

Case Study

FarmLogics Technologies x Barry Callebaut

Cocreation of sustainable farming practices at the home of the finest Belgian chocolate



Barry Callebaut Group

Barry Callebaut Group is the world's leading producer of supreme quality chocolate and cocoa products. Headquartered in Zurich, Switzerland, Barry Callebaut has been producing the finest chocolate for more than 100 years now, right in the heart of Belgium. Over the years, Barry Callebaut has grown to improve the quality of not just their products but their processes as well which adds to the reason why they are preferred by chefs and chocolatiers to create great delights.

With 12,500+ employees and 64 factories worldwide that cater to 137 countries, Barry Callebaut has been on a growth trajectory for more than 175 years now. What makes them unique is the way they go the extra mile to make sure that they produce the best in the best possible way. As part of the same, they have embraced vertical integration as the way to go - to ensure that all their processes are well orchestrated to deliver the finest.

The Challenge

To produce the finest, Barry Callebaut needs to associate with and procure the best available resources and harness its power in creating chocolates that make people want more. The Barry Callebaut Group works with around a million contract farmers in Ivory Coast, Ghana, and Cameroon to make this possible. Working with them and associating with them made Barry Callebaut think about doing something different to make their lives better as well - so that they also feel good at the end of the day associating with Barry Callebaut and see value in their contributions and how it makes a difference to the end consumer.

Barry Callebaut's Cocoa Horizon Foundation aims to improve the lives of cocoa farmers and their communities by promoting sustainable, entrepreneurial farming, increased productivity, and community development that protects the environment and children. The major challenges faced by these communities can be largely summed up as:

- Some of the associated smallholder farmers had limited knowledge and understanding of good agricultural practices which impacted their harvest and were often faced with poor yield.
- Due to intensive farming practices and high dependence on chemicals and several other factors, the practice of farming itself is being challenged in its longevity which can be attributed to rapid depletion and degradation of soil.
- Climate change is another major issue faced by farmers across the globe. The unpredictability and ambiguity associated with climate change cost a lot for farmers and significantly affect their harvest and yield, even in situations where they are prepared.
- Farmers are often exploited in the marketplace and another major problem they face is addressing farm-related financial issues. They find it hard to find stable financing that can support their farming operations.
- Another challenge that surfaced was connectivity. Physical, Network and Economic connectivity are often scarce in the cases of farmers who work on pieces of land, which is far from the hustle and bustle of cities.

Approach

FarmLogics stepped in to help Barry Callebaut in their pursuit to better equip them on this front. To understand exactly the challenges faced by the farmers, the team from FarmLogics took to utilizing various techniques to view and immerse themselves in the challenges faced by the smallholder farmers from their exact point of view. After detailed problem analysis and multiple rounds of discussions, debates, brainstorming, and more, FarmLogics came up with an MVP based on their distinctive Outgrowers platform, specifically to address the needs of Barry Callebaut.

Their specific approach to addressing these challenges was as follows:

- To begin with, they developed a mobile application for Field coaches, which could operate even in areas with little connectivity for the following purposes:
 - Surveying the farmers to better understand the current situation at their farm, the challenges they are faced with, their gains and pains and to create well-tailored Farmer Business Plans for them.

- Predicting the farmers' current and expected yield along with anticipated revenue for the next 15 years.
 - Recommending the package and combination of inputs that could improve the farmers' yields which is made possible using FarmLogics' well-designed and robust algorithms.
 - Aids in drawing contracts between the company and farmers in a hassle-free manner.
 - Collecting payments and tracking payment-related activities in a highly secure and reliable environment.
 - Managing supply chain activities like order deliveries and warehouse management.
 - Addressing the farming activities of the farmers for non-cocoa produce and providing them relief packages for them, to assist them in their ventures.
- Next, FarmLogics took to developing a web application to set up and manage the data of around a million farmers and thousands of coaches who facilitate the data and the process of collecting it.
 - They also build in capabilities to create and manage multiple reports and track various key performance indicators based on the large data collected by the coaches.
 - The application was built to be fully scalable and came with multi-language and currency support.

The approach they took helped them effectively address the challenges at hand and the difference they created are explained in the next section.

Impact

FarmLogics' attempt to understand the challenges faced by Barry Callebaut's valuable stakeholders - their smallholder farmers, in and out, and their commitment to enable Barry Callebaut in aiding them was well reflected in their approach and the results speak for themselves. The impact created by FarmLogics' Outgrowers Solutions is as follows:

- Based on the insights drawn from the specific data collected from farmers and farms, along with other associated important insights, the coach is now able to offer the farmers a customized and specific Farmer Business Plan for the present and several upcoming years. Based on this well-drafted Farmer Business Plan, the solution also recommends the most convenient productivity packages for the farmer to improve their yield's productivity and income.
- Thanks to the offerings of this unique solution, coaches are now able to collect data and register new farmers and provide coaching on topics like cocoa quality, traceability, sustainability, health and safety, and child protection, as per requirement or a gap identification as indicated by respective farmer communities easily and quickly.
- The farmers finally have access to tools, inputs, and/or planting materials to aid them in the adoption of good agricultural practices, soil fertility management, and rehabilitation.
- The KPIs also point to an improvement in the performance of coaches as well.

Through these well-thought-of and designed solutions, Barry Callebaut is now able to better reach out to and connect with their contract farmer community and enable them to secure a better livelihood and produce and create more value for their actions and activities.