

Background

Comply365 is a leading US-based provider of airline operations and transportation management software. The company helps airlines around the world digitalize operations by offering a mobile electronic flight bag (EFB); an application for maintenance, repair, and overhaul (MRO) workflow; training and compliance management software; business intelligence; and more.

This software comes both in a web version with deep customization capacities and a slightly simplified mobile application for iOS, Android, and Windows to be used by field crews. The software environment is unified into the ecosystem of end-points that communicate in real time. Each software module is customizable to be aligned with individual requirements of airlines or companies from other transportation industries.

Comply365 engaged AltexSoft software engineers to modernize existing web and mobile solutions and engineer a number of new modules within the software ecosystem.



Challenges

AltexSoft started with modernizing web modules and then the scope of work extended to mobile development tasks and QA automation.

1.

Improve and modernize web modules

2.

Engineer native and cross-platform mobile applications

3.

Document the product and provide both manual and automated QA



Value Delivered

1. Ongoing improvements and legacy modernization of web modules.

The ecosystem of operations modules comprises both legacy and up-to-date code. Sharing the responsibility with the Comply365 engineers, the AltexSoft .NET team is focused on constant improvements and legacy system modernization across 14 modules in development.

2. Xamarin. Forms and Native iOS mobile development.

As AltexSoft's engagement with Comply365 solutions has deepened, the native team has modernized the **Objective-C**-based mobile application for iOS with 10 functional modules. Android and Windows applications were completely built from the ground up on **Xamarin.Forms**. The use of the cross-platform package allowed the AltexSoft team to share UI and business logic across platforms and reduce engineering time and cost.

3. Product documentation and comprehensive QA workflow.

Prior to AltexSoft engagement, Comply365 engineers were covering all quality assurance works. AltexSoft QA engineers documented web and mobile applications, which further allowed for creating both manual tests by the QA team and automated unit tests by the engineering team. Currently, there are 73 automated tests, while the rest are in development. Advanced QA framework increased reliability and performance scores of the ecosystem.



Approach and Technical Info

The cooperation is handled within the **team extension** model. Both AltexSoft and Comply365 engineers use Scrum workflow. The AltexSoft team overall consisted of two .NET engineers, two native iOS developers, five Xamarin specialists, and three QA engineers.

The above-described work was accomplished in 10 months. Both apps and web environments undergo incremental updates to improve user experience and system reliability. The project is ongoing.

The technology stack and toolset include ASP.NET, .NET Framework, Objective-C, Xamarin.Forms, Jenkins Continuous Integration, Jira.



