

1. Overview

We are excited to present a plan to develop a **secure private dashboard** that will improve machine monitoring across Daikibo’s 4 factories. This dashboard will provide **real-time insights** on the health of machines into the condition and performance of machines, helping Daikibo maintain efficiency and reduce downtime across all 4 Daikibo factories.

To keep **data safe and secure**, the dashboard will be available **only within Daikibo’s Intranet**—a private network used by the company. It will also connect with Daikibo's **internal authentication system**, allowing employees to log in with their existing company accounts. This ensures a **smooth and secure** user experience.

This new tool will help Daikibo **monitor its machines more efficiently**, make quicker decisions, and keep operations running smoothly.

2. Scope

This project involves the development of a **comprehensive private dashboard** designed to enhance **machine monitoring and factory efficiency** across Daikibo’s operations.

The scope of this project entails the creation of a comprehensive private dashboard featuring the following capabilities:

**Factory Monitoring**

* The dashboard will provide **real-time insights** into all four Daikibo factories: **Meiyo, Seiko, Berlin, and Shenzhen**.
* This ensures **holistic monitoring** of operations across different locations, helping factory managers make informed decisions.

**Machine Categories**

* The system will cover a wide range of **essential industrial machines**, including: CNC Machines, Laser Cutters, Heavy-Duty Drills, Spot Welders, Laser Welders, Metal Presses, Furnaces, Conveyor Belts, Air Wrenches
* By including various machine types, the dashboard will cater to **all key production processes** at Daikibo.

**Health Status Indicators**

* Each machine will be classified under **two primary categories** for easy monitoring:
  + - 🟢 **Healthy** – Functioning within optimal conditions.
    - 🔴 **Unhealthy** – Requires attention or maintenance.
* **visual indicators** will allow workers and engineers to quickly assess machine health **at a glance**.

**Single-Page Overview**

* + Users will see a **real-time snapshot** of all monitored machines **on one screen** upon logging in.
  + This ensures **quick, efficient data assimilation**, reducing time spent searching for information.

**Collapsible/Expandable View**

* + The dashboard will feature **collapsible and expandable sections**, allowing users to customize their view.
  + This flexible design ensures that users can **focus on relevant information** while keeping other sections neatly hidden.

**Historical Data & Analytics**

* In addition to real-time monitoring, users will be able to **review past machine status changes** over time.
* This feature will support:
* **Trend analysis** – Identifying recurring patterns.
* **Predictive maintenance** – Reducing unexpected machine failures.
* **Data-driven decision-making** – Optimizing operations based on historical insights.

By integrating these features, **Daikibo’s factory** teams will gain a powerful tool to **improve efficiency, reduce downtime**, and **optimize machine performance**. The combination of **real-time data, historical analysis**, and **user-friendly customization** makes this **dashboard** a critical asset for modern industrial operations.



3. Estimate

An estimate of the total number of man-hours needed to get this project done + a breakdown of those hours into development, testing, and integration of the product in the client’s intranet.

* **Development:** 200 man-hours
* **Factory Monitoring Implementation:** 50 hours
* **Machine Categories Integration:** 70 hours
* **Health Status Display:** 50 hours
* **Single-Page Overview Design:** 65 hours
* **Testing:** 85 man-hours
* **Integration:** 45 man-hours
* **Total Estimate:** 350 man-hours

4. Timeline

* **1st September 2024** – Design starts
* **15th September 2024** – Development phase begins
* **1st November 2024** – Factory monitoring implementation
* **15th November 2024** – Machine categories integration
* **1st December 2024** – Health status display development
* **15th December 2024** – Single-page overview design
* **1st January 2025** – Testing phase begins
* **15th January 2025** – Integration phase starts
* **1st February 2025** – Final review and adjustments
* **15th February 2025** – Project completion and deployment

5. Support

To ensure ongoing support for the private dashboard developed in this project, we provide a structured approach to maintenance, scalability, and optimization.

* **System Monitoring & Performance Optimization -** Continuous tracking of the health status of the 9 machines across Daikibo’s 4 factories. Performance audits and proactive troubleshooting to maintain real-time telemetry accuracy.
* **Security & Authentication Maintenance -** Regular updates and security enhancements to align with evolving authentication protocols. Seamless syncing with Daikibo’s internal authentication server, ensuring secure access via company-wide accounts.
* **Bug Fixes & Issue Resolution** - Clients can rely on ongoing maintenance to swiftly identify and resolve any technical issues or bugs. Regular updates ensure optimal system stability and functionality.
* **Support Tickets & Assistance** - A dedicated support system is available to address inquiries, troubleshoot concerns, and provide assistance. Whether it's a minor question or an urgent issue, help is readily accessible.
* **New Functionality & Upgrades**  
  The product will continuously evolve with enhancements based on user feedback and industry advancements. Future updates will integrate new features to improve usability and efficiency.

Through these commitments, we ensure the long-term reliability and scalability of the solution, allowing uninterrupted operations and seamless user experience.