

## Title of the challenge:

**Production plant optimization through the implementation of Internet of Things (IoT) technologies and Data Analysis to reduce costs and boost efficiency**

## The company:

**BYG Electronics** is a company dedicated to the production of electronic components. Renowned for its innovative approach, the company stands out as a leading designer of intercoms and loudspeakers for both vehicles and business settings. Since 1990, we've been providing electronic solutions and other complementary products, to meet our customers' diverse needs. Today, our footprint extends to over 20 countries worldwide.

See more at: <https://www.byg.com.co/>

## Full description\*

Established in 1990, BYG Electronics specializes in providing electronic solutions and manufacturing electronic components, such as intercoms and loudspeakers systems, for different applications in vehicles and business settings. Today, the company has a presence in over 20 countries worldwide.

BYG Electronics faces a significant business challenge: it needs to improve its efficiency and reduce production costs, in order to retain its international presence in a market segment that is both highly competitive and is continually influenced by technological shifts.

A potential partnership could focus on creating a solution to manage the production plant processes using IoT technology and Data Analytics. This would enable efficient production management and real-time monitoring of critical variables for strategic and operational decision-making.

This smart industry challenge will propel BYG Electronics towards more efficient and competitive operations in an ever-evolving industrial environment. Moreover, it will facilitate the company's digital transformation and its ability to adapt to new global market demands.

## What are we looking for?

A partner with expertise in developing and/or implementing solutions with IoT technologies and Big Data Analytics to improve production processes. The partner should be capable of:

- **Data Collection:** Embedding IoT sensors at various production points to gather real-time data on production, inventory, and environmental conditions.
- **Connectivity:** Establishing a robust network for secure data transmission from sensors to a control center.
- **Data Analysis:** Utilizing data analysis tools to process the gathered information and derive valuable insights about production efficiency.
- **Optimization:** Based on the data analysis results, pinpointing areas for improvement in the production process, like inventory management and production planning.
- **Monitoring:** Setting up a continuous monitoring and data collection system, to adjust operations as needed.

## What are we offering?

The partner could benefit by having information and support in terms of entry to Latin American markets and the identification of strategic partners, as well as joining efforts to face the technical and operational challenges that may arise during the innovation process.

The partners who develop the solution will have access to the current company data and could access to the production plant for the realization of the pilot.

In summary, the collaboration offers tangible benefits, such as access to both Latin American and North American markets. Together, we will face technological and operational challenges that may arise during open innovation, fostering new collaborations built on our combined capabilities to address the challenge and scale towards new business lines.

## **Opportunity area**

Smart production.

## **Looking for partners from the following regions**

Europe.

## **Specific areas**

Electronics.

## **Technologies**

Big Data Analytics; IoT; Machine Learning.