

1. Overview

We are pleased to present this development proposal for the creation of a private dashboard that will provide real-time health status updates for the 9 machines located in each of Daikibo's 4 factories. This dashboard will offer a comprehensive view of the manufacturing processes, ensuring timely alerts in case of any anomalies or issues. The primary objective is to enhance Daikibo's operational efficiency and facilitate proactive maintenance.

2. Scope

The project will encompass the following key functionalities:

**Dashboard Overview:** A single-page dashboard accessible exclusively within Daikibo's Intranet. The dashboard will provide an at-a-glance overview of the health status of all 36 machines across the 4 factories.

**Machine categories:** The dashboard will be designed to accommodate different machine categories vital to Daikibo’s operations, such as Construction Equipment, Mining Equipment, Agricultural Machinery, Energy and Power Generation Equipment and Transportation and Logistics Equipment, etc.

**Factory and Device Hierarchies:** The dashboard will support a collapsible/expandable view, allowing users to drill down to specific factory levels for a detailed overview. Furthermore, users can access individual devices, viewing their current statuses and historical data.

**Authentication Integration:** User authentication will be seamlessly synced with Daikibo's internal authentication server. Employees can access the dashboard using their existing company-wide accounts, ensuring a secure and streamlined user experience.

**Real-time Updates:** The dashboard will provide real-time updates, ensuring that users have access to the most current information about the status of each machine.

**Alerting Mechanism:** The system will be equipped with smart alerting mechanisms to notify relevant personnel immediately in the event of critical issues or machine malfunctions.

**Historical Data:** Users can access historical data and trends for each device, facilitating data-driven decision-making and root cause analysis.

To gain a comprehensive visual understanding of the proposed dashboard’s layout, the functionalities of its collapsible/expandable sections, and the visualization of historical data, please refer to the attached graphical representations.



3. Estimate

* **Development:** We estimate a total of 600 man-hours for the development phase, which includes front-end and back-end development, database setup, and integration with Daikibo's authentication server.
* Dashboard & Machine categories: 250 man-hours
* Factory and Device Hierarchies: 100 man-hours
* Real-time Updates: 100 man-hours
* Alerting Mechanism: 100 man-hours
* Historical Data: 50 man-hours
* **Testing:** The testing phase will require approximately 200 man-hours to ensure the dashboard functions smoothly, is responsive, and meets security standards. This includes unit testing, integration testing, and user acceptance testing.
* **Integration:** Integrating the dashboard with Daikibo's existing systems and ensuring seamless authentication will take an estimated 150 man-hours.

Total Man-Hour Estimate: 950 man-hours

4. Timeline

* **Milestone 1 (Week 1-2):** Project kickoff, requirements gathering, and architecture design.
* **Milestone 2 (Week 3-6):** Development phase, including front-end and back-end development.
* **Milestone 3 (Week 7-8):** Testing phase, including unit, integration, and user acceptance testing.
* **Milestone 4 (Week 9-10):** Integration with authentication server and final testing.
* **Milestone 5 (Week 11):** Deployment and Go-live.
* **Milestone 6 (Ongoing):** Continuous product support, including bug fixes, support ticket resolution, and potential enhancements.

5. Support

Daikibo Industrials can rely on our dedicated support services to ensure the continued success and reliability of the manufacturing status dashboard. Our support includes the following:

**1. Bug Fixes and Issue Resolution:**

* Timely identification and resolution of any software bugs or issues that may arise during the usage of the dashboard.
* A dedicated support team to address and prioritize bug fixes, minimizing downtime and disruptions to operations.

**2. 24/7 Monitoring and Alerting:**

* Continuous monitoring of the dashboard's performance and health.
* Proactive alerting and immediate response to critical system failures or anomalies, ensuring minimal disruption to operations.

**3. User Support and Training:**

* Comprehensive user support services, including a helpdesk for addressing user queries and issues.
* User training programs to ensure that Daikibo's personnel can maximize the value of the dashboard.

**4. Security Updates and Maintenance:**

* Regular security audits and updates to protect against emerging threats and vulnerabilities.
* Ongoing maintenance to keep the dashboard up-to-date with the latest technologies and best practices.