

AI Product Manager Challenge

Background

Company name MyServices (fictional) is experiencing challenges with customer support across multiple channels.

- Customer satisfaction dropped 20pp in the last 3 months due to:
 - Humans agents are not able to handle all the tickets and keep the SLA
 - Agents are providing bad responses and taking too long
 - 24/7 support not feasible due to cost constraints
 - Each agent is handling on average 650 tickets per day (60% from total)
- Active support channels:
 - Website Chat (42%)
 - SMS (38%)
 - Email (15%)
 - Phone (5%)

Ticket Distribution

- 48% General information about MyServices products
- 24% Issues signing up
- 11% Requests to terminate subscription
- 8% Requests to change personal information
- 4% Complaints about services/company
- 3% Unsubscribe requests from marketing notifications
- 2% Other issues

The Challenge

As a candidate for the AI Product Manager role, you are tasked with developing an AI strategy to enhance customer support capabilities while maintaining high customer satisfaction and retention rates.

Team

(2 Full Stack Eng) (3 ML Eng) (1 QA) (1 Designer)

Part 1: Strategy Development (Mandatory)

Create a comprehensive plan addressing:

1. **Opportunity Assessment**
 - How would you break down this problem & why?
2. **Solution Design**
 - What are the fundamental aspects of your solution?
 - Outline your proposed solution architecture
 - What guardrails would you implement to ensure quality?
3. **Implementation Roadmap**
 - Create a phased rollout approach with clear milestones
 - How would you test and validate your solution before full deployment?
 - How do we measure success?

Part 2: Prompt Engineering (Optional)

Design two example prompts:

1. A system prompt for an AI agent handling "general information about XYZ Company"
2. A system prompt for handling "issues signing up"

Include reasoning for key design decisions in your prompts.