

For: Daikibo Corporation   
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**1. Overview**

This proposal offers a comprehensive solution for creating Daikibo's Manufacturing Intelligence Dashboard—a sophisticated real-time monitoring system designed to give immediate visibility into the operational health of your manufacturing environment. The solution will include a centralized command center displaying the live status of 36 critical machines spread across your four production facilities.

Our approach focuses on building an enterprise-grade platform that smoothly integrates with your existing IT infrastructure while offering an easy-to-use experience. The dashboard acts as a strategic tool, enabling proactive maintenance decisions and reducing unplanned downtime through ongoing telemetry analysis and smart status reporting.

The system architecture emphasizes security, scalability, and performance, making sure that your manufacturing data stays protected within your corporate network while providing real-time insights to authorized stakeholders.

**2. Scope**

The Manufacturing Intelligence Dashboard will encompass the following comprehensive functionality based on the provided wireframe specifications:

**Core Dashboard Features:**

* **Hierarchical Factory Overview:** Clean, card-based interface displaying all four Daikibo facilities (Meiyo, Seiko, Berlin, Shenzhen) with immediate visual status indicators using checkmarks (✓) for healthy facilities and X marks (✗) for facilities with issues
* **Expandable Factory Views:** Interactive collapse/expand functionality allowing users to drill down into individual factories to reveal the 9 machines within each facility, as demonstrated in the Shenzhen factory expansion
* **Individual Machine Monitoring:** Detailed machine-level displays showing equipment names (CNC, LaserCutter, HeavyDutyDrill, SpotWelder, LaserWelder, MetalPress, Furnace, ConveyorBelt, AirWrench) with dedicated status icons and real-time connectivity indicators
* **Historical Status Tracking:** Expandable machine entries revealing detailed status history with timestamps (e.g., "Status: Unhealthy - 2min ago", "Status: Healthy - 12min ago") and "Load More" functionality for extended historical analysis
* **Real-Time Update Indicators:** Live timestamp displays showing "Last update" information for each facility and machine, ensuring operators know the freshness of telemetry data

**Visual Design Elements:**

* **Intuitive Status Indicators:** Clear visual hierarchy using green checkmarks for healthy systems, red X marks for problematic equipment, and connectivity icons to show telemetry status
* **Responsive Card Layout:** Clean, modern interface design with consistent spacing and typography for optimal readability across different screen sizes
* **Progressive Disclosure:** Smart information architecture that presents overview data first, with detailed information available through user-controlled expansion
* **Timestamp Precision:** Granular time tracking showing updates down to the minute level for critical operational awareness

**Security & Access Management:**

* **Intranet-Exclusive Deployment:** Application hosted entirely within Daikibo's secure network perimeter
* **Enterprise Authentication Integration:** Seamless single sign-on (SSO) connectivity with your internal Active Directory or LDAP infrastructure
* **Session Management:** Secure user session handling with automatic timeout and re-authentication protocols

**Technical Implementation:**

* **Real-Time Data Streaming:** Live telemetry integration ensuring status updates reflect current operational conditions with sub-minute refresh rates
* **Scalable Architecture:** Backend infrastructure designed to handle concurrent users across multiple facilities without performance degradation
* **Mobile-Responsive Design:** Cross-device compatibility ensuring the dashboard functions seamlessly on desktop workstations, tablets, and mobile devices



**3. Estimate**

**Total Project Investment: 285 Man-Hours**

**Development Phase: 180 Hours**

* Frontend application development: 75 hours
* Backend API and data processing services: 65 hours
* Authentication system integration: 25 hours
* Real-time telemetry connection and optimization: 15 hours

**Quality Assurance Phase: 65 Hours**

* Comprehensive unit testing across all components: 25 hours
* Integration testing with existing systems: 20 hours
* User acceptance testing and stakeholder validation: 15 hours
* Performance and security testing: 5 hours

**Deployment & Integration Phase: 40 Hours**

* Production environment setup and configuration: 15 hours
* Authentication server synchronization: 10 hours
* Data migration and system validation: 10 hours
* Staff training and knowledge transfer: 5 hours

**4. Timeline**

**[1st September 2024]** **Project Initiation & Requirements Gathering**

* Stakeholder meetings and detailed requirement documentation
* Technical architecture planning and system design specifications

**[8th September 2024]** **UI/UX Design Phase Completion**

* Wireframe refinement and visual design approval
* User experience flow validation and interface mockups

**[15th September 2024]** **Development Phase Kickoff**

* Backend infrastructure setup and API development begins
* Frontend framework implementation and component development

**[29th September 2024]** **Core Development Milestone**

* Dashboard interface fully functional with telemetry integration
* Authentication system synchronized with internal servers

**[6th October 2024]** **Testing Phase Initiation**

* Comprehensive quality assurance testing across all components
* Performance optimization and security validation

**[13th October 2024]** **User Acceptance Testing**

* Stakeholder validation and feedback incorporation
* Final adjustments and bug resolution

**[20th October 2024]** **Production Deployment**

* Intranet environment setup and system configuration
* Staff training sessions and knowledge transfer

**[27th October 2024]** **Project Go-Live**

* Full system launch with monitoring and support
* Post-deployment optimization and performance tracking

**5. Support**

Our commitment to Daikibo extends well beyond the initial deployment through our **Comprehensive Support Partnership**:

**Immediate Response Services:**

* **Priority Support Channel:** Dedicated technical support line with guaranteed 4-hour response time for critical issues
* **Proactive Maintenance:** Regular system health monitoring and preventive maintenance scheduling
* **Bug Resolution Guarantee:** All software defects addressed within established service level agreements

**Continuous Enhancement Program:**

* **Feature Evolution:** Quarterly assessment of new functionality opportunities based on operational feedback
* **Technology Updates:** Regular platform updates ensuring compatibility with evolving infrastructure
* **Performance Optimization:** Ongoing analysis and improvement of system performance metrics

**Knowledge Partnership:**

* **Training Programs:** Comprehensive user training and administrator certification programs
* **Documentation Library:** Continuously updated technical documentation and user guides
* **Strategic Consulting:** Advisory services for manufacturing intelligence strategy and best practices

This partnership ensures that your Manufacturing Intelligence Dashboard remains a valuable, evolving asset that grows with your operational needs and technological advancement.

*This proposal represents our commitment to delivering a world-class manufacturing monitoring solution tailored specifically to Daikibo's operational excellence requirements*