



AI Driven Hyper- Personalization & Recommendation

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Problem Statement



Develop a Generative AI-driven solution that enhances hyper-personalization by analyzing customer profiles, social media activity, purchase history, sentiment data, and demographic details.

To design a system that generates personalized recommendations for products, services, or content while also providing actionable insights for businesses to optimize customer engagement.



Why Hyper-personalization?

- Traditional recommendation systems often lack personalization.
- Users get irrelevant recommendations, leading to poor engagement.
- Customers today expect tailored experiences.
- Businesses need to optimize engagement & conversions.
- Example Use Case: Personalized credit card or loan recommendations.

Solution Overview



What Does Our AI Do?

- Delivers Personalized Banking Experiences
 - Context-Aware Service Recommendations
 - Behavioral Insights from Social Media Activity
 - Conversational AI for Intelligent Assistance
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Delivers Personalized Banking Experiences

Our AI dynamically tailors banking services based on individual user interests, ensuring that each customer receives recommendations that align with their financial goals and needs.



Context-Aware Service Recommendations


By analyzing key user attributes—such as occupation, age, financial behavior, and transaction history—our AI provides highly relevant suggestions. For example, a young professional might receive recommendations for investment plans, while a retiree may be suggested wealth management services.





Behavioral Insights from Social Media Activity

Our AI leverages social media sentiment analysis to understand a user's financial concerns, interests, and lifestyle. This enables hyper-targeted recommendations, such as travel insurance for frequent travelers or credit card offers based on spending patterns.





Conversational AI for Intelligent Assistance

A built-in AI-powered chatbot provides real-time assistance, guiding users through banking services, answering queries, and proactively suggesting financial products. It enhances customer engagement by making interactions seamless, personalized, and intuitive.



RECOMMENDATIONS
BASED ON USER
PROFILE

Education Credit Card with Cashback

Get cashback on education expenses. Plus, earn reward points to fund future learning opportunities.

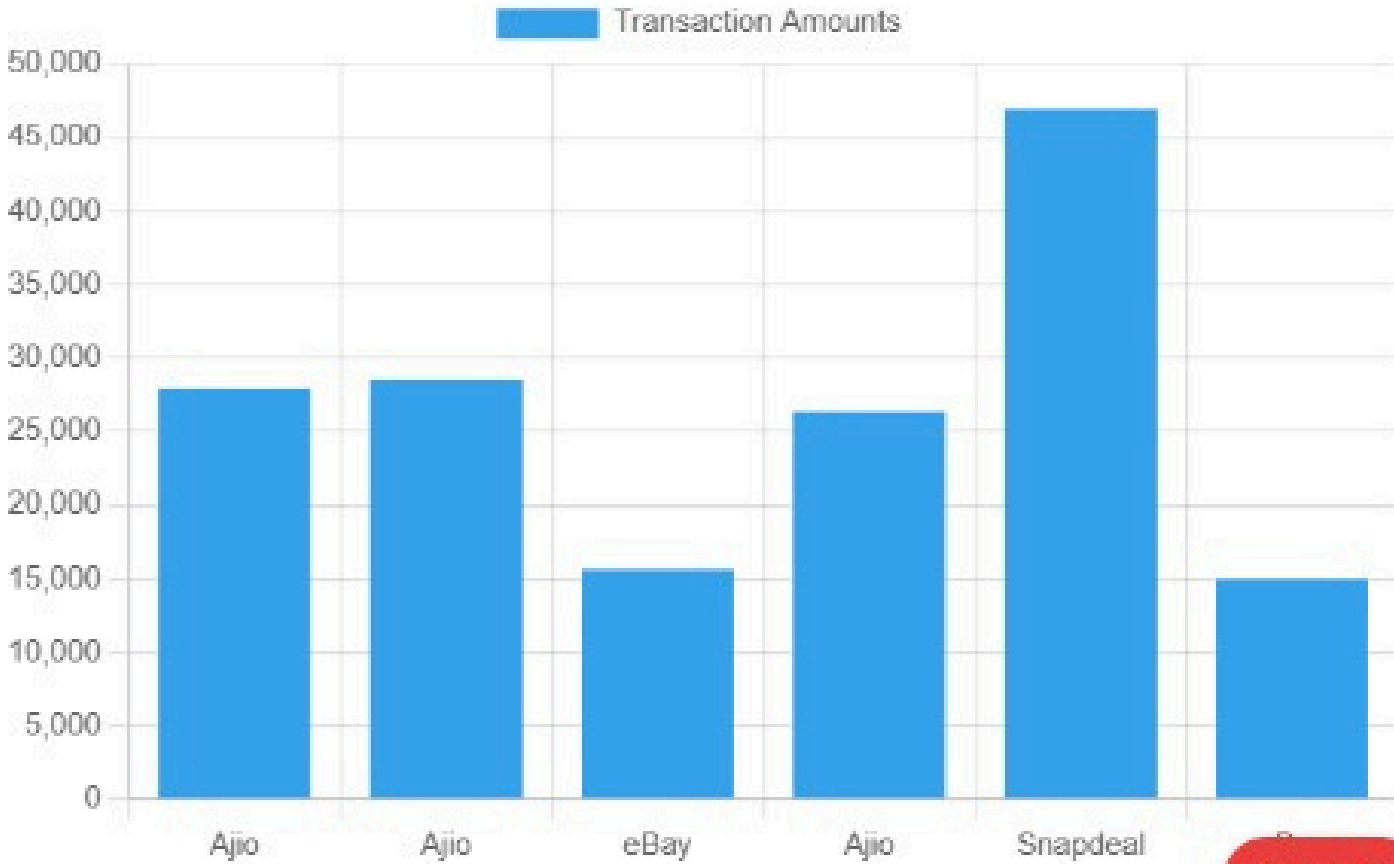
Recent Transactions

Purchased Platform	Amount	Payment Mode
Ajio	\$27,938.51	UPI
Ajio	\$28,591.57	Debit Card
eBay	\$15,640.17	Credit Card
Ajio	\$26,357.40	UPI
Snapdeal	\$46,911.06	Net Banking
eBay	\$15,002.19	Debit Card

USER TRANSACTION
DETAILS

Transaction Insights

Show Transaction Analysis



Chatbot

MyApp

New Tab

localhost:4200

1106

BankGenie

1106

Healthcare Reward Credit Card

Earn reward points on all healthcare expenses. Redeem for exclusive wellness packages and discounts.

Recent Transactions

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Transaction Insights

Show Transaction Analysis

Transaction Insights Chart

Platform	Amount
Ajio	28,000
Ajio	29,000
eBay	15,000

Chatbot

the snowball method, but instead of focusing on the smallest debts first, you focus on paying off the debts with the highest interest rates first. This can help reduce the overall amount of interest paid over time.

okay thankyou

You're welcome! If you have any questions about banking, finance, or related topics, feel free to ask. I'm here to help!

Type a message...

Search

20:23 26-03-2025

Tools, Tech Stack & Models Used

- Python
- Angular
- NodeJs
- PyCharm
- VS Code
- Mistral AI
- VADER
- TF-IDF + Cosine Similarity

Business Impact

- Increased customer engagement.
- Higher conversion rates & retention.
- Cross-selling & upselling become more effective when customers receive personalized offers
- AI-powered chatbot support enhances response times & service quality, improving user experience.
- Data-Driven Decision Making

Future Scope

- AI-Driven Service Recommendations Based on User Activity
- Hyperpersonalization in Fraud Detection & Security
- Voice-Assisted Conversational Banking
- Real-Time Personalization through Chatbot
- Expanding multi-modal recommendations (text, images, videos).

Studio Shodwe

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Thank you

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