AI Support Assistant for SaaS Products (v0.1)

Case Study – AI Product Management
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1. Problem Overview

SaaS support teams face high volumes of repetitive L1 queries related to onboarding, pricing, and basic feature usage. This results in longer response times, higher operational costs, and reduced customer satisfaction. Existing knowledge bases are underutilized due to poor discoverability.

2. Users & Use Context

Primary Users: End customers seeking quick answers
Secondary Users: Support agents handling escalations
Context: Time-sensitive support interactions during product usage

3. Goals & Non-Goals

Goals: Reduce L1 ticket volume, improve first-response time, and maintain answer accuracy.
Non-Goals: Replacing human agents, handling account-specific or sensitive actions.

4. Proposed Solution

A Retrieval-Augmented Generation (RAG) based AI assistant that answers support questions using approved product documentation. The assistant is embedded in help surfaces and escalates uncertain queries.

5. AI Approach & Key Decisions

Chosen: RAG over fine-tuning to ensure data freshness and lower risk.
Rejected: Pure LLM chatbot due to hallucination risk.
Trade-offs: Slight latency increase accepted for higher accuracy and trust.

6. Success Metrics

Business Metrics: Ticket deflection rate, cost per ticket
Product Metrics: CSAT, first response time
AI Metrics: Answer accuracy, hallucination rate, fallback frequency

7. Risks & Guardrails

Risks include hallucinated answers, outdated documentation, and over-reliance on AI. Guardrails include confidence thresholds, source citation, fallback to human agents, and regular document refresh cycles.

8. Experimentation Plan

A/B test AI-assisted support vs baseline. Launch to a small user cohort, monitor accuracy and CSAT, and scale only if quality thresholds are met.

9. Current Status & Next Steps

Status: In Progress – v0.1
Next Steps: Implement prompt evaluation framework, integrate analytics dashboard, and expand document coverage.