



PIERUCCI AGRICOLTURA

CASE STUDY

IoT platform for monitoring crops and energy consumption

- Sustainable IoT Technology
- Real time monitoring
- Hydropower generation
- Quality assurance

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DISCOVER HOW ZERYNTH EMPOWERED PIERUCCI WITH THE IOT TECHNOLOGY TO OPTIMIZE PLANT GROWTH, MONITOR CULTIVATION HEALTH PARAMETERS, AND CUT CONSUMPTION COSTS.

X2

Optimization of
Cultivation
growth

20%

Water Savings
and Power
Consumption

30%

Reduction on-site
visits

7

For a long time we were looking for a smart agricultural solution that could help us optimize cultivation growth and reduce maintenance costs as well as energy consumption. With Zerynth's help, we released our solution to the market, which is unique in the horticultural sector. The project has been an astounding success: it achieved all objectives in less than 6 months, opened a new revenue stream for us, and significantly increased our competitive edge.



Emanuele Pierucci - CEO, Pierucci Agricoltura Srl

Industry

Agricoltura

Asset

Nursery fertilizers

The Challenge

It is well known that the role of technical progress in agriculture has exploded. Therefore, like in any other industry, it has many pitfalls. Pierucci Agricoltura, just like anyone else, is familiar with all of them. Here's their story. The biggest challenge is that a nursery requires a complex system of plants, production factors, and agronomic treatment for nutrition and defense.

Moreover, farms must meet certified standards by achieving environmental and economic sustainability through: efficient usage of fertilizers and pesticides, water containment, energy consumption, and a **decrease in the risk of cultivar damage from system malfunctions and atmospheric events**. Aside from this, Pierucci Agricoltura had a real challenge finding a reliable IoT partner to help them participate in a project from the European Regional Development Fund.

In order to do that, they needed to use technology that was able to **reduce water and energy consumption, decrease manual operations** for monitoring and reporting data, **remotely monitor and manage the system**, and **get real-time notification** regarding infrastructure damages.



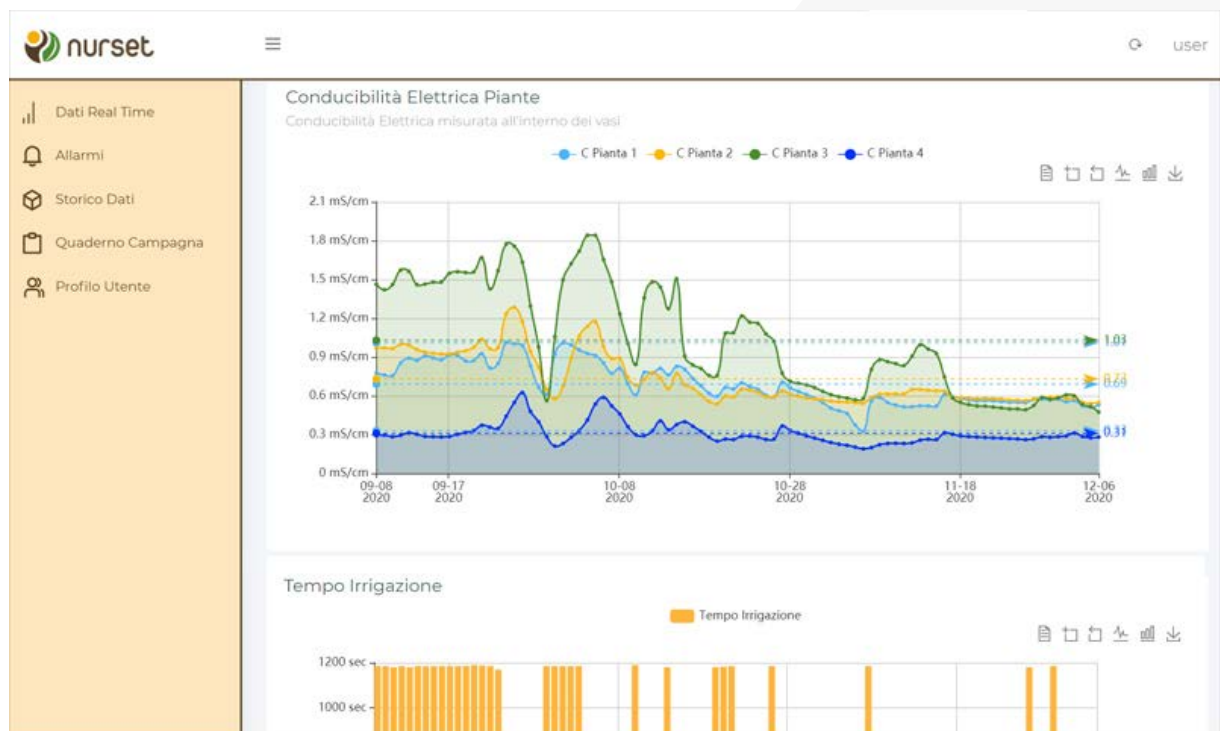
The Solution

The Zerynth team provided Pierucci Agricoltura with Nurset, an IoT-enabled solution designed for monitoring the cultivation of ornamental plants in nurseries.

Zerynth Edge Devices extracts data and send it to Zerynth Platform, a simple and intuitive platform. The system allows **information analysis**, **manages an alert system**, and **digitizes documentation for nutrition** and crop protection. Moreover, it can create digital treatment logbook, with the ability to export reports in the most common formats.

Nurset includes an analytics tool designed to continually improve the plant health indicators' performance. The system allows you to **extract and analyze data** and send it to the Zerynth Platform ensuring complete remote management with high-security standards. Nurset automatically generates reports, and **continually monitors the selected KPI's** by comparing them with configurable thresholds, and sending emails or SMS alerts in real-time.

Moreover, due to the function of historical data reporting, Zerynth made it possible to manage a digital campaign notebook and record agronomic practices by integrating them with the data collected.



I Risultati

Increased Productivity

x2 optimization of cultivation growth

Increased Automation

50% less manual operations

Increased Efficiency

15%-25% energy reduction and maintenance costs

Why did Pierucci Agricoltura choose Zerynth?

Pierucci Agricoltura has successfully extended its product line by providing customers with a smart IoT solution capable of real-time recording and monitoring of plant cultivation in nurseries.

Zerynth enabled Pierucci Agricoltura to remotely monitor all parameters related to plants grown in pots (temperature, salinity, humidity) and allow data detection from the irrigation system (water and energy consumption, state filters, fertilizer level in the tank). This saved Pierucci time because manual control and monitoring was decreased by 30%.

Zerynth quickly implemented an ideal tool to achieve certified standards for environmental and economic sustainability, by optimizing the use of input factors and reducing waste. Thanks to Zerynth's consultation Pierucci Agricoltura became a strategic partner for farms by producing high-quality products in the Wholesale Sector Industry.

About Zerynth

Zerynth enables companies to streamline production processes and increase the value of connected industrial products. Through a plug-and-play IoT & AI platform, we connect any industrial machine, allowing for a complete 4.0 transformation quickly, flexibly, and securely.

Founded in 2015, Zerynth has grown steadily. Today it has 40+ team members with deep IoT expertise and industry knowledge with over 150 customers across many industries: from manufacturing to agriculture to energy to logistics. Zerynth is based in Pisa, Italy, but also is active in international projects, and foresees an expansion both in EU and non-EU countries during the next three years.

GET START WITH ZERYNTH

Ready to see what Zerynth can do for your business?

LET'S TALK!