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MARKET NOTE

Amazon Web Services Modernization Accelerator — AWS Helps Organizations Go Beyond Lift and Shift

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EXECUTIVE SNAPSHOT

FIGURE 1

Executive Snapshot: Delivering Successful Application Modernization Through AWS Modernization Accelerator — A Model for Best Practice Modernization Pathway

Application modernization pathways take different approaches based on enterprises' business needs and digital journey. With this, service providers recognize the need to handhold enterprises with a modular approach to mitigate the risk of complete and up-front replatforming and rearchitecting to save from any unwarranted risk to critical workloads. This IDC Market Note discusses how Amazon Web Services (AWS) takes a modular application modernization pathway with a business outcome based on the six pathways designed for its clients.

Key Takeaways

- AWS' assessment and understanding of the current state of enterprise is key to the modernization approach that it suggests. It helps enterprises know which applications/workloads and modernization method would work best.

- Modernization pathways are modular, making it easy for an AWS customer to see the benefits and mitigate the risk of large-scale replatforming and rearchitecting of critical workloads. This modular approach helps AWS customers see the benefits in real time, from the assess stage to the scale stage. It also helps organizations decide on the course of their modernization, whether in-place modernization or replatforming, based on what outcomes they desire.

- AWS works with its client as a business outcome enabler and not just as a technology transformation exercise. This is critical for customers to get confident with the look and feel of business outcomes when critical workloads are migrated and modernized.

Source: IDC, 2022

IN THIS MARKET NOTE

This IDC Market Note provides a detailed summary of how Amazon Web Services (AWS) partners with customers across the Asia/Pacific (excluding Japan) region, including enterprises, software vendors, and digital natives, to help define and execute successful modernization programs. Through AWS Modernization Accelerator (ModAx), AWS works with customers to assess an organization's preparedness and recommends one or more modernization pathways based on the customer's business objectives.

IDC'S POINT OF VIEW

From upgrading the underlying application infrastructure to migrating legacy applications to newer technology platforms, the term application modernization evokes a wide variety of definitions.

The need for agility, driven by the growing scale, evolving customer expectations, and business model innovations, has made organizations prioritize application modernization. A successful application modernization strategy starts with the business need in mind, then focuses on technologies. As the journey to the cloud gathers pace, organizations have been looking for ways to accelerate their cloud adoption and, for a prescriptive approach, application modernization.

Many organizations in the region are adopting a reactive approach to application modernization or struggling with a technology-led approach rather than a business need–based approach. This has increased costs and unwarranted long-term implications on maintaining and servicing legacy applications, thus impacting business outcomes and customer experience. Delivering a successful modernization program pivots on having the right partners and a clear road map along with executive buy-in.

IDC believes that customers evaluate their modernization partners across a spectrum of qualities, including cultural fit, experience and expertise, delivery methodology, and cost. Partners are expected to help organizations visualize potential cost savings and business outcomes prior to the journey and build a business case and road map for modernization. Customers seek references and demonstration of skills and tools before making a commitment. This is where AWS Modernization Accelerator helps.

AWS ModAx aims to help customers kick-start and expedite their modernization journey by:

- Presenting easy-to-choose options, backed by prescriptive guidance in the form of modernization pathways
- Ascertaining the scope and developing the approach for application deconstruction/transformation
- Eliminating analysis paralysis and decision fatigue
- Supporting the customer as required but letting them take the lead with hands-on experience during the minimum viable product (MVP) development stage
- Deploying a modernized application and data in AWS with new features, new code, or new workflows (can be deconstructing monolithic applications or rearchitecting applications to cloud-native services)
- Streamlining and simplifying processes to enable production at scale

The AWS Modernization Accelerator engagement is delivered through a modular approach designed to help organizations measure the success of each step in their modernization journey. Customers can choose either one-step or two-step modernization as defined:

- **One-step modernization**. This moves workloads or applications directly from on premises or other clouds to AWS using a cloud-native architecture and fully managed services.
- **Two-step modernization**. This refactors or replatforms workloads already on Amazon Elastic Compute Cloud (EC2) to a cloud-native architecture and fully managed services. This step is applied on workloads that are already on EC2 and want to achieve greater benefits, lower total cost of ownership (TCO), and better outcomes and agility.

AWS Modernization Accelerator Framework and Approach

AWS Modernization Accelerator is delivered in three simple, discrete yet incremental phases: assess and architect, build and deploy, and scale. This makes it easy for customers to absorb and adopt. AWS begins by identifying the right decision makers and influencers, including IT and business executives who are either application owners or users. A modernization readiness assessment, which is the most critical, begins with a custom questionnaire focused on determining an organization's readiness for modernization. Business questions to assess the business drivers, impacted users, and success criteria are assessed and evaluated. Application questions collect information on customer pain points and workloads to modernize. Development operations (DevOps) questions collect information on DevOps environment, adoption, and practices. This is followed by assess and architect, build and deploy, and scale of the AWS accelerator engagement program.

Phase 1 — Assess and Architect

- **Objective**. The goal is to identify modernization opportunities.
- **Timeline**. It spans one week.
- **Stakeholders**. They are led by AWS modernization specialists, solutions architects, application users, and IT and business leaders.
- **Approach**. It consists of:
  1. Conducting a rapid discovery/modernization assessment workshop with key stakeholders to identify one to three MVP opportunities
  2. Mapping the identified MVPs to one or a combination of more than one modernization pathways defined by AWS
  3. Creating target architectures
  4. Presenting recommendations and next steps to build MVP(s)
  5. Getting customer buy-in from business stakeholders and IT leaders

Phase 2 — Build and Deploy

- **Objective**. The goal is to build MVPs.
- **Timeline**. It spans four to five weeks.
- **Stakeholders**. They are led by AWS modernization specialists, solutions architects, customer solutions managers, customer technical subject matter experts, application users, and IT and business leaders.
- **Approach**. It consists of:
  1. Planning and enablement

2. An experience-based accelerator party to build and deploy MVPs

The modernization party is a sprint-based, interactive activity designed to transform applications and the business workflows they support. The party deploys an application in AWS with new features or implements cloud-native services.

Phase 3 — Scale

- **Objective**. The goal is to modernize at scale.
- **Timeline**. It is an ongoing initiative.
- **Stakeholders**. They are led by partners, AWS ProServ, or customer technical teams.
- **Approach**. It is an ongoing modernization initiative post-MVP. To date, AWS has developed six prescriptive pathways focused on helping customers expedite their modernization journeys. The pathways are:
    - **Move to cloud native**. This is for decomposing monolithic applications into a loosely coupled distributed architecture using microservices. AWS works backwards, starting with the targeted business outcome of the customer by understanding what their modernization needs are. Move to cloud native targets organizations that want to advance their business agility, accelerate their product features, and create constant improvement from customer feedback.
    - **Move to containers**. This is mainly for containerizing existing workloads and leveraging fully managed container orchestration services for operational efficiency.
    - **Move to open source**. This is for migrating Windows and SQL server workloads to open source. It focuses on helping customers move away from expensive commercial licenses and adopt open source alternatives, driving TCO reduction and innovation.
    - **Move to managed data**. This pathway helps customers move to a fully managed, purpose-built, and cloud-native database. The key concept is building operational efficiency at the operating system and security level. It frees operational burden off the database team and enables growth beyond relational data models using a purpose-built database.
    - **Move to managed analytics**. By moving to a fully managed, cost-optimized, lake house architecture, this pathway allows organizations to realize innovation and value beyond just application by becoming a data-driven organization with data cataloging, self-service discovery, fine-grained access control, and federated data-sharing capabilities.
    - **Move to modern DevOps**. Moving to modern cultural philosophies, practices, and tools increases an organization's ability to deliver applications and services at high velocity. Moving to modern DevOps ensures customers leverage capabilities, such as continuous integration/continuous delivery, automation, test-driven development, test automation, infrastructure as code, and observability, to successfully modernize legacy apps.

Pathways can be used individually, but they are more frequently used in combination. For example, customers combine move to modern DevOps with move to containers into a single modernization accelerator, which gets them an automated pipeline to deploy containerized versions of their workloads more efficiently, and they get the containerization of workloads themselves within the same ModAx. For customers who are starting their journey and do not already have automated pipeline-based deployment, this is a much better move than as-is containerization alone because it maximizes agility.

IDC Recommendation

Migrating applications to cloud using the rehosting (lift and shift) approach does not automatically give the benefits of the elasticity, resilience, ease of deployment and management, and flexibility that cloud providers, such as AWS, offer, nor does it automatically modernize culture and processes to enable high-performing software development. Modernization means taking the application environment in the form that it is in today (most likely, legacy and monolithic) and transforming it into something that is more agile, elastic, and highly available. In doing so, organizations can transform their business into a modern enterprise.

AWS' approach to offer prescriptive guidance through its Modernization Accelerator program will certainly help build customer confidence and simplify the process of business case/road map development and prioritization. By working backwards from business objectives and driving consensus among key stakeholders, AWS Migration Accelerator promises a definitive path to success for organizations looking to embark on a modernization journey. AWS should look to scale the Modernization Accelerator program through partners to achieve scale and maximize impact.

LEARN MORE

Related Research

- *IDC Survey Spotlight: Top Application Modernization Tactics Across Regions* (IDC #US49734516, October 2022)
- *Accelerate App Modernization to Realize Full DX Potential* (IDC #US48980522, March 2022)

Synopsis

This IDC Market Note provides a detailed summary of how Amazon Web Services (AWS) partners with customers across the Asia/Pacific region, including enterprises, software vendors, and digital natives, to help define and execute successful modernization programs through AWS Modernization Accelerator.

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