Scope of Legacy Modernization In the Telco Industry

The telecom industry has gone through a major revamp in recent years. Telecom enterprises must embrace modernization to stay relevant in the industry. One of the significant hurdles to the digitization of the telecom system is the extensive use of legacy systems. By aggressively adopting modernization, leading telecom companies could reduce their service cost by 30% to 50%.

According to a Dell study, telecom enterprises spend 60% of 80% of their IT budget on maintaining mainframe applications and systems. Legacy system modernization provides a holistic approach to digitization by changing how a company operates and accesses resources.

Companies such as Verizon and Maxis adopted modern Microsoft work solutions to improve connectivity and bundled mobility services. Likewise, Telia moved to the cloud-based Microsoft architecture to leverage BI tools to deliver faster and more personalized customer experience.

What Is Legacy System Modernization?

Legacy systems are older applications and architecture that use archaic methods. These applications need to align with modern business objectives. They will not help in a fast-paced, dynamic business environment. These systems add significant technology debt to organizations, eroding their profits. They may continue to work well, but there will be limitations.

Legacy system modernization involves three stages:

Evaluation of legacy systems –

The modernization partner will evaluate the outdated system and create a development roadmap at this stage.

Re-engineering architecture –

Deep analysis of legacy software will help understand business requirements. These requirements are then converted into achievable tasks for forward engineering.

Migration and modernization –

It involves developing internal architecture, platform infrastructure, and modern applications that align with the business requirements.

Benefits Of Legacy Migration for Telecom Industries

From an IT perspective, companies using applications developed in the last ten years should consider legacy migration. As technologies update, organizations will find it challenging to locate mainframe experts who can continue supporting legacy systems. To create a scalable digital infrastructure, an agile modernized approach is necessary.

The following are the benefits of telecom modernization:

Reduced maintenance costs – Modern applications and infrastructure operate with better efficiency. Organizations can immediately reduce maintenance overhead by adopting cloud-based solutions. There is no need to correct errors manually.

Improved speed and accuracy – The latest technology stacks enable digital applications to operate at high speed with greater accuracy. Mobile apps, AI, ML, Managed Code, and the Internet of Things help manage enterprise resources effectively.

Enhanced functionality – The current generation of internet users is highly sophisticated and demanding. Telecom companies must find new ways to provide value-added services to retain their existing customer base and gain new customers. Legacy system modernization helps streamline operations and build innovative services.

Improved security – Modernization's greatest value to the telecom industry is improved security. Advanced technology stack doesn't have as many security vulnerabilities as outdated systems. Organizations can significantly reduce occurrences of data theft, data breaches, and digital fraud.

How To Approach Legacy Migration?

Many companies use a 'rip and replace' modernization strategy to replace their legacy systems. It requires a considerable capital investment. Also, the existing staff must undergo rigorous training to use modern architecture. However, this approach is only sometimes necessary. Modernization can be carried out in small iterations without disrupting business operations. In that case, the legacy migration partner should ensure that the outdated architecture can communicate with the modern infrastructure.

Depending on the business requirements, legacy migration can be done in different ways:

Encapsulation – Instead of completely replacing existing applications, the data and functions of existing applications can be encapsulated for modern architecture. The services can be made available as APIs.

Rehosting – The existing application components can be lifted and shifted to another infrastructure. It can be virtual, physical, or cloud. The code, functions, and features of legacy applications will remain the same.

Re-platform – The application code structure, functions, and features will remain the same but run on a re-engineered modern platform. Appropriate integration and migration modules will be used to ensure smoother functioning.

Refactor – In this approach, the existing code will be modified to eliminate technical debt. The optimized code will run on a new platform.

Rearchitect – The application architecture will undergo a complete overhaul to include new capabilities. The application code will also drastically change to run on the new infrastructure.

Rebuild – Rewrite and redesign from scratch to create application components using the latest technology stack. The new applications will flawlessly run on modern platforms

Legacy system modernization doesn't just help with improved business services or reduced operational costs. It allows businesses to scale up with simplified product offers. Many operators that adopted digitization now generate 15% of their revenues outside the core connectivity. Telecom operators can expand their managed services using edge computing. Cloud-based modernization can help these companies to reduce their capital expenditure by as much as 80%.

In light of the increasing number of legacy applications converting to the web or other modern user interfaces, testing must be included for validating that conversion. ImpactQA can be trusted as a reliable partner for leveraging testing solutions to maintain the quality of your modernized systems. We have a skilled team of onshore, offshore, and nearshore experts available to meet all of your testing needs. Get in touch with us to discuss your needs.

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