# CENGN

ET GROW INNOVATION HIGHLIGHT

et GROW

COMPANY OVERVIEW

ET Grow is a software as a service (SAAS) company, that provides leading edge cloud and mobile based tools to agricultural growers to help them manage inventory and cultivation. ET Grow carried out a CENGN project using real world testing of their new Internet of Things (IoT) Plant Health Sensor prototype in the CENGN Living Lab Greenhouse. This allowed ET Grow to rapidly iterate the sensor design and accelerate it's go-to market strategy.

LOCATION: BEAMSVILLE, ON

TECHNOLOGY

IoT
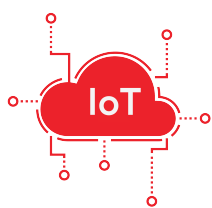
Internet of Things

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THE NEEDS TO AUTOMATE CROP DATA COLLECTION

Even with advanced tools to track production, most data entry is still a manual process for growers. This puts a strain on the growing team and leads to increased overhead and reduced efficiency. The need for good data is continually increasing. This has increased the demand for technologies such as IoT that automate data gathering so growing teams can focus on other priorities. These datasets then need to be analyzed, meaning artificial intelligence (AI) and machine learning (ML) will continue to play a larger role in agriculture over the next decade. The large datasets created by the IoT sensors will lay the foundation to allow AI and ML technologies to create additional value.

MANUALLY TRACKING GROWTH PRODUCTION

ET Grow provides simple to use software tools allowing growers to track production, inventory and all actions performed on crops they are growing. One element that is often hard for growers to track is detailed plant health data at the soil level. Tracking moisture and salinity in the growing media can help a grower understand PH and nutrient levels in real time. The ET Grow IoT Plant Health Sensor can autonomously collect air temperature, humidity, moisture, and salinity readings from the growing media. This information is sent to the ET Grow platform automatically and linked to alerts and inventory data, to enable the grower to make the right business decisions.

IMPROVING ET GROW'S IOT PLANT SENSORS

During the CENGN project, ET Grow focused on improving their existing IoT Plant Sensor prototype and testing how they receive environmental data from it. ET Grow also updated their server-side code in the cloud to read environmental data and link it to a growing location within an ET Grow account. Leaving CENGN, ET Grow improved their sensor's battery life, configurations, and packaging improvements.

> **"We expect the new sensor to have a large impact on the revenue growth of ET Grow. With a fully integrated IoT Plant Sensor, we expect to onboard clients more quickly and provide additional value faster."**
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> **Terry Vermeer**
> P.Eng., Chief Operating Officer, ET Grow