

The background features a vibrant blue gradient with subtle, wavy horizontal lines. A diagonal band of lighter blue and green runs from the top right towards the center. The bottom right corner is dominated by a large, flowing shape in shades of purple, pink, and orange, resembling a stylized wave or a modern architectural element.

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MIG008

Modernizing Microsoft workloads - Strategies and tools to go cloud native

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Agenda

- Modernizing Microsoft workloads : why do it on AWS?
- Refactoring strategies & tools, that help you go cloud native
- Demo : Microservice extractor for .NET

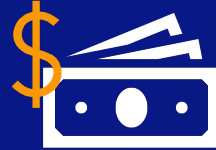
Modernizing Microsoft workloads : Why do it on AWS ?

Why modernize on AWS?

Unlock Innovation



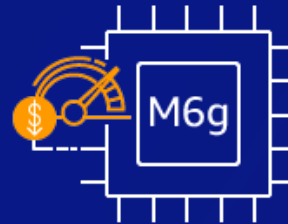
Lower Costs



Harden Security



**Improve
Price/Performance**



**Robust Tooling &
Support**



Modernization pathways on AWS

Rehost

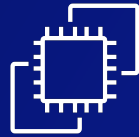
Replatform

Refactor

.NET
applications

MIGRATE

Self-managed
apps and databases run on
virtual machines (VMs)
No code changes



Amazon EC2
Windows



Microsoft SQL Server
on Amazon EC2 Windows

CONTAINERIZE
Automation and CI/CD
Portability and predictability
Minimal code changes



Amazon
ECS



AWS
Fargate



Amazon
EKS

.NET 6+

License freedom
Performance
and security
Cross-platform



SERVERLESS

Pay as you go

Build fast

Scale
effortlessly



AWS Lambda

SQL
databases

MOVE TO MANAGED

Managed provisioning, backups,
patching, monitoring, and scaling
No code changes



Amazon RDS for SQL Server

CLOUD NATIVE

High performance and scalability

Saves on licensing costs



Amazon
Aurora



Amazon
DynamoDB



Amazon
Neptune



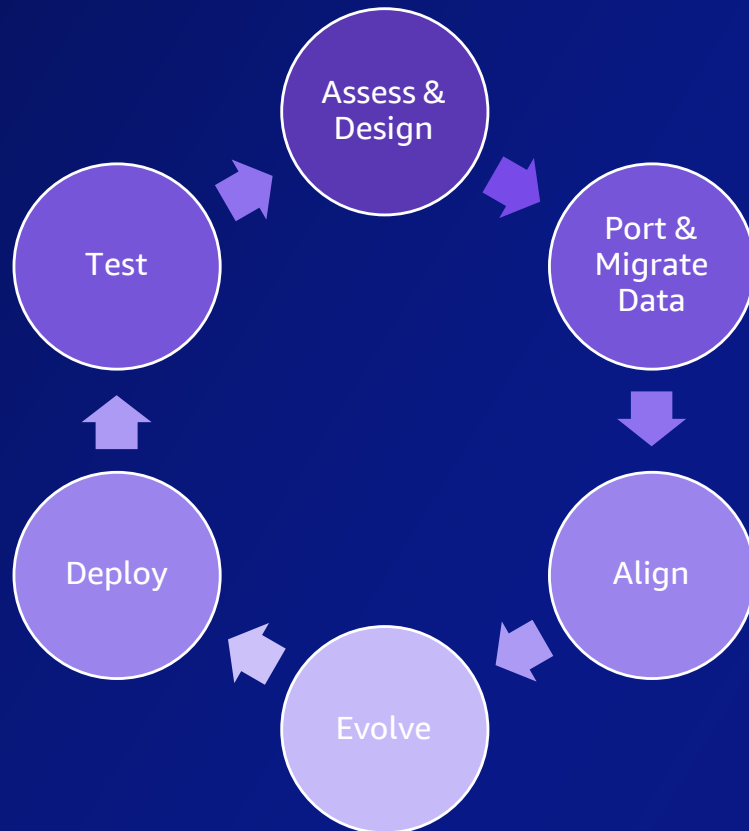
Amazon
Redshift

Refactoring strategies & tools : To go cloud native

Refactoring strategies

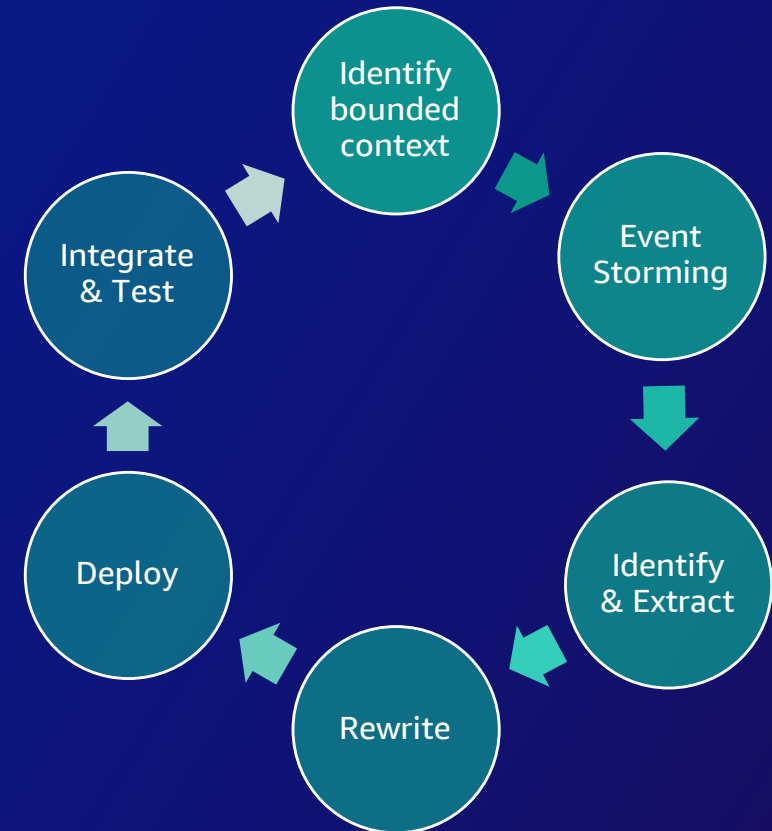
Cloud Optimized

Move to Managed Cloud Services



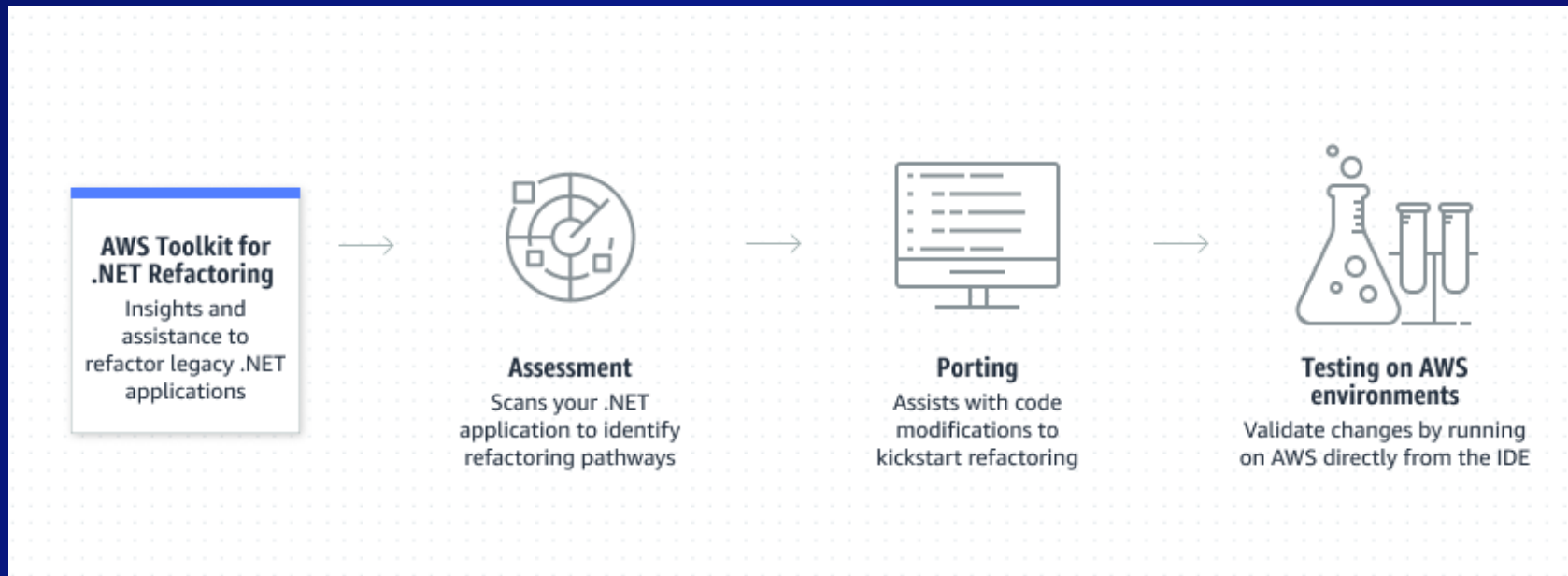
Cloud Native

Re-architect to Microservices



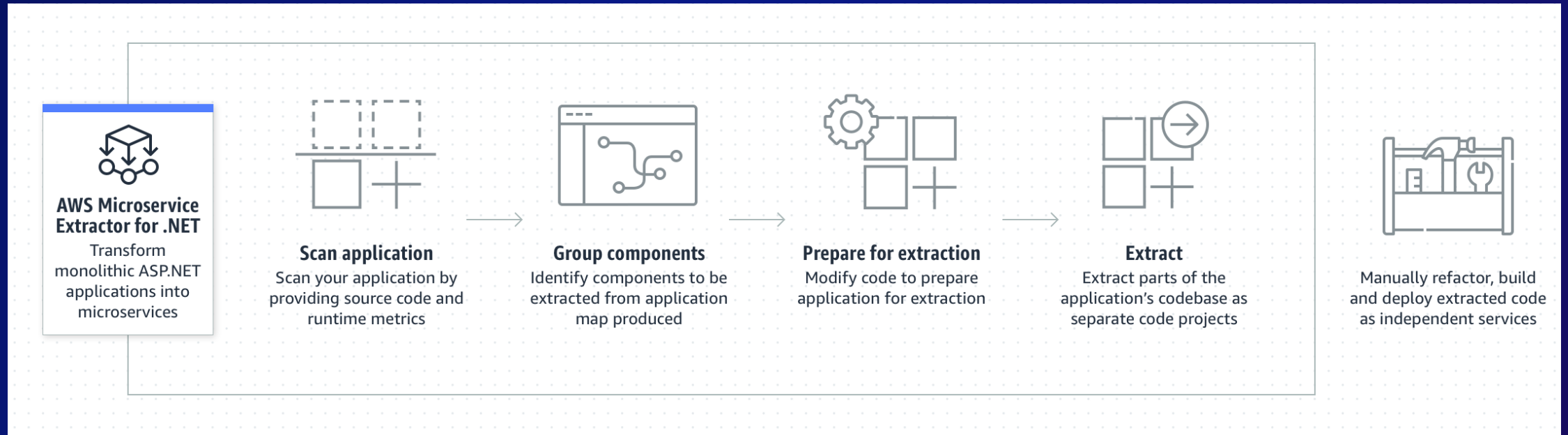
AWS Toolkit for .NET Refactoring

AWS Toolkit for .NET Refactoring is an extension for Microsoft Visual Studio that reduces the time and effort that is required to refactor legacy .NET applications to alternatives on AWS Cloud.



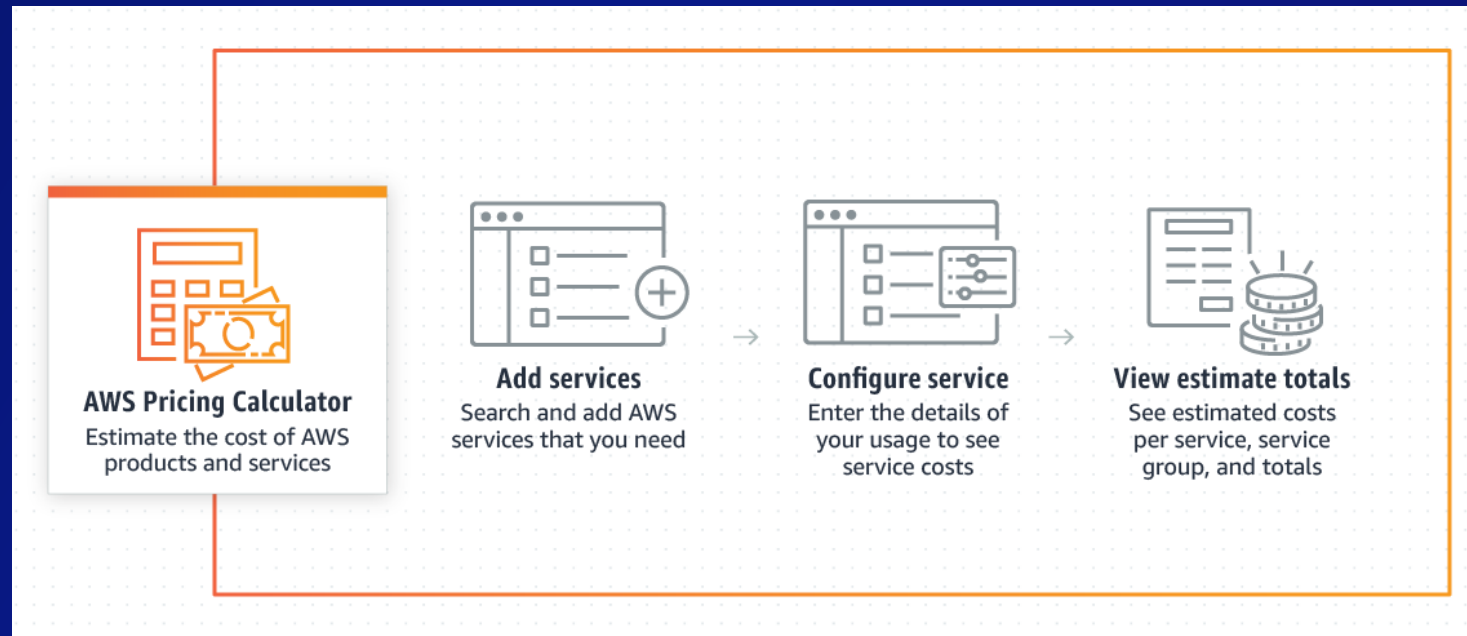
AWS Microservice Extractor for .NET

Microservice Extractor for .NET simplifies the process of refactoring older monolithic applications into smaller code projects to build a microservices-based architecture.



Modernization Calculator for Microsoft Workloads

AWS Modernization Calculator for Microsoft Workloads helps estimate the cost of modernizing your Microsoft workloads to a new architecture that uses open-source software and cloud-based services in the AWS cloud.



ProServe offerings

ALIGN

Application
Modernization
Assessment



.NET Application
Modernization
Discovery



LAUNCH

Application
Modernization Lab
(AML) Windows



Monolith To
Microservice
Modernization With
Serverless

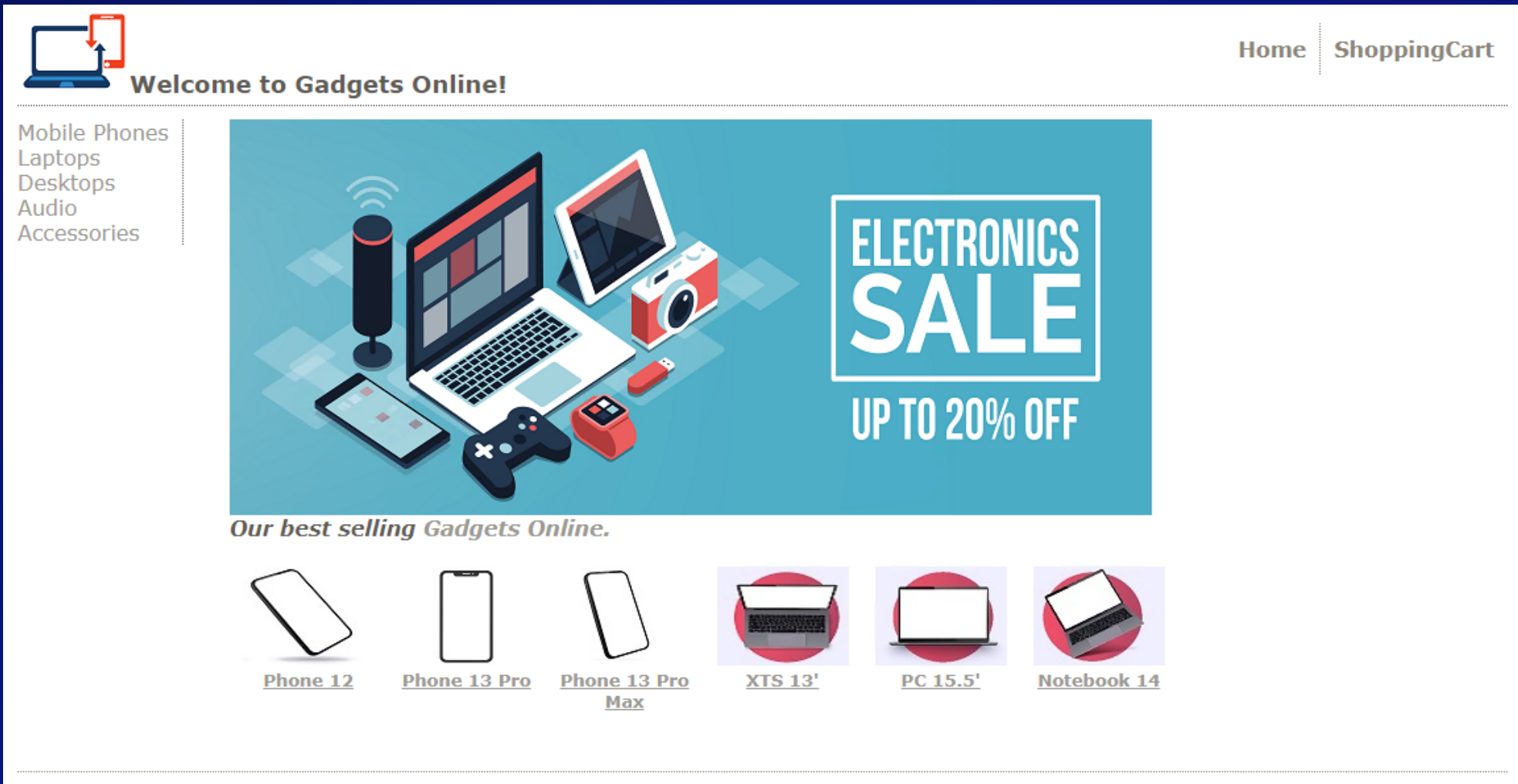


Microservices
using containers
(ECS)



Demo : Microservice Extractor for .NET

Our Application : Gadgets Online



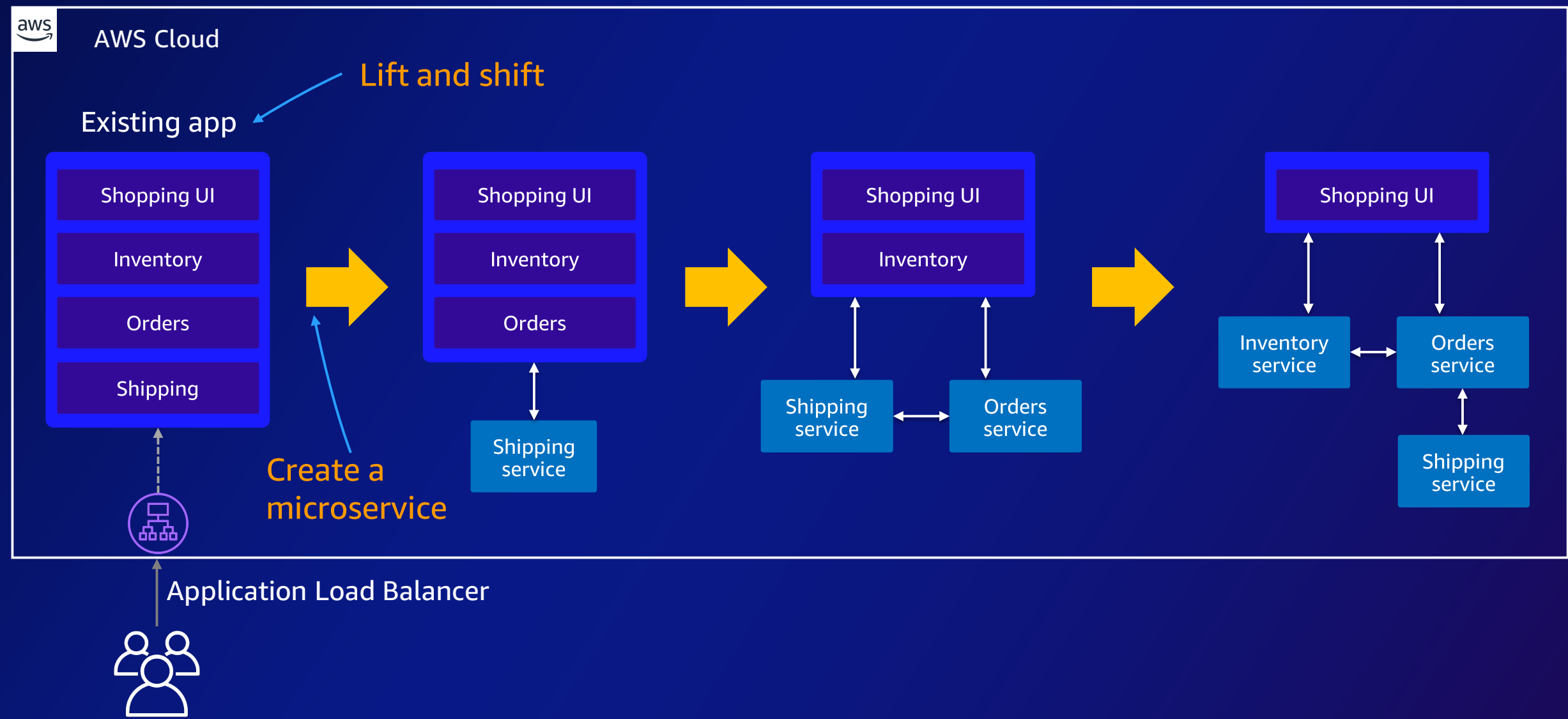
Monolith architecture



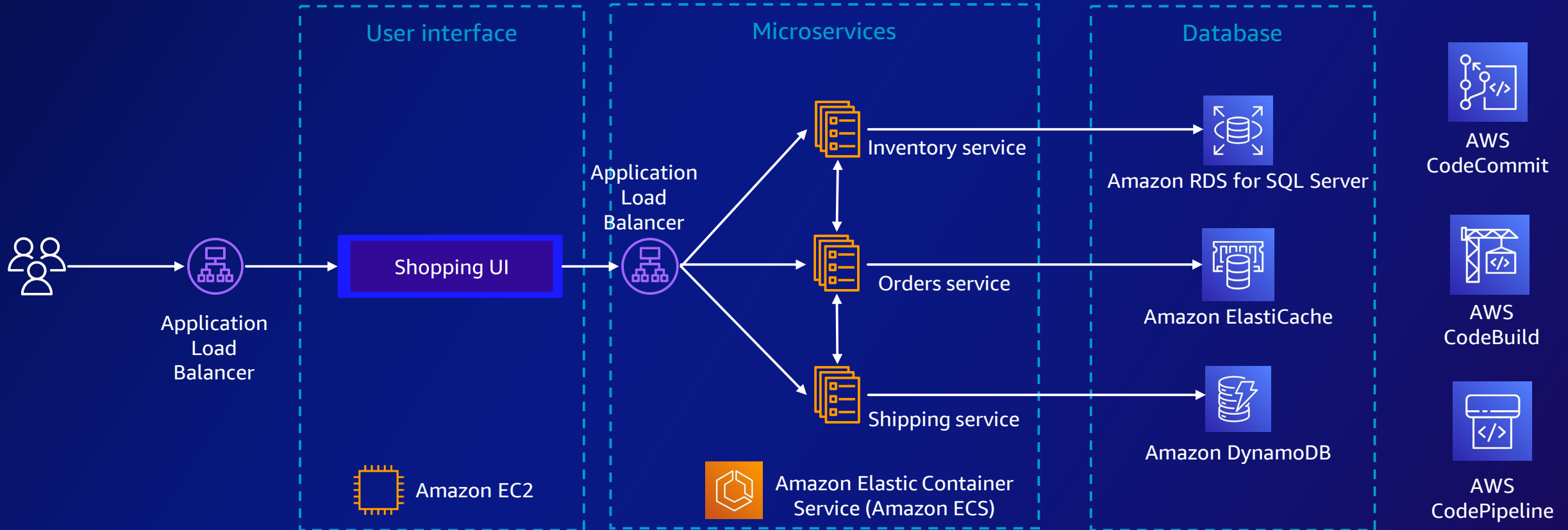
Demo

- Verify the monolith application is running on **Amazon EC2**
- Use **AWS Microservice Extractor for .NET** to extract 1 microservice, from monolith application and move it to new Git repository
- Deploy the **extracted microservice** to **Amazon ECS**
- Deploy the modified monolith application code to **Amazon EC2**
- Test application to **verify integrity** with extracted Microservice

The step-by-step journey



Microservices architecture



Takeaway

- Why & How to modernize Microsoft workloads on AWS
- AWS prescriptive guidance & Tools, to get you going
- Explore AWS Microservice Extractor for .NET
- Port from .NET Framework to .NET, for best results
- Visit <https://aws.amazon.com/windows/modernization/> to learn more

skillbuilder.aws 

Your time is now

Build in-demand cloud skills *your way*



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Thank you!

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