



# **Cloud**

## **is a Growth Engine for Business**

**Peter Edwards**

**Cloud & Smarter Infrastructure Software  
ASEAN**

# The Future is a **Composable** Business

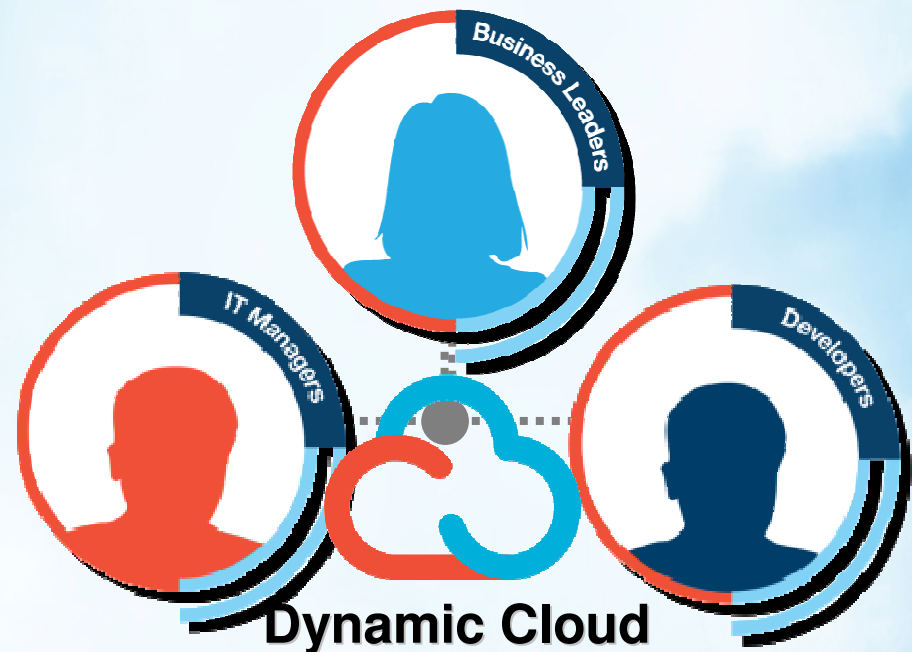
- Restless reinvention and process innovation
- Better decision making from actionable insight
- Speed to market



# The Path to Composable Business

# IS Dynamic Cloud

## Composable Business





# Dynamic Cloud

The ability to dynamically consume, interconnect and orchestrate all types of clouds and IT to speed innovation and adapt to changing business conditions.

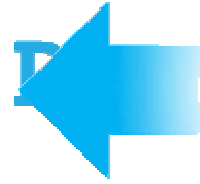


**Dynamic Cloud**

# This is The Cloud of the Future

*...Dynamically consume, interconnect and orchestrate all types of clouds and IT...*

Off Premise



On Premise

Benefits

- Rapid access
- Low entry cost
- Highly elastic

Dynamic Cloud

Benefits

- Fully customizable
- Robust management
- Scalable

Supported by rich APIs for on-prem & off-prem

Encapsulated expertise into patterns

Open, extensible hybrid model

# Cloud is **CHANGING** The Way Work Gets Done



**Choice of  
market leading  
services**



**Robust platform  
for service  
composition**



**Self-optimizing  
hybrid environment**

**Today's Business and  
IT Leaders Can't Wait to**

**Innovate.**

**And Don't Have to.**



# Speed and Innovation are Needed by Front-Office and Back-Office

## Benefits of SaaS

Reduce TCO (vs. on-premise)



Gain competitive advantage



Chief Procurement Officers  
Chief Human Resources Officers  
Chief Financial Officers  
Chief Information Officers  
Chief Marketing Officers  
VPs of Sales  
Heads of Customer Care  
Mayors & City Planners  
General Counsel

Source: IBM Study: Champions of Software as-a-service:  
How SaaS is fueling powerful competitive advantage, 2014





# IBM

## Leads the Industry in Cloud Business Services

100+ apps serving unmatched breadth of C-Suite roles

24 of top 25 Fortune 500 use IBM SaaS



ANNOUNCING  
**Powerful New**

**Cloud Services for  
Business and IT**

**NEW**



**IBM Mobile Web Push (Xtify)**



**IBM Kenexa Talent Suite**



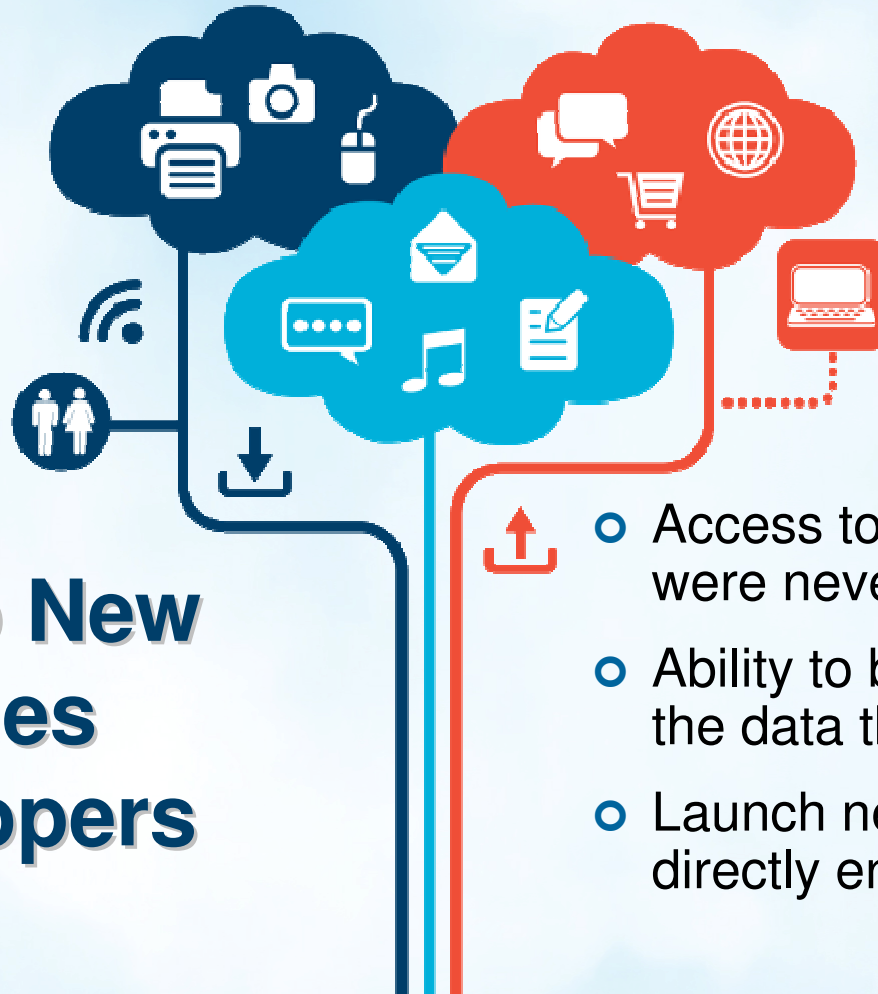
**IBM Watson Discovery Advisor  
IBM Watson Analytics  
IBM Maximo Asset Management  
IBM Maximo Inventory Insights**

**IBM BLU Acceleration for Cloud  
IBM Connections  
Extreme File Transfer (Aspera)**

Great Innovation  
Runs through a  
Developer's  
Hands



# Cloud Opens Up New Possibilities for Developers



- Access to services that were never available before
- Ability to bring and access the data that you need
- Launch new initiatives to directly engage your clients

## Challenges that we hear...

“I don’t want my developers managing infrastructure. I need to **eliminate drudgery** and get them writing code.”

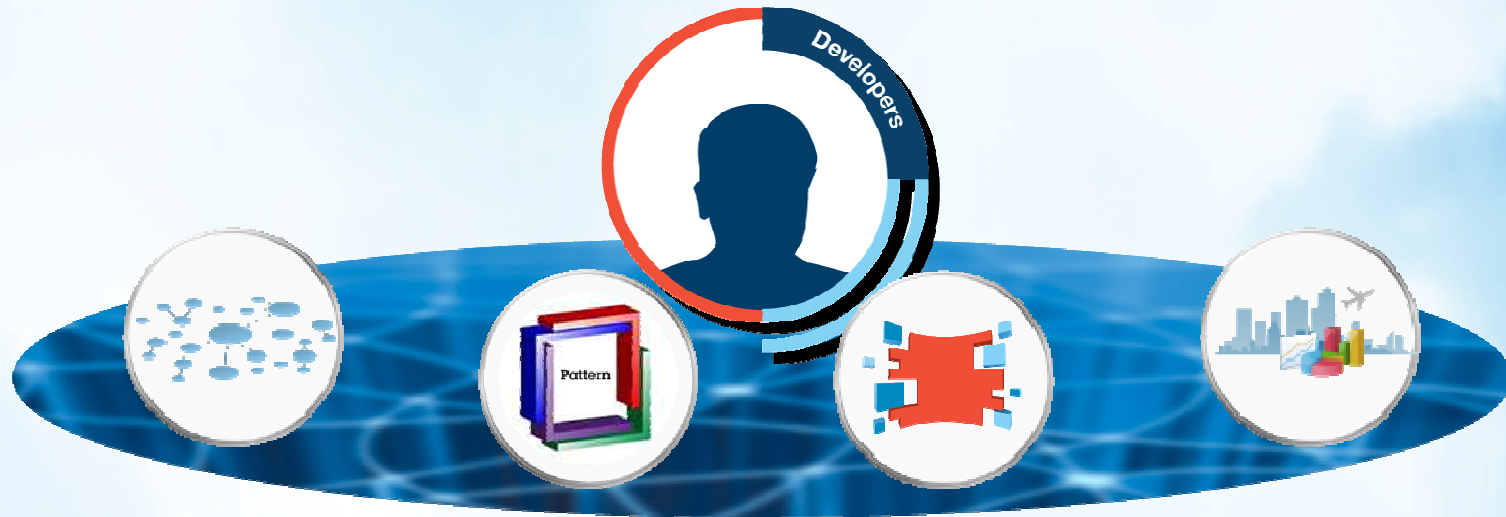
“I am nervous we are spending time and money **integrating things** that should naturally fit together”

“I have 250 open change requests with business value I need to deliver and **experiment more**.”

“I am losing developers because they don’t have access to the **open technologies** and tools they want to use.”

A True Cloud  
Experience  
Requires

# THE ENTIRE CONTINUUM



**Infrastructure  
Services**

**Defined Patterns  
Services**

**Composable  
Services**

**Business  
Services**

# Redefining Cloud Development

## Software Patterns on SoftLayer

easily extend  
existing applications  
to the cloud

## Codename: BlueMix

new platform-as-  
service combining IBM  
software, third-party  
and open technologies



THE NoSQL database-  
as-a-service for  
mobile and web  
applications

**NEW**

## ANNOUNCING Software Patterns on SoftLayer



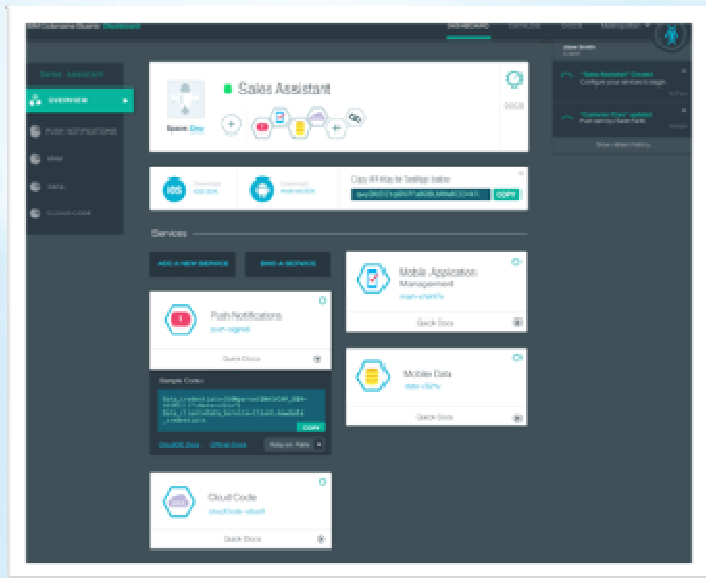
Defined Patterns  
Services

- 200+ application and middleware patterns available
- Pre-integrated environment optimized for applications
- Accelerates and simplifies running existing applications on the cloud



**NEW**

# ANNOUNCING Our New Composable Environment Codename: **BlueMix**



- Run apps in any language
- Built on open standards
- Provides integration services to systems of record
- Designed for mobile
- Provides DevOps services for integrated dev experience

**NEW**

## Level Up with Unmatched Services

From Codename: **BlueMix**



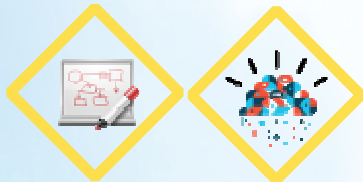
### Mobile

Data api + app  
management  
+ quality assurance



### Big Data & Analytics

From in-memory data store  
to Hadoop analytics



### DevOps Services

Integrated developer  
experience for mobile  
and cloud apps



### Integration Services

Access to systems of  
records and enterprise data

# List of Cloud Platform Services

## IBM, Open Source and Third Party APIs






### Runtimes















Java Liberty    Node.js    Ruby on Rails    "Bring Your Own Buildpack"

### Dev Ops

Monitoring and Analytics    Git Hosting    Deployment Automation    Web IDE    Agile Development

### Data Management Services












IBM Relational Database    IBM JSON Database    Mongo DB    MySQL    PostgreSQL    Mobile Data    Mobile Sync    BLU Data Warehouse    MapReduce

### Mobile Services



















Push    CloudCode    Mobile App Mgmt    Mobile Quality Assurance    Twilio    Internet Of Things    Historian    MQTT

### Web & App Application

Data Cache    Session Cache    Elastic MQ    Decision    SSO    Redis    RabbitMQ    Log Analysis    Mobile App Management

# Integrate Into Existing Applications

Security connect to and leverage data from your existing systems

**NEW**



API Management



Cast Iron Integration



Secure Connector



Data Mapper



Private API Catalog

Get featured tweets and purchase history

← Database Transformation Credit Check → End Edit

SOURCES TRANSFORMATIONS TARGETS

Choose the data you need

Add a data source

Field	Type	Sample
birth_day	#	11
birth_month	#	02
birth_year	#	1977
first_name	abc	John
last_name	abc	Smith
ssn_esp_num	abc	555-55-1234

Which method do you need to use?

checkCredit

Parameter	Type	Sample
birthDate	abc	02-11-1977
firstName	abc	John
lastName	abc	Smith
ssn	abc	555-55-1234

Canvas Documentation

100%

**The Future is Yours**  
**Get Started On It**

**Join** the open beta

[www.bluemix.net](http://www.bluemix.net)

# ANNOUNCING THE NoSQL Database-as-a-Service

**IBM offers a full range of  
database services for  
cloud developers**

BLU Acceleration

MapReduce/Hadoop

SQL Database

JSON Database

Mobile Data

**NoSQL Database**



**Cloudant**

[www.cloudant.com](http://www.cloudant.com)



- **Rapidly create next generation web and mobile apps**
- **Built-in replication and sync for DR, HA and pushing data close to the users (mobile devices)**
- **Unlimited scalability**

# ANNOUNCING The Cloud Foundry Foundation

**Cloud Foundry is the industry's Open PaaS and provides a choice of clouds, frameworks and application services**



**CLOUD  
FOUNDRY™**

Founding Members:

**IBM**



**SAP**

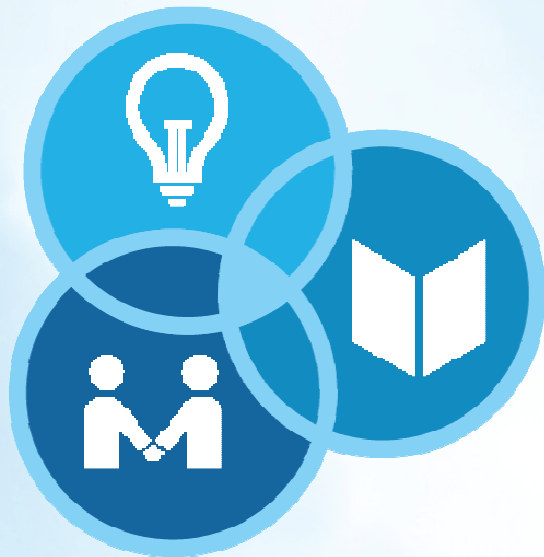
**vmware**

**Pivotal**

**EMC<sup>2</sup>**



# Underpinned by a Strong **Developer Ecosystem**



## **Community**

- 4M+ developerWorks members
- dev2dev support community with 1,000s of how-to assets
- “How to build an app with BlueMix in minutes”
- Showcase peer clients and best practices

## **Entrepreneurship**

- Global Entrepreneur program, 1,000+ startups

## **Mentoring**

- 3,000+ local events across 43 innovation centers, 100 universities; 200 faculty; 2,000+ students in 20 countries





IT Manager

Will Archi  
Move Yo

Bold  
akes



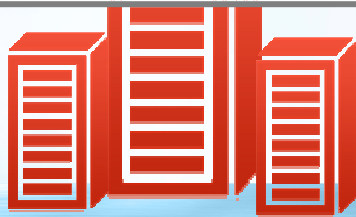


Maintenance &  
Optimization



Innovation

**~70%** of IT budgets spent  
maintaining systems



**Maintenance**



**85%** of new applications  
will be deployed  
via the cloud



**Innovation**

Source: IDC; Converged Systems: End-User Survey Results presentation;  
September 2012; Doc #236966

Source: IDC, Five Steps to Successful Integrated Cloud Management,  
May 2011

# Dynamic Cloud

Helps IT Strike **the Balance**



Maintenance &  
Optimization



Innovation

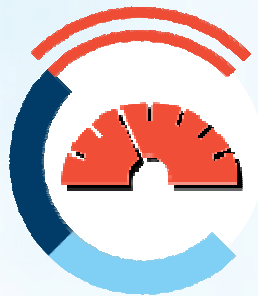
# There is no Dynamic Cloud without...

## VISIBILITY



See the services,  
workloads and resources  
across a hybrid  
environment

## CONTROL



Manage changes,  
performance &  
security

## AUTOMATION



Orchestrate a dynamic  
hybrid cloud

# IBM Systems Management as-a-service

- Designed for the IT practitioner
- Plugs into your existing infrastructure
- SaaS or On-premise

**NEW**

## ANNOUNCING

  
**Application  
Performance**

VISIBILITY

  
**IT Service  
Management**

CONTROL

  
**Workload  
Automation**

AUTOMATION

Optimized on **SOFTLAYER**<sup>®</sup>  
an IBM Company

# Enabled by workload-optimized infrastructure services

**NEW**

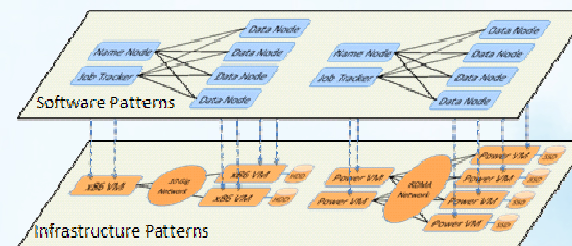
## IBM Cloud Orchestrator Extended to support SoftLayer

- *Pattern and policy based optimization*
- *Enterprise cloud management platform*

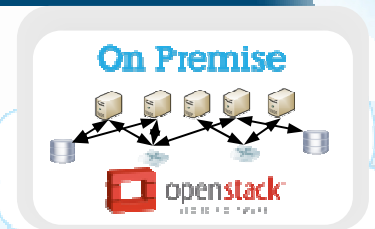
**NEW**

## IBM Platform Computing Cloud Service on SoftLayer

- *Easy-to-manage unified grid on and off premise*
- *Elastic scale across cloud for compute and data*



**Optimized Infrastructure**



**Public | Shared | Dedicated | Private | Traditional**

# IBM is a Leader in Open Technology



## Leader

in governance, code and design contributions

OpenStack now has

**14,186+**

individual members, surpassing Linux growth/size

Founding member & platinum sponsor



CLOUD  
FOUNDRY™

OASIS   
TOSCA

“TOSCA v1.0 is now an OASIS standard” *Nov. 2013*

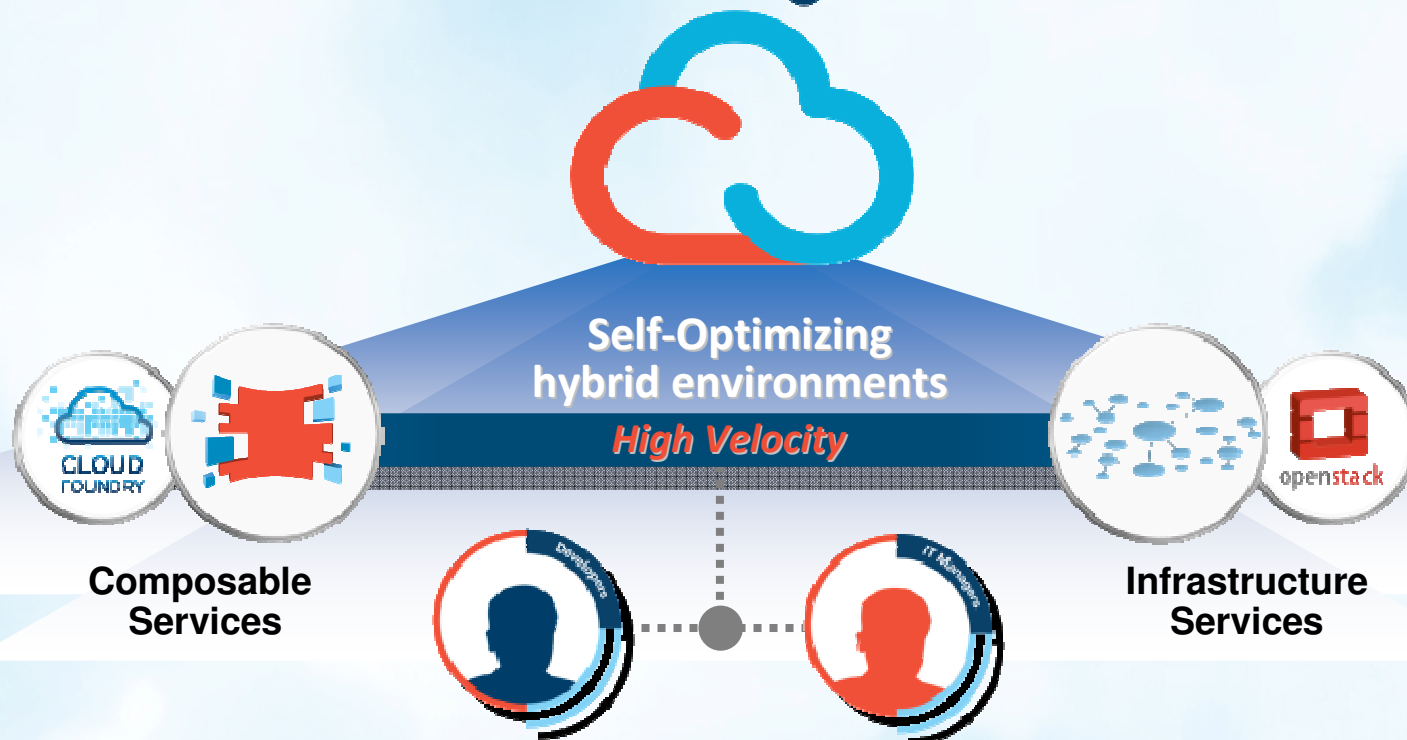
IBM Cloud Reference Architecture v3



- **2500+** certified architects
- Leveraged by hundreds of our clients
- Voted in top 10 industry certifications

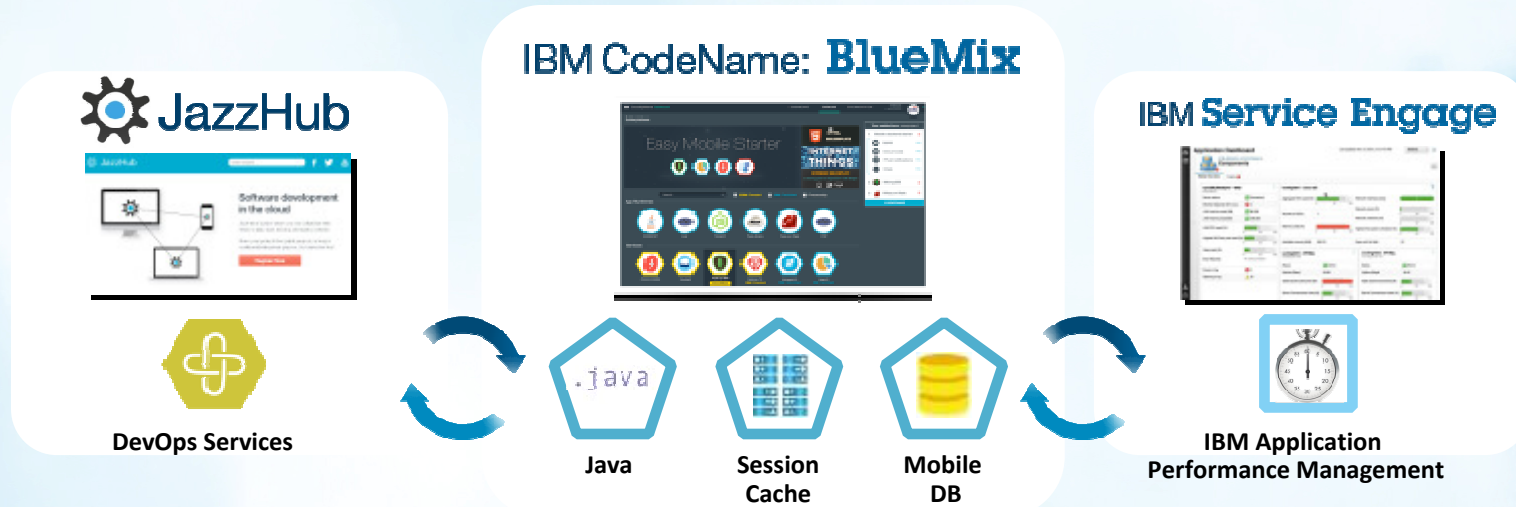


# Leaders are Reinventing businesses with the next generation Cloud



# Rapidly delivering composable services leveraging devOps

*...Businesses can react quickly to test new markets  
and deliver accelerated business value*



**Continuous optimization to drive better business outcomes**

# IBM “as-a-service” Empowers Innovation



**Fuel the front and  
back office**

**New SaaS Services**



**Rapidly develop new  
cloud applications**

**Codename: BlueMix**

**Accelerate existing  
applications to the cloud**

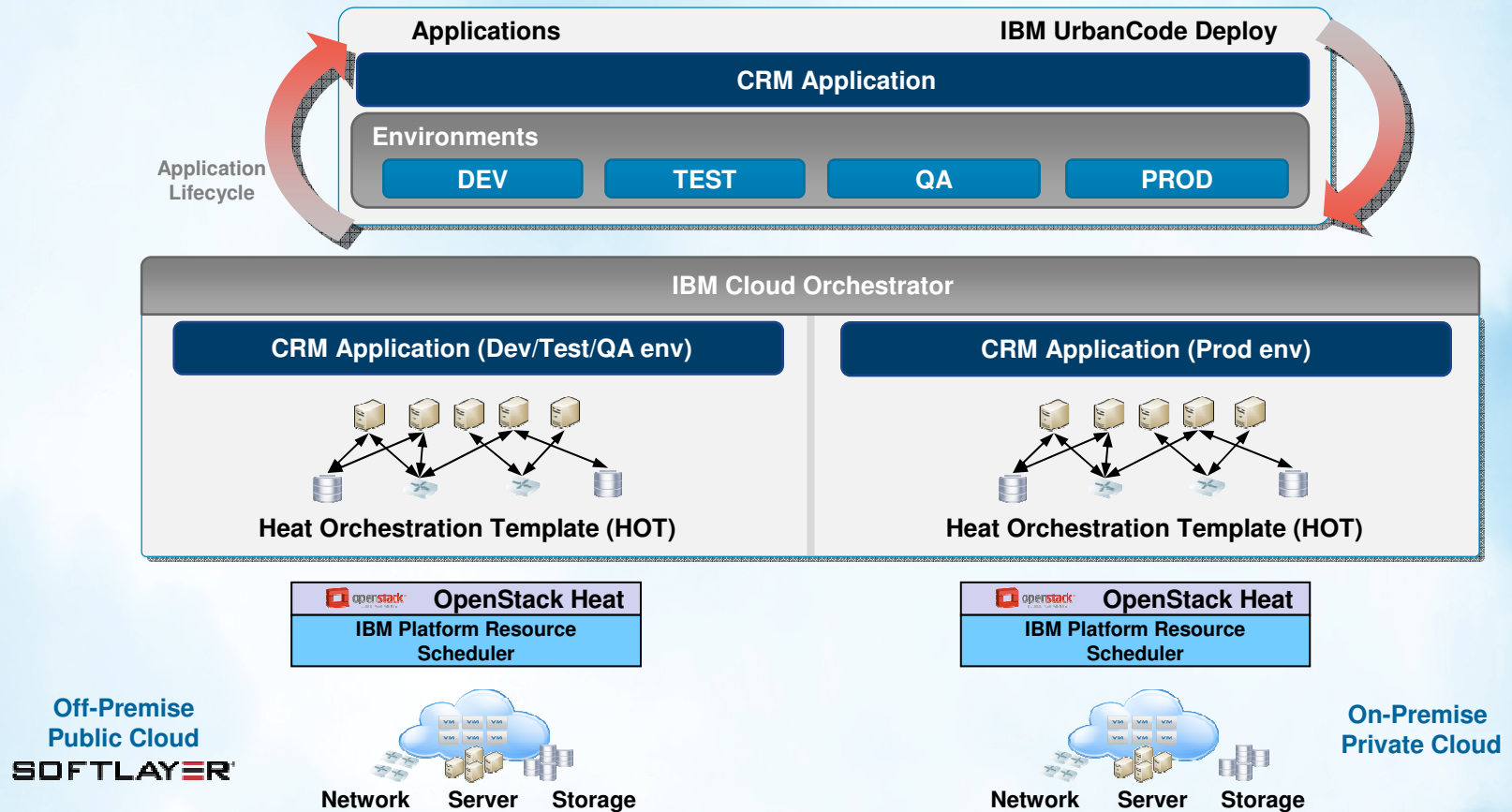
**Software Patterns on  
Softlayer**



**Simplify management  
of your dynamic cloud**

**Systems Management  
“as-a-service”**

# Open Technology In Action





# **Cloud**

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