

The background features a vibrant blue gradient with subtle, wavy horizontal lines. In the bottom right corner, there are abstract, flowing shapes in shades of purple, pink, and orange, creating a modern and dynamic feel.

# aws SUMMIT

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# How ICICI Lombard built a modern Service CRM platform to achieve scale and optimize cost

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# Why modernize with AWS ?



# Organizations are moving legacy applications and data to the cloud



**>50%** of enterprise workloads and data are expected to be in a public cloud within 12 months

# What is enterprise modernization?

**Modernization** is the process of progressively transforming existing applications and infrastructure to extend into higher-value cloud-native services that unlock new business capabilities, accelerate innovation, and reduce technical debt



# Why modernization?



Pressure to increase **innovation velocity**



Rising **cost** of maintaining legacy applications



Challenges **scaling** infrastructure to meet business needs



Increasing **“technical debt”** of monolithic architectures



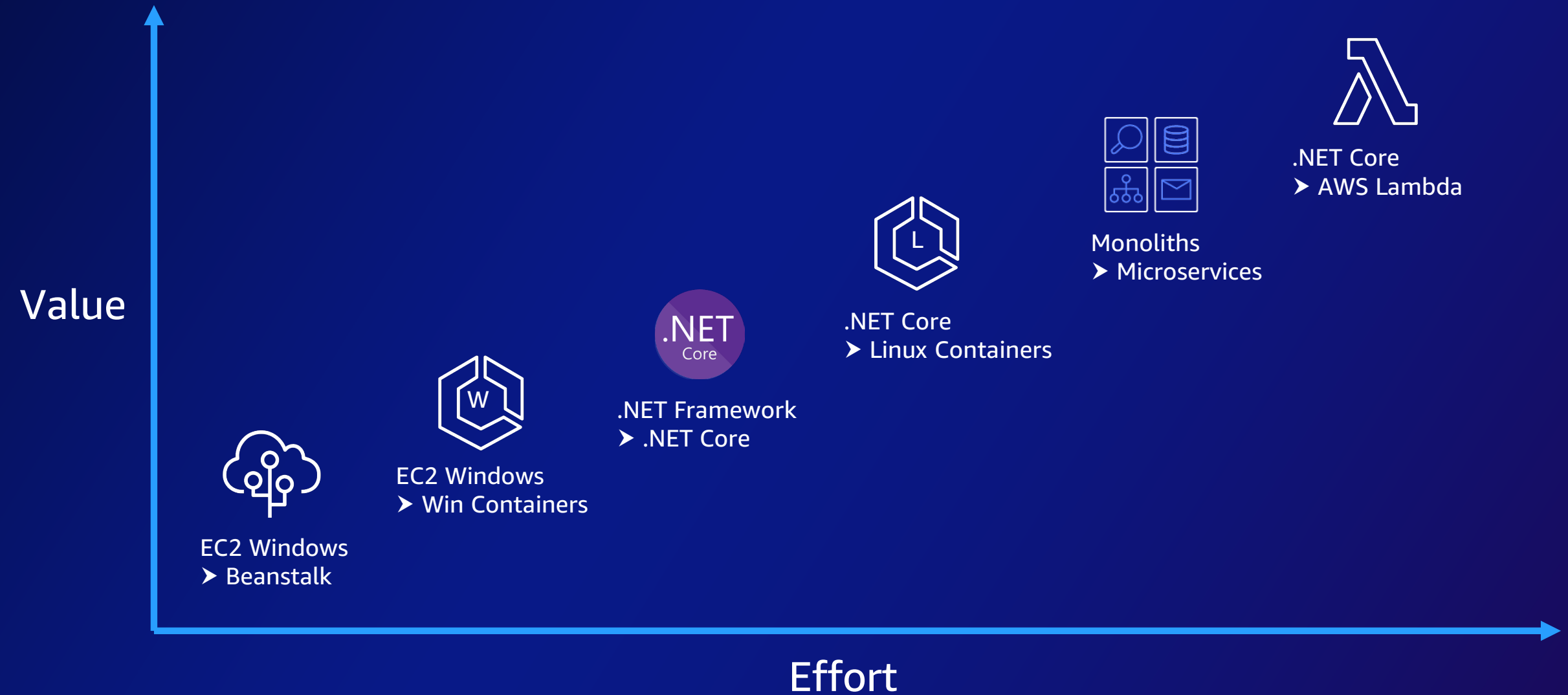
Maintaining security and operational **resilience**



Providing **performance and reliability** during demand peaks/spikes via dynamic scaling








# .Net modernization journey

# .NET modernization journey





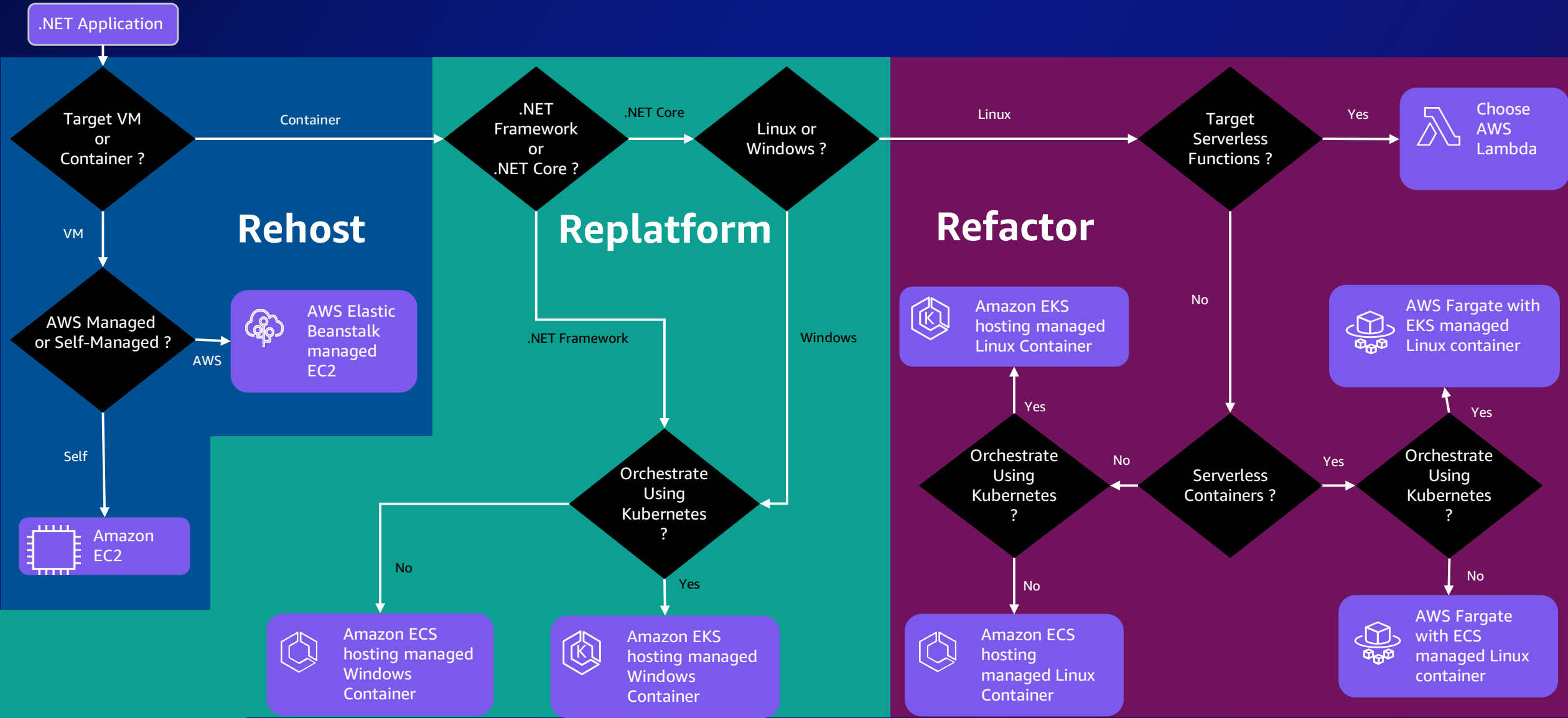
# .NET workload migration strategies

<b>Rehost</b> On-prem → Cloud-native	Deploy .NET Framework applications “as is” to Amazon Elastic Compute Cloud (Amazon EC2) virtual machines	  WinEC2 SQL on EC2
<b>Replatform</b> VMs → containers	Containerize in Windows containers and orchestrate with Amazon Elastic Container Service (Amazon ECS), AWS Fargate, or Amazon Elastic Kubernetes Service (Amazon EKS)	  Amazon ECS Amazon EKS  AWS Fargate
<b>Refactor</b> .NET Framework → .NET Core	Port to .NET Core, and run in Amazon ECS, AWS Fargate, or Amazon EKS as Linux containers OR Lambda	  AWS Lambda

Low

Level of effort

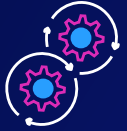
# We will help you chart the course



# Modernization tools and services

# App2Container

CONTAINERIZE AND MIGRATE EXISTING APPLICATIONS



— **Streamline** operations



— **Analyze** your applications and **automatically generate** a container image



— **Easily deploy** an existing application

<https://aws.amazon.com/app2container>



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# Porting Assistant for .NET

INSIGHT AND ASSISTANCE FOR PORTING FROM .NET FRAMEWORK TO .NET CORE



— **Scan your entire .NET Framework application portfolio** to generate .NET Core compatibility assessment reports



— **Analyze your applications and automatically generate** a container image



— **Identify incompatible .NET APIs and packages** from your .NET Framework applications and automatically find known replacements

<https://aws.amazon.com/porting-assistant-dotnet>

# Microservice extractor for .NET

SIMPLIFY REFACTORING .NET APPLICATIONS



— **Simplify refactoring monolithic applications** into microservices to build a modern architecture



— **Visually group & label** parts of application to become **independent services**



— **Automated recommendations** identify common extraction candidates

<https://aws.amazon.com/microservice-extractor>

# AWS toolkit for .NET Refactoring

EXPEDITE YOUR .NET MODERNIZATION JOURNEY



— **Scan .NET applications** to identify refactoring pathways



— **Porting assistance** guides you on code modifications



— **Test on AWS environments** to validate changes directly from Visual Studio

<https://aws.amazon.com/visual-studio-net/>

# ICICI Lombard success story: MUSE platform

# India's leading private general insurer

Leader in  
general  
insurance

Gross Written  
Premium of  
₹185.62  
billion for  
FY '22

29.3 million  
policies issued  
in FY '22

2.3 million  
claims settled  
in FY '22

# Customer first approach – The Muse platform



# ICICI Lombard's service CRM platform

MUSE  
Indigenously  
built Service  
CRM

Integrated  
with core  
systems for  
Customer 360

Improved  
customer  
satisfaction

Increased  
efficiency &  
visibility

# Size and scale of the Muse platform

1 Mn+ claims  
tracked

20K+ tickets  
handled daily

25 internal  
systems  
integrated

10 million+  
API and  
database

1200+  
concurrent  
agents

Multiple  
channels

# Modernization of the Muse platform



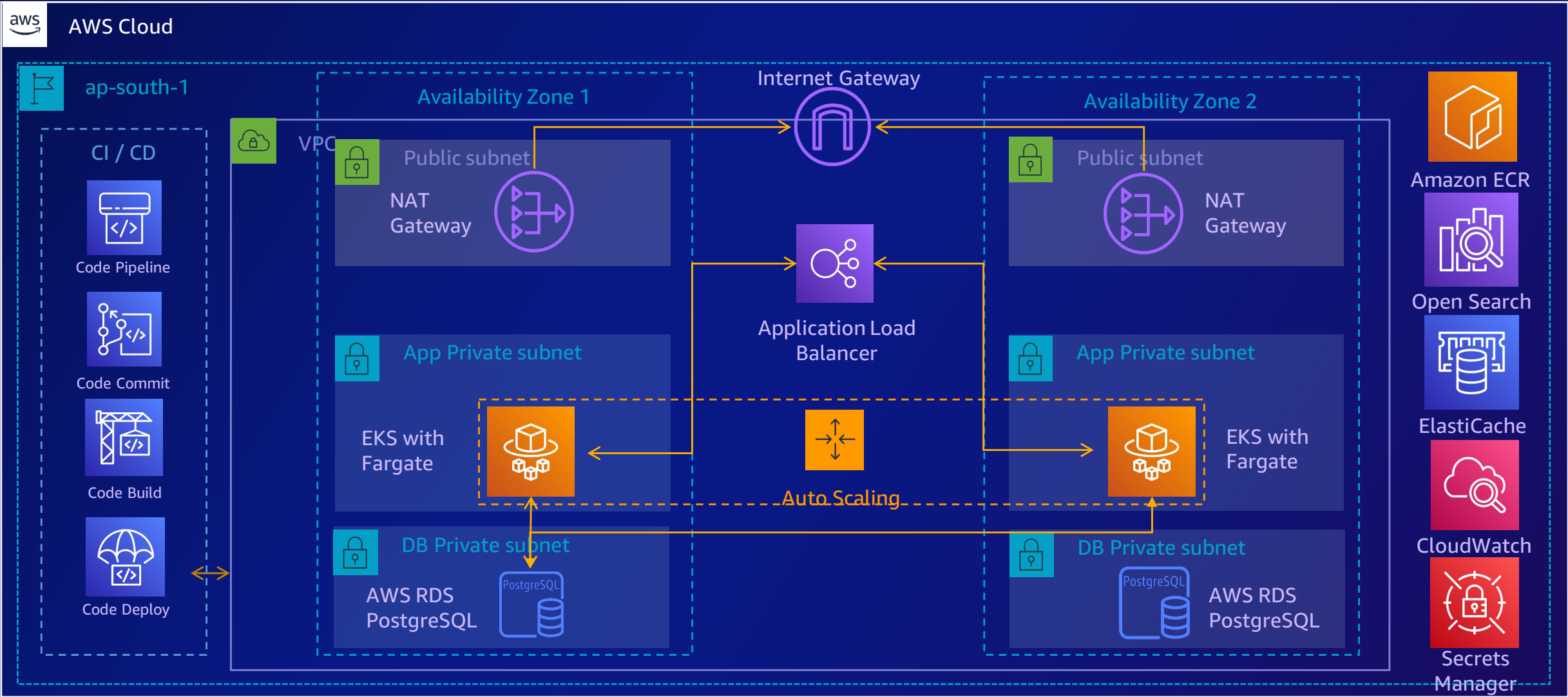
# Challenges of the monolith in past

- With increase in business, monolithic architecture had limited capability to scale and sustain high volumes
- Development speed was slower due to lack of micro services architecture and interdependency
- The stack was built on a legacy platform and was due for refresh
- Management and provisioning of infrastructure was becoming a challenge

# Cloud native modern architecture on AWS

- Leveraged Amazon EKS for container orchestration
- Amazon Fargate was preferred due to its the ability to run containers without the overhead of managing servers or clusters
- Amazon ElastiCache - Redis was used for centralized session managed which helped the Kubernetes pods to scale seamlessly.
- Amazon OpenSearch is used for log monitoring
- AWS Code Commit, Code Pipeline and Code Deploy used to build the CI/CD pipeline
- Refactored the platform from .Net Framework to .Net Core to leverage advantages of Linux OS

# Cloud native modern architecture on AWS



# Benefits of Muse platform modernization

Introduced  
Modernization  
Culture

50% less CPU  
60% less Mem

Seamless  
Scaling

40% cost  
saving

Moved to  
modern  
DevSecOps

skillbuilder.aws 

# **Your time is now**

Build in-demand cloud skills *your way*



# Thank you!

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