

RakuMon

Your Real Life Dorae-Mon!

Sub-Theme: Hyper personalization and prompt based shopping experience in e-commerce leveraging [Gen] AI

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EXPLORE NOW

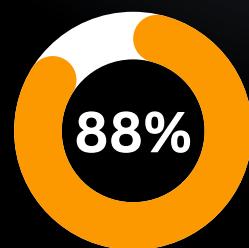


Problem Statement

SHOPPING ONLINE: THE STRUGGLE IS REAL

Online shopping often lacks the personal touch of a knowledgeable shopkeeper and the shared joy of shopping with family. For example, while one customer might prioritize fabric, another focuses on brand, but current platforms treat them the same ignoring their unique preferences.

In physical stores, a shopkeeper tailors their pitch—highlighting a T-shirt's brand for Avneet and its cotton fabric for Sid. We aim to bring this level of personalization online, using hyper-personalization to create adaptive retail experiences that cater to each customer's unique needs.



Shoppers abandoned purchases in the last 3 months of 2023 due to decision-making difficulties caused by information overload



INFORMATION OVERLOAD

Bombarding customers with millions of product options all at once, makes it difficult and overwhelming to choose their right fit.



MISSING APNA-PAN

Online shopping feels one-size-fits-all; we crave the personal assistance that understands our unique tastes.



LIMITED SEARCH CAPABILITIES

Current ecommerce search engines can't handle complex search queries and have difficulty in fetching exact results.



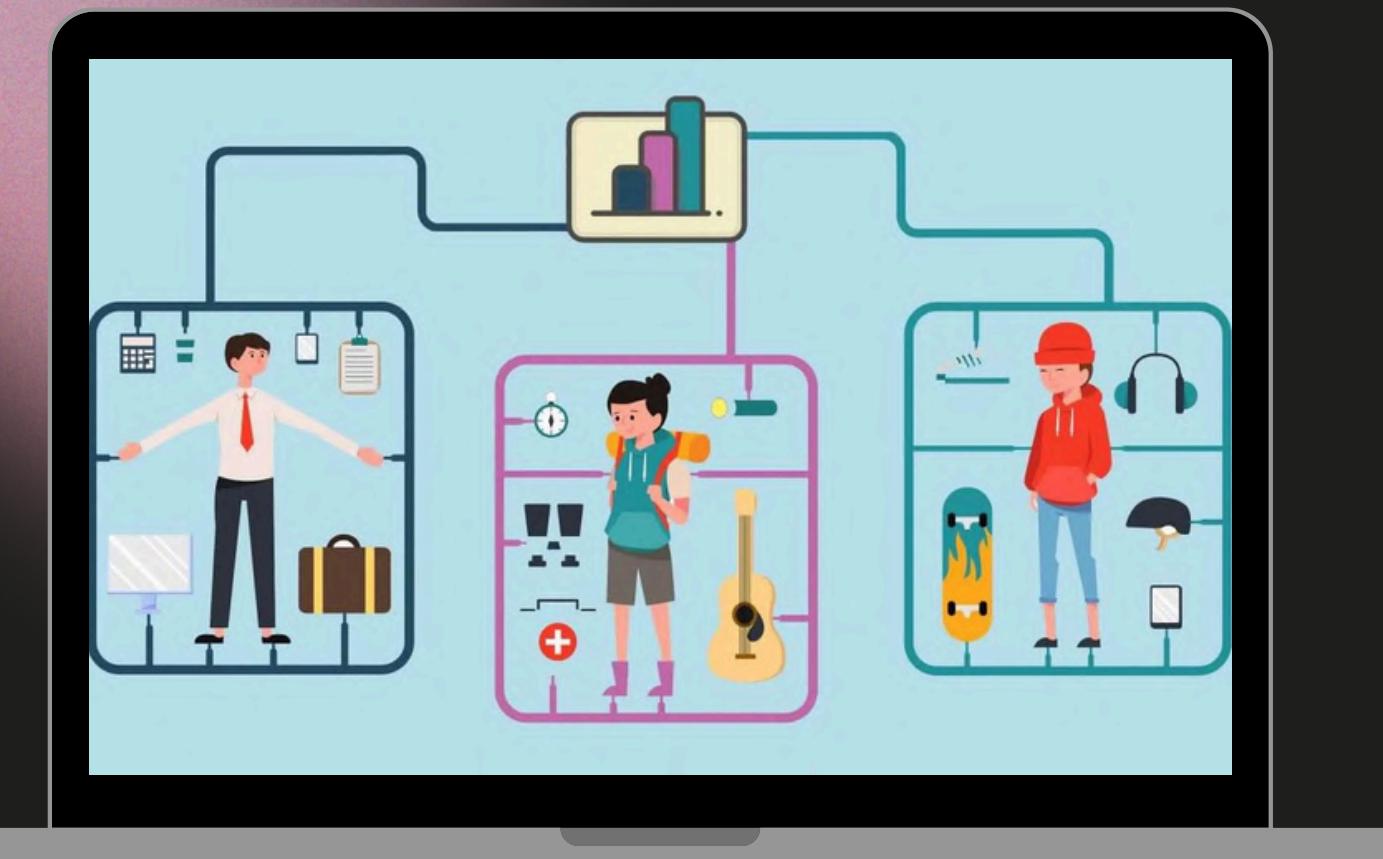
63% of consumers stop buying from brands that fail to personalize effectively.

Solution Summary

Introducing RakuMon, prompt driven multi agent framework redefining online shopping. RakuMon first analyzes user behavior and preferences, then leverages generative AI to deliver personalized product recommendations, predictive support, and engaging immersive conversations.

With its roots in hyper-personalization, RakuMon transforms customer experiences, drives sales, and boosts retention rates. Say goodbye to conventional chatbots and search bars— embrace intuitive, human-like interactions where every user feels valued and understood.

Discover the future of shopping—where every conversation is as unique as you are.

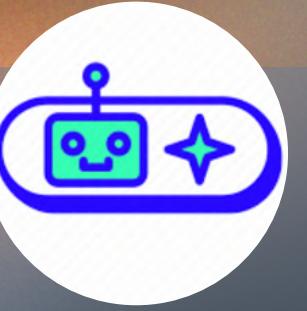


Application Features



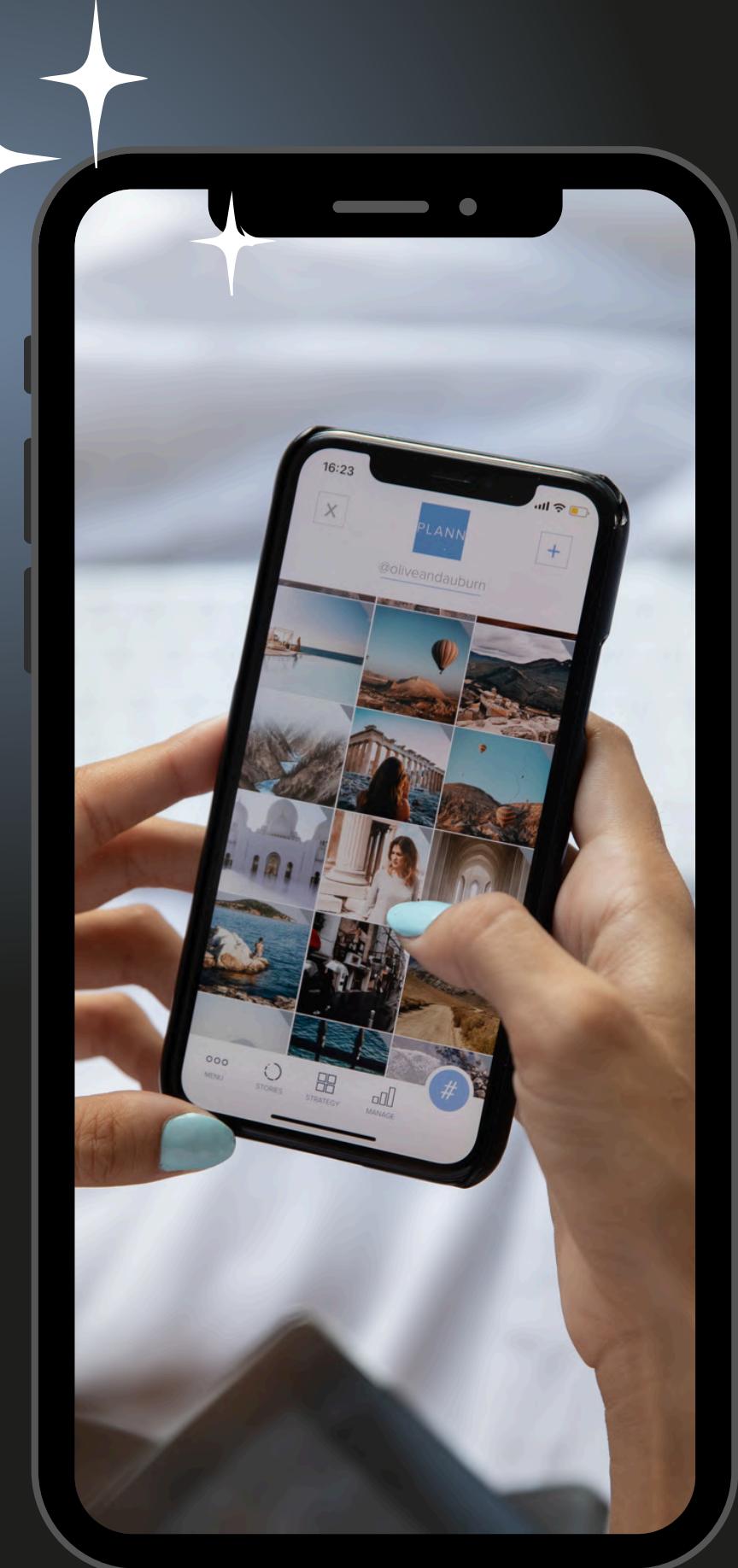
INTERACTIVE ONBOARDING

RakuMon gamifies onboarding with a visuals-first approach, presenting users with unique image based questions to determine their preferences as well as taste of shopping.



UNIFIED PROMPT BASED SEARCHING

RakuMon replaces the traditional search bar. It can understand the user intent and accordingly switch between normal search and interactive chat, providing a smoother and more intuitive shopping experience.



Application Features



COLLABORATIVE SHOPPING

RakuMon bridges the gap between online and offline shopping by allowing friends and family to join the conversation and help you make choices in real-time, all within the same chat interface.

This feature eliminates the need to share product links on WhatsApp, providing a shared, enjoyable shopping experience directly on the platform.



CREATIVE SEARCH MODE

Ever felt the need to buy the perfect flower vase to match your table but got confused?

RakuMon allows users to create unique product combination images and unleash their creativity. The chatbot then searches for products that closely match the curated image, empowering users to shop for exactly what they envision - turning vague ideas into precise product searches.

1. Same Prompt, Different User, Different Results

Mere liye T shirts dikhao

Acha, mere bhai! T-shirts dikaane mein toh main master hu! 😊 Kya style chahiye? Streetwear, casual, something with a cool print? Batau, aur kya size aur brand pasand hai?

Turtleneck Compression Top for Men, Long Sleeve Basic Undershirt Stretch Slim Fit Workout T-Shirt
Have It Tall Men's Fashion Fit T Shirt
THE WEEK FACE T-Shirt for Men - Lightweight Cotton Soft Regular Fit Comfort T-Shirt 2 Packs
Shirts for Men, Mens Casual V Neck Tops Solid Color Long Sleeve Round Neck 3D Love Heart Print Pullover Tops Casual Slim
Men's Valentine's Day Shirts, Long Sleeve Round Neck 3D Love Heart Print Pullover Tops Casual Slim

Mere liye T shirts dikhao

T-shirts? Okay, Neha, let's get you some cool threads. Tell me, what kind of style are you looking for? Something casual, funky, or maybe a bit more formal?

Yoga T-shirt for Ladies
This eco-friendly yoga t-shirt is perfect for your practice, made from soft, breathable fabric for Women's Barefoot Relaxed Fit Yoga T-shirt
This relaxed fit yoga t-shirt is perfect for your yoga practice.
NBrand Stretchy Womens High Waist Comfortable Athletic Workout Yoga Shorts with Pockets
These comfortable and stylish yoga
T Party Women's Basic Solid Color Mineral Wash Yoga Pants

3. Multi-lingual Prompt Based Search

2. Personalized Chatting

😎Rakumon

Hii Rakumon

Mere liye T shirts dikhao

Hey Rakshit! What's up, my bodybuilding buddy? Ready for some retail therapy? 😊

Acha, mere bhai! T-shirts dikaane mein toh main master hu! 😊 Kya style chahiye? Streetwear, casual, something with a cool print? Batau, aur kya size aur brand pasand hai?

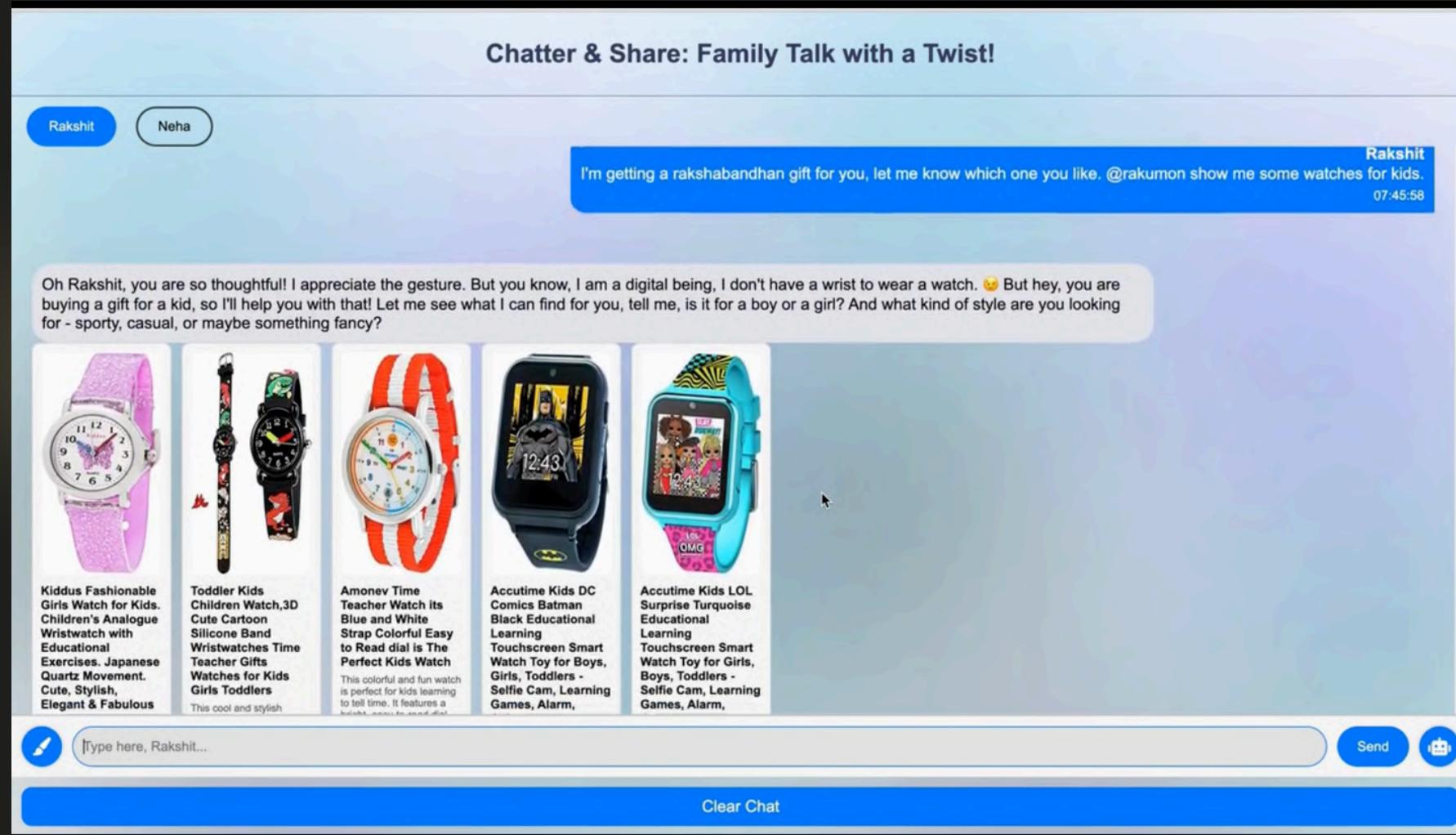
Turtleneck Compression Top for Men, Long Sleeve Basic Undershirt Stretch Slim Fit Workout T-Shirt
Have It Tall Men's Fashion Fit T Shirt
THE WEEK FACE T-Shirt for Men - Lightweight Cotton Soft Regular Fit Comfort T-Shirt 2 Packs
Shirts for Men, Mens Casual V Neck Tops Solid Color Long Sleeve T-Shirts Classic Tshirts Plus Size Loose Fit Blouse
Men's Valentine's Day Shirts, Long Sleeve Round Neck 3D Love Heart Print Pullover Tops Casual Slim Fit Muscle Workout Blouse

\$8.49 \$22.95 \$15.39 \$12.69 \$8.70

Type your message...

4. Customized Product Description

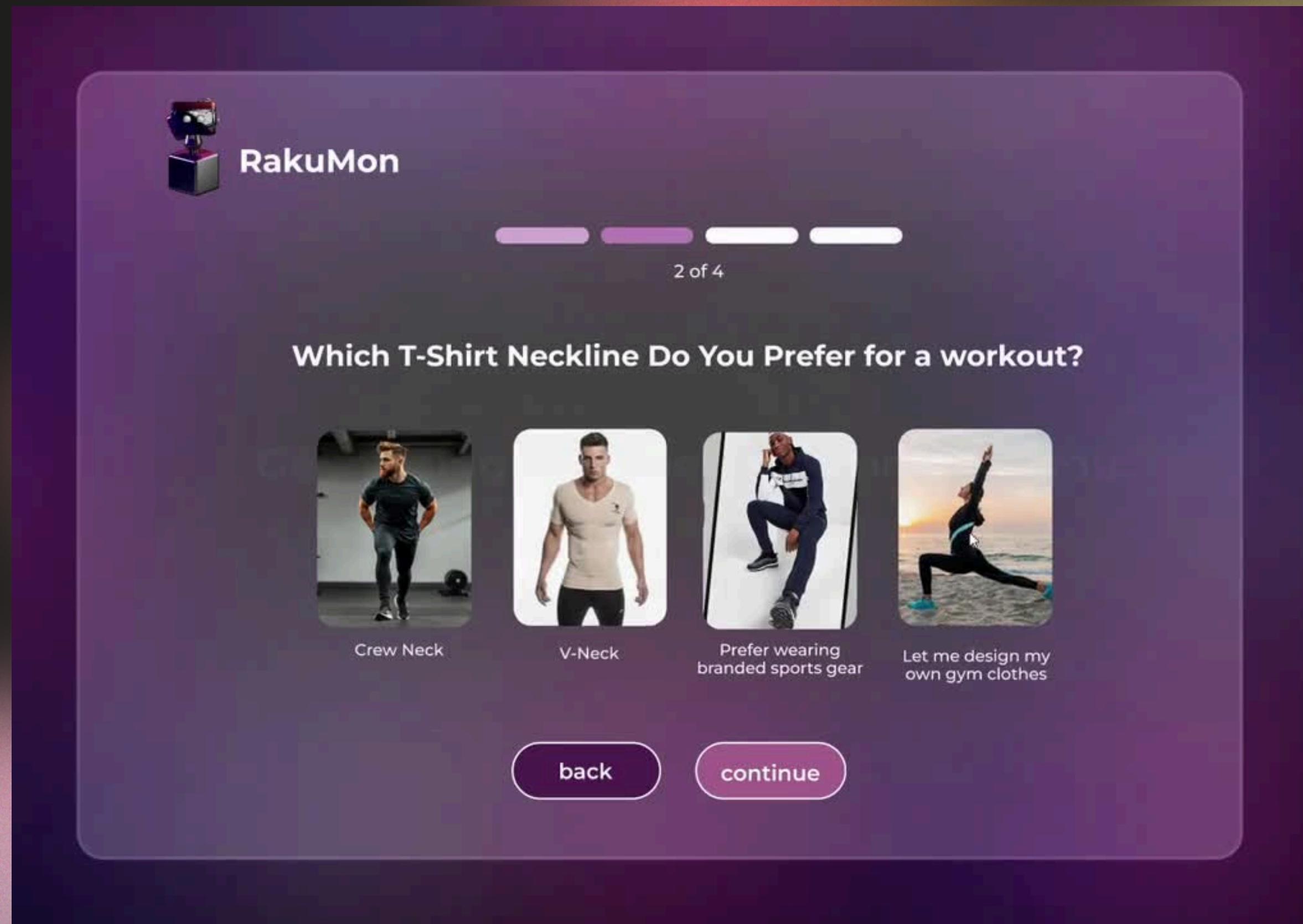
5. Shopping With Your Family



6. Design & Search

The screenshot shows a messaging interface with a panda-shaped table lamp as the main image. The message reads: "Here are the three images I created for you. Which one do you like the most?" Below the message are three images of the lamp in different poses. To the right, there is a section titled "Panda Shaped Table Lamp" with the number "3" in a circle. It says: "Here are the similar products for image 3." Three similar products are shown: "Cute Panda Light Lamp For Kids" (\$19.99), "Love Craft Gifts Personalized Wooden" (\$29.99), and "Kids animal table lamp" (\$39.99). At the bottom, there is a text input field with "Type your message..." and a "Send" button.

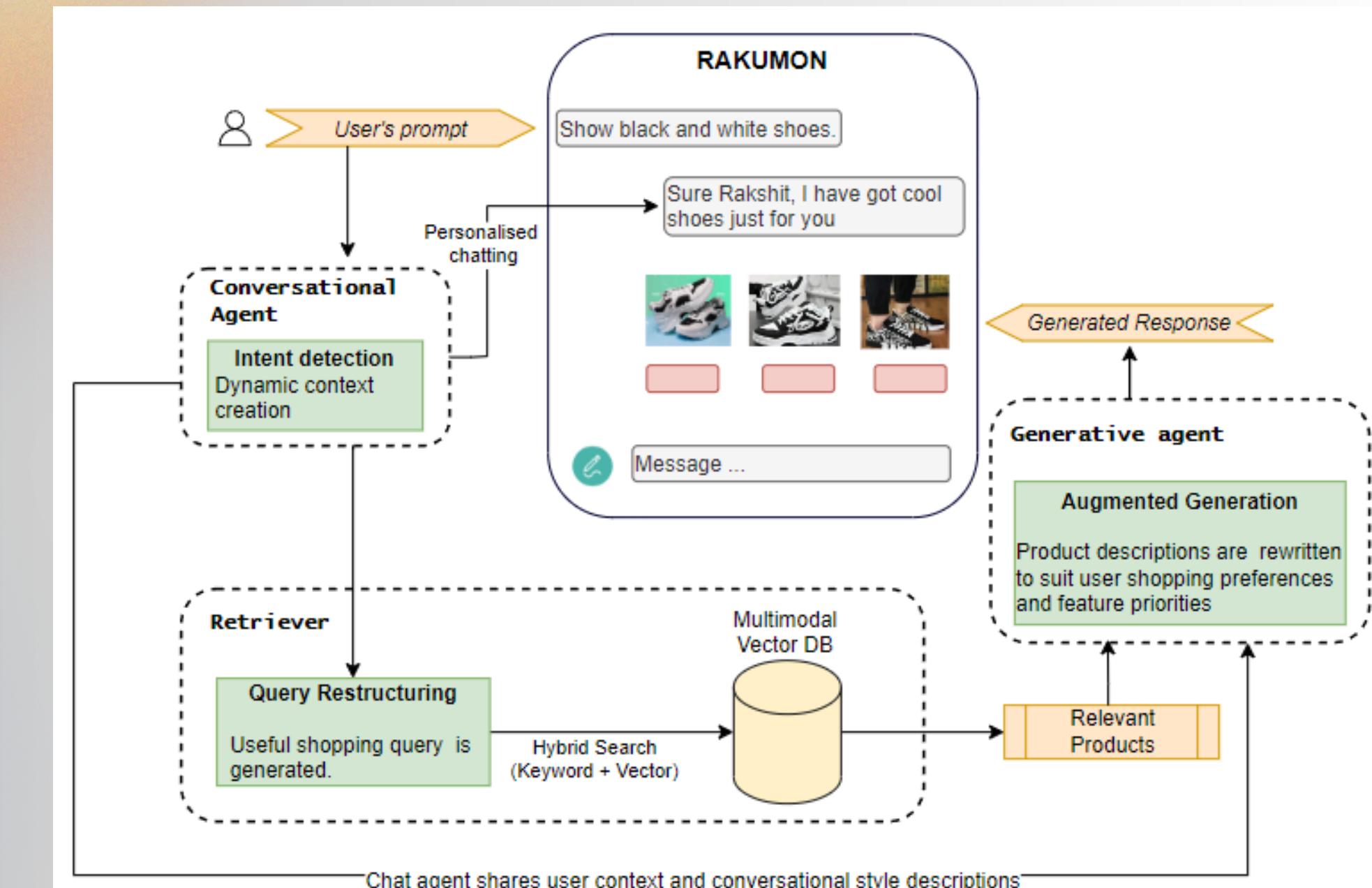
Prototype Demo



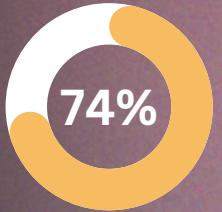
Detailed Approach

Models & libraries	Functionality
Gemini Flash	Conversational agent
Flux.1-Schnell (Open Source)	Model for image generation
Mistral-Large (Open wts model)	<ul style="list-style-type: none"> • Query restructuring • Augmented Generation agent
BAAI/bge-m3 (Open Source)	Multilingual Text embeddings
BAAI/bge-visualized (Open Source)	Multimodal embeddings for Vector DB
Jina-clip-v1 (Open Source)	Multimodal Embeddings for image search
Pinecone	Vector database and Hybrid search
Data Sources	Purpose
UCSD Amazon Dataset	Product classification
Amazon Shopbench dataset - subset (KDD cup '24)	Few shot prompting for agents.

Multi agent Framework & Flow



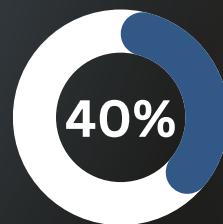
Why This Will Change the Game?



"74% OF GEN ZS ARE INTERESTED IN PERSONALIZED PRODUCTS"



"56% OF CUSTOMERS WHO EXPERIENCE PERSONALIZED SHOPPING EXPERIENCES SAY THEY'LL BECOME REPEAT BUYERS."



"COMPANIES THAT EXCEL AT PERSONALIZATION GENERATE 40 PERCENT MORE REVENUE FROM THOSE ACTIVITIES THAN AVERAGE PLAYERS."

40% revenue growth



"77% OF CONSUMERS HAVE PAID MORE FOR A BRAND THAT PROVIDES A PERSONALIZED SERVICE OR EXPERIENCE."



BUSINESS IMPACT USER BENEFITS

Customer Satisfaction:

- Seamless integration of shared shopping experiences with loved ones
- Collaborative decision-making in a virtual environment mimicking in-person shopping

Gen Z Appeal and Gamification:

- Semi-gamified shopping aligns with Gen Z's digital-native habits.
- Interactive, personalized elements create a more engaging interface.
- Encourages social sharing and friendly competition in family shopping.

Enhanced User Comfort and Engagement:

- Intuitive, personalized UI reduces decision fatigue.
- Family shopping mimics in-person dynamics, easing the e-commerce transition.
- Adaptive features create a "sticky" platform for repeat visits.



MONETIZATION STRATEGY

Advanced Seller Analytics

Create customer specific product catalogues.
Design mode enables merchants to get insights of emerging tastes.

Targeted Promotion Based on User Interaction:

Utilize user interaction data to deliver hyper personalized promotions in a conversational style that users find most engaging.

Selling Rakumon to Other E-commerce Platforms:

Multi agentic framework allows easy integration of Rakumon on any platform. Ecom sites can even choose to keep one of the agents supplementing to their current infrastructure.

Future Scope



- GenAI-Powered iterative Virtual Try-Ons:**
- Blend user-provided images with product visuals and search only for the added products.
 - Bridging the gap between AR and GenAI technologies



Voice-Enabled Interactions:

- Implement voice-based search and chatting capabilities
- Direct conversations with Rakumon for a more natural shopping experience



Long-Term Vision:-

- Create a versatile, modular AI system adaptable to diverse ecommerce needs.
- Basically create the equivalent of Doraemon in ecommerce :D



Adopt Privacy-Centric Approach:

- Adopt a user-first strategy for data ownership
- Explore federated learning techniques for enhanced privacy



Specialized Agent Ecosystem:

- Develop a family of disjoint, specialized AI agents
- Ensure easy integration across various platforms and use cases
- Position Rakumon at the forefront of ecommerce personalization