Openxcell

Empowering Businesses With Innovations

How a Waste Management Firm Went Digital With eWaste Application

Thank you for downloading this case study!

"Alone we can do so little, together we can do so much." It stands true for businesses so very well because a successful business cannot survive without profitable partnerships.

One such valuable partnership which OpenXcell formed with Alba is highlighted in this case study. It is our visualization, agility and technical expertise that enabled quick delivery of an expected digital product and propelled Alba's primary mission to improve waste management towards fruition. Team management, staff recruitment and optimization also played a significant role in bringing the potential expertise to table.

Today Step-up (a mobile waste management application) has been touted as one of the biggest contributors towards the recycling industry of Singapore.

If you want to dive deep into the details of this environment friendly project, keep reading!

Table of Content

Step-Up Intro

Industry	Waste Management
Headquarter	Singapore
Offshore Development Centre	Ahmedabad, India
Team Size	4
Platforms	Mobile

Step-up is a waste-management application that was developed by Openxcell for a waste -management group called Alba which is currently working for Singapore. This German group has been consistently providing e-waste smart recycling solutions. *Step-up is one such initiative by Alba group which regulates, treats and recycles consumer e-waste in Singapore.* One of the most intriguing features of Step-up application is - it rewards users with CO2 points that shows the amount of CO2 emissions people saved out of recycling their trash.

The application also features trash-ure maps and trash-ure chests which can be leveraged to find the nearest and most suitable location to put the trash in the recycle bins. Apart from allowing people to dump waste in the nearby locations to be picked-up by the company, the application also provides on-demand waste collection for heavy materials.

Step-up's Business Challenge

Step-up was developed in 2019 and the founding organization ALBA wanted to streamline the process of waste management in Singapore through this application. They wanted to launch the application quickly however *they were short of time as well as technical expertise.*

Apart from that, our client was also skeptical about the scope of the product. Hence, they wanted a reliable and a long-term partner who can develop the project in phases with them and can also give them clarity regarding the flow of this application.

Given that Alba is a Singapore and Germany based company, they also needed a flexible partner that can align its operations as per their time zones for proper communication on a timely basis. Our client found us a right fit and initiated the process quickly.

Product Key Features

- Trash-Ure maps

- Tash-Ure Chests

- Cash for trash

- Reverse Vending Machine (RVM)

Our Approach

Project Inception

Alba came to us with their requirements in December, 2019. They had a vague proposition of developing an application which was supposed to record the collected trash through real bins and segregate it according to their respective e-recycle bins.

The idea was to allow users to find the nearest recycle bins through geolocator and while they dump the trash in the bin, the user must earn points as per the amount of carbon emission saved. After comprehending the specifications of the application after several consultations, *OpenXcell defined the scope of the project and* managed to provide clarity to the client as well.

Apart from that, the client also wanted the application to be launched quickly and because they didn't have a technical team of their own, their reliability on our team was a matter of trust now. We had to prove our credibility. So, *we quickly started planning a headcount which would be needed to create the application. Finally, a team of 1IOS, 1 Backend developer, 1 Android Developer and 1 Designer was set-up* after recruitment and screening of the in-house team of technical experts. This dedicated team was now supposed to work full-fledgedly for the development of Step-up.

Project Acceleration

Once the team was ready within 2 weeks, the development team rigorously started designing the UI of the application. *As the design was ready, the backend team worked on creating recycle bins which would segregate the user's trash as per the category like - ebins for electronics and blue-bins for general trash.* These bins were supposed to have QR codes which if the user scans, it can notify the company about the kind of trash they have dumped and could receive cash as well as CO2 score in return. It took months for the team to finish the development of bins, segregating them according to the waste type and linking them with different QR codes.

Once the recycle bins were developed, a Reverse Vending Machine (RVM) was mandatory to integrate which could provide QR codes to the bins and convert them into CO2 score. These scores could be later redeemed for products or offerings within the app. Since it was a feature that could attract customers and motivate them to recycle their trash, our team integrated RVM immediately after creating the bins. With all these attractive features, the application had started enticing customers and by December 2020 quite a lot of customers were actively using Step-up. However, the new feature introduced in the application - *'cash for trash events' increased the app's popularity tremendously. Reason being, it motivated people to dump their trash in the 'cash for trash' events organized by ALBA and earn money out of it.*

As the popularity grew and more people started acknowledging the good work happening through this application, the company came up with yet another feature - ewaste.

"Introducing cash for trash gave us a big turn of events. More people were interested in participating and earning. We are thankful to the Openxcell team that was really working hard behind all the integrations. Our efforts, hopefully, will bring a change in Singapore"

Product Manager

Alba Smart City Pte. Ltd.

E-waste is another category of bin which has been included recently to collect all the electronic trash like desktops, keyboards, etc.

Ever since this latest upgrade, there has been no going back. Step-up has almost 6270 live users today and the number is still growing.

This kind of success has certainly motivated our client as well as OpenXcell's team to work even harder to achieve the goal of reducing carbon footprints in Singapore, more quickly than they had imagined.

Support and Maintenance

Openxcell has fared way more than the client would have expected. Infact, it wouldn't be wrong to say that we have rather earned that trust because Alba aptly got the kind of reliability they had sought in us.

We built the entire application from scratch, successfully deployed it and have also been managing their hosting for 2 years without any hassles which makes our client rational to continue the technology partnership with us for their future integrations as well.

Way Forward

Future Scope	OpenXcell's Participation
Feature enhancements and application maintenance	OpenXcell will extend its technical assistance to upgrade the application as and when required by the client.

Product Success

Excellent software uptime

Variety of Trash Bins

User friendly

Hassle-free hosting

OpenXcell's Contribution In Client's Success

Coming to Openxcell has been the best decision for Alba so far, as touted by their product manager in Singapore. Comprehending client's requirements and putting our foot into their boots has actually helped OpenXcell deliver exactly what the client had expected. Our proficient team of experts brought every possible aspect of the project to the platter, then be it - the database that was best suited for the app or the kind of integrations it required to help users scan and dump their trash hassle-free or the technical team that we created for the project, all by ourselves, for that matter. Though the efforts still continue, it is our 360 degree involvement so far that has helped us form a trustworthy alliance with our client.
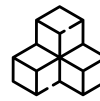
Our Success Gears

12+ years of extensive product development experience

Recruitment of Top Talent

360 Degree Operations Management

Scalable Model

Dedicated Development Centre

Dedicated Development Teams

24/7 Support Service

Technology Stack

Frontend

React-js

Backend

Node.js

Database

Native iOS   Native Android

Client Achievements

6270 active users

Government backed project

30+ organizations using the application

300+ e-waste bins

Client Testimonial

"Openxcell has provided unparalleled technical support and we definitely want to continue with more enhancement in our application and for that we will require your continued support."

Alba

Product Owner

Conclusion

Step-Up was always a philanthropic project for OpenXcell and whatsoever Openxcell has contributed to the good cause of reducing carbon emissions in Singapore has been undeniably satisfying. The collaboration itself has been quite rewarding and the kind of technical expertise we have put into making Step-up reflects in our client's satisfaction. We at OpenXcell, always endeavor to bring a model that helps our clients to leverage 360 degree technical support which includes everything from assembling the team of developers and providing the maintenance of the product even after the completion of the development. Our holistic services reinforce our client's ideas by providing flexibility to the development procedures, on-demand deliveries, sustainability and scalability to the product. Above all, it is the transparency that Openxcell provides to its clients which gives us an edge over our competitors and makes us more reliable and a go-to technology partner.

Thank you for your time!

Contact Us

Want to scale your business with our seasoned product development team? Let us know your requirements.

✉ **sale@openxcell.com**

📅 **Schedule a Meeting**