EXPANDING FUNCTIONALITIES WITH
LOW-CODE APPLICATION
DEVELOPMENT PLATFORMS

OVERVIEW

A leading provider of technological solutions for the transportation industry needed help with building its core platform for the Toll Services industry. XTGlobal used a low-code application development platform to enhance the client's ERP platform with new modules and functionalities that extend to all kinds of devices.

ABOUT THE CLIENT

The client is a leading provider of innovative technological solutions for toll authorities in the United States, helping to process over 2 billion toll transactions annually. They design and develop roadside solutions, congestion management solutions, and back office products to help communities address their traffic management issues.

The client has a suite of enterprise roadside solutions and business applications that incorporate high-level process automation to streamline both onsite as well as remote maintenance and back office activities.

CLIENT CHALLENGES

The client was looking to build and extend the functionality of the platform in phases. The platform has multiple modules covering the value chain of a Tolling Services customer, such as Account Management, Customer Relationship Management, Online Customer Service Center, Accounting and Treasury, Reporting and Real-time Dashboards. The client approached XTGlobal, a long-time partner, to help it build and extend the platform's functionalities with new modules and services.

DESCRIPTION OF THE PRODUCT

The client's ERP system for the Toll Services industry is a unified suite of tolling-specific modules, integrated with commercial off-the-shelf applications (COTS), providing complete account management and automated operations of tolling back-office service functions.

The platform replaces individual traditional toll systems, ERP, and CRM systems by offering a unified platform. This platform, that is based on a single data model, integrates accounting, audit, and data transparency, with business process management, and user-intuitive CRM.

The platform is designed to easily integrate new modules and offers a seamless and comprehensive solution to address the unique requirements of the tolling industry with GAAP, GASB and PCI reporting and auditability. The strength of this platform is its extensible architecture designed to accommodate current and future needs. XTGlobal used the Mendix platform to add new functionalities to the existing platform.

XTGLOBAL SOLUTIONS

Using a creative Agile methodology to execute fast projects and deliver quick wins, XTGlobal added the following incremental functionalities to the client's core platform. XTGlobal suggested using Mendix, a low-code application development platform that provides automation solutions based on AI to speed up the development process.

ONLINE CUSTOMER SERVICE MODULE

XTGlobal helped build the website supporting Customer Service functions across multiple devices and browsers. The portal is Web Accessibility compliant. To expose customer service functions to the online user, we reused the existing Java services layer, creating a Java adapter interfacing between Mendix and Java services.

ACCOUNTS RECEIVABLE MODULE

Using the Mendix low code design and building platform, XTGlobal has developed the Accounts Receivable module to support processing transactions through the Collections stage. The application gives our client's customers the ability to schedule hearings in the courts and updates the system with the settlement from the judge. During this process, letter notifications are generated to send to customers about the case status.

ACCOUNT CREATION

Mendix UI and Java adapters were used to expand the platform functionality to mobile devices and to integrate with existing services. Using this app, the client's customer CSRs could quickly create accounts in a few steps. The app integrates with multiple external services such as RocketChat, Social Authentication with Google, Facebook, and LinkedIn. In addition, it provides API integration with Experian for address standardization and Vantiv for Credit Card transactions. High volume of transactions resulted in quick ROI with almost instant positive cash flows.

REPORTING

The platform has a robust reporting solution, which XTGlobal helped build using the Mendix platform. This involved building a reporting framework that can be reused across multiple reporting requirements. The solution provides dynamic views of the client's customer across functions in operations, finance, and audit. The reporting suite is easy to use for both technical and non-technical users, featuring drag and drop abilities and a variety of point and click features.

The average account creation time was reduced from 7 minutes to less than 3 minutes in the new app.

THE MENDIX ADVANTAGE

XTGlobal's expertise in Mendix platform helped the client save a lot of development time and cost, improve agility, and make the application development process less complex. The Mendix app development platform helps to increase responsiveness, reduce current IT backlog and legacy debt, enabling citizen developers to improve internal processes. Mendix supports Web-based, Windows, Linux, Android, iPhone, & Windows Phone platforms with an option of public cloud, private cloud or on-premise deployment. Its key features are agile project management, reusable components, and visual modeling tools. Combined with XTGlobal's expertise and the Mendix platform, the client was able to attain complete control over the app development process by tracking, analytics, automated testing, and role-based platform access.