AI-Enabled Gift Recommendation System MVP

Product Requirements

Sections

Context

The company, a leader in fast fashion retail, has experienced explosive growth over the past three years but is now facing market saturation among U.S. teenagers. While the mobile app has successfully created a highly social shopping experience, sales have begun to slow down. To drive further growth, the company needs to introduce innovative product enhancements that align with its core strengths and customer behaviors.

MVP goal

Launch an AI-powered gifting recommendation system to help teenage customers easily find and purchase gifts for friends and family, driving additional sales and engagement.

Target customer segment

- U.S. teenagers who are active users of the company's fast-fashion shopping app.
- Highly engaged in social shopping experiences and influenced by friends and family.
- Loyal customers with high trust in the brand, reflected in an NPS of 75.
- Frequent shoppers, with 35% making multiple purchases in the past year.
- Comfortable with frictionless mobile commerce, with payment and shipping details already stored in the app.

Timeframe

The MVP must be launched within six months to align with the holiday shopping season and achieve financial goals.

First 60-Day Success Metrics

Key Performance Indicator	Target
Gifting frequency	

% of active customers who make at least one gift purchase	15%
Average # of gifts purchased per gifting customer in 60 days	1.8
% of total transactions that are gift purchases	10%
Gifting value	
Average Order Value (AOV) for gift purchases	$40
Total dollars spent on gifts per customer per year	$150
Overall marketplace value	
Total revenue generated from gifting transactions (first 60 days)	$4M
% of total orders that include a gift	10%

AI Models and Data

Recommendations

1. The recommendation system will recommend gift purchases to users based on the preferences and purchase behavior of their friends and family.
2. AI model selection: A Hybrid Model combining Content-Based Filtering and Item-Based Collaborative Filtering would be a logical choice. Such a model would allow the recommendation engine to account for a user's previous gift purchases, in addition to the complimentary item purchases of friends and family.
3. Relevant data sources:
- Family and friends, and their birthdays, holidays, and interests - Infer from shopper's in-app social connections and communications (Exogenous); Recommend gifts for the shopper's family and friends
- Past gift recipients - Shopper's individual purchase history (Exogenous); Know who each shopper has already purchased a gift for
- Past gift purchases for others - Shopper's individual purchase history (Exogenous); Know what the shopper likes to buy for others

Forecasts

1. The AI-powered forecasting tool will forecast when future gift purchases are due.
2. AI model selection: Multiple Regression is an appropriate model because it allows multiple dependent variables to be considered in the generation of a prediction.
3. Relevant data sources:
- Past gift recipients - Shopper's individual purchase history (Exogenous); Know who each shopper has already purchased a gift for
- Gift occasion - Add a new question in the checkout flow (Exogenous); Know the purpose of a past gift to enable future recommendations for recurring occasions such as birthdays and holidays
- Birthdate - Ask the customer (Exogenous); Recommend birthday gifts to the shopper's family and friends

User Stories

(For each User Story:
- Summarize the product enhancement in 1 sentence
- Describe the details in 3-5 bullet points)

Generate recommendations in the app

User Story A: Personalized Gift Recommendations

As a frequent shopper, I want to receive AI-driven gift recommendations based on my purchase history and social connections so that I can easily find and buy relevant gifts for my friends and family.

- AI analyzes purchase history, browsing behavior, and social connections to suggest personalized gift ideas.
- Recommendations appear on the home screen, category pages, and a dedicated gifting tab.
- Users can refine suggestions by selecting recipient preferences (e.g., gender, style, price range).
- Machine learning models continuously improve recommendations based on customer engagement.
- Includes "Top Picks for Your Friends" carousel based on shared trends.

User Story B: Smart Gifting Prompts During Checkout

As a customer, I want to be prompted with a gift suggestion during checkout so that I can easily add a recommended gift item before completing my purchase.

- The system detects when a user has a potential gifting occasion (e.g., holidays, birthdays inferred from browsing trends).
- A non-intrusive modal appears at checkout suggesting a last-minute gift based on the recipient's past interactions.
- Users can add the suggested gift with one click, streamlining the checkout process.
- Prompts are tested to ensure they enhance conversion without disrupting the shopping flow.

Forecast and display results for analysis

User Story C: Performance Dashboard for Gifting Metrics

As a product manager, I want access to a web-based dashboard that displays gifting metrics so that I can analyze the impact of the new feature on customer behavior.

- Dashboard shows KPIs like % of customers making gift purchases, gifting AOV, and total revenue from gifting.
- Includes visual charts (bar graphs, trend lines) for engagement over time.
- Enables filtering by customer segments (e.g., first-time gifters vs. repeat gifters).
- Data updates daily and integrates with existing analytics platforms.

User Story D: Weekly Gifting Performance Summary via Email

As a stakeholder, I want to receive a weekly email summary of gifting trends so that I can stay informed on feature performance without logging into a dashboard.

- Email contains key KPIs, trends, and standout insights from the past week.
- Highlights top-selling gift items and conversion rates.
- Includes a comparison of gifting sales vs. self-purchases.
- Sent every Monday morning to leadership and product teams.

Populate backlog

User Story F: Explicit Gifting Toggle at Checkout

As a customer, I want the option to specify whether I'm purchasing an item as a gift so that I can receive relevant recommendations in the future.

- Adds a simple "Is this a gift?" toggle at checkout.
- If toggled on, the system tags the purchase for future recommendation improvements.
- Customers can add an optional gift note or recipient's name.
- Data is stored for refining gifting recommendations over time.

User Story G: Gifting Behavior Experimentation

As a data analyst, I want A/B testing capabilities for the gifting feature so that I can measure its impact on customer behavior and optimize it over time.

- A/B tests evaluate different placements of gifting recommendations.
- Tracks changes in conversion rate, AOV, and repeat gifting behavior.
- Provides automated statistical significance calculations for tests.
- Insights inform iterative improvements to the gifting experience.