AI Shopping Concierge

Team ASICs

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The Problem in E-commerce

Stagnant Experience

Traditional e-commerce lacks personalization and guidance, leading to aimless browsing and abandoned carts.
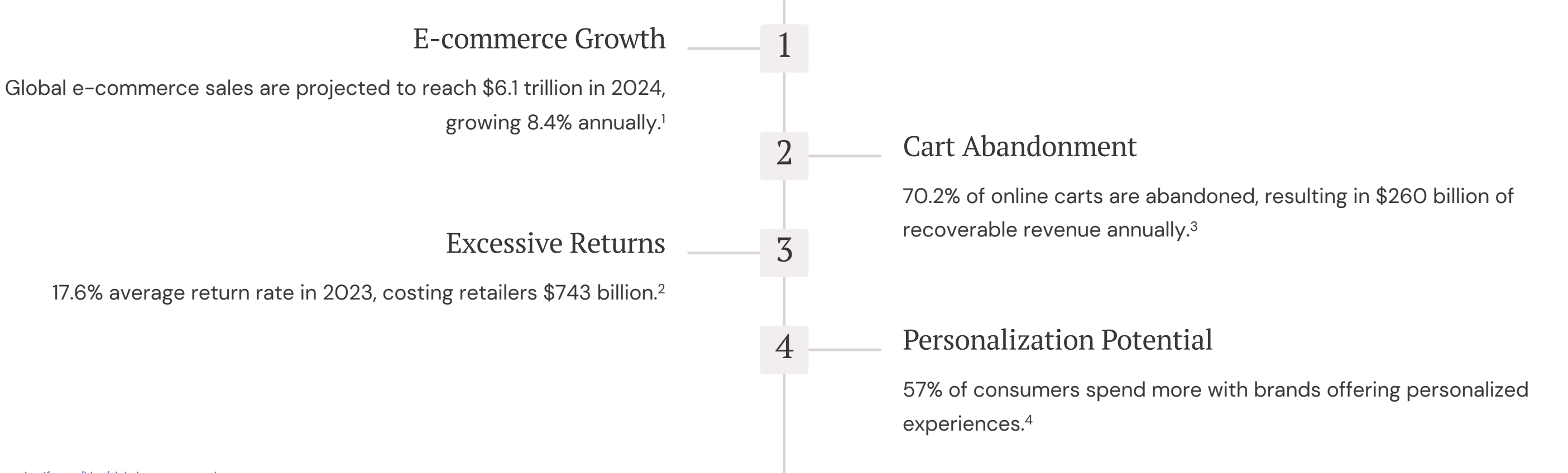
Limited Search

Current search functionalities limit the user's ability to express their specific needs, making it difficult to find the most relevant products.

Visualization Issues

Static product images fail to show how items would look on individual users, leading to a "runway-to-reality gap", poor sizing, and product returns.

Market Opportunity

E-commerce Growth — [1]

Global e-commerce sales are projected to reach $6.1 trillion in 2024, growing 8.4% annually.[1]

[2] — Cart Abandonment

70.2% of online carts are abandoned, resulting in $260 billion of recoverable revenue annually.[3]

Excessive Returns — [3]

17.6% average return rate in 2023, costing retailers $743 billion.[2]

[4] — Personalization Potential

57% of consumers spend more with brands offering personalized experiences.[4]

[1] https://www.shopify.com/blog/global-ecommerce-sales
[2] https://www.shopify.com/enterprise/blog/ecommerce-returns
[3] https://www.shopify.com/uk/blog/shopping-cart-abandonment
[4] https://www.shopify.com/enterprise/blog/personalization-trends

Our Solution → AI Shopping Concierge

Integrated Presence

Integrates seamlessly into existing online storefronts, offering guidance and personalization to the user.
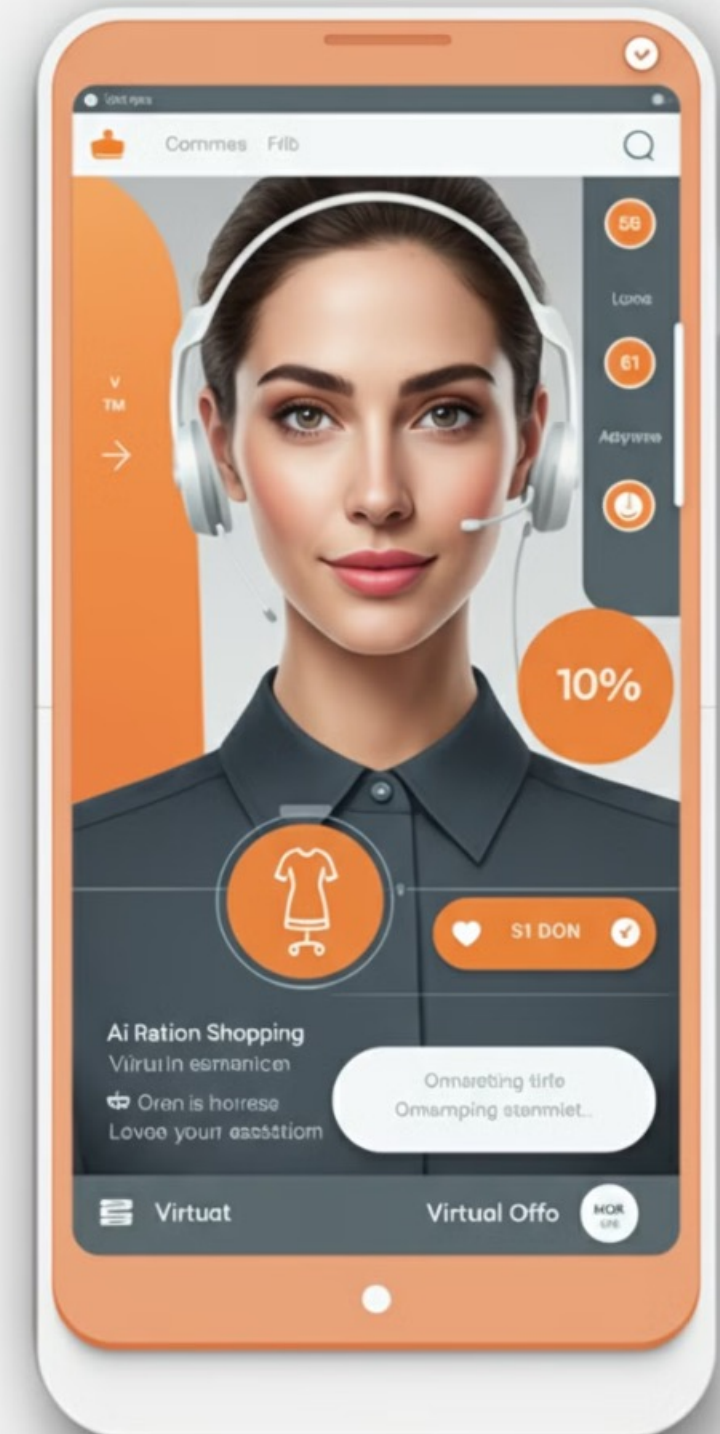
Intuitive Interface

Allows for natural conversations through text or voice, enabling intuitive product search and recommendations
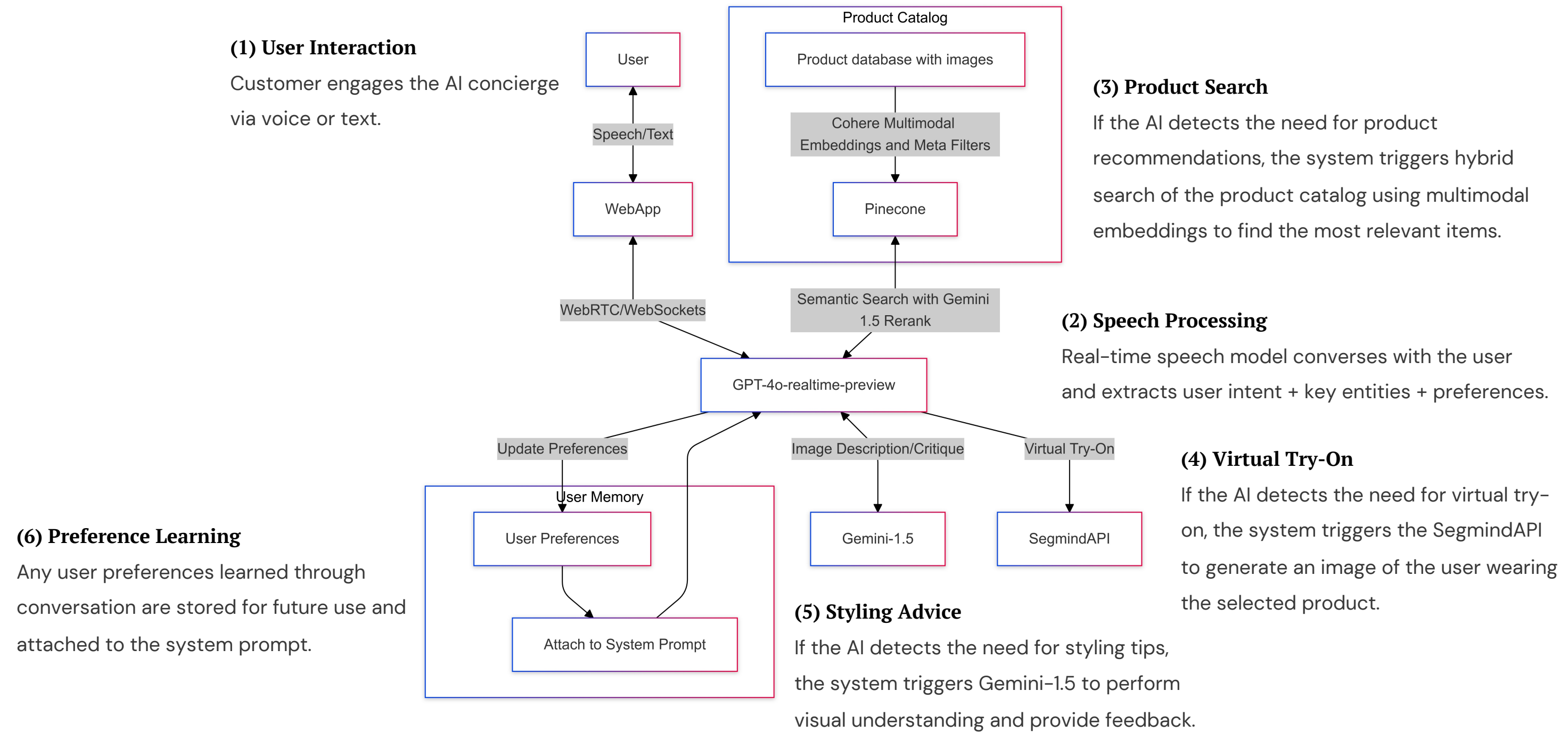
Continuous Personalization

Learns and remembers user preferences across conversations, building deeper understanding over time.

Virtual Try-On

Generative AI-powered try-on feature helps users visualize products and get fashion advice.

System Architecture + User Workflow

(1) User Interaction

Customer engages the AI concierge via voice or text.

(3) Product Search

If the AI detects the need for product recommendations, the system triggers hybrid search of the product catalog using multimodal embeddings to find the most relevant items.

(2) Speech Processing

Real–time speech model converses with the user and extracts user intent + key entities + preferences.

(4) Virtual Try-On

If the AI detects the need for virtual try-on, the system triggers the SegmindAPI to generate an image of the user wearing the selected product.

(6) Preference Learning

Any user preferences learned through conversation are stored for future use and attached to the system prompt.

(5) Styling Advice

If the AI detects the need for styling tips, the system triggers Gemini–1.5 to perform visual understanding and provide feedback.

Product Catalog
- Product database with images
- Cohere Multimodal Embeddings and Meta Filters
- Pinecone

User — Speech/Text — WebApp — WebRTC/WebSockets — GPT-4o-realtime-preview

Semantic Search with Gemini 1.5 Rerank

Update Preferences — Image Description/Critique — Virtual Try-On

User Memory
- User Preferences
- Attach to System Prompt

Gemini-1.5

SegmindAPI

Demo Time

Let's dive into a live demonstration.