

Application Modernization: innoWake™ Mainframe to Cloud Native

An ecosystem that transforms legacy applications to Cloud Native



Migrating legacy applications to the cloud is no longer optional; it's a basic business requirement. Today, organizations looking to achieve the full benefits of the cloud model are turning to Cloud Native, an approach to building and running applications that enables developers to more rapidly design, deliver, and operate business-critical tools and services.

Migration of mainframe applications to a Cloud Native platform requires an integrated solution that addresses every phase of a modernization initiative, from analysis of legacy software to post-deployment maintenance of cloud applications using DevOps. Deloitte's Mainframe to Cloud Native solution, a component of the Application Modernization powered by innoWake™ suite, provides an ecosystem that allows organizations to rearchitect legacy code to Cloud Native services in a single project. What's more, Deloitte's ATADATA™ suite of solutions can be used to deploy legacy applications to the cloud from non-mainframe systems.

Deloitte's product-based approach can help you address your entire enterprise cloud-migration journey.

Our Cloud Native initiatives typically start with automated diagnostics to understand the legacy code and infrastructure, followed by fully automated migration of legacy applications to a modern platform such as Java or .NET. Next, the modernized code is deployed to an Infrastructure-as-a-Service (IaaS) platform, and then converted to Cloud Native architecture. Our platform-agnostic Mainframe to Cloud Native ecosystem comprises five solutions:

Discovery: This automated diagnostics solution generates a summary of your codebase, data, and third-party tools to help determine the most effective path to modernization and cloud rearchitecting.

Mining: This deep-dive solution scrutinizes legacy code and data to create a comprehensive understanding of business

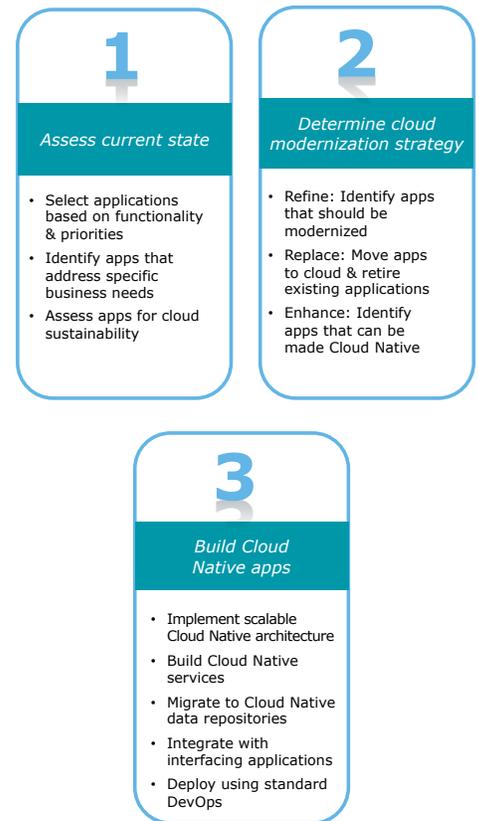
functions executed by the code. Mining also helps identify modernization initiatives that will best meet individual business goals and provides the data needed to chart a Mainframe to Cloud Native roadmap.

Transformation: Using patented software, Transformation converts legacy code, data, and UI assets to modern equivalents that are compatible with cloud architecture and processes.

Modernization: This open-ended initiative extends the capabilities of the current system to enable adoption of Cloud Native applications, as well as technologies like mobility, analytics, microservices, and cybersecurity.

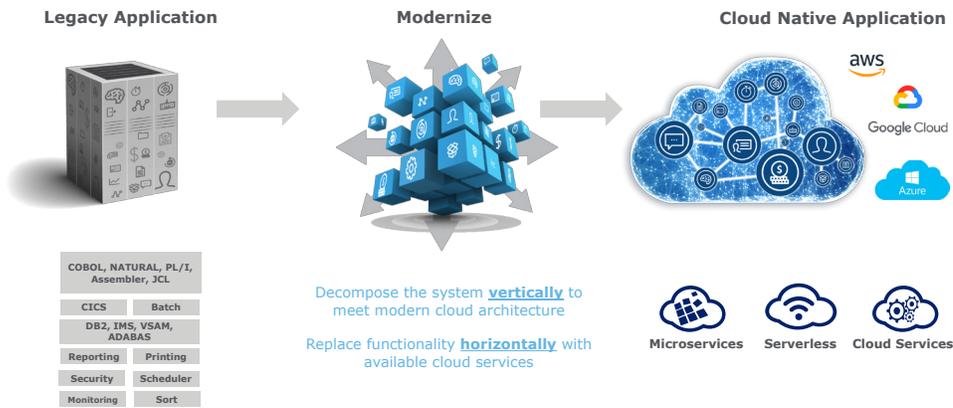
Legacy DevOps: DevOps helps streamline development, deployment, and testing of migrated workloads and data, and enables maintenance of Cloud Native applications on the mainframe as well as on open-systems environments.

From mainframe to Cloud Native in 3 steps



We augment these solutions with deep knowledge of business processes and market realities across industries, including government, financial services, healthcare, telecommunications, and transportation. Our teams of Application Modernization specialists have helped organizations at all levels of maturity design and deploy a business-focused cloud implementation.

Mainframe to Cloud Native rearchitected process



Potential business benefits

Speed to market: 1:1 refactoring helps expedite the migration process

Customized to business: Highly customizable UI and screen design, based on business needs

Deep insights: Mining provides in-depth understanding of business functions of code

Enhanced operations: Automated processes and minimal user training requirements can improve efficiencies

Single-source vendor: Deloitte manages all phases of the initiative, providing a single point of contact that helps streamline cloud migration

Post-deployment management: We can help operate cloud implementations after deployment

From Mainframes to Cloud Native apps, with a single vendor

Deloitte's integrated Application Modernization ecosystem—coupled with our strategic business services and cross-industry capabilities—helps enable us to design and deliver end-to-end cloud modernization solutions.

We use one-of-a-kind tools and methodologies to modernize legacy code and build a cloud architecture that supports business modernization and digital transformation. For each project, Deloitte assembles a collaborative team that has a unique combination of industry experience and specialized technical skills. In addition to the onsite project team, Deloitte's Application Modernization Studios in Austin, TX, and Senden,

Germany, help provide efficient and consistent modernization support from a central location. Our Application Modernization service can also draw upon the skills and know-how of Deloitte professionals in other domains, including cloud engineering, risk management, data analytics, cybersecurity, human capital, and regulatory.

Together, these capabilities help enable us to design and deliver end-to-end modernization and cloud architecting solutions. As a single-source provider, we oversee all team activities as part of the overall project-management workstream. Deloitte is specifically positioned to help you plan and implement a low-risk Mainframe to Cloud Native initiative that can take you to the cloud and beyond, based on your current and future business needs.

Key capabilities

Cloud Native applications exploit the full advantages of the cloud computing model. They are built using containers and microservices, and are managed on elastic infrastructure through agile DevOps processes. Our Mainframe to Cloud Native ecosystem offers:

Automated Transformation:

Accurate, fully automated migration of legacy applications to modern platforms

New possibilities: Enables organizations to integrate modern platforms and technologies, and prepare for cloud migration

Cloud Native architecture: Uses patterns to quickly develop resilient, scalable applications

Modern methods: Cloud Native uses modular components and methods such as microservices, containers, DevOps, and orchestration

Accelerated migration: Deloitte's ATADATA cloud-management platform helps accelerate the transition by mapping and managing workloads

Low risk: Stepwise approach helps deliver fast results and lowers risk, without code freezes

Fast updates: Applications can be updated in hours, rather than weeks

LEARN MORE

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To learn more about Deloitte's Application Modernization solutions, visit:

www.deloitte.com/us/appmod

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