

# Practically applying lessons from IBM's DevOps Transformation

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# Our challenge:

Implement a DevOps methodology that breaks down silos within development & operations functions of the organization, addressing the practices & challenges that disrupt execution, by bringing the flexibility & speed of a startup to the enterprise.

Disrupt, or be disrupted

A photograph of a vintage IBM mainframe computer system. Two people, a man in a brown coat and a woman in a dark suit, are standing in front of the machine, looking at its components. The mainframe is housed in a large, light-colored metal cabinet with various panels and equipment visible. A prominent "IBM" sign is mounted above the entrance to the room where the machine is located.

At IBM, we  
started  
with a  
design thinking  
approach

Cloud  
changes  
everything

Code,  
Community  
& Culture

Design  
Thinking

Cloud changes  
everything by enabling  
a new era of innovation

Code,  
Community  
& Culture

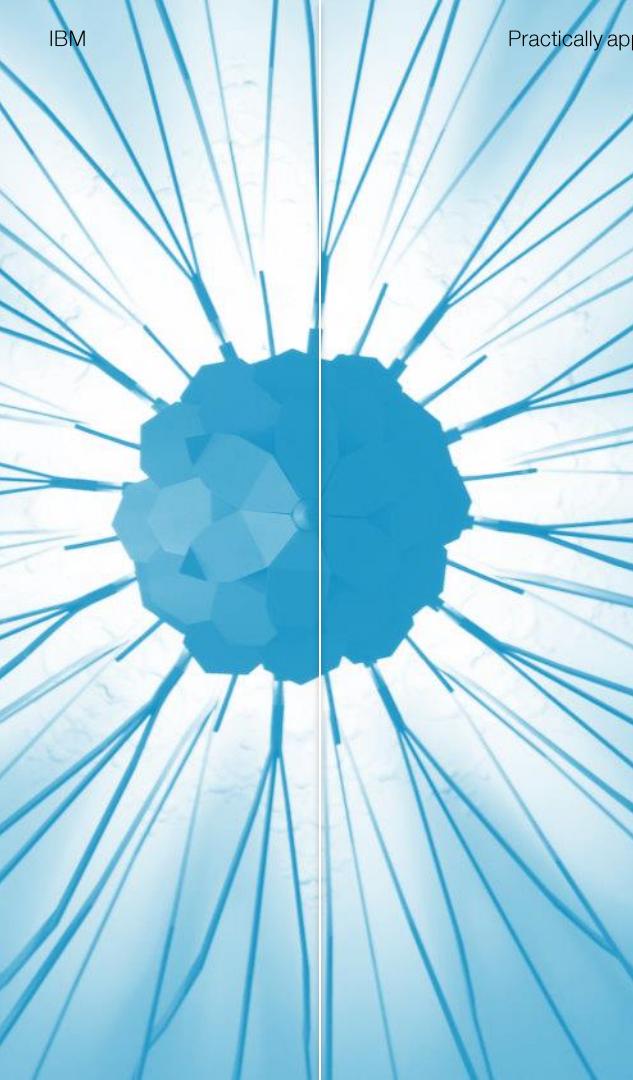


# Design Thinking

Cloud changes everything

Code, community & culture are the catalyst





# IBM's transformation story

2000+ Developers

100+ squads

30+ bootcamps

8 core tools

35+ tools in the tool chain

A few early results...

300% increase of  
“pure coding time”  
Cloud Services  
developers

IaaS Services team  
reduced new code  
deployment time  
from 32 hours... to  
6 hours... to  
minutes

Watson developers  
compressed release  
frequency from  
months to every 3  
weeks

# IBM is changing the way we work



Small focused squads give us great flexibility & speed

"I think we saved ourselves 6-12 months delivering containers & logging on Bluemix"

- Software Development, Bluemix Cloud Foundation Services



From Scrum to Kanban for continuous delivery

"Kanban and the pull model have reduced cycle time and enable us to see rapid results"

- Software Development, Cloud Infrastructure Services

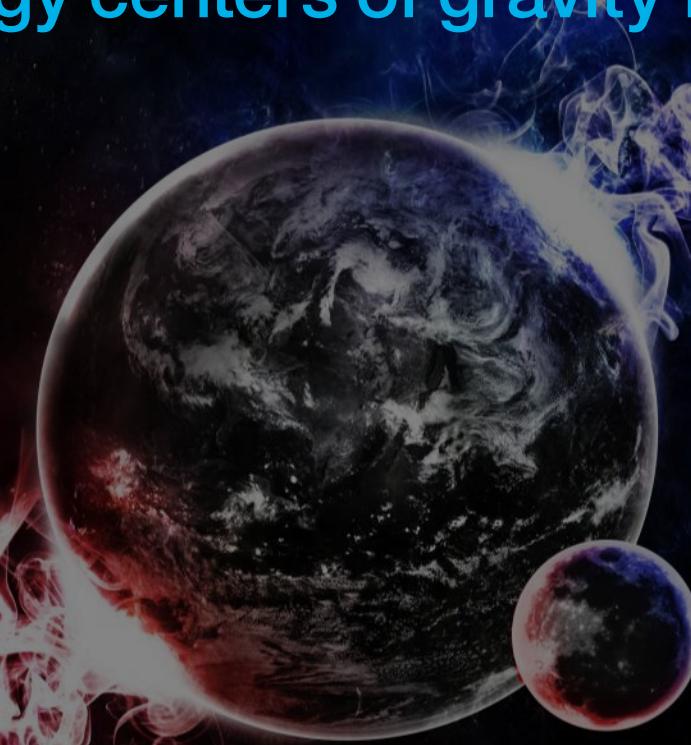


Slack integration for unattended automation

"reduced troubleshooting down from hours to minutes & increased work/life integration"

- Continuous Delivery Architect, Cloud Infrastructure Services

# Open technology centers of gravity foster skill & ecosystems...



... enabling innovation without boundaries

# All great foundations come from a well defined set of building blocks



# Use design thinking to incrementally deliver awesome products



Learn more:

[ibm.com/devops/method/category/think](http://ibm.com/devops/method/category/think)

*Pivoting fast is better  
than failing fast*



# Transform + innovate with speed

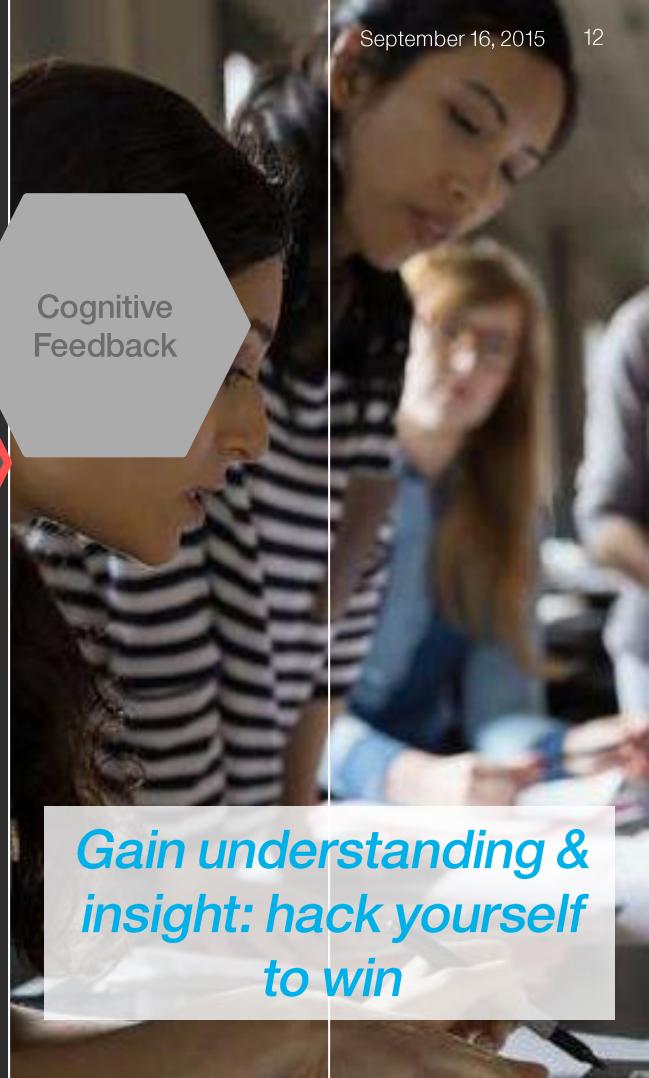
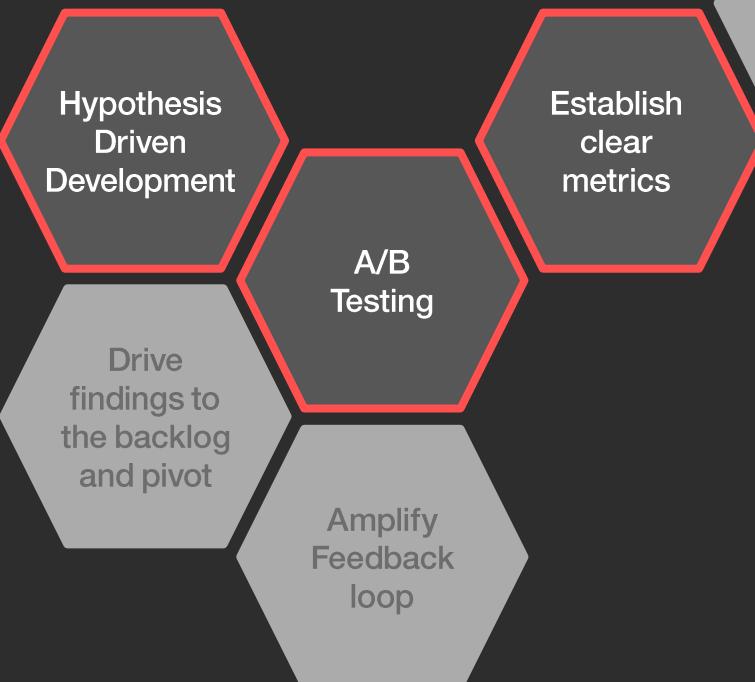


**Ignite innovation: find  
your creative oasis by  
learning to play**

Learn more:

[ibm.com/devops/method/category/culture](http://ibm.com/devops/method/category/culture)

# Continuously experiment to deliver the right solution



Learn more:

[ibm.com/devops/method/category/learn](http://ibm.com/devops/method/category/learn)

# Create innovative solutions fast!



*In development, you can measure once, cut many times*

Learn more:

[ibm.com/devops/method/category/code](http://ibm.com/devops/method/category/code)

# Accelerate application delivery and reduce costs

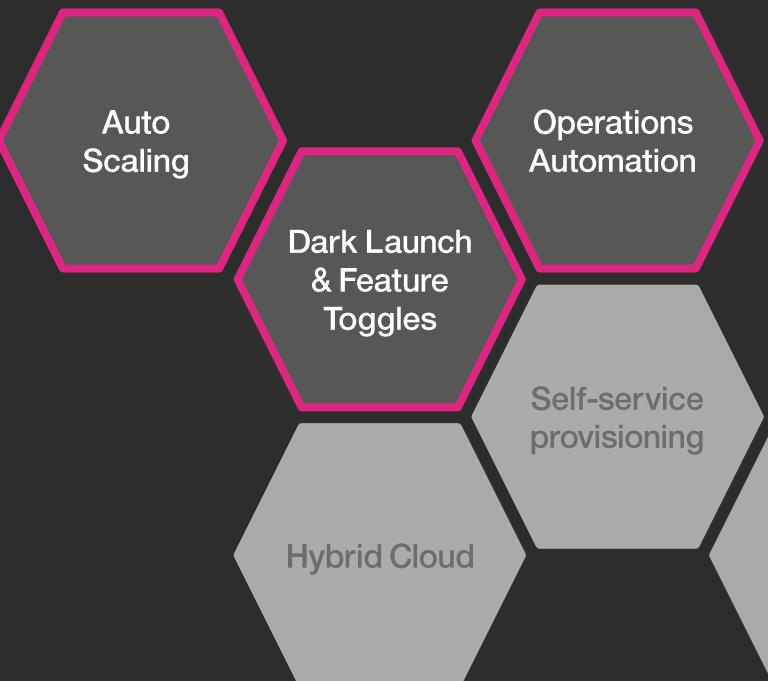


*From code to production in seconds*

Learn more:

[ibm.com/devops/method/category/deliver](http://ibm.com/devops/method/category/deliver)

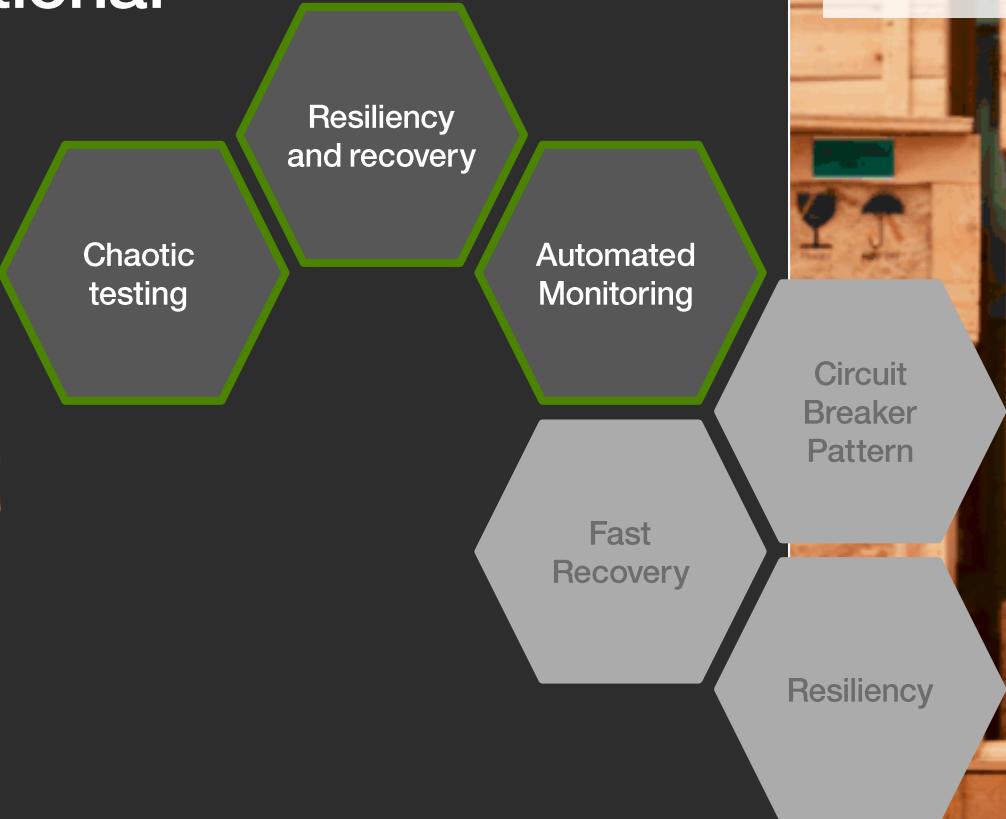
# Leverage the power of the cloud



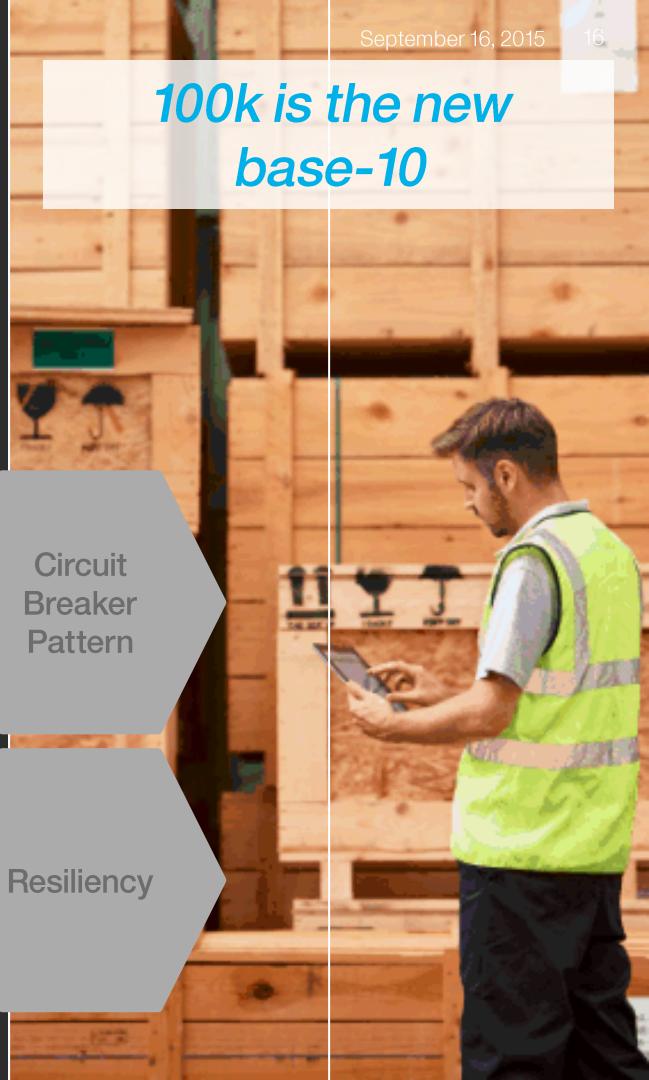
Learn more:

[ibm.com/devops/method/category/run](http://ibm.com/devops/method/category/run)

# Ensure operational excellence



**100k is the new  
base-10**



Learn more:

[ibm.com/devops/method/category/manage](http://ibm.com/devops/method/category/manage)

# Announcing IBM Bluemix Garage Method

Combining industry best practices for Design Thinking, Lean Startup, Agile Development, DevOps, and Cloud to build and deliver innovative solutions.

To learn more visit:

<https://www.ibm.com/devops/method>



# Challenges in Scaling Innovation for the Enterprise

- Existing culture, process and organizational structure inhibit innovation, speed and continuous iterations.
- Difficult to scale successful pilots, with robustness, industry compliance, and managed risk and governance required.
- As they scale, they get bogged down and slowed down in operations, silos, complexity, compliance, global reach, and impact to their existing business estate

# Executive Sponsorship

- Empower transformation efforts with knowledgeable & astute leaders
- Socialize objectives throughout the organization & celebrate the successes
- Lead organizational restructuring

Center of  
Comp-  
etency

Series of  
method  
bootcamps

# Executive Sponsorship

## Establish a Center of Competency

- Develop a team of experts who can mentor the organization and projects on the method
- Lay out and execute a roadmap for adoption of the method



Series of method boot-camps

# Executive Sponsor- ship

# Center of Comp- etency

## Train your teams with a series of method “bootcamps”

- Teach the method & practices that will be used to affect change
- Teach the technology & tools that will be used
- Build new team relationships & establish necessary lines of communication
- Energize teams





# IBM Bluemix Garage



**Rachel Reinitz**

IBM Distinguished Engineer & CTO  
of IBM Bluemix Garage



# Accelerating Innovation Track



# Manulife explores innovation & disruption with the Bluemix Garage

## Deliver a Pilot App

- A mobile web app survey
- Goal that the user will engage with Manulife resources at the end
- Challenge to create an app to engage the target user



## Evaluate the Garage

- Build initial skills, and evaluate thru a project
- Experience IBM Design Thinking & Agile DevOps
- Explore options for scaling Garage method adoption

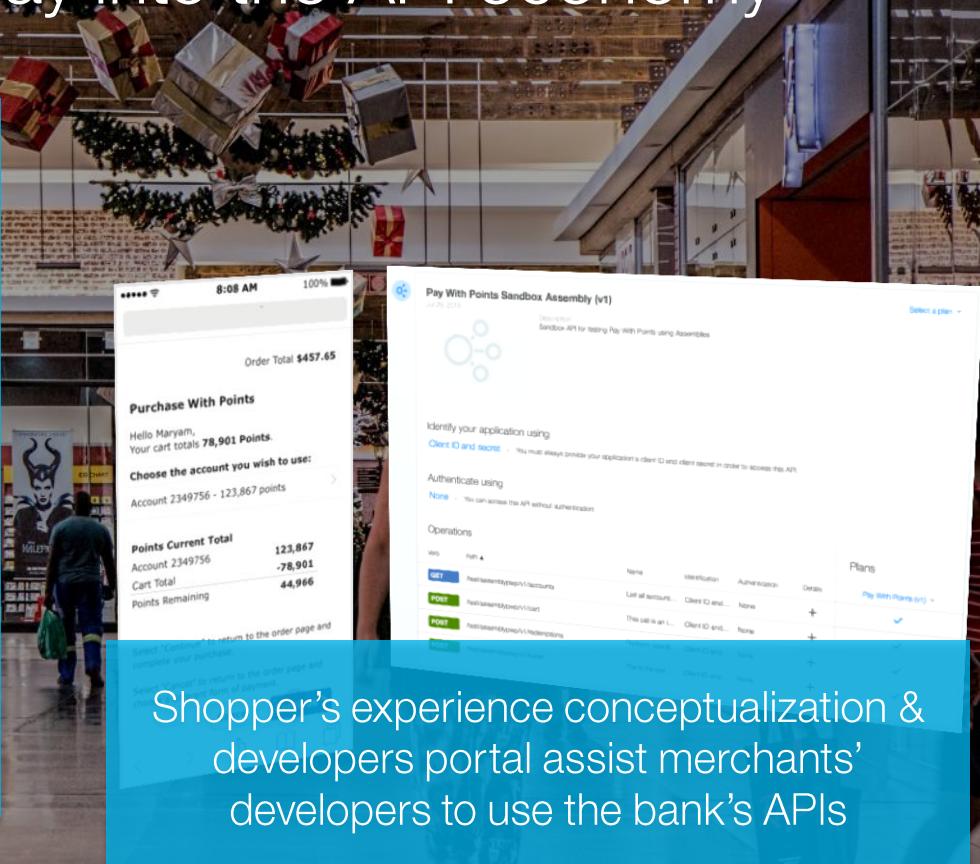
## Evaluate Bluemix

- Use on the pilot project (Java, Cloudant, dashDB, DevOps ..)
- Aspects beyond those used on Manulife (security, integration, operations, scaling)
- Benefits of Dedicated Bluemix

# International bank expands loyalty points program to add customer value & foray into the API economy

## This project enabled the bank to...

- Validate whether potential merchant partners would integrate Point Payment & customers use it
- Minimize cost & time of integration for merchants; Bluemix connects to the systems of record
- Deliver fast – security, test APIs, API mgmt, developer portal, 4 SDKs in 10 weeks
- Try Garage Method & understands existing barriers to innovation & agility



The collage illustrates the project's outcomes:

- A smartphone screen shows a mobile payment interface with a "Purchase With Points" option. The total order amount is \$457.65, and the user has 78,901 points available.
- A laptop screen displays the "Pay With Points Sandbox Assembly (v1)" developer portal. It includes sections for identifying the application using Client ID and secret, authenticating using None, and operations like GET, POST, and PUT methods for managing accounts and redemptions.
- A photograph of a shopping mall interior featuring a large Christmas tree decorated with wrapped gifts.

Shopper's experience conceptualization & developers portal assist merchants' developers to use the bank's APIs



**Kristal York**  
Executive Mobile Strategist,  
PointSource

**PointSource**

The Bluemix  
Garage:

A customer  
perspective

Through intelligent  
design and collaborative,  
continuous delivery  
**via cloud**



# Why Strategy?

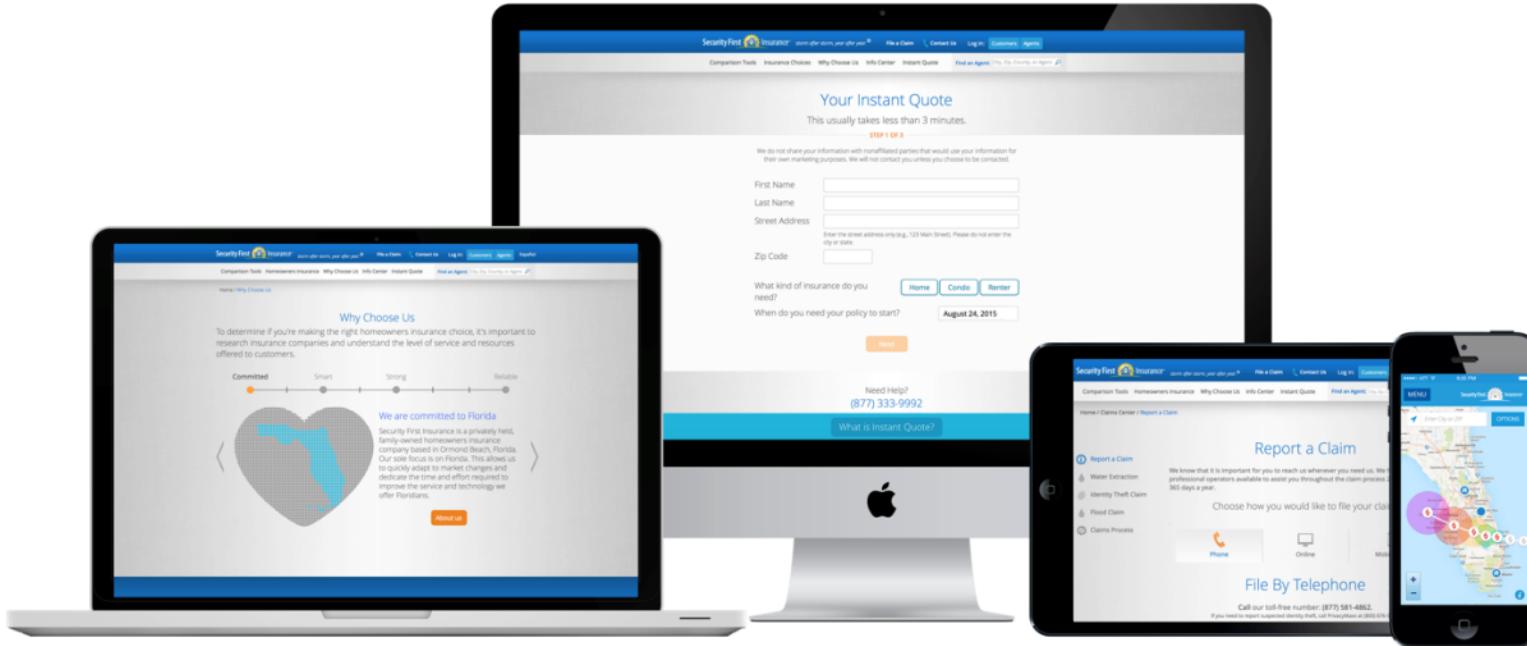


# Alignment Allows for Agile Innovation



# Security First Insurance: Disrupt Expectations

PointSource



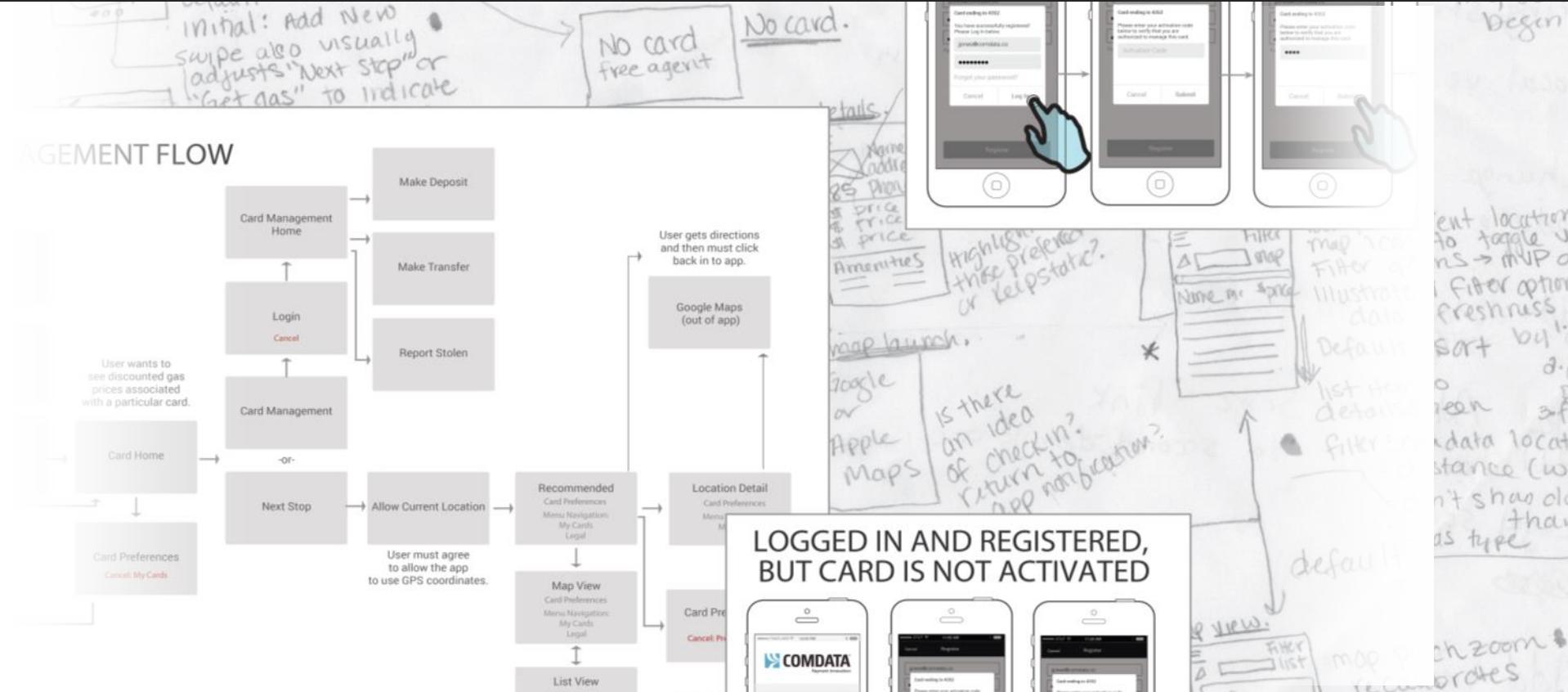
# Supply Distribution: Understanding the User

PointSource



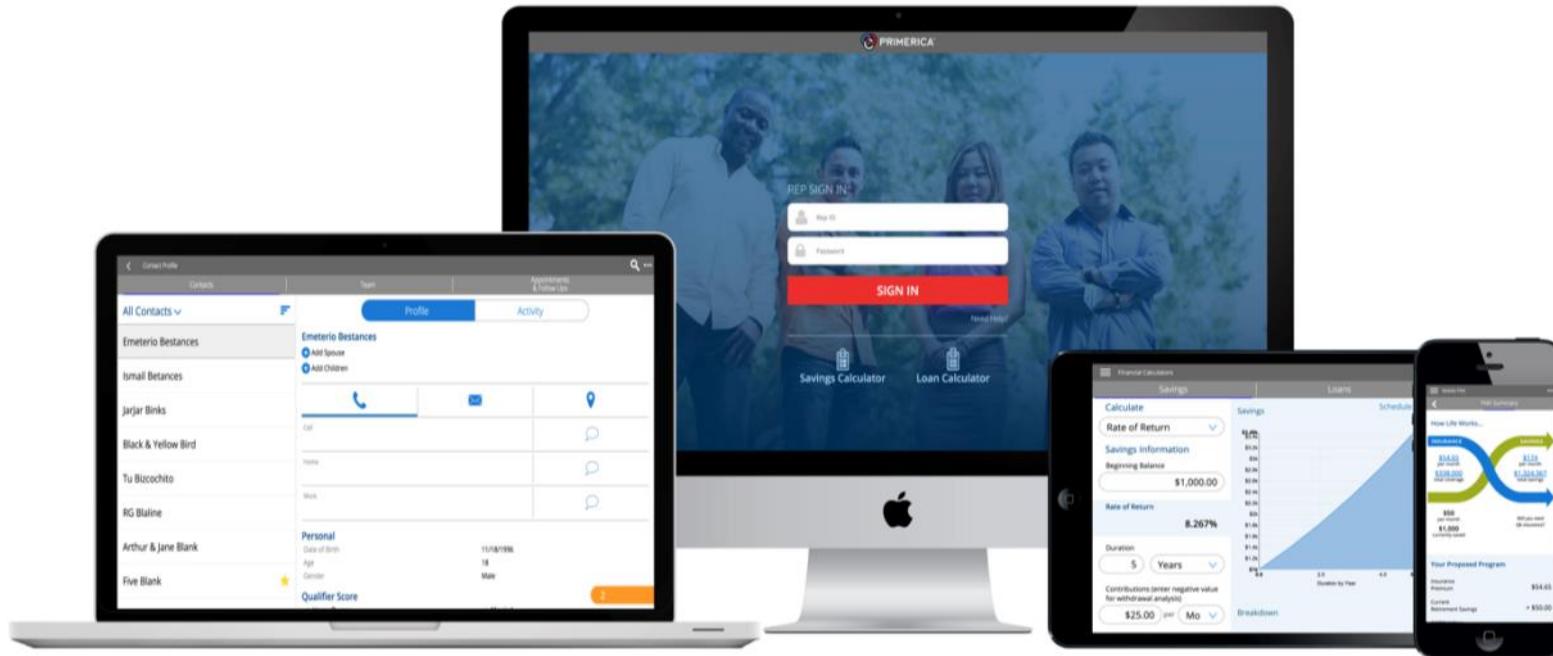
# Comdata: Distilling the Noise

PointSource



# Primerica: Trust in Transparent Development

PointSource



# The right innovation method

A proven and transformational DevOps methodology based on IBM Garage Method:

- Lean startup
- IBM Design Thinking
- eXtreme Programming



<https://ibm.com/devops/method>

# The right innovation platform

# The right innovation culture

# The right innovation method

## The right innovation platform

IBM Bluemix enables the rapid composition of web and mobile applications with your choice of:

- Runtimes, Toolchain
- Development services
- Integration with your systems

<https://ibm.com/bluemix>



## The right innovation culture

The right innovation method

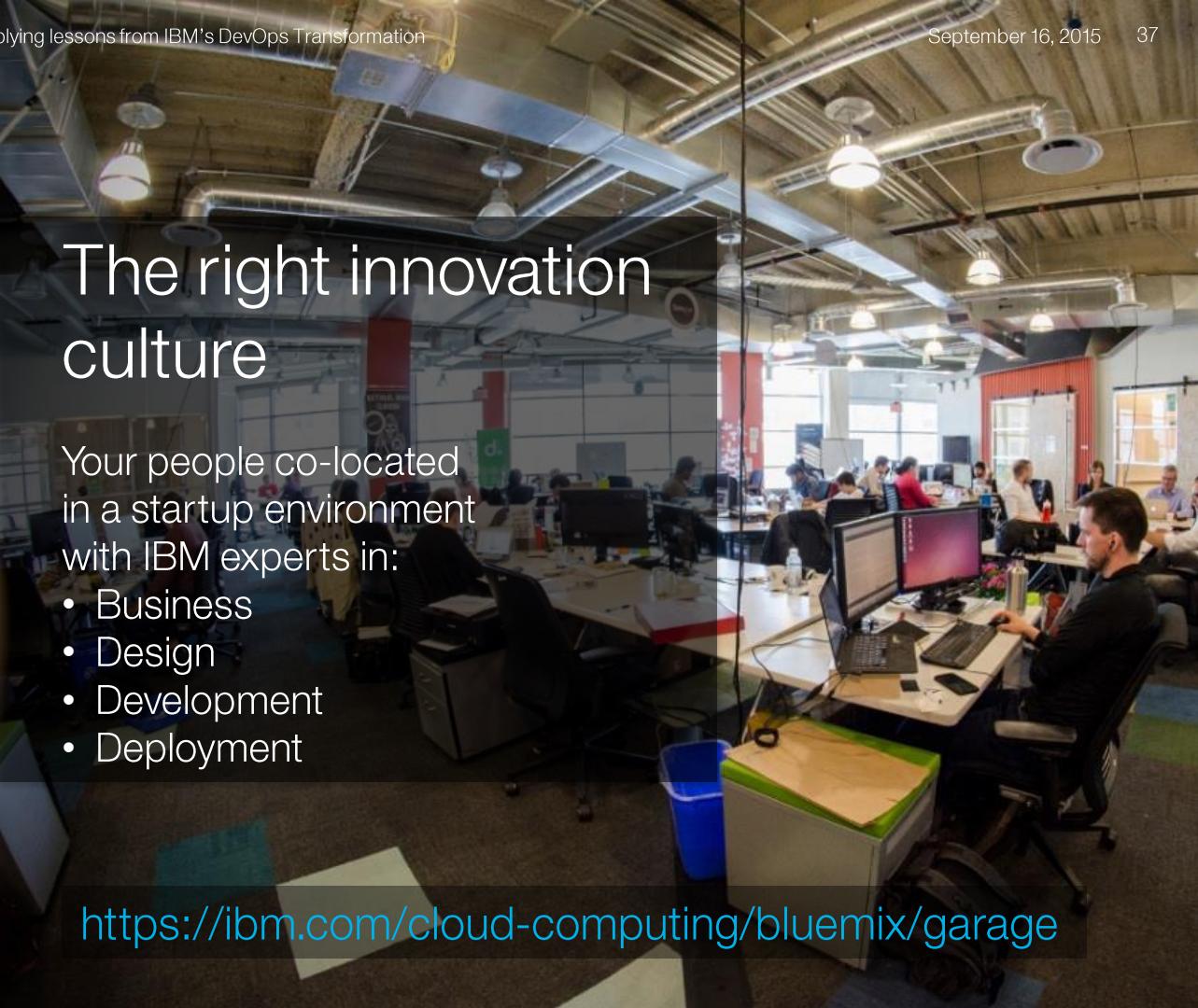
The right innovation platform

## The right innovation culture

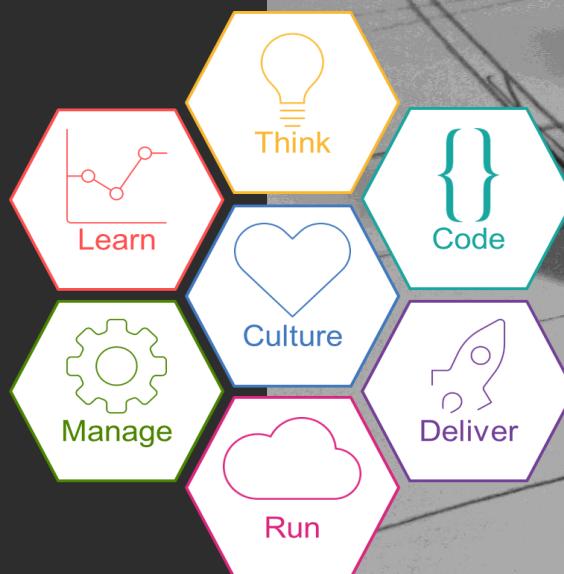
Your people co-located in a startup environment with IBM experts in:

- Business
- Design
- Development
- Deployment

<https://ibm.com/cloud-computing/bluemix/garage>



Sure, it's a busy world,  
but be sure you take the  
time to...



<https://ibm.com/devops/method>

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# Thank You!

