



The Application Modernization Checklist

A roadmap for modernizing applications while prioritizing security, data continuity and seamless operations

Where data
& AI come to **LIFE**™



Why modernize your applications?

Modernized applications enhance performance, lower operational costs, minimize downtime and deliver experiences that inspire customer loyalty.

Set yourself up for success and a smooth modernization journey with this checklist for moving from legacy and custom applications to an artificial intelligence (AI)-ready, cloud-native data architecture.



Assessment and discovery

Map your existing applications for a comprehensive, objective understanding of your existing application landscape.

Document how each application supports critical business functions to prioritize modernization investments.

Conduct user experience evaluations and interview stakeholders to learn about pain points and needs.

Define what success looks like and identify metrics that will help you understand progress toward modernization goals.



Strategic considerations

Choose how you will modernize applications — lifting and shifting, upgrading, rebuilding or retiring. **Learn more** about these approaches.

Decide if you'll modernize all at once or in microservices, then use cloud-native architecture and serverless computing to scale efficiently.

Assemble the technology stack that best fits your needs, including programming languages and frameworks, integration platforms and cloud services.

Design your DevOps strategy for continuous integration, delivery and deployment, Infrastructure as Code (IaC), configuration management and automated testing.

Build your timeline and a detailed cost estimate with anticipated ROI. Consider a **consumption-based pricing model** to contain costs.



Execution and implementation

Prepare the infrastructure and toolchains needed to support development, deployment and monitoring of applications in the target environment.

Adopt agile development processes to iteratively build and improve applications while incorporating modern architectural patterns.

Execute data migration only after profiling, cleansing and trialing your tools and process — then run validation reports to ensure data integrity.

Implement a comprehensive testing strategy to support quality, performance, security and functional correctness before deployment.

Execute a controlled, efficient and secure modernization rollout by adopting automated deployment and risk mitigation strategies.



Post-modernization and optimization

Continuously monitor application performance, resource utilization and user experience to optimize based on data.

Keep costs low by regularly reviewing spending and usage patterns and consolidating integration management on a central platform.

Conduct ongoing vulnerability scanning, patch management and security audits to stay compliant and ahead of risks.

Collect and analyze user feedback for ongoing improvements while using agile practices to deploy new features efficiently.

Maintain documentation covering architecture, deployment processes, operational runbooks and security configurations.



Want more step-by-step support?

Explore our in-depth guide to application modernization success.

GET WORKBOOK



Source: Informatica, Application Modernization Workbook: A 4 Phase Guide to Success, 2025

About Us

Informatica (NYSE: INFA), a leader in AI-powered enterprise cloud data management, helps businesses unlock the full value of their data and AI. As data grows in complexity and volume, Informatica's Intelligent Data Management Cloud™ delivers a complete, end-to-end platform with a suite of industry-leading, integrated solutions to connect, manage and unify data across any cloud, hybrid or multi-cloud environment. Powered by CLAIRE® AI, Informatica's platform integrates natively with all major cloud providers, data warehouses and analytics tools — giving organizations the freedom of choice, avoiding vendor lock-in and delivering better ROI by enabling access to governed data, simplifying operations and scaling with confidence.

Trusted by about 5,000 customers in nearly 100 countries — including over 80 of the Fortune 100 — Informatica is the backbone of platform-agnostic, cloud data-driven transformation.

Informatica. Where data and AI come to life.™

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