



ACCENTURE AWS BUSINESS GROUP

AWS NAMER Modernization Week

Modernizing to Cloud Native at scale

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Meet our Speakers



Mike Rutherford is the Accenture Migration and Modernization Play in the **Accenture AWS Business Group (AABG)**. Mike's focus is to ensure migration and modernization innovation within Accenture and AWS is leveraged for our client pursuits across all of the AABG horizontal and vertical industry plays. He has developed globally offerings and services for Accenture for over 12 years and is currently **AWS certified**.



Rupa Ganesh is a Managing Director and the Lead Architect at Accenture's Advanced Technology Centers in India for **all things AWS**. Rupa has also been globally leading a number of complex deliveries and initiatives around **AWS & Container technologies** for the **Accenture AWS Business Group (AABG)**.

Rupa is one of Accenture's **globally certified Master Technology Architects (MTA)** and also **AWS certified at the Professional level**. She leads a team of very deep AWS architects with Containers and Cloud Native as a core focus area.



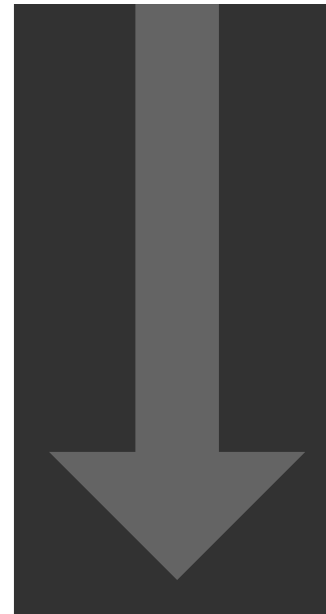
While most enterprises are engaged in some form of a Cloud migration, a majority are not realizing the value of Cloud.



Cloud is prevalent in most enterprises...

+90%
enterprises

have adopted cloud in some form to drive efficiency¹



Cloud value is not being realized...

2/3
enterprises

are dissatisfied with their results of cloud initiatives²

Most enterprises are already engaged in some form of Cloud Migration

Most of the migrations have been straight forward rehost.



Rapid

Most enterprises have a business case need to migrate at-pace to Cloud in order to exit DCs and traditional platforms and avoid duplicate costs. They may have begun parts of this journey or they may have exited only the easy applications.



Complex

Large, complex application sets like SAP and Oracle require both IT and Business planning and execution. Many enterprises are still debating what to do with these applications and what the best approach is for their business.



Data

Every Cloud migration includes a Data migration. In order to move to Cloud and exit DCs and traditional platforms, we must address all the legacy data platforms to have a seamless operating model in Cloud.

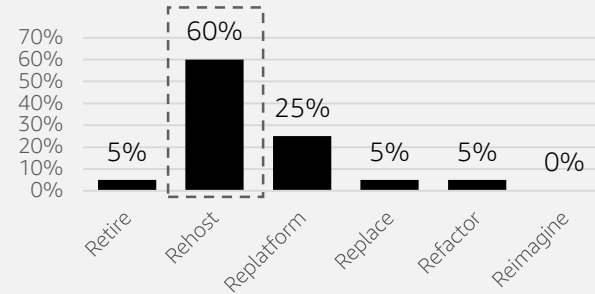


The next generation is the Modern Migration.

Clients apply the Modern Migration based on their goals

Client A: cost focused

Client A is retail client under significant market pressure. They are focused on driving down the cost to serve. They have a largely Windows based environment and little to no Oracle databases.

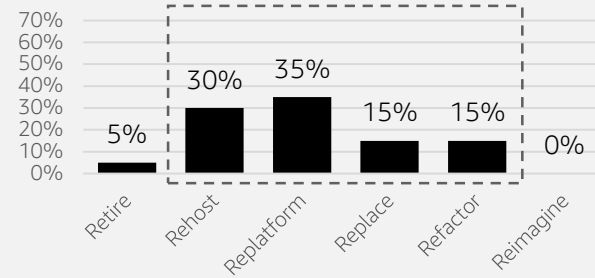


Approach

- Focused on Rehosting most workloads for a rapid exit.
- Utilizing Replatform where rehost isn't possible due to technical limitations
- Seeks to Retire applications along the way
- Refactor and Replace as a last resort

Client B: value focused

Client B is a value focused manufacturing client. They want to migrate, but they have complex systems which need to be Refactored or Replaced. They also want to take full advantage of SaaS, PaaS and IaaS platforms to save costs long term.

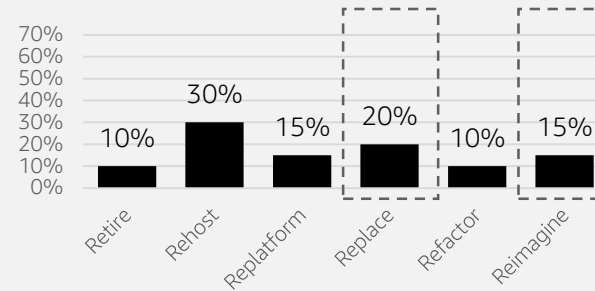


Approach

- Assesses cloud options during application assessment. Plans to target long term value
- Chooses to Replatform to high value options, rehost low value options
- Containerizes custom-made applications, consolidating DBs and adding PaaS solutions
- Refactors specific applications to SaaS based on high business value

Client C: transformational growth

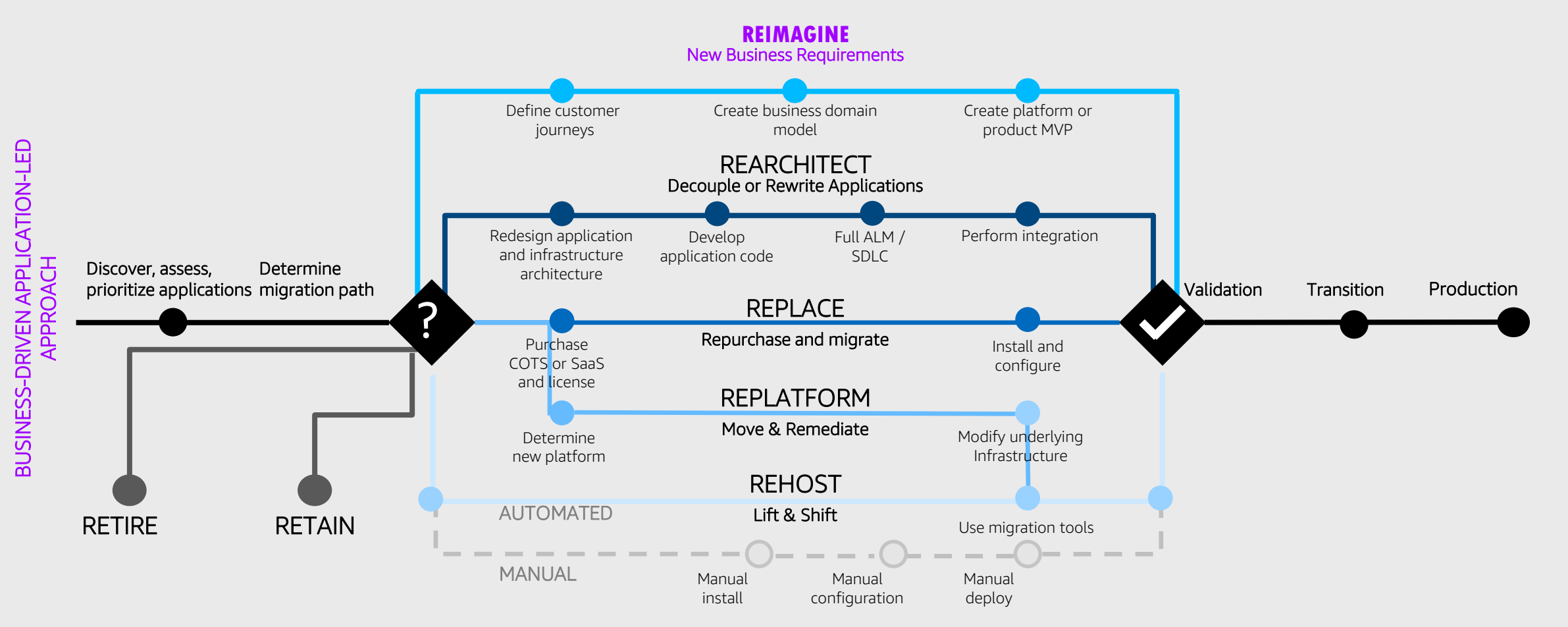
Client C seeks to transform client interaction and sees the cloud as pivotal to change. They seek to reimagine a significant and core portion of their landscape. Migrating the remaining applications helps fund long-term transformation.



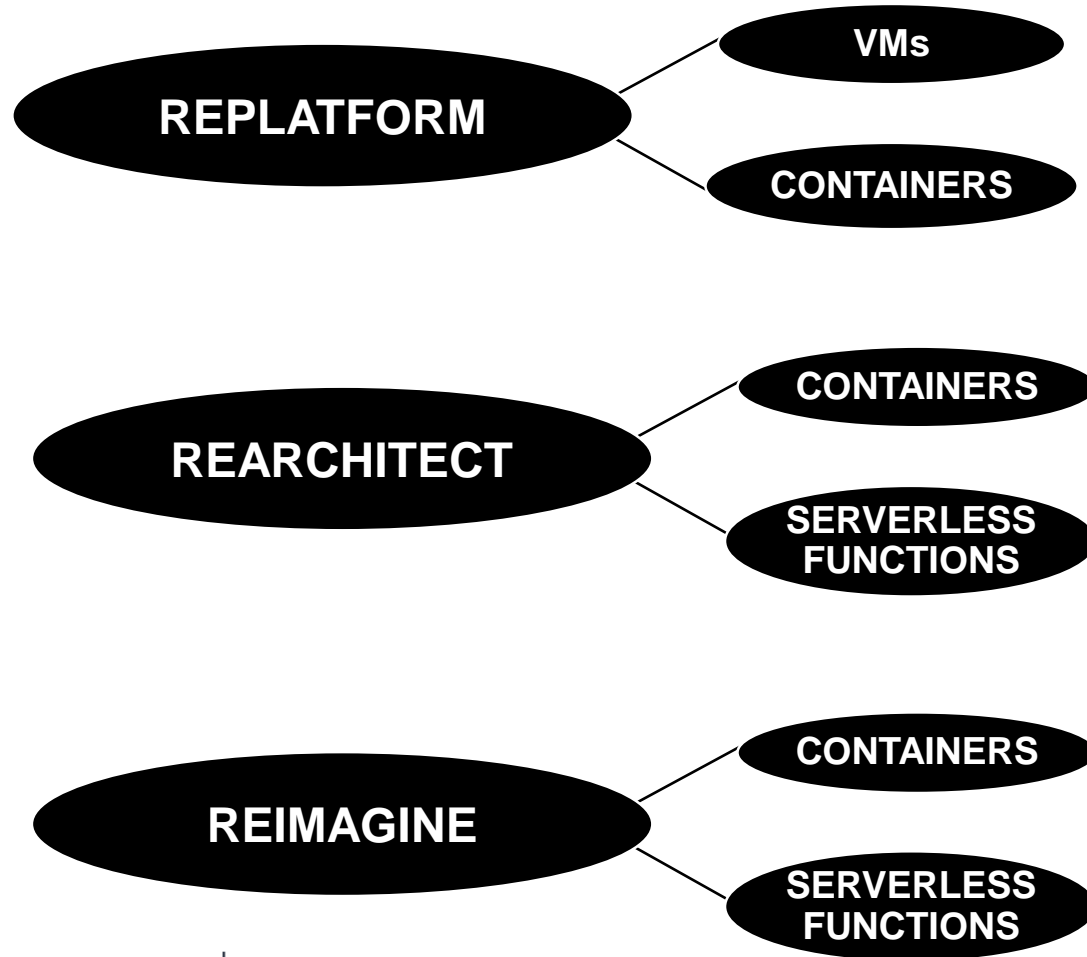
Approach

- Begins with a business-driven innovation strategy grounded in one or more Reimagined business processes
- Replaces, Refactors and Reimagines applications surrounding that vision
- Rehosts and Replatforms the remainder to cut costs and power the vision
- Retires applications from legacy processes

Accenture's 7Rs of Modernization



The Best Cloud Native Target State for Custom Apps – Serverless vs Containers



- Serverless Functions often provide the best optimization but not everything is suited to serverless architecture.
- An important consideration is the commonality of target states to keep tooling & DevOps consistent. Containers are a big winner if this is an important consideration
- Integrating with the rest of the ecosystem is another important consideration while deciding target states. For eg: need to integrate with AWS Step functions etc
- Replatform may be an end target state for some applications but the trend we see is for this to be a starting point on the cloud before an application goes through the larger modernization journey on the cloud.

Typical Container Migration Use Cases

Containers can see Rehost use cases too!

The Accenture AWS Business Group (AABG) is heavily invested in modernization initiatives for migrating workloads to AWS in an optimized manner. Containerization is an important part of our modernization charter. Our Containerization strategy is tied into the different 'Rs' of app disposition:

1. **REHOST:** Container-to-container migration i.e. migrating from one container platform to another. Use cases include:
 - a. On-prem Kubernetes or Mesos to AWS ECS or EKS
 - b. Pivotal Kubernetes Service (PKA)/ Google Kubernetes Engine (GKE)/ Azure Kubernetes Service/ VMWare Tanzu migrations to AWS EKS
 - c. On-prem OpenShift to AWS ECS or EKS or ROSA
 - d. AWS ECS to EKS migrations
2. **RE-PLATFORM:** Lift-and-containerize workloads to AWS ECS or EKS. These use cases do not involve modernization or remediation except for basic mandatory changes needed to be able to containerize the workload. Use cases:
 - a. Legacy workloads that may be containerized with minimal remediation.
 - b. Pivotal Cloud Foundry (PCF) to AWS ECS or EKS migration.
3. **RE-FACTOR:** Refactoring legacy workloads significantly (or rewriting them) to optimize them for containers.
4. **RE-IMAGINE:** Greenfield build of Cloud Native applications to a containerized state



Our Differentiating Accelerators

We are invested heavily in accelerators and initiatives that ensure best practices across both Application and Platform pillars

MYNAV FOR CONTAINERS ON AWS

AABG is enabling myNav, Accenture's one-stop platform for Cloud Migration with AWS-optimized approaches to containerization.

Container Fitment Assessment

Accenture's Container Fitment Questionnaires help analyze the container-readiness of a workload and calculates the T-shirt size of the workload (Simple, Medium, Complex) and the recommended disposition (Rehost, Replatform, Refactor, Reimagine)

AWS Container Services Selector

Accenture's Container Platform Selector is an intuitive tool that steps through a use case and its scenarios and recommends the right container orchestration platform and options to use on AWS



Our Joint Initiatives with AWS

Accenture and AWS are invested heavily in accelerators and initiatives that ensure best practices across both Application and Platform pillars

Thought Leadership

Accenture collaborated with AWS's engineering teams as launch partners for AWS **App2Container (A2C)** – a new service from AWS to automate lift-and-containerize use cases to AWS ECS or EKS. Our joint is published at APN:

<https://aws.amazon.com/blogs/apn/automating-containerization-at-scale-with-aws-app2container/>

Edge & Hybrid

Accenture is collaborating with AWS as Early Access Partners for EKS-Anywhere – a new service to enable containerization on-premise leveraging AWS's EKS services.



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WADE for Containers

AABG's differentiating Well Architected Delivery Excellence (WADE) for Containers provides a one-stop shop for AWS ECS and EKS.

The screenshot shows a Wiki page with a table of contents on the left and a diagram on the right. The table of contents includes items like '1. EKS Cluster base arc...', '2. Infrastructure as a C...', '3. EKS - Cluster Setup a...', '4. EKS - Sample Applic...', '5. FARGATE - Cluster (E...', '6. Tools Used', '7. Region', '8. Repository', '9. Our Standard Best P...', 'EKS-Infra Setup - CL...', 'SecurityGroupSetti...', 'EKS-Sample Applic...', 'IAM Roles for Servi...', and 'Horizontal Pod Aut...'. The diagram on the right is titled 'Kubernetes cluster architecture (Public-Private Subnets)'. It shows a multi-availability zone architecture with three availability zones. Each zone contains a VPC with private subnets for EKS worker nodes and public subnets for NAT gateways. The NAT gateways are connected to an Internet Gateway. The diagram is annotated with 'Public-Private Subnet architecture' and 'Kubernetes cluster architecture (Public-Private Subnets)'. Below the diagram, there is text explaining the design: 'Above architecture is designed with consideration of AWS best practices. Below are key points considered for design.' followed by a list of key points: 'AvailabilityZones - Using three availability zones to achieve highly available cluster', 'Private subnets - To achieve security for EKS cluster VPC is configured using private subnets for EKS worker nodes', and 'NATGateway - To allow outbound internet access for EKS worker nodes NAT gateways are configured in public subnets. Thus, EKS cluster can have access to internet through NAT gateway.'

Thank you



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