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APPLICATION STRATEGIES FOR A MODERN ENTERPRISE

AGENDA

- Why change?

- Why Red Hat?

- Our approach

APPLICATION MODERNIZATION:

WHY CHANGE?

SUCCEEDING AT DIGITAL TRANSFORMATION

EFFICIENCY　　　　　AGILITY　　　　　SPEED

OPTIMIZE THE IT YOU HAVE

INTEGRATE APPS, DATA, AND PROCESSES

ADD & MANAGE CLOUD INFRASTRUCTURE

BUILD MORE MODERN APPLICATIONS

MODERN BUSINESS CHALLENGE

Business wants more with less

- Increased expectations from business to deliver new functionality **faster**.
- Pressures from the business to **reduce cost**.
- How can we do more with less?

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MODERN BUSINESS CHALLENGE

Business wants more with less

SPEED = REVENUE

BARRIERS TO CHANGE

Antiquated: people, process, technologies

Industry disruptors either …

- … are **greenfield** and do not have legacy challenges.
- … have **re-tooled** to be competitive in 2017 landscape.

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THE CIO DILEMMA

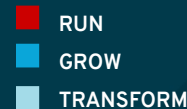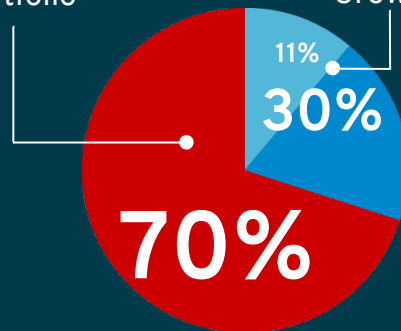Business Expectations become IT Challenges

Resources   Time   Budgets

?

Maintain current portfolio

Innovation, Differentiation, Growth

11%

30%

70%

- RUN
- GROW
- TRANSFORM

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WHAT ARE "TRANSFORMERS" DOING DIFFERENTLY?

The Vision: Everything-as-a-Service (EaaS)

Transformation
Ideas to production safely in a day.

Goal
85% of the bank's apps developed and deployed on their automated EaaS PaaS platform by 2020 on a fraction of their current infrastructure.

Deutsche Bank

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WHAT ARE "TRANSFORMERS" DOING DIFFERENTLY?

"The IT department is moving way beyond being an internal service provider for the business"

"We're playing a big part in how the company asks vital questions about its business."
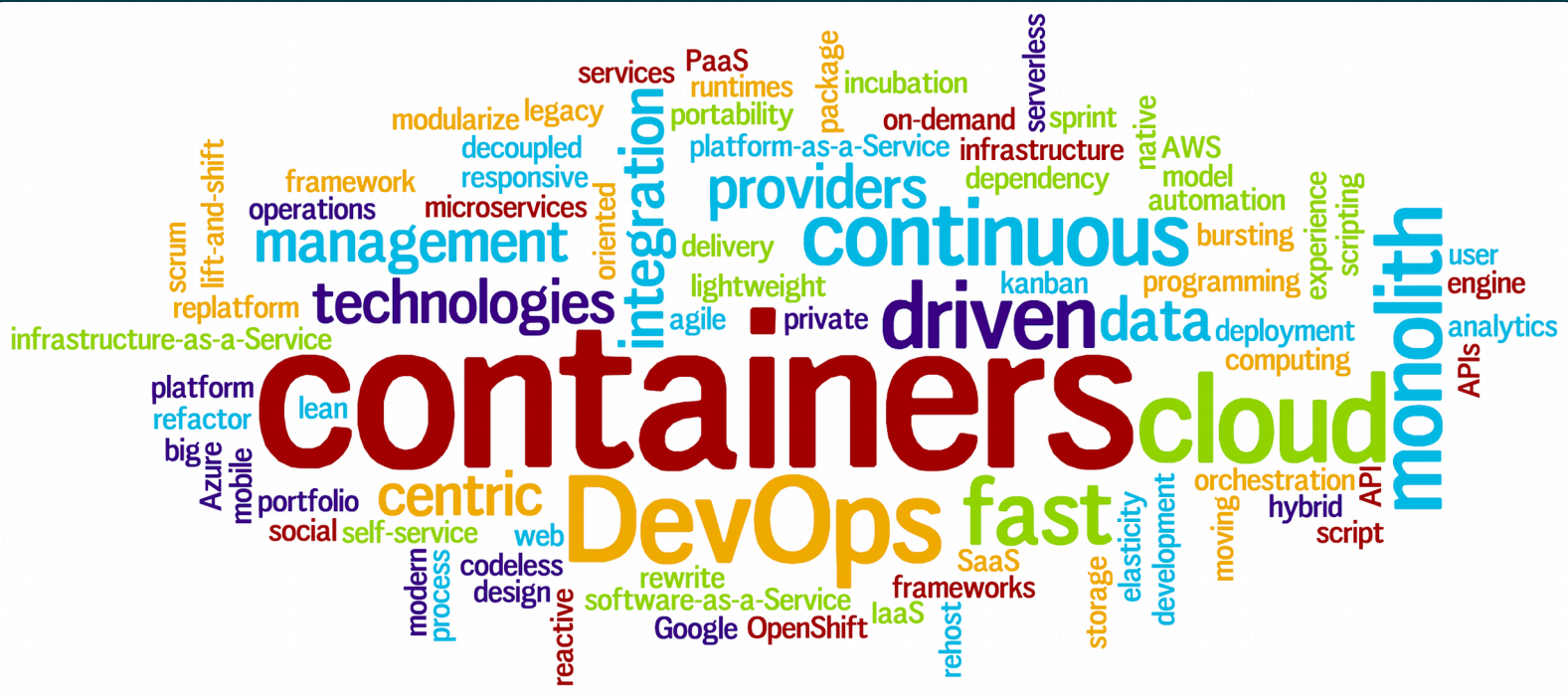Klas Bendrik, senior vice-president and CIO of Volvo Car Group

Klas Bendrik, senior vice-president and CIO of Volvo Car Group
Source: "Volvo's digital launch of the XC90 marks 'connected car' era", ft.com, December 8, 2015
http://www.ft.com/cms/s/2/4e8b4230-951e-11e5-8389-7c9ccf83dceb.html#axzz4JKZ1934H

TECHNICAL INITIATIVES

How do we <u>run</u> and <u>build</u> applications in the new world?

TYPICAL CUSTOMER LANDSCAPE TODAY

Where the journey starts...

RUN
Brownfield

GROW

TRANSFORM
Greenfield

PHYSICAL   VIRTUAL

PRIVATE & PUBLIC CLOUD

Complex & heterogeneous

Lack of common standards

Inconsistent automation & governance
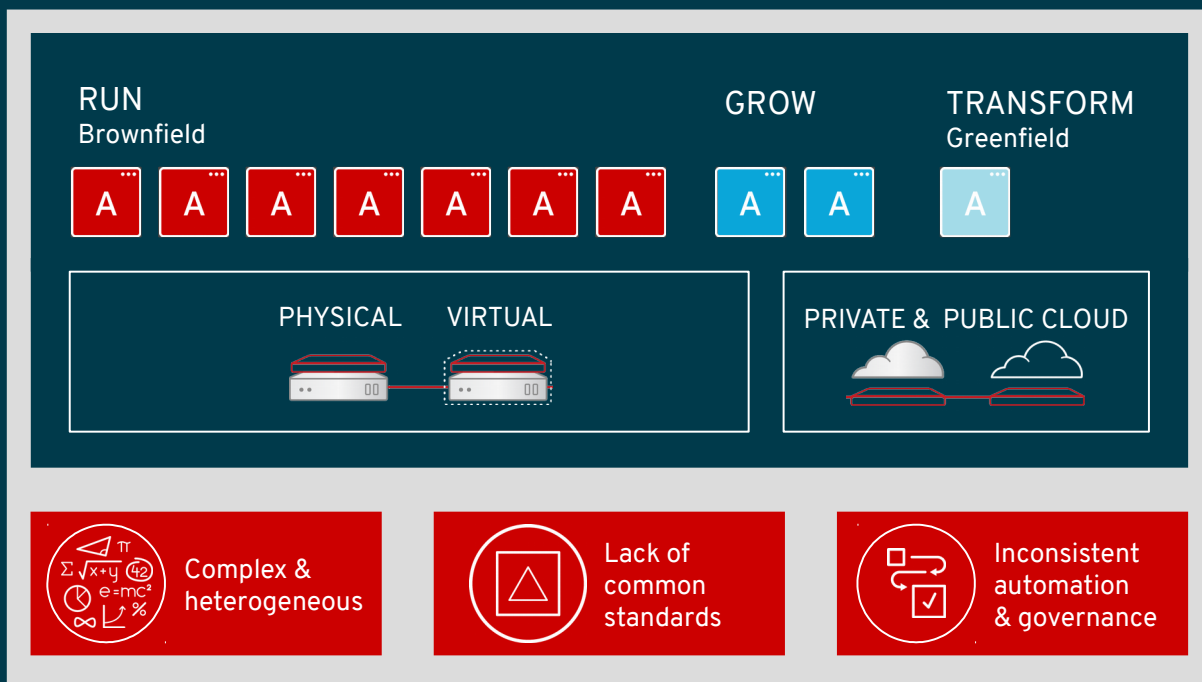
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TYPICAL CUSTOMER LANDSCAPE TODAY

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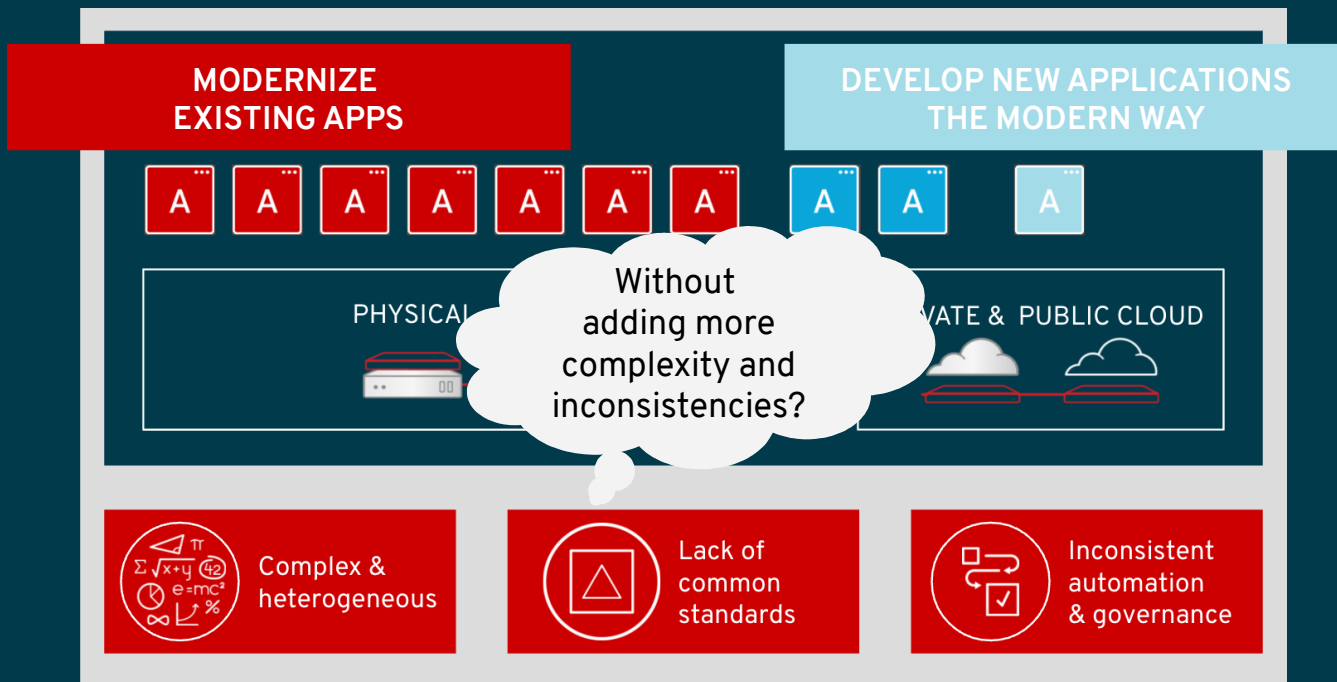
APPLICATION PORTFOLIO MODERNIZATION

One platform to support you today and tomorrow

RUN
Modernized brownfield

GROW

TRANSFORM
Greenfield

A A A A A A A   A A   A

COMMON HYBRID APPLICATION INFRASTRUCTURE

MODERN APPLICATION CONCEPTS

| BETTER SOFTWARE ARCHITECTURE | AGILE INTEGRATION | STREAMLINE APPLICATION LIFECYCLE | CONTINUOUS INNOVATION |
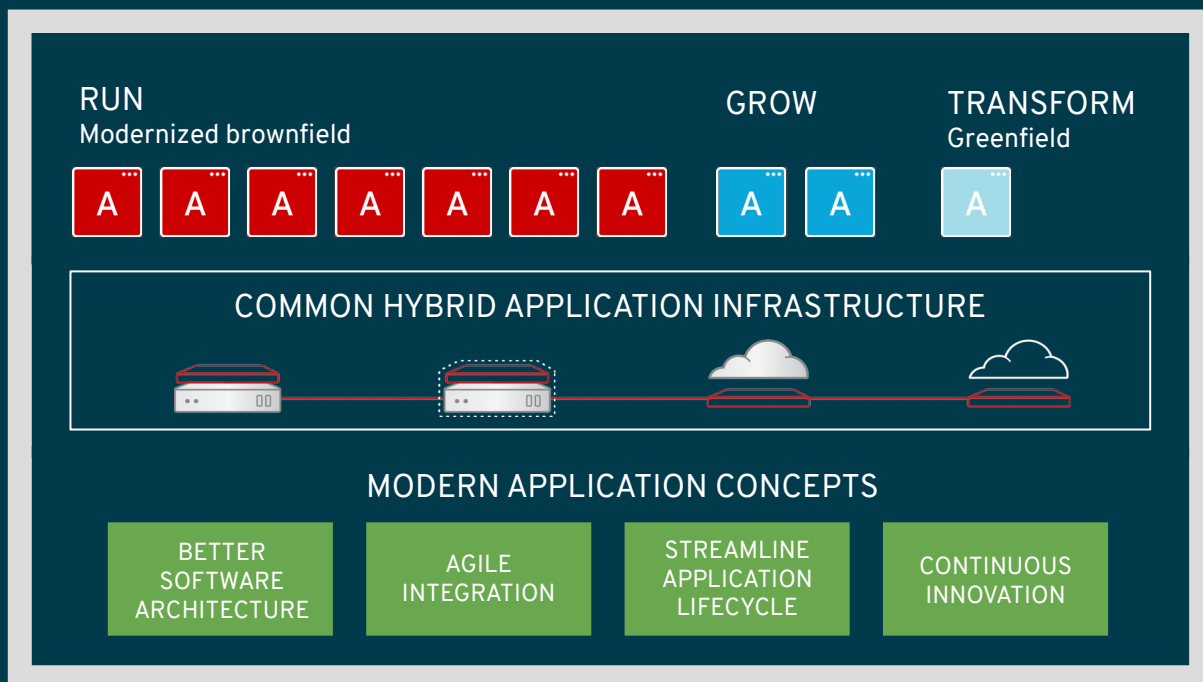
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APPLICATION MODERNIZATION & MIGRATION:

WHY RED HAT?

IT'S ALL THERE!
COMPLETE TECHNOLOGY STACK FOR HYBRID CLOUD

DEVELOPER TOOLS

RED HAT® JBOSS®
DEVELOPER STUDIO

RED HAT®
CONTAINER
DEVELOPMENT KIT

RED HAT®
OPENSHIFT
Container Local

RED HAT®
OPENSHIFT.io

SECURITY & MANAGEMENT

RED HAT®
CLOUDFORMS

RED HAT®
ANSIBLE
Automation

RED HAT®
SATELLITE

RED HAT®
INSIGHTS

RED HAT® QUAY
CONTAINER
REGISTRY

MIDDLEWARE AND APPLICATION SERVICES

FOUNDATION
RED HAT® JBOSS®
ENTERPRISE
APPLICATION PLATFORM

RED HAT® JBOSS®
WEB SERVER

RED HAT® JBOSS®
DATA GRID

RED HAT®
MOBILE

INTEGRATION
RED HAT® JBOSS®
FUSE

RED HAT® JBOSS®
AMQ

RED HAT® JBOSS®
DATA VIRTUALIZATION

RED HAT® 3SCALE®
API MANAGEMENT

AUTOMATION
RED HAT® JBOSS®
BPM SUITE

RED HAT®
DECISION
MANAGER

+

RED HAT®
OPENSHIFT
Application Runtimes

WildFly SWARM

VERT.X node spring

CONTAINER PLATFORM

RED HAT®
OPENSHIFT

RED HAT®
CoreOS

INFRASTRUCTURE SOFTWARE

RED HAT®
ENTERPRISE LINUX®

RED HAT®
STORAGE

RED HAT®
OPENSTACK®
PLATFORM

RED HAT®
VIRTUALIZATION

PHYSICAL   VIRTUAL   PRIVATE CLOUD   Google   amazon webservices   Microsoft Azure   OTHER CLOUD PROVIDERS

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WHY CHANGE WITH RED HAT?

Solutions for today and the future

RE-BALANCE MAINTENANCE AND INNOVATION

DECREASE COMPLEXITY, INCREASE EFFICIENCY

REDUCE / AVOID VENDOR LOCK-IN, INFLEXIBLE LICENSE MODELS

INCREASE SPEED & BECOME MORE PRODUCTIVE

REMOVE TECHNICAL DEBT & RISK

ADOPT AGILE METHODOLOGIES, DEVOPS

WHY MIGRATE?

Red Hat JBoss EAP migration benefits
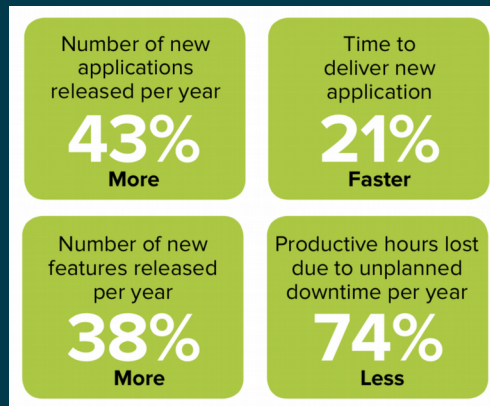   … experienced by our customer moving from IBM WebSphere and Oracle WebLogic.

IDC ROI Summary of JBoss EAP

3 Year ROI
481%

Average Annual Benefits per 100 Users
$50K

Payback Period
8 MONTHS

Average Annual Benefits per 100 Users

Business Productivity Benefits
$11K

IT Staff Productivity Gains
$21K

IT Infrastructure Cost Reductions
$10K

IDC study available: Executive summary, Infographic, White paper.

Risk Mitigation and App Development Impact

Number of new applications released per year
43% More

Time to deliver new application
21% Faster

Number of new features released per year
38% More

Productive hours lost due to unplanned downtime per year
74% Less

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WHY MODERNIZE?

Red Hat OpenShift Container Platform benefits

Benefits experienced introducing Red Hat OpenShift:

- Fast Return on Investment (ROI)
- High increase in business productivity
- More features developed
- Faster development live cycle
- Increased developer productivity

Study available at "IDC - The business value of Red Hat OpenShift"

ROI Summary of Red Hat OpenShift

5 Year ROI
531%

Average Annual Benefits per 100 Developers
$1.29M

Payback Period
8 MONTHS

Average Annual Benefits per 100 Application Developers

Business Productivity Benefits
$291.1K

IT Staff Productivity Gains
$814.5K

IT Infrastructure Cost Reductions
$174.2K

Application Development and Business Operations Impact

Number of applications/ major features developed per year
36% More

Application development life cycle (weeks)
66% Faster

Annual user productivity gained per 100 application developers
1,156 Hours

Annual additional revenue per 100 application developers
$1.65 Million

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SOME CUSTOMERS

Application Modernization customers

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OPPORTUNITIES FOR CHANGE

Application Modernization and Migration

CORE MIGRATION

EXISTING & NEW WORKLOADS

| APPLICATION SERVERS | ESB & INTEGRATION PLATFORMS | BPM & DECISION MANAGEMENT | APPLICATION INFRASTRUCTURE |

MODERNIZATION INITIATIVES

ENABLING BUSINESS VELOCITY

| BETTER SOFTWARE ARCHITECTURE | AGILE INTEGRATION | STREAMLINE APPLICATION LIFECYCLE | CONTINUOUS INNOVATION |

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MODERN APPLICATION CONCEPTS

Enhancing applications, platform & processes

BETTER SOFTWARE ARCHITECTURE	AGILE INTEGRATION	STREAMLINE APPLICATION LIFECYCLE	CONTINUOUS INNOVATION
Future-proof applications	Bridge old and new	Speed up your business	Foster an agile culture
Modularize

Adopt standards

Reuse instead of reinvent

Clean technical debt & risk | Decouple, expose & integrate APIs, services & applications

Need hybrid-cloud-enabled integration platform | Accelerate time from idea to production

Continuous Integration & Delivery (CI/CD)

Automation & self-service

Container technology | Agile methodology

DevOps principles

Collaboration |

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MOST WANTED ANSWERS

Approaching a large-scale application modernization

How do I ...

- predict the needed <u>man-days</u> and <u>ROI</u> upfront?

- identify and mitigate <u>risks</u>?

- implement best practices to save <u>cost</u> and <u>catalyze</u> the process?

- maximize my business <u>benefits</u>?

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RED HAT APPROACH

Scope of a modernization / migration

Application Code

Infrastructure
hardware, storage, virtualization, operating system, JVM, application container

Processes & Governance
application lifecycle, build, configuration, deployment, provisioning, DevOps, environments, test, integration, continuous *, monitoring

Knowledge

RED HAT APPROACH

Key good practices

Information sharing based on a central collaborative platform

- Simplified knowledge transfer, with <u>least effort</u> approach: no issue solved twice.
- Red Hat Consulting, Customer Portal, Knowledgebase, Support, Documentation, Trainings.

Reuse, automate, standardize as much as possible

- Infrastructure, deployments, tests, dependencies, stages, processes, management
- Transform: Red Hat Application Migration Toolkit
- Define: Red Hat Developer Suite, Cloud, Containers, System management.

Efficient, proven, pragmatic methodology

- <u>As few changes as possible</u> to get a running <u>functionally identical</u> application
- Holistic portfolio approach for green and brown fields
- Scaling through a factory delivery model

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END