Enterprise Mobility

Pratham Software (PSI) team works with a data collection and mobile computing solutions provider to develop an enterprise mobility application for logistic firms. The logistic firms can manage their client tasks regarding delivery orders for the day & schedule route plans for the drivers through the platform.

Develops a Xamarin & Azure based enterprise mobility application for a logistics platform catering to B2B clients

About the Client

The client is a market leader in data collection and mobile computing solutions for industrial and commercial applications. With expertise in supply chain data capture solutions, they have spread the service offerings for logistic solutions.

Client's Service Offering

The software product is an electronic proof of delivery solution for businesses to optimize their work schedule, reduce costs and improve customer service levels. The application allows tracking of driver route plans and keeps customers informed about the proposed delivery schedule well in advance.

Auto schedule options are available, wherein each day we can schedule runs based on each driver /vehicle availability. The scheduled delivery cannot be recalled or changed once the process has been initiated. The driver/delivery person sends the delivery records along with the captured image of attendee person & delivery to the administrator using the handheld device as a delivery proof.
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Solution Approach & Methodology

Client was looking for a mobility solutions service provider, with expertise in application development platforms. They wanted a partner who could work as an extended team and follow the solution roadmap to deliver the changes on time.

The major requirement was to have a responsive design and provide relevant information on a real time basis.

Key Highlights of the Approach

※ Pratham Software (PSI) analyst and architect developed thorough understanding of the project during requirement gathering and analysis phase

※ The two main components of the application includes route plan and data management

※ Another component was to deliver a template based application, wherein job details in can be modified based on the templates selected

※ Pratham Software (PSI) team regularly interacted with the client for document reviews and sign-offs

※ The team suggested to include dashboard for better understanding and real-time user interface to understand current situation

※ The client could monitor the work progress through the live links at each project milestone

※ The team used different handheld devices (Android device, iPhone device and PDAs) to test the UX of application

Key Challenges

- Application required better customer experience and simple data fields to be used by the logistic operators and drivers

- Real time integration with other systems for faster information availability to the customer and access of information across different devices and operating systems

- Reduce complexity of route planning and monitoring the execution for the logistic firms

- Uncertain and ever evolving application requirements suggested by the client imbibed in the final product

- The new technology framework to be adopted for delivering customer solution

- Real time tracking of the drivers and vehicles, even in remote locations through GPS

- Integrate chat facility for drivers in the hand held devices to communicate with operators

- Offline and online sync of data from drivers' end to the web portal

- Consolidation of delivery tasks for the day and the drivers as per the requirement

- Generation of invoices for the clients based on business cycle

Achievements

- Pratham Software (PSI) developed the application by implementing Microsoft Azure and Xamarin technologies (leveraging the benefits of latest Azure features like Mobile APPs, Blobs, CDN, offline sync of data and many more) wherein through web portal they can schedule the tasks and drivers

- Utilized our expertise in Microsoft capabilities to resolve the various issues and built capabilities in Azure features

- Pratham Software (PSI) has not just partnered with client on technology front but has advised client on the crucial features to be included, like the more intuitive dashboard in the application

- Employed Xamarin platform for cross platform application development to make it more sustainable

- The delivered solution provides efficient resource planning and management, reduced delivery errors/returns, real time tracking of vehicles and customer notifications, instant and accurate invoicing and reduced paperwork

- The second phase of application to include listing of the household miscellaneous services for end users

Technology Deployed

Framework	.NET framework 4.5, MVC 5
Front End	JQuery, Knockout, Bootstrap
App Server	Azure WEB APP, API APP
Database	Azure SQL Server
Platforms	Azure Cloud
Development Platforms	Windows 8
Development Tools	VS 2015, Xamarin Studio, Android Studio
Design Tools	VS 2015

About PSI

Pratham Software (PSI) is a global IT services company (with established ISO 9001:2015 & ISO/IEC 27001:2013 practices) providing software product development, consulting and outsourcing solutions to enterprises worldwide. While providing a wide range of solutions, we focus on Outsourced Product Development (OPD), Business Process Management (BPM), Application Development and Maintenance (AMD) and Content Engineering. Our extensive experience in OPD helps us build strong relationships with Independent Software Vendors (ISVs), as we work with them throughout the product development lifecycle. In terms of technology and platform, we work across all major technologies such as Microsoft, Java and Open source and have capabilities and experience in developing solutions for web, mobile, Cloud and social media. For Enterprise customers, in addition to Process Automation, we also offer development and support services in BI and DWH.