

Project nº NORTE-02-0651-FEDER-000548

Support under the **Business Entrepreneurship Innovation** incentive system

Project Date: **01/01/2016 - 31/12/2017**

Project Designation: **IZUM Production Unit Inovation**

Total eligible cost: **2 326 000,00 €**

EU Financial support: **1 744 500,00 €**

Private financial investment: **581 500,00 €**

Private Investment 25%

The product or IZUM solution consists of two parts: hardware and software. In both views, the IZUM offers innovations that allow you to be a reference and be a differentiating product of all existing. The hardware or physical part of the product consists of two parts: electronic and box / enclosure. The electronic component is built in a modular architecture so as to ensure permanent expansion of their functions, as well as the final product defined by the customer. The modules comprising the IZUM are the Central Module, Sensor, Power, Communication and Outputs. The central module consists of a central processor (MCU), NFC or BLE module for device configuration, LED and Buzzer; this module is the unique identification of the device in IZUM universe, this identifier will be created with a GUID (Globally Unique Identifier) which allows 5.3×10^{36} different identifiers. In this module, the data received by the other modules are processed. The sensor module may include the following sensors: light, temperature, humidity, proximity, accelerometer, GPS, microphone, PIR, Infrared and smoke. Since it is a modular solution, the customer will select which sensors you need for your device. This module will be constructed integration plates for external sensors existing on the market (eg the brand Libellium) and which increase the number of sensors that offers the product. The power module consists of the following versions: battery, batteries, IQ, USB and feeder 90 to 264V for industry. Each device must have at least one of the previous elements, some of which sensors influence the choice of module because they have power requirement that some of the alternatives are not sufficient. The communication module will provide the following methods: ZigBee / 802.15.4 / XBee with modules (2.4GHz, 868MHz, 900MHz), Lora (868 / 900MHz), GSM / GPRS (Quadband: 850MHz / 900MHz / 1800MHz / 1900MHz) 3G / GPRS (UMTS Tri-Band 2100/1900 / 900MHz and Quad-Band GSM / EDGE 850/900/1800/1900 MHz), WiFi and Bluetooth: Bluetooth Low Energy and Bluetooth Pro. With these options you can choose encompass 98% of existing reporting mechanisms on the market. Each device must have at least one of these methods of communication. The output module (output) allows the IZUM be a product differentiator all others since it allows the device to act on other objects which are not currently possible. This module is built a 12V output (most electronic equipment works with this voltage) and an infrared transmitter that will work with any device whose command use this technology. This modular structure and identifying the core module allows the B2Cloud no limit on the number of devices, as well as advance to this product licensing system integrating equipment that does not have

this IOT component (for example, you can integrate a IZUM device in air conditioning equipment and thus the equipment will become an IOT it will be possible to connect the device to the internet and control it from the internet). The other part of the physical component is the housing / casing. As the product is modular, the choice of modules causes the dimensions of the product to change configuration settings. The other component is the software product. The B2Cloud developed a Cloud platform, which receives all the data sent by IZUM devices or other devices configured in it, does its processing and sends to other devices actions resulting from the processing or provide the data in the application. Communications between devices and the server will use the MQTT protocol is a free protocol, low power consumption and allowing safety standards (encryption of messages) that is necessary for the product.

MARKETING

It will develop a Plan of Marketing SEO and PPC? the beneficiary states that due to the great need for a strong online presence is necessary to delineate SEO strategies (Search Engine Optimization) product website as well as the Pay Per Click Campaigns, so this marketing plan will support the decision of these strategies.

ORGANIZATIONAL

Organizational innovations deal primarily with people and the organization of work. The investments included in this typology relate to the acquisition of hardware and software related to the logistics system has yet been made for an investment in the realization of Energy Audit.

GVA (Gross Value Added) Post Project: **1.473.658,00 €**

BV (Business Volume) Post Project: **2.394.448,00 €**

Approval Date: **2016-11-29**