AI-DRIVEN LOYALTY PROGRAM OPTIMIZATION



Enhancing Customer Engagement for Supermarkets in Kenya



Presented by: Sylvia, Clive, Ezekiel, Brenda, Isaiah

BUSINESS UNDERSTANDING

- Supermarkets in Kenya are facing increased competition

- Traditional loyalty programs are outdated and impersonal

- Customers expect personalized experiences and rewards

PROBLEM STATEMENT

Problems with Current Loyalty Programs:



- Generic offers lead to poor customer engagement



- Supermarkets struggle to retain loyal customers



- Money is wasted on untargeted promotions

OUR SOLUTION



AI-POWERED LOYALTY OPTIMIZATION:



- GROUP CUSTOMERS BY THEIR SHOPPING HABITS



- IDENTIFY VALUABLE CUSTOMERS



- PREDICT WHICH CUSTOMERS ARE LIKELY TO STOP SHOPPING

OUR GOALS

01

- Build smart customer segments

02

- Predict customers at risk of leaving

03

- Help businesses reward their most valuable shoppers 04

- Ensure our models are at least 80–90% accurate

THE DATA WE USED



Customer Information (e.g., gender, loyalty ID) 2

Shopping
Transactions (e.g., products bought, amount spent)

WHAT WE DID



- Cleaned and analyzed the data



- Discovered shopping patterns



- Created customer profiles



- Predicted future customer behavior

KEY INSIGHTS



- Different types of shoppers prefer different products and promotions



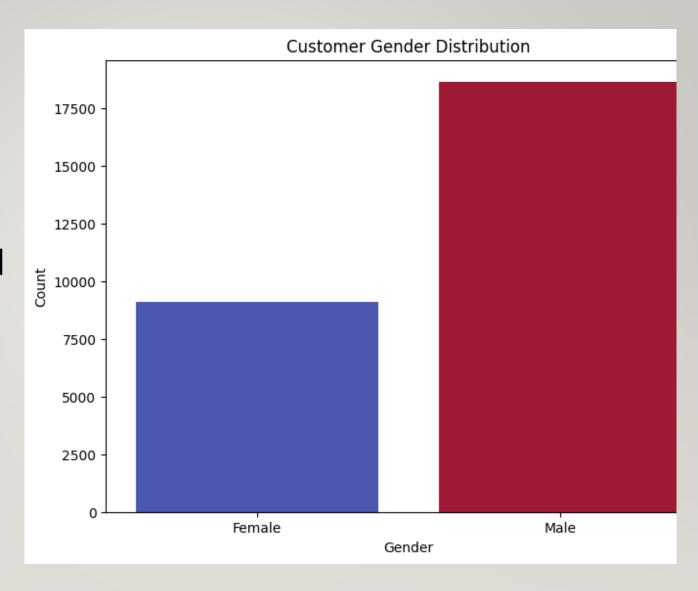
- Some customers are highly loyal, others are at risk of leaving



 Personalized rewards can significantly improve customer retention

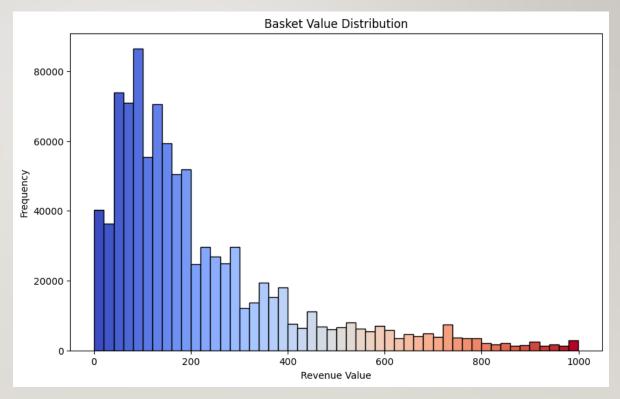
CUSTOMER DISTRIBUTION BY GENDER

Based On The Analysis, Most Shoppers Are Male.

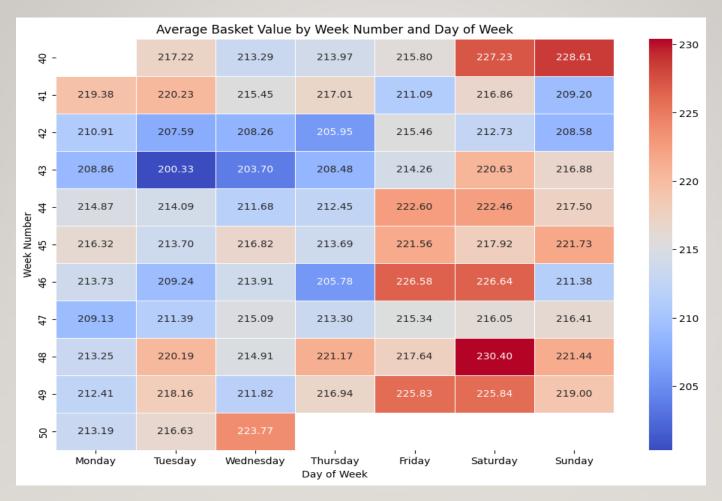


BASKET VALUE DISTRIBUTION

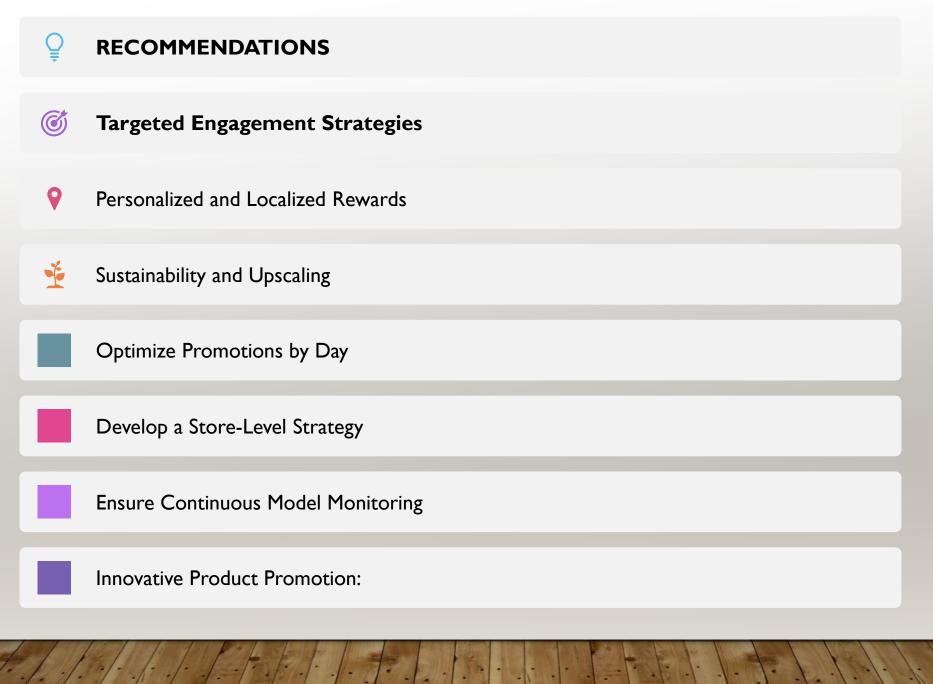
- Shoppers with basket value below Ksh 200 shop most frequently
- The higher the basket value the lower the frequency



Basket Value by Day of Week



Major shopping mostly happen on weekends (Friday, Sat & Sunday) Sat being the best day









Cluster 0 (Loyal High-Value): Premium incentives and VIP treatment.



Cluster I (At-Risk): Strong discounts and personalized offers to bring them back.





Cluster 2 (New): Welcome bonuses and introductory deals.



Cluster 3 (Occasional): Encourage upsell through bundling and seasonal promotions.



2. Optimize Promotions by Day



Focus efforts on Fridays to Sundays to capture peak shopper traffic and

boost campaign effectiveness.

PERSONALIZED AND LOCALIZED REWARDS



Personalize

Personalize Customer Rewards

 Leverage AI to assign loyalty scores and craft tailored rewards (e.g., point-based systems aligned with preferences).



Develop

Develop Store-Level Marketing Strategies

 Analyze customer registration data to implement locationspecific campaigns, especially in high-density regions.



Promote

Promote Top-Performing Products

 Highlight best-selling items in promotions and use product bundling to increase perceived value and drive loyalty.

SUSTAINABILITY AND UPSCALING

- 6. Continuous Model Monitoring Retrain and calibrate Al models regularly to keep up with changing consumer behavior and maintain predictive accuracy.
- 7. Upscale Customers to Premium Segments Use smart promotions to encourage higher basket sizes and transition customers to premium product categories.

BUSINESS IMPACT

- Better targeting = fewer wasted promotions
- Loyalty customer retention-High value customers
- Increased customer loyalty = higher sales
- Insights help make smarter business decisions

FINAL THOUGHTS

- We've built a foundation for a modern, Al-driven loyalty program that can:
- Adapt to customer needs
- Improve engagement and sales
- Set the stage for long-term growth