

1. Overview

This proposal outlines the development of a secure, real-time manufacturing status dashboard for Daikibo Industries. The objective is to create a web-based solution that provides live telemetry data on the operational health of machinery across Daikibo’s four factories, each comprising nine machines. The dashboard will function exclusively within the client’s internal network, integrating seamlessly with their existing authentication infrastructure to ensure secure access.

The solution aims to enhance operational visibility, enable proactive fault detection, and simplify access to machine health information through a single, intuitive interface. This dashboard will support better decision-making and minimize production downtime by surfacing critical issues in real-time.

2. Scope

The proposed dashboard will include the following features:

* **Single-Page Interface**: A unified, responsive web interface that displays the real-time status of all 36 machines (9 per factory × 4 factories).
* **Collapsible/Expandable Views**: Users can expand or collapse factory-level sections to view or hide individual machine statuses. This improves clarity and supports focused diagnostics.
* **Historical Status Logs**: Each machine section will include a brief status history view, allowing quick reference to recent performance and issue patterns.
* **Authentication & Security**: The dashboard will be accessible only within Daikibo’s internal intranet. User authentication will be integrated with the client’s internal authentication server, allowing staff to log in with their company-wide accounts.
* **Real-Time Data Visualization**: Telemetry data will be fetched in real time, and machine statuses will be updated dynamically using visual indicators (e.g., green = healthy, yellow = warning, red = critical).
* **Optimized UI/UX**: Designed for engineers and operations managers, the UI will prioritize readability, simplicity, and quick access to key status insights.



3. Estimate

The total estimated effort required to deliver the complete solution is **160 man-hours**, distributed across development, testing, and integration phases as follows:

| **Phase** | **Estimated Hours** |
| --- | --- |
| UI/UX Design | 20 hours |
| Front-End Development (React/HTML/CSS) | 40 hours |
| Back-End Development (API, Data Integration) | 40 hours |
| Authentication & Security Integration | 20 hours |
| Testing & QA | 20 hours |
| Intranet Integration & Deployment | 10 hours |
| Buffer / Minor Revisions | 10 hours |
| **Total** | **160 hours** |

This estimate assumes access to existing telemetry APIs and authentication services. If additional backend infrastructure needs to be developed, further hours may be required.

4. Timeline

Below is the proposed Timeline:

| **Date** | **Milestone** |
| --- | --- |
| 1st September 2024 | Project kickoff and UI/UX design starts |
| 5th September 2024 | Completion of wireframes and UI design |
| 6th – 20th September 2024 | Front-end and back-end development |
| 21st – 25th September 2024 | Authentication integration and testing |
| 26th – 29th September 2024 | Full testing, debugging, and optimization |
| 30th September 2024 | Final deployment within intranet |
| October 2024 onward | Ongoing support and maintenance begins |

5. Support

Our team is committed to providing **continuous support** following the successful deployment of the dashboard. This includes:

* **Bug Fixes**: Immediate attention to any post-deployment issues or failures.
* **Support Tickets**: A dedicated channel for the Daikibo team to raise issues or enhancement requests.
* **Performance Monitoring**: Regular health checks of the system for stability.
* **Feature Enhancements**: Additional functionality can be scoped and added as needed (e.g., email alerts, predictive maintenance analytics).

All support activities can be governed under a Service Level Agreement (SLA) to ensure timely response and resolution.