



TEAM DSENTINELS

# TOGETHER, *WE* RISE.

THE SECRET INGREDIENT:

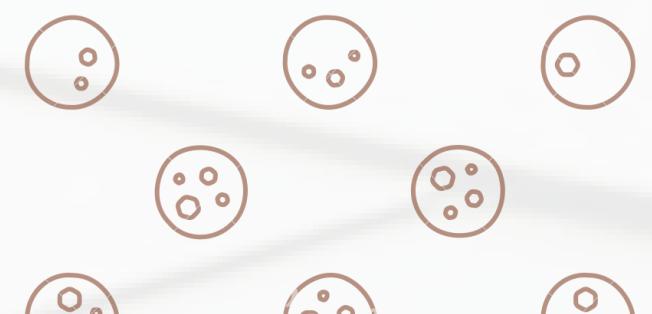
Empowering a Brighter Future for Filipino Micro-Bakeries with YEAST AI



TOGETHER, WE RISE. ●

# MSME'S FACES CHALLENGES TOO.

cash shortages, operational issues, and difficulties meeting financial obligations.

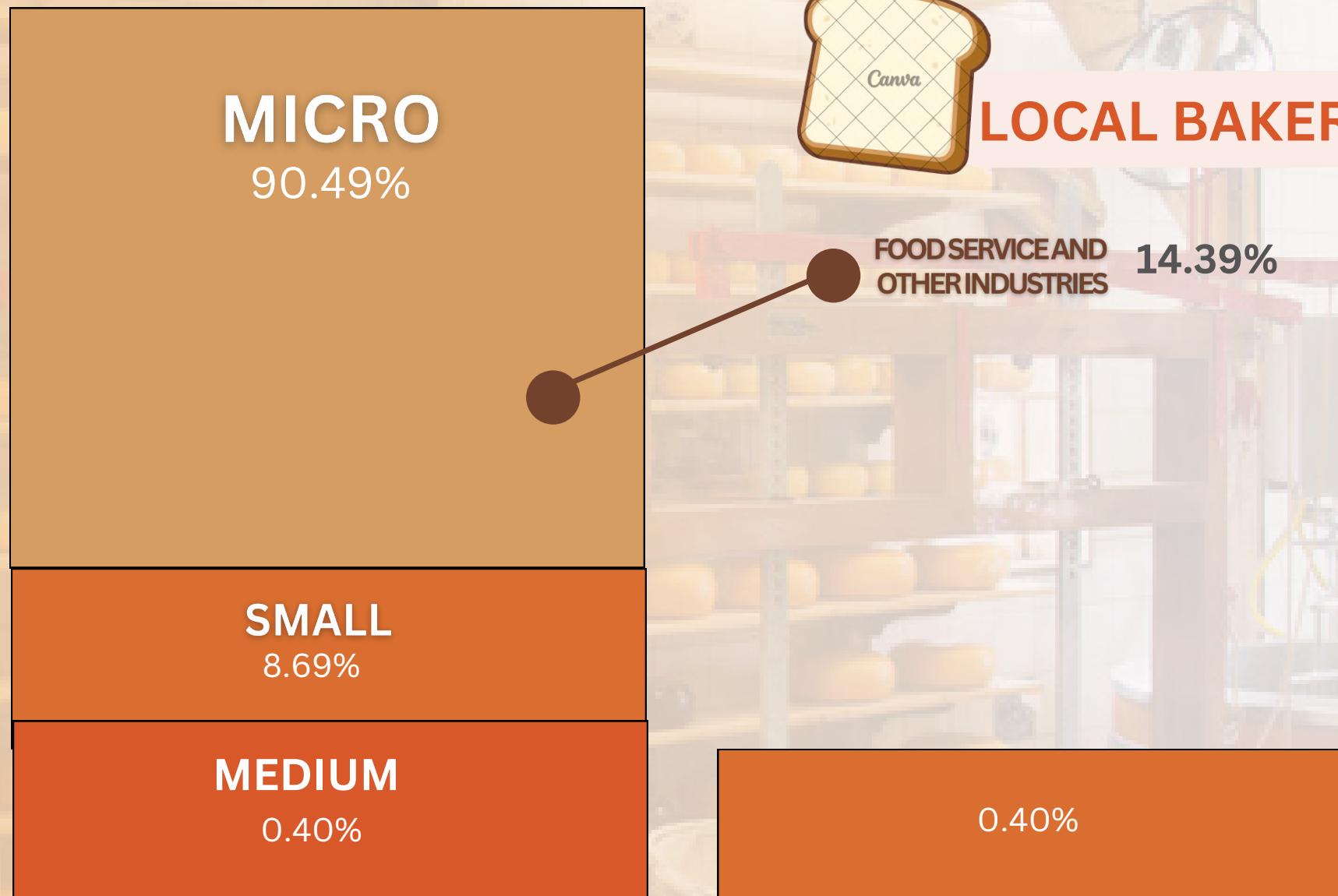


# WHY BAKERIES?

economic contributors.  
cultural touchstones.

**1,105,143**

total businesses in the country



**LOCAL BAKERIES**



FOOD SERVICE AND  
OTHER INDUSTRIES  
14.39%

**MICRO**

90.49%

**SMALL**

8.69%

**MEDIUM**

0.40%

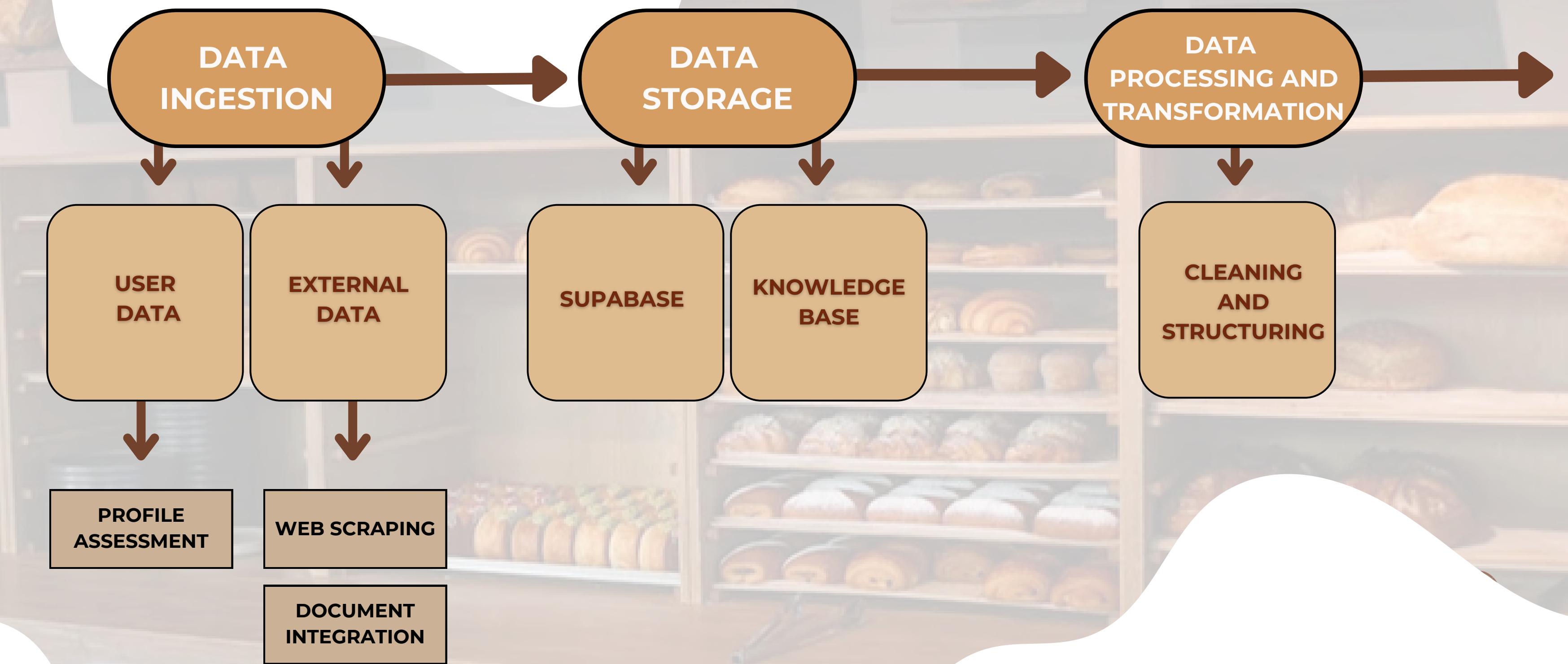
0.40%

**MSME**

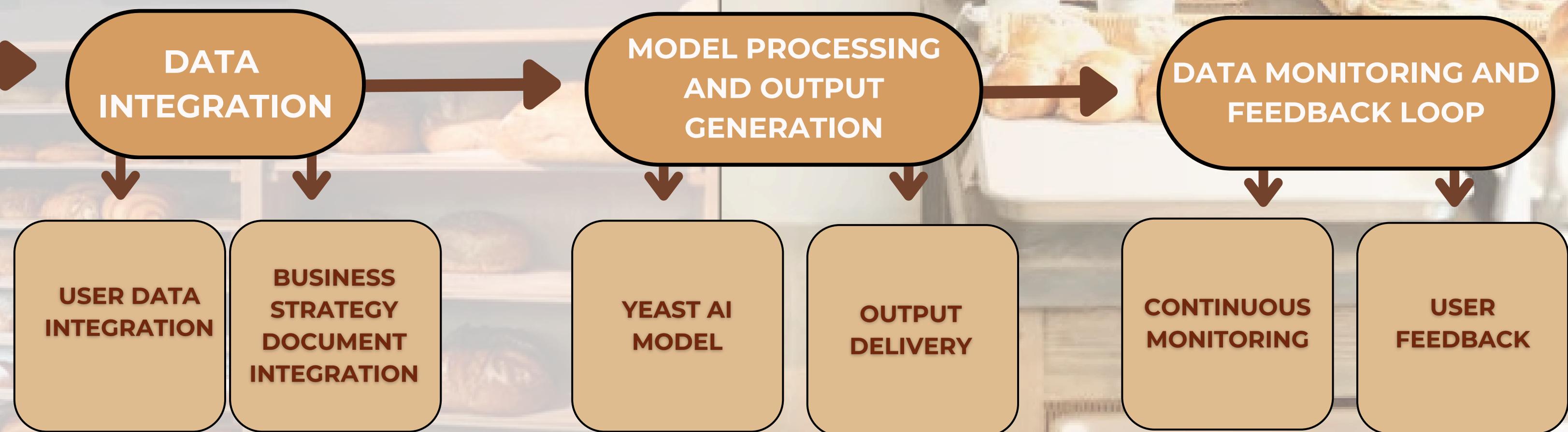
**LARGE**

# DATA PIPELINE

Together, we rise.



Together, we rise. 





## EXPLORATORY DATA ANALYSIS

\*data is based from BPI DATASETS



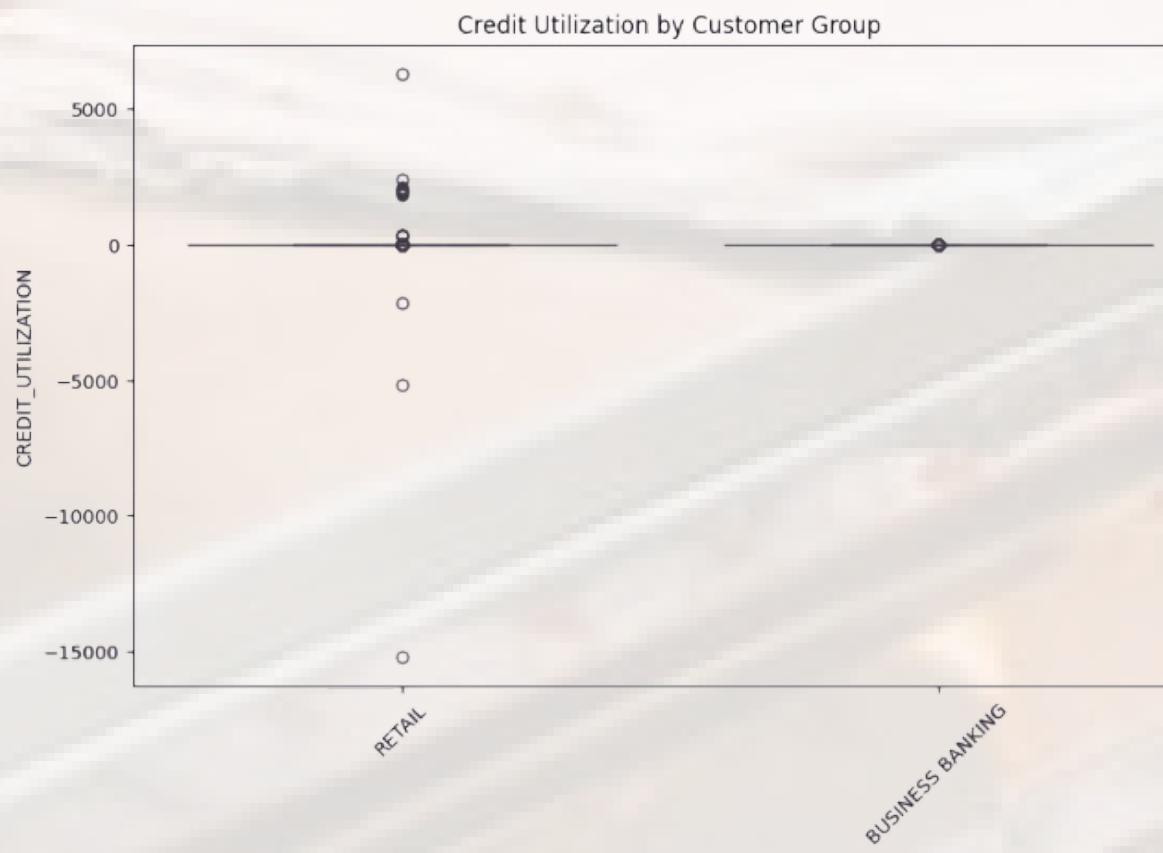
Together, we rise.

20%

**BUSINESS BANKING**

Size	By Employment	By Asset Size
Micro	1-9 employees	Up to P3,000,000
Small	10-99 employees	P3,000,001 – P15,000,000
Medium	100-199 employees	P15,000,001 – P100,000,000
Large	200 and above employees	P100,000,001 and above

# BUSINESS BANKING AND ITS POTENTIAL



## CREDIT UTILIZATION

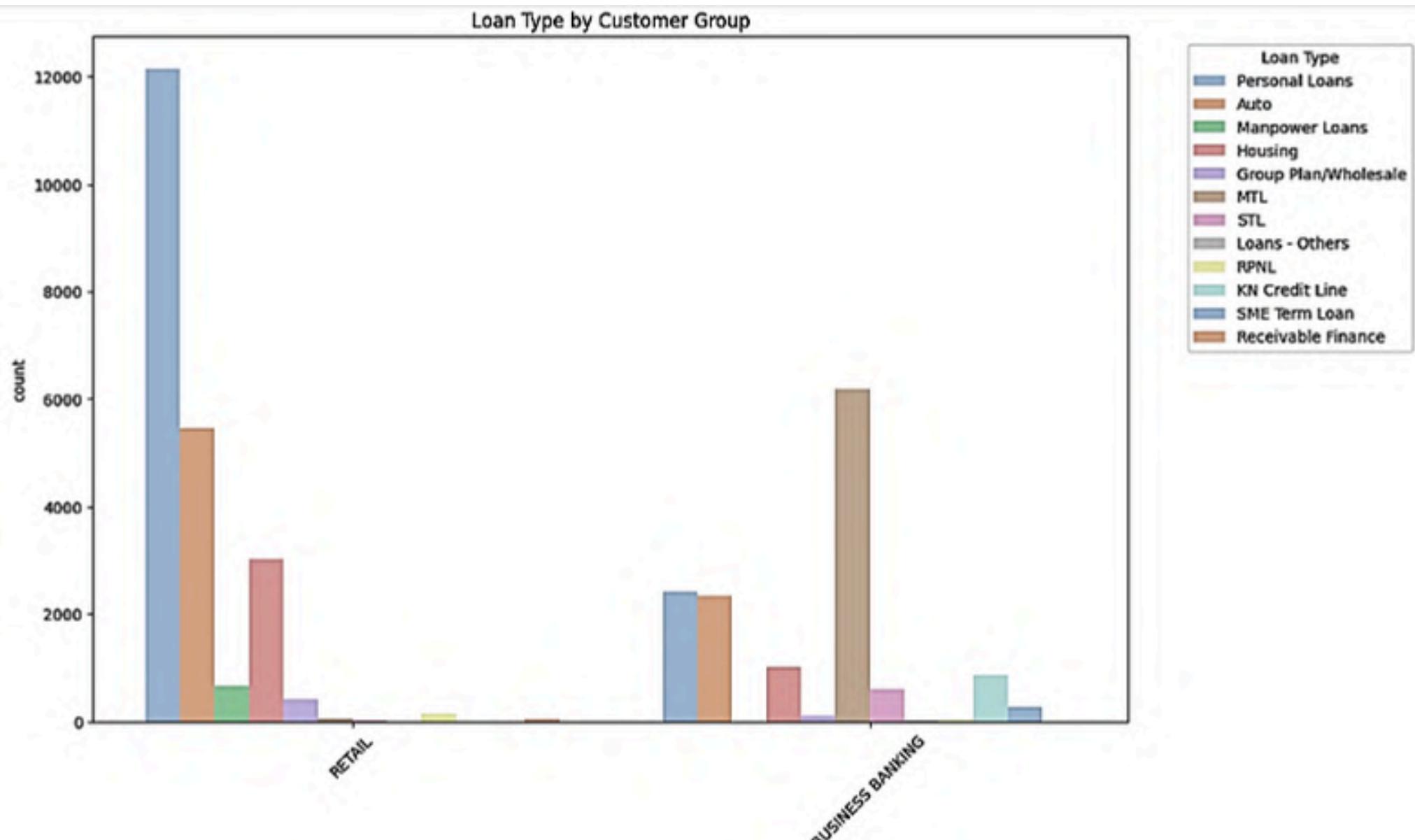
Business customers tend to have lower credit utilization compared to Retail customers.

## LOAN UTILIZATION

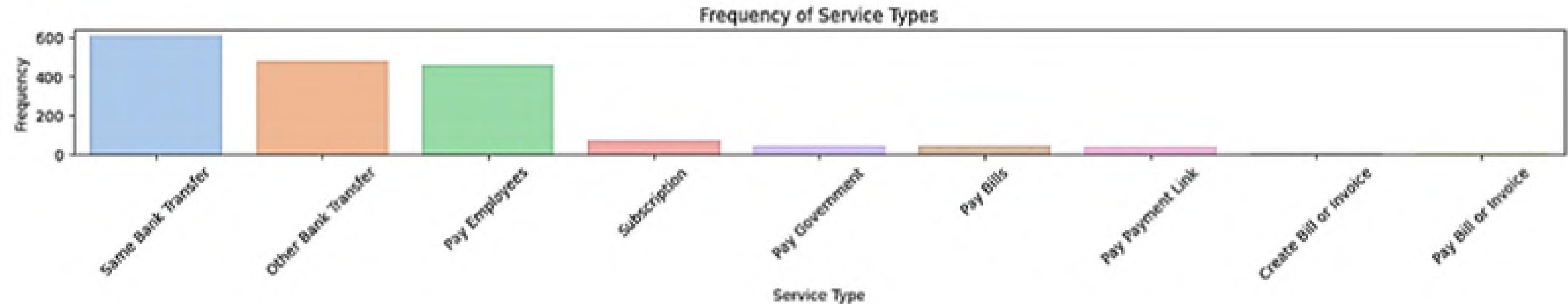
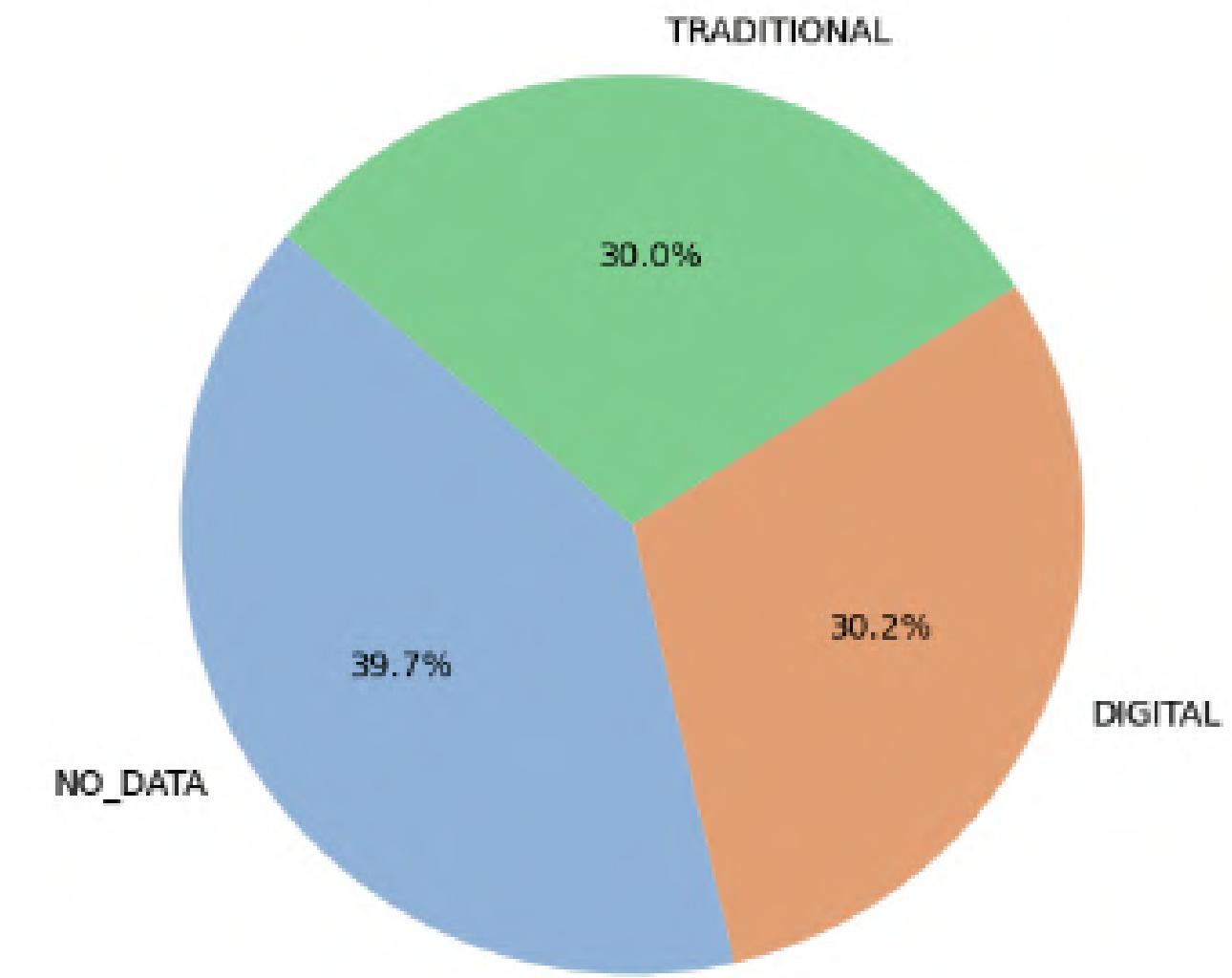
Business customers generally have higher median loan amounts and a narrower range, indicating more consistent loan sizes.

## TRANSACTION AMOUNT

Similar to loan amounts, Business customers also exhibit higher median transaction amounts and a narrower range.



Digital vs. Traditional Indicator Distribution





YEAST  
AI

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Smart Financial Companion for Local Micro-Bakeries

# YEAST AI

Generative AI-Powered Chatbot



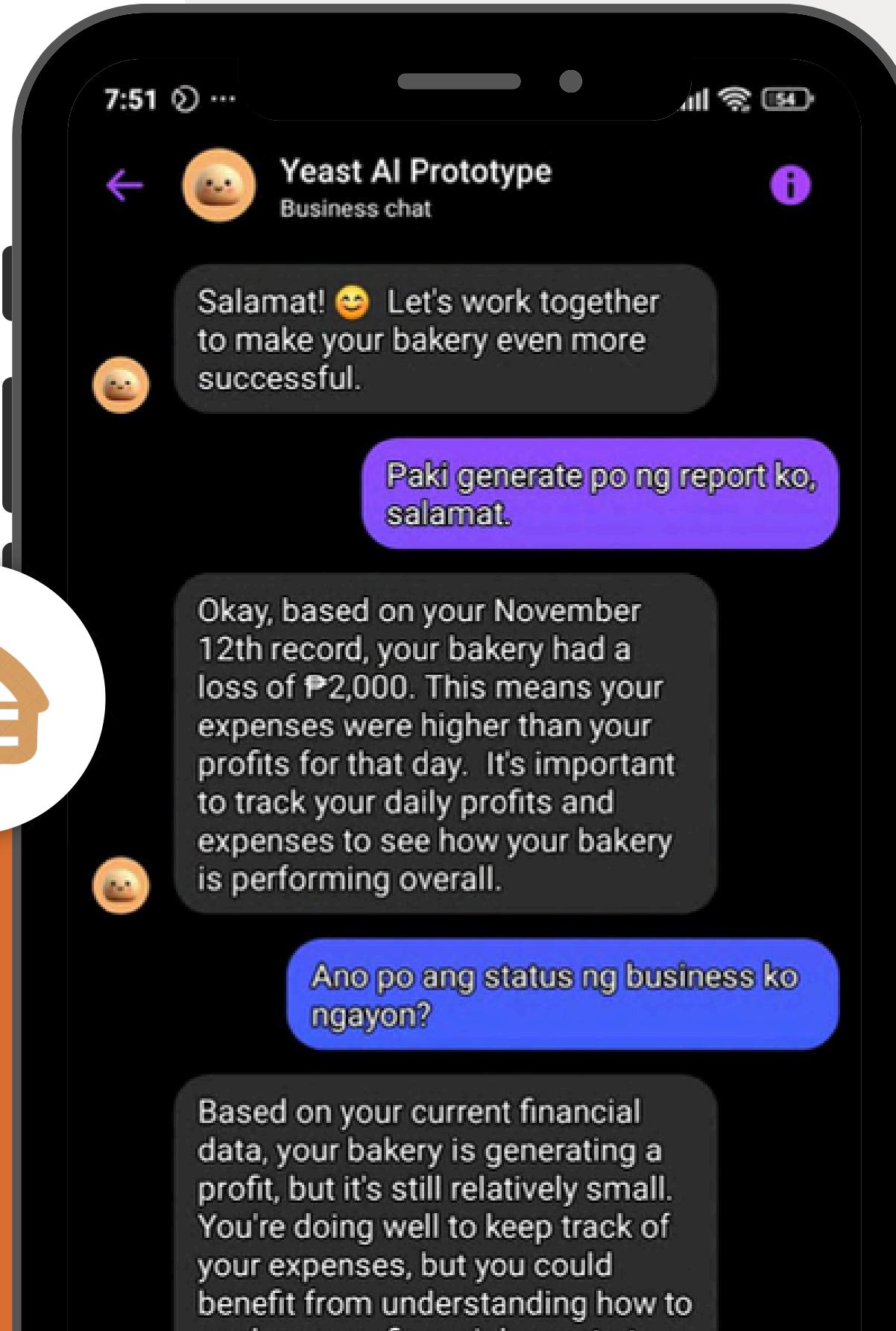
Based on your current financial data, it's difficult to say for sure if you're eligible for a loan right now. Your bakery's revenue is a bit low, and your recent profit is negative. To improve your chances, it's important to track your expenses carefully and understand your financial performance better. We can help you analyze your finances and create a plan to improve your profitability, which will make you a stronger loan candidate.

What loan products can you suggest for me?

Based on your bakery's financial data, you might be eligible for a \*NegosyoKo Loan\* from BankKo. This loan is designed for small businesses like yours and can help you expand your bakery. Since you're looking for a loan between ₱100,001 and ₱250,000, this loan option fits your needs. You can apply for the loan through BankKo's mobile app and manage your payments easily. However, remember that your recent profit of ₱5,000 might be a concern for lenders. It's important to show consistent profitability to increase your chances of loan approval.

# SOLUTION DESIGN

an innovative generative AI-powered chatbot designed specifically for micro-bakeries. This platform aims to empower local bakery owners to effectively manage their finances, plan for business growth, and access tailored loan options.



01

## Financial Tracking and Reporting

easily input their daily expenses and profits. At the end of each week, the AI generates a comprehensive financial report that summarizes key metrics and trends

02

## Fluctuating Market and Inventory Management

The AI provides actionable advice on resource allocation for upcoming days or months

03

## Personalized Profile Assessment

Before accessing the chatbot, users will complete a detailed profile assessment that gathers essential information about their bakery operations and personal financial goals.

# SMART LOAN SUGGESTIONS



## BASED ON BANK INFORMATION

Scrape relevant data about loans from different websites (e.g., loan types, interest rates, eligibility).



## ADVANCED RECOMMENDATION TECHNIQUE

Recommend loans similar to those the user has previously expressed interest in or those relevant to their business profile.



## LOAN REPAYMENT ANALYSIS AND PREDICTION

Based on the user's financial profile, analyze and predict whether they can repay the loan amount on time.

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# TARGET MARKET

local bakery business owners who are passionate individuals run small, often family-owned bakeries in their communities, striving to deliver quality products and exceptional customer experiences.

01

## Financially Conscious and Strategic

aware of financial constraints and actively seek methods to manage and optimize their business finances.

02

## Growth-Oriented

They are proactive in expanding their businesses through new product introductions, customer outreach, and operational efficiency improvements.

03

## Non-Tech-Savvy

Others may be new to digital tools but are eager to learn. The chatbot is designed to be intuitive and user-friendly, accommodating varying tech expertise.



# IMPACT, THE INNOVATION

The AI-powered chatbot, initially designed for micro-bakeries, can be adapted to serve a wider range of MSMEs

## Enhanced Financial Management

01 Improved financial tracking, reporting, and analysis.

## Optimized Operations

02 Efficient inventory management and predictive insights.

## Increased Access to Finance

03 Simplified loan application process and tailored recommendations.

## SDG 8 : DECENT WORK AND ECONOMIC GROWTH

By providing tools for financial management and business growth, the chatbot can help micro-bakeries thrive and create jobs.

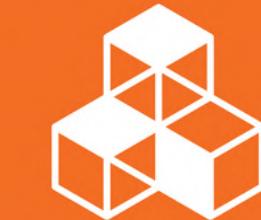
## 8 DECENT WORK AND ECONOMIC GROWTH



## SDG 9: INDUSTRY, INNOVATION AND INFRASTRUCTURE

provides access to financial information and support and contribute to the resilience of small businesses, which can be considered a form of infrastructure.

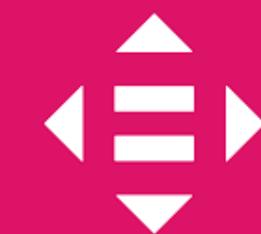
## 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



## SDG 10: REDUCED INEQUALITY

empower micro-bakery owners, particularly those from marginalized communities, to access financial tools and resources that can help them grow their businesses.

## 10 REDUCED INEQUALITIES



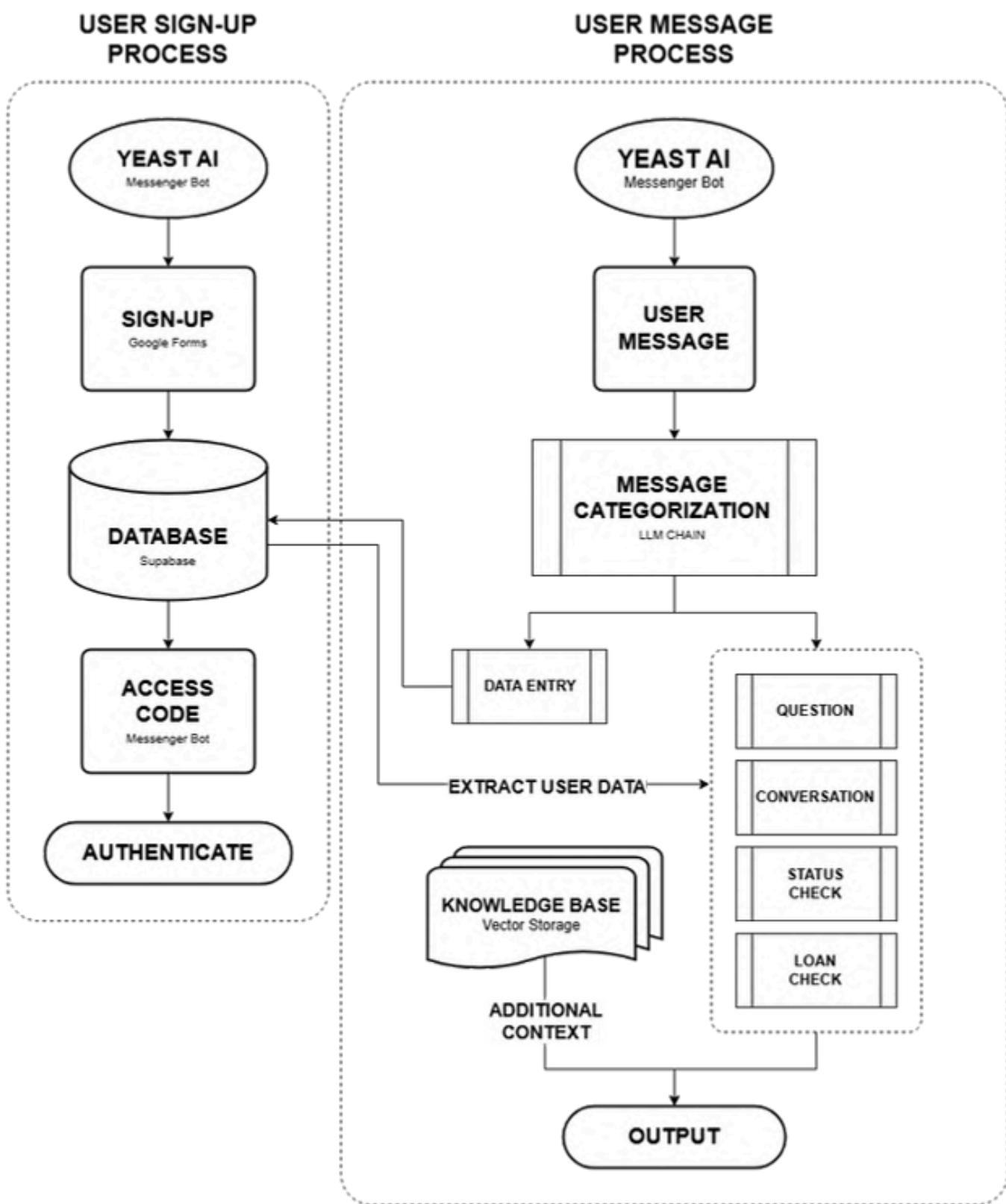
## SDG: SUSTAINABLE CITIES AND COMMUNITIES

by supporting local businesses, the chatbot can contribute to the sustainability and economic vitality of communities.

## 11 SUSTAINABLE CITIES AND COMMUNITIES



# A SYNERGISTIC FUTURE: AI, DATA AND MSME



## Data-Driven Insights Empower MSMEs

At the heart of the solution lies the ability to leverage data-driven insights. By analyzing financial data, market trends, and customer preferences, the chatbot provides bakery owners with actionable recommendations. This enables them to make informed decisions regarding inventory management, pricing strategies, and financial planning.

## MSMEs and BANKING

By empowering MSMEs with advanced financial tools and insights, this solution can bridge the gap between traditional banking and the needs of small businesses. For MSMEs, this partnership could lead to a future where they have greater financial control and access to capital. For banks, the integration of AI-powered solutions can streamline processes, improve customer service, and reduce operational costs. In the long run, this symbiotic relationship between MSMEs and banks, powered by AI, can foster a more inclusive and sustainable financial ecosystem.



**YEAST** AI

Together, We Rise.