

INFOSYS LEGACY MODERNIZATION TESTING

Infosys
cobalt



The application modernization services market is projected to reach **US\$ 32.8 billion by 2027, with a 16.7% CAGR**. Enterprises today are rapidly investing in modernization initiatives, shifting workloads to the cloud, and transforming customer experience using artificial intelligence (AI). However, modernization faces challenges arising from the need for updated architecture, data migration, and focus on a unified customer experience. The road to legacy modernization is paved with potential financial and operational risks. Despite the challenges involved, it is evident that modernizing legacy systems is essential for an organization's business agility, growth, and scalability.

The Infosys Solution

Infosys Legacy Modernization Testing provides services powered by **Infosys Cobalt** and **Infosys Topaz** for cloud and AI-based testing respectively, helping businesses modernize their legacy systems to stay relevant and competitive. This involves testing all legacy transformations while addressing the following key priorities:

- Modernizing the infrastructure
- Migrating the data and legacy code
- Ensuring a seamless client satisfaction index

LegMAP (Legacy Modernization and Microservices Test Automation Platform) is an integrated automation test solution that supports parallel validation of data extracts from cloud-native applications and services against on-premises modules. An 80% agnostic testing platform, it streamlines the process beginning from the discovery phase test planning, execution, up to the validation and certification of modernization.

Figure 1 illustrates the multi-layer validation framework that the solution provides by leveraging Infosys' in-house IP tools and solutions, covering more than twenty testing aspects. It helps businesses achieve an 80% early defect detection rate through AI-driven approaches and potential cost savings of up to 40%.

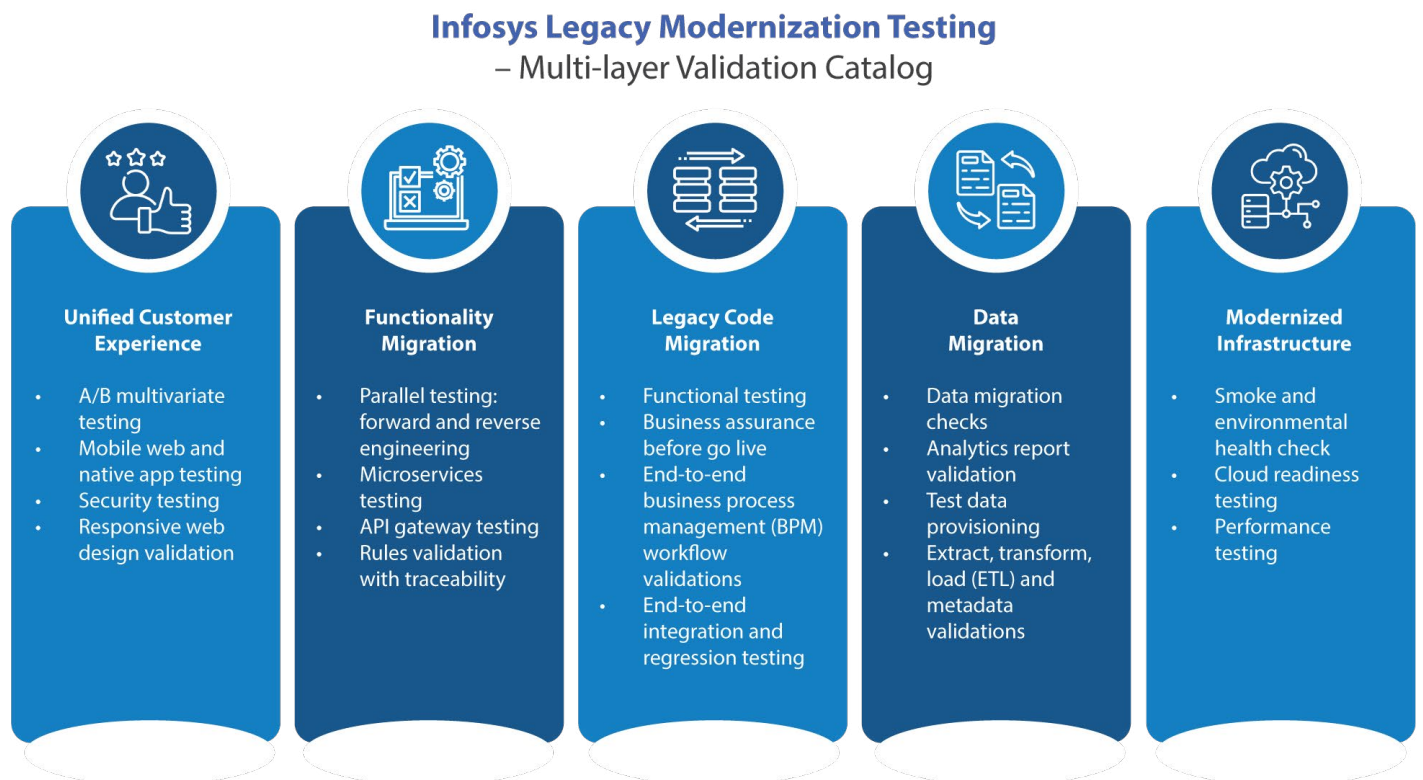


Fig 1. Infosys Legacy Modernization Testing Services – Multi-layer validation catalog

Key Features

Infosys Legacy Modernization Testing is built on a multi-layered catalog that focuses on five main pillars of testing and migration. These pillars and their key features are listed below.

- 1. Legacy code migration:** This pillar leverages operating systems (OS) and platform-native tools as well as reporting and data setup utilities across all stages of the performance lifecycle for legacy modernization, including requirements, design, build, performance testing, and production monitoring.
- 2. Functionality migration:** Integrated automated testing capabilities combined with our service virtualization and in-sprint behavior-driven development (BDD) automation framework extract legacy business rules, create test plans, execute test cases, and validate pre- and post-modernization to certify modernization progress.
- 3. Unified customer experience:** The customer experience assurance platform offers a unified framework and tools for testing responsive web, mobile-native, and hybrid apps. It supports product testing for look and feel, performance, scalable architecture, and new functionalities absent in the legacy systems.
- 4. Cloud readiness testing:** Infosys Cloud Digital Validation Suite supports cloud-agnostic platform validation to address desired state configuration (DSC) issues in cloud deployment architecture. It includes testing for cloud readiness, cloud infrastructure, shared service integration, network protocols, and server builds.
- 5. Data migration testing:** Infosys Data Quality Engineering Platform provides an end-to-end testing solution for relational database management systems (RDBMS) as well as not only SQL (NoSQL) and cloud systems, supporting validation for both data at rest and data in motion. The tool offers features such as quality assurance (QA) workflow, test governance, audit trail, security, reporting, and batch scheduling.

Benefits

Each of the pillars of Infosys Legacy Modernization Testing offers several benefits.

Benefits from legacy code migration:

- Boosts early defect detection by 40% and fast-tracks improvement in user experience by over 95%
- Ensures 100% accurate non-functional requirements (NFR) verification with Infosys microservices

- Guarantees 100% application availability and accelerates test results reporting by 40% using performance testing

Benefits from functionality migration:

- Achieves full test process standardization by automating the extraction of business rules and data operations
- Maximizes test data coverage and reduces test cycle time by 50% through component automation
- Eliminates defect slippage and concurrently validates multiple work flows
- Realizes 40% cost savings throughout the process

Benefits from unified customer experience:

- Fully automates regression testing across parameters such as usability, performance, social, omnichannel functionality, and security
- Lowers the cost of ownership by 25% through crowd testing
- Streamlines mobile testing effort by 50% using chatbot testing and automated accessibility checks
- Detects accessibility issues in advance on real devices and hardware
- Proactively identifies vulnerabilities through security and penetration testing

Benefits from cloud readiness testing:

- Provides multi-protocol support for platform readiness and one-click cloud validation
- Manages cloud-native framework, eliminating lag and facilitating real-time data validation
- Accelerates time to market by 50% using cloud DSC checks
- Accelerates the performance of traditional tools tenfold

Benefits from data migration testing:

- Fast-tracks test design by 40% and test execution by 50%
- Ensures 100% data quality coverage by integrating with Jenkins and Hewlett-Packard Application Lifecycle Management (HP ALM)
- Orchestrates end-to-end automation for heterogeneous data, guaranteeing data quality
- Secures 40% savings in efforts through multi-interface data validation

Why Choose Infosys

Infosys is a trusted partner for leading global enterprises embarking upon legacy modernization initiatives.

The Infosys advantage shows in our:

- Skilled workforce of over 8000 testers who ensure a seamless modernization journey
- Abundant tools and resources, with more than 30 tools and accelerators tailored to current market trends
- Proven collaborations of over 20 successful engagements and more than 10 alliance partners
- Cost savings demonstrating 40% reduction in total contract value
- Innovative 20-point framework ensuring complete risk and legacy coverage

Success Story

A leading financial services company was struggling with legacy modernization due to a lack of skilled resources and outdated documents. They had more than 1000 legacy programs and over two million lines of code. Implementing LegMAP enabled 100% test process standardization, a 35% effort saving using automated test execution, and auto-creation of 10,000+ test scenarios with 40,000+ test cases.

Reach out to us at ige_marketing@infosys.com to know more about Infosys Legacy Modernization Testing Services.



Infosys Cobalt is a set of services, solutions and platforms for enterprises to accelerate their cloud journey. It offers over 35,000 cloud assets, over 300 industry cloud solution blueprints and a thriving community of cloud business and technology practitioners to drive increased business value. With Infosys Cobalt, regulatory and security compliance, along with technical and financial governance come baked into every solution delivered.

For more information, contact askus@infosys.com

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