



Microsoft Workloads on AWS

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Agenda

Why Migrate to the Cloud?

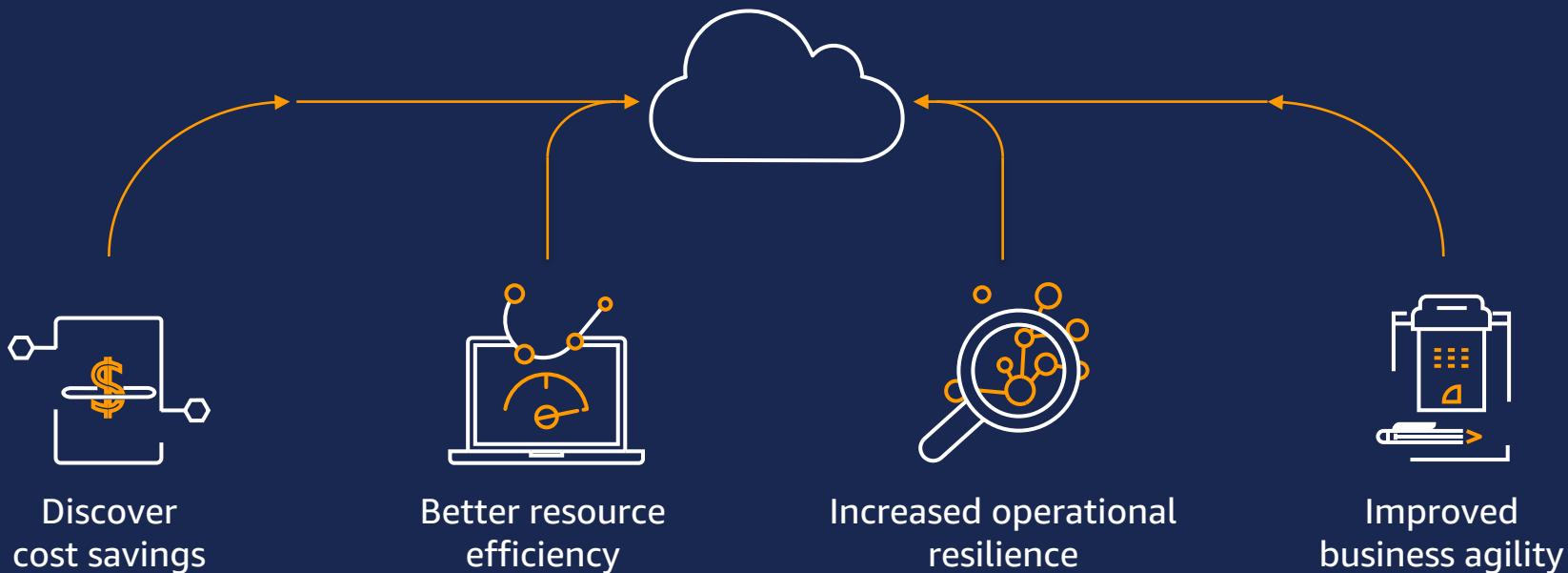
Microsoft Workloads on AWS

Licensing choice

Key Scenarios – .NET and Legacy workloads

Fireside chat

Drivers for migrating to the cloud



Business benefits in the cloud



Cost savings (TCO/CO)



Resource efficiency



Operational resilience



Business agility

What is it?

Infrastructure cost savings / avoidance from moving to the Cloud.

Efficiency improvement by function on a task by task basis.

Benefit of improving SLAs & reducing unplanned outage.

Deploying new features / applications faster and reducing errors.

Example

Data center consolidation

IT process efficiencies

Large scale compute intensive workloads

Improved agility and developer productivity to drive innovation and digital transformation

AWS customer success

50%+ reduction in TCO (GE)

Over 500 hours per year of server configuration time saved (Sage)

Critical workloads run in multiple AZs & Regions for robust DR (Expedia)

Launch of new products 75% faster (Unilever)

Typical
focus

Most compelling
cloud benefits

Future-proof your legacy IT investments

Customers rely on
Microsoft workloads

70%

of on-premises apps run on
Windows Server

End-of-life software can
leave applications vulnerable
and outdated



Why AWS for Microsoft Workloads?

Experience & Innovation

10

years

Running Windows workloads

Availability & Performance

55

Availability Zones

Spanning 18 geographic regions

Security & Compliance



Compliance Certifications

FISMA, HIPAA, GDPR, ITAR, EU Model Clauses
SOC-1,2,3 FIPS, ISO

Over

100

Service offerings

Database Migration Service

700000

Databases Migrated

66

price reductions

Since 2006

Run any Microsoft workload on AWS



Advanced Threat Analytics

Skype for Business Server

System Center Server

BizTalk

Visual Studio

R Server

Microsoft Office

Visual Studio Team
Foundation Server

Remote Desktop
Services

SQL Server

Windows Desktop Enterprise
Operating System

Exchange Server

Project Server

Core Infrastructure Suite

MSDN

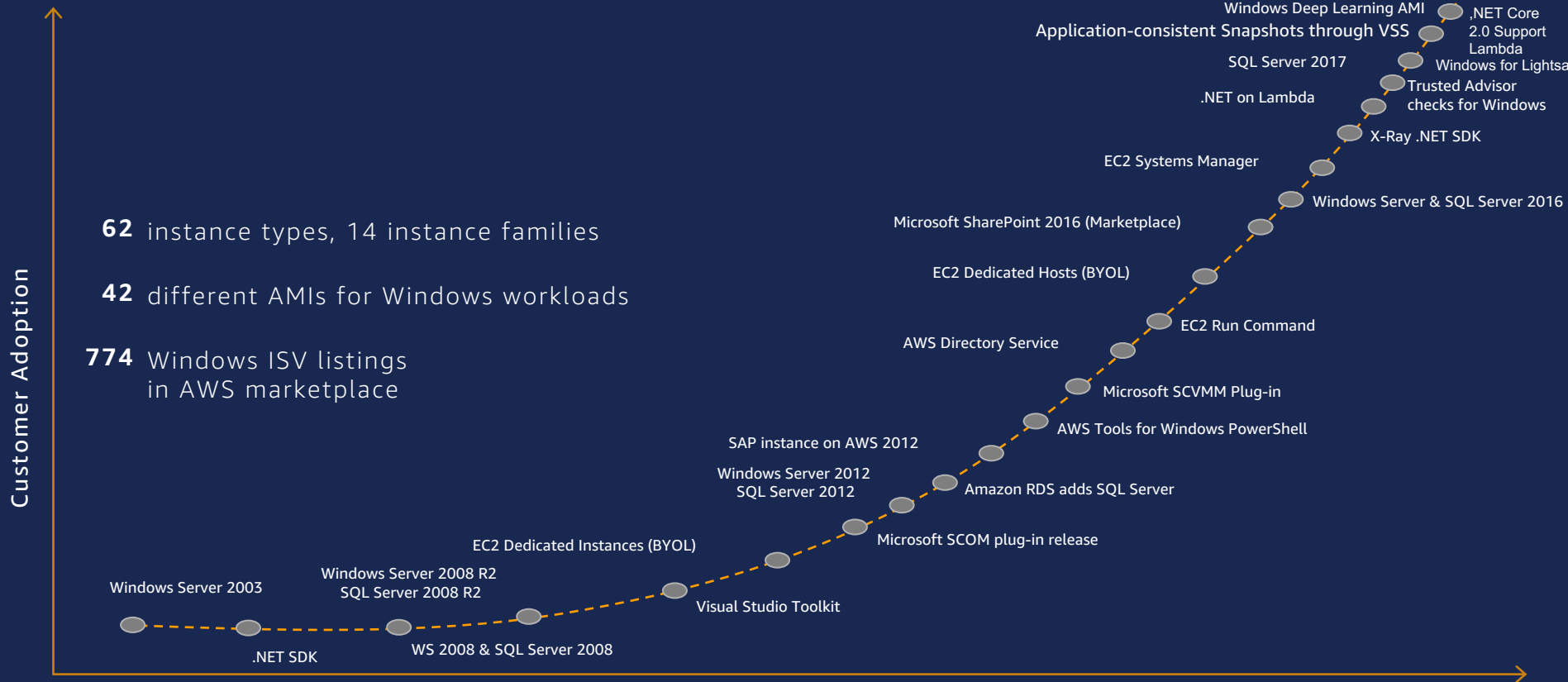
Windows Server

Microsoft Dynamics

System Center

SharePoint Server

Pace of innovation for Windows on AWS



2008

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aws Today
SUMMIT

Licensing Windows Workloads on AWS



License Included

- On demand, Spot, or Reserved Instance
- Pay-as-you-go pricing
- Multi-tenant or Dedicated Instance
- AWS provides images
- Legacy versions supported
- Amazon manages the licensing and compliance



License Mobility (Bring your own license - BYOL)

- Requires active Software Assurance
- Includes SQL Server, Remote Desktop Services, Exchange, SharePoint
- Does not include Windows Server, Windows Desktop and Microsoft Office
- Requires a verification process with Microsoft
- Customers import and use their own software



Dedicated Hosts / Instances (Bring your own license - BYOL)

- Includes Dedicated Host and Dedicated Instances
- Software Assurance/license mobility not required
- Windows Server can be deployed on a Dedicated Host
- MSDN eligible for Dedicated Host or Dedicated Instance
- Customer is responsible for compliance with Microsoft
- Customers import and use own their software



*AWS has Microsoft licensing specialists to help you.

Mixed Licensing Model is a Win-Win

Use BYOL for core (slowly varying) infrastructure

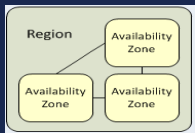
- Large potential savings by reusing licenses

and

Use License Included for varying infrastructure

- Take advantage of AWS Auto Scaling
- Less management overhead, pay-as-you-go

Key Scenarios for Microsoft Workloads



SQL Server
High Availability



Disaster Recovery



Migrations



Dev Ops



End User Compute

- Sales Play Presentation
- Solution Brief
- Cost Comparisons

- ISV Partner Solutions Overview
- Quickstarts
- Well Architected Review

Key Scenarios for Microsoft Workloads

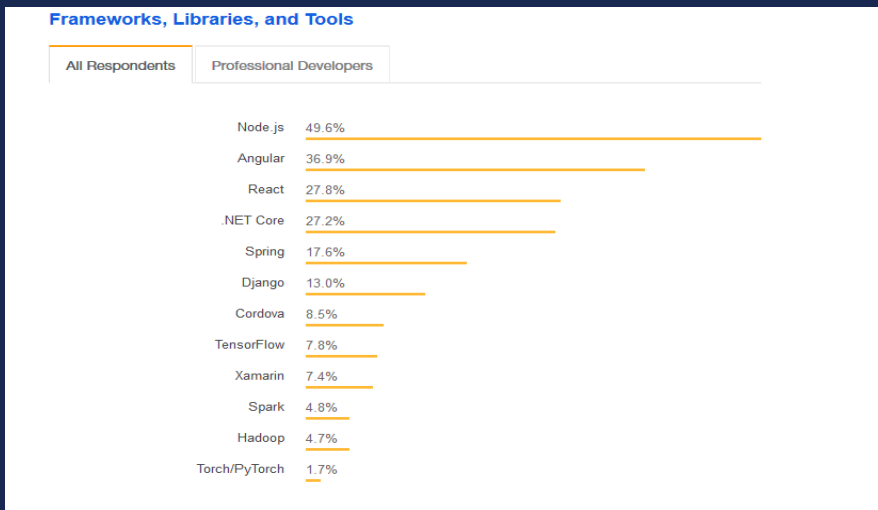
.NET Modernisation on AWS

Modernize legacy Windows workloads with AWS

Anil Erduran
EMEA Microsoft Solutions Architect
Amazon Web Services
anerdura@amazon.com

.NET Core is popular

- According to CIO Magazine, 74% of Fortune 500 enterprises have line-of-business apps running on .NET
- In the 2017 Stack Overflow developer survey, C# was the third most popular technology for server-side development, while .NET Core was the second most popular server-side framework right behind node.js.





**AWS SDK for .NET,
PowerShell
& Visual Studio
Toolkit**

**Visual Studio
Team Services**



AWS Lambda

.NET Core 2.0



**AWS Elastic
Beanstalk**

Microsoft IIS



**AWS
CodeBuild**

.NET Core 2.0



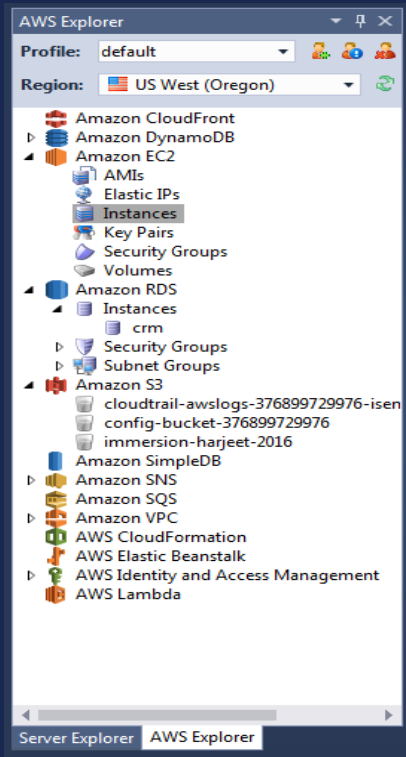
Amazon EC2

**Windows and
SQL Server**

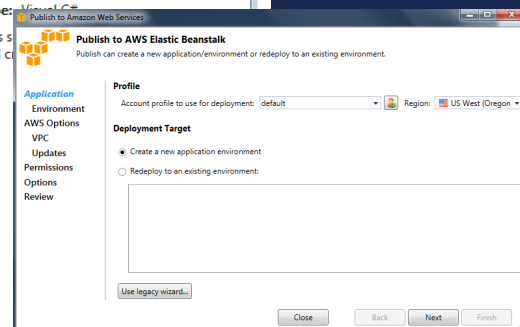
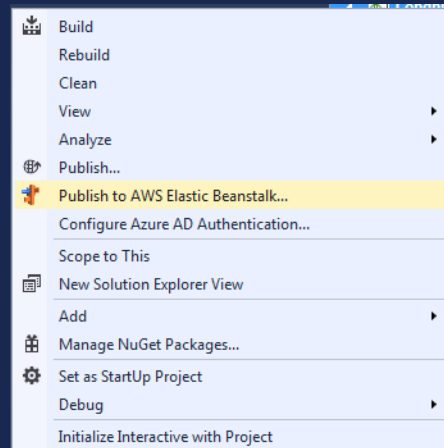
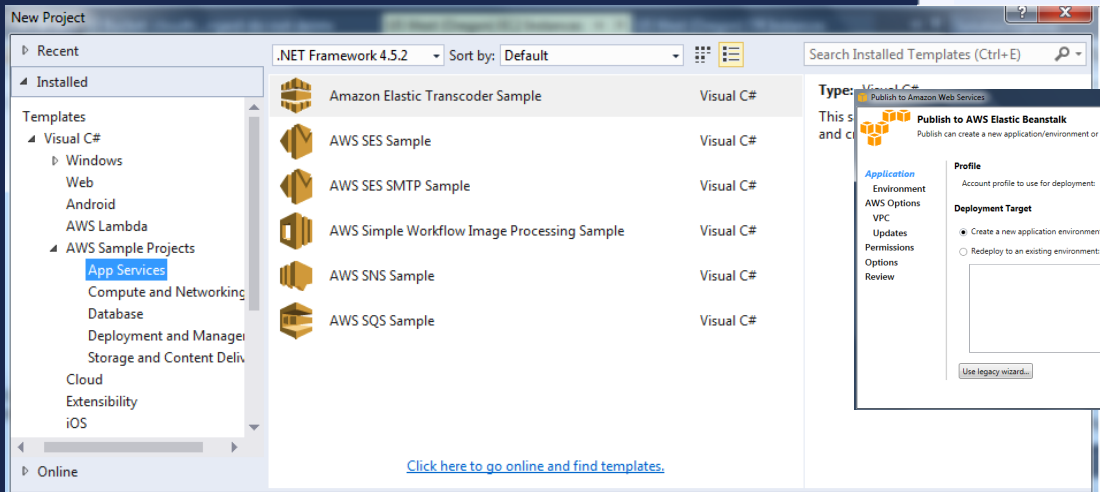
But, I'm a .NET Shop!

And we are, too!

AWS Toolkit for Visual Studio



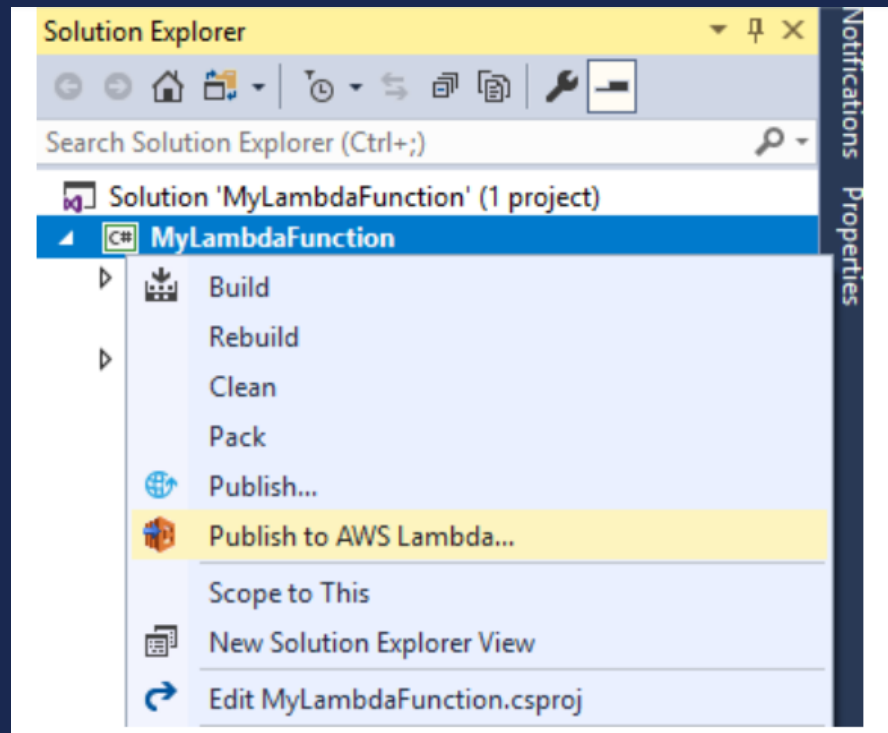
	Name	Instance ID	Status	AMI ID	Root Device Type	Type	Security Groups
1	RDS_Client	i-023e7c8a1636e334f	running	ami-1562d075	ebs	t2.xlarge	RDS_Client_SG
2	Dynamics_Backend2	i-0b197f471324d2e0	stopped	ami-b871aad8	ebs	m4.xlarge	Dynamics_App_Seg
3	Dynamics_Frontend2	i-0a5db60a4276e3176	stopped	ami-b871aad8	ebs	m4.xlarge	Dynamics_App_Seg
4	Vin16Container	i-0b7c190840e939b8	stopped	ami-b45713d4	ebs	t2.xlarge	mysg
5	Dynamics_SQL_Node2_us-west-2b	i-0e5950252365941a	stopped	ami-b871aad8	ebs	m4.xlarge	Dynamics_SQL_Nod
6	ISVisaIdthrough - isexample1	i-0b8-3f18652efadfc	stopped	ami-24e64944	ebs	c3.large	ALWS-OpalWorks-RD
7	CodeDeployDemo	i-01b0ak952c6d682d	stopped	ami-24e64944	ebs	t2.xlarge	mysg
8	Dynamics_Backend1	i-0dac33575af45717	stopped	ami-b871aad8	ebs	m4.xlarge	Dynamics_App_Seg
9	Dynamics_Frontend1	i-0b11e0ba81751ba2a	stopped	ami-b871aad8	ebs	m4.xlarge	Dynamics_App_Seg
10	Dynamics_SQL_Node1_us-west-2a	i-0c58fdedd345f8a0	stopped	ami-b871aad8	ebs	m4.xlarge	Dynamics_SQL_Nod
11	CRM_RGW_us_2a	i-0551eccc3b392924	stopped	ami-24e64944	ebs	t2.xlarge	Dynamics_RGW_S



[Click here to go online and find templates.](#)

Recently Launched: .NET Core 2.0 Support: Lambda, AWS Codebuild, X-Ray, AMI- .NET Core

- Lambda: functions as a service for .NET Core 1.0 and 2.0
- AWS Codebuild: fully managed build service
- AWS X-ray: debug .NET Core apps running on AWS
- EC2- new AMI pre-configured for .NET Core 2.0



Hosting options for .NET applications



AMAZON EC2

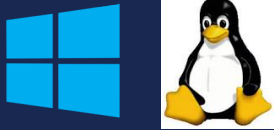


AMAZON ECS

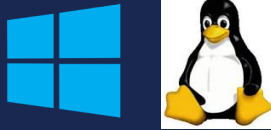


Amazon API
Gateway

AWS LAMBDA



VMs



CONTAINERS



SERVERLESS



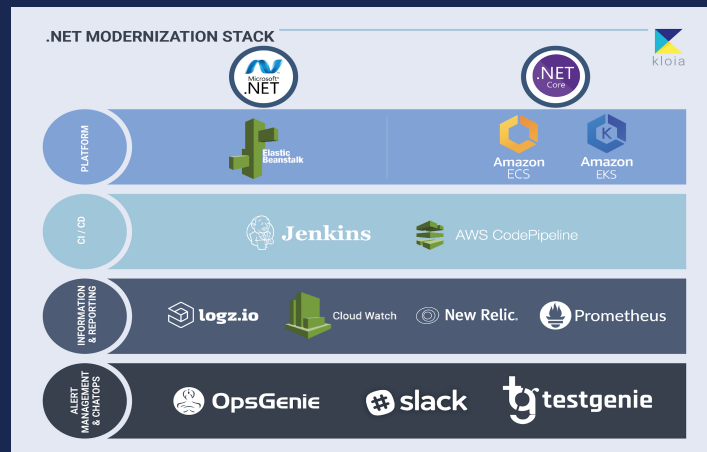
“Out of a team of seven engineers, only one team member had logged into an AWS console before, yet getting the app up and running in Elastic Beanstalk went very quickly. It was much faster than if we’d done it locally.”

- Saved four to six weeks of engineering time
- Teams free to innovate while meeting security requirements
- Access to capabilities not available in company data centers
- Flexibility to choose the best technology for the use case
- Rapid setup of development infrastructure sped time-to-market



Application Modernization Solutions

- .Net Modernization
- .Net Core Modernization
- .Net to .Net Core Transition

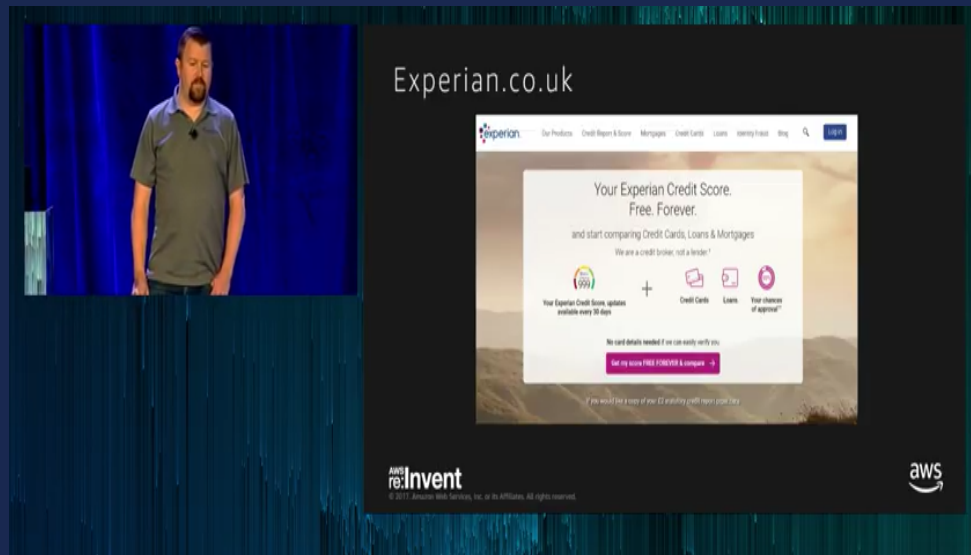


<https://blog.kloia.com/a-case-study-scaling-from-startup-at-otelz-com-fd8cf74f9971>

This Is My Architecture - Refactoring .NET Services to Microservices

Experian Credit Services

- 2.5M visitors/month
- 85K logins/day
- 70 microservices
- 3.5K API requests/sec.
- PCI Compliant
- 1 year refactoring to Linux



Modernize legacy Windows workloads with AWS

AWS is a proven choice for Microsoft workloads

AWS has hosted Windows workloads since 2008

AWS supports 32-bit operating systems

Migrate Windows Server 2003/2008 32-bit operating systems and applications to AWS

Migrate now, modernize on your own terms

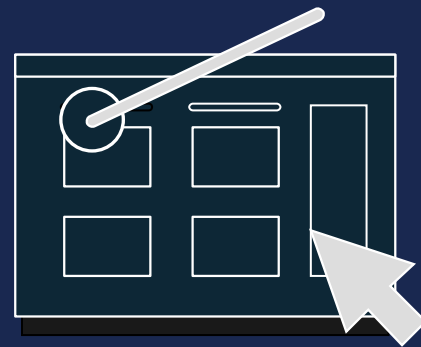
AWS supports lift & shift migration to get to the benefits of the cloud faster

Find cost savings in the cloud

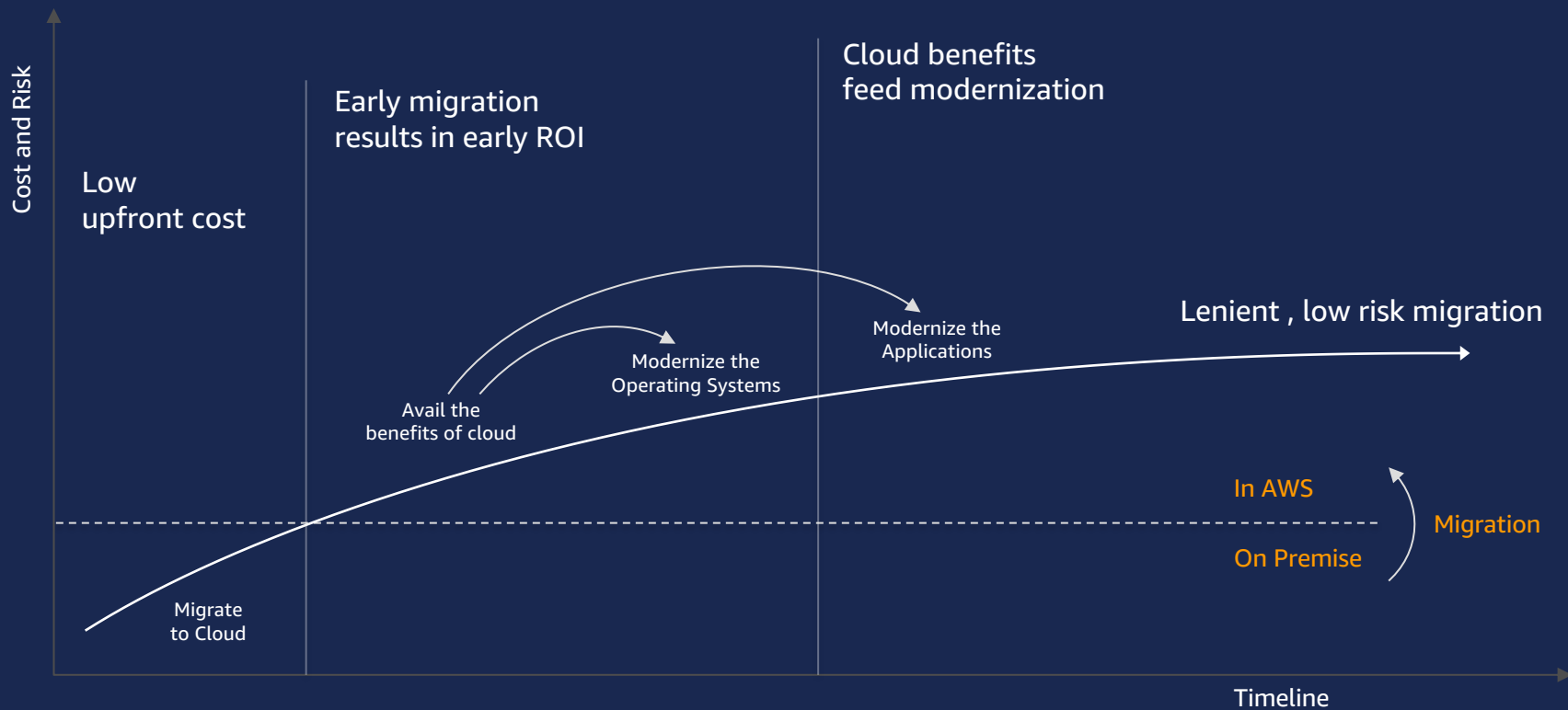
On-demand and reserve cost savings when on-premises legacy workloads are moved to the cloud

Keep existing investments

Bring your Windows licenses to AWS



AWS approach to legacy platform migration



AWS legacy migration savings scenario

Customer wants to migrate Windows Server 2003
32 bit instances

The customer does not have Microsoft Software
Assurance (SA)

The customer bringing existing windows license to AWS

Dedicated instances used for the migration

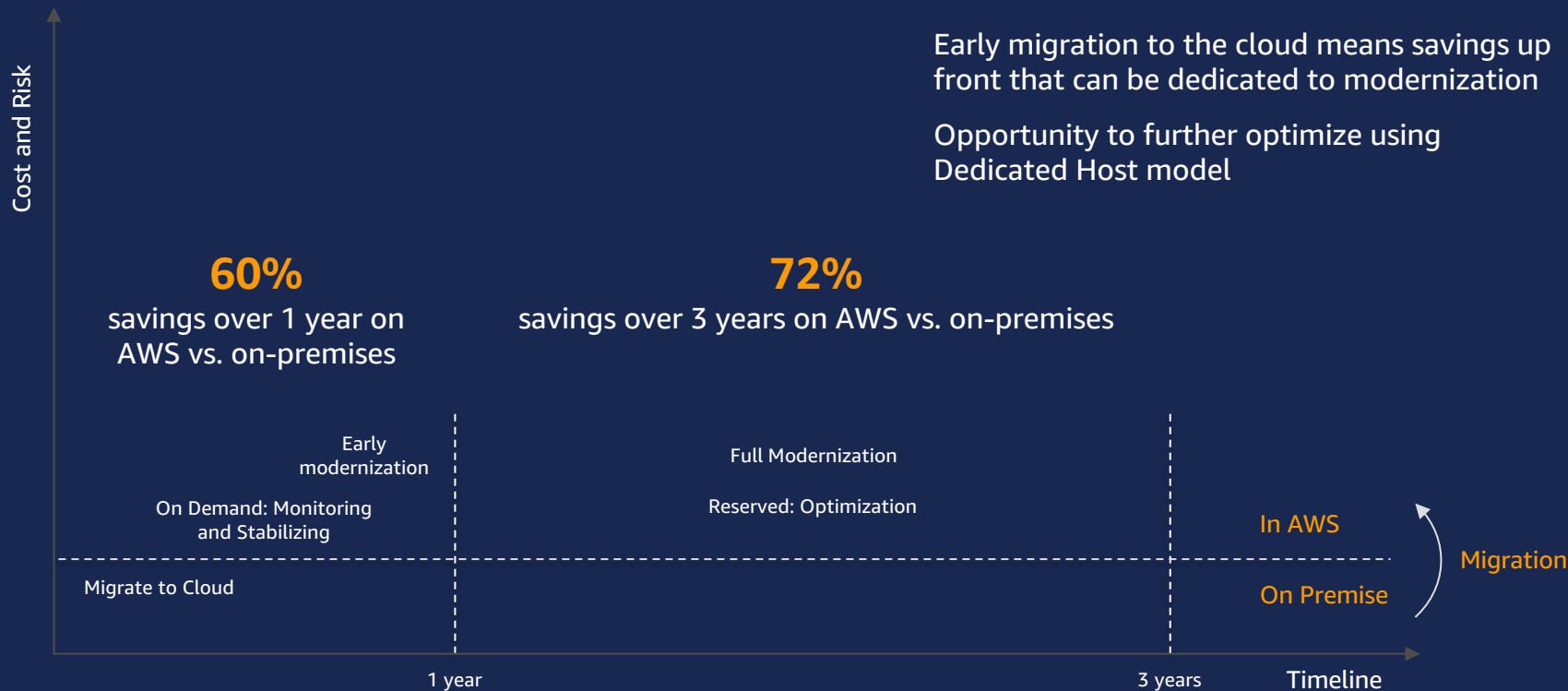
The migration timeline

Migration and optimization: ~ 1 year

Full Modernization: 3 years



Savings scenario: Use AWS savings to propel modernization



Customer success running Windows on AWS

The logo for Infor, consisting of the word "infor" in a lowercase, white, sans-serif font.

"We've seen much stronger performance for our database-backup workloads and we're also saving 75% on our monthly backup costs."

Randy Young,
Director of Cloud Operations

"We didn't have time to re-design applications. AWS could support our legacy 32-bit applications on Windows Server 2003, a variety of SQL Server and Oracle databases, and a robust Citrix environment."

Jim McDonald,
Lead Architect

"We chose AWS for our data center workloads, including Windows, based on our assessment of the security, availability and performance of the platform."

Rajeev Bhajwardi,
Sr. Director Enterprise Technology

Fireside Chat

Mr. Jürgen Jögeva
Director Products
Axinom

axinom!

Next Steps

Assess your Microsoft workloads for a migration to AWS

Consider your choice in licensing

Dedicated hosts can be cost effective for slow varying infrastructure

Engage your AWS contact and the Microsoft segment team

Secure Re:think to help you migrate a workload or run a Proof of Concept

Re:think for Microsoft workloads

AWS Credits

- Proof of Concept
- Migration

Requirements:

- Statement of work
- Monthly cost calculator link (showing MRR)



SAP and SQL Server



Core Windows workloads on AWS

To apply, send an email with required information to:
Harjeetk@amazon.com cc: Microsoft@amazon.com

Thank you!