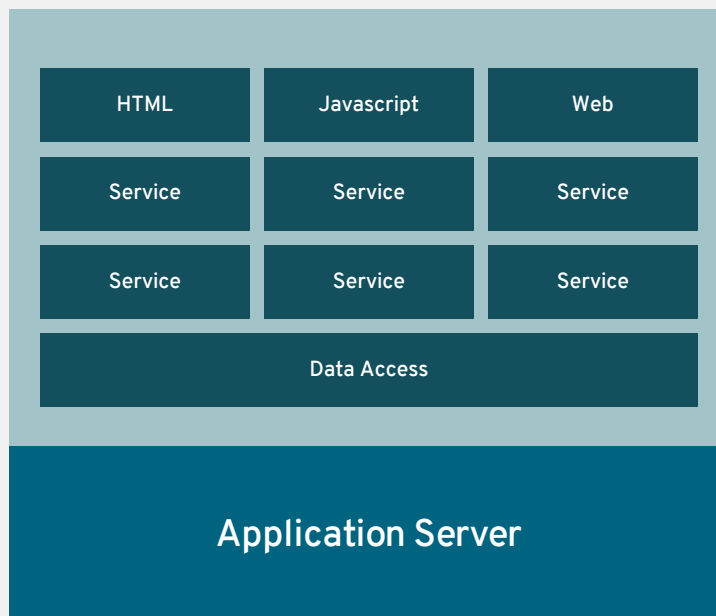# MODERN APPLICATION DEVELOPMENT HAS CHANGED, HAVE YOU?

Mattias Paulsson
Head of Solution Strategy and Middleware SSP, Nordics

BACKGROUND AND CONTEXT

redhat.

MONOLITHIC ARCHITECTURE

CLOUD-NATIVE APPS
BUILDING APPLICATIONS FOR THE CLOUD

WHY CLOUD-NATIVE APPS?
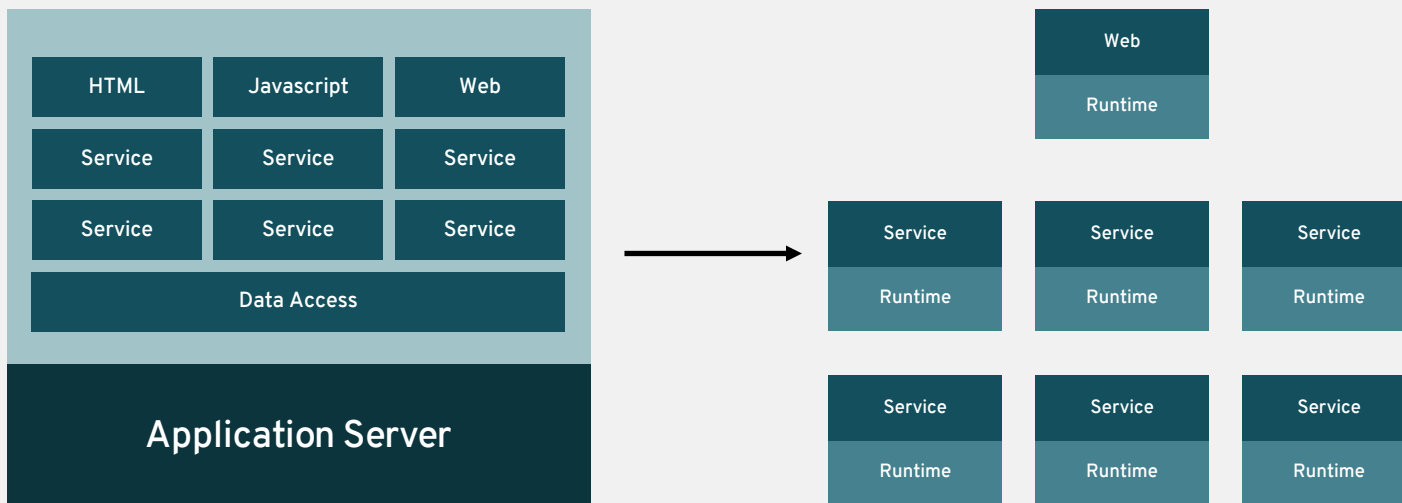
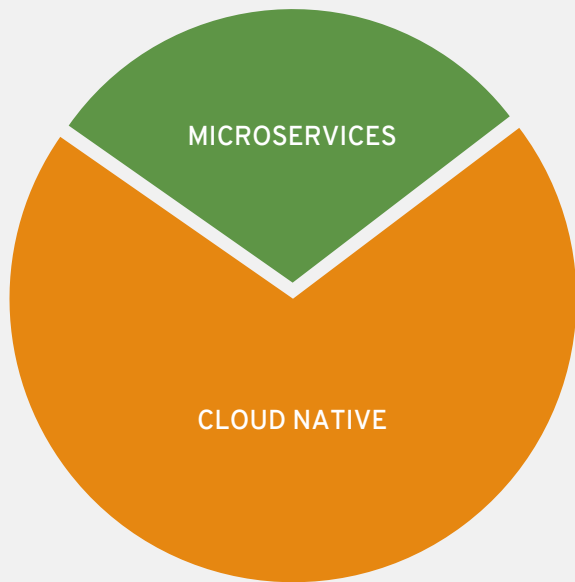**FASTER
SERVICE DELIVERY**

**INCREASE
SERVICE QUALITY**

**REDUCE
RISK OF DELIVERY**

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MICROSERVICES ARCHITECTURE

CLOUD-NATIVE IS MUCH MORE THAN YOUR APPLICATION ARCHITECTURE

THE PATH TO CLOUD-NATIVE APPS

A DIGITAL DARWINISM

RE-ORG TO DEVOPS

SELF-SERVICE ON-DEMAND INFRA

AUTOMATION

CONTINUOUS DELIVERY

ADVANCED DEPLOYMENT TECHNIQUES

MICROSERVICES

AND ONLY THEN!

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THE PATH TO CLOUD-NATIVE APPS

A DIGITAL DARWINISM

RE-ORG TO DEVOPS → SELF-SERVICE ON-DEMAND INFRA → AUTOMATION → CONTINUOUS DELIVERY → ADVANCED DEPLOYMENT TECHNIQUES → MICROSERVICES
FAST MONOLITH

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THE FAST MONOLITH

- Refactored to REST and JavaScript

- Adopted Container on Red Hat OpenShift

- Automated Testing

- Redefined Dev and Ops Boundaries

- Continuous Deployment Pipeline

- Zero Downtime Release to Production

- Release Cycles From 3 months to 1 Week

KeyBank

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THE PATH TO CLOUD-NATIVE APPS

A DIGITAL DARWINISM

RE-ORG TO DEVOPS → SELF-SERVICE ON-DEMAND INFRA → AUTOMATION → CONTINUOUS DELIVERY → ADVANCED DEPLOYMENT TECHNIQUES → MICROSERVICES / FAST MONOLITH
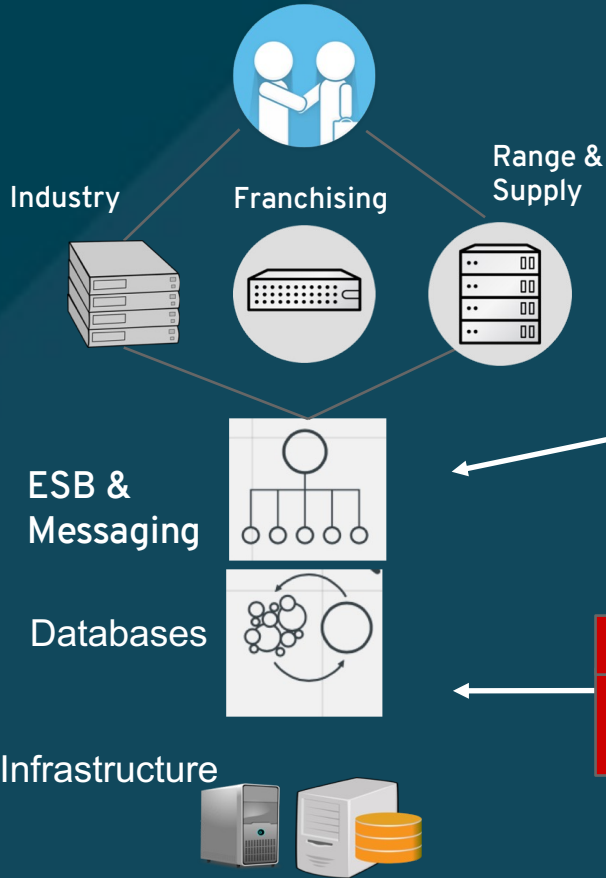
BUT CLOUD NATIVE ISN'T JUST TECHNOLOGY

Cloud Native is structuring

teams, culture, and technology

to utilize automation and architectures to
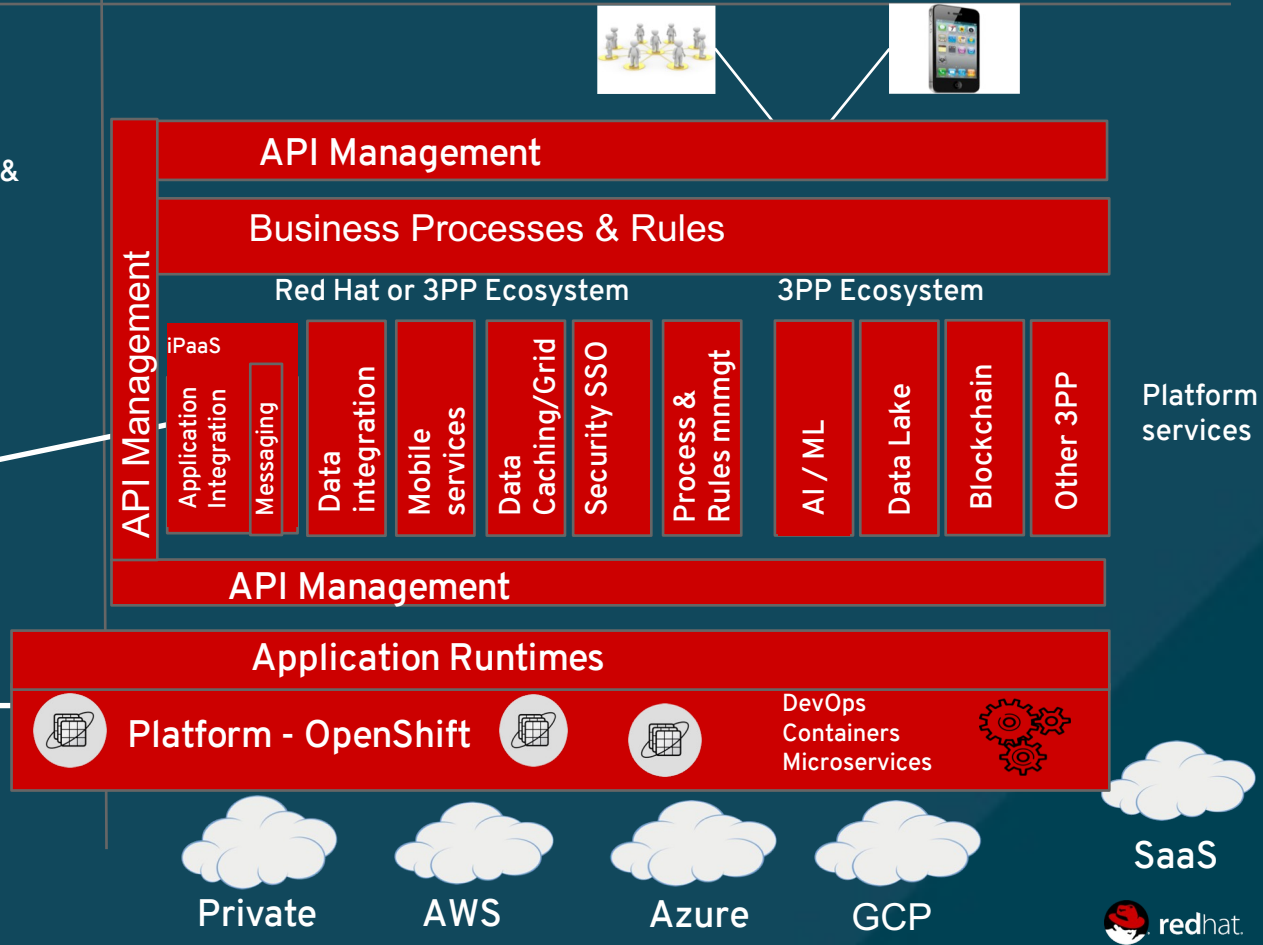
manage complexity and unlock velocity

- Joe Beda, CTO of Heptio

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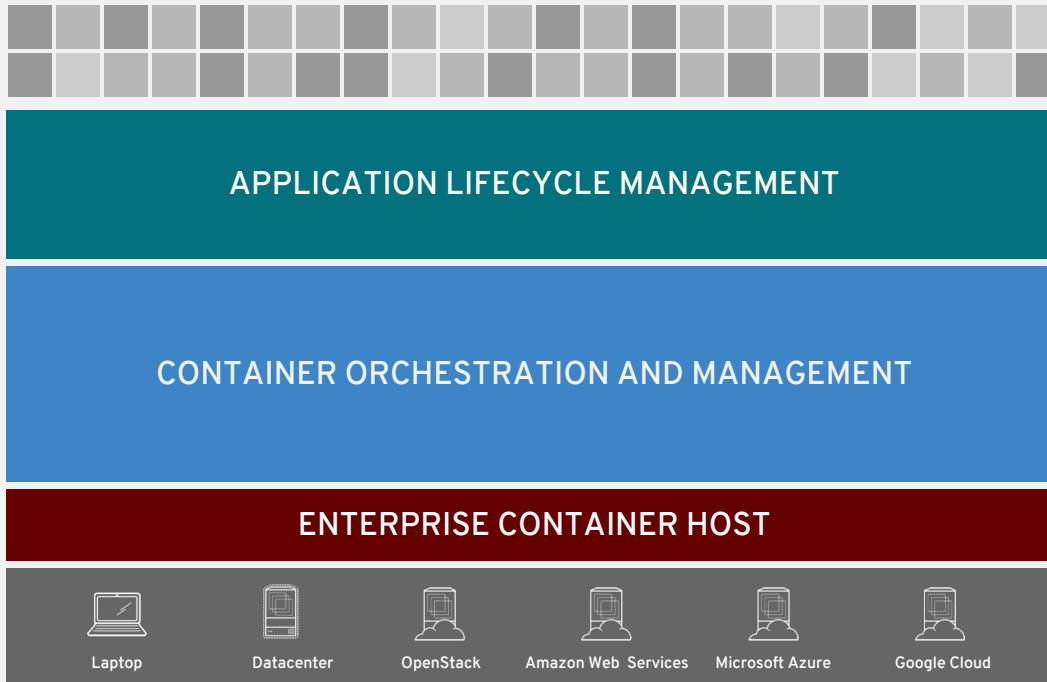# An evolutionary approach to Innovation

Mode 1: Systems of Record

Mode 2: Systems of Innovation / Engagement

Industry

Franchising

Range & Supply

ESB & Messaging

Databases

Infrastructure

API Management

API Management

Business Processes & Rules

Red Hat or 3PP Ecosystem

3PP Ecosystem

iPaaS

Application Integration

Messaging

Data integration

Mobile services

Data Caching/Grid

Security SSO

Process & Rules mnmgt

AI / ML

Data Lake

Blockchain

Other 3PP

Platform services

API Management

Application Runtimes

Platform - OpenShift

DevOps
Containers
Microservices

Private

AWS

Azure

GCP

SaaS

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CLOUD-NATIVE CAPABILITIES WITH RED HAT OPENSHIFT

ANY CONTAINER

APPLICATION LIFECYCLE MANAGEMENT

CONTAINER ORCHESTRATION AND MANAGEMENT

ENTERPRISE CONTAINER HOST

RED HAT® OPENSHIFT

Laptop   Datacenter   OpenStack   Amazon Web Services   Microsoft Azure   Google Cloud
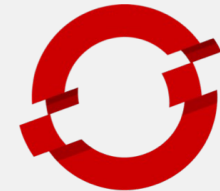
ANY INFRASTRUCTURE

67

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COMMUNITY-POWERED INNOVATION

RED HAT® OPENSHIFT Container Platform

Build and host apps anywhere you want: laptop, datacenter, cloud

RED HAT® OPENSHIFT Dedicated

Build apps in a dedicated public cloud managed by Red Hat

RED HAT® OPENSHIFT Online

Focus on your apps, Red Hat manages the rest in public cloud

OPENSHIFT COMMONS

An interactive community for all OpenShift Users, Customers, Contributors, Partners, Service Providers and Developers to share ideas, code, best practices, and experiences.

More at http://commons.openshift.org

THE POWER OF THE OPENSHIFT ECOSYSTEM

RED HAT PORTFOLIO
Optimized for Containers

RED HAT OPENSHIFT Application Runtimes

RED HAT JBOSS WEB SERVER

RED HAT JBOSS ENTERPRISE APPLICATION PLATFORM

RED HAT DATA GRID

RED HAT AMQ

RED HAT FUSE

RED HAT MOBILE

RED HAT ANSIBLE Engine

RED HAT QUAY CONTAINER REGISTRY

RED HAT DECISION MANAGER

RED HAT PROCESS AUTOMATION MANAGER

RED HAT 3SCALE API MANAGEMENT

RED HAT OPENSHIFT Container Storage

THIRD-PARTY ISV
Red Hat Container Catalog (200+ certified)

IBM · Microsoft · SAP · New Relic
Couchbase · CRUNCHY Enterprise PostgreSQL · Sysdig · f5
VERITAS · ZABBIX · NetApp
Sonatype · JFrog · dynatrace · nuagenetworks

CLOUD SERVICES
Open Service Broker

amazon web services · Microsoft Azure
Google Cloud

RED HAT OPENSHIFT

RED HAT ENTERPRISE LINUX ECOSYSTEM
Hardware, Virtualization, Cloud and Service Provider Certifications

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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METHODOLOGY

Iterative, managed service, factory scale up.

DISCOVER	DESIGN				DEPLOY
Explore	Assess	Prove	Pilot	Plan	Scale

Typical duration

1 day	4 - 10 weeks	2 - 12 months

- Standard, <u>proven</u>, modular, <u>repeatable</u>, pragmatic methodology

- Step by step, <u>low risk</u> and <u>highly efficient</u>

- <u>Scale</u> up by leveraging collaboration with clients and partners
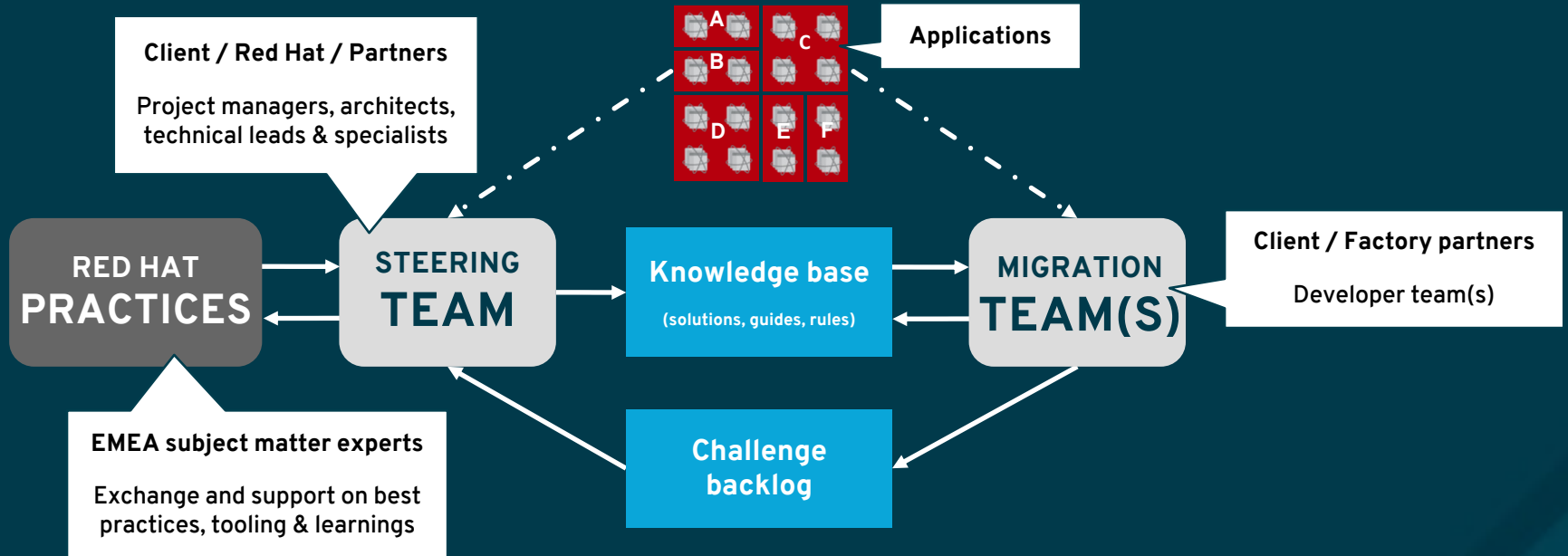
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An immersive residency for teams of 3-6 people
to rapidly build applications,
experience Devops,
and learn how to develop cloud native apps