

Shaping Healthcare Possibilities



CitiusTech

Accelerated code generation and reduced costs using **GenAl**

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Client **Background**

The client, a global leader in medical device manufacturing, required modernization of its software development and infrastructure automation processes. Their technology stack included Angular and NodeJS for web applications, along with Xamarin for mobile app development. With Xamarin nearing end-of-support from Microsoft, the client sought an efficient solution to migrate their applications and improve the overall speed and quality of their code generation and infrastructure management.



Business **Challenges**

- Xamarin, the client's primary framework for mobile app development, was going out of support.

 Without the availability of Microsoft support engineers, the client needed an expedited migration strategy to transition their mobile apps to a supported framework while minimizing disruption to their ongoing operations
- The client was manually writing Angular and NodeJS code as well as generating unit test cases, which was time-consuming and resource-intensive

The client also sought to streamline infrastructure management by generating Terraform scripts and automating Infrastructure-as-Code (IaC) deployments

With a large codebase and complex infrastructure, the client needed a solution that would reduce both development time and operational costs while maintaining the high quality of their software

Value **Delivered**

Accelerated development & cost-effective modernization

- Implemented GenAl-driven automation to speed up development and infrastructure processes, enabling faster, cost-effective modernization.
- Automated Angular and NodeJS code generation, reducing repetitive coding efforts and allowing developers to focus on high-value tasks.
- Reduced development cycles and accelerated application delivery through streamlined automation.

Seamless migration & efficient code refactoring

- Ensured a smooth transition to a new Microsoft-supported framework, securing the client's mobile app infrastructure.
- Leveraged GitHub Copilot to automate migration, expedite code refactoring, and minimize manual intervention.

Automated Testing & Reliable Deployments

- Enabled unit test case automation using GitHub Copilot, ensuring applications remained robust and thoroughly tested.
- Created automated deployment scripts for large-scale infrastructure rollouts, reducing human errors and ensuring faster go-live.

Optimized Infrastructure Management & Cost Savings

- Automated Terraform scripts for Infrastructure-as-Code (IaC), improving infrastructure efficiency and reliability.
- Automated code, test case, and infrastructure script generation, leading to significant cost savings by minimizing manual coding and deployment tasks.



