

## **Kanba-DO**

### **Business Description**

#### **Why (Problem / Motivation)**

In today's busy world, managing tasks and staying productive can be overwhelming. People juggle multiple projects, deadlines, and responsibilities, often losing track of priorities or how efficiently they complete work. Traditional productivity tools provide checklists or simple boards, but they rarely offer meaningful insight into how workflow actually functions.

Most tools show what is pending or completed — but not how work moves, where it slows down, or whether the user's execution rhythm is sustainable.

Kanba-DO's mission is to help users optimize task management through structured workflows and data-informed insights. Rather than gamifying productivity, Kanba-DO focuses on measurable flow, stage balance, and actionable correction. It empowers users to:

- Organize tasks clearly and visually.
- Track task movement across structured stages (DO, DOING, DONE).
- Detect bottlenecks and stagnation early.
- Improve execution rhythm using rule-based productivity insights.

Kanba-DO turns everyday task movement into performance signals.

#### **Who (Users / Stakeholders)**

Primary Users:

- Students managing coursework, projects, and deadlines.
- Professionals balancing multiple tasks and structured workflows.
- Independent builders managing personal or entrepreneurial projects.

Secondary Users:

- Managers or mentors seeking structured visibility into workflow health.
- Productivity-focused individuals who want insight without unnecessary complexity.

User Needs & Pain Points:

- Difficulty understanding where tasks stall.
- Overloaded "in-progress" stages.
- Accumulating overdue tasks without clear signals.
- Lack of insight into workflow balance and stage distribution.
- Tools that measure activity instead of execution flow.

Stakeholder Goals:

- Efficiency without cognitive overload.
- Clear visual structure.
- Meaningful analytics, not gamification.
- Lightweight intelligence without reliance on external AI systems.

### **What (System Functionality)**

Kanba-DO is a structured Kanban-based task management system enhanced with rule-driven productivity analytics.

Its core functionalities include:

Task Creation & Organization:

Users create tasks with metadata such as priority, due date, tags, recurrence rules, and activity type.

Kanban Workflow Tracking:

Tasks move through three structured stages:

- DO
- DOING
- DONE

Each transition records stage history and timestamps, allowing measurable workflow analysis.

### **Rhythm (Productivity Insight Engine – V1):**

Kanba-DO evaluates workflow patterns using deterministic thresholds. It:

- Identifies tasks stuck in DOING beyond healthy limits.
- Flags overload when DO or DOING exceed balance thresholds.
- Detects accumulation of overdue tasks.
- Provides one clear insight with one actionable recommendation.

This system operates locally and does not depend on external AI services.

Notifications System:

- Overdue task detection with badge indicators.
- Dedicated notifications view.

Analytics Dashboard:

- Visualizes task distribution across stages.
- Highlights bottlenecks and imbalance.
- Compares workflow trends over time.

Multilingual Infrastructure:

- Dynamic UI translation system.
- Expandable language support architecture.

Where (Platforms / Context)

Platforms:

- Web Application (current primary platform).
- Static hosting-ready architecture (e.g., GitHub Pages or S3).
- Modular JavaScript structure supporting future cloud expansion.

Contexts of Use:

- Personal project management.
- Academic workload tracking.
- Structured professional workflows.
- Weekly productivity review and planning sessions.

Kanba-DO is designed to remain lightweight while supporting future architectural scalability.

## **How (Operations / Flow / UX)**

### **Step 1: Task Creation & Queuing**

Users add tasks with metadata (priority, due date, tags, activity type, recurrence).

Tasks enter the DO stage.

### **Step 2: Workflow Progression**

Tasks move through DO → DOING → DONE.

Stage transitions are recorded and time-tracked.

### **Step 3: System Evaluation (Rhythm Logic)**

Kanba-DO evaluates:

- Stage distribution percentages.
- Duration in DOING.
- Overdue thresholds.
- Backlog accumulation patterns.

When imbalance is detected, the system presents a concise, actionable insight.

#### Step 4: Review & Adjustment

Users review analytics and adjust behavior by:

- Reprioritizing tasks.
- Splitting large tasks.
- Clearing overload.
- Rebalancing stage distribution.=

Design Principles:

- Clean and minimal UI.
- Insight without distraction.
- Intelligence without dependency.
- Structured flow over gamification.
- Measurable performance signals.

#### **Impact / Vision**

Kanba-DO is more than a Kanban board. It is a workflow evaluation system that:

- Helps users detect bottlenecks early.
- Encourages sustainable execution rhythm.
- Converts stage movement into actionable insight.
- Supports disciplined productivity without complexity.

#### **Long-Term Vision:**

Kanba-DO evolves into a scalable productivity intelligence platform. Over time, the system may incorporate deeper historical trend analysis, cloud-backed storage, and team-level workflow health metrics. However, its foundation remains grounded in measurable flow and structural correction and helping users work smarter through clarity and balance.