Building a Roadmap to Modernization

TEKsystems Global Services guides a research institute on their application modernization journey with AWS.

a story of **owning change**

Mastering Momentum in Health and Education

Our client, a research institute, set out to [modernize their existing application](#) by taking advantage of more cloud-native services on AWS. Modernizing the organization's app would help reduce costs, address storage issues and move toward a microservices architecture that would serve as a foundation for automation and future growth.

What We Did
AI/ML Automation

Application Innovation

Industry
Healthcare

Results
76% predicted database cost savings

72% predicted storage cost savings

$850K+ total predicted infrastructure cost savings over 3 years

Key Integrations
AWS

The Challenge

Modernizing and Optimizing Existing App
A Research Institute's Digital Transformation

While our client had already performed a lift and shift migration, app modernization would improve overall end-user experience, increase efficiency and productivity, and decrease maintenance costs. The research organization wanted to evolve from a monolithic architecture to a microservices architecture, organizing the various complex tasks within their application into individual services. While this transition would take time, a comprehensive plan would ensure the [modernization journey started and proceeded properly](#).

The research institute needed a highly experienced AWS partner to develop a roadmap for implementation and help them see this process through. Enter TEKsystems Global Services (TGS).

Our Solution

Creating a Game Plan for Continued App Modernization Efforts
Highlighting Short-, Mid- and Long-Term Goals in Discovery

First, our team reviewed the current architecture and application to identify existing challenges and areas of opportunity. This assessment helped us develop recommendations, including essential foundational steps such as establishing containerization and microservices, database migration, and the adoption of Agile methodologies and cross-functional teams. Our goal? Set the stage for long-term goals such as adopting continuous deployment (CD) to ensure the rapid delivery of improvements and features, as well as the eventual full migration to Amazon S3 cloud storage.

In the short term, we focused on a database migration strategy that would serve as a firm foundation for automation and a microservices architecture and help address performance and scalability issues. We used CAST Highlight and Imaging tools for a comprehensive discovery of the organization's applications and harnessed these insights to accelerate our development of an application modernization roadmap.

a story of **owning change**

Powerful Partnership

Putting AWS Expertise to Work
Migration and Application Modernization Strategy

Our client required the expertise of a partner with extensive knowledge of AWS best practices. As an AWS Premier Tier Services Partner, TGS has the capability to guide customers through any and every stage of their modernization journey. Leveraging our deep expertise and proven successes with application innovation, we recommended an AWS-centric architecture that would enable the institute to realize the full benefits of microservices, along with automation practices, while also developing a strategy for an eventual full migration to Amazon S3.

Real-World Results

By following this plan, our client can improve navigation and overall end-user experience on their application, as well as reduce support staff workloads through automation. Thanks to seamless integration with the app ecosystem, users will be able to automate records validation, enjoy near real-time certificate generation and boost performance with customized assessment reporting. Because of our partnership on this project, the organization can continue their work of applying cutting-edge research to develop learning solutions while maximizing technology ROI.

76%	72%	$850K+
predicted database cost savings	predicted storage cost savings	total predicted infrastructure cost savings over 3 years

a story of **owning change**

About TEKsystems and TEKsystems Global Services®

We're a leading provider of business and technology services. We accelerate business transformation for our customers. Our expertise in strategy, design, execution and operations unlocks business value through a range of solutions. We're a team of 80,000 strong, working with over 6,000 customers—including 80% of the Fortune 500—across North America, Europe and Asia, who partner with us for our scale, full-stack capabilities and speed. We're strategic thinkers, hands-on collaborators, helping customers capitalize on change and master the momentum of technology. We're building tomorrow by delivering business outcomes and making positive impacts in our global communities. TEKsystems and TEKsystems Global Services are Allegis Group companies.

Learn more at **TEKsystems.com**.