Building Bridges Why App Modernization is Critical to Unlock Your Next Growth Phase

by Sakthivel Sabanayagam
As businesses grow, application modernization becomes a critical factor in aligning legacy software to meet current business needs and ensure continuous growth. Based on the definition by Gartner, Application Modernization Services address the migration of legacy to new applications or platforms, including the integration of new functionality to provide the latest functions to the business. Modernization options include re-platforming, re-hosting, recoding, rearchitecting, re-engineering, interoperability, replacement and retirement, as well as changes to the application architecture to clarify which option should be selected.

The core focus of app modernization initiatives is to optimize and create new business value from existing apps. App modernization has been established as a precursor for businesses to drive innovation, launch new products, roll out new business models and revenue streams, optimize operations, and be agile in responding to dynamic customer requirements.

A Markets and Markets report, published in July 2020, suggests that the global application modernization market size is expected to grow from USD 11 billion in 2020 to USD 25 billion in 2025 at a CAGR of 16.8% during the forecast period. This growth will be driven by higher adoption of cloud services, large-scale migration of workloads to cloud-based and Service-Oriented Architecture, growing focus on transforming and modernizing legacy systems, and increased demand for modern infrastructure to ensure business continuity.

The ability to use on-demand, scalable cloud models to achieve cost efficiency and business continuity is providing the impetus for organizations to accelerate their digital business transformation plans rapidly, the report further adds. For a significant number of enterprises, this shift and the need to transform operations and embed new capabilities implies modernizing legacy applications and delivering them quickly. Some of the critical challenges that are driving this shift toward app modernization include:

**Monolith apps slow down growth:** Most companies have set up their IT systems some 10 or 20 years ago, and these monolith architectures today are hampering growth, making it challenging to introduce and add new functionalities. As companies put in larger teams to optimize such systems, it places further pressures on costs and resources with often discouraging results. It is no surprise then that modern enterprise models are increasingly moving toward service-oriented architectures and microservices. This is offering greater
flexibility, increasing development speed, reducing time-to-market, and expanding innovation. With APIfication, data migration, and developing simple UI apps, businesses are making app modernization a business imperative.

**Dealing with archaic processes:**
For traditional organizations with long-standing, high-investment, and often complex infrastructure and app stacks, a rip-and-replace approach is not an option even as upgrading legacy enterprise apps remains high on the CIO’s agenda. This is where app modernization and cloudification offer tremendous benefits. From increasing efficiency and productivity, driving agility, elevating customer experiences, to significantly reducing IT spends and impacting the bottom line, application modernization empowers businesses to redesign and migrate legacy infra to the latest tech architecture with minimal disruption.

**Shift toward cloud-native and multi-cloud apps:** Legacy systems make it challenging to containerize and migrate existing application workloads out of on-premises app servers, virtual machines, and legacy PaaS to Kubernetes or a Kubernetes-based platform. Challenges such as tech stack standardization, communications management, multi-cloud, skill gaps, and integrated security hamper progress.

**Security Challenges:** As legacy systems built on outdated systems and software languages become increasingly hard to maintain, they also leave the organization vulnerable to security gaps. Besides, stringent data privacy laws have made it mandatory that personal data should be protected and kept confidential. This makes data security and anonymization a key driver to ensure protection and compliance with data privacy mandates and regulations.

**App Modernization is Right Approach**
While forward-looking businesses may understand the criticality of app modernization to boost business performance and enhance customer experience, how do they identify the right approach to the process? IT teams are often so focused on maintaining existing systems that there is very little time, resources, and budget left for innovation and modernization. Moreover, it is a constant struggle to align legacy software to meet current business objectives, so how do IT teams know if they should rehost, replatform, rearchitect, or replace current systems?

Aligning your priorities and options is important to unlock full potential.
**Simplify** Understand where your business needs are driving you to modernize.

**Select the right modernization approach** Evaluate all possible modernization options relative to their complexity, cost, and business value.

**Plan and prioritize** Plan your modernization based on matching effort to business priorities. Your first few projects should be both short in duration and high in potential business value.

The right partner can be key differentiator in ensuring success by assessing business objectives, costs, and timelines and identifying the roadmap for overall technology application management strategy or even a specific application. App modernization also makes it critical for businesses to embrace APIfication. Once the APIfication process is complete, modernizing operations and improving business rules is critical to success.

Global businesses are already looking to invest a significant portion of their IT budgets in application modernization initiatives. The fundamental premise is on realigning the IT infrastructure to be future-ready and matching evolving business objectives while keeping a tight grip on cost around networking, compute, and backup and providing visibility into expenditures. A partner with the right experience and expertise can make this transition disruption-free by identifying critical business drivers, developing a tailor-made plan based on the existing tech landscape, and providing project management and implementation support through the process.

LTIMindtree has rich experience in enabling Application Modernization journeys of global organizations. LTIMindtree’s industry-ready family of solutions have helped customers automate, secure, and update business processes and applications.

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