Kisheka Construction System - Client Walkthrough

Purpose

This document is a client-facing walkthrough of the Kisheka Construction system. It explains what the system does, the major user flows, and how to present the platform in a demo. It includes flowcharts and UI references based on the current codebase and documentation.

Executive Summary (One-Minute Pitch)

Kisheka Construction is a construction accountability platform that ties together projects, procurement, labour, and financial control. It turns day-to-day site activity into auditable, budget-aware workflows: requests lead to approvals, approvals lead to purchase orders, suppliers respond through secure links or SMS, and every action updates project finances and reports in real time.

Who Uses the System

Roles are role-based and surfaced in navigation and dashboards:

- Owner: full visibility and approvals, financial oversight
- Project Manager (PM): project execution, procurement, approvals
- Supervisor: approvals and site oversight
- Site Clerk: data entry (requests, materials, expenses)
- Accountant: budgets, expenses, financial reporting
- Investor: read-only financial view for allocated projects
- Supplier: external response to purchase orders via secure links/SMS

What the System Covers (Modules)

Core modules are organized in the sidebar and dashboards:

- Project management: projects, phases, templates
- Procurement: material requests, purchase orders, suppliers, bulk orders
- Operations: materials, work items, equipment, subcontractors
- Labour: entries, batches, workers registry, supervisor submissions, labour reports

- Financials: financing, investors, budget reallocation, expenses
- Professional services: assignments, activities, fees, reports
- Reporting and analytics: wastage, budget vs actual, phase reports
- Management: users, categories, floors, suppliers

UI Map (How Users Navigate)

Primary navigation is built from role-aware sections.

Dashboard and Project Context

- Landing redirects authenticated users to `/dashboard`
- Role-specific dashboards live under `/dashboard/*`
- Project context is carried via project selection and query parameters

Sidebar Sections

- Dashboard
- Projects (Projects, Create Project, Phases, Phase Templates)
- Financial (Financing, Investors, Budget Reallocations, Initial Expenses, Expenses)
- Operations (Materials, Material Library, Material Requests, Purchase Orders, Work Items, Equipment, Subcontractors)
- Labour (Dashboard, Quick Entry, Bulk Entry, Entries, Workers, Templates, Reports, Supervisor Submissions, Site Reports)
- Professionals (Assignments, Library, Activities, Fees, Reports)
- Management (Users, Suppliers, Categories, Floors)
- Analytics (Wastage, Budget vs Actual, Phase Reports)
- Archive (Projects, Investors, Materials, Expenses, Initial Expenses)

End-to-End Walkthroughs (Client-Facing)

0) Project Lifecycle (Create → Operate → Archive)

Goal: Show the owner's full lifecycle from project creation to archive/cleanup.

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0a) Archive and Delete Options (Owner-Level)

Use this flow to explain what happens when projects or records are retired.

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Note: The UI exposes archive lists for projects, investors, materials, expenses, and initial expenses. If permanent deletion is required, confirm the business rules before promising it in a demo.

1) Project Setup Flow

Goal: Create a project, structure it, and fund it before procurement begins.

Steps:

1. Create project with budget and location
2. Auto-create floors or add floors manually
3. Define categories and phases
4. Allocate capital from investors
5. Add initial expenses

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2) Material Procurement Flow

Goal: Track materials from request to supplier response and entry.

Steps:

1. Create material request with estimated cost
2. Approve request (single or bulk)
3. Create purchase order and select supplier
4. Supplier responds via email, SMS, or link
5. Material entry created and costs committed

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3) Labour Capture Flow

Goal: Log on-site labour and track costs by project and phase.

Steps:

1. Quick entry for single workers or professional services
2. Bulk entry for daily site visits
3. Supervisor submissions reviewed and approved
4. Labour costs reflected in reports

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4) Financial Governance Loop

Goal: Ensure every activity is capital-aware and auditable.

Steps:

1. Budget defined at project creation
2. Capital allocated by owner/investors
3. Requests and expenses check capital status
4. Warnings displayed on low/negative capital
5. Budget reallocation and reporting closes the loop

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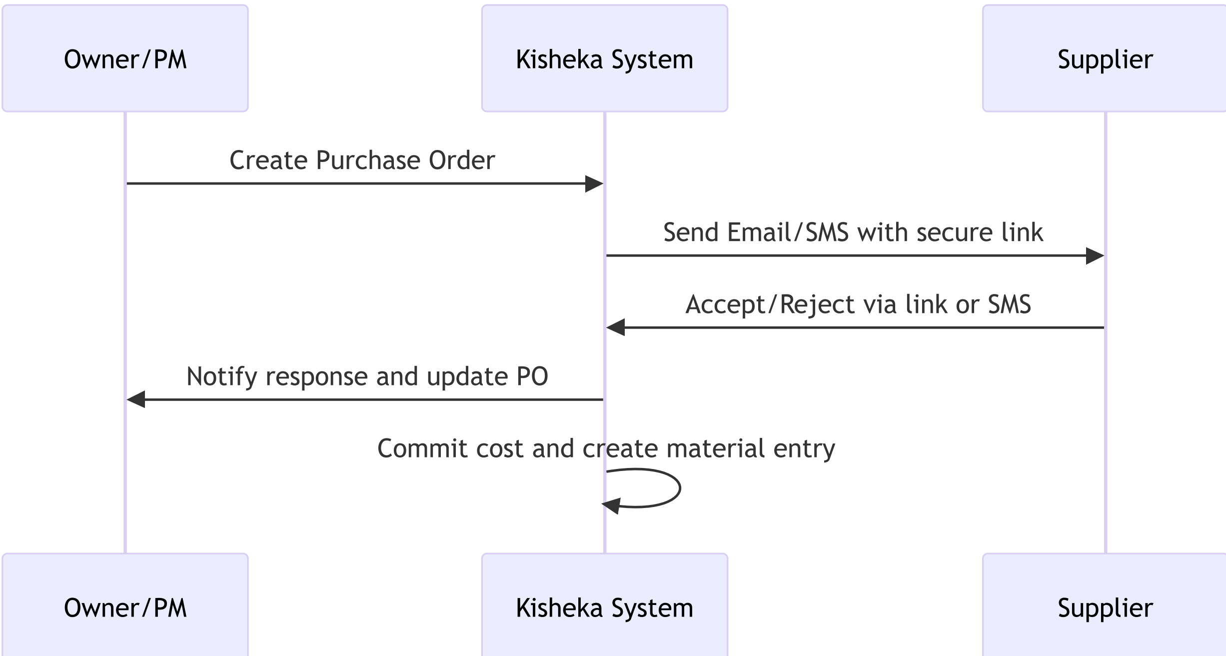
5) Supplier Communication Flow (External)

Goal: Let suppliers respond fast without system access.



Role-Based Demo Script (Client Presentation)

Use this as a live walk-through.

1. Owner dashboard: show capital status, projects overview, approvals
2. Projects: open a project, show phases and finances
3. Material requests: create a request, show approval actions
4. Purchase orders: show PO creation and supplier communication
5. Labour: show quick entry and bulk entry flow
6. Reports: show budget vs actual and phase reports
7. Management: categories, floors, suppliers, users

Page Inventory (Grouped by Area)

This is a summarized map of major pages based on app routes.

Dashboards

- `/dashboard`
- `/dashboard/owner`, `/dashboard/pm`, `/dashboard/supervisor`
- `/dashboard/accountant`, `/dashboard/clerk`, `/dashboard/investor`
- `/dashboard/approvals`, `/dashboard/budget`, `/dashboard/stock`
- `/dashboard/analytics/wastage`, `/dashboard/analytics/material-insights`
- `/dashboard/analytics/bulk-orders`, `/dashboard/analytics/supplier-performance`
- `/dashboard/notifications`, `/dashboard/users`

Projects

- `/projects`, `/projects/new`, `/projects/[id]`, `/projects/archive`
- `/phases`, `/phase-templates`

Financial

- `/financing`, `/investors`, `/budget-reallocations`
- `/initial-expenses`, `/expenses`

Operations

- `/items`, `/items/new`, `/material-library`
- `/material-requests`, `/material-requests/new`
- `/material-requests/batches`
- `/material-requests/bulk/[batchId]/*`
- `/purchase-orders`, `/purchase-orders/rejections`
- `/work-items`, `/equipment`, `/subcontractors`

Labour

- `/labour`, `/labour/entries`, `/labour/entries/new`
- `/labour/batches`, `/labour/batches/new`
- `/labour/workers`, `/labour/workers/bulk/new`
- `/labour/supervisor-submissions`
- `/labour/site-reports`
- `/labour/reports/*`

Professionals

- `/professional-services`, `/professional-services-library`
- `/professional-activities`, `/professional-activities/bulk`
- `/professional-fees`, `/reports/professional-services`

Management and Analytics

- `/categories`, `/floors`, `/suppliers`
- `/reports/phases`

Visual Aids Summary

Use these diagrams in client decks:

- Project Setup Flow

- Material Procurement Flow
- Labour Capture Flow
- Financial Governance Loop
- Supplier Communication Sequence

All diagrams are included in this document and can be pasted into a slide tool that supports Mermaid.

Value Highlights (Client-Facing)

- Accountability: every request, approval, and spend is logged
- Cost control: capital warnings prevent overspending
- Procurement speed: suppliers respond without system access
- Visibility: real-time dashboards and reports by project and phase
- Scalability: multi-project support and role-based access

Notes and Assumptions

This walkthrough is based on:

- `README.md` and `docs/USER_GUIDE.md`
- Navigation structure in `src/lib/navigation-helpers.js`
- Dashboard routing in `src/app/dashboard/*`

If you want a tailored version for a specific client (industry, size, or demo dataset), provide:

- Target client profile
- Preferred feature emphasis (procurement, labour, financials)
- Demo data constraints (project size, number of suppliers, etc.)