



Đơn vị tổ chức























Dataset 1: Adidas and Nike Products

Context





Adidas



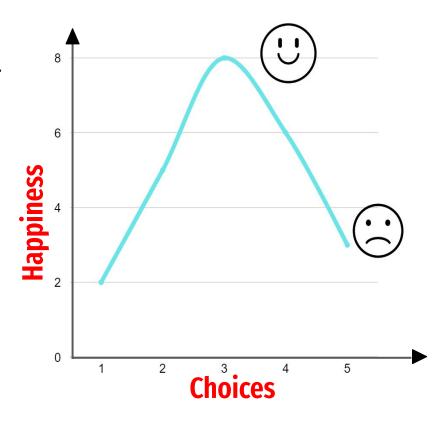
Customers are "Super Overwhelmed With Products" despite company's sales success

Paradox of choice



→ PROBLEM: Consumers are faced with an abundance of choices, making it difficult for them to make a decision.

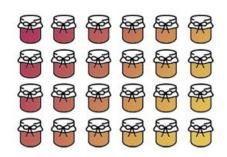




Paradox of choice



Too many choices?



24 choices of jam attracted 60% of the shoppers 3% of shoppers bought jam









6 choices of jam attracted 40% of the shoppers 30% of shoppers bought jam

Paradox of choice

Definition

The paradox of choice is a phenomenon in which an abundance of options can lead to less happiness, less satisfaction, and a reduced ability to make a decision.

In business

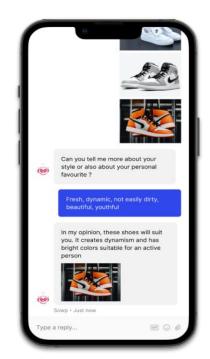
- Reduced sales volume.
- ◆Customers are less likely to make any decision at all.

(Iyengar, S. S., & Lepper, M. R. (2000). When choice is demotivating: Can one desire too much of a good thing?. Journal of personality and social psychology, 79(6), 995)

Core Functionality









We developed ChatSowp to provide individuals with the best option

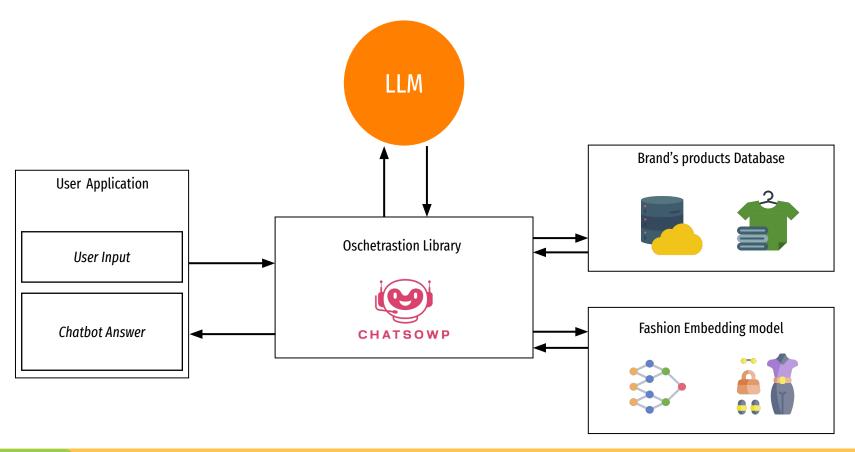
Core Functionality





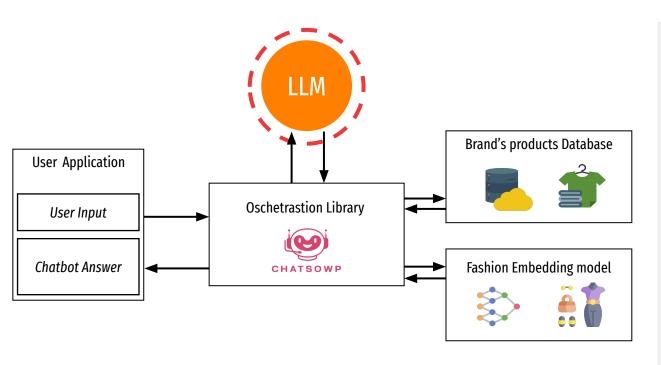
Assisting customers in selecting the best product from their confused options based on client's characteristics





Solution

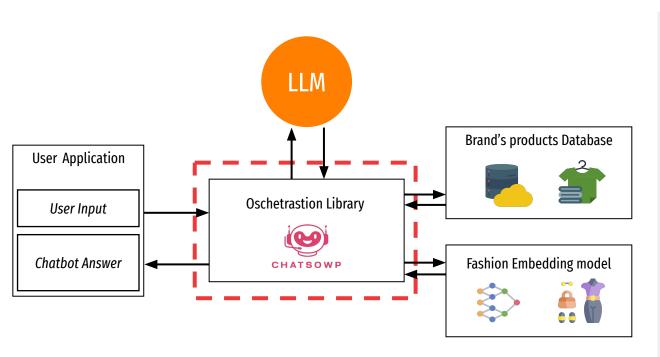




Harnessing the Power of Large Language Models

- Our solution seamlessly integrates a
 Large Language Model (LLM) into a
 customer assistant chatbot, empowering
 it to handle a wide range of
 fashion-related queries.
- Utilizing a fine-tuned LLM model and instruction prompting techniques, the chatbot can provide comprehensive and informative responses to customer inquiries.

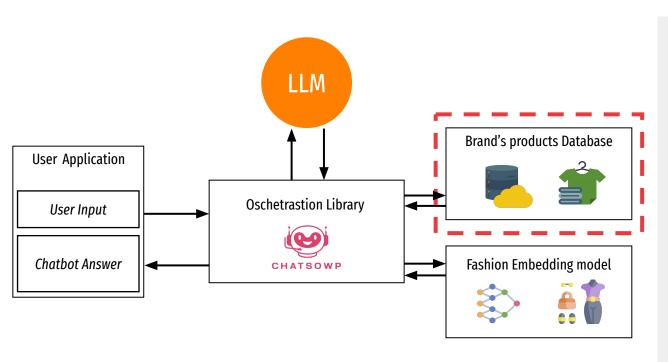




Enriching the Chatbot with Visual Understanding

- To enhance the chatbot ability to process and understand visual information, we employ an Orchestration library, enabling it to interpret product images or user style images and retrieve relevant product data.
- This integration streamlines the process of generating personalized product recommendations based on user preferences.

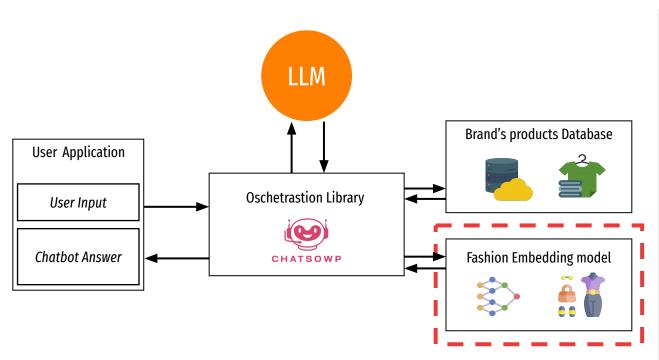




Maintaining Product Knowledge Currency

- To ensure the LLM possesses up-to-date knowledge about brand products, we have established a connection to an external product data source.
- This approach eliminates the need for constant retraining of the LLM whenever new products are introduced.





Empowering Image-Based Interactions

- Furthermore, to facilitate the processing of user-provided images, we have integrated our chatbot with a Fashion Embedding model.
- This model effectively translates images into a format that the LLM can readily comprehend, allowing for seamless image-based interactions.

ChatSowp's Application Stack





Application Interfaces: Integrate with Websites, Mobile Applications via API

LLM Tools & Frameworks: LangChain, Model Hubs

Product Database

Fashion Embedding model

LLM Model

Generative Outputs & Feedback

Infrastructure: Training/Fine-Tuning, Serving, Application Components

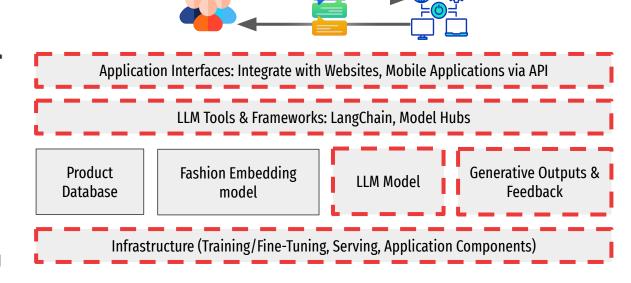
ChatSowp's Technology





Amazon SageMaker

- Quickly deploy and integrate foundation models into your applications.
- Fine-tune and manage models with ease.
- Covers infrastructure, LLM, tools, and API for model invocation.
- Simplifies machine learning workflow and empowers developers.

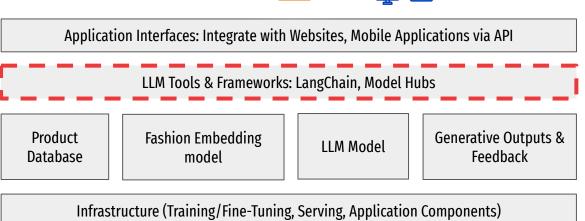


ChatSowp's Technology



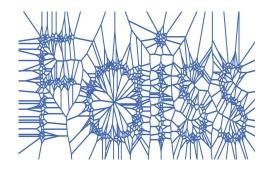


- Seamlessly integrate external data sources and Fashion models with LLMs.
- Enhance LLM performance and reduce hallucinations.
- Enable LLM access to real-time and private data.
- Build AI applications with greater accuracy and contextual relevance.

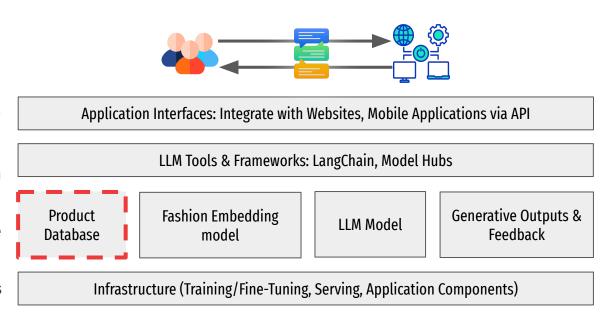


ChatSowp's Technology





- Leverage FAISS's efficient vector similarity search capabilities within LangChain.
- Enhance LangChain's retrieval and generation tasks with faster similarity comparisons.
- Scale to large-scale datasets and improve overall performance.
- Enable real-time similarity search applications with LangChain.
- Using FAISS to store product datasets



ChatSowp's Large Language Model





Llama 2 Chat

- Optimized transformer-based auto-regressive language model.
- Available in 7B, 13B, and 70B parameter sizes for diverse use cases.
- Pre-trained and fine-tuned variations cater to different needs.
- Fine-tuned models use SFT and RLHF to align with human preferences.
- Pre-trained models adaptable for various natural language generation tasks.
- Responsible use guide assists in customizing and optimizing models with safety mitigations.



Application Interfaces: Integrate with Websites, Mobile Applications via API

LLM Tools & Frameworks: LangChain, Model Hubs

Product Database Fashion Embedding model



Generative Outputs & Feedback

Infrastructure (Training/Fine-Tuning, Serving, Application Components)

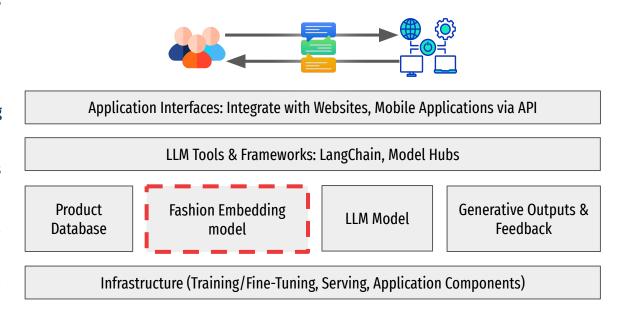
ChatSowp's Fashion Embedding model

Customer



Fine-Grained Fashion Similarity Prediction by Attribute-Specific Embedding Learning (ASEN++)

- ASEN effectively captures fine-grained fashion similarity.
- ASEN outperforms single-embedding approaches.
- Two-branch ASEN with attention modules provides state-of-the-art performance.
- Fine-grained similarity complements overall similarity in fashion analysis.
- ASEN trained on FashionAI, DARN, and DeepFashion datasets.











Domain	Various fields	Business operations	Fashion consulting
Conversational Flow	Conversational AI	Prepared answer	Conversational AI
Response Time	Fast	Very fast	Fast
Personalization	No	No	Yes
Hallucination	Yes	No	No, great accuracy and contextual relevance

Business Model Canvas

Timeline and Roadmap

Conclusion

Customer Profile Adidas

User Profile Le Thi Lan





Background

- A vast number of clients
- Many types of products

Insights

Want to ensure both sales and customer satisfaction

Reasons to engage

- Provide personalized product recommendations
- Upselling and Cross-selling opportunities
- User's data collection for R&D products

Background

- 25 years old, female
- Big fan of sportswear, especially Adidas
- Often wear sports clothing: going outside or exercising

Insights

- Don't have much money, so that just want to buy 1 item at a time
- Choosing suitable item is always a challenge

Reasons to engage

- Easily obtain recommendations for appropriate Lan's style items
- Save time
- Simplification



their demands.

o Companies have a

collecting customers'

habits to improve

their experiences.

demand for

Problem

Chatbot help selecting the Customers have best product for client's difficulty choosing a personality from confused product that meets

options.

Record behaviors, feedback for better model.

Solution



Channels

- **Distribution: partners'** sales platform (Adidas, Nike).
- **Marketing: Tiktok,** Youtube, Facebook.

£[]3

Value proposition

o The first platform to provide suggestions base on individual preferences



Unfair advantage

o Enrich the Chatbot with **Large Language Model &**

Visual Understanding.

- o Maintain product
- knowledge currency.



Customer segments

VIETNAM

Businesses that use the chatbot to enhance the shopping experience for customers.

Cost structure o R&D cost.

- o Advertising cost.
- Server cost.
- **Programming costs.**

Revenue streams

Revenue from the sale of business solutions



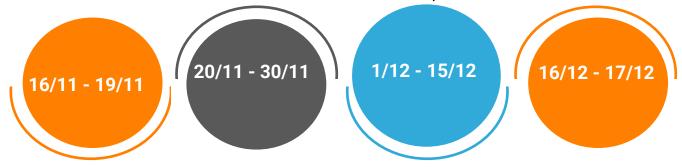
- Conversion rate.
- **User Engagement.**
- **Number of companies** joining in a quarter.

Customer

Business Model Canvas

- Market research
- System analysis and design

- Refine the business model
- Adapt and align AI model: fine-tuning, human feedback, evaluate, etc.



- Research suitable model
- Prepare & discover additional datasets

- Optimize and deploy model
- Augment model and build LLM-powered application

SWOT

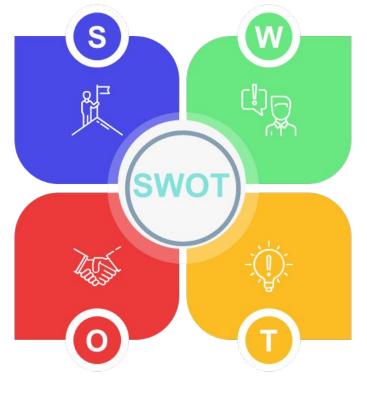


Strengths

- ✓ Apply AI model
- ✓ Expertise and insights from customers
- ✓ Time-saving and simplification
- Customization and personalization

Opportunities

- ✓ Market demand
- ✓ Collaborating with businesses, brands, or platforms



Weaknesses

- Deal with latency
- Handle unforeseen inputs

Threats

- Ethical considerations
- Model maintenance & updates
- Fashion's trend dynamics

OUR TEAM







- Student majoring in Information Systems UIT
- 2 prizes in start-up contest
- 3 scholarships for outstanding performance
- Used to have internship at Bosch Global Software Vietnam



Lê Thế Việt

- Student of Honor Program in Computer Science major - UIT
- Consolation prize in Computer
 Competitive of National
 Excellent Student contest
- Have an accepted paper at SOICT 2023



Nguyễn Thị Thanh Châu

- Student of Advanced Program in Information Systems major - UIT
- 5 scholarships for outstanding performance
- 1 volunteer campaign

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Đơn vi tổ chức























THANK YOU FOR READING