E-commerce Industry Business Analysis Report Gift-Mate App

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Industry Problem Statement & Stakeholder Analysis

Business Problem

Due to time restrictions, a lack of personalization, and an abundance of options, consumers in the e-commerce and giving sectors frequently struggle to locate the ideal gift present. Generic recommendations from traditional internet retailers leave customers frustrated and unable to decide. As a result, e-commerce platforms suffer from decreased user engagement and lost sales. Gift Mate aims to solve this by offering AI-driven personalized suggestions, ensuring affordability and fast delivery.

Business Goals (SMART Goals)

- 1. Improve User Experience Within 6 months of launch, 90% of users will be satisfied with AI-generated gift suggestions.
- 2. Increase Conversion Rate Within the first year, increase gift purchase conversions by 20% by using tailored recommendations.
- 3. Optimize Engagement Within 8 months, employ AI-powered gift recommendations and Wishlist reminders to boost user retention by 30%.
- 4. Extend Market Reach Within the first year, collaborate with a minimum of 50 brands to integrate e-gift cards.
- 5. Ensure Scalability Even with 100,000+ active users, the system should respond to gift recommendations in less than two seconds.

Stakeholder Mapping

| Stakeholder | Type | Influence | Interest |
|-----------------------|----------|-----------|--|
| Customers | External | High | Want personalized and easy gift selection |
| Retailers & Brands | External | lH1gh | Expect increased sales through AI-driven recommendations |
| Business Owners | Internal | High | Drive revenue and platform success |
| Product Team | Internal | lH19h | Responsible for developing and improving AI models |

| Stakeholder | Type | Influence | Interest |
|---------------------|----------|-----------|--|
| Marketing Team | Internal | Medium | Focus on user acquisition and retention strategies |
| Customer Support | Internal | Medium | Handles queries and improves customer satisfaction |
| Investors | External | High | Expect business growth and ROI |

Agile Roles and Responsibilities

Business Analyst

- Collects and evaluates stakeholder requirements.
- Specifies acceptance criteria and user stories for development teams.
- Assures that technical viability and commercial requirements are in line.
- Collaborates with UX designers to enhance usability and optimize user processes.
- Assists the Product Owner in grooming the backlog.

Product Owner

- The product backlog is defined and ranked according to corporate objectives.
- Serves as a liaison between the development team and stakeholders.
- Makes ensuring the group iteratively produces high-value features.
- Final decisions are made about roadmap modifications and product features.
- In order to harmonize product positioning, the marketing and sales teams work together.

Scrum Master

 Facilitates Agile rituals, such as sprint planning, daily stand-ups, and retrospectives.

- Eliminates obstacles that impede the development team.
- Assures that Agile principles and Scrum practices are followed.
- Team members are coached to increase productivity and cooperation.
- Refines processes to help the team get better every time.

Project Manager

- In charge of the project's overall budget, schedule, and resources.
- To align deliverables, cross-functional teams are coordinated.
- Controls external alliances, dependencies, and dangers.
- Verifies that the project satisfies strategic business goals.
- Regularly updates executives and stakeholders on progress.

Requirements Elicitation

Steps –

- Stakeholder Identification: Engage end-users, business owners, developers, designers, marketing, and sales to gather diverse perspectives.
- Interview Planning: Design a plan prioritizing end-user needs, then business goals and expectations.
- Interview Scheduling: Politely schedule meetings with stakeholders, emphasizing the importance of their input.
- Open-Ended Questions: Prepare questions that encourage detailed answers (e.g., "What's the hardest part about finding the perfect gift?").
- Conducting Interviews: Listen carefully, take notes, and encourage stakeholders to share their thoughts freely, using follow-up questions for deeper insights (e.g., "What did you do after facing that difficulty?").
- Documentation: Record and categorize interview content into user pain points, feature requests, and business goals.

- Requirements Validation: Share findings with stakeholders to confirm accurate interpretation and implementation (e.g., "Did you mean pre-written notes or templates for e-gift cards?").
- Prioritization: Collaboratively determine the most crucial features/needs with stakeholders (e.g., personalized messages or gift-wrapping suggestions first?).
- Results Sharing: Present findings to the team using visuals like user stories and flowcharts.
- Iteration & Refinement: Gather feedback on prototypes and early versions to ensure the app develops in the right direction (e.g., test AI gift suggestions with stakeholders).

Questionnaire -

Potential consumers (External):

- 1) Do you find any kind of difficulty in choosing the desired type of products online?
- 2) How do you typically choose gifts? Is it that you search a wide range of platforms to shortlist gifts?
- 3) Do you find any variation in the pricing of the products that are found in physical stores and online sites?
- 4) Do you prefer a special note or a customized gift wrap while purchasing a gift product?
- 5) What are your expectations from AI regarding the recommendations it offers?
- 6) Do you find it difficult to remember certain special occasions? Would you like if there is a feature in app to reminder you of occasions based on your previous purchases?

Business Owners (Retailers, Gift Sellers) (External):

- 1) Do you sell your products online? What is the main issue that you face while selling online?
- 2) Do you think that your products stand apart from your competitors? Is it pricing, uniqueness or something else?

- 3) What is the target audience for products you sell? Are they young adults, parents, corporate clients, or some other group of people?
- 4) What features do you seek from an app which is AI integrated in order to achieve your selling goals?
- 5) What key data insights for example user behaviour, trends, preferences etc. would be useful to you from our platform?
- 6) What are your thoughts on certain policies such as delivery, return or replacement policies that are important for both you and consumer?

Business Owner & Investors (Internal):

- 1) What are the primary business objectives for GiftMate in the first year?
- 2) What key performance indicators (KPIs) should define GiftMate's success?
- 3) What models do you think will be more profitable for you (premium membership, commissions, etc.)?
- 4) According to you what are the benefits and risks of launching an AI-powered gift-recommending app?
- 5) How can someone differentiate GiftMate from its competitors?
- 6) What strategies are planned to scale the platform and attract more users?
- 7) What are your plans on the platform to handle seasonal demand surges and special occasions?
- 8) What partnerships will benefit you more?
- 9) What security and data privacy measures should be taken to ensure the trust of users and partners?

Marketing & Sales Team

- 1) What are the most effective channels to promote a gift-shopping application?
- 2) What digital marketing strategies would work best for an AI recommendation gifting app?

- 3) How will you analyze user behaviour data to create marketing campaigns?
- 4) How will you build the brand image with customer reviews or testimonies?
- 5) What is the role of social media platforms to drive sales?

Logistics Team

- 1) What are the most commonly faced challenges while delivering the gifts?
- 2) How can we optimize same-day or express delivery to ensure the satisfaction of user?
- 3) How can the company improve the return processes of unwanted gifts?
- 4) How can AI be beneficial for both the logistics team and users?
- 5) What should be the policies for lost and damaged products?

Technical Team:

- 1) What are the major technical challenges in integrating AI with an app?
- 2) How AI recommendations should evolve over time-based on user behavior?
- 3) How will you ensure that the availability of the application 24/7 to the users?
- 4) What are the security measures that would be taken to maintain the privacy of users?

The requirements were collected through interview questions, and the features were defined accordingly.

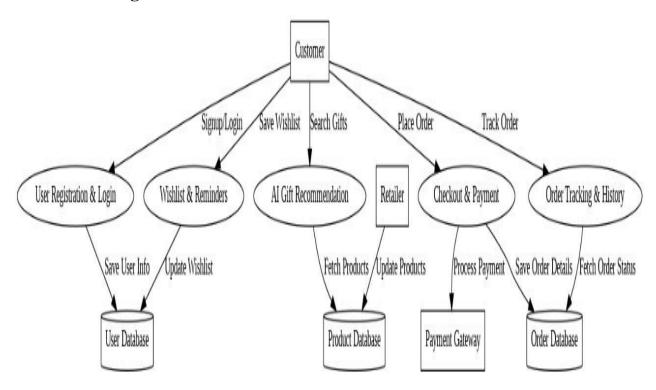
These are the requirements -

- Profile Setup (Add early preference of gift categories)
- Guest Mode
- Gift Search & Filters
- Gift Categories
- AI recommendations
- Wishlist & Saved Items
- Event Reminders
- E-gift cards & Digital Gifting
- Personalized Gift Wrapping & Messages

Agile Backlog Management and Visualization

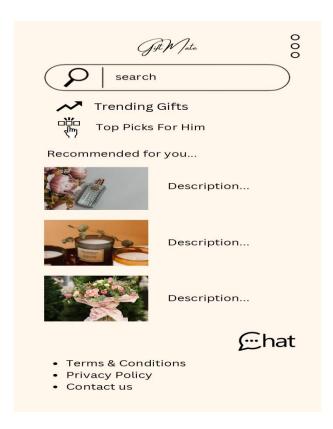
Process Flow Visualization –

Data Flow Diagram



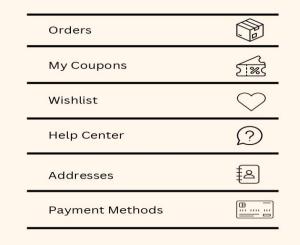
Design Diagrams



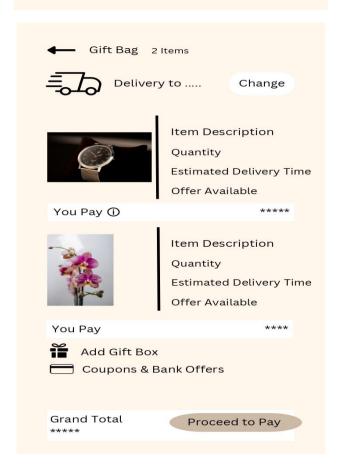




Hey XYZ Edit Your Profile



Log Out



Backlog of Epics-

Login & Authentication

- 1. User Registration
- 2. User Login & Authentication
- 3. Profile Setup (Add early preference of gift categories)
- 4. Guest Mode

Home Page & Navigation

- 5. Gift Search & Filters
- 6. Gift Categories
- 7. AI recommendations
- 8. Wishlist & Saved Items

My Account

- 9. Manage Profile Information
- 10.Event Reminders
- 11.E-gift cards & Digital Gifting

My Orders

- 12. Secure Payment & Checkout
- 13.Order Tracking & History
- 14. Return & Refund Requests
- 15.Personalized Gift Wrapping & Messages
- 16.Customer Support & Chatbot Assistance

Epic – Home Page

Feature - Gift Categories

1. As a user, I want to browse gifts categorized by my preferences so that I can get a list of suitable gifts easily.

Acceptance Criteria – Given the user is on the homepage when they click on the category then the user should see a list of gifts related to their preference.

2. As a user, I want to browse gifts based on the occasion so that I can easily find the perfect gift for birthdays or special events.

Acceptance Criteria – Given the user is on the homepage when they click on a particular occasion then they get to see a list of gifts relevant to that occasion.

3. As a user, I want to browse tech-related gifts so that I can find suitable gifts for people interested in gadgets and electronics.

Acceptance Criteria – Given the user is on the homepage when they select the tech category then they should see a list of tech-related products.

4. As a user, I want to browse fashion-related gifts so that I can find trendy gifts for people who love style and accessories.

Acceptance Criteria – Given the user is on the homepage when they select the fashion category then they should see a list of fashion-related products.

5. As a user, I want to browse gifts for book lovers and stationery enthusiasts so that I can find relevant gifts.

Acceptance Criteria – Given the user is on the homepage when they select the books & stationery category then they should see a list of gifts suitable for book and stationery enthusiasts.

6. As a user, I want to browse personalized and handmade gifts so that I can find meaningful presents.

Acceptance Criteria – Given the user is on the homepage when they select the personalized and handmade gifts option then they should see a list of customizable gift options.

7. As a user, I want to browse gifts for kids so that I can find age-appropriate fun items.

Acceptance Criteria – Given the user is on the homepage when they select the kids category then they should see a list of fun gift items.

8. As a user, I want clear visual icons representing each interest category so that I can quickly identify the categories.

Acceptance Criteria – Given the user is browsing gift categories when they look at each category option then the user should see clear visual icons representing each category.

9. As a user, I want to view a section for New Arrivals in gift categories, so that I can discover the latest products available.

Acceptance Criteria – Given the user is on the homepage when they navigate to the new arrivals option then they should see a list of the latest gift products available.

10. As a user, I want to see gift categories based on my viewed history so that I can quickly find gifts relevant to my preferences.

Acceptance Criteria – Given the user has previously viewed certain products when they return to the homepage then they should see recommendations of gift categories based on the viewing history.

Epic – My Orders

Feature – Order Tracking & History

1. As a user, I want to track the delivery status of my purchased gifts so that I will know the arrival time of that gift.

Acceptance Criteria – Given the user has placed an order when they go to the order tracking section then they should see the current status and delivery date and time of that order.

2. As a user, I want to view my order history so that I can easily find previous orders for reordering or reference.

Acceptance Criteria – Given the user is on my orders page when they click on the order history section then they should see a list of their past orders with details like date, items and total cost.

3. As a user, I want to reorder gifts from my order history so that I can purchase the same item with one click.

Acceptance Criteria – Given the user is in the order history section when they click on a past order then they should have an option to reorder the same items with a single click.

4. As a user, I want to receive a notification related to my shipment updates so that I am informed of any changes in the delivery status.

Acceptance Criteria – Given the user has placed an order when there is a change in the status of shipping then they should receive a notification via app message pop-up or email.

5. As a user, I want to see the estimated delivery date for my pre-orders so that I know when to expect my gift.

Acceptance Criteria – Given the user is reviewing the product when they check the order details then they should see the estimated date based on the location and shipping method.

6. As a user, I want to track my order using a tracking number so that I can get real-time updates.

Acceptance Criteria – Given the user's order has been shipped when they click on the tracking link in the order details then they should be directed to the real-time tracking page of delivery.

7. As a user, I want to search my order history using the product name or time - duration so that I can quickly find a past order.

Acceptance Criteria – Given the user is in the order history section when they enter valid profile or order details in the search bar then they see a filtered list of matching orders.

8. As a user, I want to sort my order history by order status so that I can quickly check the progress of my orders.

Acceptance Criteria – Given the user is in the order history section when they select a particular filter then they should see orders matching to that particular status.

9. As a user, I want to view the detailed information about my order on one page so that I can check the overall details about that particular order.

Acceptance Criteria – Given the user is in the order history section when they click on an order then they see full order details including items purchased, prices, shipping details and payment method.

10. As a user, I want a download option for past orders invoices so that I can use it to keep records.

Acceptance Criteria – Given the user is in my orders when they select an order in the order history section then they see an option to download the invoice in pdf format.

Analysis

Prioritization Analysis using MoSCoW

The MoSCoW method categorizes app features based on priority:

- Must-Have (M): Essential features for the app's basic functionality.
- Should-Have (S): Important features that improve user experience but are not mandatory for the initial version.
- Could-Have (C): Additional features that can be introduced later.
- Won't-Have (W): Features that are not needed for now.

1. Must-Have (M) – Core Features for MVP

These are the key features required for the app to function properly.

Key Features:

- AI Gift Recommendations Suggests gifts based on user preferences and budget.
- Secure Payment & Checkout Ensures safe and smooth transactions.
- User Registration & Login Personalizes user experience by saving preferences.
- -Order Tracking & Notifications Keeps users updated on their purchases and deliveries.
- -Retailer & Product Integration Connects users with vendors for real-time product availability.

Reason: These features are critical for the app to function as intended.

2. Should-Have (S) – Features That Enhance User Experience

These features improve the app's usability but are not essential at launch.

Key Features:

-Wishlist & Reminders – Allows users to save gifts and set reminders for special occasions

- Personalized Gift Messages Users can attach custom messages to gifts.
- Gift-Wrapping Options Offers different wrapping styles for a better gifting experience.
- Social Media Sharing Enables users to share gift ideas with friends and family.
- Multiple Currency & Language Support Makes the platform accessible to a global audience.
- AI-Based Seasonal Gift Suggestions Recommends gifts based on upcoming holidays and events.

Reason: These features make the app more engaging but can be introduced after the MVP launch.

3. Could-Have (C) – Advanced Features for Future Updates

These features add extra value and innovation but are not necessary for the first version.

Key Features:

- AR Virtual Gift Previews Allows users to view gifts in 3D before purchasing.
- Video Gift Messages Enables users to send recorded messages with gifts.
- AI-Based Emotion Detection Suggests gifts based on the user's mood.
- Subscription-Based Gifting Service Allows users to set up automated gift deliveries for recurring occasions.
- Corporate Gifting Solutions Provides bulk gifting options for businesses.

Reason: These features are advanced and require further investment in technology and resources, making them suitable for future updates.

4. Won't-Have (W) - Features Not Needed for Now

These features are not necessary at this stage and may be considered in the future.

Key Features:.

- Gift Auctions or Bidding System Allowing users to bid on gifts.
- -Virtual Reality (VR) Shopping Requires expensive technology and is not widely adopted.
- Metaverse Gifting Not practical for mainstream users at this time.

Reason: These features are either too complex, expensive, or not relevant for the app's initial success.

Summary of MoSCoW Prioritization

- 1.Must-Have (M) Essential Features for MVP AI Recommendations, Wishlist, Secure Payment, Order Tracking, User Login.
- 2. Should-Have (S) Features That Improve User Experience Gift Wrapping, Personalized Messages, Social Sharing, Multi-Currency Support.
- 3. Could-Have (C) Advanced Features for Later Updates AR Previews, Video Messages, Subscription Gifting, Corporate Gifting.
- 4. Won't-Have (W) Not Needed at This Stage Blockchain Gifting, VR Shopping, Gift Auctions, Metaverse Gifting.

Development Plan Based on MoSCoW Prioritization

- Phase 1 MVP Launch (Must-Have Features Only) 3-6 Months
- Phase 2 User Experience Enhancements (Should-Have Features) 6-12 Months
- Phase 3 Advanced Features (Could-Have Features) 12+ Months
- Future Consideration (Won't-Have Features) Reviewed Based on Market Demand

Validation

Validation Approach for GiftMate

1. Stakeholder Review Meetings

Purpose: Ensure the app Balance with user expectations and business goals Analysis:

- Conduct meetings with key stakeholders such as customers, business owners, retailers, and developers.
- Discuss user needs, pain points, and expectations for the app.
- Review the AI gift recommendation system, wishlist, reminders, and checkout process.

Gather feedback and refine features accordingly.

2. Prototype Testing

Purpose: Verify whether the core features function correctly before full development.

Analysis:

- Create a basic interactive prototype showing the main app functionalities.
- Invite a small group of users to test the prototype.
- Observe their navigation and interactions with the app.
- Gather feedback to improve design and usability.

3. Usability Testing

Purpose: Identify any design or functionality issues before the final development phase.

Analysis:

- Ask users to perform specific tasks, such as selecting a birthday gift under (Amount Range)
- Measure how long it takes to complete tasks and identify any challenges faced.
- Collect feedback on navigation, design, and ease of use.
- Make necessary changes to enhance user experience.

4. Feasibility Testing

Purpose: Ensure that the app is both technically and financially viable. Analysis:

- Work with the development team to assess whether AI-powered recommendations can be implemented effectively.
- Analyze potential technical challenges, costs, and required resources.
- Conduct a cost-benefit analysis to ensure financial feasibility.

• Confirm that the app can support high traffic and complex AI processing.

5. Performance Testing

Purpose: Ensure that the app can handle large numbers of users, especially during peak

Analysis:

- Simulate high traffic scenarios to test app response times.
- Monitor app speed, AI recommendation performance, and checkout processing.
- Identify any performance issues, such as slow loading times or system crashes.
- Optimize the system for smooth and efficient operation.

Summary of Validation Approach

Stakeholder Meetings - Ensure the app meets user needs.

Prototype Testing - Test core features and refine usability.

Usability Testing - Identify and fix navigation or design issues.

Feasibility Testing - Confirm technical and financial practicality.

Performance Testing - Optimize app for high-traffic usage.

This approach helps ensure GiftMate is user-friendly, functional, and well-tested before full launch.

Change Management

Change Management Plan:

Change management is significant as it ensures adaptability, minimizes risk and keeps stakeholders engaged.

Change Management Plan for the app GiftMate.

1. Change Management Process

- 1. Identify the need for change: The need for change can be identified through feedback from the stakeholders, market trends, and other factors that affect the business.
- 2. Impact assessment: First we have to know what the issues that need to be solved which in this case is lack of personalization, recommendations that are generic rather than based on the behaviour pattern of the users.
 - After we analyze the issues we have a goal which we have to achieve with methods that fit right. When the methods are listed, we assess the impact they'll have whether they are feasible or not and the probable risks they may have.
- 3. Prioritize the change: After the identification and impact assessment, the next step is to prioritize the changes for which we are using MoSCoW method. Through MoSCoW method we prioritize the requirements in terms of what the Must-have requirements are that need to be incorporated in the app which is the core feature of AI recommendations, after Must-have next one is Should-have in which we take the features that are important but not crucial for the app such as Wishlist. Next is Could-have in which we put additional features without which an app will not be affected and the last one is Won't-Have in which we can either not incorporate the said features or can add them later in the update cycle.
- 4. Develop and Test the Change: At this step, we build and integrate the change with the Technical team. This will involve the development phase, testing phase, and QA, etc. It is to ensure that the application is in line with the requirements.

- 5. Implement the Change: Rather than having a big-bang release it is better to release the app in phases or for a better review we can launch a beta testing app to the major stakeholders. Once the changes are validated, it can be deployed to all users. After deployment, it is important to monitor performance and feedback.
- 6. Post-Change Evaluation: The work does not end after deploying the changes. For a successful change implementation, it is important to measure KPIs that were set at the start through which we can assess whether we are achieving our goals or not. The KPIs in our case are high user engagement, conversion rates, and extended market reach.

2. Communication Plan

A proper communication plan is important through which we ensure that all stakeholders are involved and aware of the changes and its progress.

The communication has to be continuous and can be done through various modes such as e-mails, personal meetings and project management tools, etc. In this project, we have used Jira, in which all the team members can view the sprint backlog and make changes.

3. Risk Management and Mitigation

A rollback strategy should always be planned so that it is easy to make a turn if anything goes wrong. For this, it is essential to monitor and track performances and user feedback after changes.

BA's Role in Agile Ceremonies & Communication

1. Sprint Planning

BA Role:

- a) To clarify the user stories, ensuring the stories aligns with the business goals.
- b) Prioritizing the backlogs by working with the PO(Product Owner) to prioritize the features like wishlist reminders, upcoming events reminders or e-gift cards integrating based on the feedbacks.
- <u>Communication-</u> Presenting the user stories and acceptance criteria in simple language.

2. Daily Standup

BA Role:

a) To monitor the team's progress towards sprint goals and identify the obstacles(flagging the blockers) that extends the timeline or compromises the quality, such as technical challenges or any unclear requirements.

Eg: The team is building the Instant e-gift card purchases feature for GiftMate. However, integrating a third-party payment API (e.g: PayPal) is taking longer than expected.

<u>Communication</u>- Sharing updates of the project concisely.

3. Sprint Review/Demo

BA Roles:

- a) AI-Driven Gift Recommendations: Show how the app uses data like age, occasion, and preferences to suggest gifts.
- b) Reminders: Show how users can save gift ideas and set reminders for upcoming events like birthdays or anniversaries. Highlight how this feature helps users stay organized and never miss an important occasion.
- c) Personalized Messages and Gift-Wrapping: Show how users can add custom messages or choose from suggested gift-wrapping styles, making the gift feel more special and tailored.
- Communication- Using real scenerios and situations based on the current status of the project.

4. Sprint Retrospective

BA Role:

a) During the retrospection, helping the team pinpointing the requirements where the process fell short.

- b) If users found any feature hard to use during demo, proposing to simplifying the interface, adding tooltips, or conducting more user testing to refine the design.
- c) If users want faster delivery, explore options like integrating multiple payment APIs or optimizing the backend for quicker processing.
- d) If delays occurred due to issues with third-party APIs (like payment gateways), this highlights a need for better planning or vendor communication.
- Communication- Sharing the anonymous users feedbacks.

5. Backlog Refinement

BA Role:

a) Breaking down large requirements into manageable tasks, clarifying acceptance criteria, and ensuring technical feasibility of the components of the project.

Eg: Integrating e-gift card purchases.

The various subtasks are-

- 1) Selecting a payment API.
- 2) Integrating the API for secure payment processing.
- 3) Designing the UI for selecting and customizing e-gift cards.
- 4) Implementing email delivery of e-gift cards within 5 minutes of purchase.
- 5) Testing the end-to-end flow for errors and ensuring the process is seamless.
- b) Ensuring each task is clearly displayed and functions during the execution of the task and they work according to the flow of the project.
- Communication- Sharing anonymous user feedback to highlight areas where the app can better meet user needs.

JIRA Screenshots

