

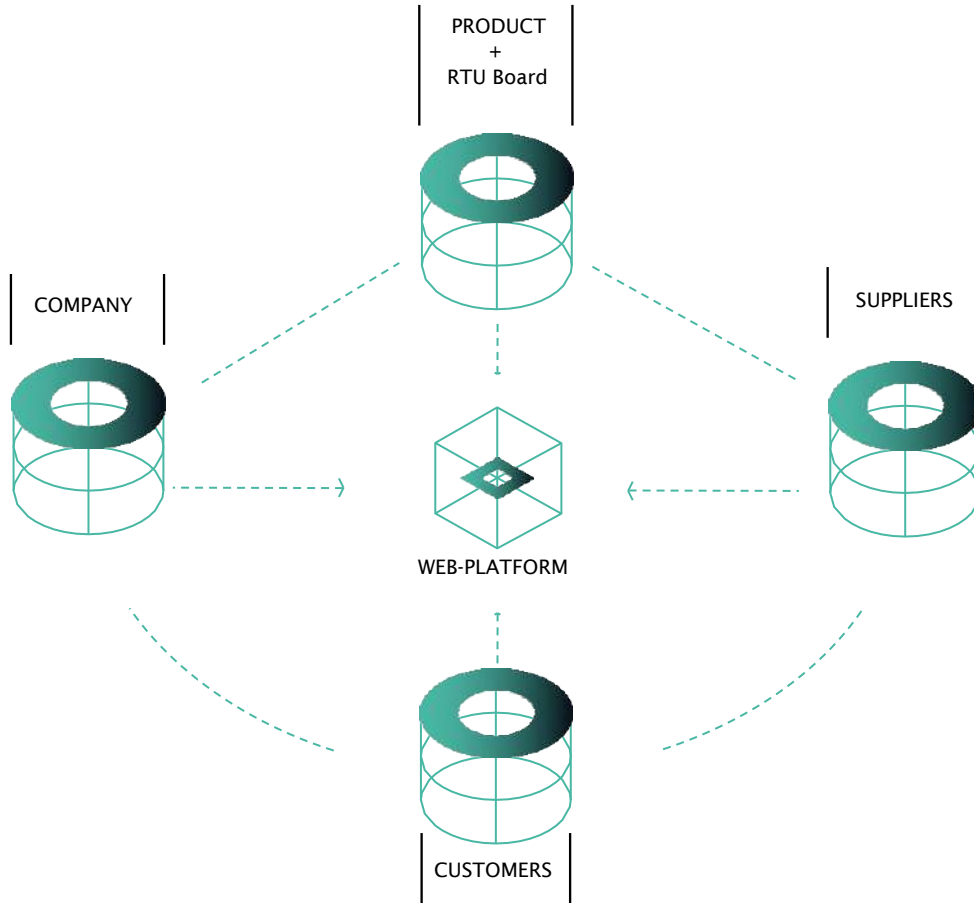
BRAINY C

What is it?

Brainy C is a smart telecommunication system that allows creating a synergic interaction between the manufacturing company, the suppliers, the product and the customer.

How?

Brainy C is a solution that integrates the RTU Board (Remote Terminal Unite Board - electronic control board) based on IoT / IIoT technologies on specific products. Brainy C allows the monitoring, the communication, the performance and functioning of the product. The front-end interaction with the product is embedded in our web-platform with multi-hierarchical access.



SOFTWARE

WEB
PLATFORM

REAL TIME
MONITORING

COMMANDS
MANAGEMENT

ANALYTICS

DESCRIPTIVE

DIAGNOSTICS

PREDICTIVE

PRESCRIPTIVE

HARDWARE

HUB
BOARD

-processing and exporting
of job performance
- Localization
- Engagement
- Commands reception and
actuation

-low power
-AI READY
-IoT retrofit
-low unit cost

FUNCTIONS

FEATURES

Applications



Household appliances industry



Automotive sector



Industrial catering



Farming industry



Mechanical sector



Energy sector

CASE STUDY— *Chokkino*

Our customer

The main objective of Live Better is to have a positive impact throughout the execution of its business. Live Better owns the brand/product "Chokkino", an innovative energy and nourishing drink, the alternative to coffee made by cocoa and water.

Its Needs

Live Better approached WEL with the aim of improving its Chokkino project, to optimize and create a commercial proposal with increased awareness of customer needs. WEL has delivered BRAINY C with the aim of monitoring the performance of all Chokkino machines installed in Italy and abroad. Our solution:

- RTU Board integrated with Chokkino machine electronic board
- WEL customized web platform with the KPIs as required by the customer

Qualitative advantages:

1. Real-time monitoring of Chokkino Machines arranged by location, product delivery, weather indication
2. Machine diagnostics
3. Alert failures and predictive maintenance
4. Automated re-supply of ingredients based on actual consumption
5. Machine firmware remote update



Quantitative Benefits:

1. Efficient costs reduction of maintenance
2. 35% of faults reduction
3. New marketing offers based on actual data, sales increase by 23%



DATA SHEET

PHYSICAL DIMENSIONS

Dimensions: 63mm x 41mm

Weight: 6.5g

HARDWARE PLATFORM

Processor: High performance ultra reduced power CPU 32KBytes

Self-Program- mable Flash

1KBytes EEPROM , 2KBytes

Internal SRAM

Board memory: Upto 2Mb Memory

External Power supply: 3.6VDC to 6VDC

Timing: Optional RTC circuitry

Sleeping Power consumption: 15uA

Power consumption range: 40-120mA
(depending on HW/Sensors setup)

COMMUNICATION OPTIONS

Mobile Network: 2G/3G/LTE daughter board

Wireless: WI-FI IEEE802.11 b/g/n
(P2P+ AP)

LPWAN: LoRa / SigFox

Wired: SPI | I2C | Digital/Analog I/O

SENSING OPTIONS

Ambient Luminosity

3Axis Accelerometer

Gyroscope

Magnetometer Humidity

& Temperature Magnetic
switch

Air Pressure/Quality

Audio activation

PHYSICAL INTERFACE & SIGNALING

External connectors: 5 Pins JST

LEDs: Radio activity status
(TX/RX), 2xCustom/status

ACCESSORIES AND EXPANSIONS

GPS Localization plus

antenna: Daughter Board

External Antenna: WIFI and LPWAN external antenna U.FL connectors

Internal Integrated Antenna: Ceramic
WiFi, Spring sigfox/Lora

Internal Power options: Battery

Expansion Buses: SPI expansion Bus
I2C expansion Bus

BATTERY RECHARGING OPTIONS

Solar charge

External wired DC

Battery

