

ACCENTURE & RED HAT

Software Delivery Lifecycle Management with Openshift

Luca Tiberia

Cloud Architect Manager

 **accenture**

Agenda

1

Accenture and Red Hat collaboration

2

Software Delivery Lifecycle Management

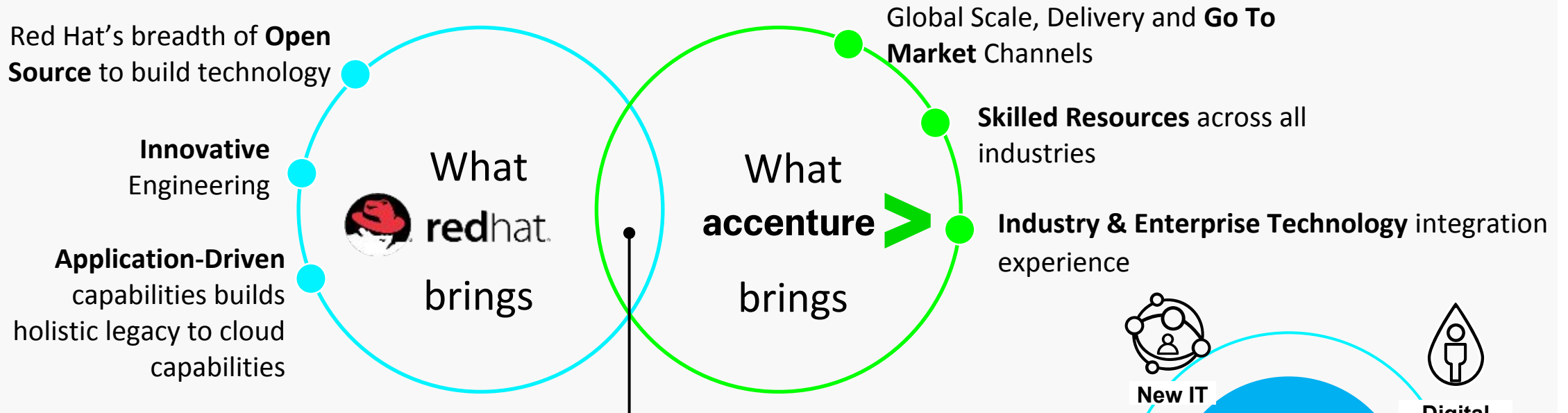
3

SDLM use case with Openshift

4

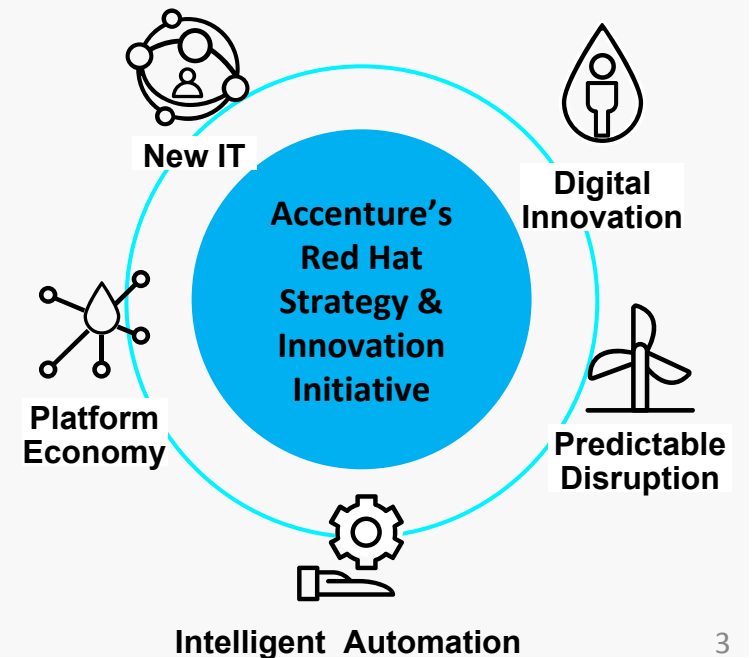
Case Study - Public Sector

Accenture & Red Hat Partnership



What Accenture's Red Hat Strategy and Architecture brings

Accenture is **Red Hat Global Strategic Partner**, members of a variety of foundations and communities such as Linux, OpenStack, OpenShift, and active Contributor and Sponsor of New Open Source Projects.



Accenture & Partners Collaboration Initiatives

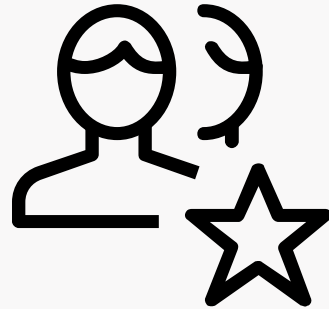


**A LAB FOR
PROTOTYPING
INNOVATIVE
CLOUD
TECHNOLOGIES
POWERED BY REAL
USE CASES**

Accenture & Partners Collaboration Initiatives



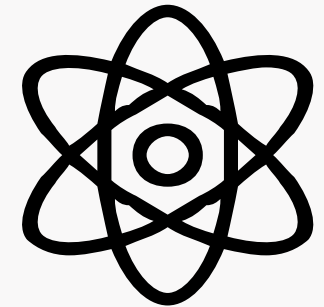
MAKING THE
INFRASTRUCTURE
ECOSYSTEM WORK



CREATE THE **SKILLS** OF
THE "NEXT NEW"



BUILD **CONFIDENCE** ON
CAPABILITIES BY **SHOW
AND TELL**



EXPLORE AND TEST
**TOMORROW'S
EMERGING
TECHNOLOGIES**

*Bring the
Value...*



Reduced Time to Market

To a Cross Industry Customer Ecosystem



Innovation Lab Use Cases

→ SDLM in Cloud Native scenarios

Automatic provisioning of dev environments, containerization of tools for software repositories, quality assurance, tasks pipelining and software testing and releases in **Continuous Integration** and **Continuous Delivery** scenarios

PaaS a la Carte

Automatic deployment of Openshift on different 'target' with a typical '**infrastructure as a code**' implementation using the orchestration capabilities of Cloudforms, Openstack and AWS and the automation engine of Ansible...



Hybrid Cloud Management and Optimization

Multi-cloud management: performance and chargeback reports, service catalogue with complex blueprints, security policies and capacity recommendations, etc.

..and next?

Openstack 13, Container Native Storage, Business Continuity, Artificial Intelligence for the Operations, Disaster Recovery as a Service, Application Modernization...

Agenda

1

Accenture and Red Hat collaboration

2

Software Delivery Lifecycle Management

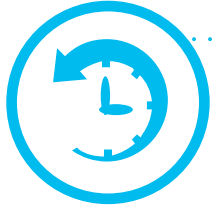
3

SDLM use case with Openshift

4

Case Study - Public Sector

What do clients need?



Speed

Microservices and continuous delivery let teams take ownership of services and then release updates to them quicker.



Scale

Infrastructure as code helps to manage the development, testing and production environments in a repeatable and efficient manner



Rapid Delivery

Continuous integration and continuous delivery are practices that automate the software release process, from build to deploy.



Improved Collaboration

Developers and operations teams, can collaborate closely, share many responsibilities and combine their workflows



Reliability

Using practices like continuous integration and continuous delivery to test that each change is functional and safe.

DevOps Mindset for SDLM

DevOps mindset is a good place to start with a SDI implementation to get higher performance in conjunction with cloud

Five fundamental practices enable optimized delivery of IT solutions



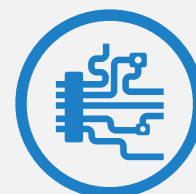
AUTOMATED RELEASE OF SOFTWARE

Automation of build and deploy process, application asset management, Software Configuration Management (SCM)



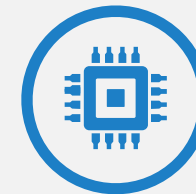
CONTINUOUS INTEGRATION

Advanced SCM concepts, automated unit testing, static code analysis, automated build and deploy process



CONTINUOUS DELIVERY PIPELINES

Orchestration and automation of all software development lifecycle processes including Functional/Integration and Smoke testing



AUTOMATED OPERATIONS

Automated event recovery, monitoring and anomaly detection



SOFTWARE DEFINED INFRASTRUCTURE & CLOUD

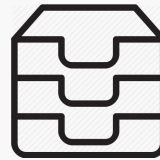
Automated creation of environment, dynamic scaling, drift detection and remediation

Why containers?

Performance



Containerization
Benefits



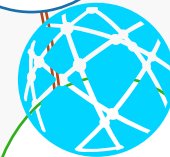
Lower infrastructure costs



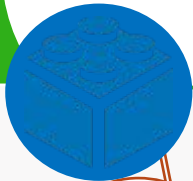
Increased utilization and
density



Portability



Modern architecture
alignment



Agility

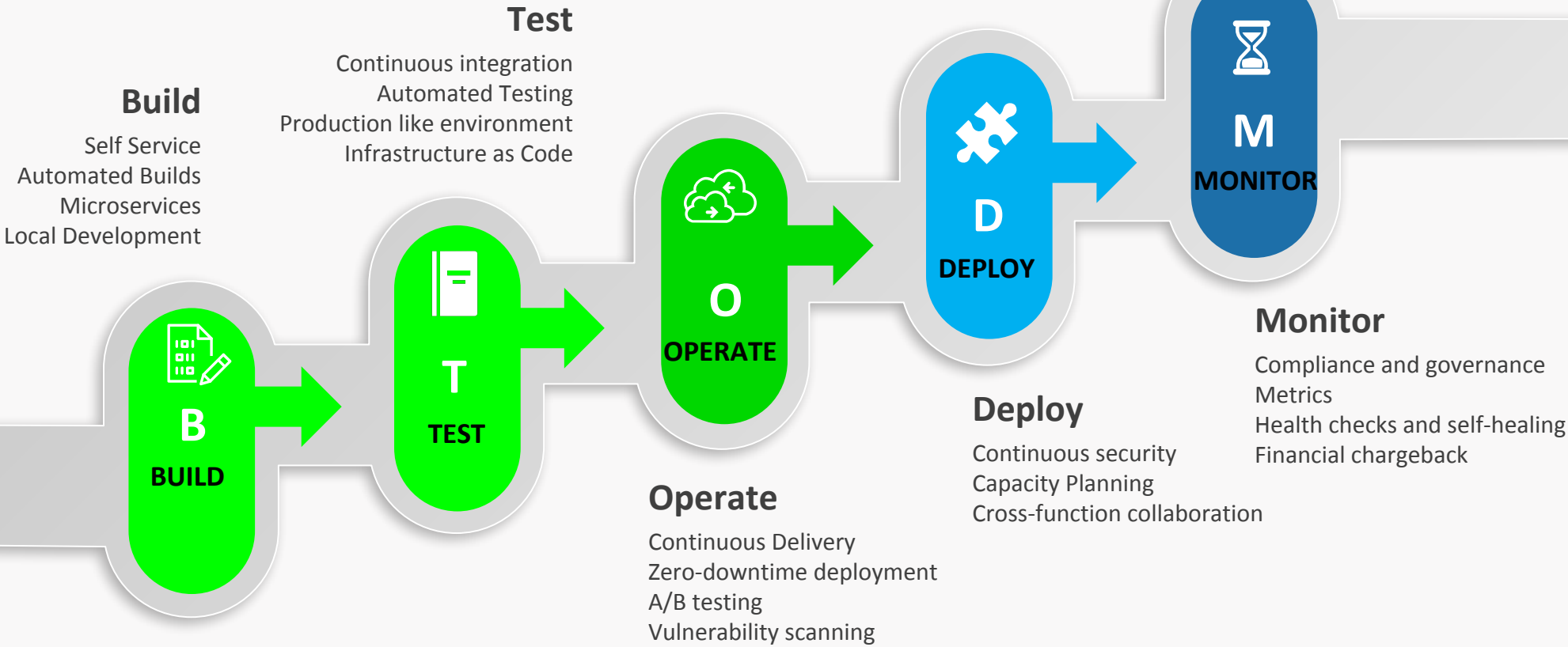


Agenda

- 1 Accenture and Red Hat collaboration
- 2 Software Delivery Lifecycle Management
- 3 SDLM use case with Openshift**
- 4 Case Study - Public Sector

How to speed-up SDLM with Openshift

Develop, Deploy, and Manage Containers



Software stack integrated with Openshift

Open source enabling tools integrated to Openshift from code development up to software release



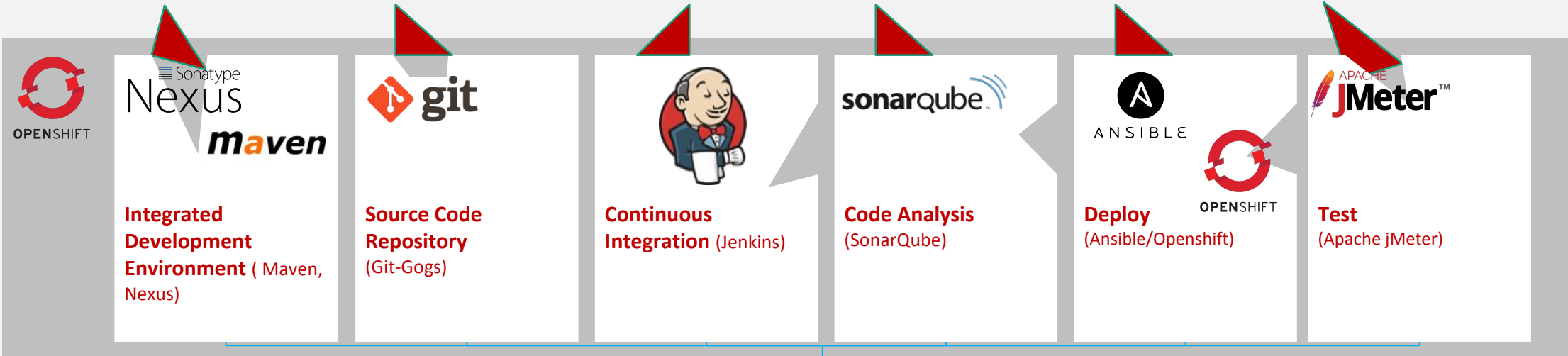
Openshift configured with containerized Opensource tools

Automatic CI-CD containerized environments integrated with Openshift (including Deployment Strategy)
Infrastructure as a Code

Autonomous build and testing of code submissions
Continuous Integration

Quality gates enforced using standardized tests against re-usable components and libraries including Source Quality Assessment
Continuous Delivery

Managed roll-out of new features via A/B testing / BlueGreen Deployment Strategy after automatic testing
Continuous Deployment



Enabling tools

Agenda

1

Accenture and Red Hat collaboration

2

Software Delivery Lifecycle Management

3

SDLM use case with Openshift

4

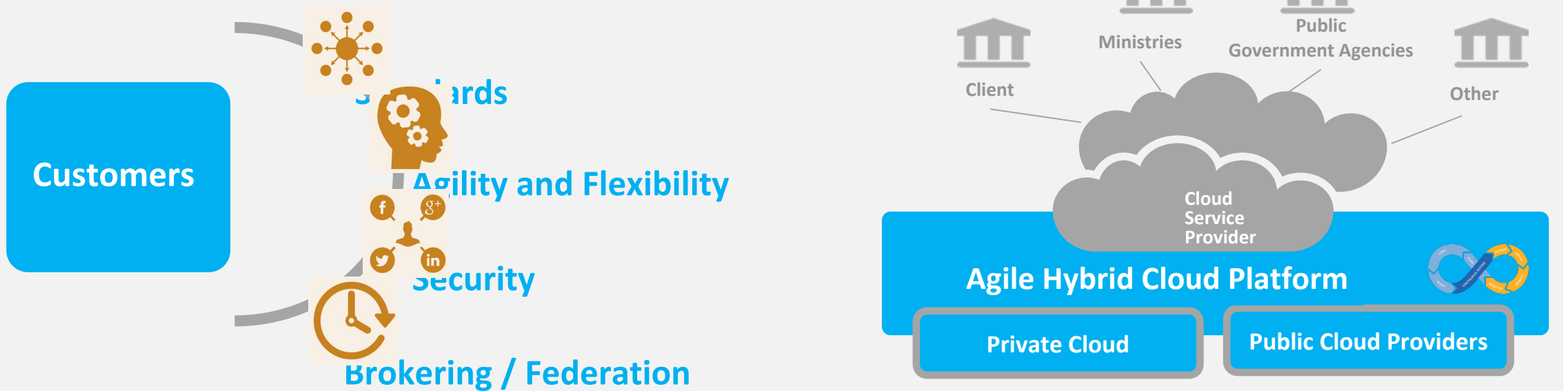
Case Study - Public Sector

Case Study – Agile Cloud Infrastructure

For enabling **Digital Transformation**, the Client has started a «Cloud Enablement» program and, through

- a deep review of Infrastructures, Platforms and Processes,
- the implementation of a standard Service Catalogue,
- the adoption of DevOps,
- the introduction of Microservices-based architecture applications deployment (Cloud Native Applications),

can now reach the target of high level of Agility, Flexibility and Security and to act as a main **Cloud Service Provider** for several public sector departments.



Case Study - Results

Benefits



50%

Increased Application Quality

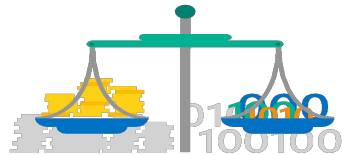
(# of errors discovered after releases)



40-60%

Increased IT Staff Productivity

Delivers more applications and major features, while using less time to operate on the OpenShift platform



40-60%

Reduced IT Infrastructure Cost

Developing on OpenShift has required less testing and production servers due to its support of containerization, microservices, and multitenancy



60-70%

Faster Development Life Cycles

OpenShift's platform has enabled new features and improvements.

Higher Agility

Lower Costs

Less Complexity

Higher Innovation

ACCENTURE & RED HAT

Software Delivery Lifecycle Management with Openshift

Luca Tiberia

Cloud Architect Manager – Infrastructure Services