

Application Modernization

Future-proofing your business by building resilient, scalable, and secure applications

The Need for Application Modernization

Application modernization has become a foundational element for business growth. It provides a way to increase the efficiency and efficacy of your existing infrastructure while augmenting new business strategies needed to address changes in customer behavior and expectations.

Today's users expect applications to accomplish tasks quickly and securely, with <u>most users making a lasting opinion about an online</u> <u>experience in 0.05 seconds</u>.

Modernizing your applications enables you to reduce complexities while maximize the agility, innovation, and operational efficiency required for the growth and success of your business. However, these initiatives can also face many challenges of their own.

79%

of application modernization initiatives fail

There are many reasons why most modernization projects fail, however some common factors include:

• Complex architectures

Integrating new services with existing applications, the technical debt of maintaining legacy applications, and slow development leads to complex deployments and bottlenecks.

Launch fails

Security hurdles, poor performance testing, and the inability to handle traffic surges and attacks deflate many launches.

Cost overruns

Miscalculations, overages, hidden charges, and investments in the wrong solutions can stop modernization projects before taking off.

What Drives Businesses to Modernize their Applications?

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Complexity and Costs

Vendor sprawl leading to disparate solutions, complex deployments as well as hidden costs such as hardware refreshes and cloud egress fees

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Performance and Security

Distributed users and patchwork of multiple vendors and solutions introducing security loopholes, latency, and misconfigurations

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Rapid Deployment and Time to Value

Lack of DevOps pipelines slowing developers down, causing delays in deployment, and increasing the overall time to value

The Different Paths to Modernization

Applications and infrastructure modernization can take different paths. The route to application modernization depends on whether existing applications are modernized or new applications are built from scratch.

You can initiate your application modernization journey at one of the three starting points, including:

Rehost - Mostly applicable to on-premises legacy deployments, this requires applications to be migrated "as-is" to the cloud. This is often referred to as a "lift-and-shift" migration.

Replatform - Primarily applicable to multi-cloud and hybrid-cloud deployments, only select elements of an application are upgraded instead of a complete migration. Better speed, security and scalability is achieved with minimal changes in this process, but missteps can introduce complexities and overages.

Refactor - This requires new applications to be created, as close to the user as possible, to take advantage of new technologies or frameworks like AI. This is the most labor intensive modernization path as it requires re-architecting existing applications, however it also induces the biggest technological leap.



Migrating legacy applications to the cloud

Traditional application delivery and security methods can cause latency, a poor user experience, and security issues. Modernizing applications helps deliver services from the edge, closer to the user, to improve response times and security.

Building highly performant, scalable, secure, and distributed full-stack applications

Developing infinitely scalable and distributed applications reduces infrastructure and cloud costs. Application modernization ensures seamless integration, security by default, and better performance for improved customer satisfaction, revenue, productivity, and developer experiences.

Developing AI-powered applications and elements

Developers have to string together complex point solutions for their Al infrastructure and architecture to give them increased security and compliance. Modernizing applications ensures Al-driven insights are leveraged with ease. This eliminates the need to manage VMs or GPU deployments, increases performance of inference at the edge and reduces time to market.