



# Logistics

## THE CLIENT

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The client is an Italian company founded in 1986 and specialized in the **design and manufacture of home appliances** and in particular prosumer coffee machines and ironing systems for domestic use.

## THE CHALLENGE

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Meteca was asked to implement a pick-to-light system for customer warehouses in order to increase the efficiency and accuracy of picking operations during the processing of customer orders and improve the tracking of warehouse assets.

Being a well-established Italian excellence in the consumer appliance sector, recently acquired by an Australian multinational, the increase in order volumes and the expansion of the product line, combined with the ambition for continuous improvement, had led the management to **analyse** in more detail the possible shortcomings and **areas for improvement** in the fundamental **warehouse processes of picking, storage and sorting**.

In particular, the company had asked itself how it could minimise the still too frequent discrepancies in warehouse stock, while at the same time making the work of order processing in the warehouse more efficient and faster, with a technologically innovative system that did not make it too complex for staff to adapt to the new situation.

**An IoT system for warehouses could certainly be the optimal solution.**

250%

More orders processed

35%

Productivity increase

99%

Reduction of stock discrepancies



#### THE SOLUTION

Meteca is designing, then realising and producing a pick-to-light system, an IoT technology for order fulfilment to guide manual picking and registration of items to be shipped.

The Kit consists of two devices, a **Control Unit** and a **Display Module** (for displaying picking information).

The Control Unit is based on the MBC-WB module and acts as an **interface between the back-end of the warehouse management software, and the physical picking line**. In addition, the Control Unit is equipped with an RFID NFC interface that **allows the identification of the warehouse operator when accessing the work line**, as well as the assignment of a specific picking order to the same operator. From then on, the Control Unit starts communicating via SMBus protocol with the display modules.

The display modules take care of **indicating the quantity of pieces to be picked for each location, monitoring the actual picking by means of optical sensors**, or alternatively also allowing the operator to indicate the quantity picked using special buttons.

Since more than one person can work on the line at the same time, **each operator recognises which is his picking sequence thanks to a specific colour assigned to him** by the back-end software and shown to him by the control unit already during login, and then during all picking operations continues to be shown to him by the RGB displays mounted on the modules.



PICK-TO-LIGHT SYSTEM

#### IOT KIT

Control Unit and Display Module

Powered by:  
Briki MBC-WB with Wi-Fi / BT-BLE

## THE RESULTS

## Improved efficiency through the Meteca solution

Thanks to the IoT solution implemented with Meteca, it has been estimated that the customer will be able to **increase** the volume of order processing in the order of **250% per day compared to the previous situation**, with a productivity **increase of 35%** compared to the old picking situation.

**Picking errors** and the resulting stock discrepancies are expected to be **reduced by 99%**.

## BENEFITS

## Advantages you get with Meteca

- Support in defining the best technological solution
- Hardware design
- Prototyping
- Dedicated software writing to interface with the company's management systems
- HMI Design
- Prototyping
- Error correction of the first prototyping phase
- Design-for-manufacturing realisation
- Field testing and on-going corrections
- Dedicated and continuous technical support
- Assembly and product testing during the MP phase

## METECA COMPANY

Meteca is a swiss company that provides unique electronic tools and support for the development of tangible Internet of Things solutions.

Take your company to the next level, whatever your industry, with an excellent travelling companion. With our innovative Briki technology, we offer you complete and continuous support to achieve your goals with your IoT project.

[BEGIN YOUR JOURNEY](#)

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