



## Innovative Agriculture through the IoT



**INDUSTRY:** Agriculture

**HEADQUARTERS:** Boston, MA

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Xively by LogMeIn has made it clear, if we win they win, and have gone above and beyond in seeing us implement the Xively IoT Platform in the best way possible for our farms. The team has even gone beyond those at LogMeIn to connect us with other meaningful partners and potential customers.”

—**KYLE SEAMAN**, Director of Farm Technology,  
Freight Farms



# Freight Farms

### CHALLENGE

Freight Farms is a Boston-based agriculture technology company that provides the tools and services to enable fresh food production in any environment. The company grew out of the desire to eliminate the negative effects of food production and distribution, and has grown into a platform that empowers anyone to grow food anywhere. Freight Farms' flagship product, the Leafy Green Machine, is a complete hydroponic growing facility built entirely inside a shipping container, with environmental controls and indoor growing technology. The “LGM” allows for immediate growing of a variety of crops regardless of weather conditions resulting in access to year-round local, fresh produce that is always in season. Farmhand Connect, Freight Farms' App, provides farmers with access to real-time data from sensors inside the farm, giving them the ability to monitor all the key components of the farm: air, water, nutrients, and plant growth. Users check temperature, humidity and CO2 levels in the air, nutrient/pH levels of the water, and receive notifications of any changes to the environment.

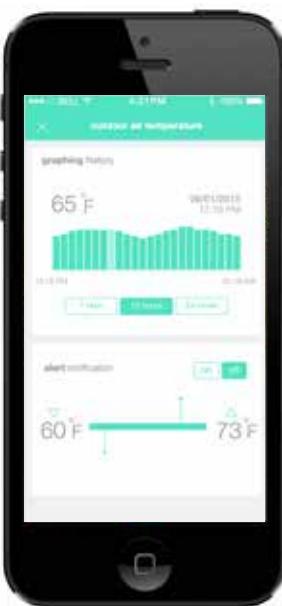
Freight Farms' goal was to create a connected farming environment that was simple to set-up, highly responsive, easy to scale, and would offer a path to future features and services - from day-to-day operations, to support, to growing optimizations, connecting their farms delivers an even greater experience to their farmers. After internal constraints for the hours of support required to build, integrate and maintain their own IoT solution, Freight Farms began looking at and evaluating IoT partners they could trust.

### SOLUTION

Freight Farms turned to Xively by LogMeIn for its connected product expertise and Xively Internet of Things (IoT) Platform. Security, scalability and expertise were important deciding factors and Freight Farms wanted to work with a company who could take on the entire connectivity stack, had a deployment ready platform with everything they needed, while providing the best guidance and advice from Xively Professional Services. By providing a secure, dependable, fast connection, Xively is allowing the Freight Farms development team to improve on other areas of the farm and overall business.



Farmhand Connect allows you to monitor indoor air temperature, humidity, CO2, and water nutrient levels from your mobile phone.



Graphing history and alerts can be turned on/ off allowing the user to maintain and monitor correct temperature levels.



#### RESULTS

- Access to real-time data allows Freight Farms to diagnose problems fast and immediately take action to correct them. When working with living plants it's crucial to have up to date climate information to ensure the environment is optimized at all times.
- Xively is enabling Freight Farms' customers to gain insights into the current state of their farm, giving them the ability to ensure things are running smoothly. This reduces the overall time required of the farmer to be working inside the farm.
- Linking Xively interactions to Freight Farms' analytics allows for better insights into how people are using their farms and how they want to be using the farms. This is helping Freight Farms design a better experience in their App to meet all of their users needs.
- Through the Farmhand Connect App, farmers can set parameters for optimal growing conditions and receive notifications or alerts about in-farm system performance. Reliable climate diagnoses provides a better customer experience and allows them to remedy problems immediately.
- Freight Farms' ability to have insight into day-to-day farm operations gives them the ability to proactively satisfy their customers needs, while also growing their business by selling consumables as needed based on the farms usage data.

