

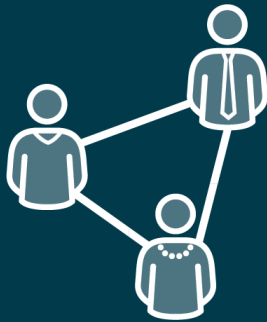


# BECOMING A DIGITAL LEADER THROUGH CULTURE, PROCESS & TECHNOLOGY

THOMAS CAMERON, RHCA  
Digital Transformation Strategist

# THE PATH TO DIGITAL LEADERSHIP

IT TAKES MORE THAN JUST TECHNOLOGY TO MOVE THE BUSINESS FORWARD



## CULTURE

---

Collaborative  
Transparent  
Open



## PROCESS

---

Agile  
Continuous  
Iterative



## TECHNOLOGY

---

Open source  
Hybrid  
Connected

# LOOK AT PROCESSES ACROSS THE BUSINESS

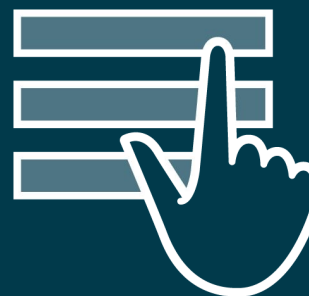
DEVELOPMENT, BUSINESS, AUTOMATION, & SECURITY PROCESSES



DEVELOPMENT  
PROCESSES



BUSINESS  
PROCESSES



AUTOMATION  
PROCESSES



SECURITY  
PROCESSES

# PROCESS CHANGES & IMPROVEMENT

AS YOU CHANGE CULTURE, UPDATE THE WAYS YOUR TEAMS CONNECT

AGILE

CONTINUOUS

ITERATIVE

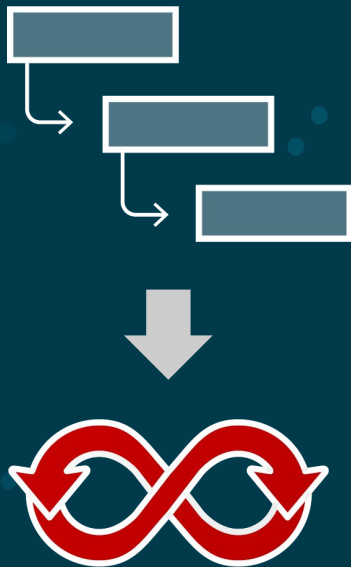
AUTOMATED

“The moral is that it is necessary to innovate, to predict the needs of the customer, give him more.”

W. EDWARDS DEMING

# CHANGE YOUR DEVELOPMENT PROCESSES

AGILE, SCRUM, DEVOPs, CI/CD, & THE MODERN APP LIFE CYCLE

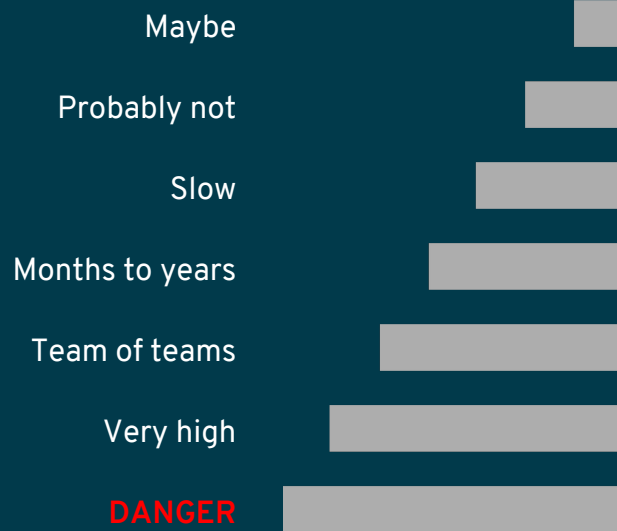


1. **Open your culture.** Transparency, collaboration, & consistency are requirements.
2. **Automate as much as you can.** Eliminating manual tasks gives you time to innovate.
3. **Get the right platform.** Containers are the best way to package apps for DevOps, & container platforms provide the needed automation.

# TAKE A NEW APPROACH

BIG BENEFITS, SMALL STEPS

## TRADITIONAL



## DEVOPS

CULTURE OF INNOVATION



AGILITY



SPEED TO VALUE



DEV LIFE CYCLE



PEOPLE NEEDED



INFRASTRUCTURE COST



RISK



# DEVOPS WORKS BETTER WITH CONTAINERS

BRING TOGETHER CULTURE, DEVELOPMENT PROCESS, & MODERN TECHNOLOGY

## DEVOPS

- ✓ Culture centered on collaboration & openness
- ✓ Uses automation to deliver applications faster
- ✓ Requires a dynamic, programmable platform

## CONTAINERS

- ✓ Technology to package & isolate apps with the files they need to run
- ✓ Reduces conflict by separating areas of responsibility
- ✓ Open source way to orchestrate app development & deployment

# TRANSFORM & UPDATE BUSINESS PROCESSES

“Changing, improving, and adapting how customers engage and interact with an enterprise often impacts how business processes are designed, how the workforce collaborates in response, and how business partners in kind must react to new opportunity and ways of doing business.”

## 451 RESEARCH

*The Enterprise in Motion: Phenomena Transforming Business Process Management & Mobility*

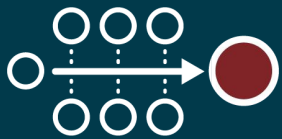
Carl Lehmann & Chris Marsh

Dec 2016



# BENEFITS OF MODERN BUSINESS PROCESSES

THEY BRING CONSISTENCY, COLLABORATION, & BETTER DECISIONS



## IMPROVED ORCHESTRATION

Between systems of engagement & systems of record to help knowledge workers collaborate



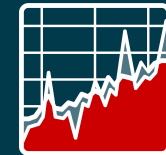
## INCREASED AUTOMATION

Centralize & control processes to make manual tasks & decisions consistent



## ENABLED LOB

Let line of business (LoB) users participate in app development directly



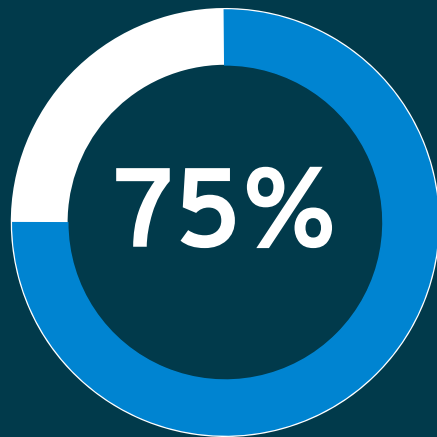
## DEEPER ANALYSIS

Collect & analyze data so you can present business metrics & recommended actions

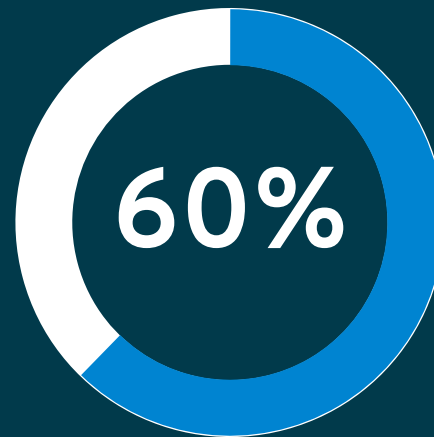
# IMPROVING YOUR PROCESSES HAS REAL ROI

ONE CUSTOMER'S RETURN ON INVESTMENT AFTER UPDATING BUSINESS PROCESSES

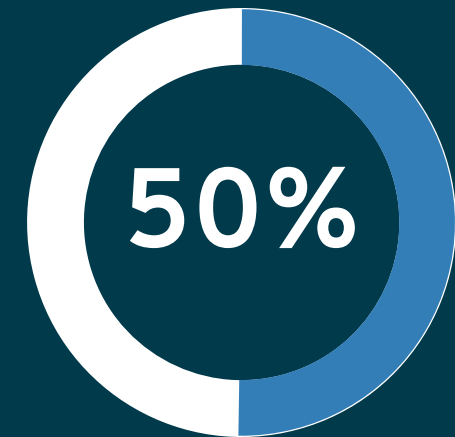
Reduced  
development  
life cycle by



Lowered  
development  
costs



Increased  
market  
reach by



# MANAGEMENT & AUTOMATION

## FOR THE MODERN ENTERPRISE



### ADAPT YOUR ARCHITECTURE

---

Today's architecture is constantly changing.

Automation lets IT teams pull traditional environments into modern times



### IMPROVE CROSS COLLABORATION

---

Empower development teams, production teams, & the lines of business with a common language



### PROMOTE ADOPTION

---

In order to have broad benefits, you must have broad adoption

# AUTOMATE PROCESSES & SERVICES

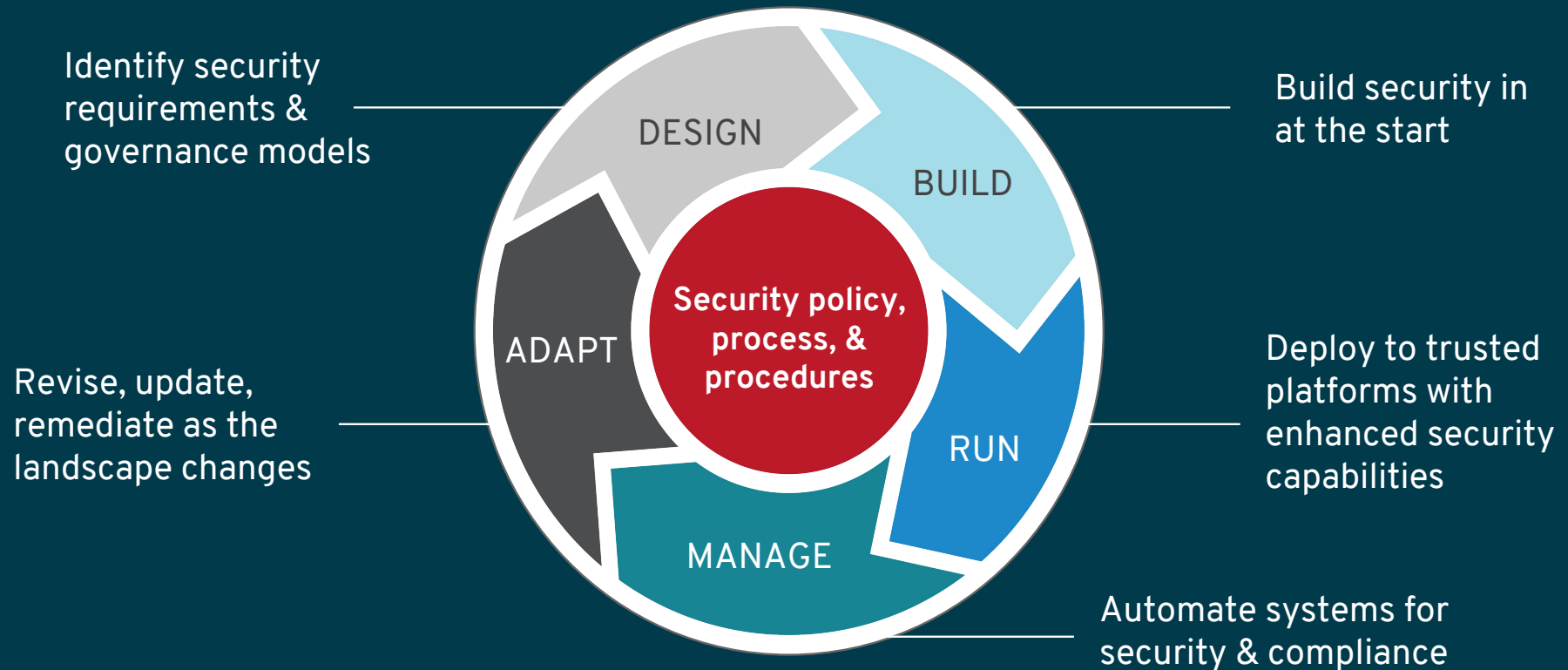
ACCELERATE SERVICE DELIVERY & IMPROVE USER EXPERIENCE



- Provisioning & configuration
- Orchestration
- Compliance reporting & mitigation
- Drift detection & management
- Container scanning & management

# IMPROVE SECURITY PROCESSES

PUT SECURITY POLICY & PROCEDURES AT THE HEART OF YOUR BUSINESS



# BARCLAYS ADOPTS AGILE CULTURE

PROCESS STORY: BUILDING MODERN APPS IN A MODERN ORG



A DevOps approach & a modern, self-service aPaaS environment

“We want to become the bank of the future. We want to be more dynamic in the way we produce applications & make better use of our underlying hardware & software, as well as our staff.”

**SIMON CASHMORE**

Head of PaaS Middleware Engineering, Barclays

May 2017

# OUR VISION: TECHNOLOGY

# MOVING TO OPEN TECHNOLOGY

GIVES YOU THE FLEXIBILITY YOU NEED FOR THE FUTURE

INTEGRATED

HYBRID

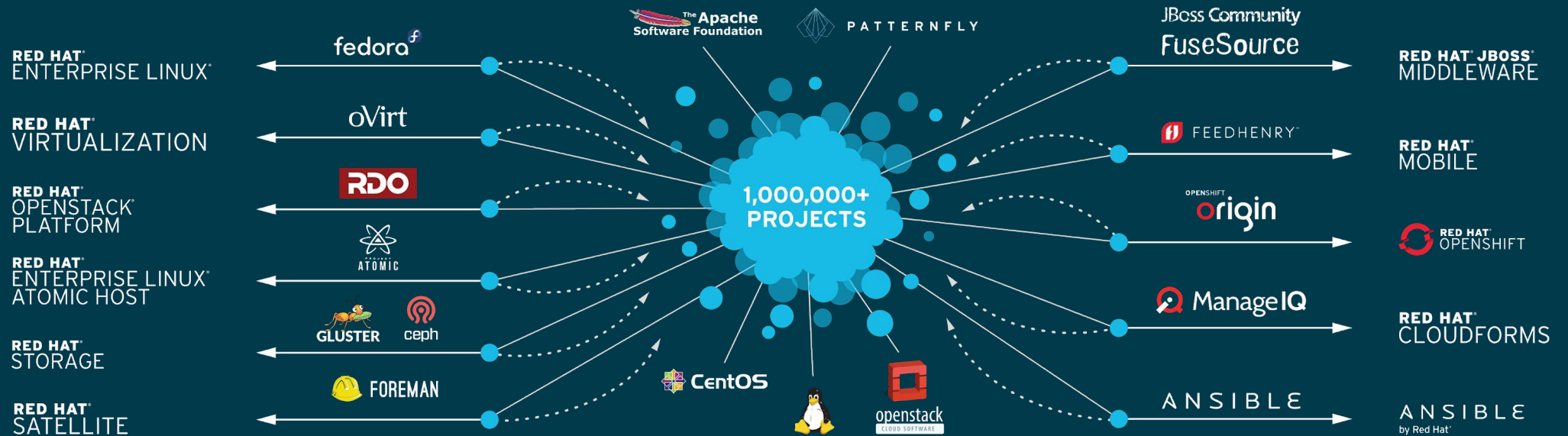
OPEN

INTEROPERABLE

Everything must work together.



# BRINGING OPEN SOURCE INNOVATION TO THE ENTERPRISE



RH0064-3

# OUR TECHNOLOGY VISION IS OPEN, HYBRID CLOUD

APPS & ENVIRONMENTS ARE INTEROPERABLE & FLEXIBLE

DEVELOPER TOOLING

APPLICATION PLATFORMS



BARE METAL



VIRTUALIZED

INFRASTRUCTURE PLATFORMS



PRIVATE CLOUD

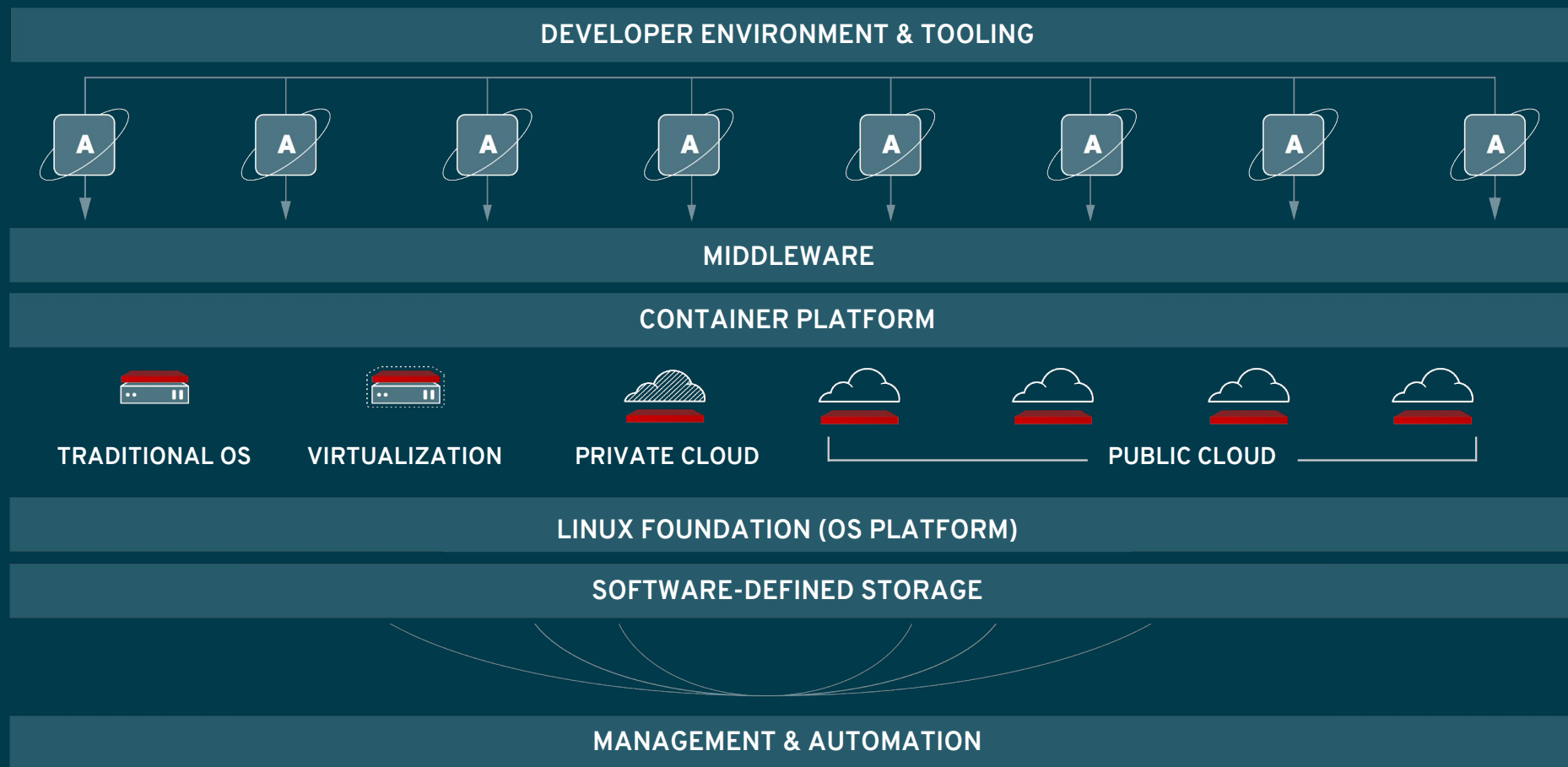


PUBLIC CLOUD

SOFTWARE DEFINED STORAGE

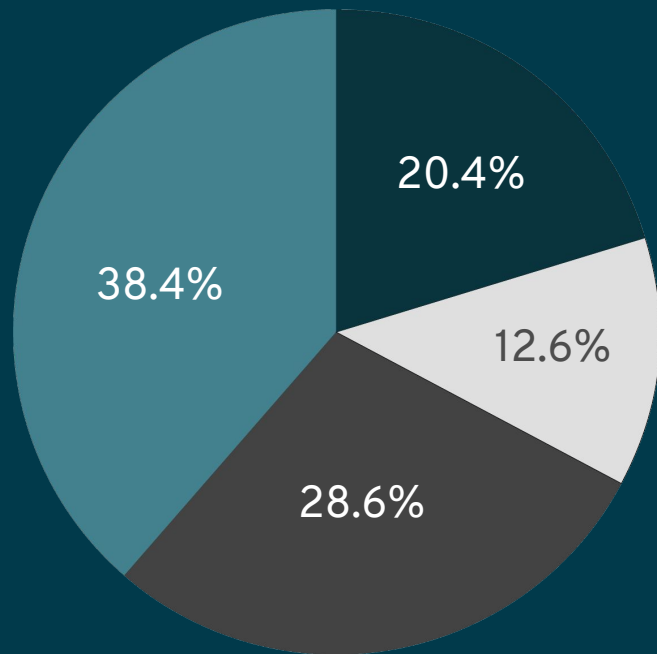
MANAGEMENT & AUTOMATION





# THE FUTURE IS HYBRID & MULTICLOUD



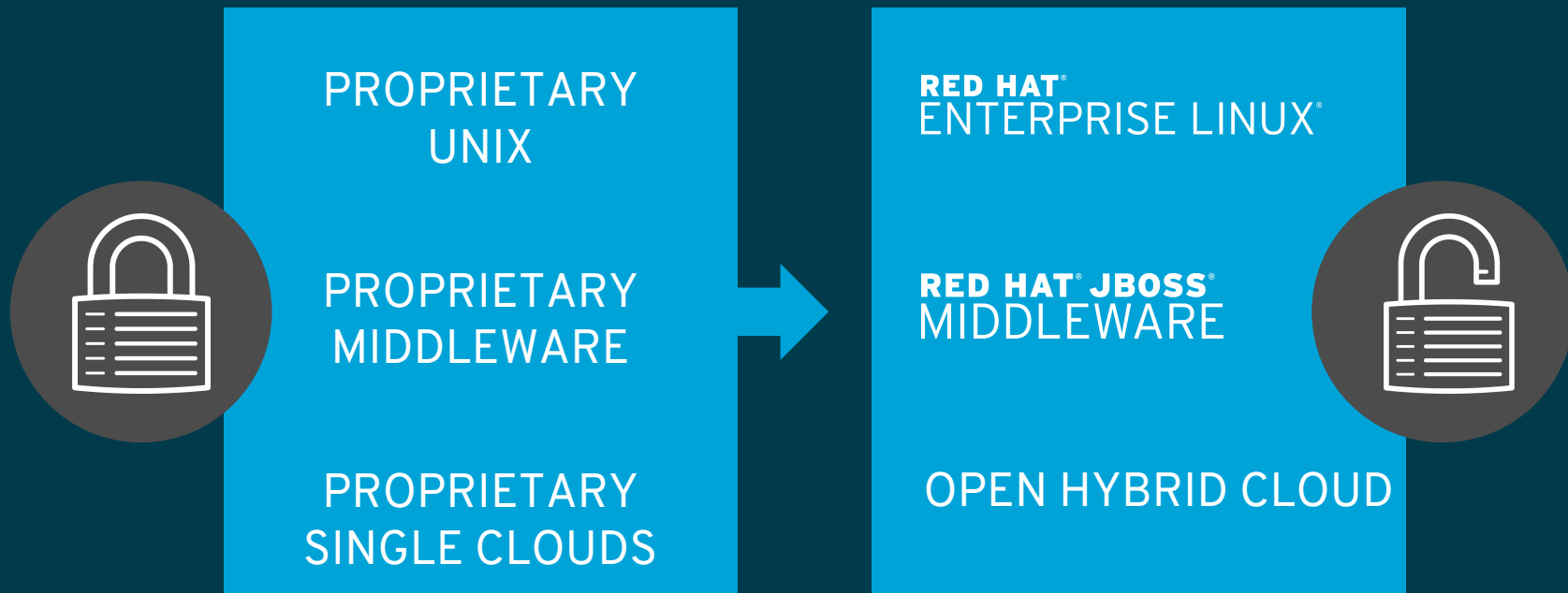
# 62% OF ORGS WILL BE MULTICLOUD

## BUT INTEGRATION LEVELS VARY



-  Will focus primarily on a single cloud environment
-  Will have multiple different cloud environments, but little to no interoperability between the environments
-  Will have multiple cloud environments to migrate workloads or data between cloud environments
-  Will have multiple cloud environments where the delivery of a single business function across the different cloud environments is seamless

# WE'VE MADE THIS MOVE TO OPEN BEFORE



# BMW GROUP LOOKS TO SERVICES FOR SPEED

TECHNOLOGY STORY: HYBRID CLOUD WITH MICROSERVICES, CONTAINERS, DEVOPS



Built a container-centric hybrid cloud platform using agile DevOps methodologies

- Point scaling handles fluctuating demand for BMW ConnectedDrive
- Reliable, continuous service for drivers

# SANGER INSTITUTE CHANGES THE GENOME GAME

## TECHNOLOGY STORY: CLOUD MANAGEMENT



Unified management for VMware and OpenStack environments, public cloud platforms

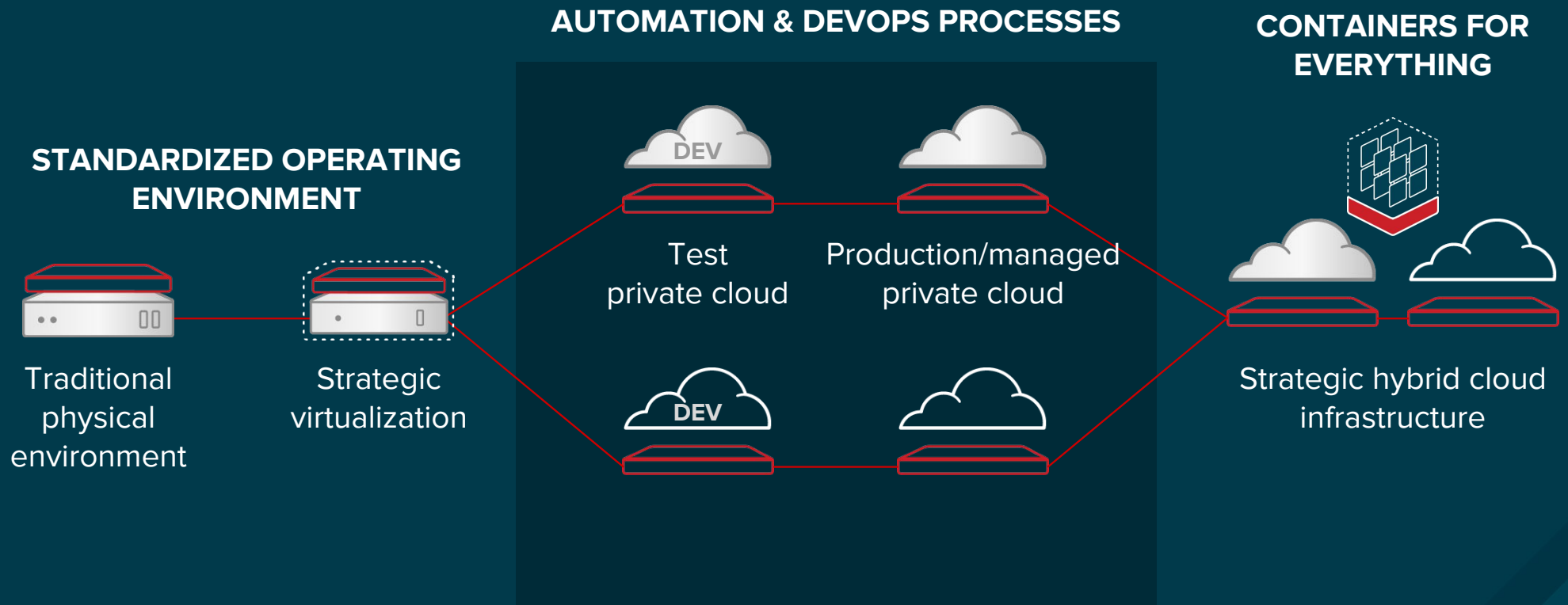
- Science-as-a-Service for startups, researchers
- Management, security improvements keep the focus on research

# THE JOURNEY TO OPEN HYBRID CLOUD



# IT'S A DIFFERENT JOURNEY FOR EVERYONE

BUT HERE'S WHAT IT LOOKS LIKE FOR ONE FINANCIAL SERVICES CUSTOMER



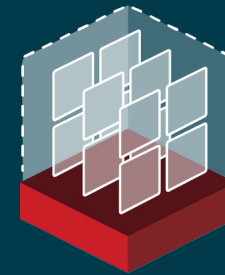
# HOW WE GET THERE



LINUX FOUNDATION  
ACROSS ALL  
ENVIRONMENTS



HYBRID CLOUD  
INFRASTRUCTURE &  
MANAGEMENT



CONTAINERS &  
CLOUD-NATIVE  
APP PLATFORMS

# COMMON OPERATING PLATFORM



RED HAT  
ENTERPRISE LINUX

- A common foundation for Red Hat platforms
- The first step toward cloud-based infrastructure, platforms, and applications
- Part of traditional OS, virtualization, private cloud, and all public clouds

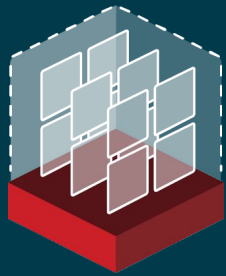
# OPEN HYBRID CLOUD INFRASTRUCTURE



HYBRID CLOUD  
INFRASTRUCTURE

- The best approach to cloud computing
- A secure environment, managed across multiple footprints
- Presence of multiple vendors prevents public cloud lock-in

# CONTAINERS ARE LINUX



CONTAINERS

- Next-generation application platform for existing and new apps
- Portable across the hybrid cloud
- Container companies must be Linux companies

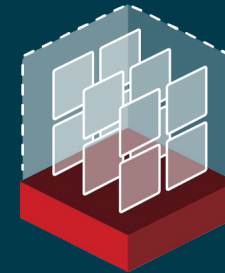
# ARCHITECTURAL “FABRIC” CONSIDERATIONS



STANDARD OPERATING  
PLATFORMS &  
PROCESSES



HYBRID CLOUD  
INFRASTRUCTURE &  
MANAGEMENT



CONTAINERS &  
CLOUD-NATIVE  
APP PLATFORMS

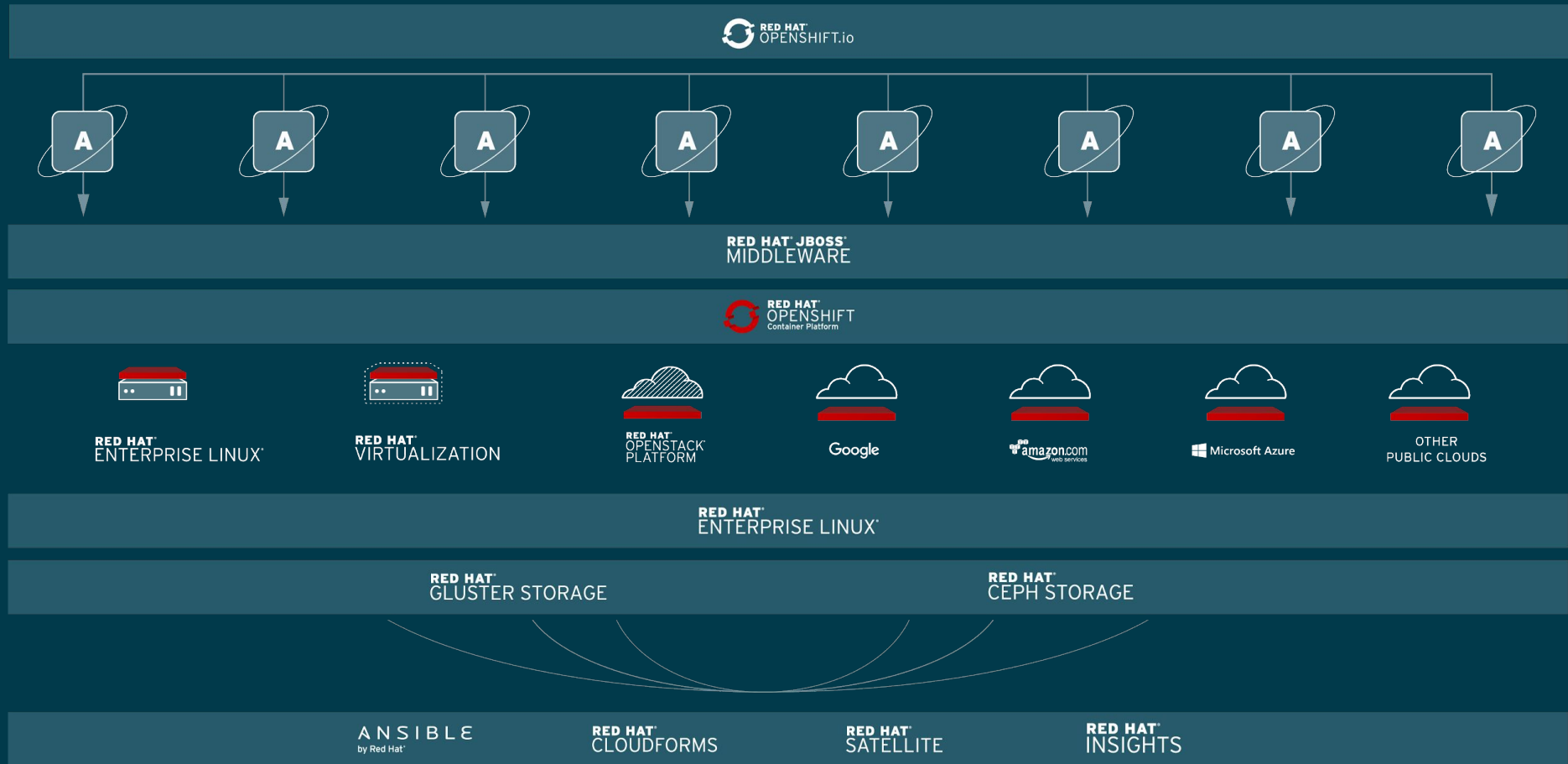
AUTOMATION / ANSIBLE

ORCHESTRATION / KUBERNETES

CONTAINERS / LINUX

VIRTUALIZATION / KVM

# THE RED HAT PORTFOLIO



# INFRASTRUCTURE

STANDARDS-BASED, OPEN SOURCE SOLUTIONS



## RED HAT ENTERPRISE LINUX

Operating system  
(OS) foundation for  
infrastructure and  
apps



## RED HAT VIRTUALIZATION

Flexible  
virtualization built  
on Linux



## RED HAT OPENSTACK PLATFORM

Datacenter  
software for  
building private  
cloud



## RED HAT OPENSIFT

Container platform  
for developing,  
hosting cloud-native  
applications



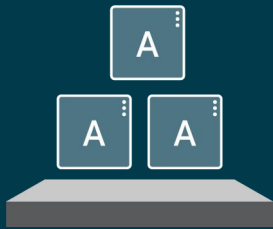
## RED HAT STORAGE

Scale-out,  
software-defined  
storage spanning  
the hybrid cloud



# APPLICATION PLATFORMS

MODERNIZE, BUILD, & MANAGE WHAT USERS NEED



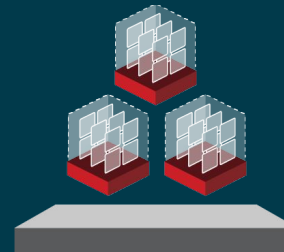
## RED HAT JBOSS EAP

Modernize & build applications using Java EE™ tools & frameworks



## RED HAT OPENSIFT CONTAINER PLATFORM

Develop, test, & host enterprise cloud applications consistently



## OPENSIFT.io

Plan & build cloud services in a complete development environment (IDE) with a hosted, integrated toolchain

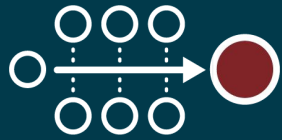


## RED HAT MOBILE PLATFORM

Develop & deploy mobile apps using open, standard toolkits—while centralizing control over security, integration, & policy

# MIDDLEWARE

INTEGRATE, AUTOMATE, & ACCELERATE DATA, APPLICATIONS, & PROCESSES



## INTEGRATION

Red Hat JBoss® Fuse  
Red Hat JBoss AMQ  
Red Hat 3scale  
API Management



## AUTOMATION

Red Hat JBoss BPM Suite  
Red Hat JBoss BRMS



## DATA MANAGEMENT

Red Hat JBoss Data Grid  
Red Hat JBoss  
Data Virtualization

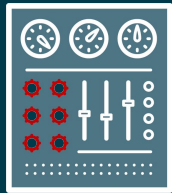


## APPLICATION SERVICES

Red Hat JBoss Enterprise  
Application Platform  
Red Hat JBoss  
Developer Studio  
Red Hat OpenShift  
Application Runtimes

# MANAGEMENT & AUTOMATION

## FOR THE MODERN ENTERPRISE



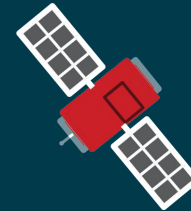
### RED HAT CLOUDFORMS

Deliver services  
across hybrid cloud  
environments



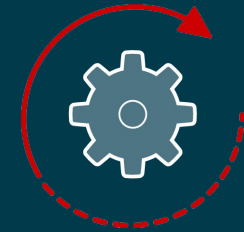
### RED HAT INSIGHTS

Proactively identify  
problems & prevent  
critical issues



### RED HAT SATELLITE

Easily maintain &  
update your Red Hat  
environment

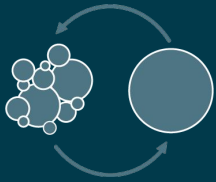


### RED HAT ANSIBLE AUTOMATION

Automate IT processes  
&  
centralize governance

# OUR SUBSCRIPTION MODEL

DELIVERS CONTINUOUS VALUE



## CUSTOMER PORTAL

Award-winning knowledgebase of solutions, docs, & technical guidance



## KNOWLEDGE

Our expertise, plus the knowledge of customers, partners, & communities



## WORLD WIDE

We have support centers & offices across the globe, & materials in multiple languages



## CERTIFICATION

Employers recognize the value of Red Hat training & certification



## PRODUCT SECURITY

Dedicated teams of experts monitor, identify, & remediate potential threats



## EXTENDED LIFE CYCLE

Extended life phase or extended life-cycle support subscriptions may be available

# COMPREHENSIVE SERVICES

WE CAN HELP YOU, NO MATTER WHERE YOU ARE (OR WHAT YOU NEED)



## TRAINING & CERTIFICATION

Hands-on certifications & exams for 40+ courses, including automation & containers



## SUPPORT

Tools, planning, & support are available 24x7 through our award-winning Customer Portal



## CONSULTING

Design through project management to align process & IT, with on-site or remote delivery



## HARDWARE, SOFTWARE, & CLOUD CERTIFICATION

Certified public cloud providers, hardware platforms, apps, & containers

# OPEN INNOVATION LABS

A HANDS-ON ENVIRONMENT FOR RAPID INNOVATION & REAL BUSINESS RESULTS



## EXPERIMENT

Rapidly build prototypes,  
do DevOps, & be agile



## IMMERSE YOUR TEAM

Work side-by-side with experts  
in a residency-style engagement



## INNOVATE

Bring modern application  
development back to your team



**ANY APPLICATION.  
ANY ENVIRONMENT.  
NO LOCK-IN.**



# THANK YOU



[plus.google.com/+RedHat](https://plus.google.com/+RedHat)



[facebook.com/redhatinc](https://facebook.com/redhatinc)



[linkedin.com/company/red-hat](https://linkedin.com/company/red-hat)



[twitter.com/RedHatNews](https://twitter.com/RedHatNews)



[youtube.com/user/RedHatVideos](https://youtube.com/user/RedHatVideos)



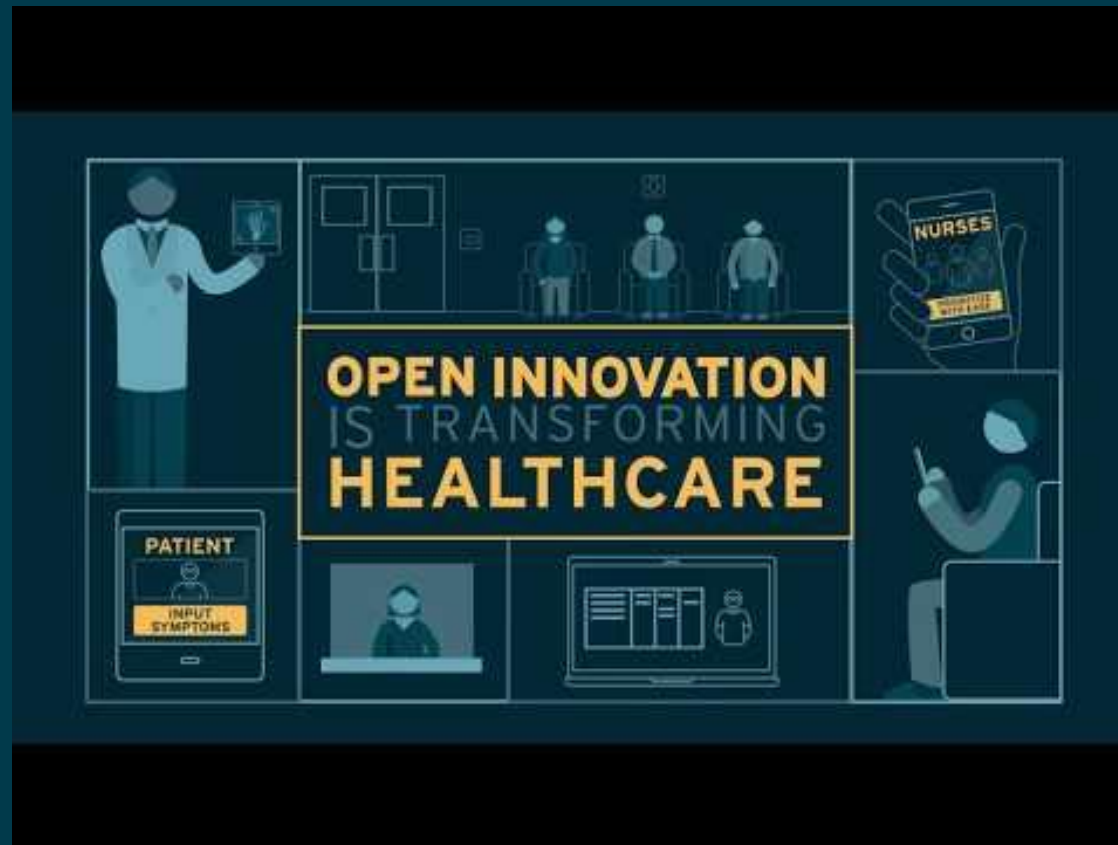
# BARCLAYS ADOPTS DEVOPS

## MODERN APPLICATIONS & AGILE PROCESSES



# easiER AG CREATES BETTER PATIENT EXPERIENCE

USING OPEN SOURCE CULTURE FOR FAST INNOVATION



# LENOVO TRANSFORMS WITH CLOUD PLATFORM

TECHNOLOGY STORY: CLOUD SERVICES

Provisioning before: 10 manual procedures + 1 week

Provisioning after: 1 automated system + 10 minutes

## HOW THEY DID IT

Built a fast, consistent, and unified Platform-as-a-Service environment based on Red Hat OpenShift Container Platform

# MACQUARIE TRANSFORMS DIGITAL BANKING

## CULTURE STORY: DEVOPS

Improved developer productivity by more than 50%  
Can deploy new features & updates in minutes (not hours)

### HOW THEY DID IT

Implemented Platform-as-a-Service to modernize legacy apps & deploy microservices in containers. The solution also uses software-based storage, cloud management, & automation.

# BANK AUDI BUILDS INNOVATIVE PLATFORM

TECHNOLOGY STORY: INFRASTRUCTURE MODERNIZATION & STANDARDIZATION

Server provisioning time went from 1 week to 7 minutes  
Increased productivity over 100% by reducing complexity

## HOW THEY DID IT

Moved from a complex UNIX architecture to standardized Linux  
on x86 hardware

# ATOS HELPS UK GOVERNMENT SERVE CITIZENS

PROCESS STORY: INTEGRATION

UK gov departments can now share info in real time  
Citizens get secure, digital data instead of phone, mail, or fax

## HOW THEY DID IT

Connected department back offices to create a citizen view  
& centralized data portal

# JALISCO MODERNIZES PUBLIC SERVICES

TECHNOLOGY STORY: APP MODERNIZATION, STANDARDIZATION, & AUTOMATION

Increased the number of citizens served daily by 900%

Infrastructure expenses down by 60%; hardware costs reduced 100%

## HOW THEY DID IT

Replaced old proprietary software with a modern IT environment based on Linux, integration, virtualization, & business process management solutions

# STATE OF JALISCO IMPROVES PUBLIC SERVICES

TECHNOLOGY STORY: APP MODERNIZATION, STANDARDIZATION, & AUTOMATION





# CABLEVISION

## PROCESS STORY: INTEGRATION

Improved performance while cutting operational costs  
Increased service quality & uptime

### HOW THEY DID IT

Automated event correlation to determine problems  
& identify failures in the network

# AVIANCA

## PROCESS STORY: INTEGRATION



# AVIANCA

## TECHNOLOGY STORY: INTEGRATION

Faster, more consistent business services for clients

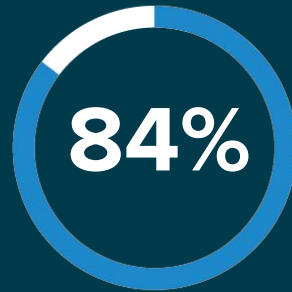
Reduced total cost of ownership (TCO) by 50%

## HOW THEY DID IT

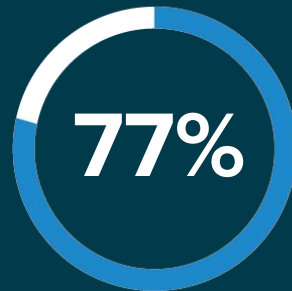
Built an efficient, distributed ESB-based integration platform

# EVERYONE WANTS A DIGITAL EXPERIENCE

BIGGER, BOLDER EXPECTATIONS FROM EVERYONE, EVERYWHERE



feel they are expected to address wider stakeholder needs.



say that technology is one of the top 3 influencers transforming stakeholder expectations for the business

# TOP 3 SPENDING PRIORITIES

CUSTOMER ORGANIZATIONS HAVE IN 2017

1.

70%

CLOUD INFRASTRUCTURE

2.

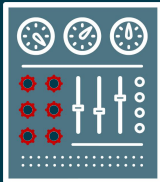
50%

SECURITY AND COMPLIANCE

3.

48%

IT MANAGEMENT, AUTOMATION, ORCHESTRATION



# BALANCING INNOVATION AND OPTIMIZATION

TOP PRIORITIES AND CHALLENGES WE HEAR FROM OUR CUSTOMERS



Optimize the IT  
you have



**GAIN  
EFFICIENCY**



Integrate apps, data,  
and processes



**IMPROVE  
PRODUCTIVITY**



Add and manage cloud  
infrastructure



**INCREASE  
AGILITY**



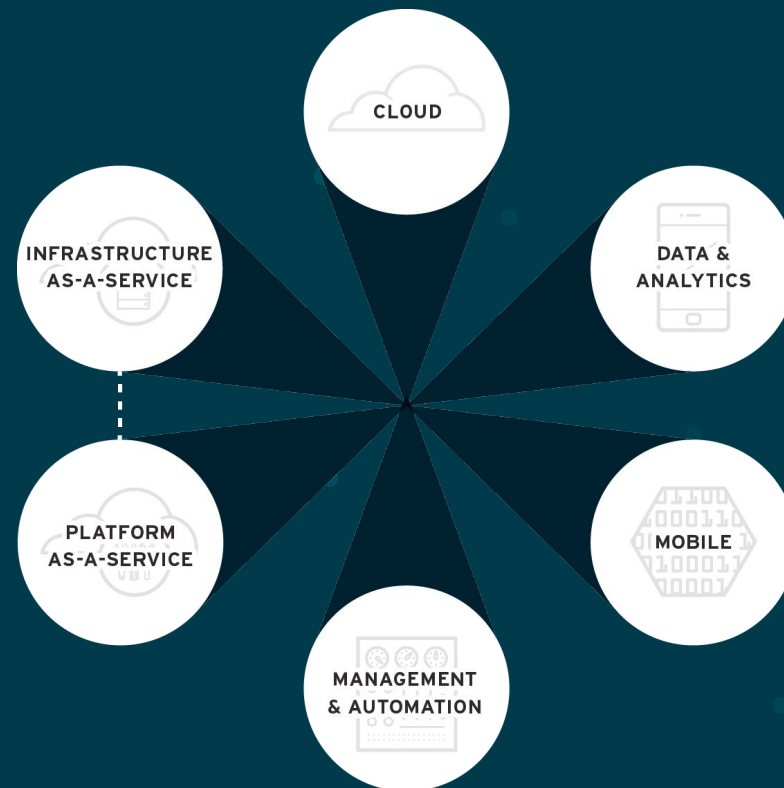
Build more modern  
applications



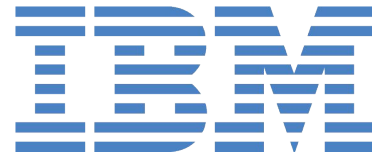
**MOVE  
FASTER**

# TECHNOLOGY MAKES A BIG DIFFERENCE

NIMBLE, FLEXIBLE I.T. IS MORE RELEVANT THAN EVER



# STRATEGIC ALLIANCE PARTNERS





# FLYTOGET BUILDS SMARTER SERVICES

PROCESS STORY: APIs & INTEGRATION

Better able to connect & collaborate with partners  
Amplified development abilities through shared services

## HOW THEY DID IT

Replaced their existing, complex integration solution with open source integration and API management from Red Hat.

# COX AUTOMOTIVE OFFERS SPEEDY SELF-SERVICE

TECHNOLOGY STORY: CLOUD MANAGEMENT

**\$5 M** in soft savings

Deliver IT resources in **15-20 minutes instead of 3 weeks**

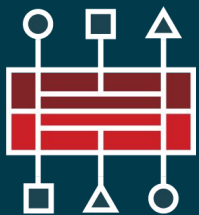
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*HOW THEY DID IT*

Updated infrastructure & big data approach; built portal with cloud management

# OPEN API INFRASTRUCTURE & MANAGEMENT

APIs & MICROSERVICES FOR REUSABILITY, MODULARITY, AND POSSIBLY PROFIT



- Create standard routines, protocols, and tools for developing applications
- Create loosely coupled services that can be used by multiple applications
- See and control APIs across the enterprise
- Let teams deliver their own APIs and microservices--and share them with partners & customers

# CONTAINERS ENABLE PORTABILITY & CHOICE

CONTAINERS GIVE YOU MORE CHOICES FOR APP DEPLOYMENT

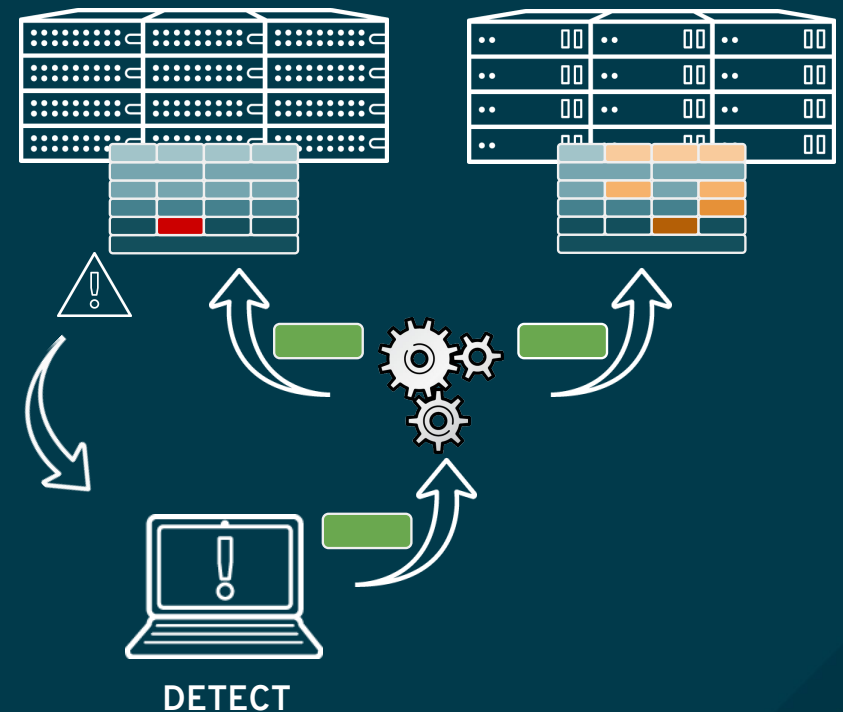


- Eliminate configuration errors and “works fine on my machine” problems
- Isolate apps from underlying infrastructure
- Deploy consistently across dev, stage, and production
- Benefit from automation with orchestration and continuous integration and deployment (CI/CD) practices

# AUTOMATE PROCESSES & SERVICES

AUTOMATION ACCELERATES SERVICE DELIVERY AND IMPROVES USER EXPERIENCE

- Provisioning & configuration
- Orchestration
- Compliance reporting & mitigation
- Drift detection & management
- Container scanning & management



# MACQUARIE TRANSFORMS DIGITAL BANKING

## WITH DEVOPS PROCESSES



# AVIVA ASIA MODERNIZES WITH MIDDLEWARE

## IMPROVING PROCESSES WITH INTEGRATION



# ATOS HELPS UK GOVERNMENT SERVE CITIZENS

## PROCESS STORY: INTEGRATION

