Loan Pipeline — Mortgage SaaS Dashboard

Overview - Problem, Context, and Goal - Primary Users and Needs

Problem Statement / Goal

This case study focuses on designing a unified mortgage operations dashboard that improves how loan officers manage their day-to-day work. The following sections outline the context, core problem, and primary goal driving the design.

Context

We are building a mortgage operations dashboard that serves as the primary workspace for loan officers using a SaaS mortgage platform. Today, loan officers often jump between loan origination systems (LOS), spreadsheets, email, and messaging tools to manage their pipeline, which creates a fragmented experience and makes it difficult to maintain a clear, real-time view of their work. This dashboard is intended to unify those touchpoints into a single interface where they can see their loans, tasks, communications, and key metrics in one place.

Problem

Loan officers struggle to maintain visibility into their loan pipeline, understand what needs their attention first, and respond to borrowers quickly and consistently. Their work is spread across multiple applications and channels—LOS, CRM, email, chat, and manual trackers—so important signals like expiring rate locks, missing documents, or approaching SLAs are easy to miss. As a result, they lose time context-switching, make decisions with incomplete information, and risk delays or errors that negatively impact borrower experience and conversion.

Goal

The goal is to help loan officers quickly understand overall pipeline health, immediately see which loans or tasks are most critical, and execute core actions (review, update status, request documents, communicate) with fewer clicks and less context-switching. The dashboard should surface clear priorities (e.g., loans at risk, high-value opportunities), provide concise, actionable summaries for each loan, and streamline common workflows so loan officers can move from insight ("this needs attention") to action ("I've taken the next step") within a single, focused environment.

Primary Users

This dashboard is designed to support several key user types within mortgage operations. While they share the same platform, each user interacts with the system in different ways and has distinct goals and pain points. The primary users for this case study are loan officers, underwriters, and loan processors.

Loan Officer

Loan officers are responsible for originating and managing borrower relationships, guiding applicants from initial inquiry through to closing. They need to keep a clear, real-time view of their pipeline, understand which loans require attention today, and communicate proactively with borrowers and agents. Their work is highly time-sensitive and relationship-driven, so they value tools that help them prioritize high-impact loans, quickly update statuses, and respond to questions without digging through multiple systems.

Mortgage Underwriter

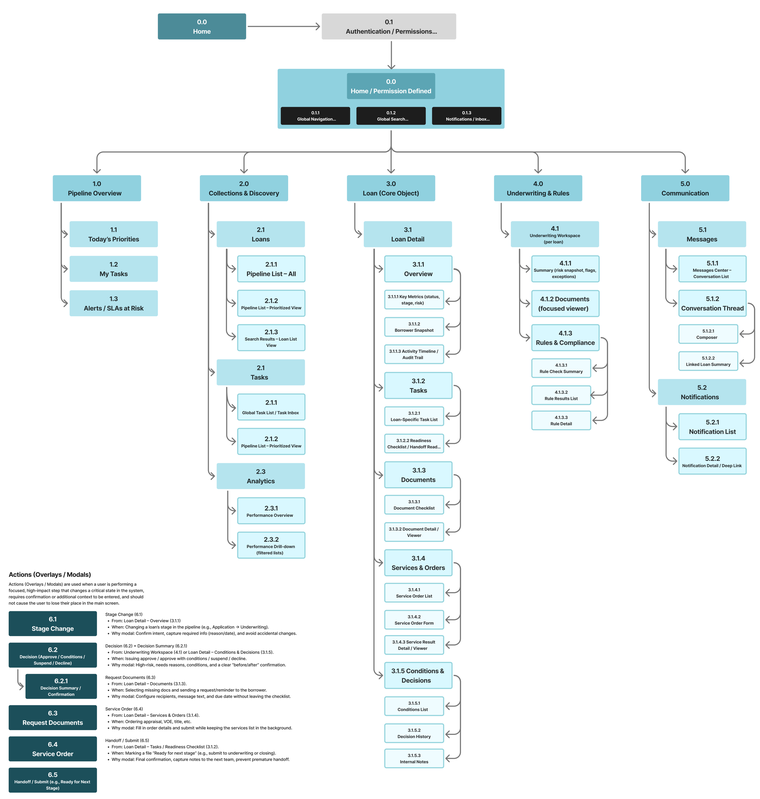
Underwriters focus on assessing risk and ensuring each loan meets lending and compliance guidelines. They spend most of their time deeply reviewing financial data and documents, evaluating red flags, and making approval or conditional decisions. They require a focused workspace where key risk indicators, document completeness, and rule/compliance results are surfaced clearly, so they can make consistent, defensible decisions with minimal manual hunting for information.

Loan Processor

Loan processors coordinate much of the operational work needed to move a file toward closing, including collecting documents, ordering third-party services, and resolving exceptions. Their day revolves around checklists, follow-ups, and clearing conditions across many loans at once. They need a clear picture of outstanding tasks and missing items per file, efficient tools to request and track documents and orders, and strong visibility into SLAs to ensure files are ready for the next stage without delays.

Taxonomy and Site Map

Site Map



3. Tasks and Role-Based Work Flows

Tasks & Rationales

Task ID	Role	Task (Short)	Key Rationales
LO-1	Loan Officer	Review today's pipeline & priorities	Supports daily triage; reduces cognitive load by surfacing at-risk/high-value loans; aligns work with SLAs and conversion goals.
LO-2	Loan Officer	Search borrower/loan & review status	Supports interrupt-driven workflows; minimizes time-to-answer for borrowers; reduces errors from opening the wrong file.
LO-3	Loan Officer	Update loan stage & add notes	Keeps pipeline data current for downstream roles; captures decision rationale; reduces misalignment about loan status.
LO-4	Loan Officer	Respond to borrower/agent messages	Centralizes communication; anchors conversations to the loan; improves customer satisfaction via fast, contextual responses.
LO-5	Loan Officer	Monitor personal performance	Gives visibility into own metrics; helps spot bottlenecks; aligns behavior with team/business KPIs.
UW-1	Underwriter	Open queue & pick next file	Provides clear, prioritized work queue; aligns work with SLAs and risk; reduces confusion about ownership/next action.
UW-2	Underwriter	Review risk summary & key indicators	Surfaces high-impact risk metrics up front; limits unnecessary deep dives; standardizes what's evaluated on every file.
UW-3	Underwriter	Check document completeness & resolve issues	Prevents decisions on incomplete info; makes missing/flagged items explicit; reduces re-work and delays downstream.
UW-4	Underwriter	Run and review rule/compliance checks	Automates repeatable checks; increases compliance and consistency; reduces manual error in complex rule sets.
UW-5	Underwriter	Issue decision with standardized reasons	Speeds up decision entry; produces clear, structured outputs for others; improves auditability and regulator readiness.
UW-6	Underwriter	Review traceable history for a file	Provides context on prior actions; supports defensible decisions; eases handoffs and re-assignments.
LP-1	Loan Processor	See tasks & outstanding docs per loan	Creates a single source of truth for blockers; reduces hunting across tools; enables proactive work planning.
LP-2	Loan Processor	Request documents & track responses	Standardizes doc requests; keeps requests visible per loan; shortens cycle time with clear sent/received tracking.
LP-3	Loan Processor	Order & track third-party services	Centralizes service ordering; makes service status transparent; reduces missed/late orders that delay closings.
LP-4	Loan Processor	Manage exceptions & route issues	Ensures issues are visible and assigned; prevents problems being buried in email; supports compliance and quality control.
LP-5	Loan Processor	Monitor SLAs & see loans at risk	Focuses attention on time-sensitive files; helps balance workload; ties work directly to operational performance targets.
LP-6	Loan Processor	Confirm readiness & hand off file	Defines a clear "ready" state; improves collaboration with next team; reduces ping-ponging and improves throughput.

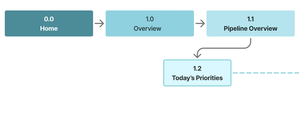
Key Needs and Top Tasks / Scenarios

Key Needs and Top Tasks / Scenarios: **Loan Officer**

Task 1: Get a pipeline-at-a-glance view and see today's priorities

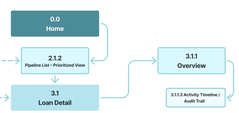
Scenario: Start the day and understand overall pipeline health and what needs attention.
Path through sitemap:
- 0.1 Login
- 0.0 Home
  - 1.1 Pipeline Overview (see all active loans by stage/status)
  - 1.2 Today's Priorities (see loans with expiring locks, missing docs, SLAs at risk)

(From here the user can click through to 2.1.2 or 3.1, see Task 2.)



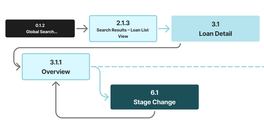
Task 2: Prioritize which loans to work on and open a specific loan

Scenario: From the overview, drill into a prioritized list and open a loan that needs action.
Path through sitemap:
- 0.0 Home
  - Click "View all" on priorities → 2.1.2 Pipeline List – Prioritized View
- 2.1.2 Pipeline List – Prioritized View
  - Scan sorted list (by urgency/impact)
  - Click a loan row → 3.1 Loan Detail
- 3.1.1 Overview
  - See key metrics, stage, risk, and 3.1.1.3 Activity Timeline / Audit Trail to understand history



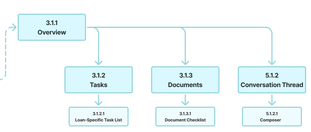
Task 3: Quickly search for specific borrower and update loan status

Scenario: A borrower calls; the loan officer needs to find their file and update its stage.
Path through sitemap:
- 0.1.2 Global Search (in Application Shell)
  - Type borrower name / ID → 2.1.3 Search Results – Loan List View
- 2.1.3 Search Results – Loan List View
  - Select correct record → 3.1 Loan Detail
- 3.1.1 Overview
  - Use stage control → 6.1 Stage Change (modal)
- 6.1 Stage Change
  - Confirm new stage, add any notes → save
- Back to 3.1.1 Overview (now showing updated status in timeline)



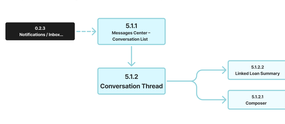
Task 4: Act on loan tasks (assign tasks, request docs, message)

Scenario: For a high-priority loan, the officer needs to clear blockers and coordinate next steps.
Path through sitemap:
- From 3.1.1 Overview of a specific loan:
- 3.1.2 Tasks
  - 3.1.2.1 Loan-Specific Task List (review or assign tasks)
- 3.1.3 Documents
  - 3.1.3.1 Document Checklist (see missing docs)
  - Select missing items → 6.3 Request Documents (modal) to send request
- 5.1.2 Conversation Thread (linked from loan or Messages Center; see Task 5)
  - 5.1.2.1 Composer to send borrower/agent a contextual message about next steps



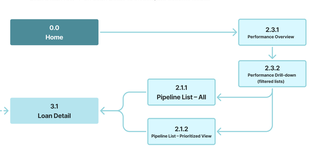
Task 5: Communications hub to respond to borrowers agents

Scenario: Check all new messages and respond without losing the loan context.
Path through sitemap:
- 0.2.3 Notifications / Inbox
  - Open → 5.1.1 Messages Center – Conversation List
- 5.1.1 Messages Center – Conversation List
  - Filter "Needs response" / "Today"
  - Select conversation → 5.1.2 Conversation Thread
- 5.1.2 Conversation Thread
  - View history and 5.1.2.2 Linked Loan Summary (side panel)
  - Use 5.1.2.1 Composer to respond
  - Optional: click through to full 3.1 Loan Detail if deeper context is needed



Task 6: Review performance insights on personal pipeline

Scenario: End of week, check how you're performing and where bottlenecks are.
Path through sitemap:
- 0.0 Home
  - Click "View performance" → 2.3.1 Performance Overview
- 2.3.1 Performance Overview
  - See metrics (conversion, time-to-close, fall-out, SLA adherence)
  - Click a metric (e.g., "Loans breaching SLA") → 2.3.2 Performance Drill-down
- 2.3.2 Performance Drill-down
  - View filtered pipeline list (subset of 2.1.1 / 2.1.2)
  - Click a loan row → 3.1 Loan Detail to investigate specific issues



Key Needs and Top Tasks / Scenarios: **Mortgage Underwriter**

Task 1: Open a clear work queue and pick the next file

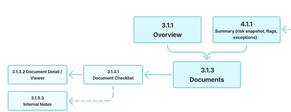
Scenario: Start the day, see a prioritized underwriting queue, and open the next file to review.
Path through sitemap:
- 0.1 Login
- 0.0 Home
  - Underwriter sees a queue widget → click "View all" → 2.1.2 Pipeline List – Prioritized View
- 2.1.2 Pipeline List – Prioritized View
  - Sort/filter by SLA, complexity, or product
  - Click top item → 4.1 Underwriting Workspace (per loan)
- 4.1.1 Summary
  - See high-level context for the chosen file

Task 2: Review risk summary and key indicators

Scenario: For the open file, quickly understand overall risk before deep review.
Path through sitemap:
- 4.1 Underwriting Workspace (per loan)
  - 4.1.1 Summary
    - View key metrics: DTI, LTV, income, liabilities, credit score
    - See flags/exceptions surfaced in risk snapshot

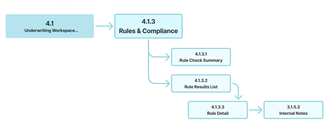
Task 3: Check document completeness and resolve issues

Scenario: Ensure all required docs are present and consistent before making a decision.
Path through sitemap:
- From 4.1.1 Summary (or 3.1.1 Overview if starting at Loan Detail):
- 3.1.3 Documents
  - 3.1.3.1 Document Checklist
    - Filter by "Missing" / "Incomplete" / "Flagged"
  - Select a document → 3.1.3.2 Document Detail / Viewer
    - Review content, compare with data in 3.1.1.1 Key Metrics
- Optionally, add comments/notes in 3.1.5.3 Internal Notes



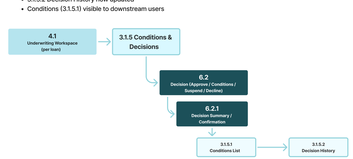
Task 4: Run and review rule/compliance checks

Scenario: Validate the file against underwriting rules and investigate exceptions.
Path through sitemap:
- From 4.1 Underwriting Workspace (per loan):
- 4.1.3 Rules & Compliance
  - 4.1.3.1 Rule Check Summary (overall pass/fail)
  - 4.1.3.2 Rule Results List (list of rules with status)
  - Click a failed rule → 4.1.3.3 Rule Detail
    - See underlying data and explanation
- Record handling notes in 3.1.5.3 Internal Notes if needed



Task 5: Issue a decision efficiently with standardized reasons

Scenario: After review, approve, condition, suspend, or decline the loan.
Path through sitemap:
- From 4.1 Underwriting Workspace (per loan) or 3.1.5 Conditions & Decisions:
- Trigger decision → 6.2 Decision (Approve / Conditions / Suspend / Decline)
  - Select decision type
  - Choose standardized reasons from dropdowns
  - Add free-text explanation if needed
- 6.2.1 Decision Summary / Confirmation
  - Review details → confirm
- Back to 3.1.5 Conditions & Decisions
  - 3.1.5.2 Decision History now updated
  - Conditions (3.1.5.1) visible to downstream users



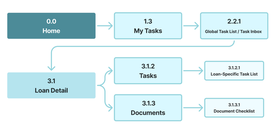
Task 6: Review traceable history for a file

Scenario: Before making or revisiting a decision, review what has already been done on the file.
Path through sitemap:
- 3.1 Loan Detail
  - 3.1.1 Overview
    - 3.1.1.3 Activity Timeline / Audit Trail (see status changes, key events)
  - 3.1.5 Conditions & Decisions
    - 3.1.5.2 Decision History (previous decisions, who made them, when)
    - 3.1.5.3 Internal Notes (rationale, clarifications)

Key Needs and Top Tasks / Scenarios: **Loan Processor**

Task 1: See tasks and outstanding documents for each loan

Scenario: Start the day, see assigned loans and what's outstanding on each.
Path through sitemap:
- 0.1 Login
- 0.0 Home
  - 1.3 My Tasks (cross-loan view) → click "View all" → 2.2.1 Global Task List / Task Inbox
- 2.2.1 Global Task List / Task Inbox
  - Filter by "Processing" / "Due soon"
  - Click a task → 3.1 Loan Detail
- 3.1.2 Tasks
  - 3.1.2.1 Loan-Specific Task List (see all open tasks for this file)
- 3.1.3 Documents
  - 3.1.3.1 Document Checklist (see missing/incomplete docs and their status)

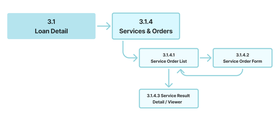


Task 2: Request documents from borrowers and track responses

Scenario: For a given loan, request missing docs and monitor if they've been provided.
Path through sitemap:
- 3.1 Loan Detail (for selected loan)
- 3.1.3 Documents
  - 3.1.3.1 Document Checklist
    - Filter to "Missing" or "Incomplete"
    - Select items to request → open 6.3 Request Documents (modal)
- 6.3 Request Documents
  - Choose recipient(s), template message, due date → send
- Back to 3.1.3 Document Checklist
  - Docs now marked as "Requested"
- 3.1.3 Activity Timeline / Audit Trail
  - See that a request was sent and when responses arrive

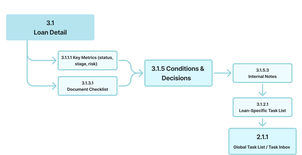
Task 3: Order and track third-party services

Scenario: Order appraisals, VOE, or title from within the loan and monitor their status.
Path through sitemap:
- 3.1 Loan Detail
- 3.1.4 Services & Orders
  - 3.1.4.1 Service Order List (existing and pending orders)
    - Click "New order" → 3.1.4.2 Service Order Form
- 3.1.4.2 Service Order Form
  - Choose service type (Appraisal, VOE, Title, Credit), fill details → submit
- Back to 3.1.4.1 Service Order List
  - See new order with status; drill into → 3.1.4.3 Service Result Detail / Viewer when complete



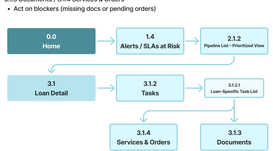
Task 4: Manage exceptions and route issues

Scenario: Identify issues like missing signatures or mismatched data and assign them to the right person.
Path through sitemap:
- 3.1 Loan Detail
  - 3.1.1.1 Key Metrics + 3.1.3.1 Document Checklist to spot issues (flags, errors)
- 3.1.5 Conditions & Decisions
  - Use 3.1.5.3 Internal Notes to document the exception
  - Create or update tasks in 3.1.2.1 Loan-Specific Task List and assign to the appropriate role
- 2.1.1 Global Task List / Task Inbox
  - Confirm that exception tasks appear under the right assignee/queue



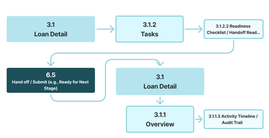
Task 5: Monitor SLAs and see which loans are at risk

Scenario: See which loans are close to breaching processing/closing timelines and act on them.
Path through sitemap:
- 0.0 Home
  - 1.4 Alerts / SLAs at Risk (widget) → click "View all"
- 2.1.2 Pipeline List – Prioritized View
  - Filter by "SLA at risk" or "Due this week"
  - Click a loan → 3.1 Loan Detail
- 3.1.2 Tasks
  - 3.1.2.1 Loan-Specific Task List (review what must be done to hit SLA)
- 3.1.3 Documents / 3.1.4 Services & Orders
  - Act on blockers (missing docs or pending orders)



Task 6: Confirm readiness and hand off the file

Scenario: Once tasks and docs are complete, mark the file ready for underwriting or closing.
Path through sitemap:
- 3.1 Loan Detail
- 3.1.2 Tasks
  - 3.1.2.2 Readiness Checklist / Handoff Readiness (all required items checked)
- Click "Ready for next stage" → 6.5 Handoff / Submit (e.g., Ready for Next Stage)
  - Confirm readiness, choose destination (Underwriting / Closing), add note
- Back to 3.1 Loan Detail
  - Stage updated via 3.1.1 Overview, new owner/queue reflected
  - 3.1.1.3 Activity Timeline / Audit Trail logs the handoff



AI-Assisted Design with Figma Make

AI Guard Rails and File Structure

AI is integrated via Figma Make, guided by a structured requirements.md:The sitemap and wireframes are translated into AI-ready prompts and guardrails. **requirements.md** is organized by taxonomy sections:
0.0 Landing & Authentication
1.0 Overview
2.0 Collections & Discovery
3.0 Loan (Core Object)
4.0 Underwriting & Rules
5.0 Communications

Each defines layout, components, and constraints for screens such as:
Home (1.1)
Collections & Discovery (2.0)
Loan Detail (3.1) and all tabs
Underwriting Workspace (4.1)
Messages and Notifications (5.0)

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# LoanPipeline - Mortgage Lending Dashboard

## Overview

LoanPipeline is a comprehensive loan pipeline management
dashboard for mortgage lending companies. It provides a full-
featured workspace for managing loans, tasks, underwriting,
analytics, and team communications.

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## Application Sitemap & Routes

### Hierarchical Structure

0.0 Landing & Authentication / (Landing.tsx) - Unauthenticated
welcome page /login (Login.tsx) - Login page /home
(Welcome.tsx) - Authenticated home/welcome page

1.0 Overview /overview (Overview.tsx) - Main dashboard with
pipeline stats, SLAs, priorities, tasks

2.0 Collections & Discovery /collections-discovery
(CollectionsDiscovery.tsx) - Hub page for accessing all
collection tools
     2.1 Pipeline (Loans) /loans/all (PipelineListAll.tsx) -
     Complete loan list with filters /loans/prioritized
     (PipelineList.tsx) - Priority-sorted loan pipeline
     2.2 Tasks /tasks (TaskList.tsx) - Global task management
     2.3 Analytics /analytics (Analytics.tsx) - Analytics hub
     (redirects to sub-pages) /analytics/overview
     (AnalyticsOverview.tsx) - Performance metrics
     overview/analytics/drilldown (AnalyticsDrilldown.tsx) -
     Detailed performance analysis

3.0 Loan (Core Object) /loan (Loan.tsx) - Loan selection/search
page /loan/:loanId (LoanDetail.tsx) - Individual loan detail
workspace with tabs

4.0 Underwriting & Rules /underwriting (Underwriting.tsx) -
Underwriting queue selection /underwriting/:loanId
(UnderwritingWorkspace.tsx) - Multi-pane underwriting workspace

5.0 Communications /communications (Communications.tsx) -
Communications hub /communications/messages
(MessagesCenter.tsx) - Message center with
conversations/communications/notifications (Notifications.tsx) -
Notification center
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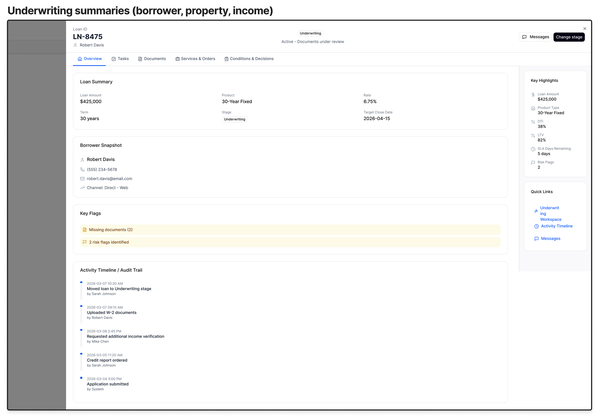
Sample Section of the requirements.md file

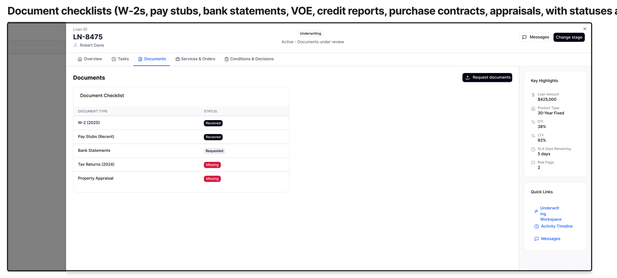
AI Assisted UI Design

Figma Make uses these prompts to generate initial UI layouts and component patterns.
View full **Figma Make** file at - https://probe-lion-03928518.figma.site
Example content grounds the designs:

Underwriting summaries (borrower, property, income)



Document checklists (W-2s, pay stubs, bank statements, VOE, credit reports, purchase contracts, appraisals, with statuses and sources)



My AI Perspective

AI can amplify and accelerate your design and research work by handling data processing, generating creative options, and suggesting evidence-based directions, but it should be treated as a tool, not a replacement for human judgment. Human designers and researchers provide context, ethical reasoning, domain expertise, and the intuitive sense needed to evaluate trade-offs, interpret ambiguous results, and make decisions that align with real-world needs and values. Collaborative interaction between people and AI, where humans set goals, critique outputs, and guide iteration, yields more reliable, responsible, and innovative outcomes than relying on automation alone.

When I start a UX design project I begin with a raw capture of data and an information dump about the objectives, constraints, stakeholders, and product context. In this phase I collect user interviews, business goals, technical limitations, analytics, market research, competitive benchmarks, and any existing materials or prior research. That mass of information is then synthesized and organized into a clear brief that defines who the product is for, what it should provide, and what success looks like.

Establishing these core definitions early keeps the team aligned, reduces rework, and gives AI tools focused prompts to accelerate tasks like data sorting, pattern identification, clustering of user needs, and initial concept generation.

Next I break the project into defined sections so work can proceed in parallel and outputs can be validated individually. Typical sections include personas, workflows, site maps, content strategy, interaction patterns, accessibility requirements, and technical constraints.

For each section I use AI to generate drafts, variants, and supporting artifacts such as journey maps and microcopy options while ensuring that human expertise guides framing, nuance, and prioritization. The goal is a set of working artifacts that are specific enough to test with users and stakeholders and flexible enough to iterate based on feedback and new insights.

When design decisions begin to return, I move into a decision analysis phase where AI becomes a critical sparring partner. I argue with AI outputs by challenging assumptions, testing conflicting requirements, and running adversarial queries to surface weaknesses and edge cases. I audit recommendations using first principles, checking each claim against core user needs, accessibility standards, and business logic. I also us AI conduct competitive analysis and document patterns in the market to see how proposed solutions compare and to identify opportunities for differentiation and innovation.

To catch what I might miss I run an AI blind spot check by returning to the original synthesis of information and asking targeted questions about gaps in the design. This includes revisiting edge cases, privacy implications, long term maintenance, localization, performance trade offs, and scenarios outside the typical user journey. I prompt AI to highlight inconsistencies, simulate rare or extreme user behaviors, and propose mitigation strategies, then validate those findings with human review, stakeholder input, and usability testing. That layered scrutiny helps reduce risk and surface issues that automated processes alone might overlook.

Throughout the process I keep collaboration and documentation central so decisions and reasoning are traceable. I maintain a living design brief, versioned artifacts, and a decision log that records why certain directions were chosen and how trade offs were evaluated. AI helps by summarizing sessions, generating meeting notes, and producing annotated design alternatives, but human oversight ensures the final choices reflect ethical considerations, organizational priorities, and user empathy.

In closing, my approach frames AI as a powerful collaborator that speeds research, generates options, and exposes patterns while preserving human judgment for framing, ethical decisions, and contextual interpretation. By combining systematic synthesis, structured sections, adversarial analysis, blind spot checks, and disciplined documentation, the team produces designs that are both efficient and deeply grounded in real user and business needs.