

Project Kushim: Product Requirements Document (PRD)

Lead Architect / Product Owner

January 5, 2026

Contents

1	Introduction	2
2	Problem Statement	2
3	Solution	2
4	Technical Details	2
5	Implementation Modules	2
5.1	Module A: IAM	2
5.2	Module B: Persistence	2
5.3	Module C: Real-Time Engine	2
5.4	Module D: UI Framework	2

1 Executive Summary

Kushim is a production-grade web platform designed to solve data fragmentation. By acting as a centralized gateway for disparate data sources, Kushim reduces "Context Switching Fatigue" and provides a unified, actionable interface for complex workflows.

2 Problem Statement

Modern digital work is scattered across silos (SaaS, local files, APIs). This fragmentation leads to:

- High cognitive load due to constant app-switching.
- Data inconsistency across platforms.
- Inefficient manual data aggregation.

3 Target Personas

1. **The Data Integrator:** Needs a single API/Interface to view cross-platform metrics.
2. **The Workflow Optimizer:** Aims to automate actions based on unified data triggers.

4 Functional Requirements (FR)

ID	Feature	Requirement	Priority
FR-1	Core IAM	Secure login with OAuth2 and MFA.	Critical
FR-2	Ingestion	Adapter-based data normalization (JSONB).	Critical
FR-3	Real-time	WebSocket updates for data changes.	High
FR-4	Audit	Immutable logging of all data access.	High

5 Non-Functional Requirements (NFR)

- **Performance:** Page interactions must occur in < 200ms.
- **Security:** AES-256 encryption at rest; TLS 1.3 in transit.
- **Availability:** 99.9% uptime target via container orchestration.

6 Success Metrics

- Reduction in average task completion time by 30%.
- 100% data integrity across integrated adapters.