

Innovative Mobile Platform for the US Construction Industry

How we helped the client turn a disruptive idea into a product, using cutting-edge technology for the US construction industry

The client is a Colorado-based firm with extensive experience in the US construction industry, the second-largest in the world. The client spotted a strong market opportunity for a mobile platform and wanted to leverage the benefits of such technologies to address significant needs that exists in the industry.

The client's mobile platform connects service providers in the construction industry with their customers. It is a highly collaborative and interactive app: easy to use, and similar to social media platforms like Facebook and LinkedIn.

The Challenges

Although the client had ideas about how they wanted the app to look and function, they were not sure about how to go about it, which technologies to use, or where to start. The following were some of the challenges our team faced:

- The client wanted to build a platform to enable service providers to keep track of the progress of a project and update the customer about the status without visiting the site and/or physically being present.
- The client wanted prospective customers to have access to data related to the client's previous projects.
- There was no frame of reference or precedent for an app of this nature; this particular idea did not previously exist in the construction industry.
- They wanted to leverage the latest technologies while ensuring that time-to-market was reduced.
- They wanted to provide a consistent and unified user experience, and were apprehensive about how some of the complex UI requirements could be offered on mobile, not wanting to impact performance.
- A highly robust architecture was required to handle large volumes of data, considering the fact that they were looking at a customer base of 50,000 registered users.
- The client's previous experience working with an outsourcing vendor resulted in failure. As such, they were apprehensive about using global delivery to execute on projects.

The Solution

Opteamix's Enterprise Mobility practice worked with the client to put together a comprehensive technology roadmap, and a strategy to turn the idea to product. Our team, comprising of a business analyst, a UI/UX designer, and a technology expert, suggested technology alternatives and recommended the most suitable solution based on the requirements.

Opteamix leveraged our mobility expertise to design a collaborative mobile platform to satisfy the client's requirements. The key aspects of the solution implemented for this assignment included:

- The team spent two weeks with the client to identify and streamline the product features and came out with a detailed technology strategy roadmap, to include: a technology solution, mobile app architecture, development mythology, deployment, distribution and back-end integration options.
- The team identified and prioritized relevant product features to ensure that the client achieved go-to market with a minimum viable product in a short delivery timespan.
- As a part of the engagement, the team conducted detailed research about the best social media apps and aggregator platforms for other industries, ensuring that the proposed app included the best features of social interaction and status tracking.
- The user interface was designed to be simple and intuitive, helping service providers to promote their work and get referrals from their existing customers.
- The user interface and architecture was also designed to ensure that the project status updates could be shared conveniently from the service providers to customers.
- The technology architecture was developed with platform scalability in mind, as well as the ability to process a large number of transactions.
- Opteamix adopted Agile delivery methodology and leveraged our global delivery capability to execute this project.

The Technology

- *Swift iOS*
- *J2EE Hibernate*
- *Apache Solr and PostgreSQL*
- *Appium for Test Automation*
- *Jenkins and Sonar Cube*
- *Selenium*
- *Amazon Device Farm*
- *Google Map Integration*

The Benefits

By leveraging Opteamix's Enterprise Mobility practice to build a highly intuitive and well-architected mobile platform, the client was not only able to build a scalable and robust app, but was able to turn a disruptive idea into a live product within a period of three months.

- **Exceptional quality at a competitive price** - Opteamix leveraged global delivery to execute the engagement at a reduced cost and deliver a quality product that exceeded the client's expectations.
- **Scalable and robust technology** – Opteamix delivered a robust product, which was not only well-architected, but also used the latest technologies such as Apache Solr to handle the client's requirement of handling 50,000 registered customers.
- **Efficient engineering processes** – Opteamix brought efficiency to the engineering process by automating development life cycle activities related to mobile testing, build and release management, etc.
- **Iterative, incremental, and interactive development** - The application was developed by adopting Opteamix's Agile methodology, tailored for global delivery. This approach provided opportunities for incremental modifications and ensured interactive development.
- **Short delivery cycle** – By prioritizing product features, Opteamix was able to build a minimum viable product within a short delivery timespan which ensured reduced time-to-market.