Case Study

Greater Chicago Food Depository Pantry Audit Mobile Application

"One of their strengths was UI design. Our team would give them a paper form we use and they'd come back with a very thoughtful representation of how that could be done on a digital platform. They made great recommendations during the prototyping process. The development process was excellent with them.

Background

The Greater Chicago Food Depository is Cook County's local food bank. They provide food for hungry people by partnering with over 700 different agencies and programs including food pantries, soup kitchens and shelters.

The Food Depository is also required to comply with audit requirements of partner agencies and programs to ensure that food is being stored, handled, and distributed in a safe, equitable manner.

This has traditionally meant that one to two auditors from The Food Depository will manually record answers to over 150 questions on paper as they audit each of these 700+ locations. After the audit, all follow-up processes were completely manual. As a result, almost no data was available to be leveraged to easily detect trends, measure performance, or plan for the future.

The Food Depository approached MXOtech to design and build a technical solution to replace their manual auditing process. They needed a digital platform that would enable an auditor to easily capture audit results during the visit, leverage partner agency information that exists in their ERP, generate reports, and provide greater insight at the management level. The solution must also work well in areas with limited or no connection to the Internet and must be able to be used on Apple iPad tablets.

The Approach

MXOtech designed a high-fidelity, interactive prototype to help The Food Depository imagine what the audit workflow would look like on their devices. This process allowed the team to come to a quick consensus of exactly how the proposed solution should look and feel as well as drive out the kind of data that would be exchanged in order for this to work as desired.

After the prototyping phase was completed, MXOtech provided and executed a design that included building a native iOS application that uses an "offline first" approach, which meant that the audits could be conducted at any location, regardless of Internet connection. The application utilizes familiar app interactions and ensures that the app is extremely easy to use and is intuitive for virtually all users.

MXOtech proved to be an excellent partner for this project. The team was diligent and flexible. Their hard work garnered positive feedback from users. Customers can expect a dedicated team that adapts to the client's needs."

- Andy Siekel, CIO, Greater Chicago Food Depository

MXOtech centralized data for this application in a Microsoft SQL database that was integrated with The Food Depository's ERP system, CERES. Additionally, MXOtech built a management console web application that leverages the Ceres database so that management personnel at The Food Depository can have real-time insight into audits. This allows them to easily gain an understanding of audit results and agency performance.

Outcome

- Digitalization of manual audit process to reduce human error and increase organization and production

- Fully customized audit questionnaire

- Mobile application with the ability to leverage data by detecting trends and measuring performance

- Data synced and managed in the cloud via the management console

- Seamless upload of photos to sync with data

- Automatic citations and action items are generated based on audit results

- Real-time insight into audits via the management console web application

Technology

- iOS Application

- Flutter

- Microsoft SQL Server Integration Services (SSIS)

- Ceres (based on Microsoft Dynamic NAV)