OPEN BANKING WITH AN AGILE ARCHITECTURE

Red Hat Summit
Boston | May 2019
BIOS

Bruno Azenha
Technical Architect
Delivery Senior Manager

Simon Kleinsmith
Technical Architect
Delivery Senior Manager
FOR THE NEXT 45 MINUTES...

We will cover:

• Technology trends
• Agile architecture and digital decoupling
• Real world journey and learnings
WHAT’S ON EVERYONE’S MINDS RIGHT NOW

MICROSERVICES

CLOUD NATIVE

DEVOPS

DOMAIN-DRIVEN DESIGN

AGILE DELIVERY

CITIZEN DEVELOPER
IT ARCHITECTURE TODAY

The simplified view

CORE SYSTEMS (100’s OR 1000’s) THAT HAVE EVOLVED OVER TIME AND DO NOT MEET THE NEED OF A CHANGING WORLD

AN ONLINE PRESENCE THAT HEAVILY RELIES ON THE CURRENT CORE

CLASSICAL INTEGRATIONS (EDI ETC)

SEPARATE SILOED DATA FUNCTION TO DO BATCH-BASED BUSINESS INTELLIGENCE AND ANALYTICS

"EVERYTHING ELSE"

INTEGRATION / B2B

ONLINE FUNCTIONALITY

BI/ANALYTICS
WHY ARCHITECTING FOR AGILITY?

AN AGILE ARCHITECTURE ENABLES TEAMS TO WORK IN PARALLEL WHILE REDUCING DISECONOMIES OF SCALE.

METHOD AND TOOLS ARE ESSENTIAL BUT NOT SUFFICIENT. “MONOLITHIC ARCHITECTURES” MUST BE ADDRESSED TO ACHIEVE PRODUCTIVITY AT SCALE.
HOW WE GO ABOUT IMPLEMENTING AGILITY THROUGH DIGITAL DECOUPLING

Moving from One-Speed IT to Multi-Speed IT requires an evolution at the architecture, technologies, people and processes.

Drivers of Change
- Dual Speed
- Flexibility of change
- Journey to Cloud
- Regulatory Support

Enablers of Change
- Organisation & Culture
- App Architecture
- App Platform
- Mainframe Digitisation
CAPABILITIES FOR DIGITAL DECOUPLING...

These capabilities deliver a complete cloud-native stack and enable transformation towards a fast-paced 100% digital business.
... AND COMMON CHALLENGES

- NOT CLOUD FIRST
- POLYGLOT APPROACH
- SUPPORT MODELS
- GOVERNANCE
- SKILLS TRANSFORMATION
- COMPLEX LICENSING MODELS
- INVESTMENT IN LEGACY
- INTERNAL RESISTANCE TO CHANGE
BUT LET’S TALK ABOUT THIS IN THE REAL WORLD...
When we started...

“VIRTUAL MACHINES ARE COOL.”

- That’s what they said
WHAT WE DID IN 10 MONTHS
HOW WE MET THE CHALLENGES...

DEVELOPER PROCESSES

Accelerated start-up
• Microservices factory

Enabling developers and testers
• Coding standards and QA
• Task management

Quality gates
• Code analysis & review
• Automated testing

ENVIRONMENTS

Cloud environments

RedHat OpenShift
• Infrastructure management
• Container creation & deployment
• Virtual environment management (OCP projects)

DEVOPS

Release pipeline
• Enable tooling
• Configuration management
• Deployment flow
• Automate everything
...HOW ADOP MADE A MASSIVE DIFFERENCE

- Pipeline covers development, package, test and deploy
- Code review process integrated into the pipeline
- Code is analysed for best practices and vulnerabilities
- Deployment is orchestrated into multiple environments
- Automatic dynamic environment reconfiguration
- Automatically generated release notes
LEARNINGS FROM MICROSERVICES ON OPENSHIFT

ARCHITECT FOR WORKLOADS

IT'S NOT AN APPLICATION SERVER, DON'T MAKE IT ONE

TO UPGRADE, OR NOT TO UPGRADE

IMMUTABLE CONTAINERS WILL SAVE YOU

LOWER ENVIRONMENTS ARE IMPORTANT

CONFIGURATION AS CODE

INFRASTRUCTURE STILL EXISTS

YOU NEED A SANDBOX CLUSTER

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... AND THE OVERALL THOUGHTS WE WANT TO SHARE

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<thead>
<tr>
<th>OPENSHIFT</th>
<th>MICROSERVICES</th>
<th>DEVOPS TOOLING</th>
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<tbody>
<tr>
<td>• Automate as much as possible</td>
<td>• Logging is priority</td>
<td>• Build in the cloud, don’t wait for Infra</td>
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<td>• Abstraction from developers</td>
<td>• Architect for liveness and readiness checks</td>
<td>• The more open, the more skills you have</td>
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<td>• Config is your new enemy</td>
<td>• Integration principles still matter</td>
<td>• Don’t idolize environments</td>
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<td>• Persistent storage may not be easy</td>
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THE FLOOR IS OPEN TO QUESTIONS...
THANK YOU