

Case Study: AI Workflow Design

How a custom AI documentation workflow reduced first-draft time at an enterprise MLOps platform

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Context

A solo technical writer supporting multiple engineering teams at an enterprise MLOps platform. Documentation scope included developer guides, system administration documentation, release notes, and onboarding content across a fast-moving product with frequent releases.

Source material lived everywhere and nowhere. Wiki pages, ticket comments, shared drives, version control – all potentially relevant, none of it curated, much of it of unknown age or reliability. No repeatable documentation workflow existed. First drafts were built from scratch for each cycle. AI tooling was available but unintegrated.

The result: high time cost per deliverable, inconsistent output quality, and no scalable path forward.

The Problem

First-draft generation consumed several hours per document – sometimes significantly longer, depending on the time required to locate, assess, and reconcile source material. Without templates, style standards, or audience definitions baked into the process, every document started from zero. When the team or tooling changed, nothing was carried forward.

The core issue was not a lack of tools. Project management systems, wikis, and version control were all in place. The problem was inconsistent adoption. Teams worked around established systems when those systems didn't suit them, defaulting to personal preferences and ad hoc solutions. Without consistent process ownership, source material scattered and documentation quality varied.

AI tooling was available but produced inconsistent output without clean data, defined workflows, style standards, or audience parameters to work from and still required significant human judgment to evaluate and revise.

The Approach

The solution was a custom six-phase documentation workflow designed to connect to existing project management, documentation, and version control platforms, delivering a functioning first-draft workflow, release notes automation, and the foundational infrastructure for scale.

Design Tenets

#	Tenet	Principle
1	Audience first	Every artifact targets a named persona.
2	Automate the draft, own the release	AI accelerates creation; humans own the release decision.
3	Human at the gate	No automated publishing; human review is non-negotiable.
4	Accessible by design	Basic tool comfort is all that is required to run it once it is initialized.
5	Tool-agnostic	The framework is the methodology, not the software.
6	Quality is upstream	Standards (style guides, templates) are embedded early, not retrofitted.

The Six Phases

Phase	Name	What It Does
1	Foundation and MCP Integration	Connect to all documentation, ticketing, and version control systems. Map the documentation ecosystem, identify team scope, and locate or establish a style guide.
2	Templates, Style Guide and Audience Personas	Building the foundational inputs first-draft generation depends on: document templates, release notes template, prompt templates, style guide, and audience personas. Validated through Phase 3.
3	First-Draft Generation	Build the prompt chain library and template-to-workflow mappings that reduce first-draft time significantly. Runs concurrently with Phase 2 and serves as the validation layer for all Phase 2 outputs.
4	Release Notes Automation	Automate release note generation by pulling from connected project management and version control systems at the close of each sprint or release cycle.
5	Documentation Code Validation	Compare code samples in documentation against the live codebase to flag meaningful discrepancies. Supports both on-demand validation and scheduled accuracy reports.
6	Scale, Measure, and Document the System	Make everything built in Phases 1 through 5 durable and transferable. Produce internal workflow documentation, an onboarding guide, a documentation health report, and a leadership-facing performance summary.

Phases 5 and 6 represent the full system vision. Implementation was not completed prior to project close.

The Result

- Delivered a complete foundation layer for first drafts: document templates, a style guide, and audience personas.
- First-draft time reduced from several hours or more to under 30 minutes per document.
- Produced a prompt chain library and workflow documentation designed for any writer to generate consistent first drafts without deep system knowledge.
- Release notes automation eliminated manual extraction from unreliable sprint and version control data.

Transferable Insight

The bottleneck in most AI-assisted documentation workflows is not the AI. It is the absence of upstream structure: no single source of truth, no defined audience, no templates, no style standards. The workflow moves those inputs to Phase 2 so that by the time the first draft is generated, the system already knows who it is writing for, what good looks like, and where reliable source material lives.

A writer who did not build the system can still run it. That is the point.