
Case Study

AoFrio's connectivity solution boosts client's sales visits by 75%

The commercial refrigeration industry, like the beverage and retail businesses, needs data-driven insights to enhance its cooler fleet potential. AoFrio's advanced IoT ecosystem allows beverage companies and refrigerator manufacturers to track their assets, ensure their temperatures are within the safety zone for quality purposes and gather vital data needed to generate preventive maintenance.

In this case study, we will explore how AoFrio's technology aided a global beverage brand in Argentina in the management of its refrigerator fleet, with a focus on managing the location of equipment in the field and detecting potential moved refrigerators.

Executive summary

Together, the customer and AoFrio created an advanced ecosystem of connected commercial refrigerators, capable of capturing data from their coolers in the field and translating it into meaningful insights that can be actioned to improve business management.

This business case for the customer was built upon addressing critical issues of inconsistency of data in their ERP (Enterprise Resource Planning) systems and frequent uncontrolled movement of coolers. There was a need to connect the coolers to an ecosystem that would alert when cooler movements occurred and where they were located, thereby reducing equipment loss, and improving operational efficiencies.



Challenge

In Argentina, the customer already had about 20,000 coolers with AoFrio [SCS controllers](#) accounting for approximately 30% of their fleet. Though the coolers had the controllers, they were yet to utilize the potential benefit of **asset management** using AoFrio's IoT ecosystem. The challenges that the company had in asset management were:

- Inconsistency of data in their ERP.
- Issues with the accurate location of coolers and a lack of alerts when they were moved.

Solution

To address these challenges, the customer and AoFrio planned and executed a trial with about 400 coolers already equipped with AoFrio's SCS controller. The pilot aimed to test AoFrio's platform for efficiency in the following operations:



Synchronization

Ensured synchronization of AoFrio SCS controllers with the mobile devices of the customer's sales team, which enabled monitoring of the assets found in the field.



Alert of moved coolers

Detected the movement of coolers and their location and provided information to the team.



Consistency of information

Detected inconsistencies in the addresses registered in their ERP, providing the company with accurate location information.

AoFrio's Management Dashboards

To enhance the potential of the coolers, the data captured from controllers within the coolers was delivered into AoFrio's efficient set of dashboards, with a focus on asset management. This dashboard was 100% automated and played a crucial role in the project's success. Provided with management and operational views for easy progress follow-up, AoFrio's dashboards are fitted with interactive action lists that guide customer decisions on visit prioritization and actions required.

Results

The project had some very positive outcomes for the customer. AoFrio's reliable and accurate connectivity solution brought several **benefits**.

The company was able to:

1. Detect inconsistencies in their ERP - approximately **25%** of the addresses registered in the customer master database were incorrect. AoFrio's system was able to correct them with accurate location coordinates.
2. Detect accurate location of **40%** of the moved coolers, which provided detailed information for avoiding these assets losses by recovering them;
3. There was a **75%** increase in recorded sales visits*. This was achieved by a massive deployment of the AoFrio Connect™ Track App (the sales team mobile app that enables the cooler location and its full data upload). The more people within the organization use this App, which operates passively, the greater the efficiency of having the entire fleet continuously monitored.

* measured in the last 30 days

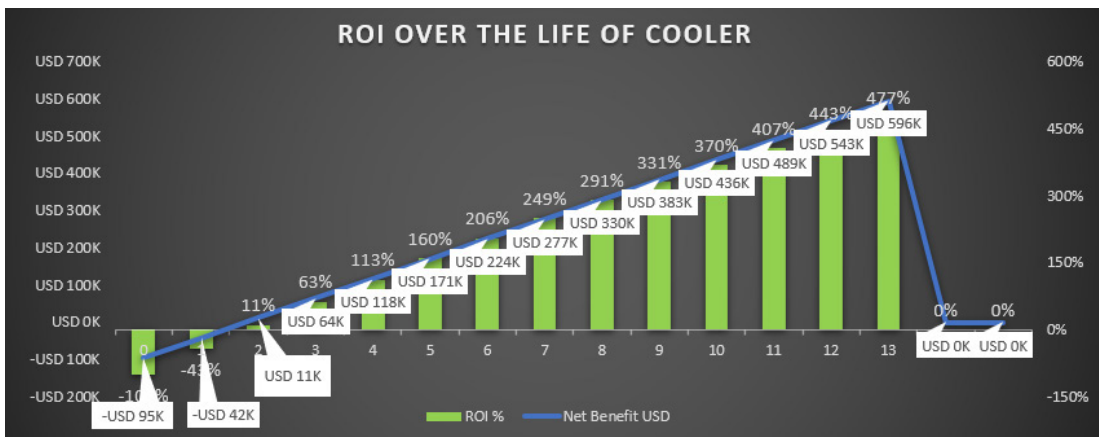
The Return on Investment and the next steps

Based on the power of moved cooler detection and the accurate information provided by AoFrio’s platform, there is a potential to expand this benefit for the full customer fleet, which would require connecting all the coolers with connected hardware in a retrofit action in the field. AoFrio also provides customers with the perfect solution for easy retrofitting of old coolers: the **Connect™ Monitor**, a multi-sensory device easily installed inside the coolers in the field that can provide information about cooler location, temperature, sales performance, and predictive maintenance.

An estimated calculation has been made to understand what the **impact of ROI and payback for future investments** could be if a retrofit program was considered by the customer. For this calculation, the following factors were assumed:

1. Potential purchase of Connect Monitors to carry out a retrofit program (5,000 units)
2. Average cost of New Cooler (estimated US\$ 1,000 as replacement cost in the event of loss or theft of coolers)
3. Cooler average life (13 years)
4. Reduce loss of refrigeration equipment (Annual loss of refrigeration equipment for the client is 4% of annual fleet loss).

The ROI was calculated only under the perspective of reducing cooler loss since currently the client has only considered focusing on asset management and is yet to consider AoFrio for the other value pillars. As shown below, the calculation suggests a project payback of nearly to 2 years.



AoFrio and the customer intend to collaborate to further quantify the other refrigeration solution pillars which are preventative maintenance, commercial actions, and energy savings, all of which will boost the ROI and the customer with even better payback results.



Conclusion

AoFrio's innovative connectivity solution has successfully demonstrated its value in transforming the beverage company's asset management in Argentina. IoT is the way of the future and businesses in the industry that are not utilizing this technology risk being left behind. As a leader in this field, AoFrio is making it easy for businesses to make the switch by providing an advanced IoT system for commercial refrigeration. Technology helps in the development of a robust ecosystem, delivering valuable insights to customers through sustainability and transformative technology.