Pitch Deck Domain 3

BY MANNERLESS

Problem

Problem 1

Inability to identify sales trends and potential opportunities at a given time

Problem 2

Unable to obtain professional guidance to improve competitiveness

Solution 1

Provide valuable business insights for merchant

Solution 2

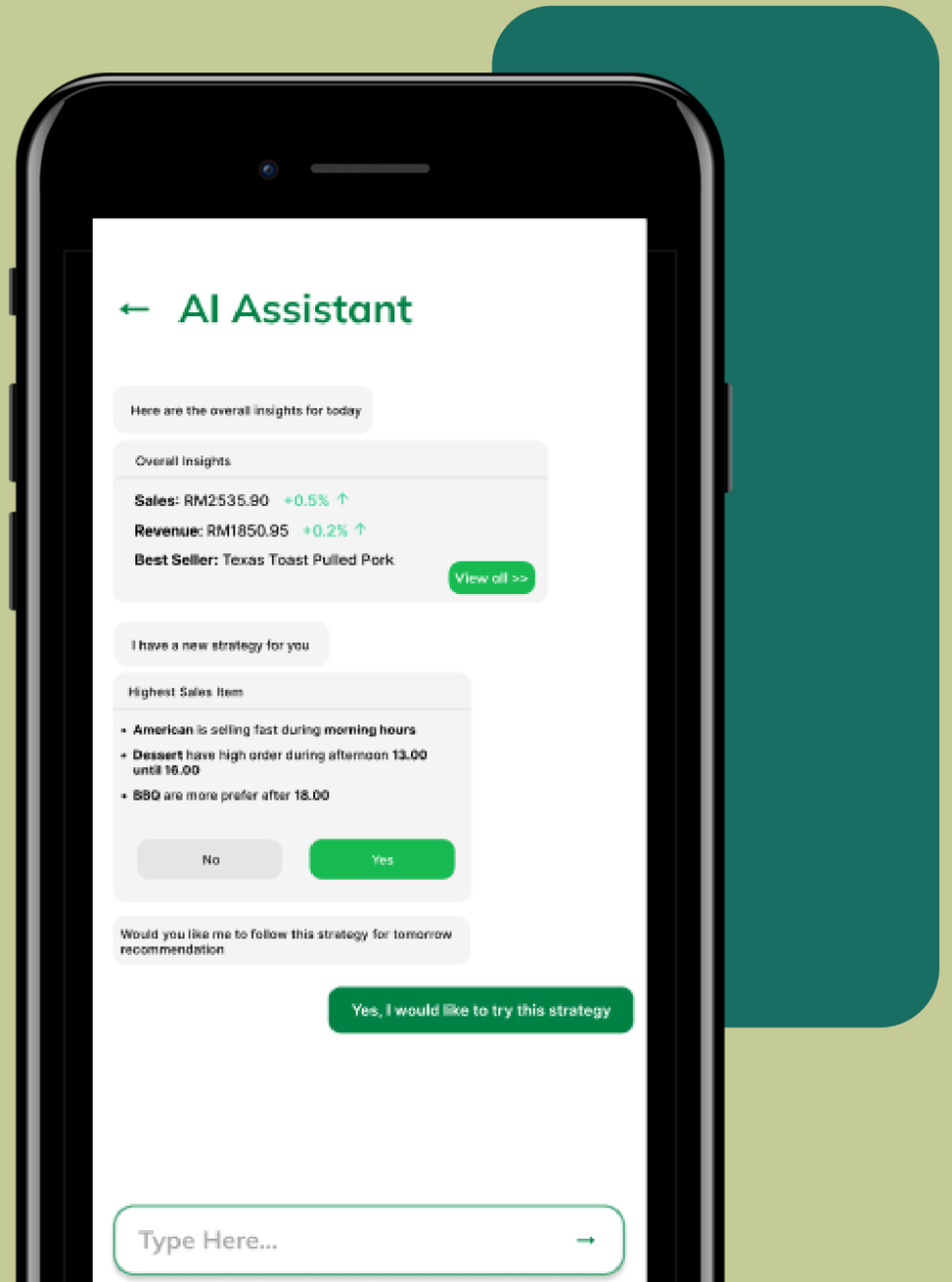
Suggest personalized recommendations for improvements and opportunities

Solution 3

Identify the sales trends and operational bottlenecks

Product or Service

Create a chat-based assistant for merchants that is able to address the bottlenecks face by merchants by leveraging the uses of AI to gain guidance in their business.



Main Feature

- Recommendation of hot sale item
- Auto generated product
- Graphical real-time report

Graphical real-time report

Makes a sale

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Sales Table in Databases

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Aggregates the data

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Frontend pulls updated data regularly

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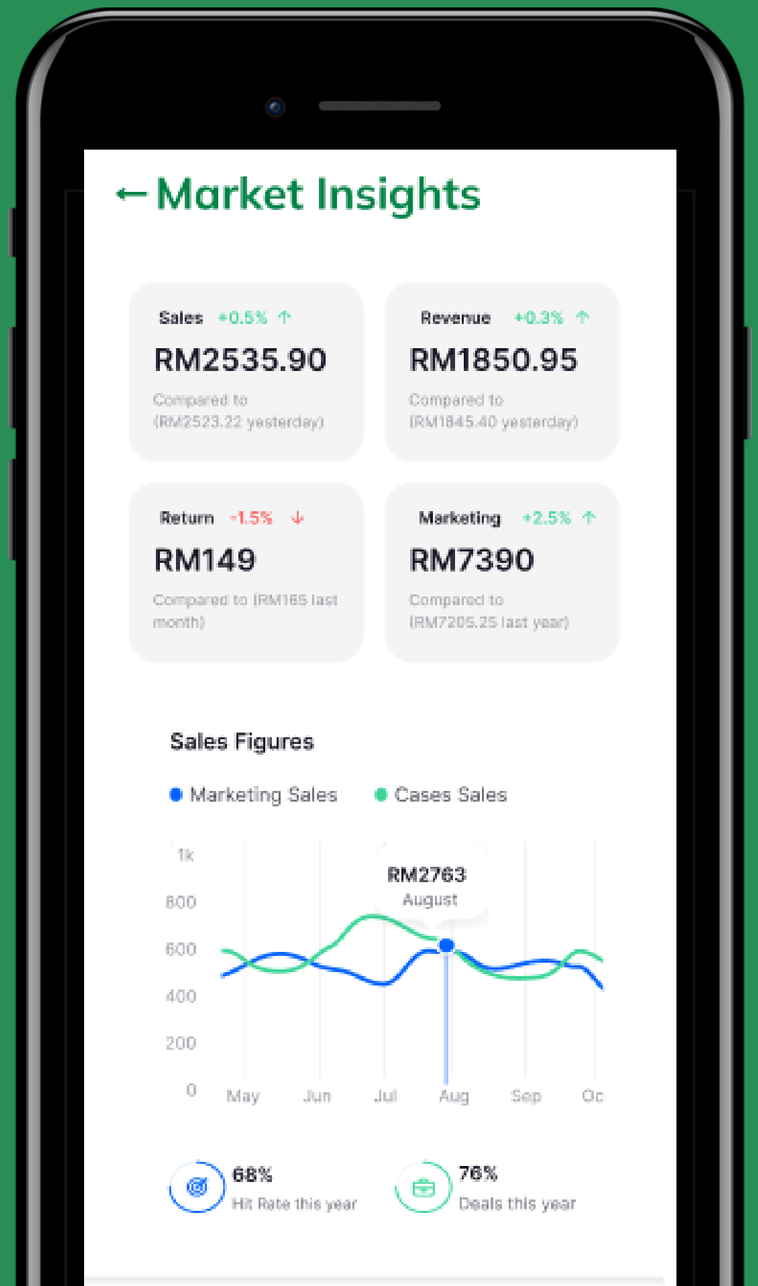
Graph/chart updates in real-time



Recommendation of hot sale item

Purchase

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Sales Table in Databases

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ML Model Trained on Past Sales

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API Endpoint Returns Top N Items

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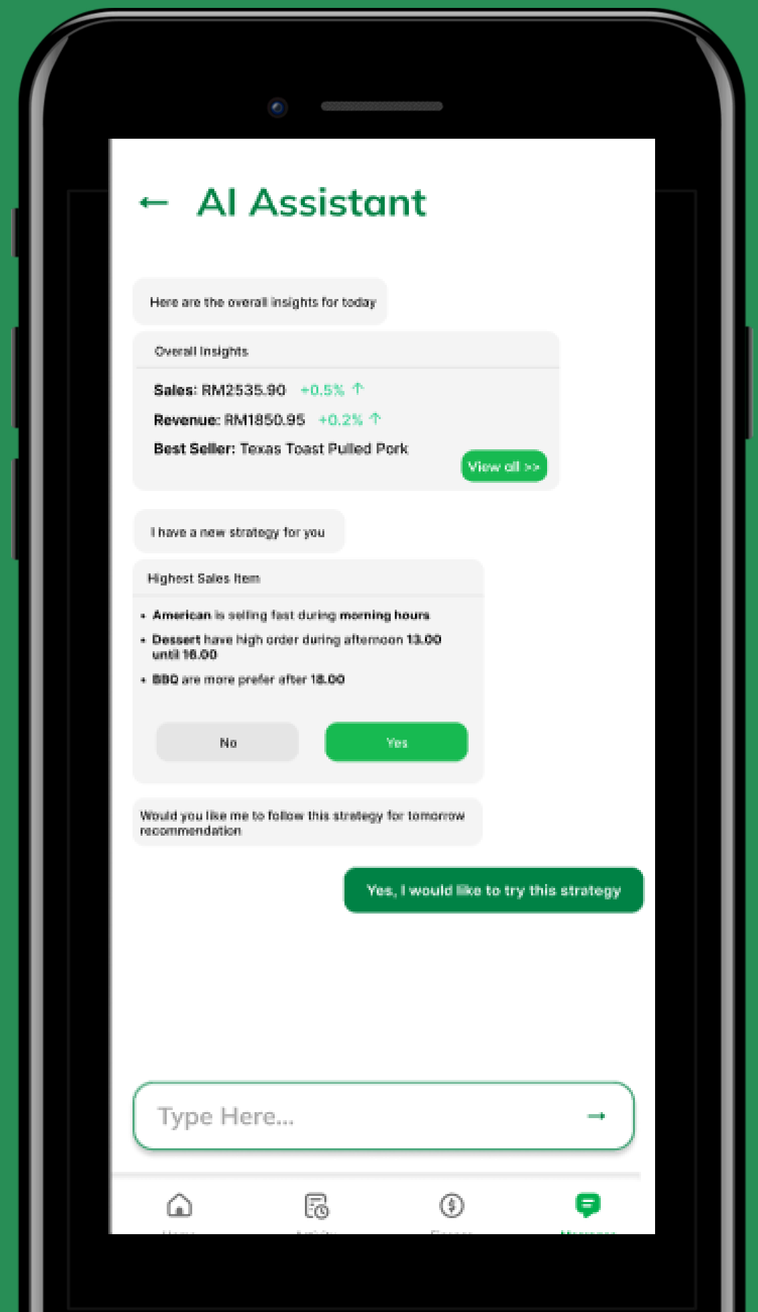
Frontend Displays Items to Users



Auto generated product

User Interaction

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Database: Sales Logs

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ML Model: Analyze Trends

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Python API: Recommend Items

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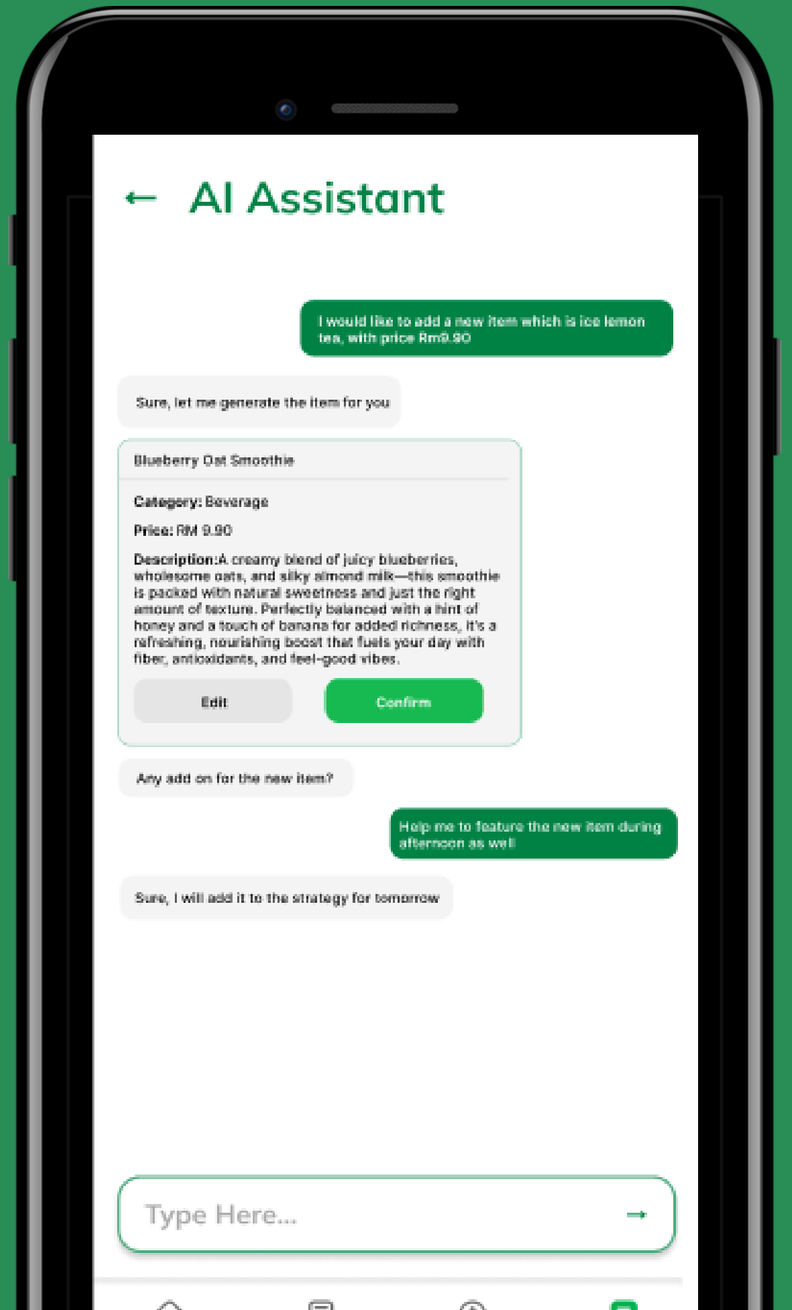
Display Item



Classification

Binary

XGBoost

Machine Learning Model

Prediction on boosting the hot sale item in the area per 3 hours

Architecture Overview

System has 4 key layers:

- Data Collection Layer
- Data Storage Layer
- ML Processing Layer
- API & Deployment Layer

Data Collection Layer

- Transaction Data
- Merchant Metadata
- City-wide Trends

Data Storage Layer

- PostgreSQL
- Pandas / Dask

Processing & Machine Training Layer

- Feature Engineering
- Machine Learning Models

API and Deployment Layer

- FastAPI / Flask
- Docker / Kubernetes
- Dashboard Integration

Personalization Strategies

Time-Based Personalization

- Granular 3-Hour Time Block
- Learning Temporal Patterns per Item
- Merchant-Specific Insights
- Trend Adaption Over Time

Location-Based Recommendations

- City-Level Analysis
- Delivery Zone Adaption
- Regional Hot-Seller Suggestions
- Flexible Local Context

System Integration Workflow

- Figma (frontend design)
- HTML page
- FastAPI
- Machine Learning Model

Competitive Advantage

Advantage 1

Assisting merchants to understand their business insight.

Advantage 2

Provide suitable recommendation for merchants to boost sales of business.

Competitive Advantage

Advantage 3

Helping merchants to discover many more possibilities.

Advantage 4

Allow merchants to be able to handle the diverse multilingual interactions.

Expected Impact

Impact 1

Assist merchants in obtaining valuable information related to the business

Impact 2

Allowing merchants to understand the level of competitiveness of their product among competitor.

CO FEATURES

Smart advice for relevant product

Short form and mix languages interpreter

FUTURE ENHANCEMENT

- Improve model with NLP or deep learning
- Add trending hashtags or tags
- Integrate push notifications or banners

THANK YOU!