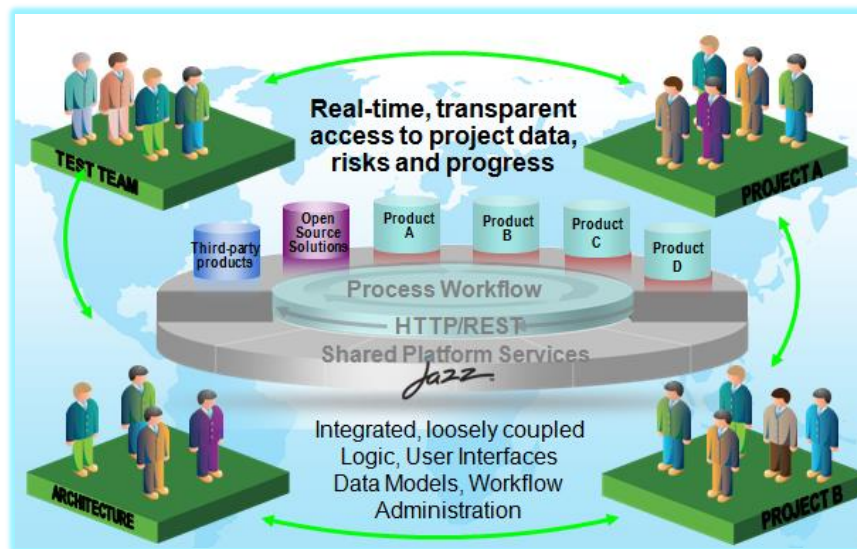
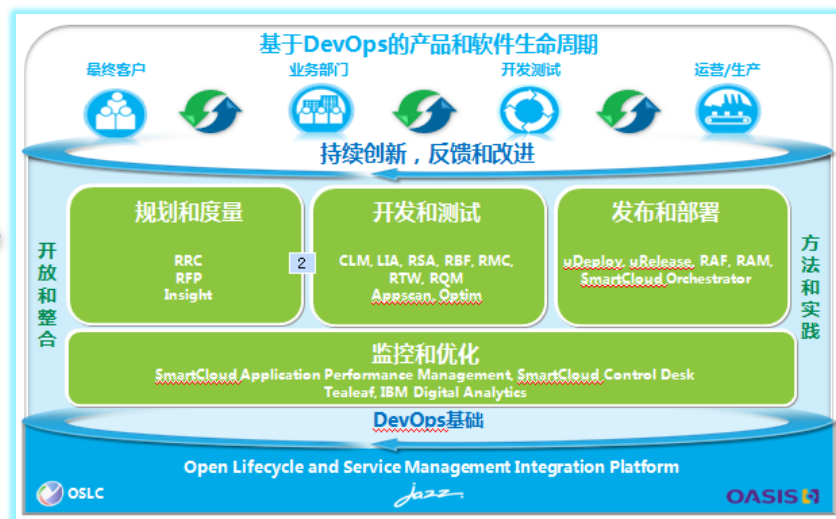
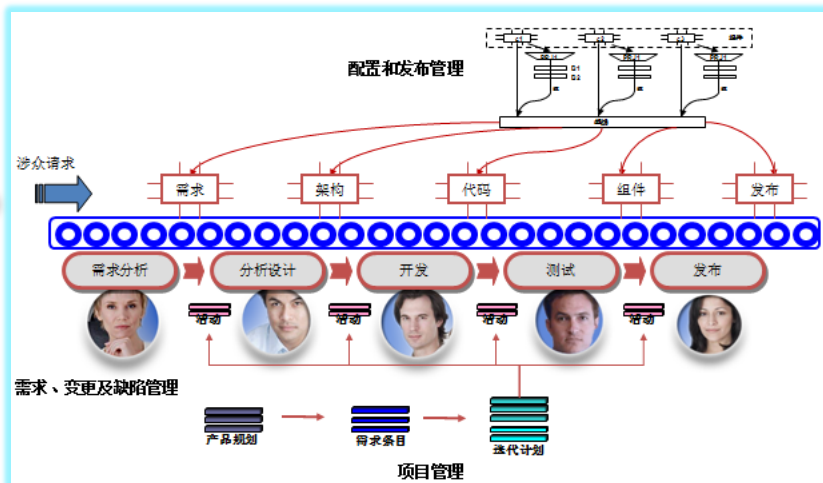


IBM Software

持续交付/DevOps和云

IBM 资深技术顾问 赵静

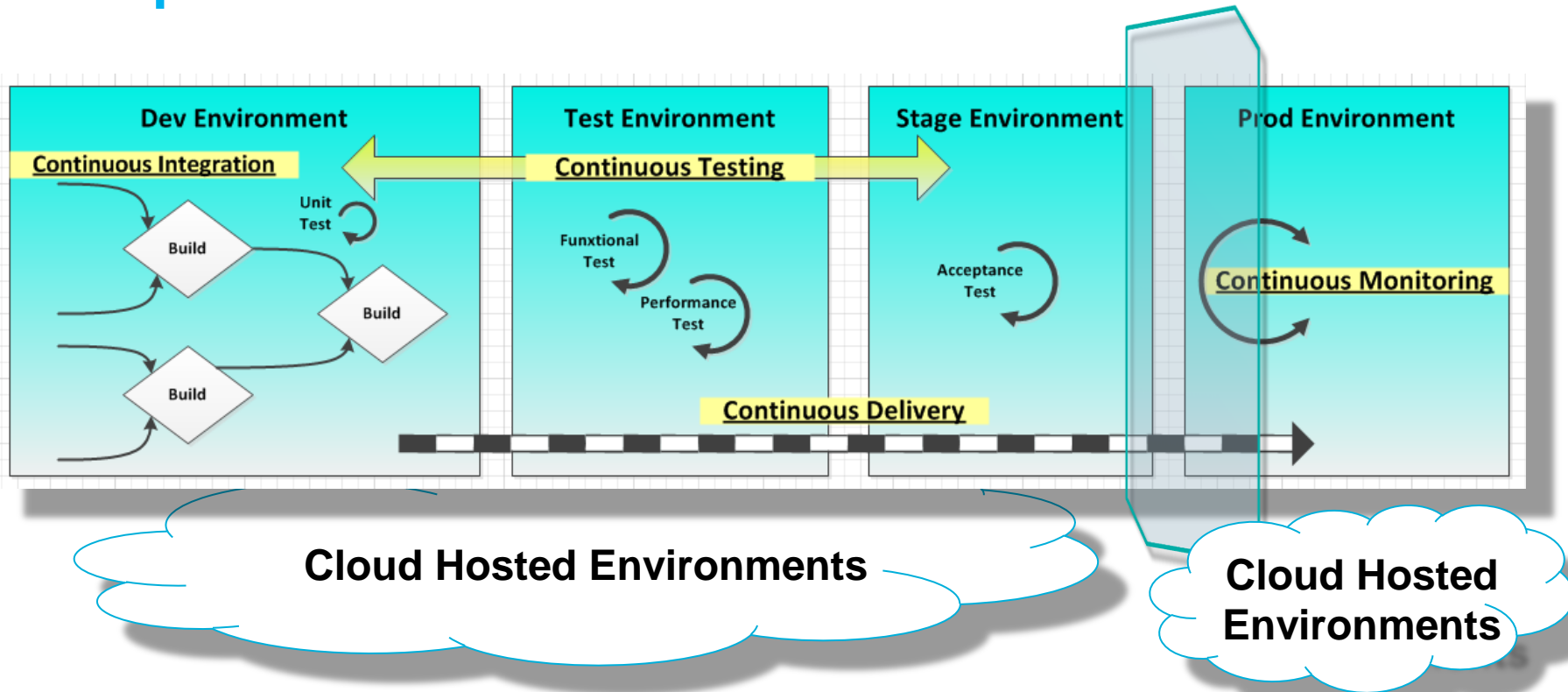
软件交付核心战略的转变历史



IBM DevOps架构

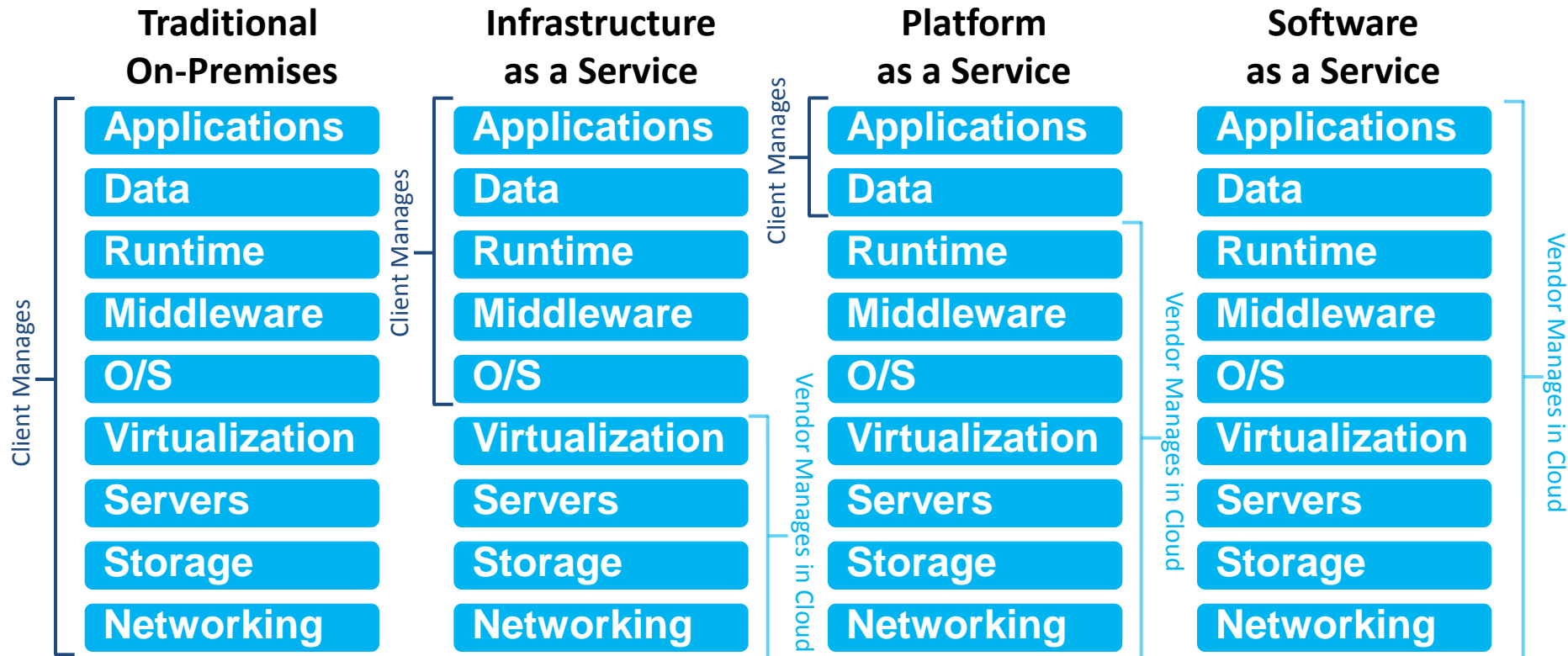


DevOps and Cloud



Dev-Test (pre-Prod)	Prod
On-Premises	On Cloud
On Cloud	On-Premises
On Cloud	On Cloud

云服务模型



Customization; higher costs; slower time to value

Standardization; lower costs; faster time to value

IBM云能力中Paas层面解析

--Rational品牌所关注的重心

Think it. Build it. Tap into it.

Process Optimized Platform as a Service

Application
development

Application
testing

Application
lifecycle
Management

Application
governance

Application on-
boarding

Continuous
delivery

Advanced Platform as a Service

Data caching
services

Auto scaling

Cloud
bursting

Workload
automation &
scheduling

Managed Platform as a Service

Identity
management &
security

Application
monitoring

Application
performance
monitoring

License
Management

Mobile
Management

Simple Platform as a Service

Provisioning &
automation
services

Middleware
pattern
deployment

Application
metering



Platform
as a Service

Public. Private. Dynamic Hybrid.

IBM云能力中Paas层面解析

--Rational品牌所关注的重心

Think it. Build it. Tap into it.

Process Optimized Platform as a Service

Rational Suite

RSA / RAD

RTW

CLM / RTC

RAM

RAF / AMC

UrbanCode
Deploy

Advanced Platform as a Service

IBM Pure Application Server

Cast Iron

SmartCloud
Workload
Scheduler

Managed Platform as a Service

Tivoli Identity
Manager

SmartCloud Application
Performance Management

IEM Software
Usage Analysis

Fiberlink
IEM

Simple Platform as a Service

SmartCloud Provisioning

SmartCloud
Cost
Management



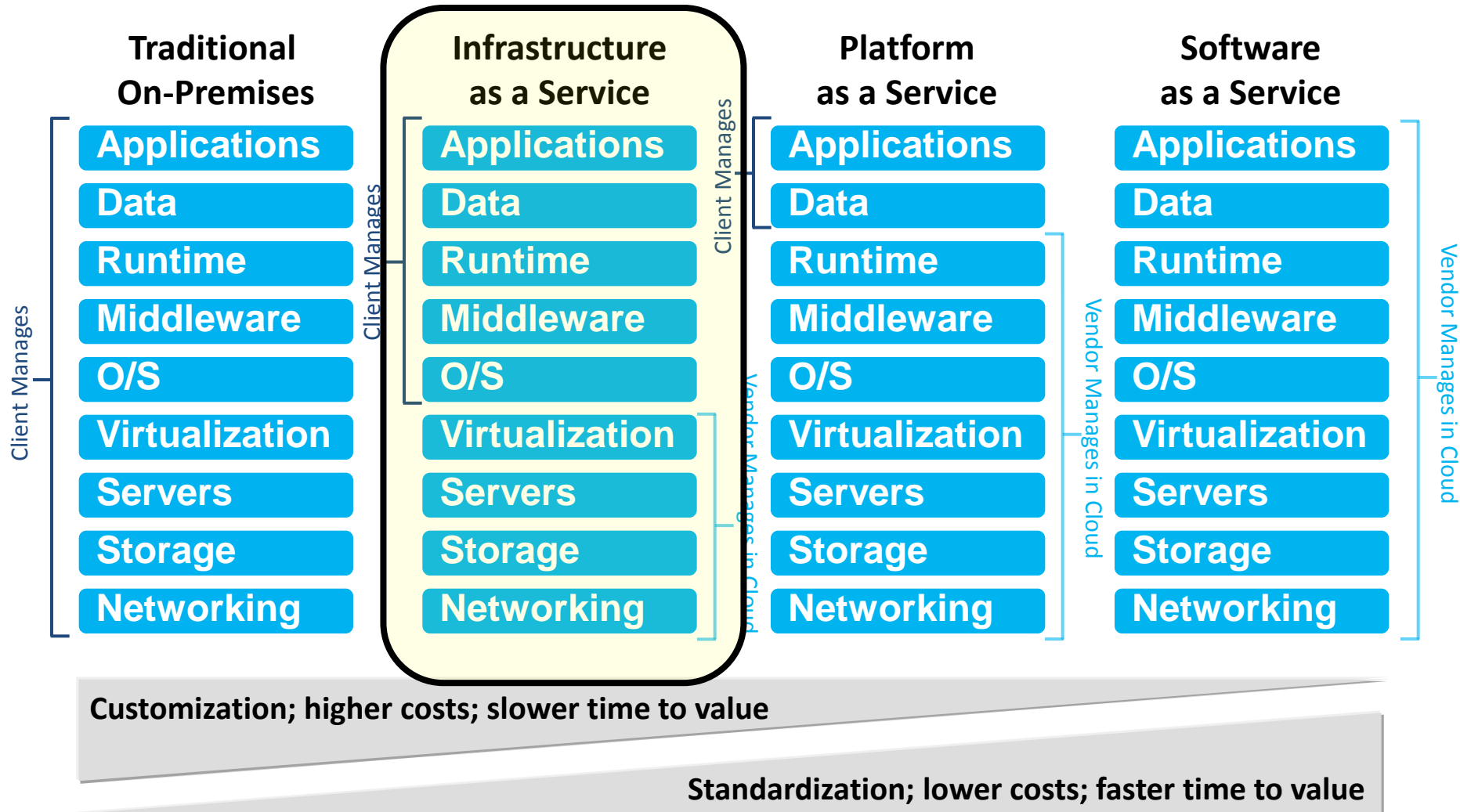
Platform
as a Service



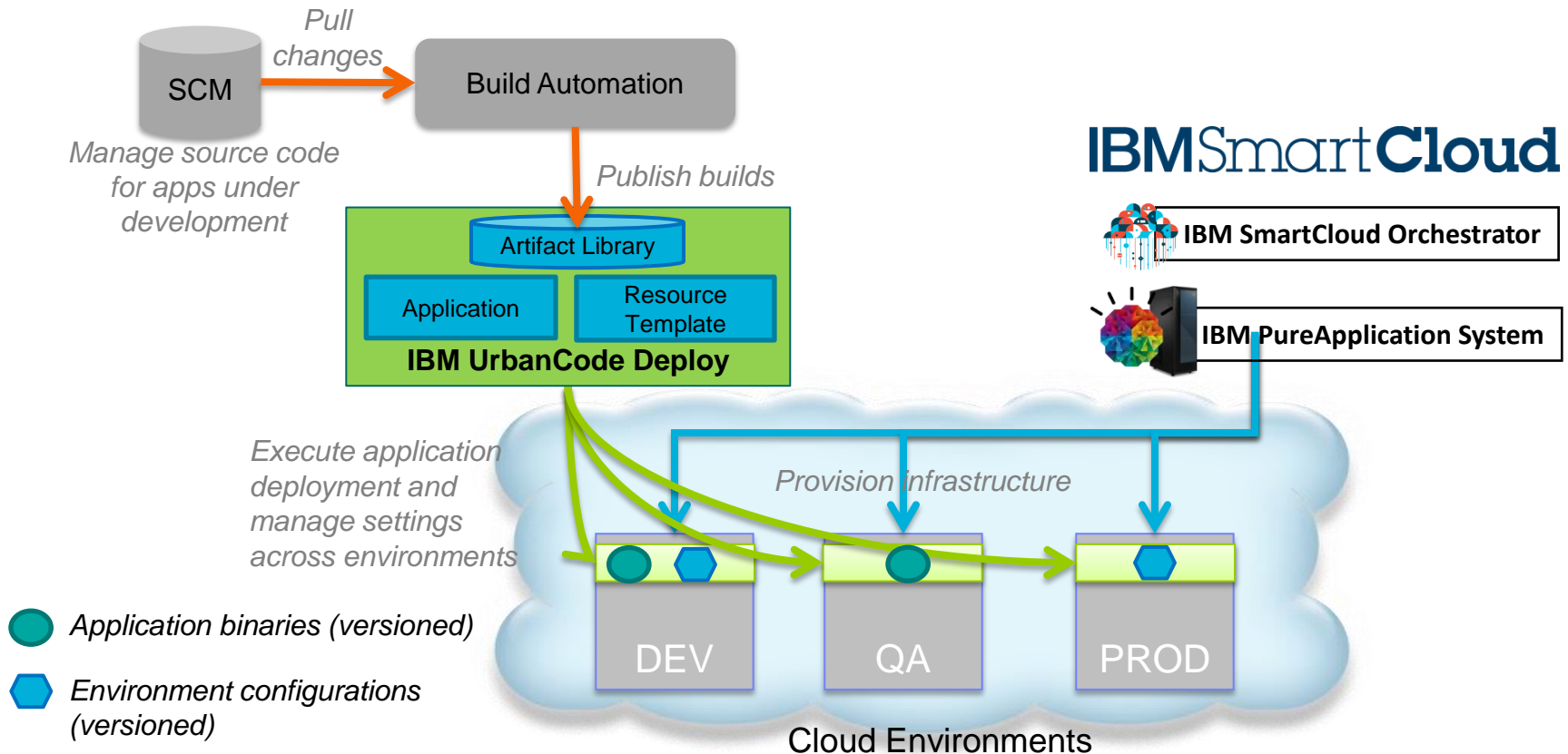
Infrastructure
as a Service

Public. Private. Dynamic Hybrid.

云服务模型 : Iaas

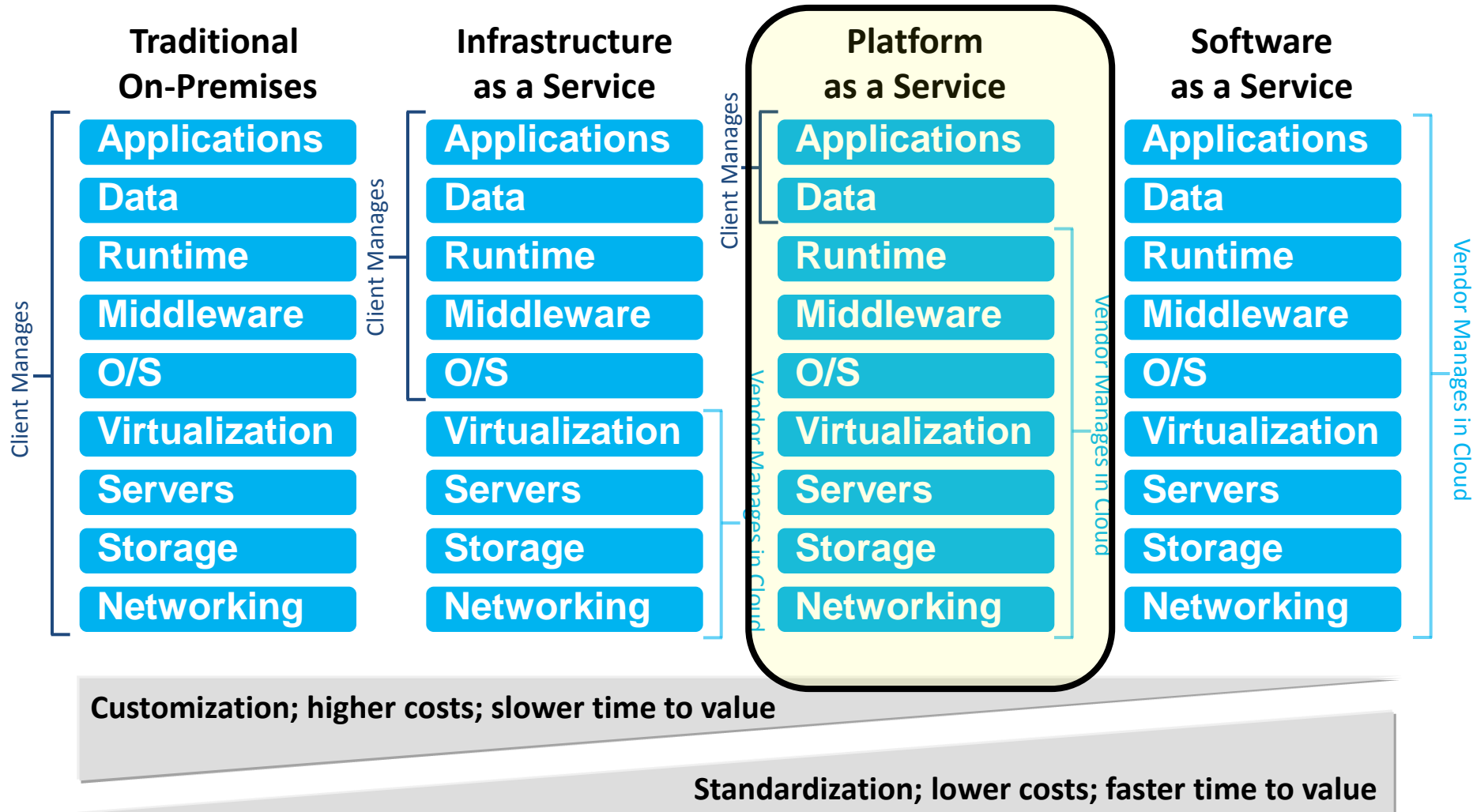


Continuous Delivery with Cloud: IaaS



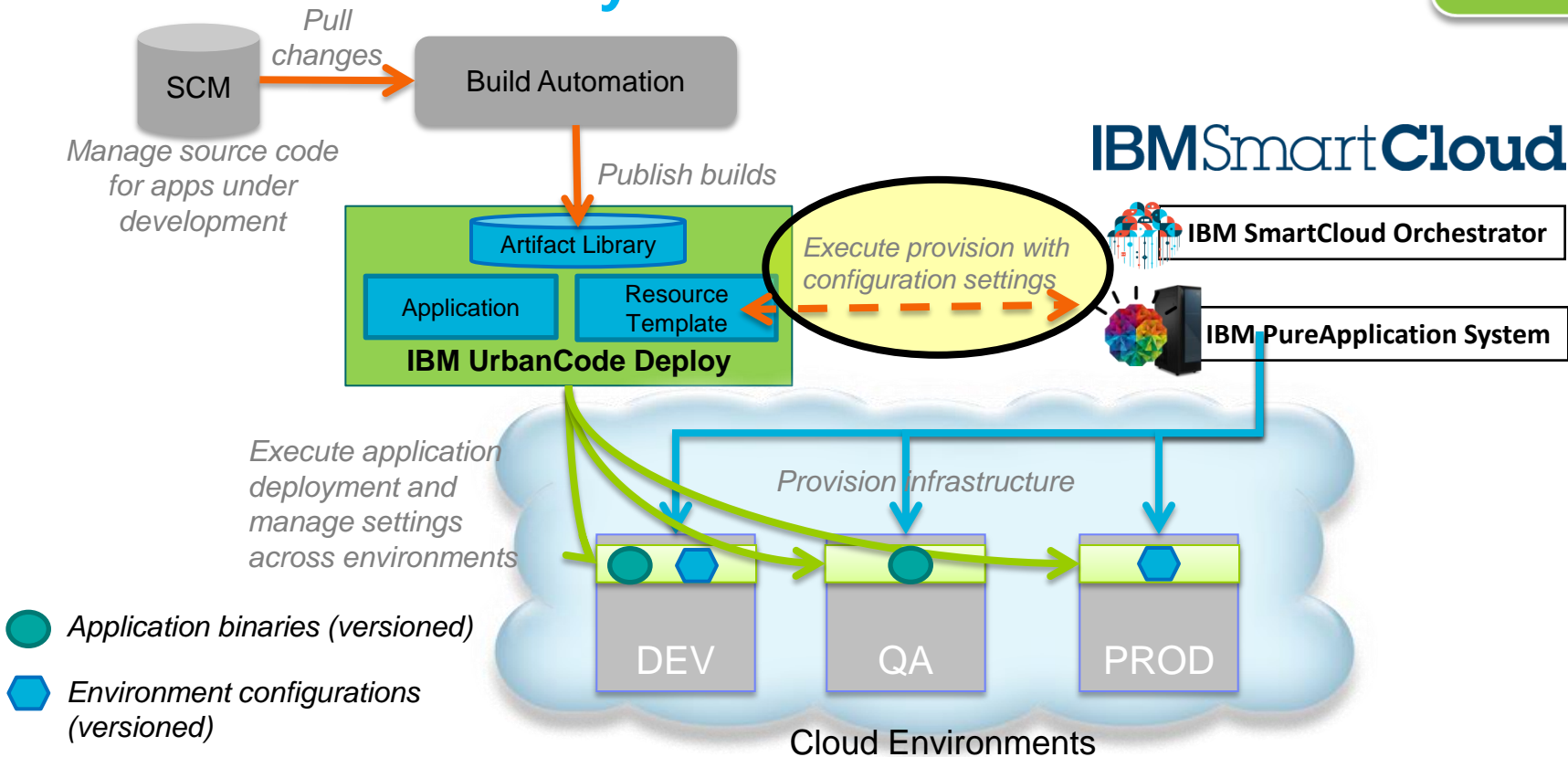
- **Cloud Platform provides base images to utilize as environment** – Instances can be configured for applications deployed
- **Deploy early and often to ensure high quality and faster releases using repeatable, reliable, and managed automation** - Seamless process flow for incremental, full stack provisioning and application deployment automation

云服务模型: PaaS



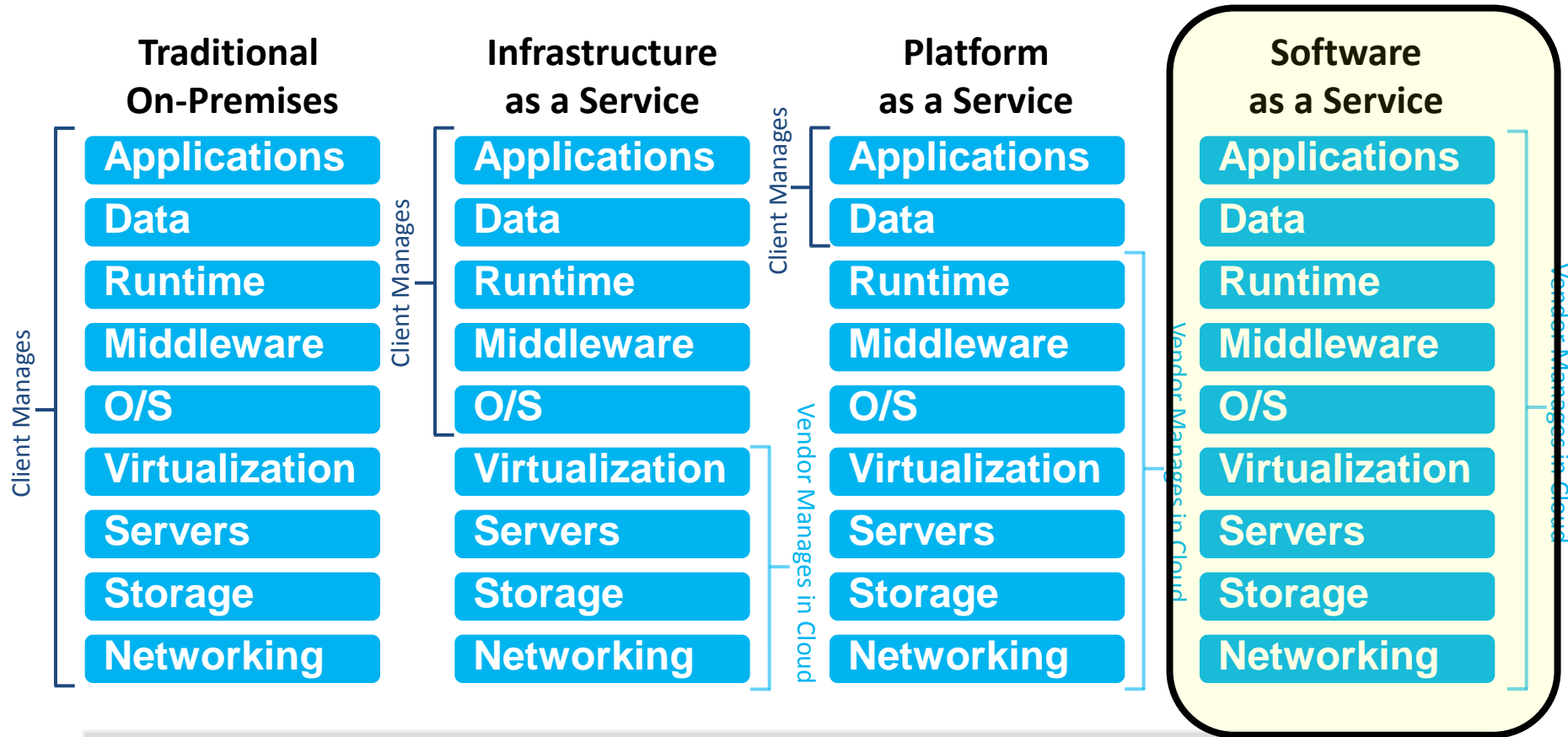
Continuous Delivery with Cloud : Paas

Release and Deploy



- **Automate provisioning of environments as part of the end-to-end delivery process** – Establish and automate deployment of Application Blueprint with resource templates imported from Cloud patterns.
- **Deploy early and often to ensure high quality and faster releases using repeatable, reliable, and managed automation** - Seamless process flow for incremental, full stack provisioning and application deployment automation

云服务模型: SaaS

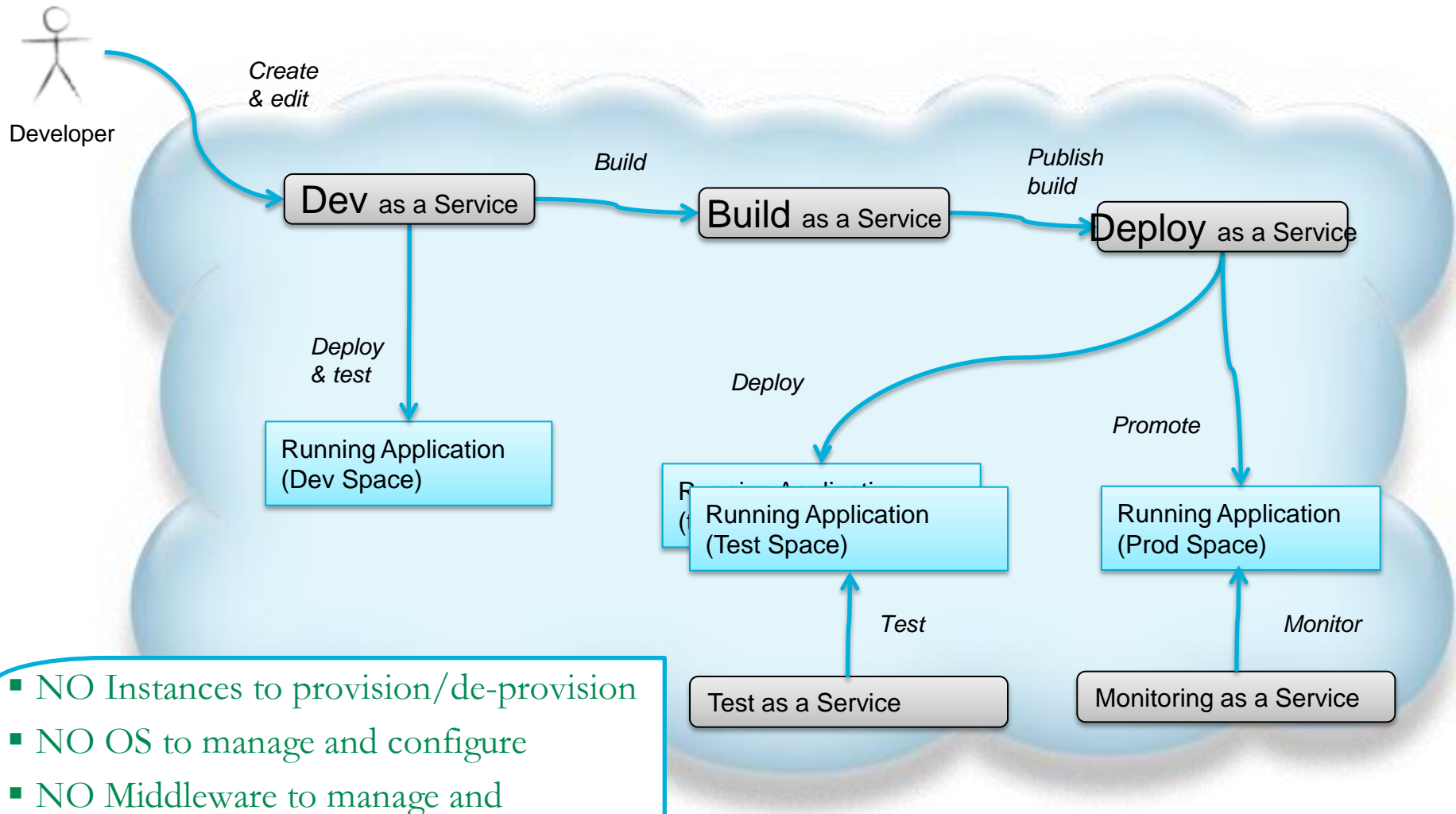


Customization; higher costs; slower time to value

Standardization; lower costs; faster time to value

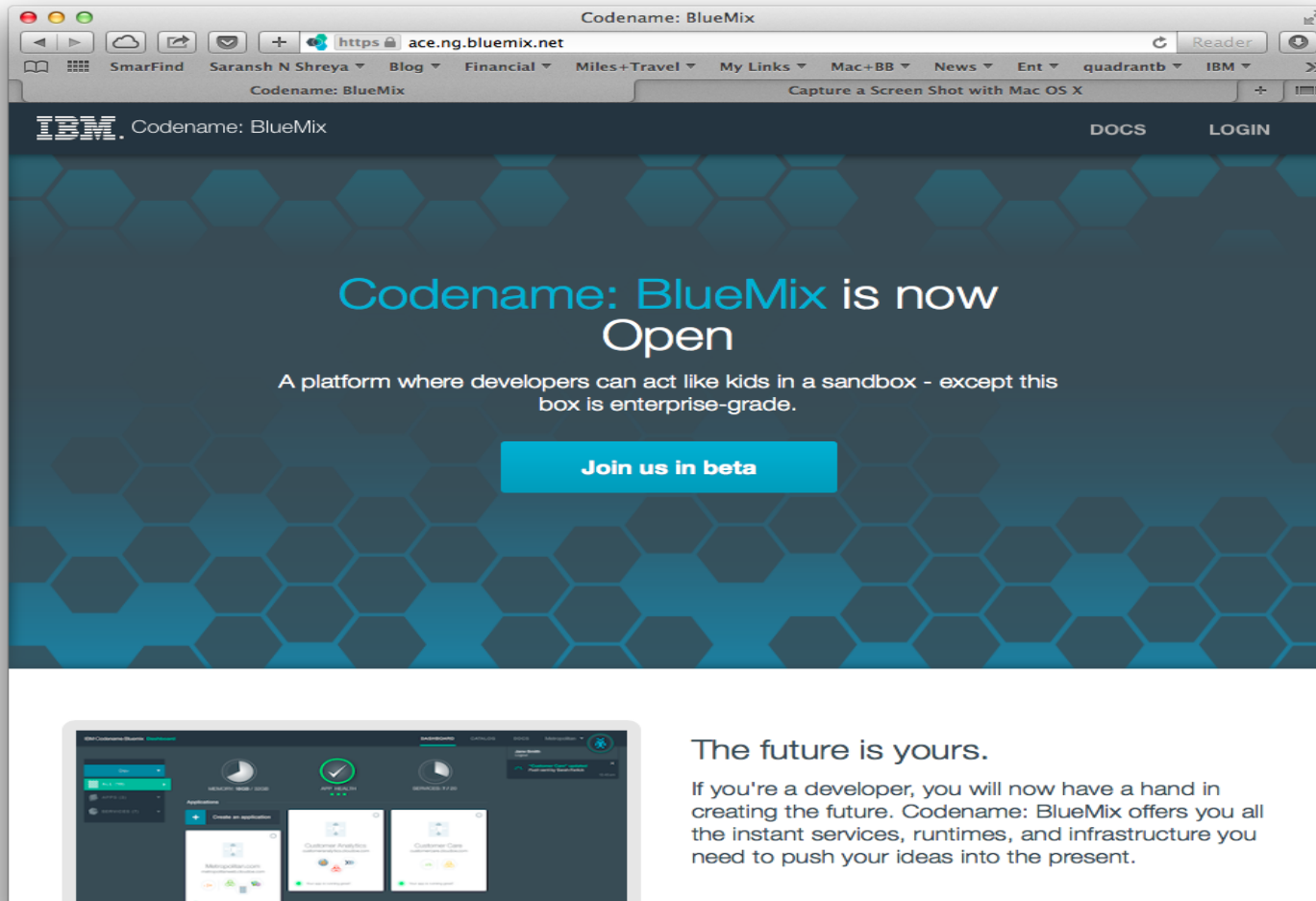
Delivery pipelines for SaaS

Everything is a service in the Cloud



IBM Bluemix: Now in Beta

<https://ace.ng.bluemix.net/>



Runtimes



Liberty for
Java



Node.js



Ruby



"Bring Your
Own
Buildpack"

Dev Ops



Monitoring
and Analytics



Git
Hosting



Deployment
Automation



Web IDE



Agile
Development

Internet Of Things



Historian



MQTT

Data Management Services



SQL
Database



JSON
Database



Mongo DB



MySQL



PostgreSQL



BLU Data
Warehouse



MapReduce

Mobile Services



Push



CloudCode



Mobile App
Mgmt



Mobile
Quality
Assurance



Mobile
Data



Twilio

Web & App Application



Data Cache



Session
Cache



Elastic MQ



Decision



SSO



Redis



RabbitMQ



Log
Analysis

DevOps Need #1



**“I want to build, deploy and
optimize mobile and cloud
applications quickly.”**

DevOps Services

Software development in the cloud



"I want to build, deploy and optimize mobile and cloud applications quickly."

- **Easy Access** - Get started for free. With Git hosting and the built-in Web IDE, it's zero to code in seconds.
- **Code Now** - Use the built-in Web IDE, Eclipse, Visual Studio, or your tool of choice.
- **Automated Deployment** - Auto-deploy your applications to IBM's cloud platform, Codename BlueMix.
- **Team Collaboration** - Share your work and collaborate through expert tools for Agile Development.

The main screenshot displays the IBM JazzHub web IDE interface. The top navigation bar includes links for EXPLORE, LEARN, FEATURES, LOGIN, REGISTER, and HELP. The main workspace shows a file explorer on the left with a project structure including 'polls', 'models', 'public', 'javascripts', 'controllers.js', 'services.js', 'routes', 'views', 'jazzhub', 'app.js', 'license.txt', 'package.json', 'README.md', and 'project.json'. The central editor displays JavaScript code for a poll application, including controllers for listing polls, creating polls, and handling votes. Below the main editor, three smaller inset windows are visible: 'Open Work Items by Type' showing a line graph of Task, Adoption Item, Enhancement, and Defect; 'Burndown' showing a line graph of Remaining Work; and 'Project Events' showing a list of recent events with timestamps.



“I want to build, deploy and optimize mobile and cloud applications quickly.”

使用DevOps Services 快速开发应用 示例

DevOps Need #2



**“I need to monitor the user
experience of my mobile and
cloud apps and
respond quickly.”**



"I need to monitor the user experience of my mobile and cloud apps and respond quickly."

Why do mobile apps get bad ratings?

Crashes

Security concerns

Slow load times

Freezes

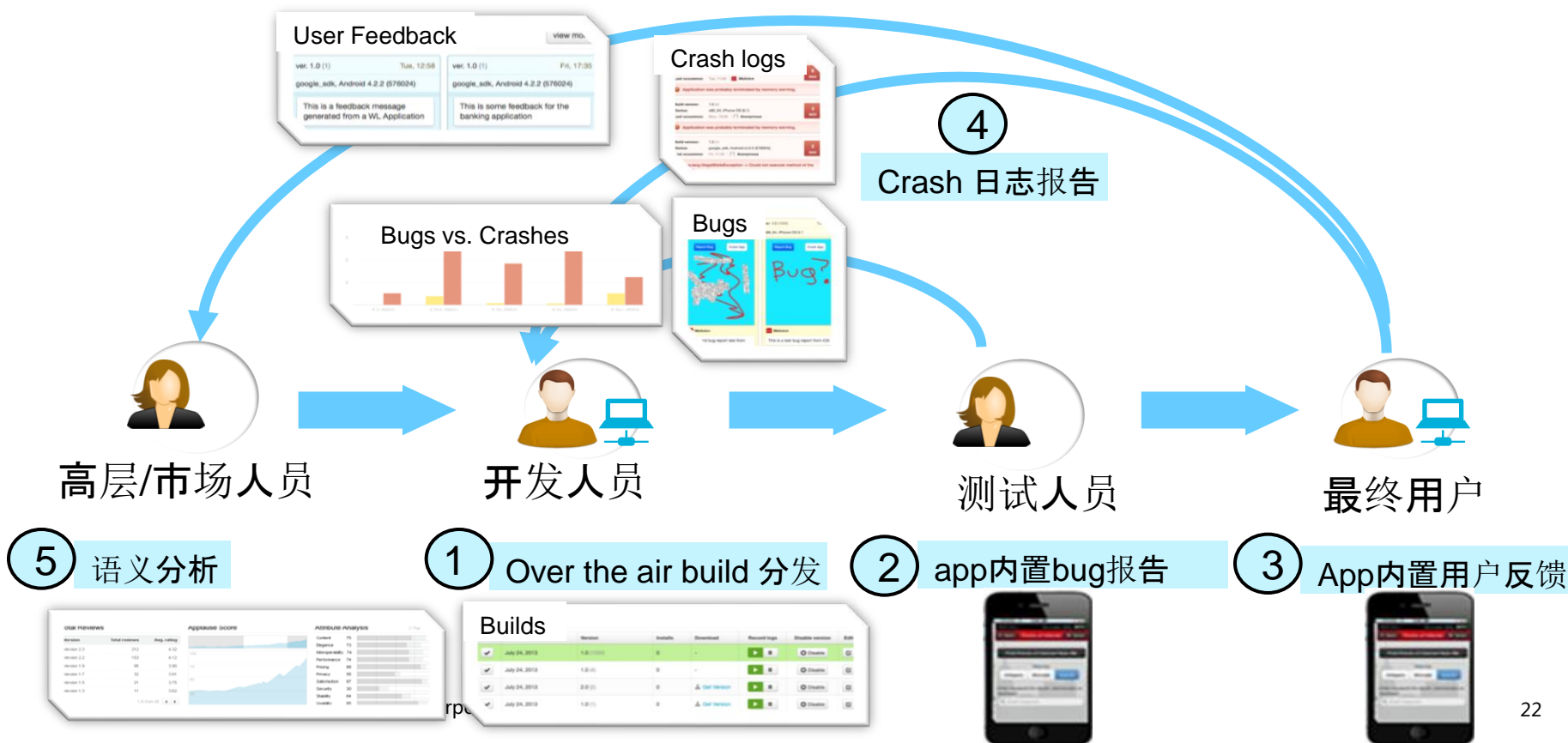
Poor user experience

Displays an error

Memory consumption

IBM Mobile Quality Assurance (MQA) *Open Beta*

- **产品定位和价值**：收集用户反馈和质量度量值，快速改善用户体验和app质量。
- **使用场景简介**：IBM MQA产品可以针对用户已有的Mobile app进行插桩，去捕获测试人员或者最终用户的体验，包括带有上下文的应用崩溃报告、内置于app的bug报告、内置于app的用户意见反馈和其它质量度量，这些信息被收集到MQA SaaS服务中，团队就可以根据产品同时提供的语义分析能力，利用这些数据来优化现有工作，进行快速改进。





**"I need to monitor the user
experience of my mobile and
cloud apps and
respond quickly."**

使用MQA Services 进行Bug收集 示例

总结：持续交付管道

