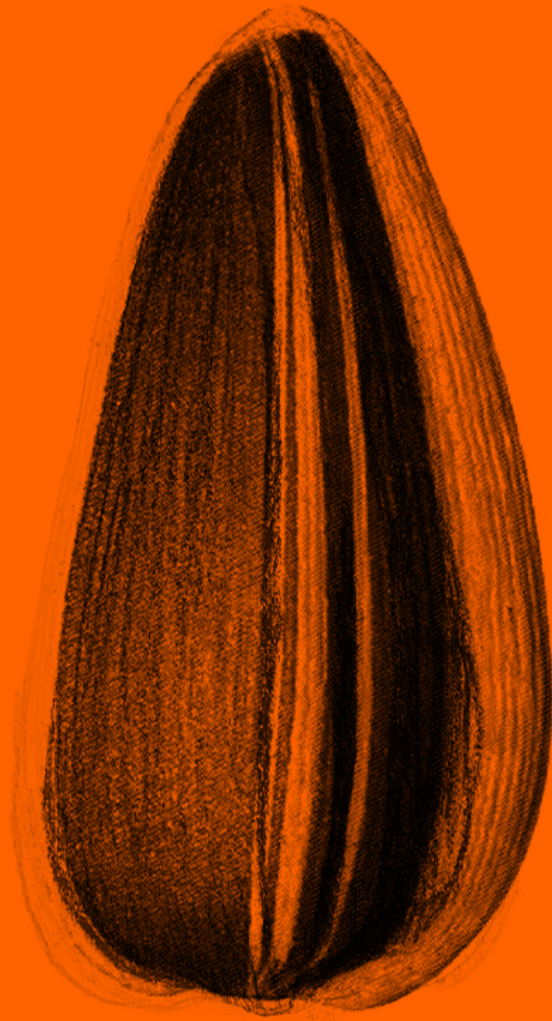


CASE STUDY



HOTCVC



SEEDBIN

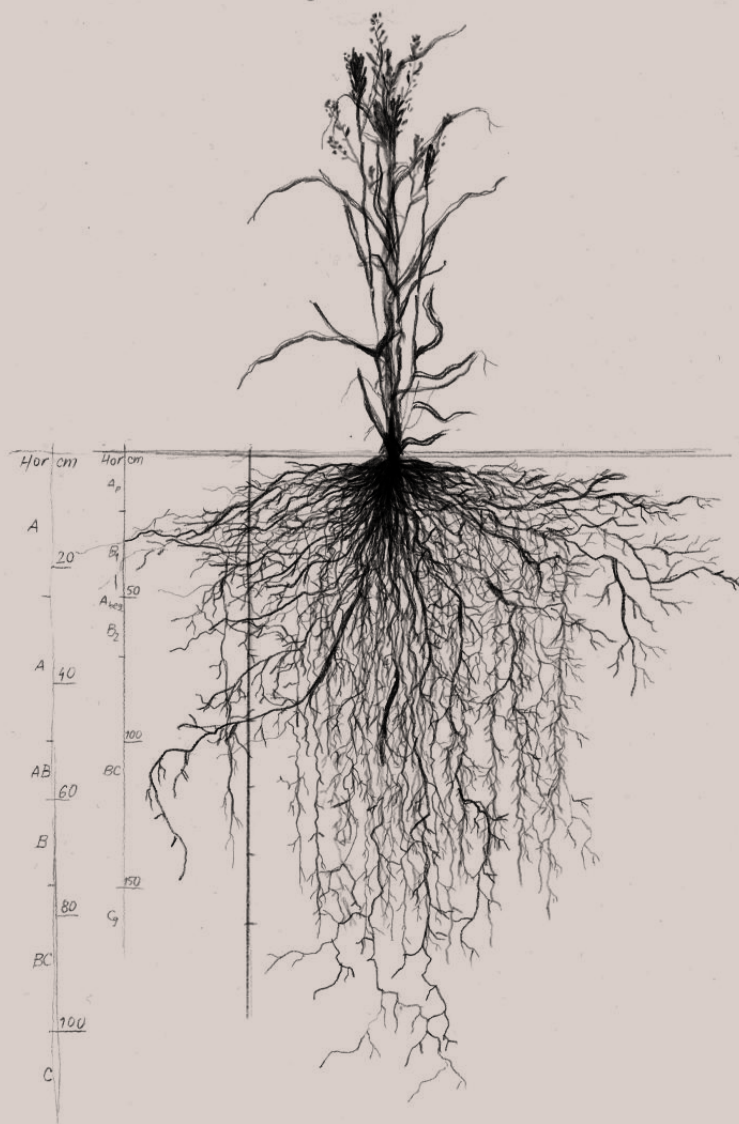


David Gorton
Head of Product
Management at SeedBin

SeedBin is an established US based agtech business that provides customized software-as-a-service (SaaS) solutions to the seed industry to help balance inventory, plan production and manage supply. Their platform enables seed producers, brokers and retailers to streamline and automate complex manual processes, as well as communicate with partners, employees and customers.

Challenges

- Seed is required for crop production throughout North America, but how does the right amount of the right seed get from its place of production to where it will be grown?
- Furthermore, as a regulated industry, how can all involved parties ensure that all rules and regulations are adhered to?
- SeedBin had ideas for new services that would better assist their clients, but didn't have the capacity or ability to develop the software in house. They needed a reliable and affordable option for outsourcing the development, and thanks to previous connections with Hotovo, knew they were the company for the job.



Solution

The initial project SeedBin wanted to develop was for a “Scanner App” – for their clients to have a means of tracking and managing their seed supply chain using a novel, hardware-native infrared scanner and barcode system.

The idea was to replace manual data sharing via spreadsheets and email with customisable software-as-a-service (SaaS) solutions – with the aim of simplifying seed supply-chain management and supporting their clients, such as the fast-growing Remington organisation, as well as easing the workload of the admin team. It would also make the data-entering process much faster, thus enabling an operator/stock keeper to do an immediate data recording when still at the shop floor.

Enter Hotovo

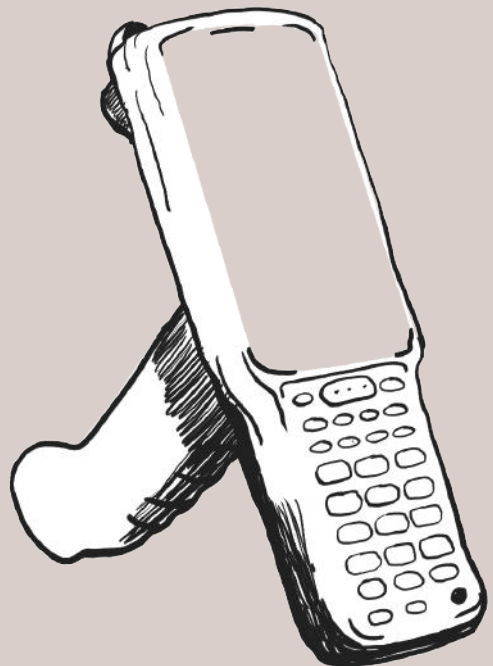
It all started with a wireframe of a potential solution. From there, Hotovo was able to analyse the diagrams and design and develop a software solution, including a mobile application and a fully-featured service layer.

Custom Android device with IR scanner integration

The result was an infrared device that the end user (warehouse operatives) can use to scan the barcodes on boxes of seed in order to know their contents, planned destination and other logistical details. This information is then processed via the service layer, notifying those concerned and helping to channel the seed to its next destination.

The mobile app streamlines the management of the supply chain by providing an easy-to-use system that simplifies the process for SeedBin's customers, who can easily maintain and manage all the data generated in a practical, cross-functional manner, resulting in increased efficiency.

Furthermore, the app allows SeedBin's customers to utilize the existing data to plan inventory movements to quickly meet their own customer's demands.



The Future of SeedBin & Hotovo's Collaboration

Hotovo and SeedBin have been successfully collaborating together since 2019. In addition to the initial project which included the development of the “Scanner App” and “Barcode Generator”, Hotovo participated in the development of the frequently used “Available to Ship” application. This was then followed by the largest and ongoing development of the highly successful “Pre-Foundation” application.

The web-based “Pre-Foundation” app provides comprehensive management of pre-foundation seed production, from crop planning through to shipment. Functionalities of the app include user management (access, roles, permissions and preferences), crop planning, field planning, inventory management, shipping management, field data, sample processing, quality data integration, data warehousing and reporting. It has been a great success for SeedBin, and we're continuously proceeding further with the development and implementation of new features.

Technology and Tools Used



DevOps:

- CI/CD: CircleCI
- Kubernetes
- Express Gateway
- AWS
- Monitoring (Prometheus, Grafana-agent, Grafana, Loki)



Frontend / Backend:

- React & TypeScript Frontend
- QA: Playwright JS Frontend
- Python & Django Backend
- QA: Robot Framework Backend



Mobile App:

- Kotlin, MVVM
- Android Jetpack (Navigation, KTX)
- Retrofit, KOIN
- Material Component

Team size



Local SCRUM master



Frontend developers



Backend developers



Android developer



Quality Assurance specialist



DevOps specialist

**If you have any questions, please don't
hesitate to contact the Hotovo sales team at
sales@hotovo.com .**

Thank you.

www.hotovo.com