

# Product Requirements Document (PRD)

## Product Title

AI-Powered Shopping Assistant for Reducing Cart Abandonment

## Target Release

[To be determined]

## Product Manager

Group 3 march cohort

## Engineering Lead

[Name]

## Designer

[Beulahland]

## Document Status / Version

Version: 1.0

Status: Draft

---

## 1. Problem Statement

Cart abandonment is a critical issue in online shopping, leading to lost revenue and reduced customer engagement. Shoppers often leave their carts due to:

- Unexpected costs (e.g., taxes, shipping fees).
- Complicated checkout processes.
- Lack of real-time assistance.
- Concerns about security and payment options.
- Distractions or indecision.

Business Impact

- Decrease in conversion rates.
  - Increased cost of customer re-acquisition.
  - Loss of potential revenue.
- 

## 2. Solution Overview

An AI-powered shopping assistant that engages customers at key decision points to reduce friction in the purchase journey. It will:

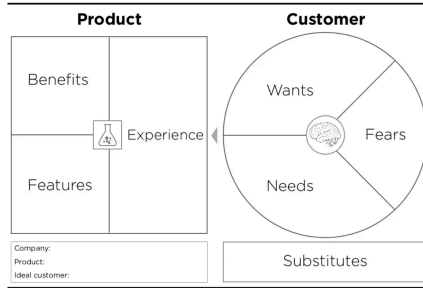
- Provide real-time chat support to answer product and checkout-related questions.
  - Send personalized reminders via email, push notifications, or SMS.
  - Detect hesitation and offer discounts or incentives dynamically.
  - Simplify the checkout process with auto-fill and guided assistance.
  - Proactively engage users through exit-intent pop-ups and personalized recommendations.
- 

## 3. Use Cases

1. As a shopper, I want real-time answers about product details so I can confidently make a purchase.
  2. As a returning customer, I want reminders about my cart with potential discounts so I don't forget to check out.
  3. As a first-time buyer, I want an AI assistant to guide me through checkout and explain security features.
  4. As a business owner, I want to reduce cart abandonment rates and increase revenue through AI-powered engagement.
- 

## 4. Value Proposition

## Value Proposition Canvas



Here's a detailed and structured Value Proposition Canvas for Valarie, Our AI-powered shopping assistant.

### Value Proposition Canvas for Valarie

#### Customer Segment (Right Side)

##### Wants

Customers want a frictionless and efficient shopping experience:

- A personalized shopping assistant that understands their preferences.
- Instant and relevant product recommendations based on browsing behavior.
- A hassle-free checkout process that saves time.
- Access to exclusive discounts and special offers tailored to their interests.
- Assistance in discovering trending or best-value products without manual searching.

##### Fears

Customers have concerns that prevent them from completing purchases:

- Security risks associated with online transactions and data privacy.
- Doubt in AI recommendations, fearing inaccurate or biased suggestions.
- Decision fatigue from too many product options, leading to indecision.
- Hidden costs such as unexpected shipping fees or price fluctuations.

- Fear of losing out on a better deal elsewhere.

## Needs

Essential solutions that would improve their shopping experience:

- Guidance in finding the right products quickly without manual searching.
- A smooth and secure checkout process that reduces friction.
- Clear assurance of best deals and discounts, eliminating price doubts.
- Reliable and instant customer support for queries about products, returns, or availability.
- A seamless shopping experience across multiple devices and channels (mobile, web, voice, etc.).

## Substitutes

Current alternatives customers rely on in the absence of Valarie:

- Traditional customer service (email/chat support, which can be slow and impersonal).
- Manual product searches (Google, marketplace filters, customer reviews).
- Third-party price comparison tools (Honey, Rakuten, etc.).
- Competitor AI-powered assistants (Amazon's Alexa, Shopify's AI, Google Shopping AI).

---

## Product Offering (Left Side - Valarie's Features & Benefits)

### Benefits

Valarie delivers tangible advantages to users by:

- Reducing cart abandonment by offering smart reminders, personalized incentives, and urgency triggers.
- Providing a highly personalized shopping journey, adapting to user behavior in real time.
- Saving time by eliminating the need for extensive searches and comparisons.

- Building customer trust with transparent pricing, secure payment options, and credibility signals.
- Enhancing customer engagement with interactive shopping suggestions and gamification elements.

## **Features**

Valarie's core functionalities that create value for users:

- **AI-Powered Personalized Recommendations**
- Analyzes browsing history, purchase patterns, and preferences.
- Offers dynamic product suggestions tailored to the user.
- **Automated Cart Recovery & Smart Notifications**
- Detects abandoned carts and sends timely reminders via email, SMS, or in-app notifications.
- Offers personalized discounts or incentives based on user behavior.
- **Seamless One-Click Checkout**
- Autofills payment and shipping details to minimize friction.
- Supports multiple payment options, including digital wallets and BNPL (Buy Now, Pay Later).
- **AI Chatbot & Virtual Shopping Assistant**
- Provides instant support for product queries, return policies, and order tracking.
- Integrates with voice assistants for hands-free shopping.
- **Multi-Channel & Omnichannel Integration**
- Works across mobile apps, websites, and smart home devices.
- Syncs shopping data across platforms to maintain a consistent experience.

## **Experience**

Valarie provides a smooth, engaging, and intelligent shopping journey:

- Intuitive UI/UX that feels seamless and human-like rather than robotic.

- Dark and light mode for optimal accessibility.
  - Gamified shopping experience with reward points, milestone discounts, and AI-driven challenges.
  - Personalized dashboards that track past purchases, favorite items, and AI-suggested deals.
  - Voice & chat interaction for hands-free, natural conversations.
- 

## 5. Target Personas

### Primary Persona: Online Shoppers

- Tech-savvy customers who prefer seamless, personalized shopping experiences.
- Customers who abandon carts due to checkout complexity, pricing concerns, or distractions.

### Secondary Persona: E-Commerce Businesses

- Online store owners looking to increase conversions and reduce abandonment.
  - Retail brands aiming to improve customer experience and operational efficiency.
- 

## 6. Goals & Success Criteria

- Reduce cart abandonment rate by 20-30% within 6 months.
  - Increase conversion rate by 15% through AI-powered engagement.
  - Improve customer satisfaction score (CSAT) by 10% via instant assistance.
  - Enhance revenue per visitor (RPV) by 10% through personalized recommendations.
- 

## 7. User Experience Flow

### Customer Interaction Flow

1. [Pre-Checkout Engagement](#)
  - AI assistant answers product-related queries in real time.
  - Provides size guides, stock availability, and delivery estimates.
2. [During Checkout](#)
  - Auto-fills customer details for a frictionless experience.
  - Offers installment payments or alternative checkout methods.
3. [Cart Abandonment Prevention](#)
  - Sends automated email/SMS reminders.
  - Offers limited-time discounts or free shipping.
4. [Exit Intent Detection](#)
  - Displays pop-ups when a user is about to leave the checkout page.

---

## 8. User Stories/ Experience

| Feature         | User Story                                                           | Requirements                                | Example UI          | Release     |
|-----------------|----------------------------------------------------------------------|---------------------------------------------|---------------------|-------------|
| 1. Installation | 1.1 As a user, I want to easily install the app on my mobile device. | - App is available on iOS & Android stores. | Mobile app store UI | Version 1.0 |

|                          |                                                                            |                                                                                          |                           |             |
|--------------------------|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------------------------|-------------|
|                          | 1.2 As a user, I want the app to work across my different devices.         | - Supports multiple devices with one account.                                            | Multi-device login screen | Version 1.0 |
|                          | 1.3 As a user, I want to upgrade my app when new features are available.   | - Update notifications appear in-app & store.                                            | Update notification popup | Version 1.1 |
| 2. Account Creation      | 2.1 As a user, I want to create an account, so that I can access features. | - Sign up with email/social media. - Set password & username. - Verification email sent. | Signup page UI            | Version 1.0 |
| 3. Login Page            | 3.1 As a user, I want to log in easily and securely.                       | - Supports email & social login. - Two-factor authentication available.                  | Login screen UI           | Version 1.0 |
| 4. Create and Edit Video | 4.1 As a user, I want to create and edit videos with ease.                 | - Video editing tools (trim, filters, effects). - Save drafts.                           | Video editor interface    | Version 2.0 |
| 5. Browse Videos         | 5.1 As a user, I want to search                                            | - "For You" page with keyword search & filters. - Filters include                        | Search and filter UI      | Version 2.0 |

|                    |                                                                   |                                                                    |                                  |             |
|--------------------|-------------------------------------------------------------------|--------------------------------------------------------------------|----------------------------------|-------------|
|                    | for videos using different filters.                               | category, duration, popularity.                                    |                                  |             |
|                    | 5.2 As a user, I want videos recommended based on my preferences. | - AI-driven recommendation s.<br>- Personalized “For You” section. | Personalized recommendation s UI | Version 2.0 |
| 6. Manage Profile  | 6.1 As a user, I want to edit my profile information.             | - Edit name, bio, profile picture, privacy settings.               | Profile settings UI              | Version 1.0 |
| 7. Manage Settings | 7.1 As a user, I want to control app settings.                    | - Notification preferences, language settings, privacy options.    | Settings page UI                 | Version 1.1 |
| 8. Analytics       | 8.1 As a user, I want to see insights on my video performance.    | - Dashboard with views, likes, shares, and engagement rates.       | Analytics dashboard UI           | Version 2   |

## 9.Design Flow

## PROTOTYPE

<https://www.figma.com/proto/9TrJ8Lw4ANf7eHfdYknz6N/VALARIE?page-id=0%3A1&node-id=61-771&p=f&viewport=-4202%2C-1146%2C0.91&t=VOCu6mHAsIBky8U3-1&scaling=scale-down&content-scaling=fixed&starting-point-node-id=23%3A1795>

**MOCK-UP**

[https://www.canva.com/design/DAGjNovlnzY/nYUrcpb7wtYCD2OmvDYoxw/edit?utm\\_content=DAGjNovlnzY&utm\\_campaign=designshare&utm\\_medium=link2&utm\\_source=sharebutton](https://www.canva.com/design/DAGjNovlnzY/nYUrcpb7wtYCD2OmvDYoxw/edit?utm_content=DAGjNovlnzY&utm_campaign=designshare&utm_medium=link2&utm_source=sharebutton)

**10. Competitor Analysis**

| Competitor | Strengths                                                      | Weaknesses                                            |
|------------|----------------------------------------------------------------|-------------------------------------------------------|
| Amazon     | Global reach, vast product catalog, fast shipping with Prime.  | High seller fees, competitive pricing challenges.     |
| Temu       | Ultra-low pricing, aggressive marketing, free shipping offers. | Product quality concerns, long delivery times.        |
| Alibaba    | Wholesale and bulk pricing, strong supply chain network.       | Not consumer-focused, primarily for B2B transactions. |

|                                   |                                                                                   |                                                         |
|-----------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------|
| Jumia                             | Strong presence in African markets, localized payment options, logistics network. | Limited product variety compared to global competitors. |
| Shopify (Abandoned Cart Recovery) | Simple email reminders.                                                           | No real-time AI engagement.                             |
| Drift (AI Chatbots)               | AI chat support.                                                                  | No direct checkout integration.                         |
| Privy (Pop-ups)                   | Exit-intent triggers.                                                             | No deep AI personalization.                             |

Competitive Advantage:

Valarie the AI shopping assistant combines real-time chat, smart reminders, and checkout optimization—an all-in-one solution that outperforms competitors.

---

# 10. Key Features & Releases

## Release Phase 1

- ✓ AI Chatbot for real-time product & checkout support
- ✓ Automated cart abandonment reminders (email, SMS, push)
- ✓ Exit-intent pop-ups to retain users

## Release Phase 2

- ✓ Personalized discount offers based on hesitation signals

✔ One-click checkout & auto-fill assistance

✔ AI-driven product recommendations

### Release Phase 3

✔ Voice assistant for checkout guidance

✔ Social media messenger integration (WhatsApp, Facebook)

✔ Advanced analytics dashboard for merchants

---

## 11. User Stories & Requirements

| Feature        | User Story                                                                        | Requirement                                           |
|----------------|-----------------------------------------------------------------------------------|-------------------------------------------------------|
| AI Chatbot     | As a shopper, I want an AI assistant to answer my product questions in real time. | AI-powered chat widget on product and checkout pages. |
| Cart Reminders | As a customer, I want a reminder for my cart items so I don't forget my purchase. | Automated email/SMS notifications.                    |
| Exit Pop-Ups   | As a user, I want a discount when I try to leave the checkout page.               | Exit-intent AI triggers with customizable incentives. |

|                    |                                                                               |                                                     |
|--------------------|-------------------------------------------------------------------------------|-----------------------------------------------------|
| Auto-Fill Checkout | As a customer, I want my details saved for a faster checkout.                 | Secure autofill and saved payment options.          |
| AI Discounts       | As a hesitant buyer, I want a personalized discount to encourage my purchase. | AI analyzes behavior and offers tailored discounts. |

---

## 12. Release Plan (Optional)

| Release | Features                                   | Expected Date |
|---------|--------------------------------------------|---------------|
| Phase 1 | AI chatbot, cart reminders, exit pop-ups   | Q2 2025       |
| Phase 2 | Personalized discounts, one-click checkout | Q3 2025       |
| Phase 3 | Voice assistant, social media integration  | Q4 2025       |

---

## 13. Out of Scope

- AI-powered inventory management (covered by separate solutions).
- In-depth fraud detection (handled by payment gateways).
- Custom branding for AI assistant (available in future updates).

---

## 14. Questions & Decision Tracker

| Date       | Question/Decision                                      | Answer                                    |
|------------|--------------------------------------------------------|-------------------------------------------|
| 2025-01-15 | Should AI assistant support voice commands in Phase 1? | No, planned for Phase 3.                  |
| 2025-02-10 | Which messaging channels should we prioritize?         | Email, SMS, and push notifications first. |

---

## Conclusion

Our PRD outlines a comprehensive AI-powered shopping assistant designed to reduce cart abandonment and increase conversions. With features like real-time chat, automated reminders, personalized discounts, and smart checkout optimizations, it provides a competitive advantage for e-commerce businesses.

---

## Next Steps

- We would Gather stakeholder feedback.
- Then we would Develop a prototype for AI chatbot & cart reminders.
- And Begin A/B testing for exit-intent incentives

## MEMBERS.

1. Ignatius Beulahland Chioma (Group Leader)
2. Mrs Motunrayo Abisola Adesanya
3. Kabirat Ayomiposi Adetokunbo
4. Oluwatemilorun Oyeranti Esther
5. Nwajei precious
6. Shin-aba Damilola
7. Udeme ofonime udofia
8. Odedina Omotolani Esther
9. Benjamin Arthur
10. Adigwe Peace Ogechukwu
11. Kolawole olawale quadri
12. Efunkunle Oluwaseyifunmi
13. Kolawole Olabisi Ruqayat
14. Oliyide Opoolajesu Oreoluwa
15. Ayoade Tobiloba Victoria

16. Banye Ogechukwu Abigail
17. Ononye Onyekachi Henrietta
18. Okolie Chinemelum Collins
19. Okosun Daniel
20. Benstowe Tamuno-kuro
21. Kolawole Oluwakemi Enddy
22. Yekeen Olalekan Saheed
23. Sulaiman Juwayriyyah Omolola
24. OreOba Waheed Elorm
25. Elizabeth Semefa Abotsi
26. Oyedotun Motunrayo Christianah
27. Adelola Abioye