

Our smart weight sensors prototypes, a closer look

MIMEX is an internationally patented technology that aims to be the new way to buy and acquire products in person. The shopping way is quick, easy, and highly intuitive.

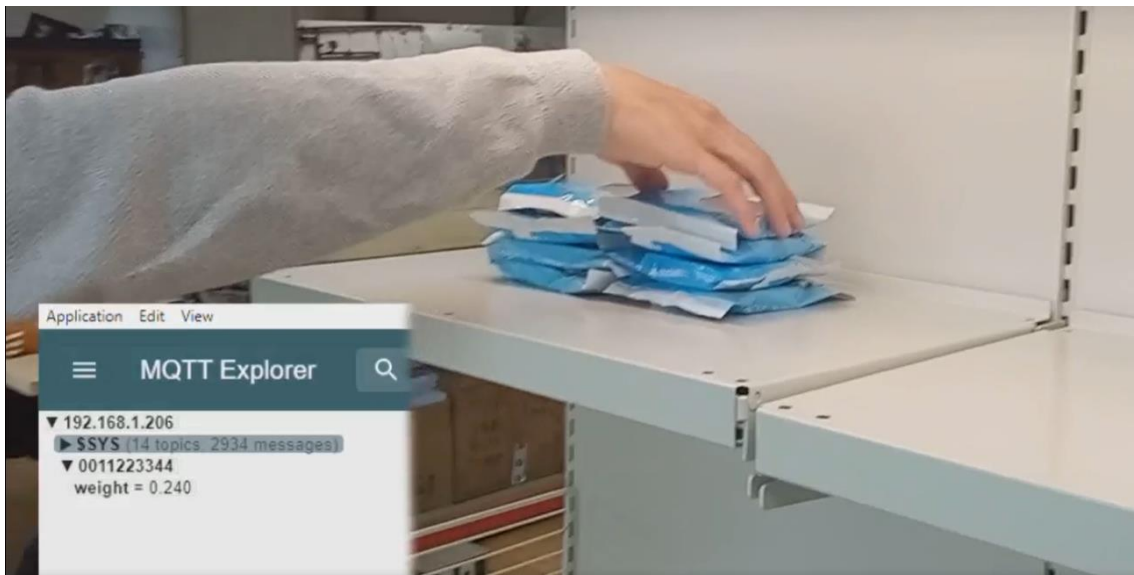
This technology is the result of the combined work from the project coordinator and research and technology development company, Spindox Labs, the Turkish e-commerce operator Hepsiburada, the Bruno Kessler Foundation, the Spanish Research & Development company Metrica6 and the CEFLA group, specialised in the engineering and shoplifting industry.

The first step is being registered in the MIMEX app. When we want to access a MIMEX shop, previously we must activate the app. This app generates a QR code. For access, we must show the QR code to the sensor. Before the entrance, the system verifies our temperature, if we are wearing a mask and dispenses hydroalcoholic gel.

Inside the MIMEX shop, we can take all the products we need or we want and, through the cameras and sensors, MIMEX systems know which products have we taken, and automatically these products will be added to the cart.

As we told in a previous website post ([link](#)) the rack works with weight sensors placed inside the intelligent shelf with the aim to detect the presence or absence of products.

Once we have implemented all the technologies that compose the rack and the shelves that compose MIMEX, we make a series of testing about the correct behavior of the shelves, the correct connection, and communication with the MIMEX cloud and check that the weight variations are suitable.



The picture belongs to the test that we made in order to verify the correct workability of the reader. After checking that the shelf where we are going to place the products is straightened correctly, we use different samples. The test starts just with one product and, later, more products will be added. MIMEX cloud shows a correct correlation between the number of placed products and the weight detected, even if we place different kinds of products (in

MIMEX shop every shelf will be placed one kind of product, for facing the technology test we try with different circumstances and scenarios).

In the picture, we also can see how the reader communicates correctly through the MQTT, ensuring the correct communication with the MIMEX cloud.

To continue, we show a video about how our intelligent weight system is working with a series of elements and the comparison of the different tests we made and the result in a weighing machine to verify that communications are the right ones.

<https://youtu.be/w7meM9tV8qM>