

Abstract

AquaCheck is a soil moisture management company that provides a range of services and products to farmers who want to improve their on-farm irrigation management. AquaCheck offers a variety of probes which measure soil moisture and temperature. AquaCheckWeb is a web application that allows customers of AquaCheck to monitor their probes. However, AquaCheck understands the complexities and time it takes to analyze data in AquaCheckWeb and therefore required a solution which highlighted a key overview of a farmer's soil moisture and temperature.

To help solve key business problems such as the complexities, lack of an intuitive interface and time it takes to understand and interpret data on AquaCheckWeb, Team Aqualac set out to achieve the overall aim of the project – help farmers focus on farming by providing an easy to use and understand interface that requires one look to get a snapshot of the situation of a farm at any given point.

To achieve the overall goal, the system had to be in line with the business objectives. Providing an intuitive interface, using farmer-friendly infographics, displaying a current snapshot along with historic data, customizations at probe level, notifications for alerts, email summaries and automated triggers for technical errors. This is in line with Aquacheck's business objectives to offering the latest technologies and flexible solutions to clients forming long-term relationships.

The solution developed by Team Aqualac ensures all objectives are met with a user-friendly, easy to use, intuitive web application that customers may use to display in their office screens and let farmers focus on farming.

Keywords: Agronomy, Agronomy dashboard, Farming, Technology in Agronomy