



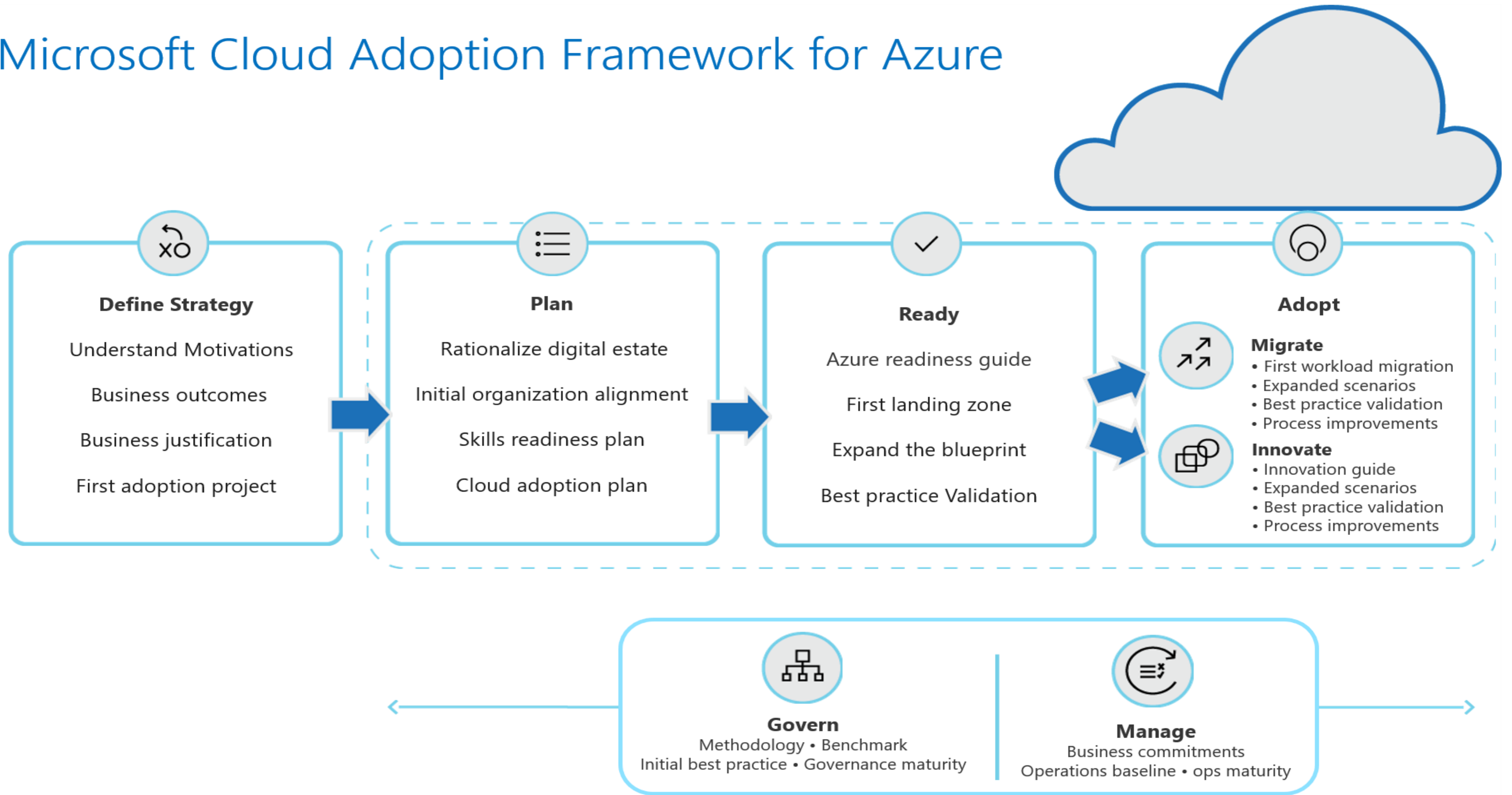
CMC TECHNOLOGY & SOLUTION

Aspire to Inspire the Digital World

The Application Journey To Cloud



Microsoft Cloud Adoption Framework for Azure

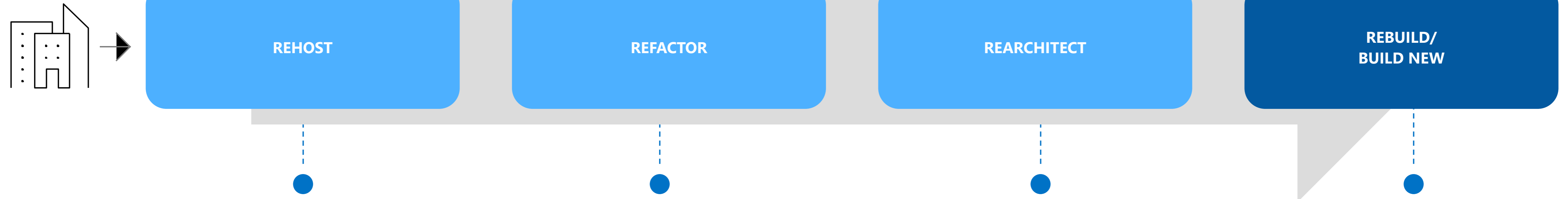


TECHNOLOGY IS THE CENTER OF INTELLIGENT BUSINESS

But where do you want to spend your time?



Application Modernization Strategies



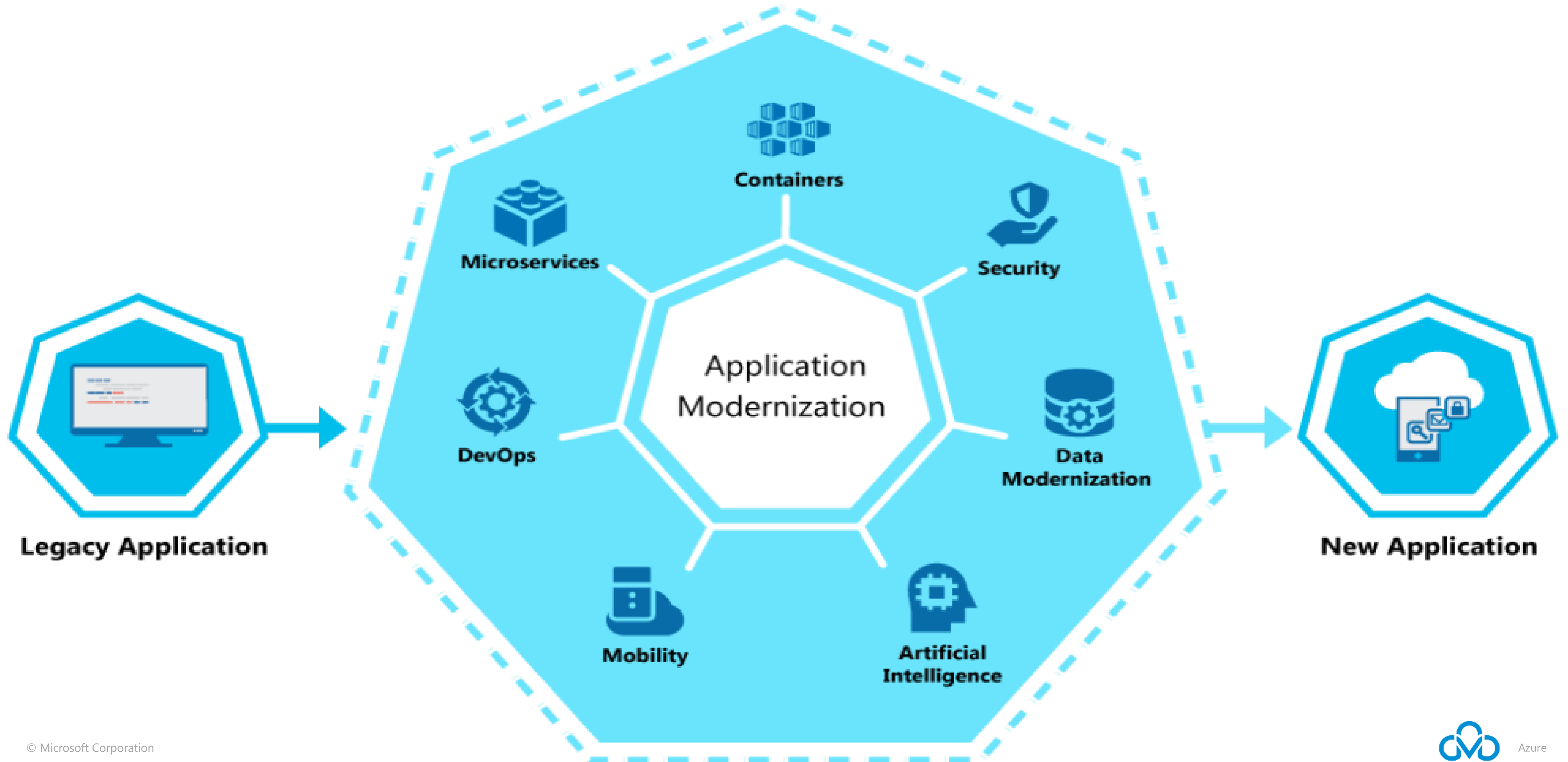
Description	Redeploy as-is to cloud	Minimally alter to take better advantage of cloud	Materially alter/decompose application to services	New code written with cloud native approach
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- | Drivers | <ul style="list-style-type: none"> • Reduce Capex • Free up datacenter space • Quick cloud ROI | <ul style="list-style-type: none"> • Faster, shorter, updates • Code portability • Greater cloud efficiency (resources, speed, cost) | <ul style="list-style-type: none"> • App scale and agility • Easier adoption of new cloud capabilities • Mix technology stacks | <ul style="list-style-type: none"> • Accelerate innovation • Build apps faster • Reduce operational cost |
|---------|---|---|---|---|
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Technologies	IaaS	PaaS Containers	PaaS Serverless Microservices
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Results	<p>IaaS: 435% ROI, 73% reduction in datacenter footprint and 83% reduced IT outsourcing cost.¹</p>	<p>PaaS: 466% ROI, 80% time saved, 5.91M NPV, 50% faster deployments.¹</p> <p>Container: 13x more releases, 10x cost reduction, 65% faster developer onboarding, 62% better availability.²</p>
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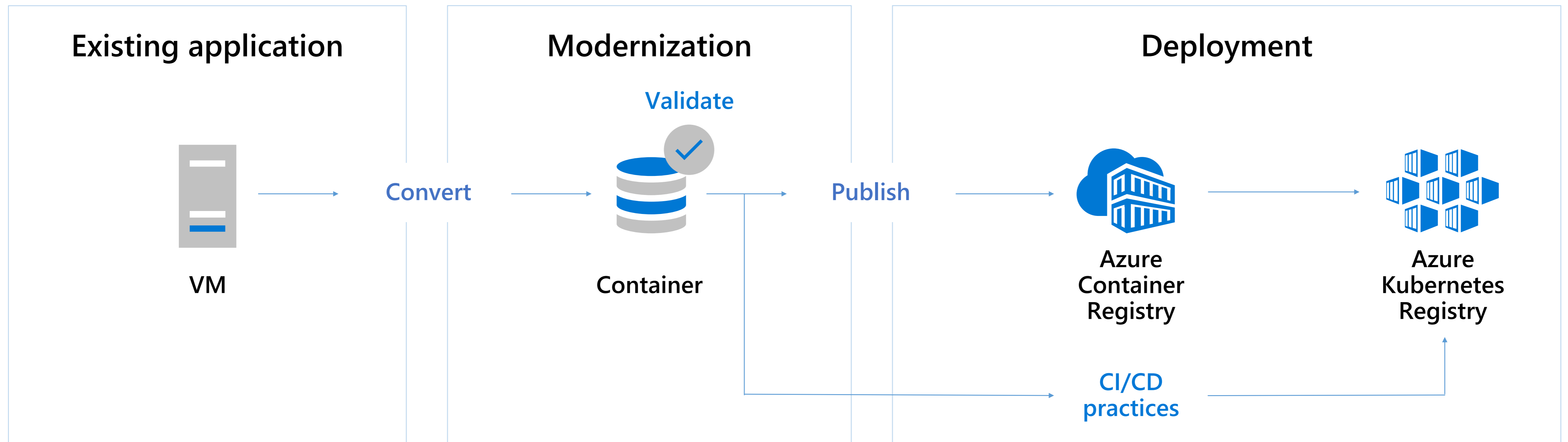
A turn-key platform for Application Modernization



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



Rearchitecting with microservices

More agile, scalable and resilient applications

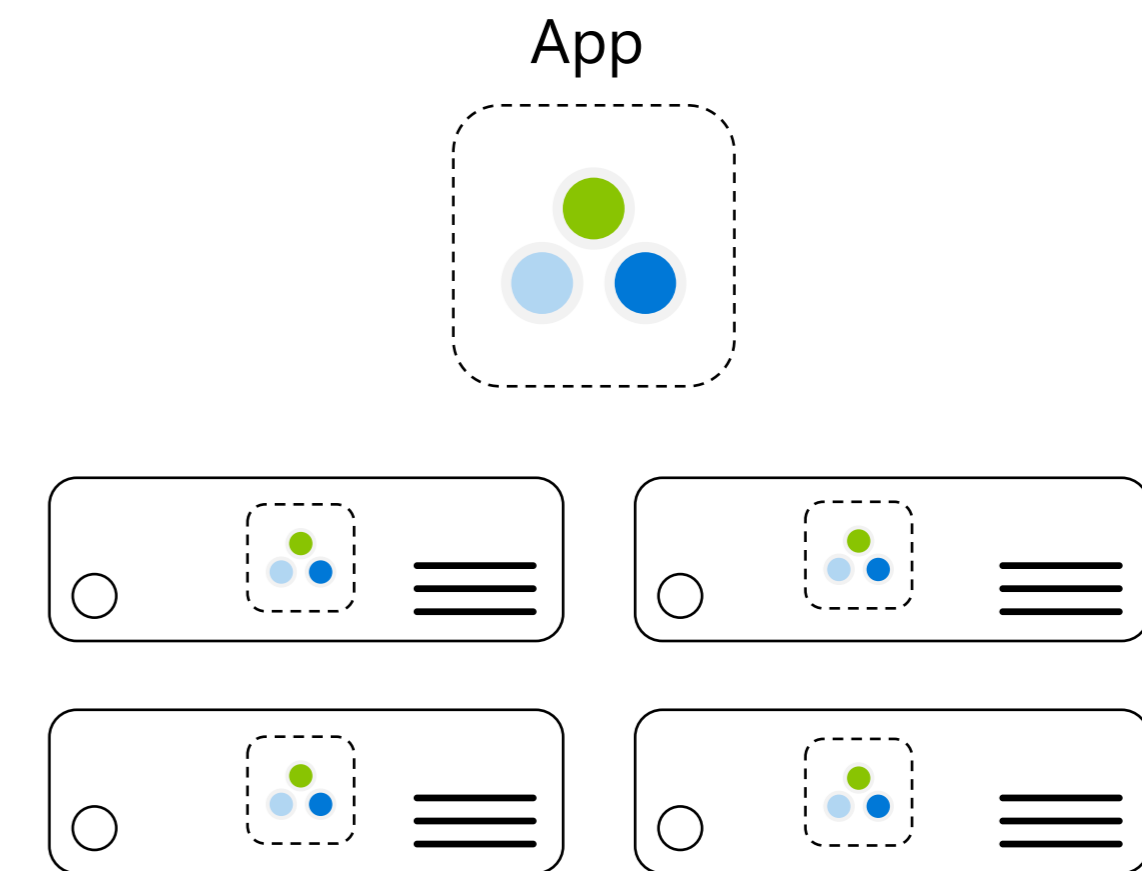
Individual services can be upgraded, changed or taken down without impacting the application

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

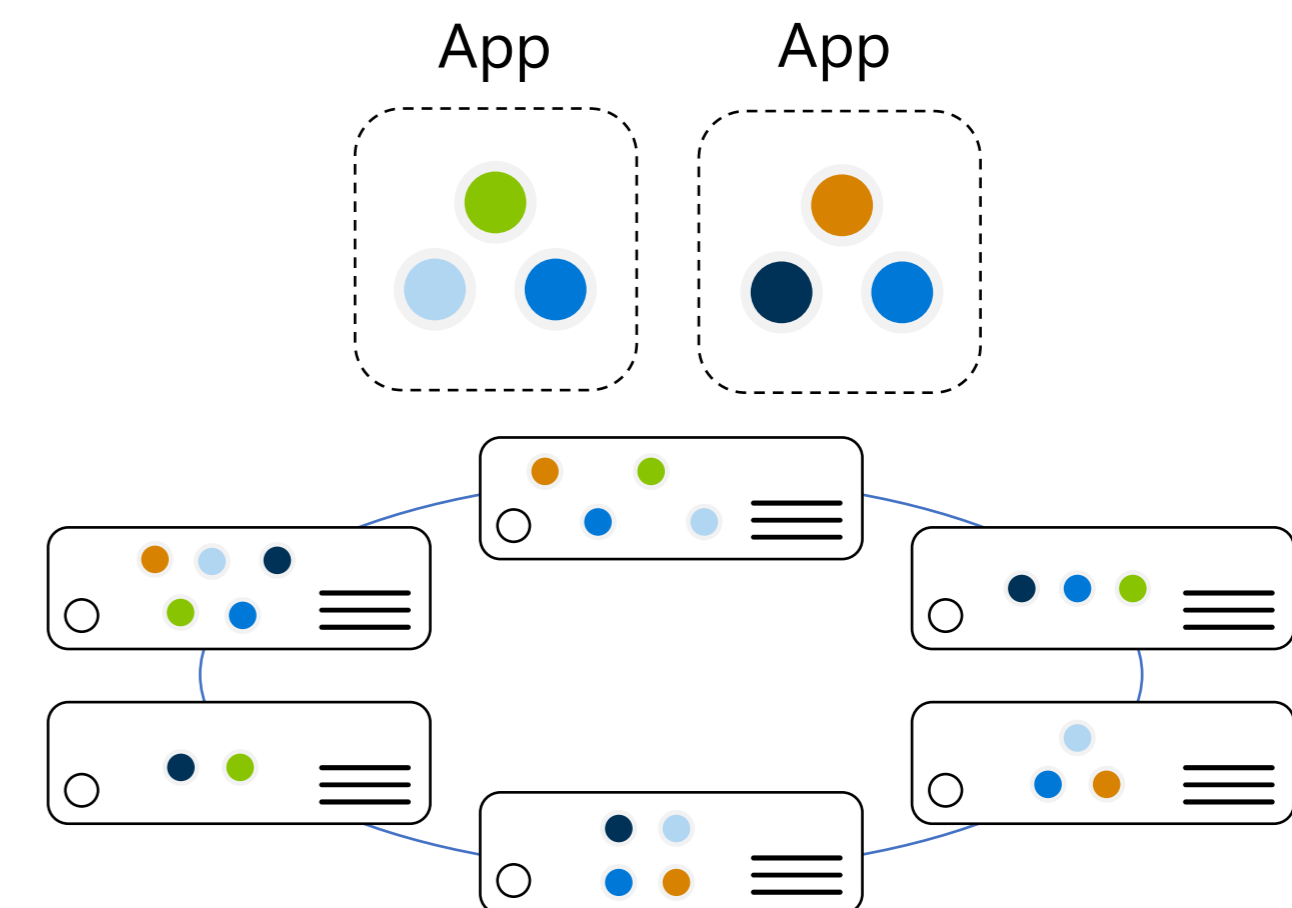
Microservices

Large, all-inclusive app



Monolithic

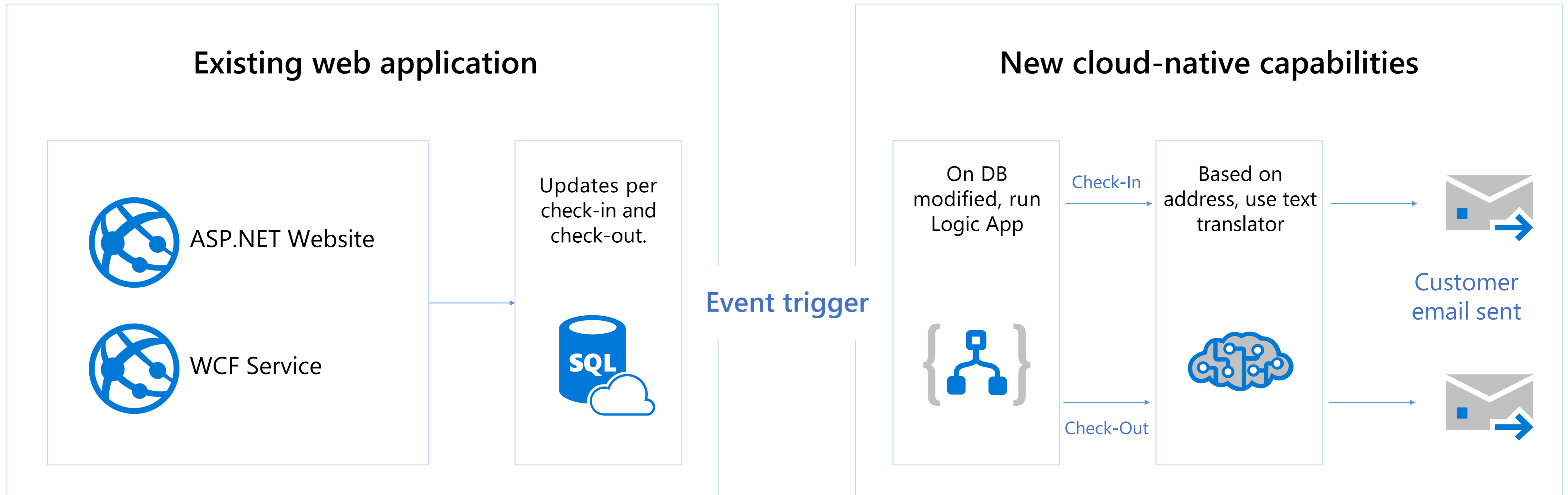
Small, independent services



Future-proofing applications with serverless

Adding new capabilities to existing applications

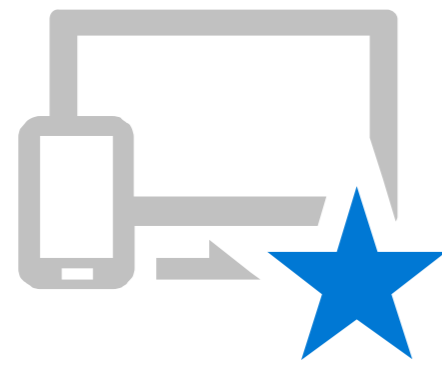
- Existing code and functionality is left as-is and moved to managed cloud services
- New capabilities are added incrementally using serverless functions triggered by events



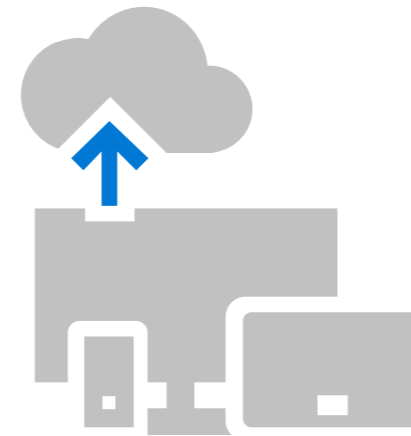
Cloud application development

The best cloud for developers

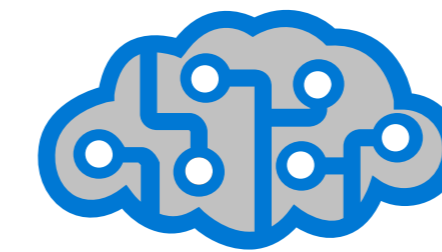
Microsoft Azure is a flexible foundation for all applications – our full-stack cloud application platform covers user experience, backend, data, intelligence and DevOps



Multi-channel
user experiences



Open and hybrid
cloud backends

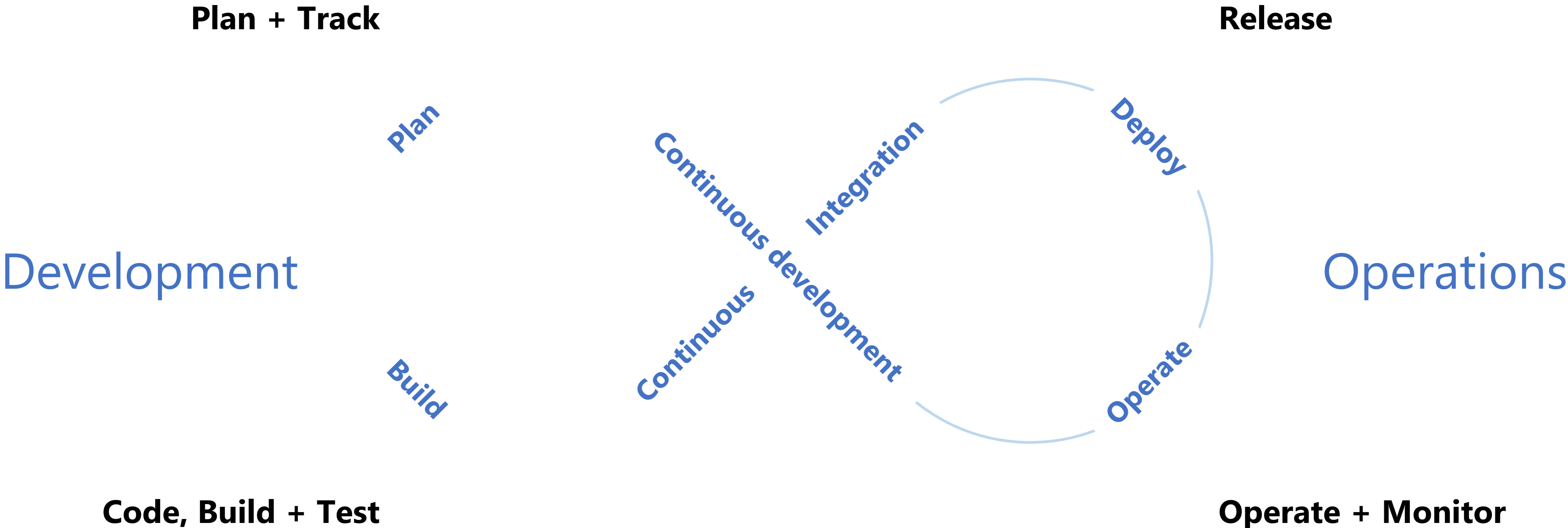


Data-driven
intelligence

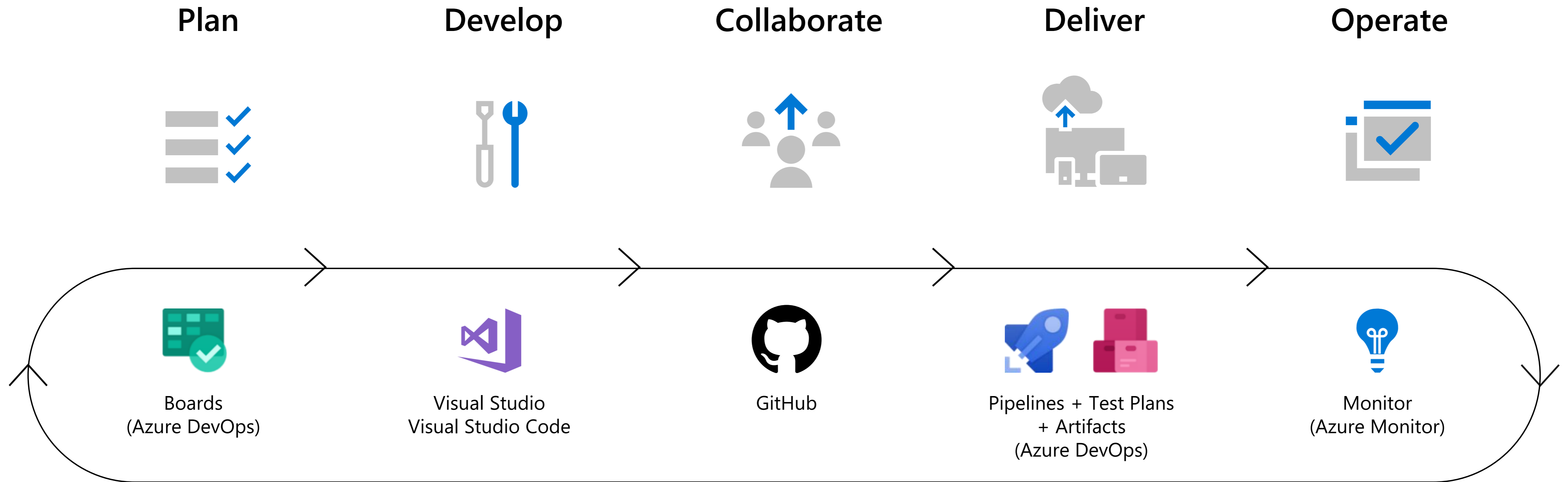


DevOps
built-in

Deliver applications faster and more reliably

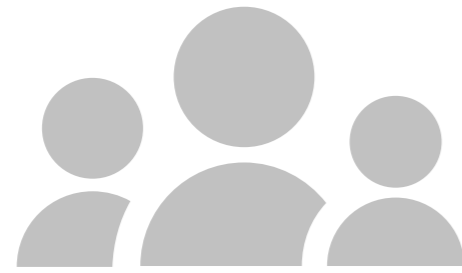


Deliver applications faster and more reliably



Faster delivery to production • More business value

Our journey to DevOps

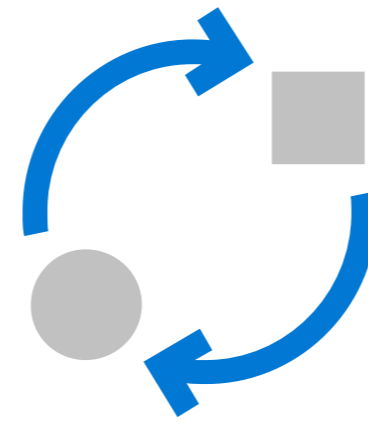


People

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

Retire it, right-size,
eliminate environments

~30%

Use or convert to a SaaS
(first or third-party) solution

~15%

Expose functionality in
existing SaaS/PaaS solution

From

Office servers
Portals and SPS
Any CRM

Source control and WIT
Data warehouses
Industry verticals

To

Office 365
SharePoint Online
CRM Online

VSTS
ADL + Power BI
Best third-party SaaS

Convert to Azure
PaaS solution

Optimize for and
move to Azure IaaS

No change, lift
and shift to IaaS

First to move

~35%

Basic web apps
Advanced portals
Any new solutions
Re-architected solutions

Next to move

~10%

High I/O OLTP
Regulatory and
high business impact

**Hard or costly
to move**

~5%

HVA systems
PKI systems
Legacy source control

Remain on-premises

<5%

Journey to Azure

> 3500 applications

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/>

App Innovation customer stories



- ❖ An Binh Fund (ABF) needs to build applications which help them manage investment products and create a trading online platform for their customers
- ❖ Microsoft Azure Platform (PaaS) helps ABF build the applications more quickly and stable. In addition, ABF completely uses infrastructure on Azure (IaaS). This help them really focus on business development.



- ❖ Thanh Thanh Cong Edu builds the website system which is used to update information and register for students but it is frequently overloaded and attacked by outside.
- ❖ TTCEdu to refactor their app by using Platform as a service on Azure (Use AppService & Database Service, Auto Scaling, Load-Balancer...)



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Thank you!
