

## The Opportunity

BatteryXchange is a leading smartphone battery exchange platform in the country, offering clients access to a network of battery exchange locations nationwide, enabling them to quickly recharge on-the-go and save valuable time and resources. The company approached Plecco.net to develop a comprehensive website and mobile application to support its battery exchange services.

## The Solution

We developed a Battery Rental Application with the aim of providing a seamless online platform for renting rechargeable phone batteries. The objective was to simplify the process of renting a battery from a kiosk and returning it within 24 hours to the nearest location. The project entailed thorough planning, design, and implementation of multiple modifications to an existing system, including the creation of custom user interfaces for web and mobile devices, integration of third-party payment services, and integration of a mapping solution to facilitate the identification of the closest BatteryXchange kiosk.

## Tech Stack



- Android- Java
- iOS – Swift, Objective-C
- Website – WordPress, PHP

## How We Built the BatteryXchange App and Website

In the first phase of the project, we conducted a comprehensive requirements analysis, engaging with potential customers to understand their specific needs and expectations for the battery exchange service, as well as holding discussions with the client regarding their business requirements. Additionally, we analyzed usage patterns to inform refinement of the user experience and user interface.

Our initial efforts focused on the development of the BatteryXchange website, which was built on the WordPress Content Management System. To enhance user-friendliness, we updated the homepage with improved graphics and created an 'About Us' page that outlines the client's mission. To facilitate engagement with potential partners, we also developed a 'Talk with Sales' page linked with SavvyCal.

The primary goal of the website is to drive app downloads, and thus we integrated links to the Apple and Google Playstore pages for easy access to the BatteryXchange app. To expand the product's market reach, we advised the development of both iOS and Android versions of the app. Our technical team finalized development of the iOS version, which was initiated by previous developers in Objective-C, and deployed it to the Apple Store. The Android application was developed using Java.

Our focus was on creating a user-friendly interface for the app, keeping in mind that it would be used on a need-to basis. The app's 'Home Page' features a map that displays the nearest kiosks for battery exchange and a button that activates an inbuilt QR Code scanner for convenient access to batteries. The app is also linked to an e-wallet, which allows users to safely recharge using various payment service providers and provides access to the user board through a swipe to the right, featuring the wallet.

### Notable Details

- **New Functionalities**– The implementation of a notification system, providing real-time updates on battery exchange status to users. As well as the introduction of a 'Pay-Per-Use' model, offering greater pricing flexibility for users.”
- **Fining System**– Introduced a loss recovery system, allowing for efficient management of lost battery charges.

- **Backend Changes**– A metrics system has been implemented to aid administrators in evaluating the performance of BatteryXchange kiosks.
- We also provide comprehensive management of the client’s cloud infrastructure to ensure the security and privacy of user data.

## **The Result**

The BatteryXchange application has been a resounding success for the company. It has achieved over 500 downloads from the Google Playstore and Apple Store, with a daily user base in the tens and monthly user base in the hundreds. In recognition of its exceptional customer experience, the app was awarded the title of ‘Best Customer Experience’ at the 2021 Global EnergyTech Awards.

Since its launch, the app has facilitated the expansion of the company’s operations to new locations and growth of its customer base. The seamless compatibility of the app on both Android and iOS platforms has greatly contributed to its success.

In alignment with the company’s vision of providing affordable battery exchange services to customers throughout the US, the BatteryXchange app has eliminated the concern of a dying phone battery and made these services readily accessible to all.”