

Industry: Agriculture

Summary: Our client needed to streamline real-time grain inventory management, automate replenishment to maintain product quality ensuring integration with the existing ERP system.

Challenges:

- Struggling with fragmented view of inventory
- Lack of control over replenishment processes, impacting operational efficiency
- High risk of product spoilage and compromised quality
- Lack of streamlined reporting led to disorganized data
- Disjointed application integration created inefficiencies across systems
- Difficulty in managing user roles and access
- Inability to manage inventory on the go

Value:

- Improved inventory monitoring
- Improved product maintenance
- Efficient access management
- Exceeded user expectations
- Automated operations

Technology: Kotlin/JVM, React.Js, Next.Js, PostgreSQL, IoT Sensors, REST, Docker, Kubernetes, and Prometheus.

Project goal:

Create an Inventory Management System that enables grain traders to monitor their inventory in real time, automate replenishment processes, and track storage conditions for product quality maintenance.

Key objectives:

1. Ensure real-time inventory management.
2. Automate the replenishment process to avoid product shortages.
3. Monitor storage conditions (such as temperature and humidity) and alert users to adverse changes.
4. Provide easy access to analytics and reports for efficient decision making.
5. Integrate with existing ERP and other applications for seamless data exchange.
6. Provide robust user management with configurable access settings.
7. Ensure system accessibility via web and mobile devices.

Curie Tech provided the following solutions:

- Real-time monitoring of current stock levels and delivery status;
- Automatically generated orders when stock levels drop;
- Temperature and humidity tracking with problem alerts;
- Detailed reports on product turnover, stock status and storage conditions;
- Integration with existing ERP systems via API;
- Advanced access control and user activity monitoring features;
- Access to the system from any device for convenient management.



VALUE

Improved inventory monitoring. Enabled comprehensive monitoring of inventory across multiple warehouses.

Improved product maintenance. Prevented product spoilage by monitoring temperature and humidity.

Efficient access management. Improved reliability and easier management with advanced access control features.

Exceeded user expectations. Delivered a bespoke IMS solution to meet specific user requirements.

Automated operations. Streamlined operations through automatic job generation, transaction monitoring and seamless integration with external systems, resulting in overall improved organizational efficiency.



ABOUT CURIE TECH

Curie Tech is a full-service software development company that helps businesses turn ideas into top-quality digital products. We also know what it takes to make white-label a success.

Extensive IT market expertise enables us to spot our clients' needs and deliver the perfect solution. We help businesses grow and avoid pitfalls that might harm their resources.

Our clients rely on our expertise to develop the best solutions in Affiliate Marketing, Custom Software Development, WEB3 Development, Web Data Extraction, AI, ML, and Data Science. We offer the following services in Healthcare, Agriculture, Professional Services, Marketing & Sales, iGaming:

- **AI Development**
- **Cloud and DevOps**
- **CRM, HRM, ERP Systems Development**
- **Responsive Web Designs**
- **Intelligent Automation**
- **Distributed Systems Services**
- **Mobile Application Development Services**
- **IT Network Services**

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