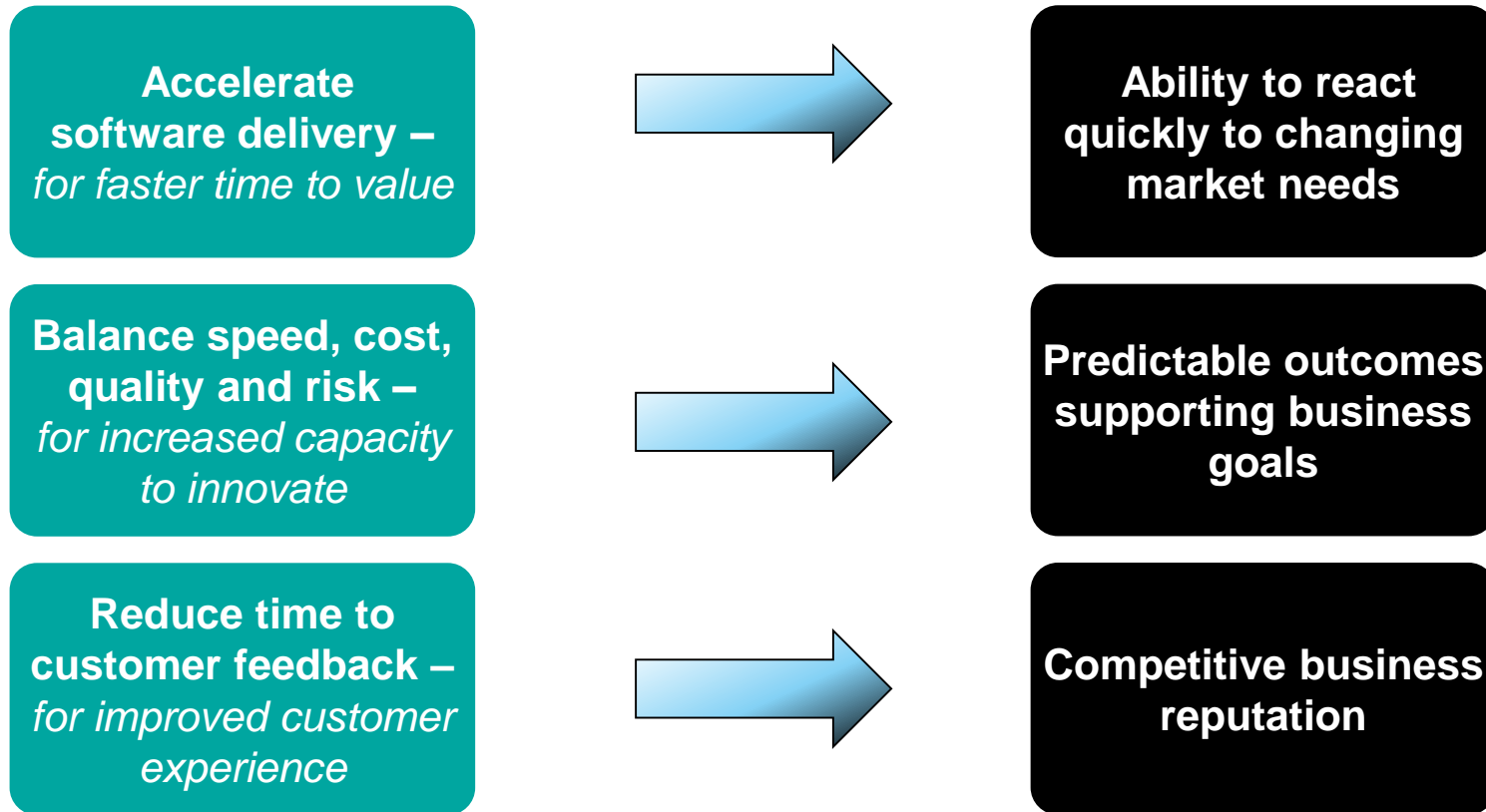**Accelerate software delivery –** *for faster time to value*

Balance speed, cost, quality and risk – *for increased capacity to innovate*

Reduce time to customer feedback – *for improved customer experience*

Continuous User Feedback & Optimization

Collaborative Development

Continuous Monitoring

DevOps **for Mobile**

Steer

Operate

Develop/ Test

Deploy

Standards

Ecosystem

Practices

Continuous Testing

Continuous Release and Deployment

DevOps for mobile
Line of Business Exec: what's in it for YOU?

Accelerate software delivery – *for faster time to value*	**Ability to react quickly to changing market needs**
Balance speed, cost, quality and risk – *for increased capacity to innovate*	**Predictable outcomes supporting business goals**
Reduce time to customer feedback – *for improved customer experience*	**Competitive business reputation**

DevOps for mobile
Developer: what's in it for YOU?

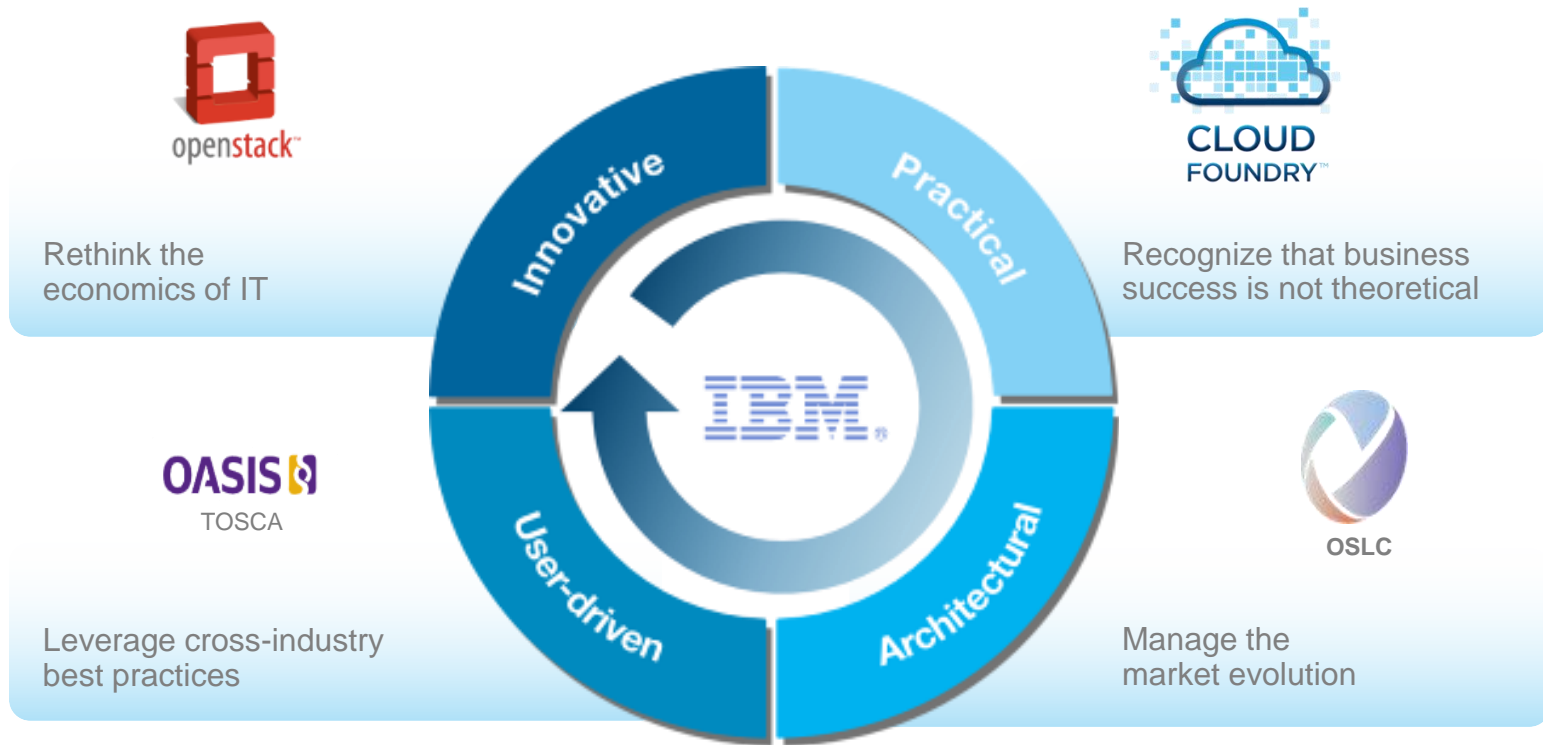|		
Accelerate software delivery – *for faster time to value*	→	**Reputation for delivery on time**
Balance speed, cost, quality and risk – *for increased capacity to innovate*	→	**Freedom to be creative**
Reduce time to customer feedback – *for improved customer experience*	→	**Apps that people actually use**

IBM.
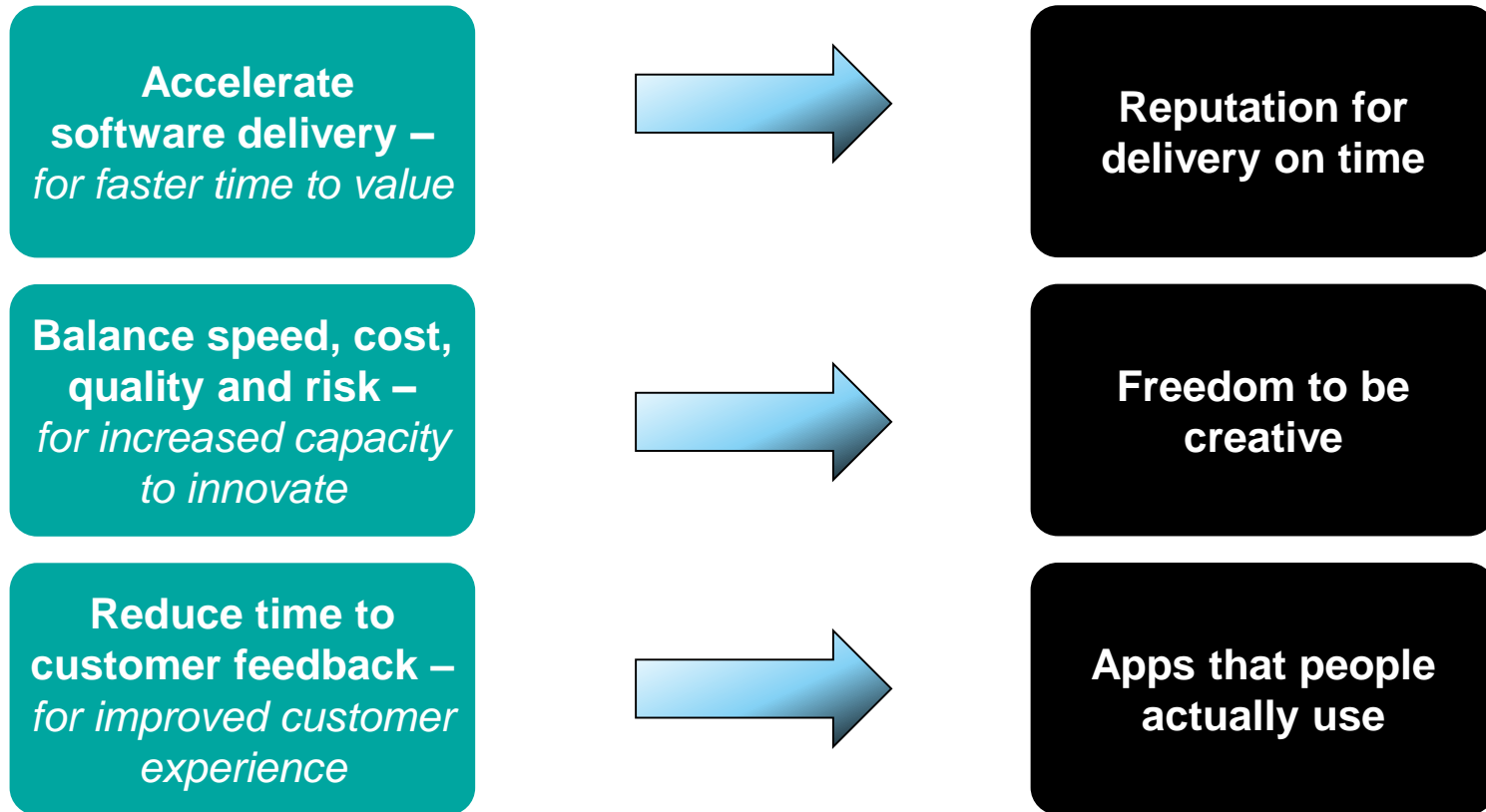
IBM's Approach to Cloud is Open
Open Standards Reduce the Cost and Risk of Cloud Adoption

Standards-based. Flexible. Customer-driven.

openstack™

Rethink the
economics of IT

CLOUD FOUNDRY™

Recognize that business
success is not theoretical

OASIS
TOSCA

OSLC

Leverage cross-industry
best practices

Manage the
market evolution

http://www.ibm.com/cloud-computing/us/en/

Introducing IBM BlueMix
A rich set of mobile ready capabilities and APIs to can mix and match
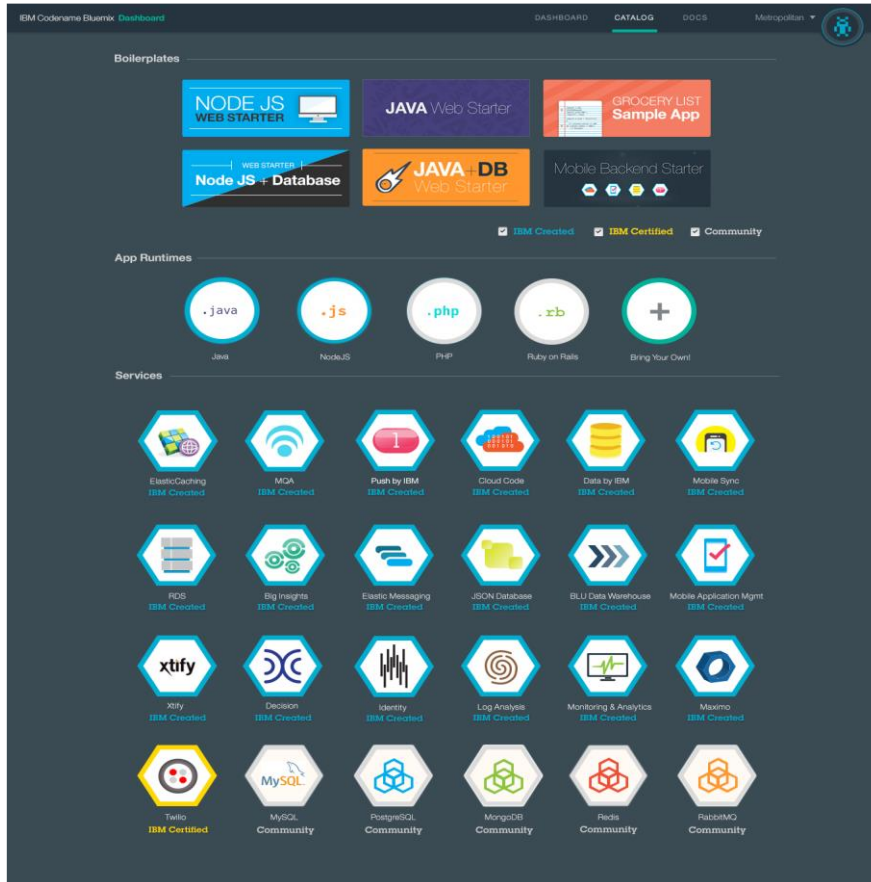
API Catalog
A catalog of developer friendly APIs (IBM & third party) with mobile SDKs, that can be composed into new and existing mobile apps. Configure and manage through the BlueMix portal.

Run Code
The developer can chose from multiple language runtimes or bring their own. Just upload your code and go.

Store Data
The developer can store data in the cloud as a service easily without needing to administer the databases.

Cloud Integration
Build hybrid environments. Connect to on-premises systems of record plus other public and private clouds. Expose your own APIs to your developers.

Built on IBM SoftLayer
Runs on top of IBM's leading infrastructure as a service.

Categories **Mobile** **Web** **DevOps** **Data** **Big Data & Analytics** **…and more**

IBM DevOps Services for Cloud
Open, integrated rapid development experience that scales

Git hosting
Store and manage the code for your application in the hosted Git repo.

Integrated Development Environment
Use built-in Web IDE, Eclipse, Visual Studio or leverage your tool of choice.

Agile planning & tracking, team collaboration
Easily share work and collaborate with team members.

Mobile quality
Improve mobile app quality through crash analytics, sentiment analysis, and feedback.

Continuous Integration
Continuously build, scan, and test code to improve quality and increase speed of delivery.

Deployment automation
Instantly deploy your applications.

Performance monitoring
Identify the early occurrence and root cause of performance issues, not just the symptoms, throughout the application lifecycle. Conduct code level diagnostics to identify bottlenecks and optimize application performance.

Innovate2014   < Innovate@SPEED >

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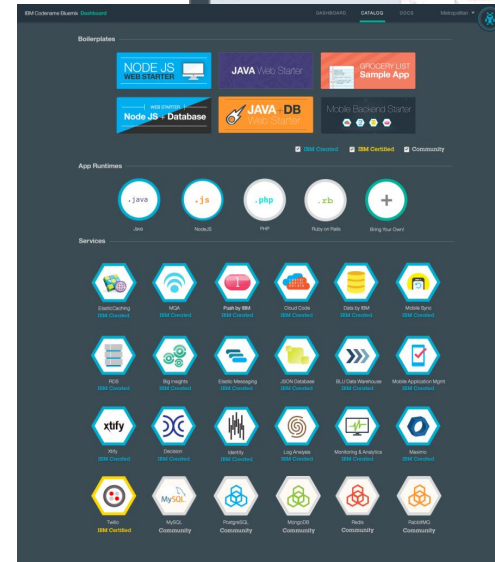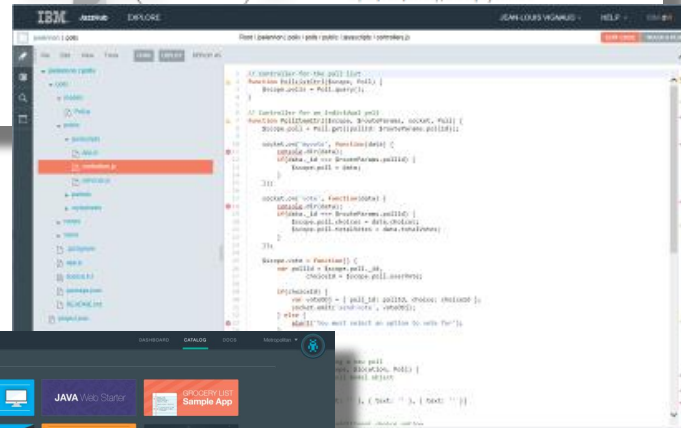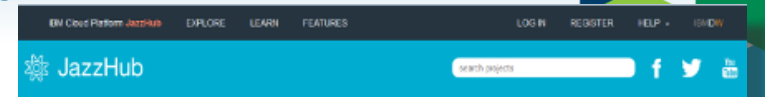
China Railways Corporation

scale
made with
mobile

Goal:

Shift **20 million online** users to mobile

Solution:

A scalable, security-rich **mobile app**

Day 1:
60,000 tickets sold

Peak season:
4 million tickets sold

In 2 months:
9 million app installs

IBM

Cool Factor

Before

After

Scale

400 servers allocated for peak holiday traffic

40 servers to start the season

Security

hacked!

app authenticity capabilities

Speed

native app: costly and cumbersome

0000 **1** 0000 one codebase: fast and easy

IBM Cloud: Think it. Build it. Tap into it.

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Visit us!

1 **8:45 AM Oct 2: IBM Bluemix: Build, Deploy and Test a Mobile App in the Cloud – IBM Workshop -** Leigh Williamson, IBM Distinguished Engineer, Mobile Software Development Strategy, Rational Software, **IBM**

2 **Visit the IBM Booth!**

3 **BART Demo: http://youtu.be/RH2g7MEbnIk?t=26m52s**