Integration modernization - Agile integration

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Agenda

- What is Cloud Native
- What are Containers
- What are Microservices
- Agile Integration : A brief Introduction
  - People and Process
  - Architecture
  - Technology
- Evolution to Agile integration
- IBM Cloud Paks

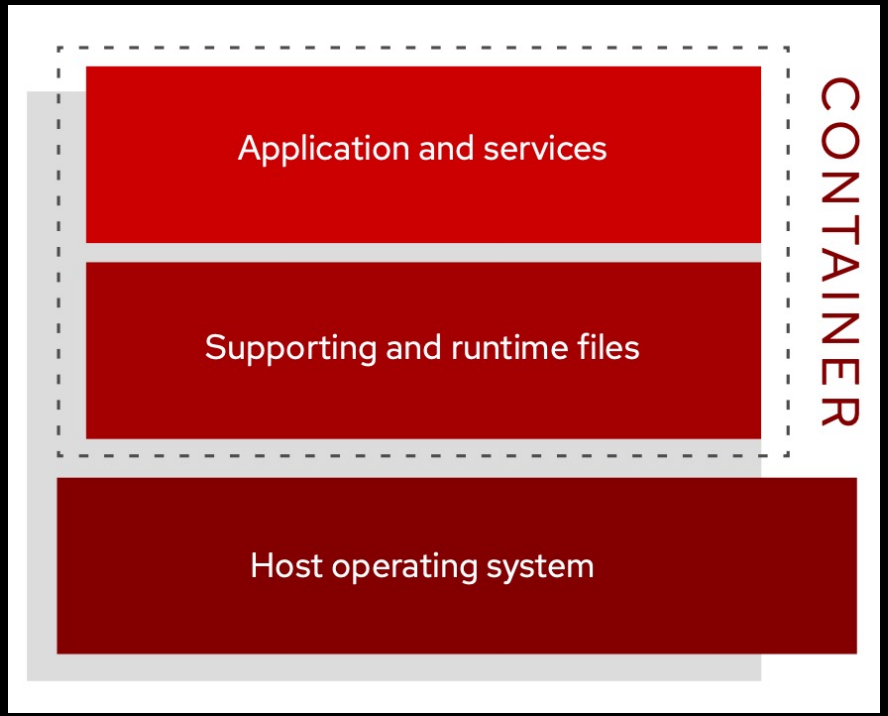
What is Cloud Native?

“Cloud-native is an approach to building and running applications that exploit the advantages of the cloud computing delivery model.

“Cloud-native” is about how applications are created and deployed, not where.”

Cloud-native solutions may be built on-premises or in dedicated environments, but it is the cloud-based approach to platform provisioning

What are Containers?



The real value of containers is **portability**.

What are Microservices?

MONOLITH	MICROSERVICES
• Server-side system based on single application • Easy to develop, deploy and manage	• Every app function is its own service • Own container • Communicate via. APIs
CHALLENGE	**ADVANTAGE**
• HIGHLY DEPENDENT • LANGUAGE/FRAMEWORK • GROWTH • HERO DEPLOYMENT • SCALING	• LANGUAGE • ITERATE AT WILL/DEVOPS PIPELINE • LESS RISK IN CHANGE • INDEPENDENT SCALING

Microservices and containers are a powerful combination, especially when integrated into a DevOps environment.

OpenShift is Open Source

How Openshift works?

OpenShift(User Experience, PaaS, Market Place)

Kubernetes (Orchestration)

Docker (Container API)

Agile integration: A brief introduction

Agile Integration....

...to achieve development, deployment, and operational agility

People & Process

- Decentralized ownership
- Empowering teams
- Agile methods

Architecture

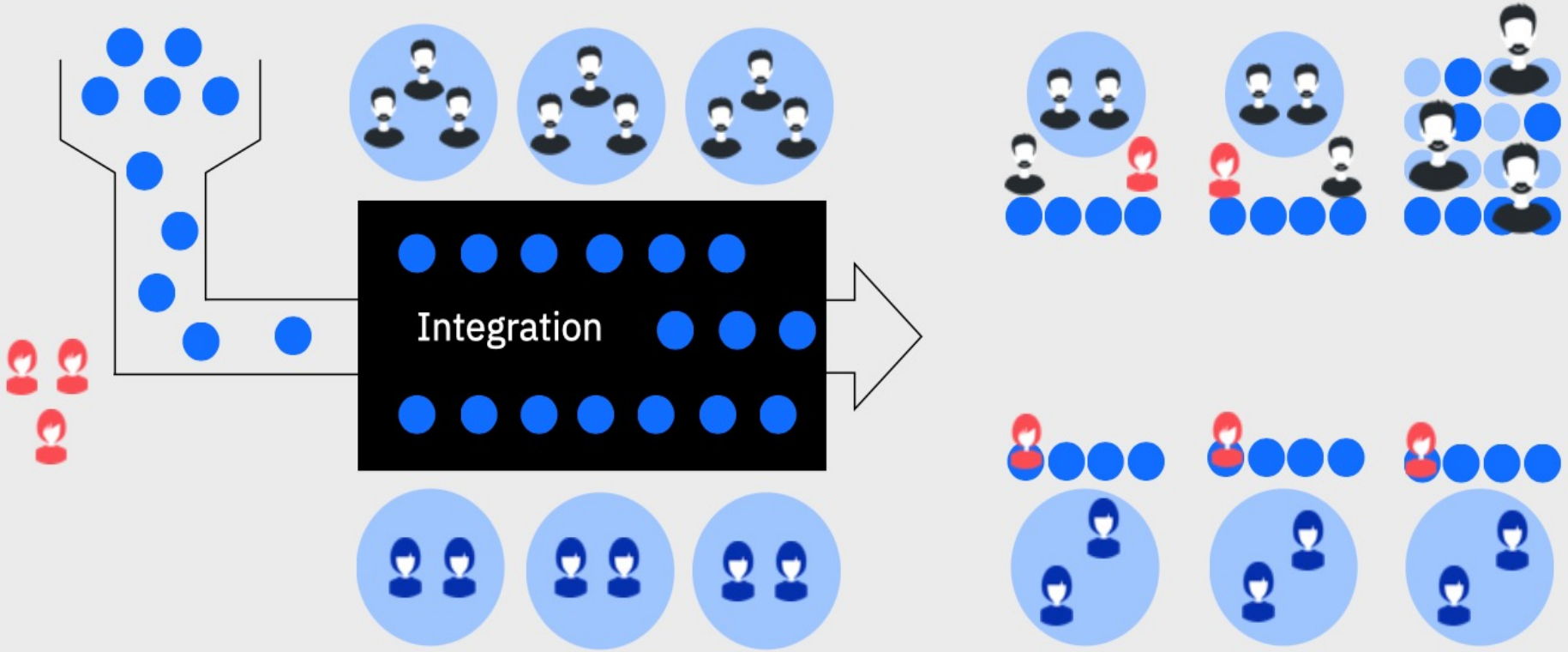
- Fine-grained deployment
- API led
- Event-driven
- Microservices aligned
- Highly scalable

Technology

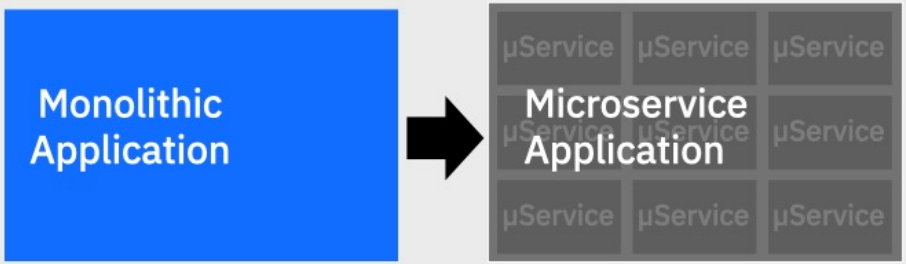
- Cloud-native infrastructure
- Essential integration capabilities
- Unified security, governance, and operations

People & Process

Decentralized Ownership



Microservices typifies the benefits sought from modern architectural techniques



Agility

Faster iteration cycles, bounded contexts, autonomous teams

Scalability

Elastic scalability, workload orchestration, cloud infrastructure

Resilience

Minimized dependencies, discrete failover, fail fast, start fast

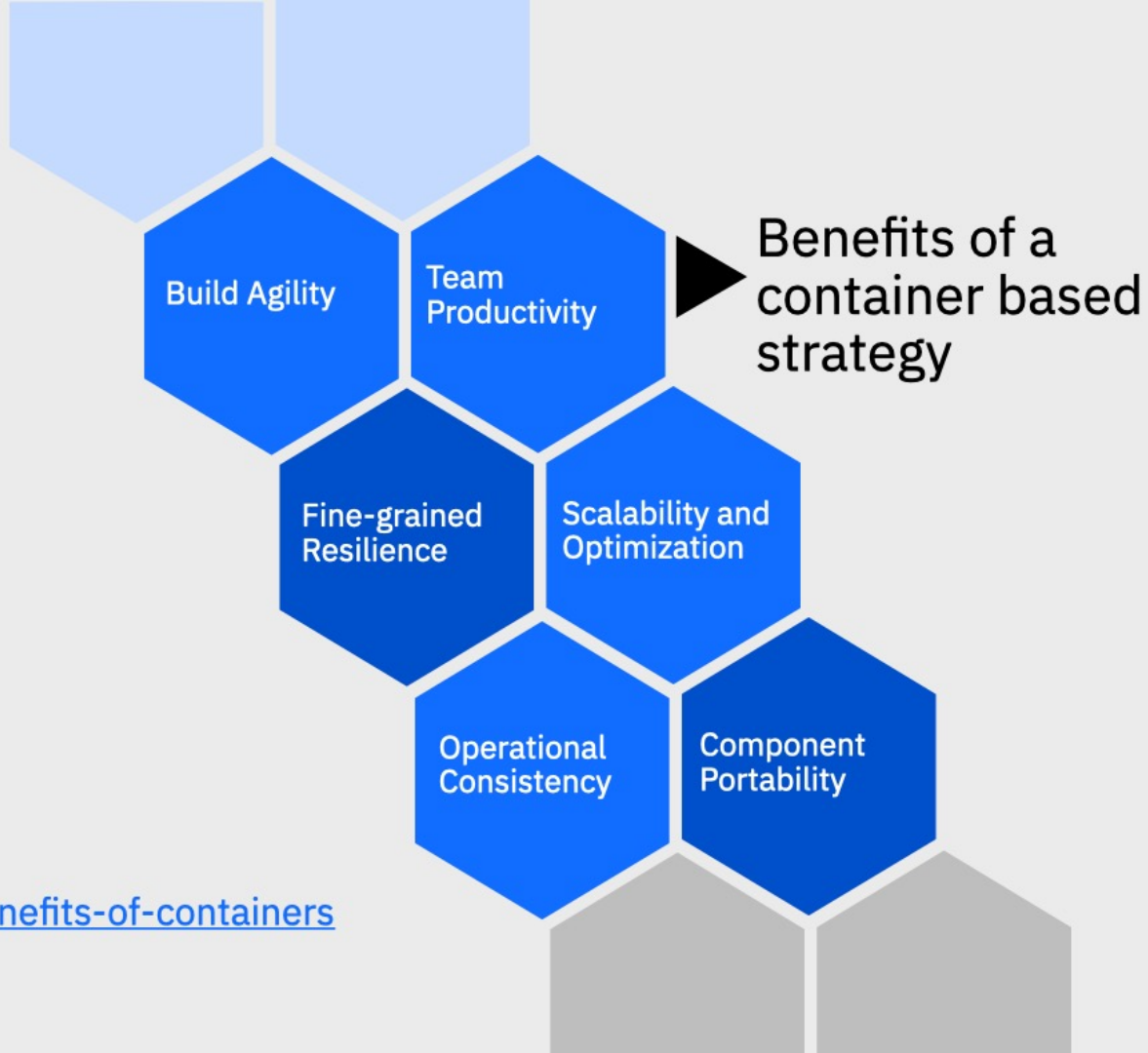
However, microservices is just one of architecture and design influences changing the way we think about building components.
API led, microservices, cloud-native, event driven...the list continues

Technology

Move to cloud is much more than re-platforming.

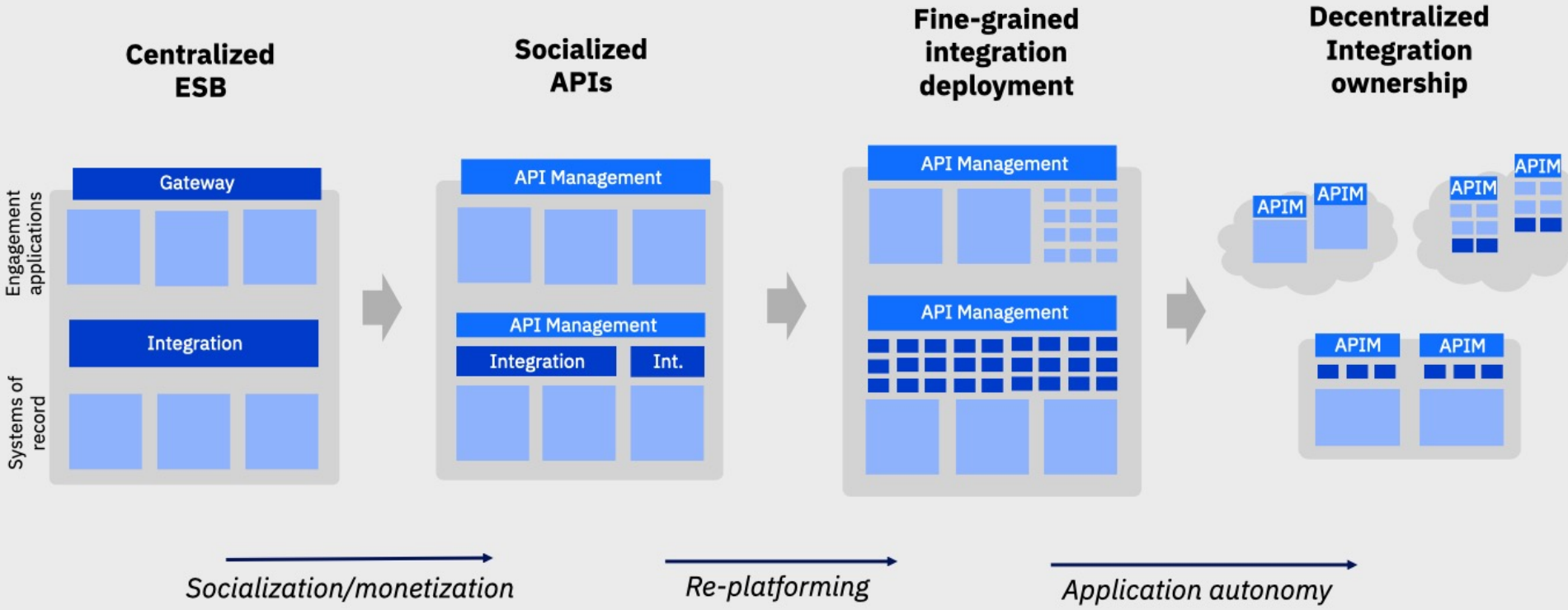
Containers, used in a cloud-native style are part of an evolving story.

Lift and shift will not bring same benefits



https://developer.ibm.com/series/benefits-of-containers

Evolution to **agile integration** – high level view



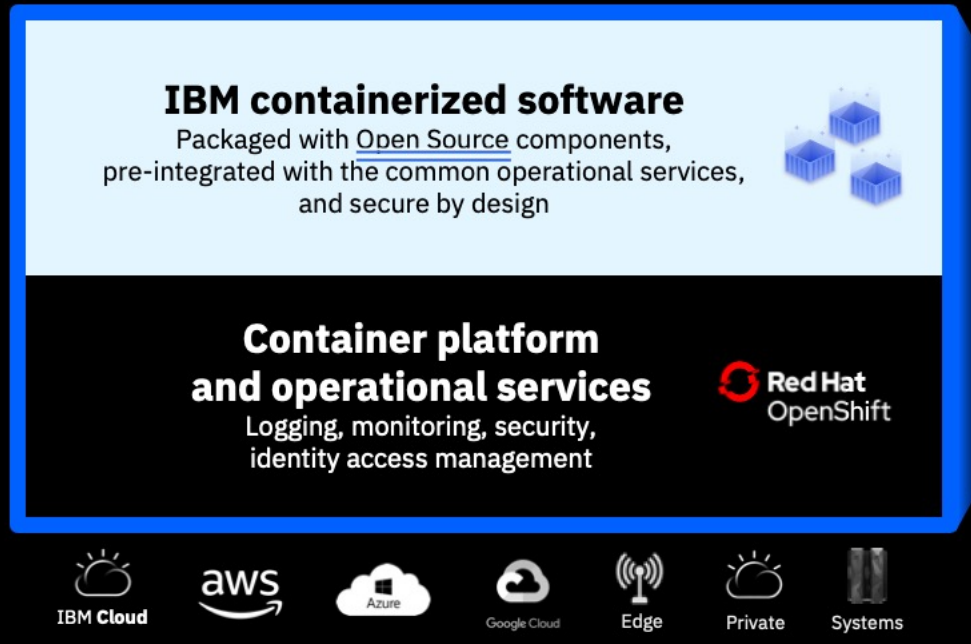
Webinars http://ibm.biz/agile-integration-webcasts

eBooklet http://ibm.biz/agile-integration-ebook

IBM Redbook http://ibm.biz/agile-integration-redbook

IBM Cloud Paks

A faster, more secure way to move your core business applications to any cloud through enterprise-ready containerized software solutions



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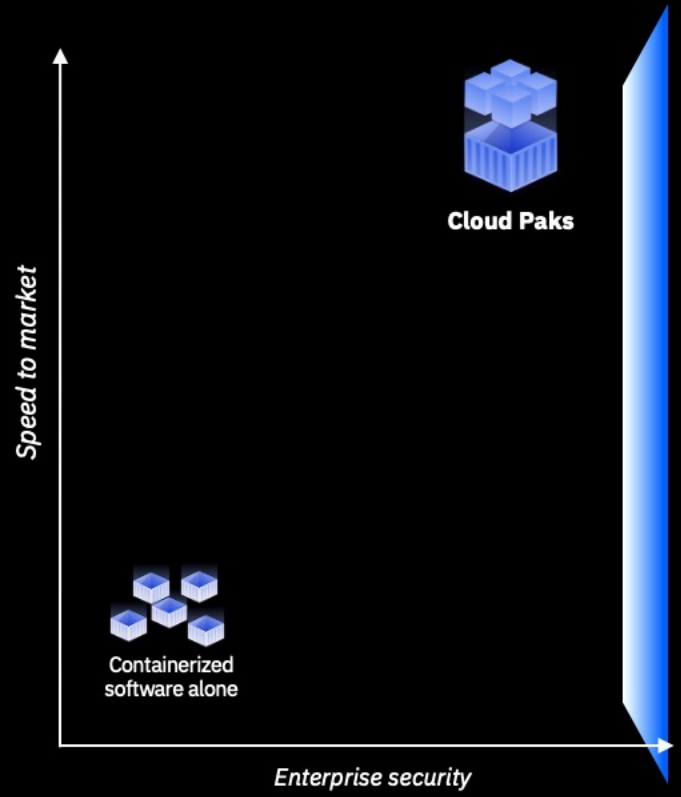

	Containers Alone Client creates containers or receives software as standalone container(s)	IBM Cloud Paks Complete solutions certified for enterprise use cases
Runs anywhere	Yes	Yes
Vulnerability scanned	Yes	Yes
Red Hat container certification	Depends on product	Yes
Complete solution w/ container platform	No	Yes
Flexible & modular: Pay for what you use	No	Yes
IBM certified/orchestrated for production (Built for Kubernetes by experts; certified against 250+ criteria)	No	Yes
Multicloud validation	No	Yes
Integrated deployment experience	No	Yes
Full stack support by IBM (Base OS, software, and container platform)	No	Yes
License metering integration	No	Yes
Scalable and resilient	No	Yes
Encrypted secrets / limited privileges	Do it yourself	Yes
Management and operations	Build your own	Yes
Lifecycle Management	Manage it yourself	Yes