

Modernizing Applications: Enhancing Efficiency for SLED Organizations



In an era marked by rapid technological advancements, state and local agencies and higher education (SLED) organizations are navigating the complex landscape of digital transformation. As they strive to enhance efficiency, agility and user experience, modernizing existing applications becomes even more essential. HCLTech's application modernization services are tailored to address the unique challenges facing SLED organizations and provide them with comprehensive solutions to revitalize their legacy systems. By streamlining operations, improving accessibility and ensuring compliance with evolving regulatory standards, our services empower SLED organizations to embrace cutting-edge technologies, foster innovation and usher in a new era of digital excellence that aligns your applications with the demands of the modern world.

Navigating the Frontier: Challenges in Application Development and Modernization for SLED

1	Legacy systems overhaul Application modernization often involves migrating applications and workloads from on-premises infrastructure to cloud environments. This process requires careful assessment of legacy systems to determine compatibility, data migration strategies and potential re-architecture efforts to leverage cloud-native capabilities effectively.
2	Regulatory compliance SLED agencies are subject to a myriad of regulations and compliance standards, including data privacy laws, accessibility requirements and government mandates. The challenge is to ensuring that modernized applications adhere to standards and regulations without compromising functionality or security.
3	Integration and interoperability Integrating cloud-based solutions with existing on-premises systems and third-party applications can be complex. Ensuring seamless interoperability and data exchange between cloud and legacy systems requires robust integration strategies, API management and adherence to industry standards.
4	Security and privacy Cloud environments introduce new security challenges, including data breaches, unauthorized access and compliance risks. To protect sensitive data in the cloud while maintaining compliance, SLED agencies must implement robust security measures such as encryption, access controls and identity management.
5	Workforce readiness and capacity Many SLED agencies face challenges in attracting and retaining talent with the necessary technical skills. Fostering a culture of digital literacy, continuous learning and innovation and building internal capacity through training are essential for successful modernization efforts.
6	User adoption and experience Modernized applications must meet the needs and expectations of end users, including government employees, constituents and stakeholders. Poor user experience can lead to resistance to change and undermine modernization efforts. Engaging end users early in the process and incorporating their feedback throughout are essential for driving adoption and acceptance.



Revitalize Your Business: Our Proven Approach to Application Modernization

SLED organizations can leverage the Gartner 7R framework as a strategic guide in navigating their application modernization journey. By evaluating each application against the seven Rs—Rehost, Refactor, Revise, Rebuild, Replace, Retire and Retain—organizations can develop a tailored modernization strategy that aligns with their unique goals, constraints and priorities. By systematically assessing and prioritizing applications based on the 7R framework, SLED organizations can optimize their application landscape, improve agility and drive innovation while maximizing ROI.

- **Rehost:** Also known as "lift and shift," rehosting involves moving existing applications to a new infrastructure without making significant changes to the application itself.
- **Refactor:** This involves making changes to the application's codebase to optimize it for cloud without altering the app's core functionality.
- **Revise:** This approach makes more substantial modifications to the application's architecture or features to align it better with modern requirements and/or technologies.
- **Rebuild:** This involves rebuilding applications from scratch using cloud-native architectures and technologies to take full advantage of cloud benefits.
- **Replace:** This approach replaces legacy applications with off-the-shelf or SaaS solutions that better meet the organization's needs.
- **Retire:** This involves decommissioning or retiring legacy applications that are no longer needed or viable, reducing complexity and maintenance costs.
- **Retain:** Applications unsuitable for modernization or replacement are retained and supported in their current state until a future transition is feasible.

Applications with minimal dependencies and straightforward architectures may be suitable for rehosting, enabling rapid migration to cloud with minimal disruption. On the other hand, complex legacy applications may require a more comprehensive refactor or rebuild approach to unlock the full potential of cloud-native architectures and technologies.

Our solution portfolio

Our application modernization services are tailored to address the unique challenges of SLED organizations, providing them comprehensive solutions to modernize their legacy systems. We offer platform-based DevSecOps and digital QA approaches that leverage modern technologies to plan, design, build, deploy and manage applications, focusing on cloud-first architectures.



Application portfolio and lifecycle management

Discover and create portfolio insights across the IT landscape and business value chain with zero touch. Envision and govern application modernization solutions, roadmaps and strategies with ease.

Legacy application modernization

A range of modernization approaches tailored to an enterprise's IT and business goals, both short-term and long-term. Our use of advanced automation and machine learning ensures scalable transformation.

Mainframe and midrange modernization

Developing a comprehensive roadmap for modernizing and migrating mainframe and midrange systems within enterprises, with a primary focus on achieving a secure and low-risk transformation while effectively managing the changes that affect business value chains, personnel and organizational policies.

Application engineering

Enhance automation capabilities to boost the efficiency and collaboration between development and operations teams, resulting in cost savings and faster time-to-market.

Process modernization

This involves optimizing workflows, removing bottlenecks and harnessing technology to boost productivity and agility —and it's essential for businesses to remain competitive and adaptable in today's rapidly changing corporate environment.

Application migration

Developing a roadmap for enterprise migration, including platform selection, containerization, migration planning, effort estimation, oversight of internal and external dependencies, application monitoring, storage management, provisioning requirements and license management.



Strength in Collaboration: Unveiling Our Robust Partner ecosystem

At HCLTech, we pride ourselves on our robust partner ecosystem, which enables us to deliver comprehensive solutions and expedite time to market for our SLED clients. By forging strategic partnerships with leading hyperscalers such as AWS, GCP and Azure, we leverage cutting-edge cloud technologies to drive innovation and scalability in our solutions. We also collaborate closely with companies that have deep expertise in the public sector and SLED domains, ensuring that our offerings meet the unique needs and challenges of SLED organizations. These partnerships enable us to deliver agile, secure and cost-effective solutions that empower SLED clients to achieve their digital transformation goals with confidence and efficiency.



Why HCLTech

HCLTech offers expansive application modernization services across the value chain, including application portfolio analysis, legacy and mainframe modernization, cloud migration, application development and SaaS and services that support commercial off-the-shelf (COTS) applications from SAP, Oracle and Microsoft. HCLTech was named a Leader in the 2023 IDC MarketScape Worldwide Application Modernization Services Vendor Assessment.

Let's continue the conversation!

Are you excited to learn more about us? Reach out to us at Mega-Lt@hcltech.com to continue the conversation about your business's digital transformation and tap into the ecosystem's value.

HCLTech | Supercharging Progress™

HCLTech is a global technology company, home to more than 227,000 people across 60 countries, delivering industry-leading capabilities centered around digital, engineering, cloud and AI, powered by a broad portfolio of technology services and products. We work with clients across all major verticals, providing industry solutions for Financial Services, Manufacturing, Life Sciences and Healthcare, Technology and Services, Telecom and Media, Retail and CPG, and Public Services. Consolidated revenues as of 12 months ending March 2024 totaled \$13.3 billion. To learn how we can supercharge progress for you, visit hcltech.com.

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