



Streamlining FlowLab's process for inventory, task management and documentation repository by Trendsic Corporation, Inc.

EXECUTIVE SUMMARY

FlowLab, LLC is a full-service, environmentally-friendly calibration option to all industries that use Fluid Flow Meters, offering on-site/mobile, self-efficient Calibration Labs that provide their clients with superior precision and productivity. Recognizing the additional need for a centralized task management and documentation repository, FlowLab reached out to Trendsic to support the further streamlining of their client's processes.

CHALLENGES:

Outdated Systems and Procedures

- Large numbers of inventory, assets, or mechanical equipment without an organized way of providing support, scheduled maintenance, or requesting replacements
- Technicians walking around chemical plants and manufacturing facilities with a clipboard full of specification documents and inspection instructions to review thousands of pieces of equipment
- Task assignment, documentation, and instructions all found on paper and manual

THE SOLUTION:

Create a Geolocation & AI Platform to Manage Projects and Inventory

Trendsic created a unique, streamlining platform where companies can:

- Store their inventory, equipment or other assets
- Create projects for specific inspection or maintenance efforts, assign assets to be evaluated and assign specific users to tasks
- Observe team member productivity charts in real time
- Manage documentation for each asset
- Access real time maps of asset locations

RESULTS:

Revolutionary Reporting and Accelerated Turnarounds

Using mobile devices, users scan NFC tags or QR codes on assets to pull up the assets profile that contains all the information they need to do their job including:

- Specification documentation
- Request replacement
- Inspection instructions
- Add notes and completed inspection documentation
- Request remote support

For questions and scenarios not handled by existing documentation, users can ask the built-in AI chatbot.

Trendsic's custom software solutions were able to support and enhance FlowLab's vision of operational efficiency, identifying bottlenecks, minimizing the risk of human errors, and improving overall accuracy and reliability via tailored development, geolocation services and artificial intelligence.

TECHNOLOGY USED:

- ASP.NET Web API
- Docker Containers
- CapacitorJS
- PDF and Image editing
- Entity Framework Core
- AWS App Runner
- Android and iOS
- Auth0 Authentication
- SQL Server
- Angular
- NFC scanning