TERTIUM
technology

Smart shelves for warehouse management and remote product restocking in real-time.

10	Number of smart shelves installed in pharmacies
100%	Automation of product restocking
24/7	Remote management of smart shelves

"I was looking for a solution that would allow me to automate the organization of my work, facilitate the logistical process for better cost optimization and minimize inventory. Thanks to the solution designed by Tertium and Zerynth, I can now experiment with innovative Industry 4.0 technologies both for my internal production of glasses and distribution in pharmacies."

Maurizio Zappaterra, CEO – IVIEW SRL

The Challenges

IoT technologies can cover increasingly different fields of application, through the **design of innovative and sustainable systems,** and they are able to satisfy even the business interests of non-industrial companies.

IVIEW, a company that produces eyeglasses and distributes them in pharmacies throughout Italy, was looking for an intelligent technology capable of remotely monitoring and managing the sales of products arranged in special displays and capable of **optimizing restocking their eyeglasses.**

Thanks to the collaboration with our partner TERTIUM Technology, a solution for a **"smart shelf" RFID + IoT solution** was developed to detect, in real-time, the number and type of glasses sold, with the aim of predicting when and how to replenish shelves .

COMPANY PARTNER:
TERTIUM Technology

LOCATION: Italy

INDUSTRY: Production of electronic equipment

PROFILE:
Italian company, founded in 2001, which designs and manufactures an exclusive range of RFID readers, and a wide choice of wireless IoT sensors.

COMPANY CLIENT: IVIEW

LOCATION: Italy

INDUSTRY: Glasses production

RESULTS:

Increased efficiency
Greater automation in the production and logistic phases.

Increased control
24/7 remote monitoring

Increase in profitability
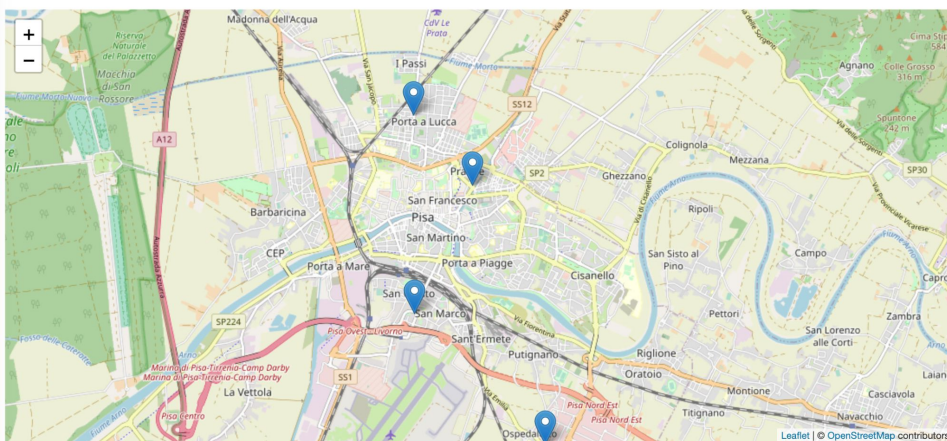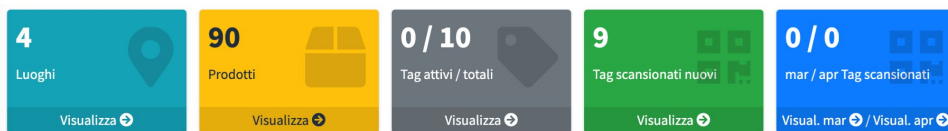Just-in-time production and warehouse management

The Solution

The Zerynth IoT platform was configured independently by TERTIUM Technology, which exploited the potential of our technology and managed to integrate it profitably and quickly into its products.

The solution offered by our team involved the use of the **ZM1 IoT Module** installed on each eyewear display in pharmacies. The ZM1 uses Zerynth Cloud, our cloud platform capable of collecting data from all shelves, saving it and sending it to the customer's customized dashboarding system.

In this way, the eyewear manufacturer is able to monitor the sale of eyewear in stores, in real time, and can promptly supply pharmacies automatically **without the need for manual control** in the stores.

In addition, through the use of special sensors, shelves can become an IoT point capable of controlling the pharmacy environment and obtaining data on temperature, humidity, air quality, and the presence of people in the room.

ZM1 – MAIN FEATURES

- Connects to any industrial machine or equipment.

- Ability to run in PLC mode, retrofitting mode for legacy machines, or hybrid mode.

- Supports industrial sensor channels, communication protocols and relays.

- Secure design via an integrated Secure Element (SE).

- Supported by Zerynth OS, real-time and multithreaded OS that enables Python and C development.

PRODUCTS USED:

ZM1 (Zerynth IoT Module)

Zerynth Cloud

Customized Dashboard

Zerynth Cloud has been integrated with a **customized dashboarding system** capable of intuitively displaying all collected data, such as the total number of products on sale or those sold overall for each pharmacy. Today IVIEW is able to observe the sales trends and the total number of glasses present on each shelf and, consequently, optimize the production process and restocking of stores.

The Dashboard contains an interactive map with all the pharmacies in which their glasses are displayed so as to **allow immediate analysis** at the single point-of-sale without having to contact the pharmacy manager directly or having to go to the site.
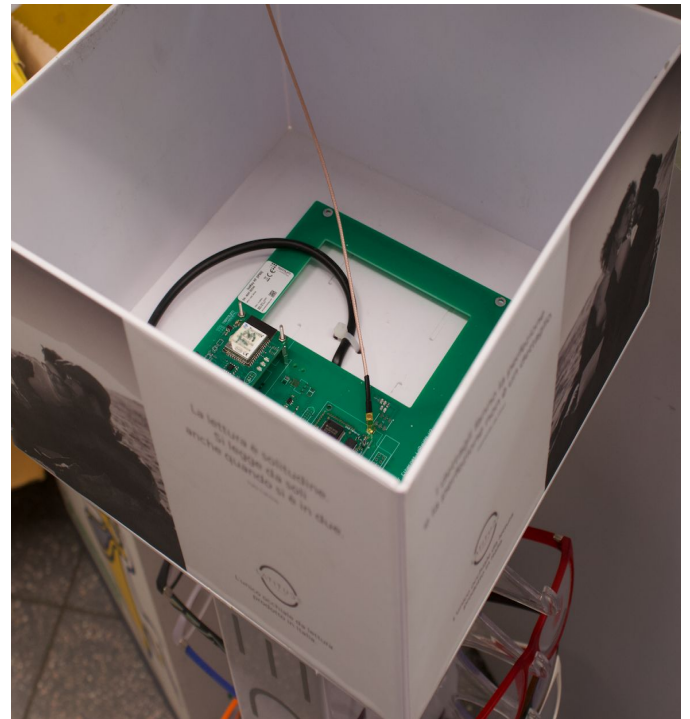
The Results

IVIEW has been able to successfully exploit the new IoT technologies by being able to start installing its own eyewear displays, which have become smart, in pharmacies throughout Italy. Having concluded the first phase of the project with the installation of 10 shelves, in fact, the final goal is to reach 5,000 pharmacies throughout Italy.

In this way, for each pharmacy, it will have instant data on the number of glasses sold and historical data on customer needs, which are useful for **just-in-time production and forecasting of future purchases.**

TERTIUM Technology, in a very short time, was able to easily integrate the Zerynth solution into its RFID products and is planning further innovative solutions in the field of wireless IoT sensors.

In fact, the integrated use of the ZM1 module and Zerynth Cloud allows you to completely skip two long and costly design phases, leaving companies, that adopt the Zerynth platform, the opportunity to focus on their own technologies and on the development of new IoT-enabled solutions.
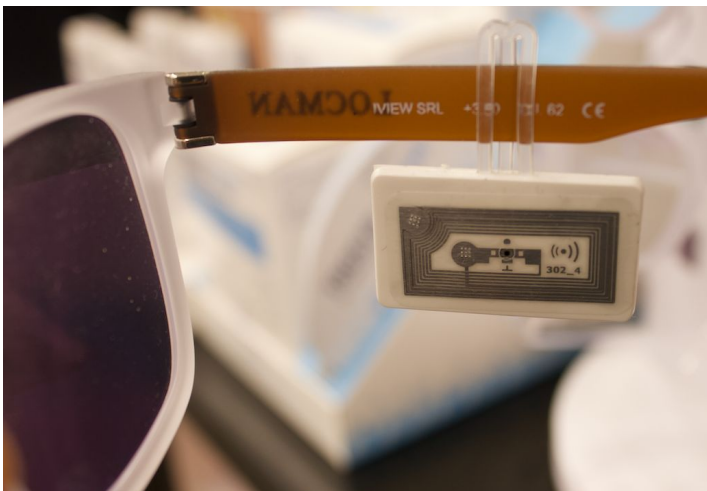

Why Tertium Technology chose Zerynth

The collaboration with TERTIUM Technology has once again proven effective in meeting different types of customer needs through the **integration of innovative 4.0 technologies**.

Zerynth's rich IoT experience was indispensable for an adequate optimization of the technologies used in the system.

The development team also supported every single phase of the project, looking for suitable solutions that would promote the digital transformation of TERTIUM Technology's products and solutions.

"Thanks to the collaboration with Zerynth, it was possible to connect our RFID cards to the IoT platform, enabling this product for Industry 4.0. The smart shelf is just an example of a solution that can be adapted to numerous application contexts, with the possibility of implementing various functions."

Marco Consani, CEO - Tertium Technology Srl

Zerynth®

Enabling IoT

About **Zerynth**

Zerynth helps companies easily get their industrial processes digitized and bring innovative connected products to the world. The Zerynth IoT Platform is a full set of hardware-software tools designed by IoT experts to enable digital transformation in a fast, flexible, and secure way.

Founded in 2015, Zerynth has grown steadily. Today Zerynth has 35+ team members with deep IoT expertise and industry knowledge with over 100 customers across many industries. Headquartered in Italy, Zerynth provides support globally thanks to an extensive network of partners in Europe and pan-global locations.

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GET STARTED WITH ZERYNTH
Ready to see what Zerynth can do for your business?

LET'S TALK!