Windows Server Migration

Further together

vodacom business

Agenda

- Windows Server Migration

- The value of Microsoft on AWS

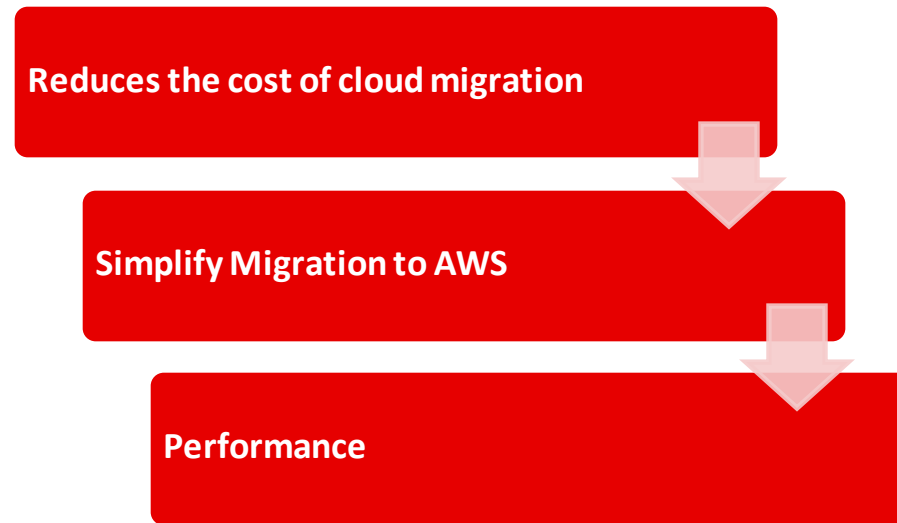- Windows Server Migration Products

- Next Steps

Windows Server Migration

01

Windows Server Migration

Unlock business value by discovering cost savings, better resource efficiency, increased operational resiliency and improved business agility with Windows on AWS

Reduces the cost of cloud migration

Simplify Migration to AWS

Performance

The Windows Sever & MS SQL Migration Service from Vodacom Business allows you to migrate to AWS through an automated and scheduled process.

The value of Microsoft in AWS

02

The value of Microsoft in AWS

Most Experience

12+

Years running Windows workloads

Global Reach & High Availability

76

Available zones spanning

Security & Compliance

50+

Compliance Certifications

HIPAA, FISMA, ITAR, EU

Customer Obsession & Innovation

210+

Service offerings

Capable of delivering Up to

80,000

IOPS/Instance With consistency
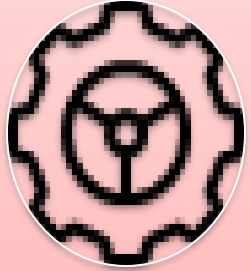
Improve TCO

80+

Price reductions since 2006

The value of Microsoft in AWS

Greater Reliability

AWS provides nearly 2x the number of regions with multiple availability zones vs next cloud provider. In 2018, the next cloud provider had 7x more downtime hours than AWS.

Better Performance

AWS has a 2X-3X performance advantage running SQL Server, including storage, compute and networking vs next cloud provider.
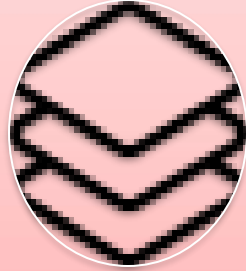
Greater Security

AWS offers 210 security, compliance & governance services which is 40 more than next provider. AWS supports 89 security standards and compliance certify which is meaningfully more than any other cloud provider.
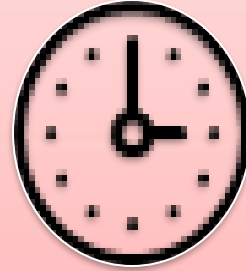
Lower Cost/TCO

AWS helps lower overall Windows Server costs with a comprehensive family of EC2 instances and pricing models AWS has reduced pricing 77 times 56% lower TCO over 5 years
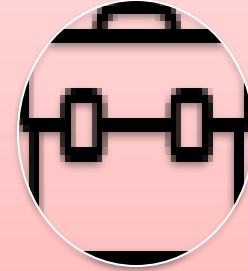
More Innovation

AWS includes 48 services where comparable options are simply not available in next cloud provider AWS offer innovative options to run managed AD, and managed SQL and has robust license mgmt. And DevOps capabilities
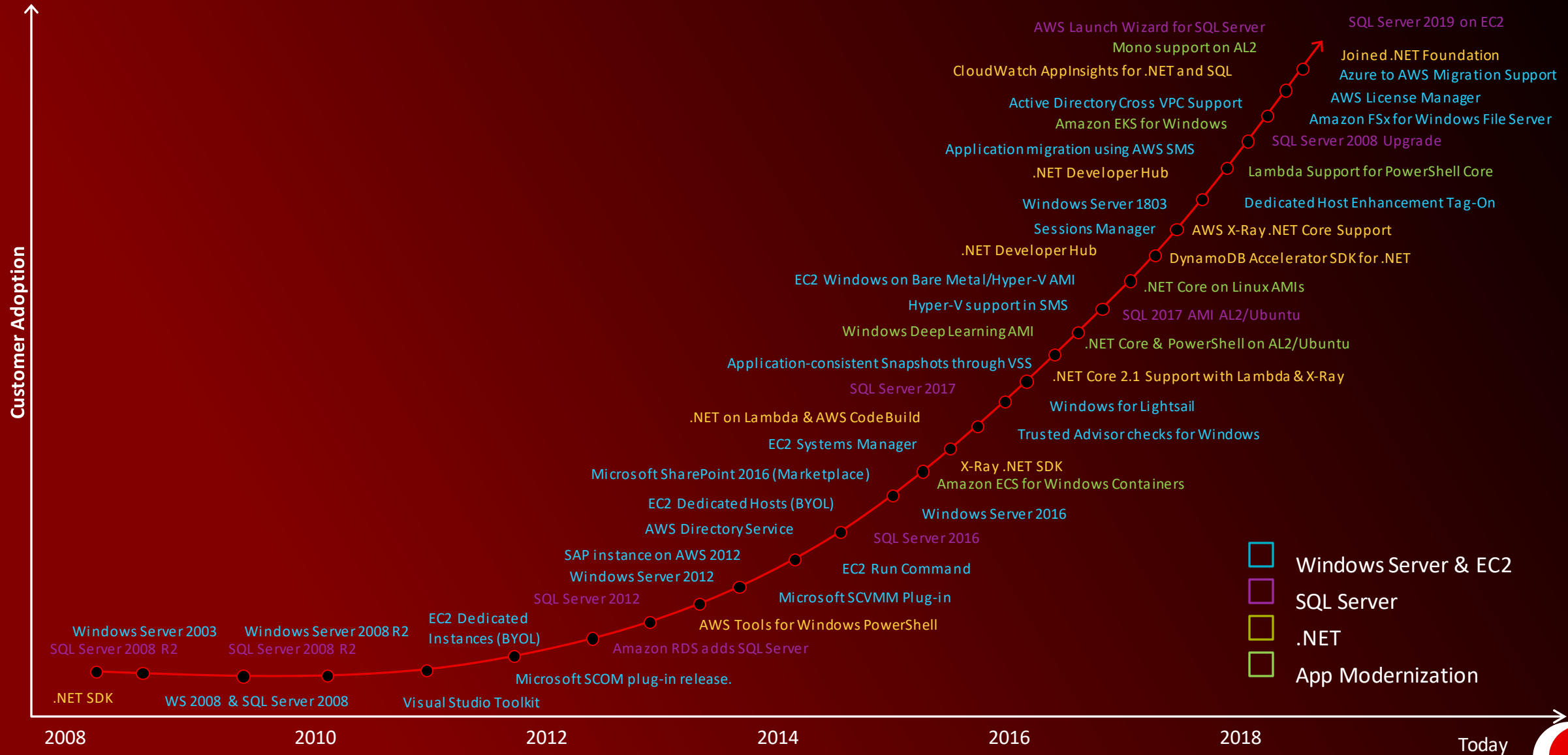
More Experience

AWS has unmatched experience over the last 12 years deploying Microsoft Workloads

Recognized by IDC as the most extensive library of cases covering thousands of successful migrations

Microsoft on AWS

12 YEARS OF INNOVATING FOR OUR CUSTOMERS

Customer Adoption →

AWS Launch Wizard for SQL Server
Mono support on AL2
CloudWatch AppInsights for .NET and SQL

SQL Server 2019 on EC2
Joined .NET Foundation
Azure to AWS Migration Support
AWS License Manager
Amazon FSx for Windows File Server
SQL Server 2008 Upgrade

Active Directory Cross VPC Support
Amazon EKS for Windows

Application migration using AWS SMS
.NET Developer Hub

Lambda Support for PowerShell Core

Windows Server 1803

Dedicated Host Enhancement Tag-On

Sessions Manager
.NET Developer Hub

AWS X-Ray .NET Core Support
DynamoDB Accelerator SDK for .NET

EC2 Windows on Bare Metal/Hyper-V AMI
Hyper-V support in SMS
Windows Deep Learning AMI
Application-consistent Snapshots through VSS

.NET Core on Linux AMIs
SQL 2017 AMI AL2/Ubuntu
.NET Core & PowerShell on AL2/Ubuntu
.NET Core 2.1 Support with Lambda & X-Ray

SQL Server 2017

.NET on Lambda & AWS CodeBuild

Windows for Lightsail
Trusted Advisor checks for Windows

EC2 Systems Manager

Microsoft SharePoint 2016 (Marketplace)

X-Ray .NET SDK
Amazon ECS for Windows Containers

EC2 Dedicated Hosts (BYOL)
AWS Directory Service

Windows Server 2016

SAP instance on AWS 2012
Windows Server 2012
SQL Server 2012

SQL Server 2016

EC2 Run Command

Microsoft SCVMM Plug-in

EC2 Dedicated
Instances (BYOL)

Windows Server 2003
SQL Server 2008 R2

Windows Server 2008 R2
SQL Server 2008 R2

AWS Tools for Windows PowerShell

Amazon RDS adds SQL Server

.NET SDK

WS 2008 & SQL Server 2008

Microsoft SCOM plug-in release.

Visual Studio Toolkit

☐ Windows Server & EC2
☐ SQL Server
☐ .NET
☐ App Modernization

2008   2010   2012   2014   2016   2018

Today

Windows Server Migration Products

03

Reduce Total Cost of Ownership

Move your Microsoft workloads to AWS and reduce cost

WHY

- Customers are looking for options to reduce their Total Cost of Ownership (TCO) of running Microsoft workloads while leveraging elasticity, scale, and agility of cloud.

- Since customers have already made huge investments in perpetual licenses, our bring-your-own-license (BYOL) approach provides significant cost savings.
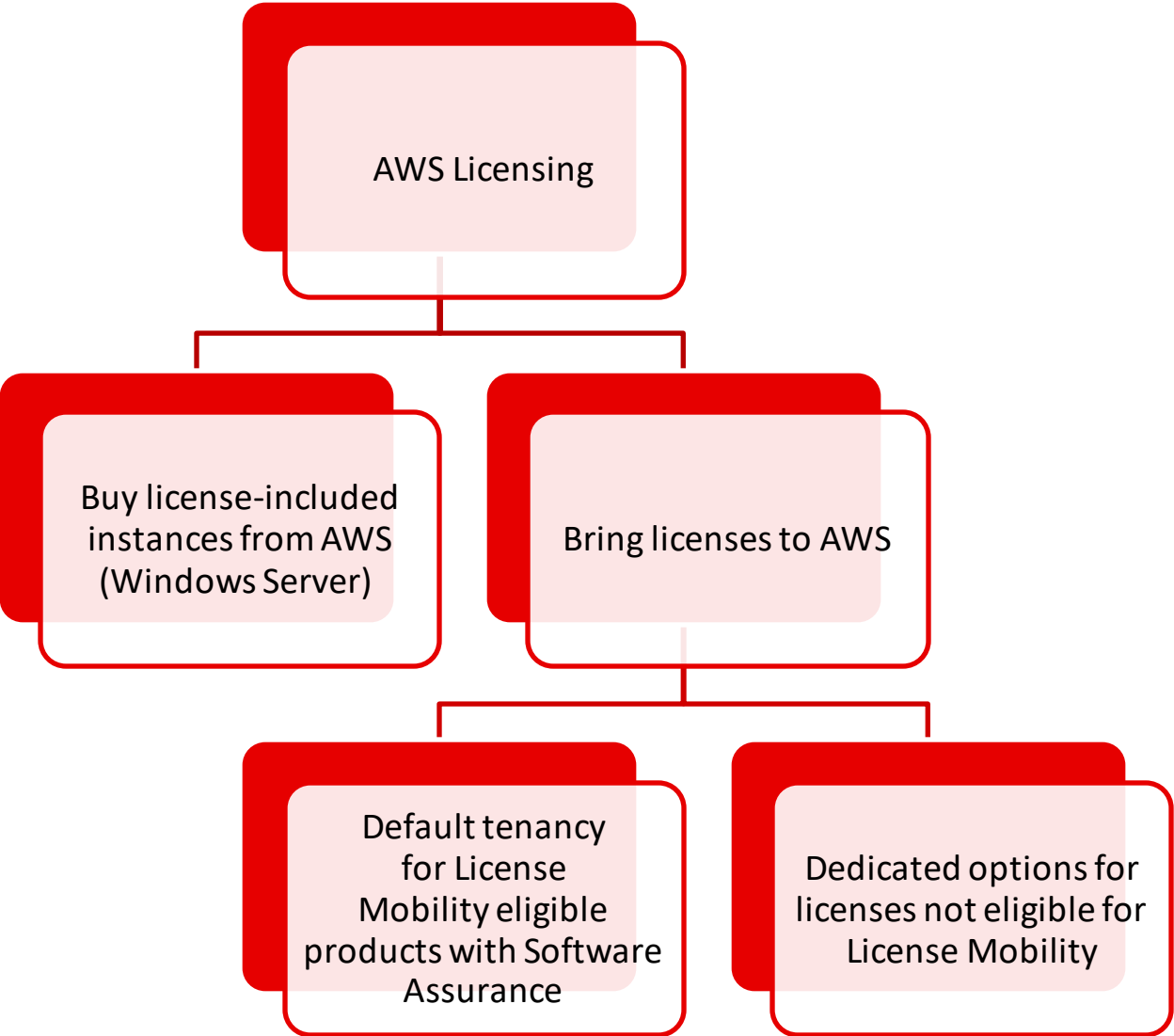
CUSTOMER VALUE

With AWS, customers find not only agility and cost savings, but
more rapid innovation, higher performance, and greater reliability.

- Run an Optimization and Licensing Assessment (OLA)
- Get started with AWS License Manager
- Use EC2 Dedicated Hosts
- Bring your own licenses (BYOL) to AWS
- Use Savings Plans

Flexible Microsoft Licensing Options

1. Flexible pay-as-you-go licensing choices

2. Bring your license mobility benefits to AWS

3. Bring licenses to AWS without paying software assurance.

AWS Licensing

Buy license-included instances from AWS (Windows Server)

Bring licenses to AWS

Default tenancy for License Mobility eligible products with Software Assurance

Dedicated options for licenses not eligible for License Mobility

Migration Products – AWS SMS

By using AWS SMS to manage your server migrations, you can:

- Simplify the cloud migration process.
- Orchestrate multi-server migrations.
- Test server migrations incrementally:
- Support the most widely used operating systems.
- Minimize downtime.

Security through End of Support

Address Windows Server 2008/2008 R2 End of Support

WHY

On January 14, 2020, Microsoft ended support for Windows Server 2008 and 2008 R2. Enterprise customers running these workloads now face increased exposure to security and compliance issues.
Our competition forces customers to either pay expensive extended support costs or delay upgrading their Windows operating server instances.
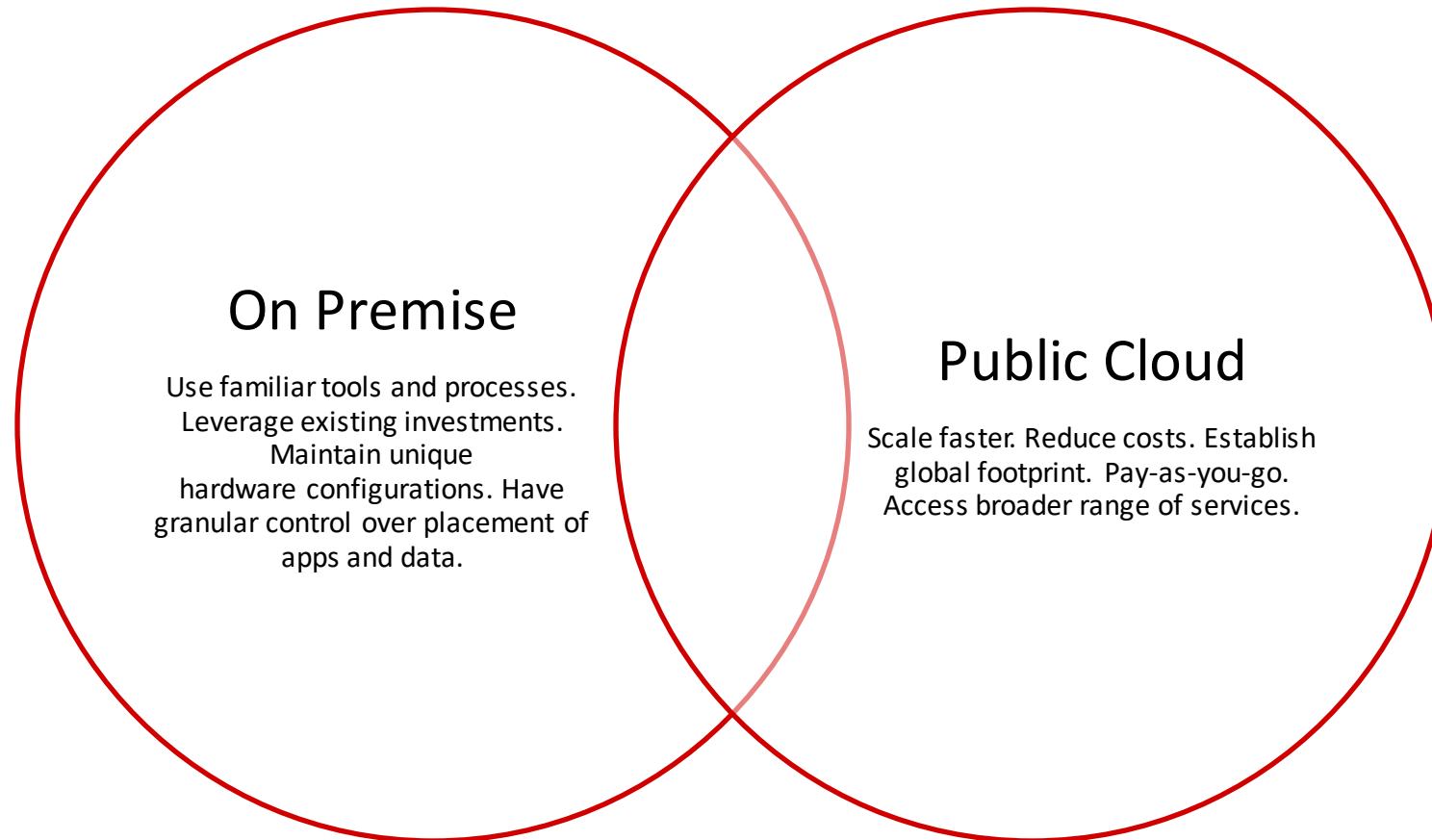
CUSTOMER VALUE

Customers can future proof their investments, make use of existing licensing and avoid vendor lock-in by moving their Windows Server workloads to AWS.
Get started by taking advantage of the AWS End-of-Support Migration Program (EMP) for Windows Servers.

Flexibility of Migrating

As customers move to the cloud, they are looking for ways to get the best of both worlds without buying new hardware.

On Premise

Use familiar tools and processes. Leverage existing investments. Maintain unique hardware configurations. Have granular control over placement of apps and data.

Public Cloud

Scale faster. Reduce costs. Establish global footprint. Pay-as-you-go. Access broader range of services.

Migration Products – AWS SMS

Easy to get started

Control

Agility

Cost-effective

Minimize downtime

How it works.
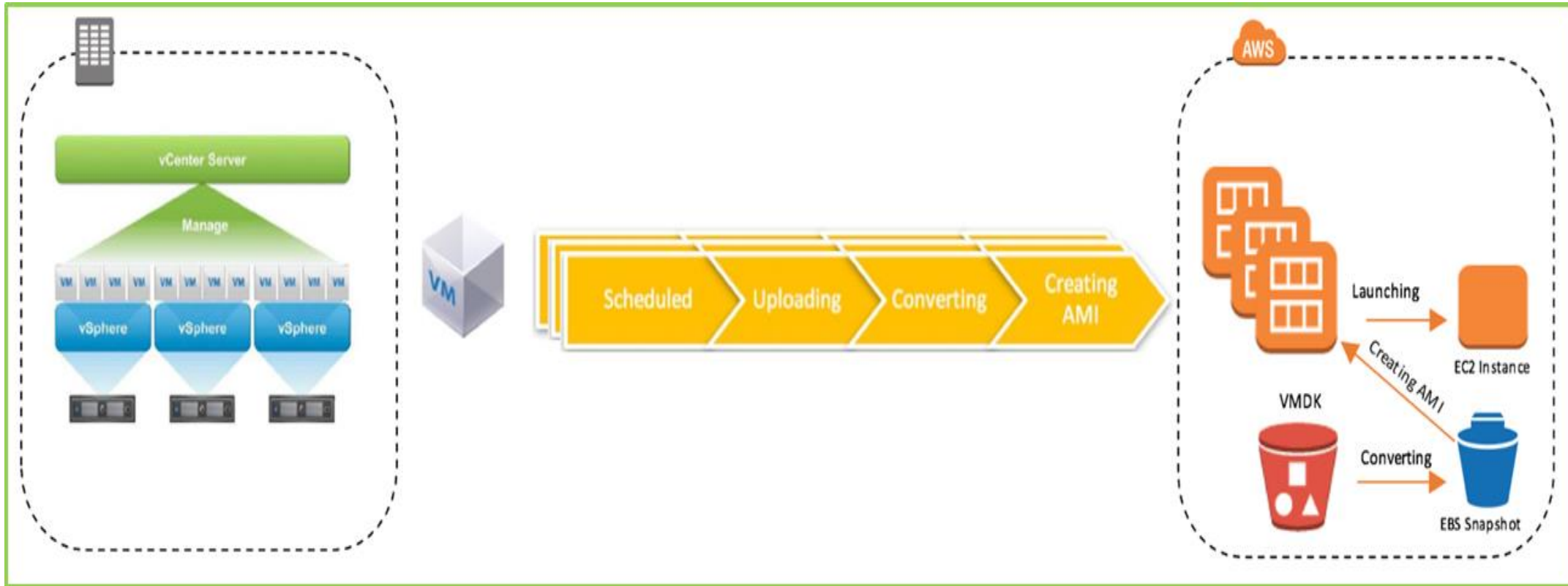
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AWS SMS Migration

AWS SMS - High Level Architecture

- AWS migration Service (SMS) is an agentless service, which makes it easier and faster for you to migrate thousands of on-premises workloads to AWS.

- AWS SMS allows you to automate, schedule, and track incremental replications of live server volumes, making it easier for you to coordinate large-scale server migrations
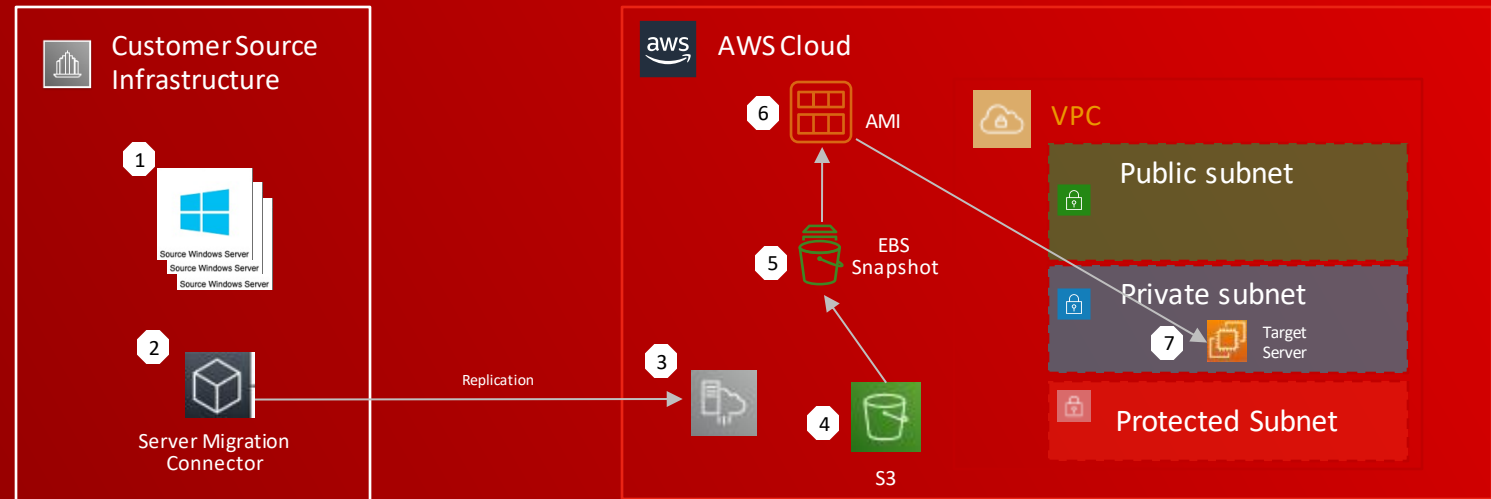
AWS Application Migration Service (MGN)

04

Application Migration Service Benefits

Decrease Migration Costs

AWS Windows Migration Accelerator includes best practices and tools to help you reduce the cost of your migration. You can also receive AWS Promotional Credits to offset costs of simultaneously running two environments during migration.

Simplify and Expedite Migration

AWS Application Migration Service allows you to migrate applications to AWS without changes and with minimal downtime. AWS Windows Migration Accelerator offers AWS Promotional Credits when you migrate at least 40 servers to help you reach your migration goals faster.

Reduce Risk

AWS Windows Migration Accelerator encourages you to set a more predictable migration schedule and allows you to better plan for costs for the 50-70% of your portfolio that can typically be rehosted. This way, your migration can be completed on time and within budget, and you can focus on more complex workloads and modernization.

Migrate servers to AWS with AWS Application Migration Service

Use AWS Application Migration Service to rehost applications and data without changes and with minimal downtime, allowing faster time to production.

You can immediately take advantage of in-cloud benefits, such as elasticity and increased security.

Modernizing applications is easier once they are in the cloud and can use the technology available on AWS.

The Cloud Migration Factory on AWS can help you coordinate and automate large-scale migrations to AWS. AWS Professional Services or an AWS partner can be engaged to assist you if needed.
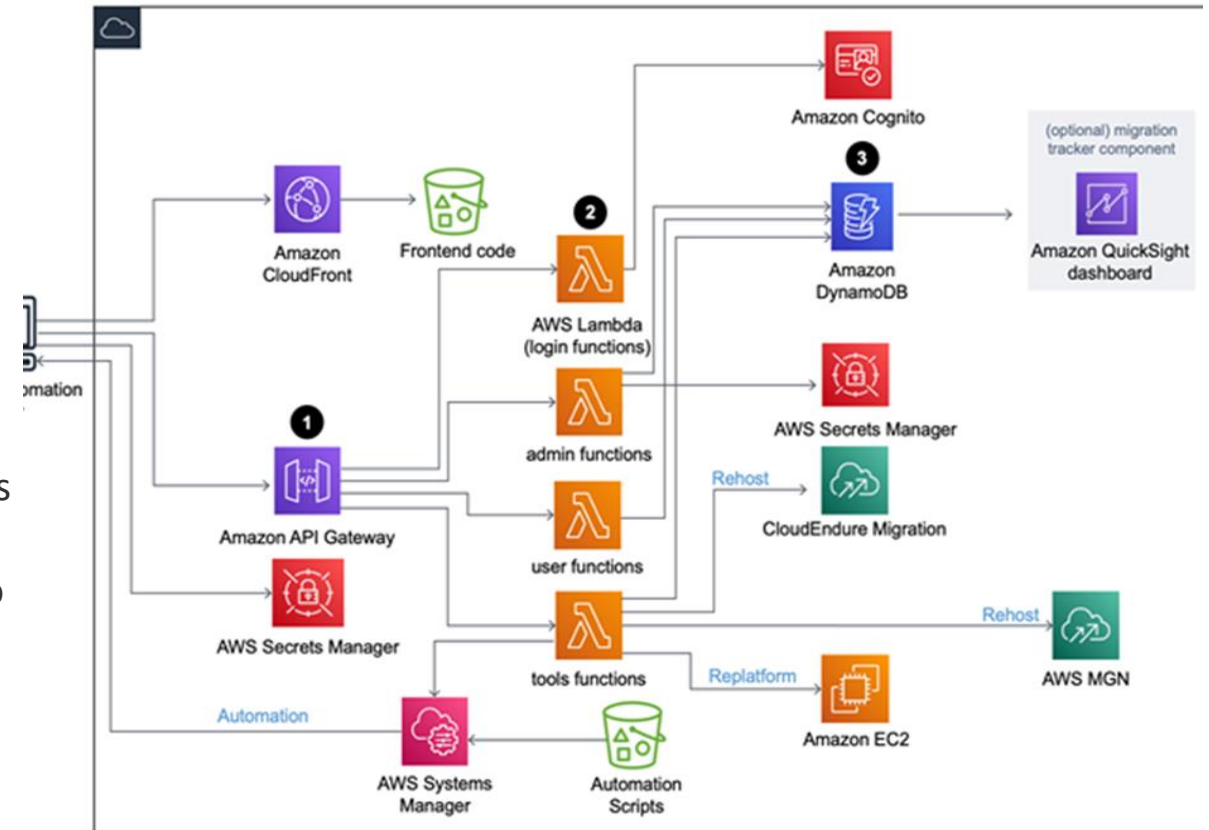
When to Choose AWS Application Migration Service

AWS Application Migration Service (AWS MGN) is the primary service recommended to migrate your applications to AWS.
With Application Migration Service, you can migrate your applications from physical infrastructure, VMware vSphere, Microsoft Hyper-V, Amazon Elastic Compute Cloud (Amazon EC2), Amazon Virtual Private Cloud (Amazon VPC), and other clouds to AWS. Technical details.

This solution is an orchestration platform powered by AWS Application Migration Service for re-hosting servers to AWS at scale. The solution is designed to coordinate and automate many of the manual processes involved with migration, helping customers with their medium-scale to large-scale migrations.
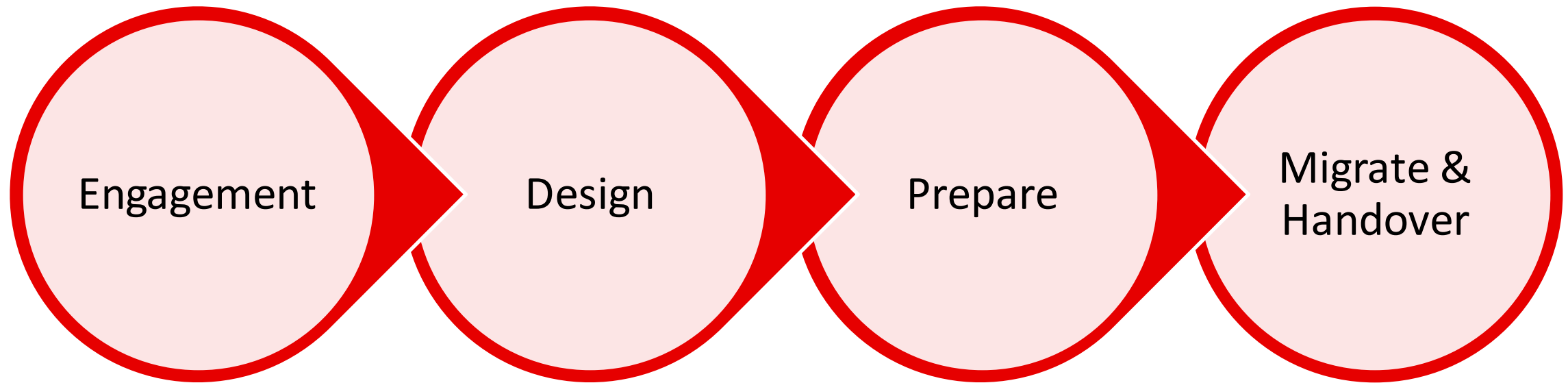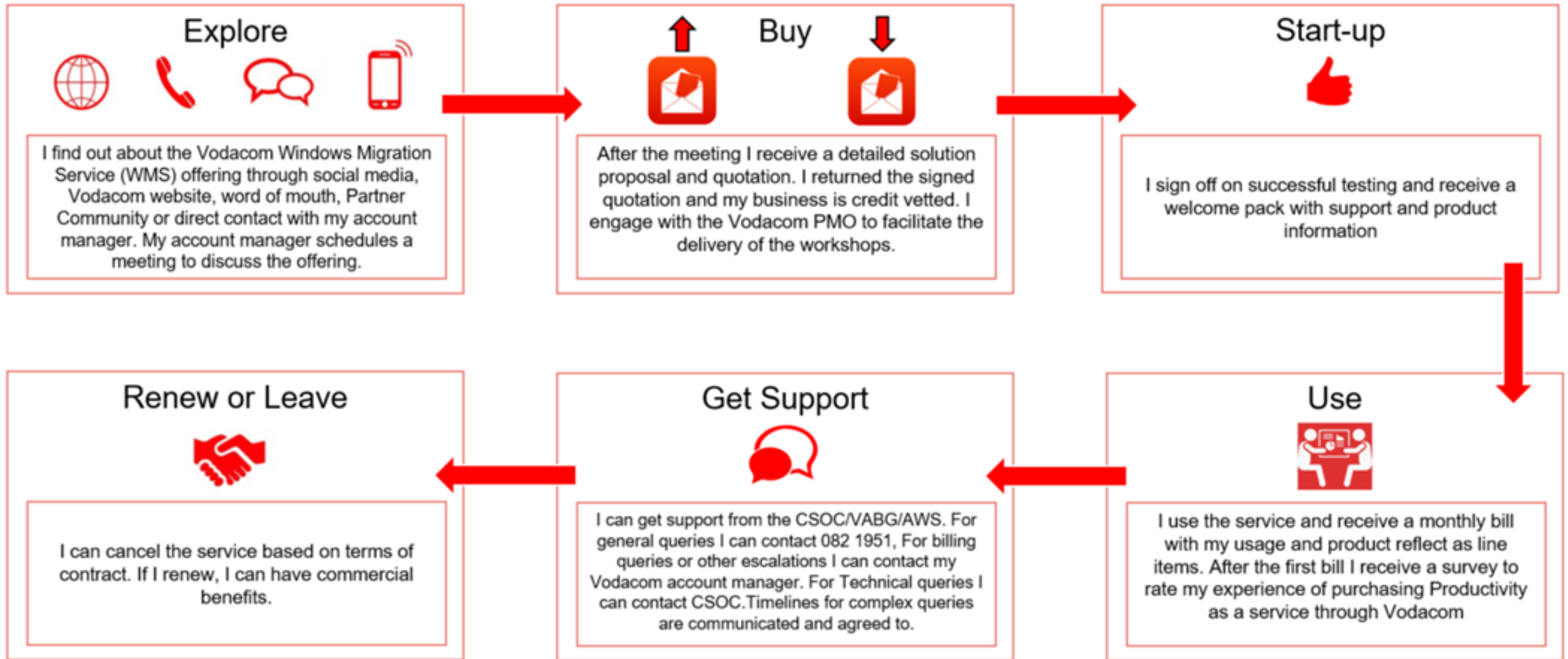
Next Steps

05

Next Steps – Cloud Migration on AWS

Engagement → Design → Prepare → Migrate & Handover

Customer Journey

Explore

I find out about the Vodacom Windows Migration Service (WMS) offering through social media, Vodacom website, word of mouth, Partner Community or direct contact with my account manager. My account manager schedules a meeting to discuss the offering.

Buy

After the meeting I receive a detailed solution proposal and quotation. I returned the signed quotation and my business is credit vetted. I engage with the Vodacom PMO to facilitate the delivery of the workshops.

Start-up

I sign off on successful testing and receive a welcome pack with support and product information

Renew or Leave

I can cancel the service based on terms of contract. If I renew, I can have commercial benefits.

Get Support

I can get support from the CSOC/VABG/AWS. For general queries I can contact 082 1951, For billing queries or other escalations I can contact my Vodacom account manager. For Technical queries I can contact CSOC.Timelines for complex queries are communicated and agreed to.

Use

I use the service and receive a monthly bill with my usage and product reflect as line items. After the first bill I receive a survey to rate my experience of purchasing Productivity as a service through Vodacom

![Vodacom business logo] vodacom business

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