



Title: **AiDA** - Virtual Shopping Assistant for  
Human-like Experiences

Theme: Visual AI and E-commerce

Team: MNS



# Problem Statement



In e-commerce, the lack of personalized guidance and real-time assistance found in traditional retail leads to challenges in making informed decisions. This often results in customer dissatisfaction, abandoned carts, and missed sales, especially in categories like electronics, furniture, and fashion where personalized services and the ability to try on before buying are crucial.

# Objective



To create a realistic virtual assistant that mimics a seasoned sales executive, interacting with users through visual and audio channels to offer personalized product recommendations and advice. It offers advanced AR technology to provide virtual try-ons for clothes and virtual placement for furniture, allowing users to visualize better to make an informed purchasing decision.

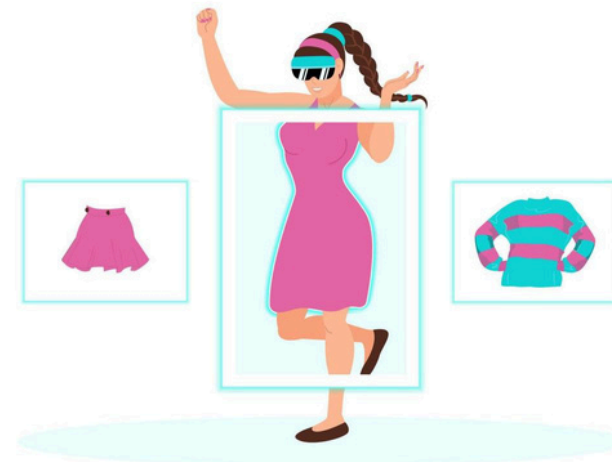


# Key Features



## Visual and Audio Interaction

A life-like shopping assistant using realistic avatars and audio generated from **RAD-Nerf** driven by user voice queries.



## Virtual Try-ons

Using **AR** and **GenAI**, we enhance Amazon Prime's "Try Before You Buy" with virtual try-ons, giving customers a realistic view of items.



## Personalized Recommendations

Use **RAG** to analyze preferences, suggest tailored products, offer expert advice, and assist with budget management.





## Sustainability and Ethical Shopping

Promote eco-friendly, ethically sourced products to guide users towards sustainable choices.



## Real-time Feedback and Adaptation

Enable the assistant to adapt its suggestions in real-time based on user feedback and conversational cues.



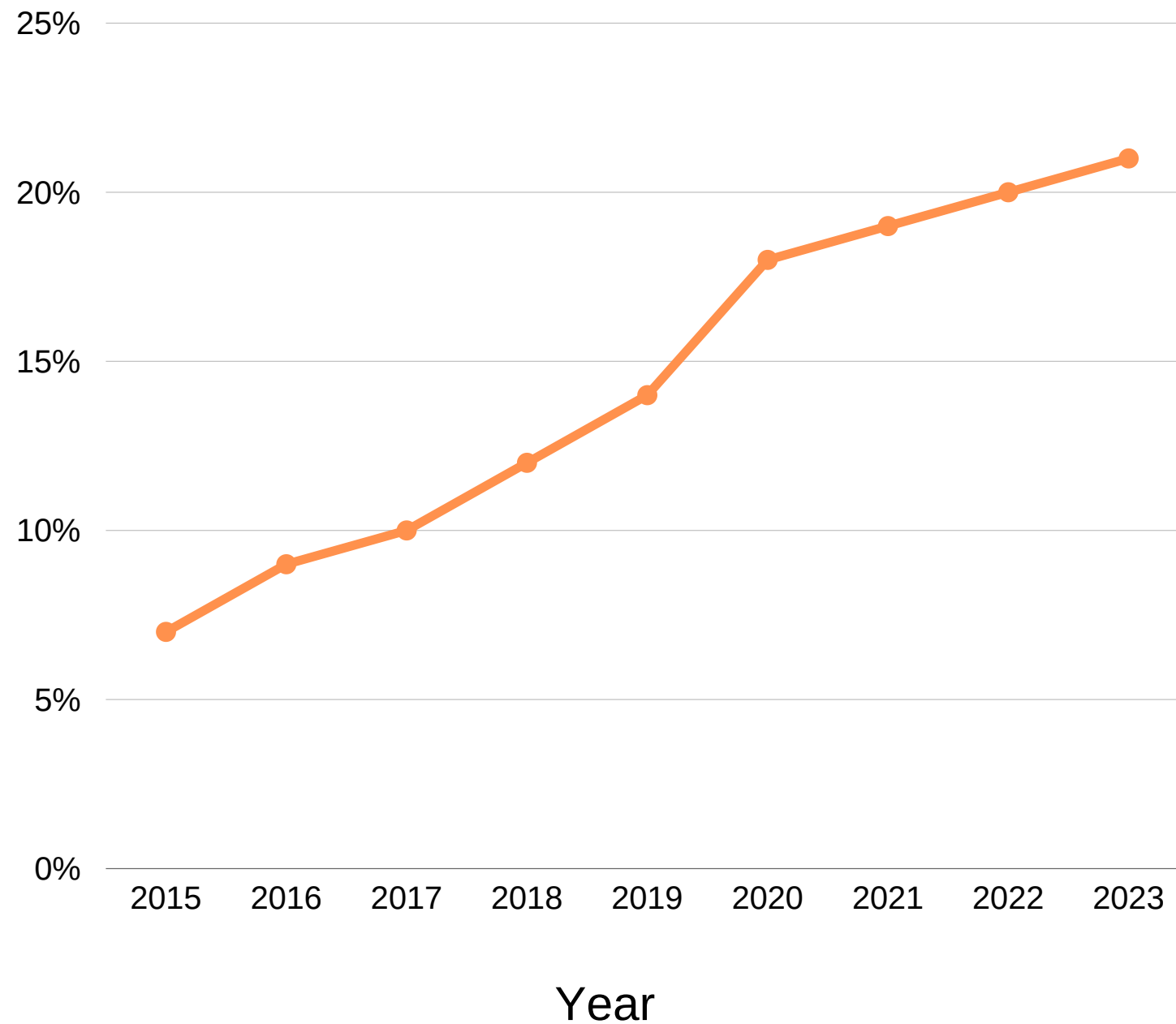
## Cross-category Expertise

Ensure the assistant adeptly assists with products across electronics, furniture, and fashion categories.



# Market Opportunity

Ecommerce as % of total retail sales



## Enhancing Personalization in E-Commerce:

Key to Unlocking Growth and Reducing Return Rates

### 01. Rapid Growth Projection

- The global e-commerce market was valued at approximately \$4.13 trillion in 2023 and is expected to grow with a CAGR of 9.49% until 2029. ([Reference](#))

### 02. Changing consumer preferences

- Modern consumers seek immersive and interactive shopping experiences that go beyond traditional e-commerce
- According to a study by [Deloitte Digital](#), 69% of consumers are more likely to purchase from a brand that offers personalized experiences.

### 03. Addressing High Return Rates

- Fashion and decor categories have high return rates. Try-ons can significantly reduce return rates by allowing customers to make more informed purchasing decisions.



# Monetization Strategies

## Advertising

Display targeted ads based on user preferences and behavior within the assistant workflow, allowing brands to reach specific audiences strategically.

## Affiliate Marketing & Commissions

Earn commissions on recommended sales and allow brand sponsorship for product placement, using PPC or PPI models.

## Prime Subscription Model

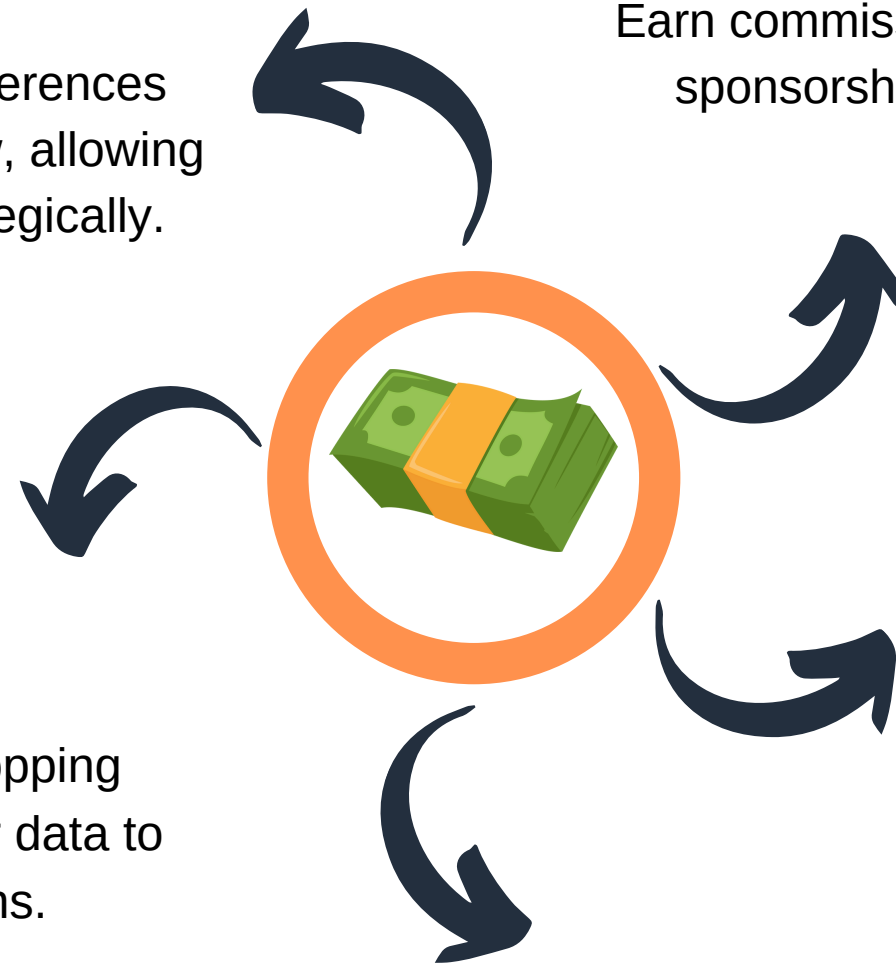
Provide a subscription plan for premium features like advanced AR try-ons, personalized styling tips, and exclusive discounts.

## Analytics and Insights Subscription

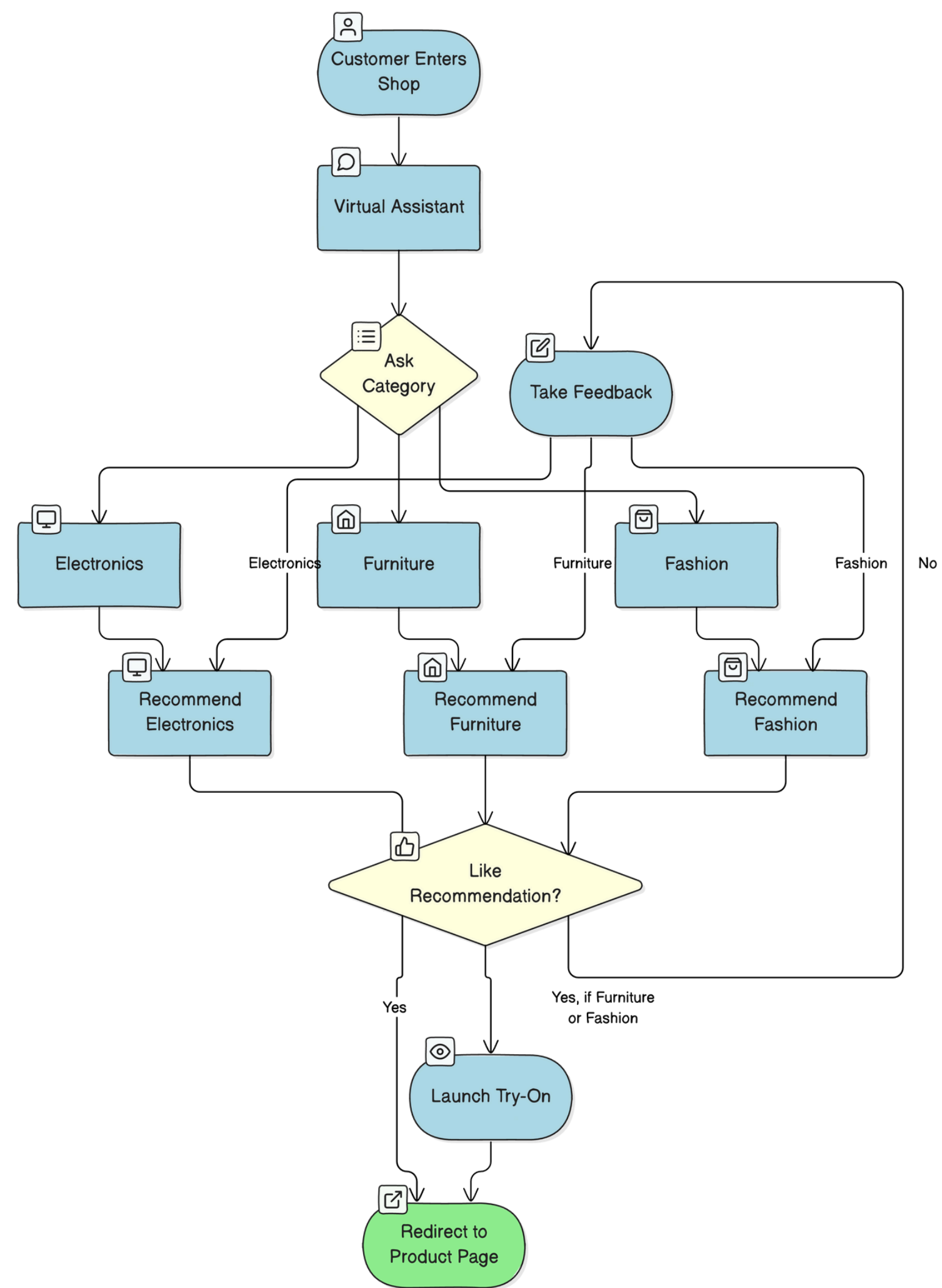
Sell anonymized consumer behavior data to brands, offering insights into customer preferences and trends.

## Personalization Services

Enable brands to create personalized shopping experiences within the assistant, using user data to tailor recommendations and promotions.



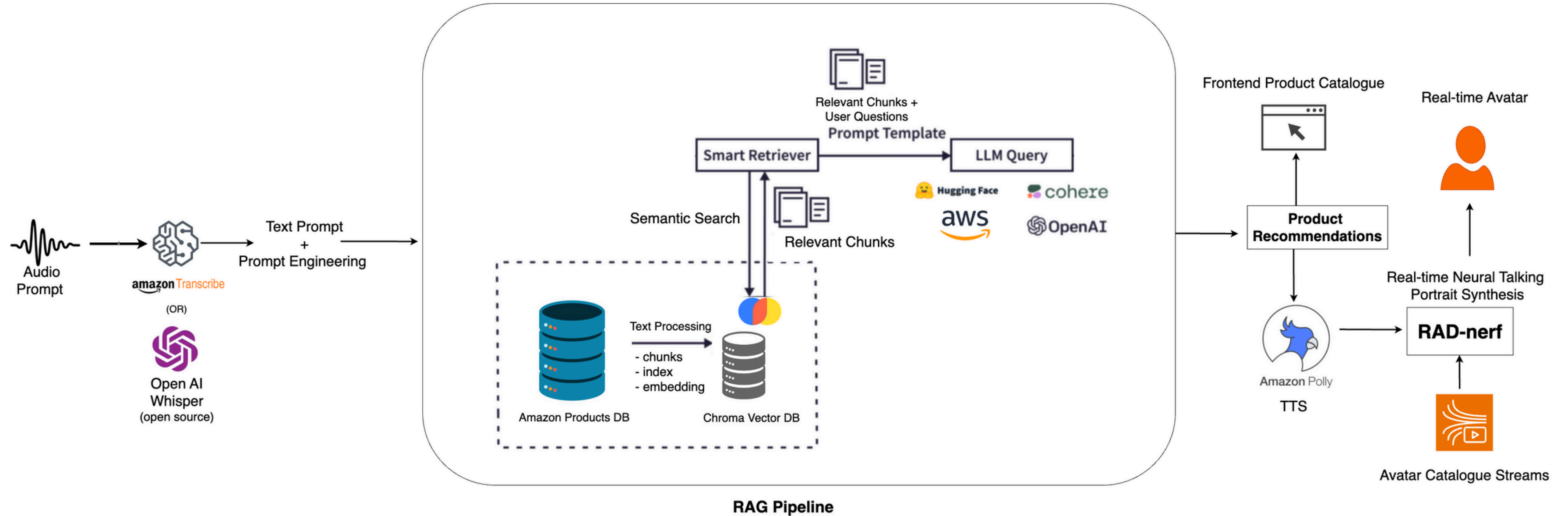
# Application Workflow



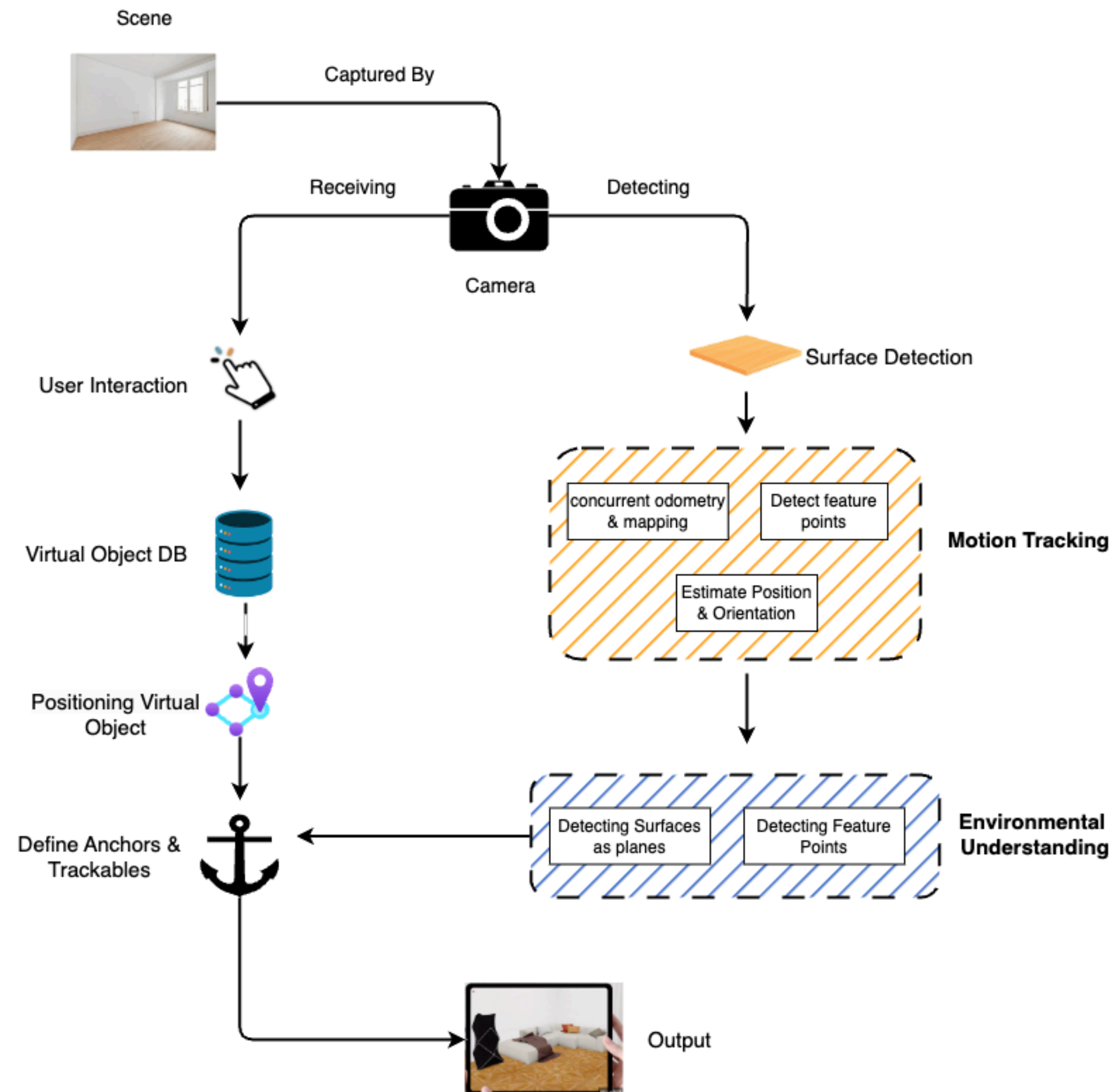




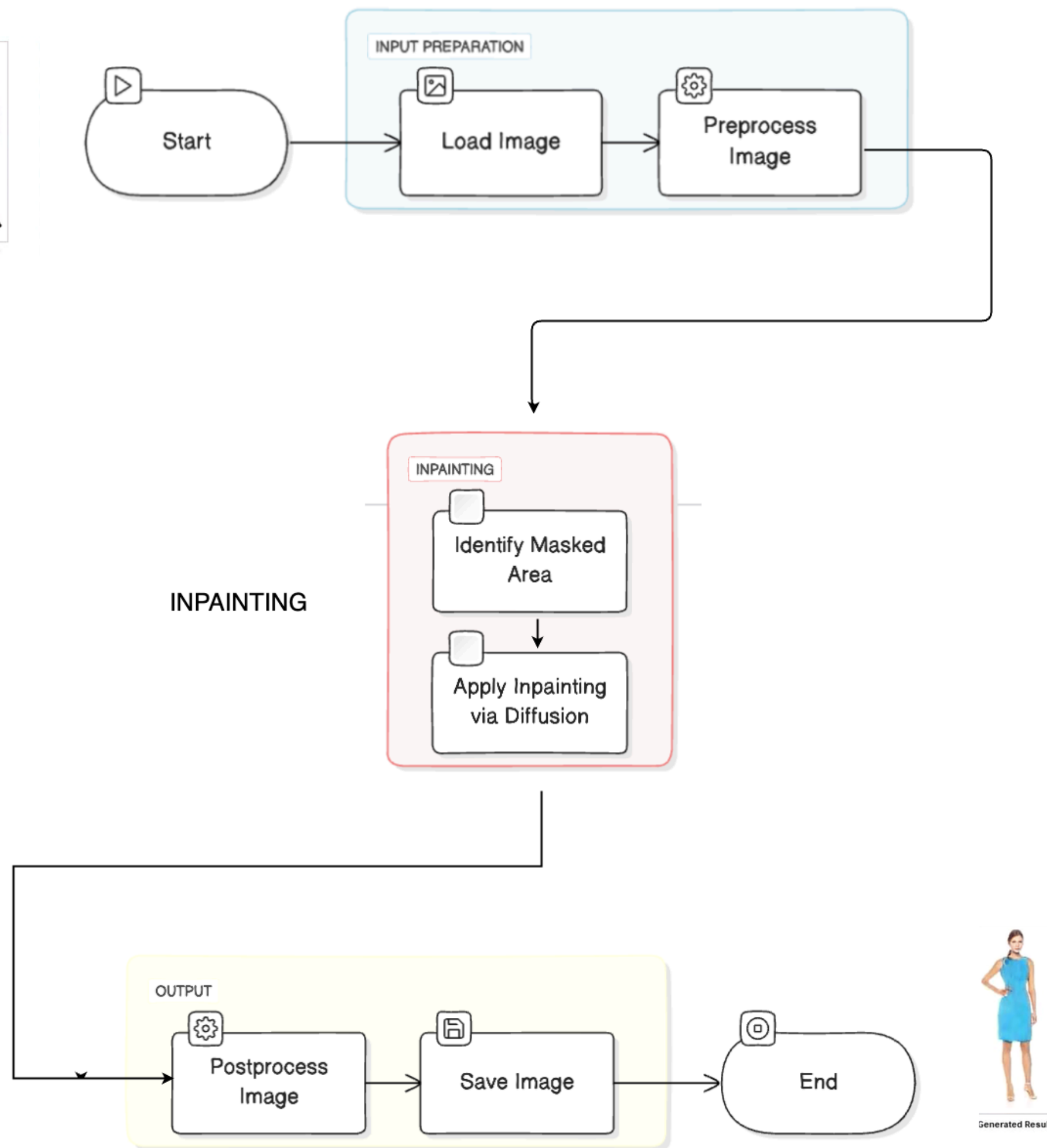
# Virtual Assistant Architecture



# AR Pipeline



# Virtual Try-On Pipeline





# Thank You!

## Team:

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