



# AI Powered Maintenance Solution





# About Theia Innovation

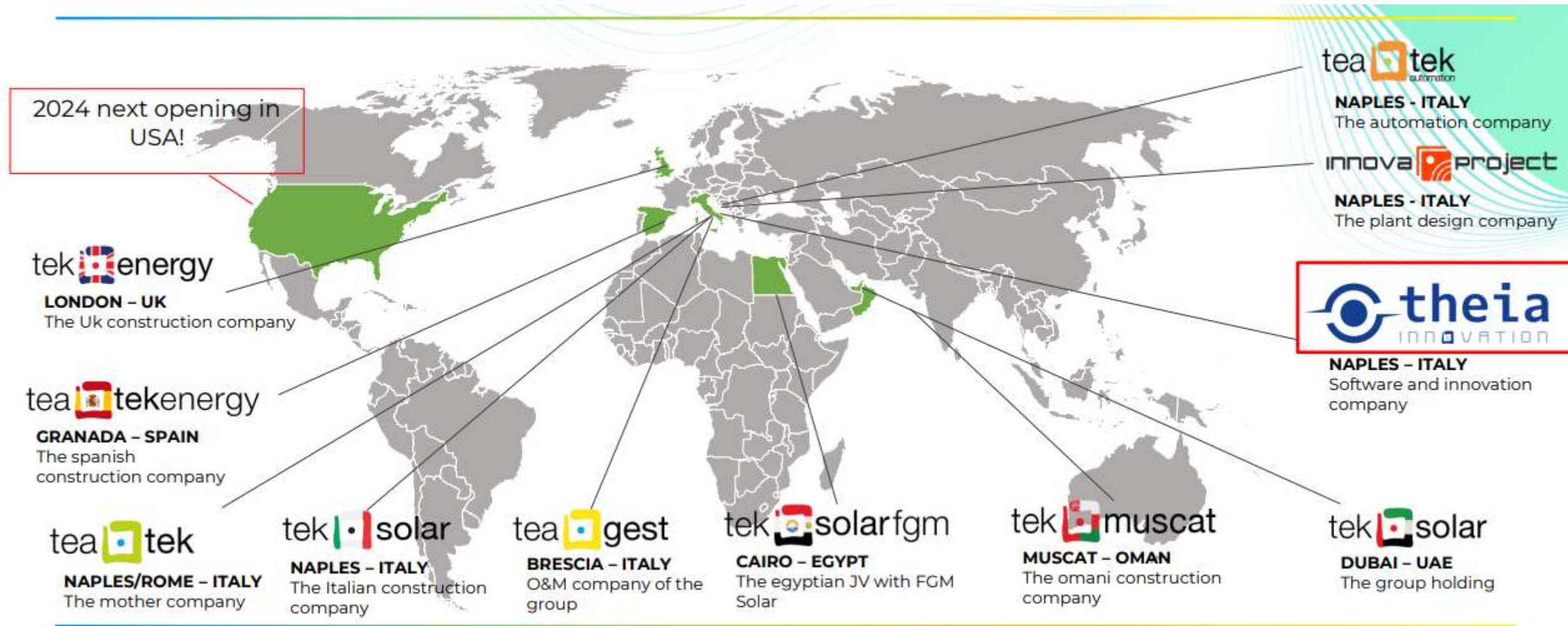
Theia Innovation, the pioneering innovation and R&D company of the Tea Tek industrial group, is dedicated to introducing cutting-edge innovations, aiming at simplifying and enhance work.

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# tea tekgroup



- Founded in 2009
- Approximately 950 employees globally
- More than 12 companies on 4 continents
- € 30 million in 2019
- € 35 million in 2020
- € 45 million in 2021

- High reliability and bankability company
- More than 4 Gwp installed worldwide
- In construction about 1.5 GW
- Long experience in design and production of automation lines and special machinery



# WHO WE ARE



**PAOLO SCHIATTARELLA:**

Founder & CEO

IT Expert. More than 20 years in Ericsson. Founder of the nonprofit organization “Napoli Blockchain”.

Founder and CEO of Theia Innovation.



**CELESTINO SANTAGATA**

Founder & CTO

Data Scientist. BA in Aerospace Engineering, MD in

Data Science, II Level Master in Big Data. Founder and President of “Napoli Blockchain”. Founder and

CTO of Theia Innovation.



# AIGO

AIGO is an AI-powered end-to-end solution designed to assist field technicians and engineers in resolving issues. By integrating advanced tools such as IoT, AI, Augmented Reality and Blockchain, AIGO provides an efficient system for plants monitoring and troubleshooting.

## Key components

- Advanced and customizable IoT platform for device connection, control and monitoring.
- Intelligent rule engine for alarming and automation.
- Integration with helpdesk and ticketing systems.
- Mobile, tablet and AR Headset based solution.
- Configurable and intelligent maintenance instructions with text, video, images, documents.
  - AI-based Assistant.
  - Fully connected Digital Twin.
    - Automatic ticket closing.
    - Blockchain certification.
      - AR object recognition





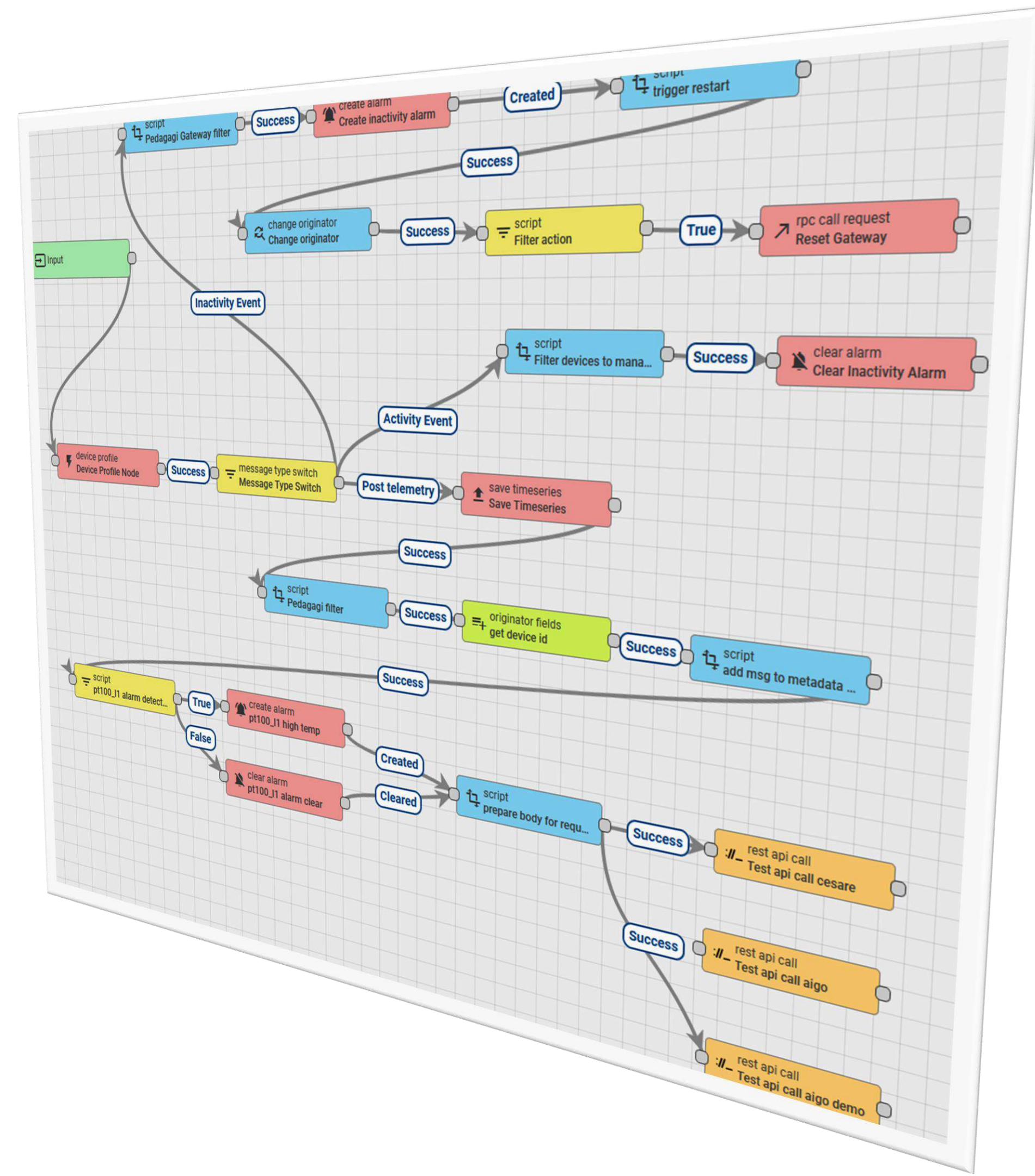
# Advanced IoT Platform

- AIGO integrates an advanced IoT platform monitor and control industrial plants and devices.
- IoT cloud and on-premises solutions.
- Provisioning of devices, plants, and customers, defining relationships between them.
- Collects and visualizes data from devices and plants.
- Provides tools for analyzing telemetry and triggering alarms via a complex rule engine.
- Allows users to remotely control devices and create advanced, intelligent automations.
- Supports the design of dynamic, responsive dashboards to present telemetry data and insights.
- Enables creation of specific features using customizable rule chains.
- Facilitates pushing device data to other systems.

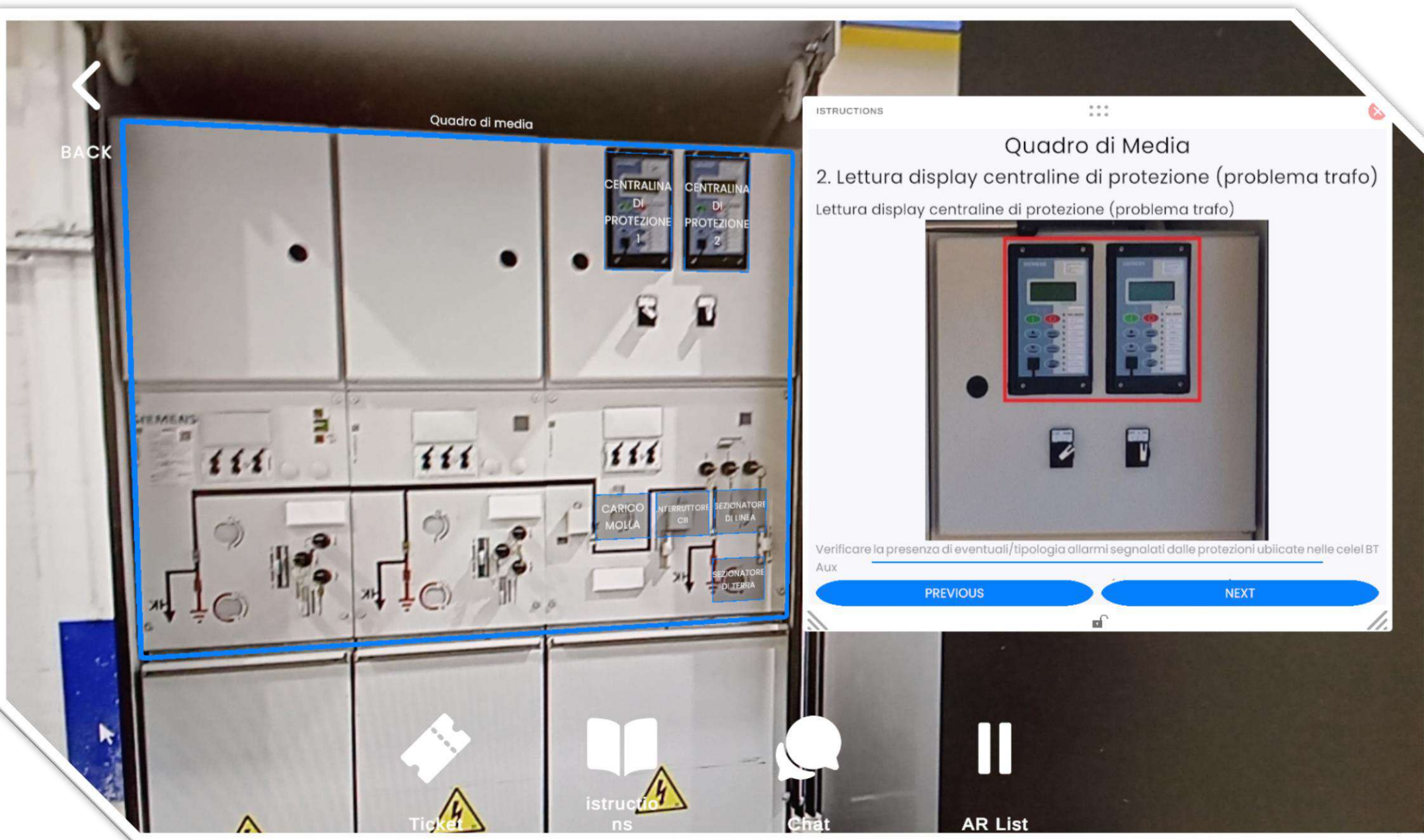


# Intelligent automation

- AIGO features a powerful, customizable rule engine for complex event processing.
- Users can design sophisticated workflows tailored to their specific IoT applications.
- Manages alarms by creating, updating, or clearing them based on specific conditions.
- Triggers actions for device lifecycle events, such as sending alerts when a device goes online or offline.
- Facilitates dynamic data loading by retrieving additional information (e.g., temperature thresholds) from device attributes.
- Integrates with external systems by triggering REST API calls, including **Artificial Intelligence models**.
- Sends event-driven notifications to the AIGO App when complex events occur.
- Incorporates user preferences into event processing to enhance user experience.







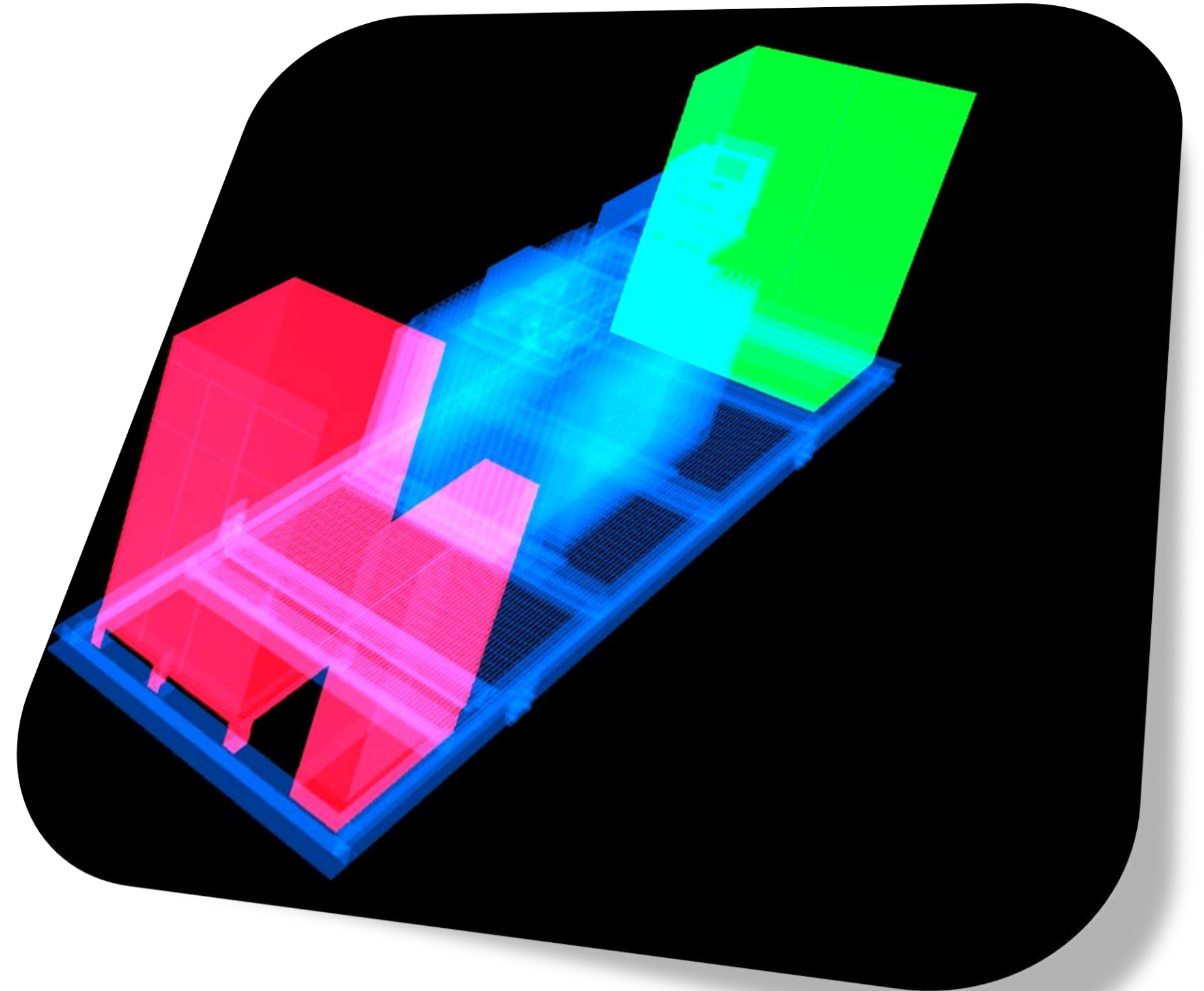
## Tailored maintenance instructions and real-time documentation access

- AIGO provides tailored maintenance instructions customized to specific devices and tasks.
- Technicians and engineers can access these instructions in real-time.
- Maintenance instructions include photos, videos, and text descriptions of workflows.
- Real-time access to instructions improves troubleshooting and issue resolution efficiency.
- Availability of relevant documentation enhances the accuracy and effectiveness of maintenance tasks.



## Augmented Reality Digital Twin and object recognition

ALGO incorporates a fully connected Digital Twin. Technicians and engineers can virtually interact with equipment, visualizing various components and identifying potential issues. This visualization capability enhances troubleshooting efficiency and accuracy.





# AI Virtual Assistant

AIGO's AI-based assistance helps field engineers by providing context-specific maintenance guidance from technical documentation and field data.

It retrieves relevant instructions, detects and analyzes images from the documentation, and offers a technical guidance through provided knowledge base and integration with enterprise systems.

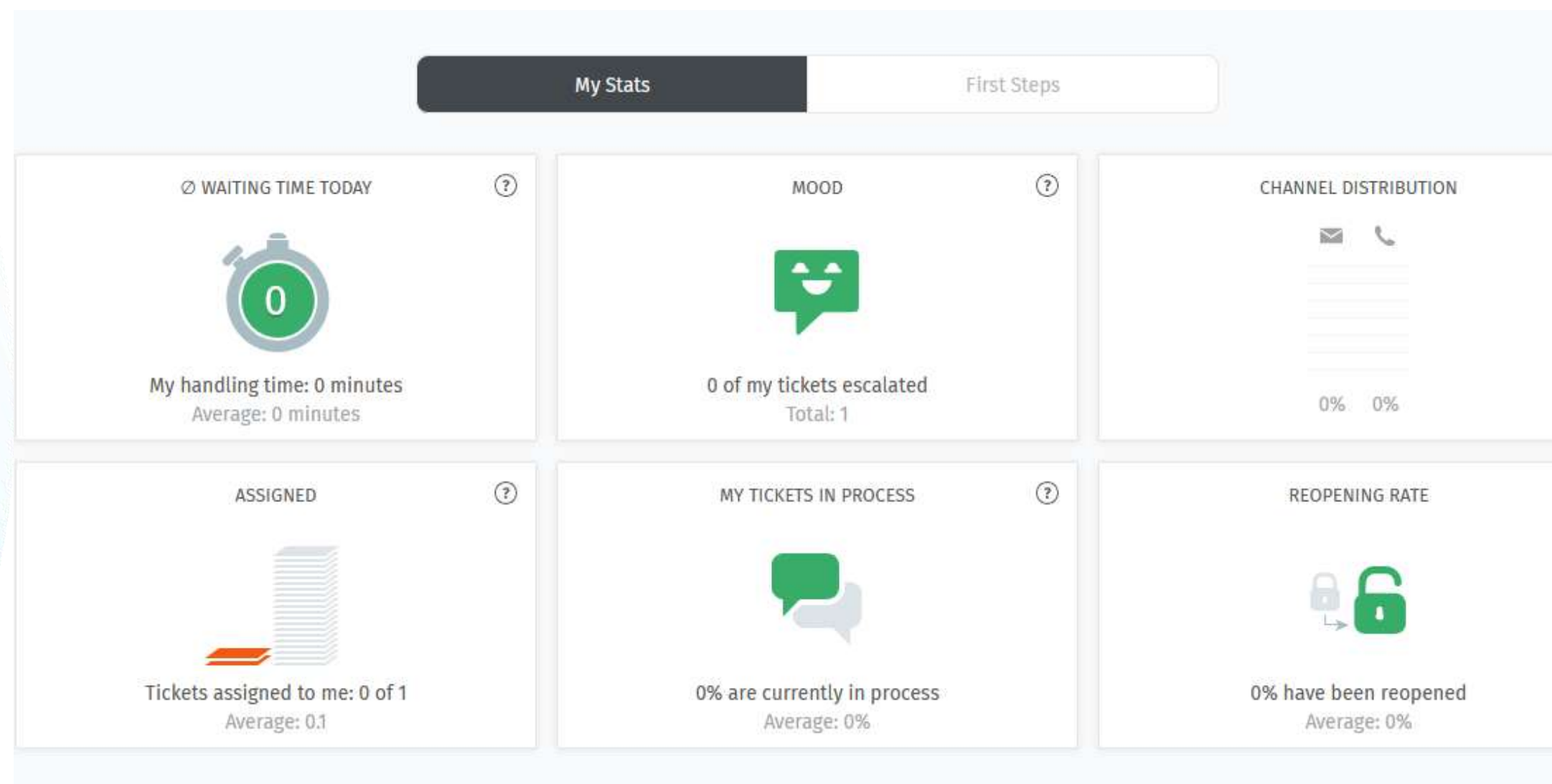
The AI also adapts recommendations in real time and learns from historical maintenance data, ensuring efficient problem-solving for both novice and experienced technicians.





# Enhancing efficiency with automatic or manual ticket dispatching

- AIGO streamlines the ticketing process with automatic and manual dispatching options.
- Enables monitoring of the entire maintenance process, including priority, severity, user roles, and KPIs.
- Automatically closes tickets after issue resolution, reducing administrative effort and ensuring timely completion.
- Allows technicians and engineers to manually close tickets when needed, offering flexibility and control.







To be worked

Solved archive

Profile

Ticket ID: 27



Issue: test\_cabinet\_quadro\_media - Guasto nel quadro di Media

Opened at: 29/07/2024 16:24

## Mobile, Tablet and AR Headset App

AIGO is available for tablet, smartphone and AR Headset. It is a complete application with which the technician can independently solve all problems on the field, even offline!



# Impacts and Benefits

AIGO provides numerous benefits for field technicians and engineers. It offers a user-friendly interface, access to tailored maintenance instructions, and real-time documentation. AIGO increases efficiency, accuracy, and collaboration in maintenance issue resolution.

The implementation of AIGO has a significant impact on maintenance issue resolution. It improves response time, reduces downtime, and enhances the overall efficiency of maintenance operations. With its advanced tools and features, AIGO empowers technicians and engineers to resolve issues more effectively, leading to improved equipment performance and customer satisfaction.





## Conclusion and future of AIGO

AIGO is a powerful AI-powered solution that revolutionizes maintenance issue resolution. With its integration of IoT, AI, Augmented Reality (AR), and Blockchain, AIGO provides a comprehensive and efficient system for troubleshooting. The innovative key features make AIGO a valuable tool for field technicians and engineers. As technology continues to advance, AIGO has the potential to further transform maintenance operations, improving productivity and driving innovation in the industry.



Ready to revolutionize your maintenance operations?



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