

Monitoring And Protecting Harvested Crops

Partner: Centaur Analytics Inc.

Country: U.S.A. & Greece

Established: 2014

Employees: 14

Website: www.centaur.ag



The Idea

Centaur's mission is to reduce the estimated \$1 trillion of wasted crops annually from farm to shelf by deploying our cognitive connected solutions globally. We are the first full-stack IoT provider for the quality and safety of stored agricultural products. Our wireless sensors and cognitive predictive and prescriptive cloud analytics enable real-time monitoring of stored product condition and recommend proactive maintenance activity.



The Results

As a result, our sensors and cloud apps help mitigate post-harvest losses. Customers include food plant operators, fumigators, agro product traders. They report drastic improvements in their quality metrics (e.g. pest management success) with cost savings over manual methods.



The Solution

Centaur has developed wireless sensors that can transmit reliably from inside containers, warehouses, silos and can form "mesh" networks for efficiently dispatching their data to the cloud. We also apply computer simulation techniques, and data analytics methods for real-time monitoring of stored product conditions (e.g. temperature, humidity, ethylene, CO, CO2, emissions) in order to determine the quality, safe storage time and spoilage risk of the product being stored.



The Azure Benefit

Our sensors readings are transmitted in realtime to the Cloud, hence our platform needs to be supported by a fast and reliable cloud service such as Azure. Additionally, Azure offers out of the box solutions for data analytics services like Azure Functions. Azure also provides reliable data storage services, a critical requirement for ensuring sensor data integrity and reliability. Finally, Azure supports multi-point and multi-country operations, allowing our platform to grow internationally.

Reducing crop spoilage risks from

30% to <1%

Reducing costs for storage quality control by

10%

\$1.3

million equity investment raised

> 90000

datapoints / hour via socket connections