Microsoft

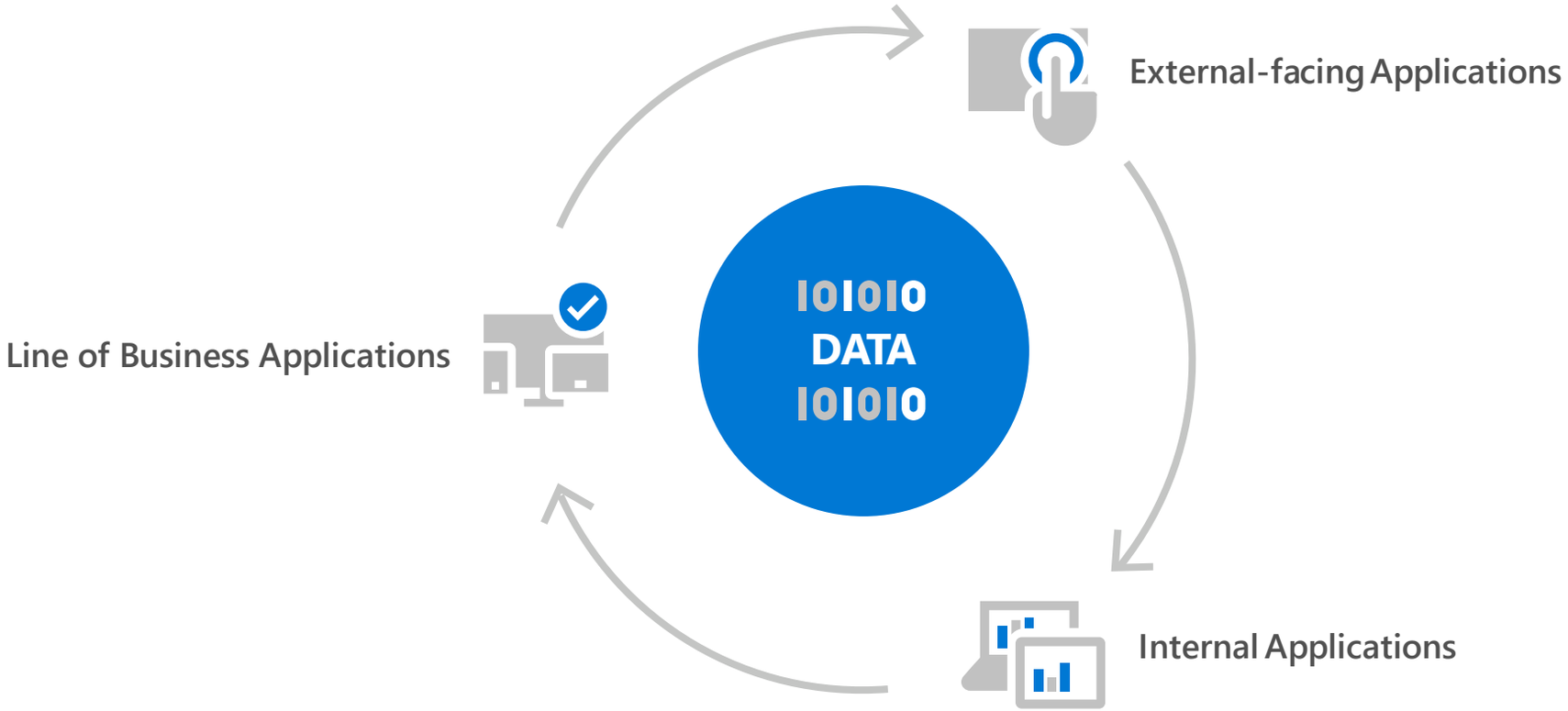
App Modernization

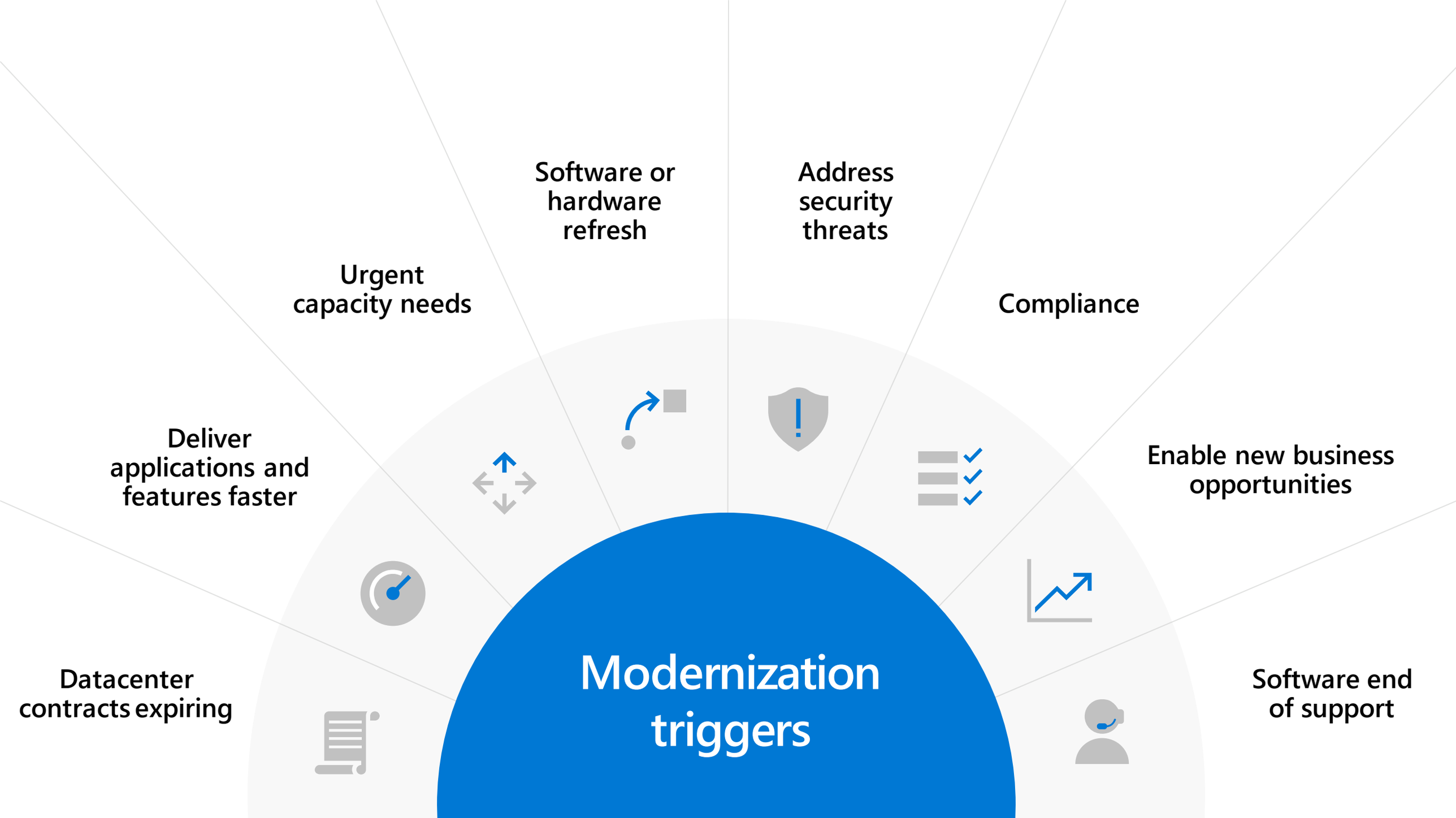
Future-proof the applications
that power your business today.

Speaker Name

Introduction + Challenge

Business is powered by applications




Modernization triggers
Software or hardware refresh
Address security threats
Urgent capacity needs
Compliance
Deliver applications and features faster
Enable new business opportunities
Datacenter contracts expiring
Software end of support

Application layers

Code

Data + Intelligence

Infrastructure

Challenges

Keeping up with the speed of business

Code

More resilient and scalable applications

Adding new features and functionality without taking applications down

Future-proof applications

Infrastructure

Heterogeneous workloads

Hybrid deployments

Security and management

Continuous monitoring

Cost management

Data

Data growth and data silos

Incongruent data types

Performance constraints

Complexity of solutions

Rising data maintenance costs

Security issues and data breaches

Application Delivery

Shorter release cycles

Improved software quality

Responding faster to bugs and security incidents

Learning from real usage to continuously improve applications

BMW

Challenge

Create an intelligent, highly personalized world of digital services that integrate the vehicle seamlessly into the customer's life and are available 24/7, anywhere.

Solution

BMW created the Open Mobility Cloud, an intelligent, continuously learning platform based on Azure that melds environment, context and services to address individual mobility needs.

asos

Are your applications ready?

Today

Application silos, built in isolation

Limited set of platforms and form factors

Overabundance of data

Servers and infrastructure to manage

Upfront capacity planning, fixed scale

Future

Multi-channel applications, covering all touchpoints

Many platforms, devices and form factors

Data-driven intelligence in applications

Focus on application functionality, not infrastructure

Elastic, unlimited scale


How can I make sure that my existing applications can take maximum advantage of cloud capabilities?
I'm worried that I need to start from zero and rebuild for the cloud?
How do I get started, I have so many apps!

Microsoft

The application journey to the cloud

The journey to the cloud

IaaS/VM/Compute

Own your home

Platform as a Service

Bed and breakfast

Serverless

Hotel

Migration + Modernization

The journey to the cloud

Infrastructure

"What your application runs on"

Data

"What your application works with"

Code

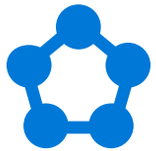
"What your application does"

Migrate • Innovate

Unified Management • Security • Governance • Tools • DevOps

A turn-key platform for Application Modernization

Orchestration
(Kubernetes)



Microservices

Web Apps

Event-driven
Functions

< Control

Infrastructure abstraction

Productivity >

Modernizing with managed services

Challenges

Infrastructure management slows down business processes

Inefficient resource management

Lock-in to a limited (legacy) stack. Lack of portability across clouds

Deployment not automated, slow, wasted time due to manual tasks

Production infrastructure can not be replicated on developer machines

Azure Benefits

Managed services let you focus on apps, not admin and speed up deployments

Smaller instances increase packing density and improve resource utilization

Managed services support all stacks. Containers run on any cloud

Fast and agile app deployment with built-in DevOps and instant startup

Environments are consistent across development, test and production

The Absolut Company

Faster time to market

Improved website capabilities

Elimination of physical servers

Increased time for IT staff to focus on new digital initiatives instead

"In a marketing-centric organization, you cannot wait days for a new server. We go into the portal, interface directly with Azure, and launch our websites and have them running in minutes".

ABSOLUT.®

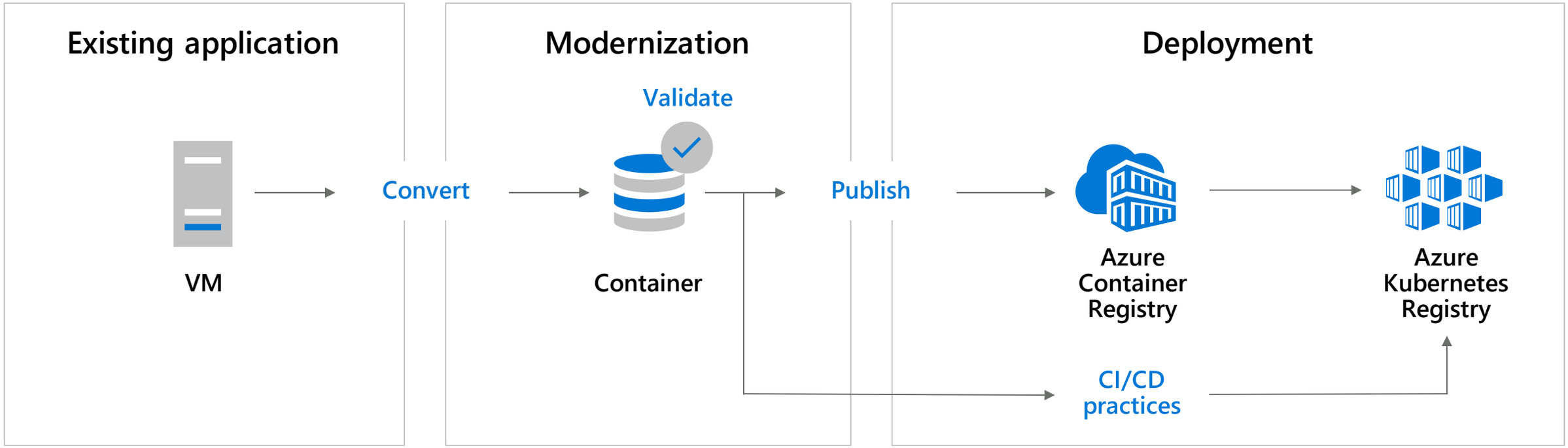
Country: Sweden | **Industry:** Retail | **Employees:** 500

Containers

Refactoring with container technology

Faster application deployment with integrated CD/CD tools and orchestration

- Containers support all frameworks and technology stacks across clouds and on-premises
- No OS overhead means improved packing density and more resource efficiency
- Faster application deployment with integrated CD/CD tools and orchestration



Xerox DocuShare

Onboard customers faster

Enable self-service environments

Reduce administrative overhead

No code modification required

"Thanks to Azure Kubernetes Service, we can now spin up customer environments in 10 minutes instead of 24 hours. Moving DocuShare Flex from virtual machines to containers in Azure allows us to provision environments faster, empowering our sales and partner network".

xerox

Country: United States | **Industry:** Manufacturing | **Employees:** 35.300

Microsoft

Microservices

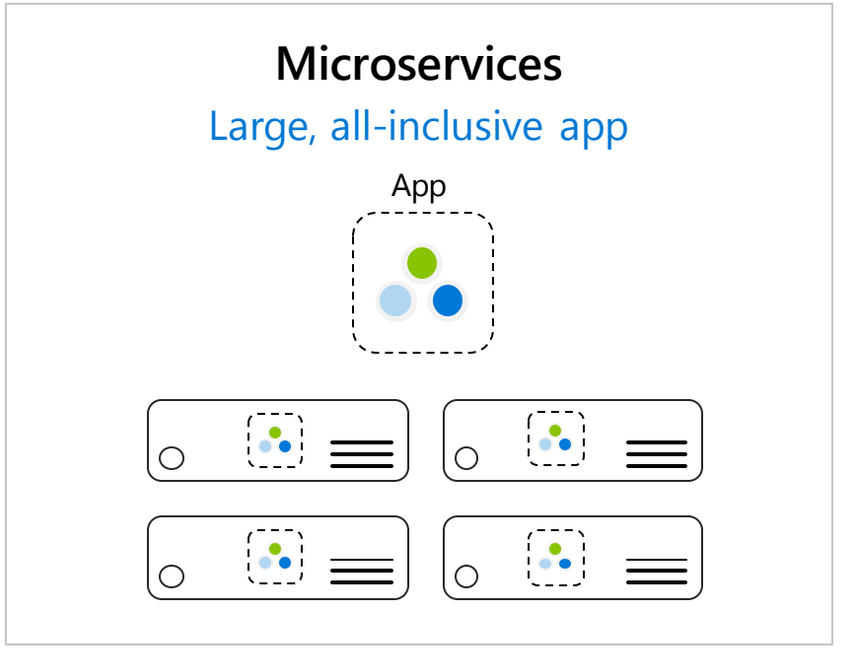
Rearchitecting with microservices

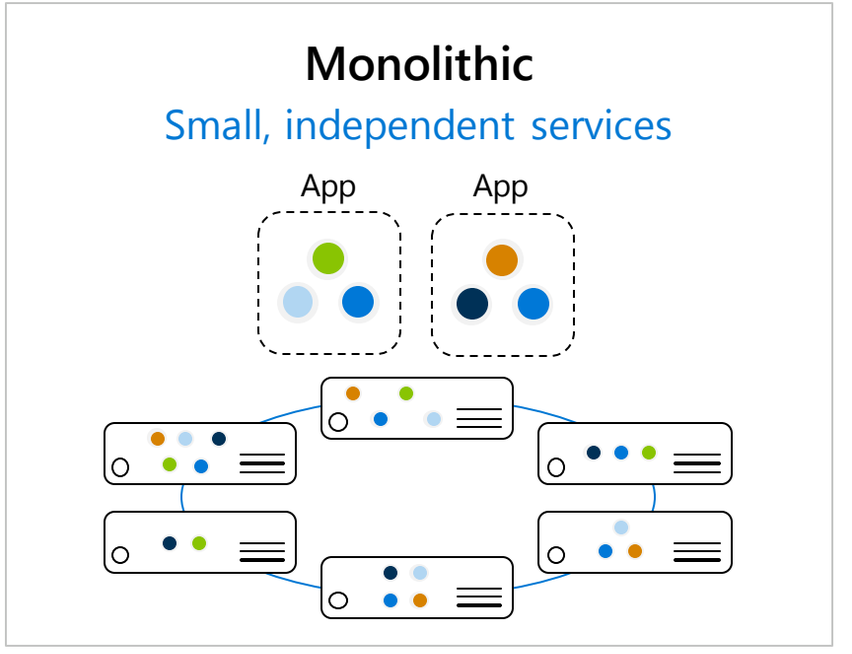
More agile, scalable and resilient applications

Individual services can be upgraded, changed or taken down without impacting the application

Developers work on individual services, which are smaller, easier to manage and understand

If individual services should fail, the application will continue to work without interruption





Alaska Airlines

Improved performance and reliability

Savings at scale

Greater control over infrastructure

Safe and consistent deployments

"We love the pristine and predictable environments provided by Windows Server Containers. Service Fabric brings us a safe and consistent deployment strategy that maximizes uptime. The marriage of the two in Microsoft Azure gives us unlimited potential".

Country: United States | **Industry:** Travel and Transportation | **Employees:** 21.561

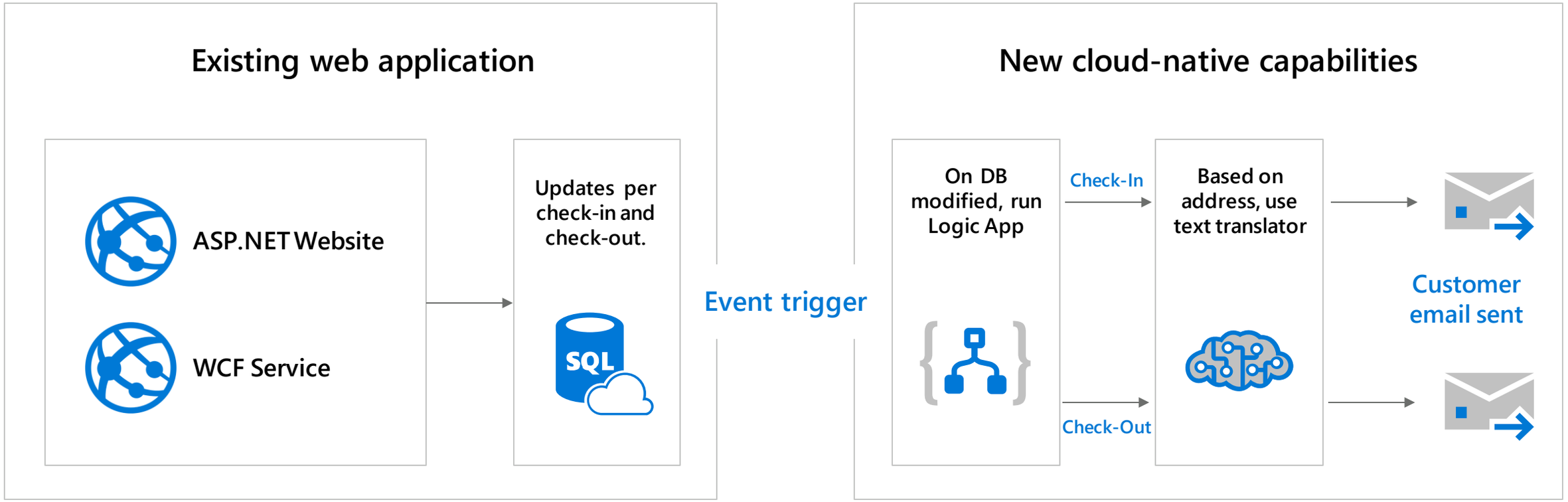
Microsoft

Serverless

Future-proofing applications with serverless

Adding new capabilities to existing applications

- Existing code and functionality is left as-is and moved to managed cloud services
- New capabilities are added incrementally using serverless functions triggered by events



Carl Zeiss AG

Shorter development cycles

Dramatically faster customer support

Elastic scale for infrastructure and apps

Safe and consistent deployments

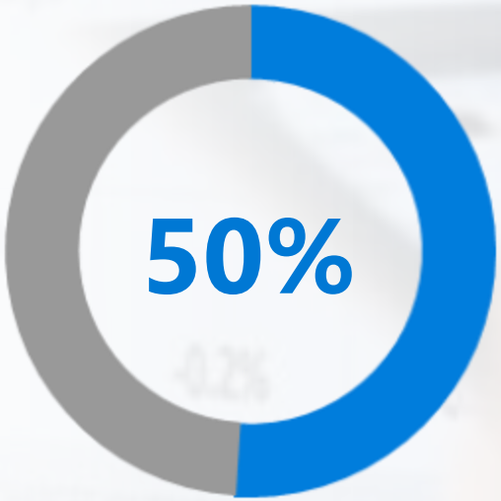
"The scalability of Azure Functions is amazing. We can send out millions of records, and the platform adjusts automatically to any load".

Country: Germany | **Industry:** Manufacturing | **Employees:** 10.000+

Innovate with Cloud-Native

“By 2020, more than 50% of enterprises will run **mission-critical, containerized Cloud-Native applications** in production”.

Gartner



Cloud application development

The best cloud for developers

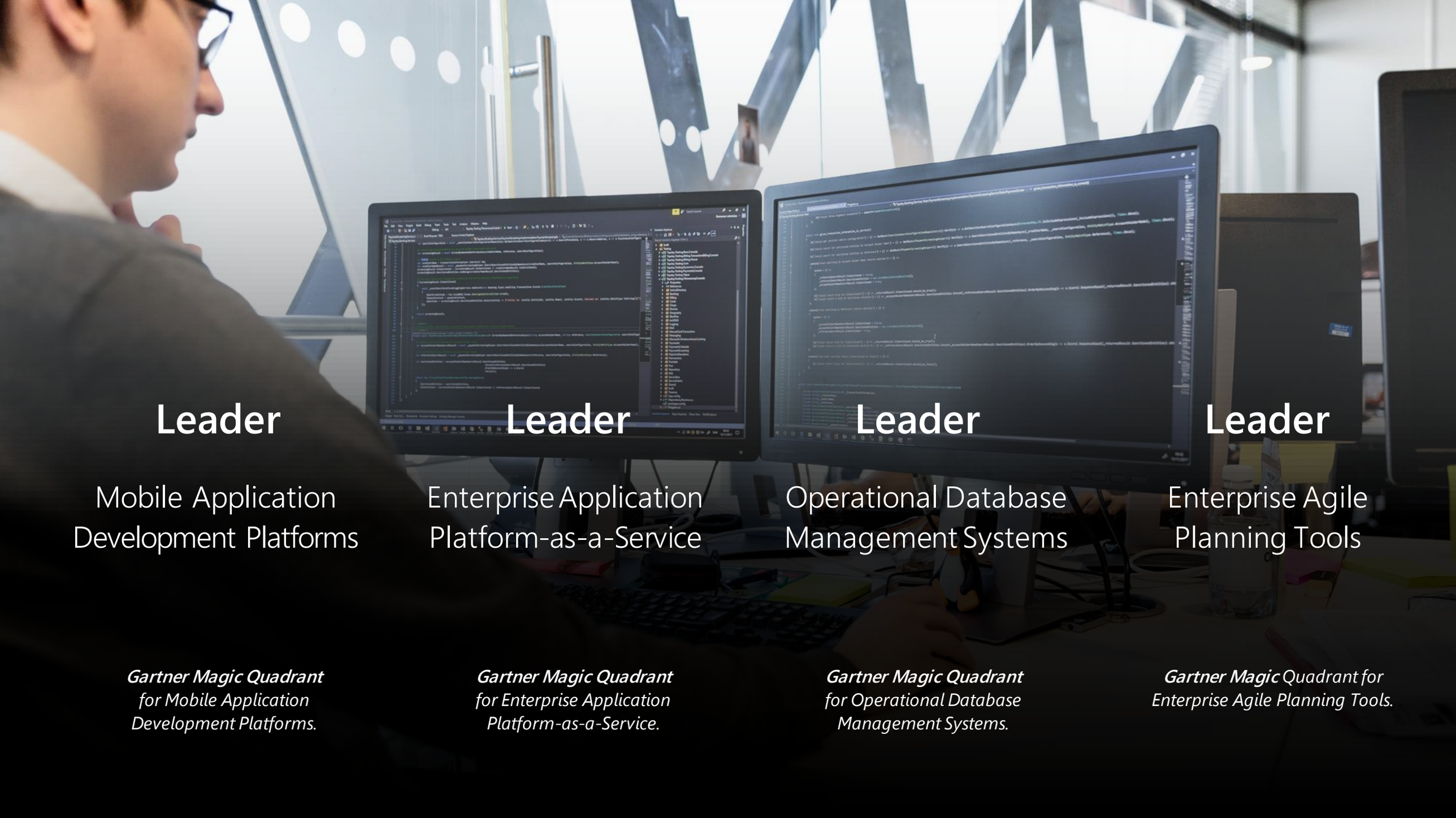
Microsoft Azure is a flexible foundation for all applications – our full-stack cloud application platform covers user experience, backend, data, intelligence and DevOps

Multi-channel user experiences

Open and hybrid cloud backends

Data-driven intelligence

DevOps built-in



Leader

Mobile Application Development Platforms

Gartner Magic Quadrant *for Mobile Application Development Platforms.*

Leader

Enterprise Application Platform-as-a-Service

Gartner Magic Quadrant *for Enterprise Application Platform-as-a-Service.*

Leader

Operational Database Management Systems

Gartner Magic Quadrant *for Operational Database Management Systems.*

Leader

Enterprise Agile Planning Tools

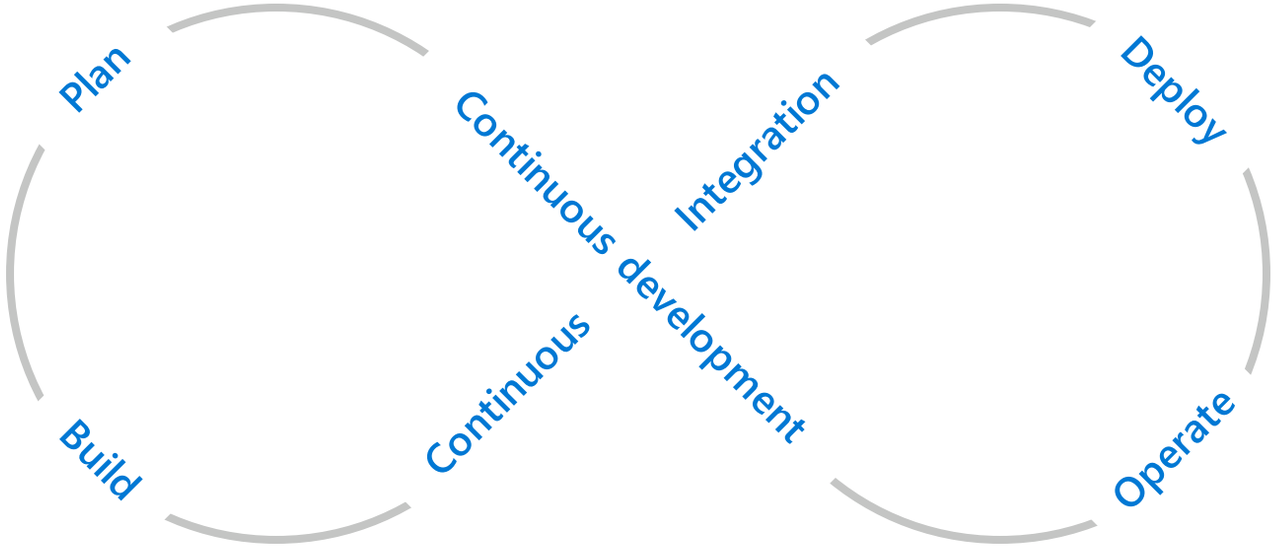
Gartner Magic *Quadrant for Enterprise Agile Planning Tools.*

DevOps

Deliver applications faster and more reliably

Plan + Track

Release



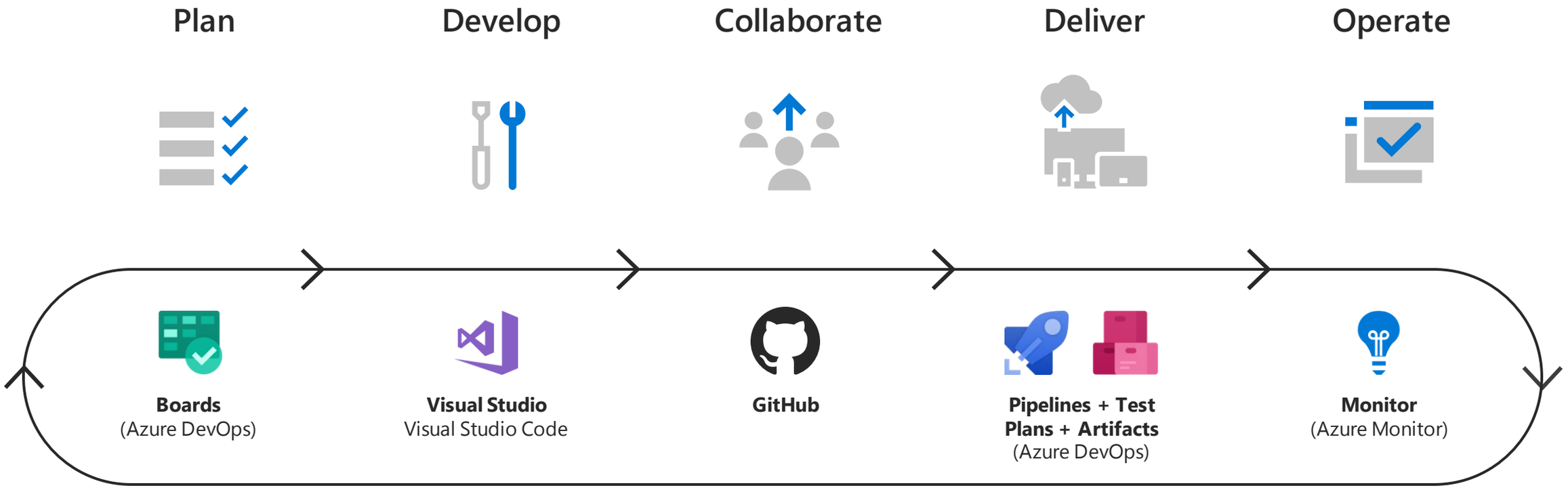
Development

Operation**s**

Code, Build + Test

Operate + Monitor

Deliver applications faster and more reliably



Faster delivery to production • More business value

Royal Dutch Shell

Improved agility at scale

Shortened development cycles

Improved business alignment

Faster deployments

"Instead of telling people to wait for six months for a new feature, we can give it to them in a few weeks. Our lead cycles are getting much shorter, and we have business stakeholders involved so that our solutions are more aligned with business requirements".

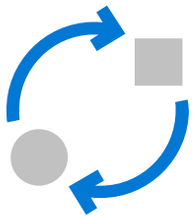
Country: Netherlands | **Industry:** Mining, Oil and Gas | **Employees:** 10.000+

Our journey to DevOps

People

PM, Dev, Test roles
Personal offices
Deep hierarchy
20+ team sizes

PM & engineering roles only
Team rooms
Flattened hierarchy
8-12 team sizes



Process

4-6 month milestones
Features shipped once a year
Success is install numbers
Long planning cycles
Secret roadmap

3-week Sprints
Features shipped every Sprint
User satisfaction determines success
Continuous planning & learning
Publicly shared roadmap

Tools

100 page spec documents
Proprietary SC, TFSVC
Feature branches
Proprietary toolchain

Mockups in PPT
Git
Everyone in master
Azure DevOps

Closing

Lower your TCO by moving to Azure

Azure offers many ways to save money

78%

savings by migrating datacenters to Azure instead of staying on-premises

68%

savings by rehosting applications on Azure PaaS

63%

savings by rearchitecting applications for Azure

5x

lower cost for Microsoft workloads compared to AWS

Source

Azure TCO Calculator at www.azure.com/tco

How Microsoft can help

Let’s have a deeper discussion about ***your*** journey to Azure.

Datacenter Migration

Windows Server on Azure

Linux on Azure

SAP on Azure

Azure Stack

Security and Management

Business Continuity Disaster Recovery

High-performance Computing

Application Modernization

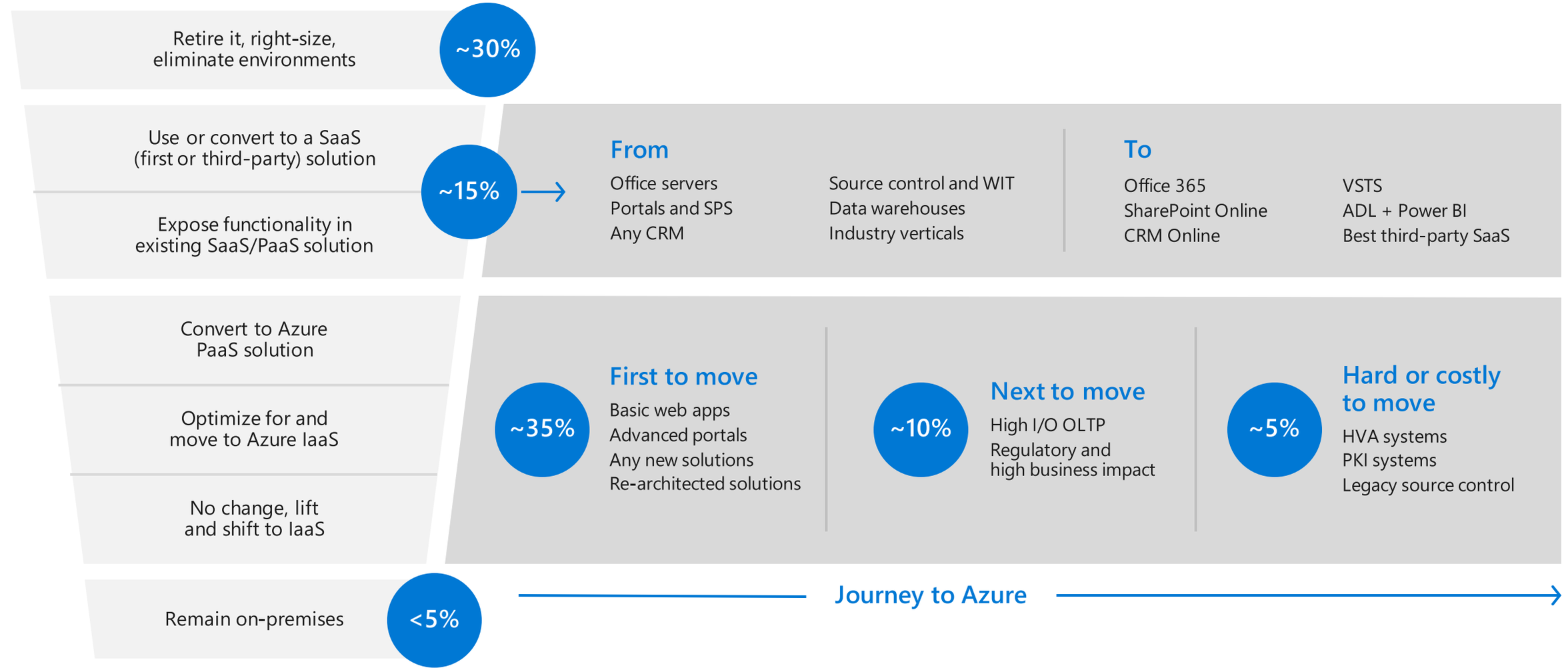
DevOps

Microsoft

Thank you

Microsoft IT journey to the cloud

Modernizing a Fortune 500 application portfolio



Our top 3 learnings

1. It's a great opportunity to 'clean house' - retire applications that are no longer used or consolidate and transition functionality to off-the-shelf solutions where possible.

2. No cloud hosting model (IaaS, PaaS, SaaS) should be taken off the table too early.

3. Move custom applications in stages:
   - Move simple workloads directly to PaaS: web sites, static portals, standard three-tier applications
   - Migrate complex solutions to IaaS first and gradually modernize later to unlock immediate benefits
   - Keep legacy/undocumented code as-is and surround it with serverless functions to add features

Download the eBook https://azure.microsoft.com/resources/inside-microsoft-cloud-migration-journey/