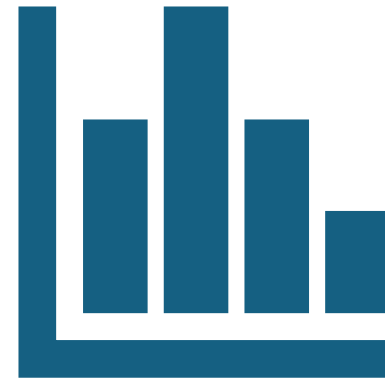


RFM Analysis

Insights and Findings from Customer Transaction Data

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Objectives



Perform RFM segmentation to identify high-value customers.



Analyze time series trends to understand sales performance over time.



Evaluate campaign response rates and customer behaviors.



Provide actionable recommendations based on findings.



Dataset Description

- Transaction Data:

- Contains customer IDs, transaction dates, and transaction amounts.

- RFM Data:

- Provides Recency, Frequency, and Monetary values for each customer.

- Campaign Response Data:

- Binary variable indicating whether a customer responded to a campaign.

- Time Period:

- Data spans multiple years, providing a comprehensive view of customer activity.

RFM Metrics

- Recency:

- Time since the customer's last purchase.

- Frequency:

- Total number of transactions a customer made.

- Monetary:

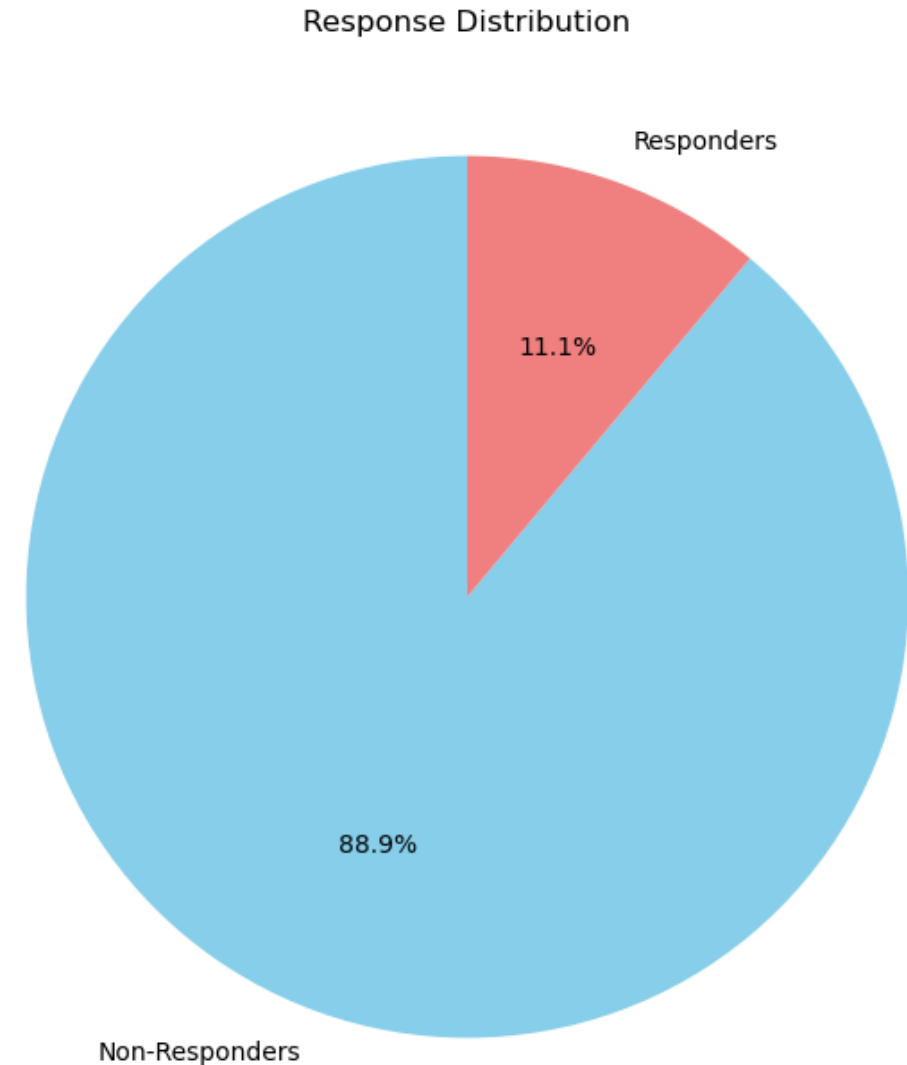
- Total amount spent by the customer.

- Purpose:

- Segments customers into groups based on their activity and value to the business.

Campaign Response Analysis

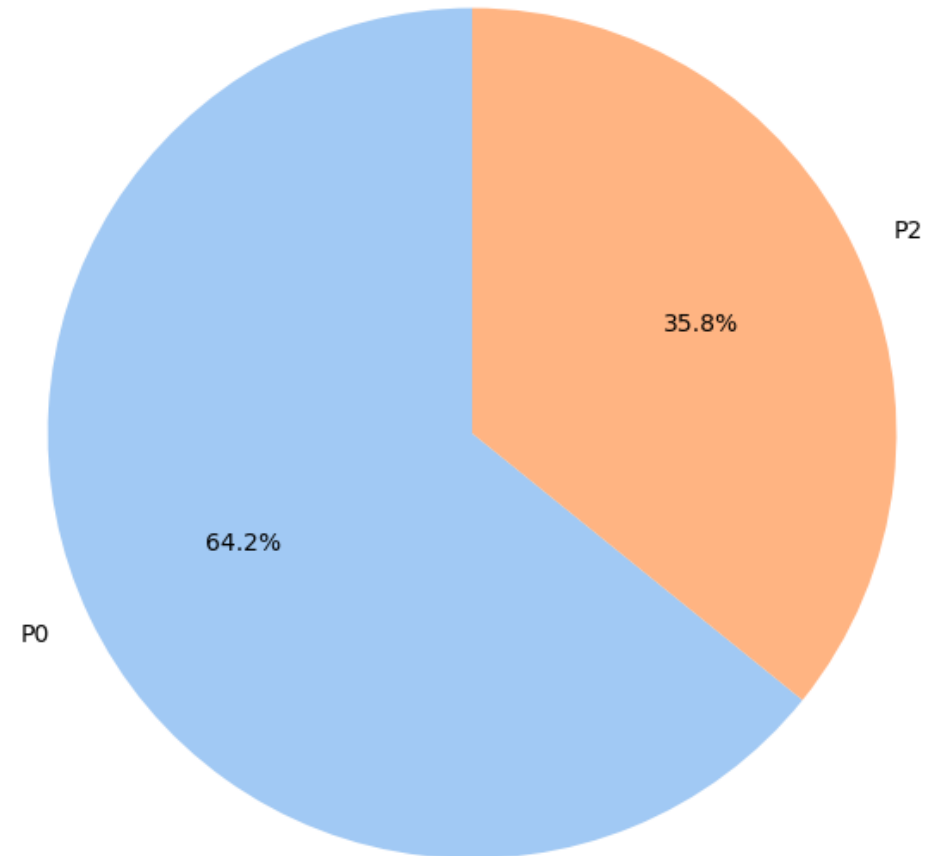
- - Responders: 11% of customers responded to campaigns.
- - Non-Responders: 89% of customers did not respond.
- - Insights:
 - - Responders typically have higher transaction values.
 - - Campaign success is influenced by customer segmentation.



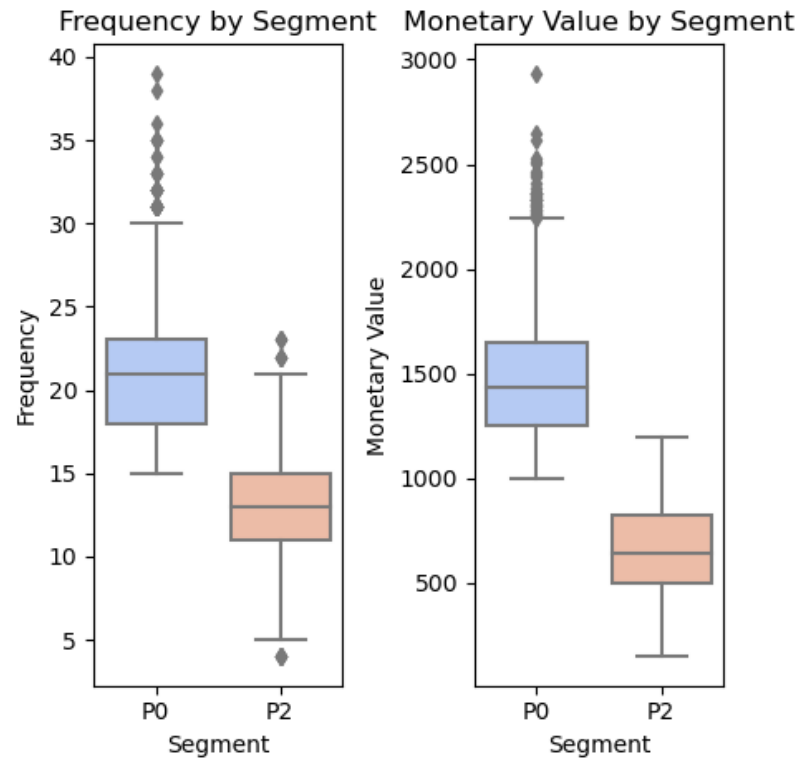
RFM Segmentation

- - P0 (High-value customers) make up 60% of the customer base and contribute significantly to revenue.
- - P2 (Low-value customers) make up 40% of the customer base with minimal contribution.
- - Tailored marketing strategies should focus on retaining P0 customers and re-engaging P2 customers.

Customer Segment Distribution



Frequency and Monetary Analysis



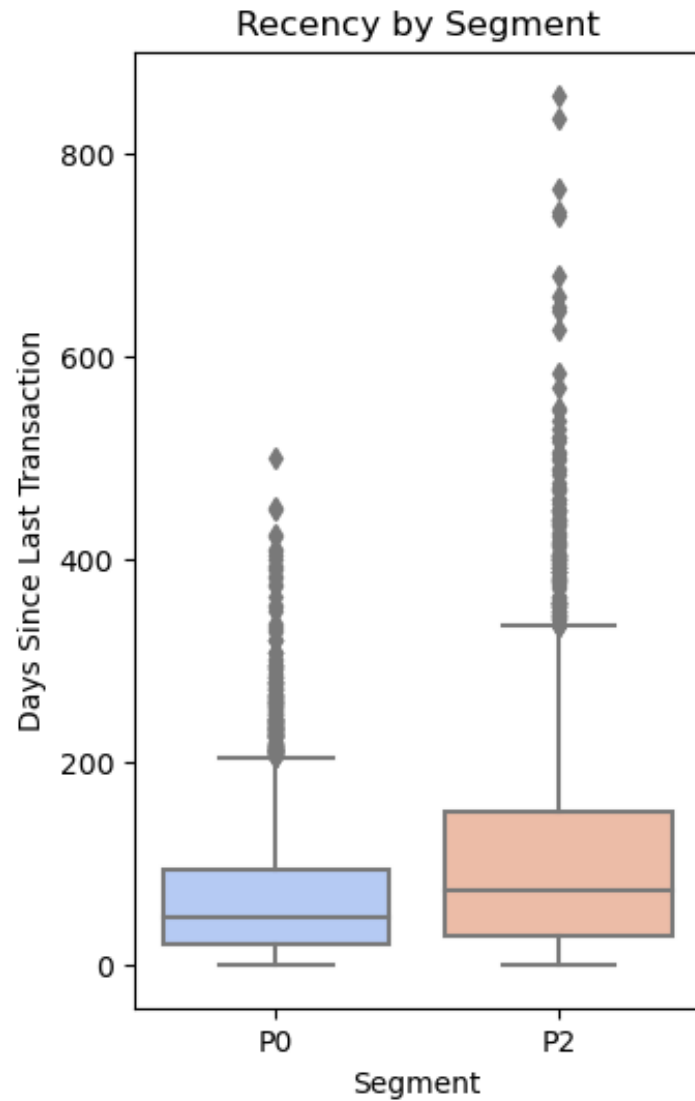
- P0 customers have higher transaction frequency and spend the most.



- P2 customers exhibit low engagement and minimal spending.



- There's a strong correlation between frequency and monetary value in higher segments.



Recency



- P0 (High-value customers) have a lower recency, indicating frequent engagement.



- P2 (Low-value customers) have a higher recency, reflecting longer inactivity periods.



- Marketing efforts should focus on reducing recency for P2 customers through re-engagement campaigns.

Revenue Concentration Analysis



- Top 20% of customers contribute to 80% of total revenue.



- Revenue is heavily concentrated among a small group of high-value customers.



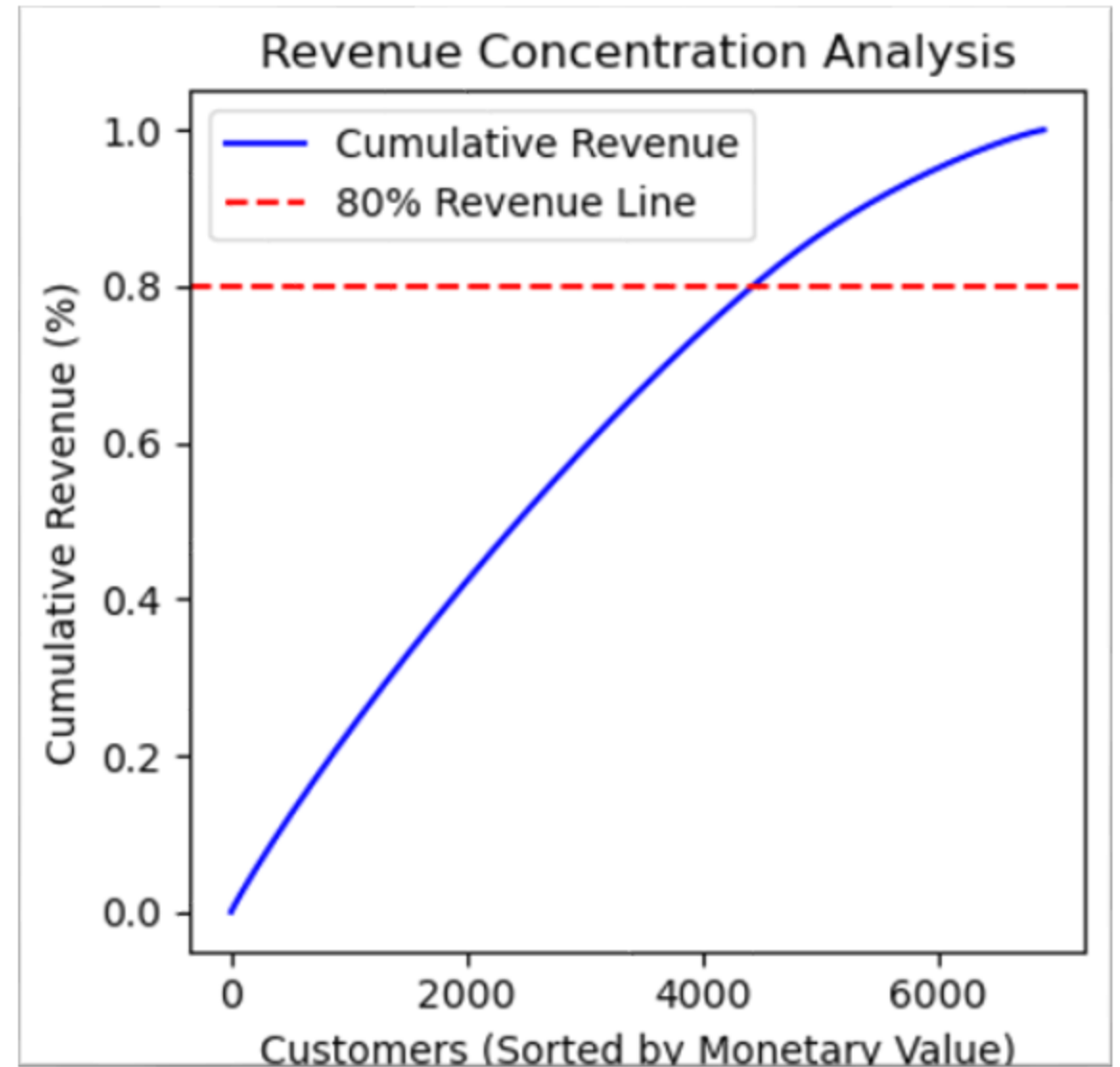
- Strategies:



- Prioritize retention efforts for top customers.



- Use personalized marketing to maximize their lifetime value.



Monthly Sales Trends



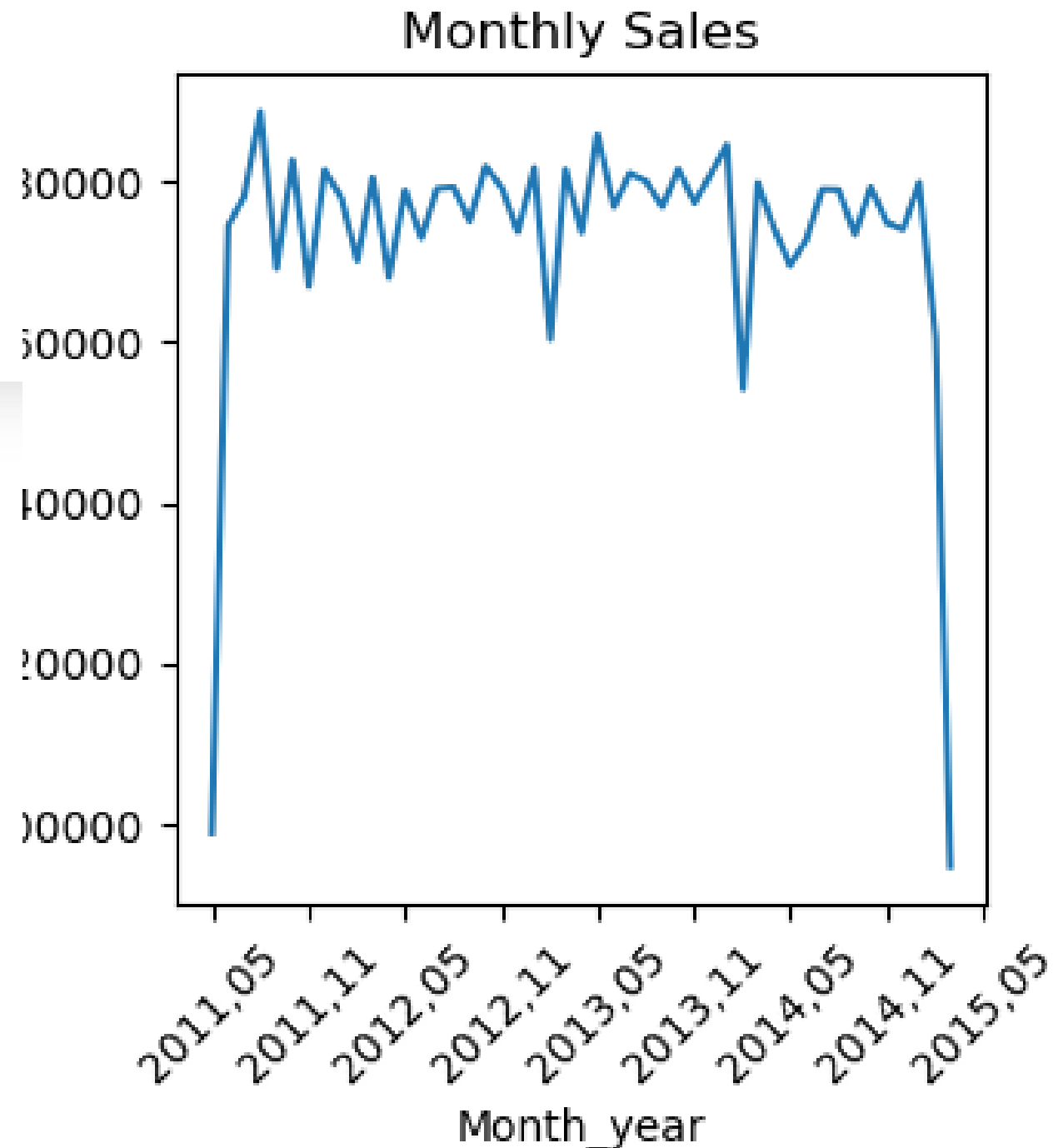
- Sales have grown steadily over the analyzed period.



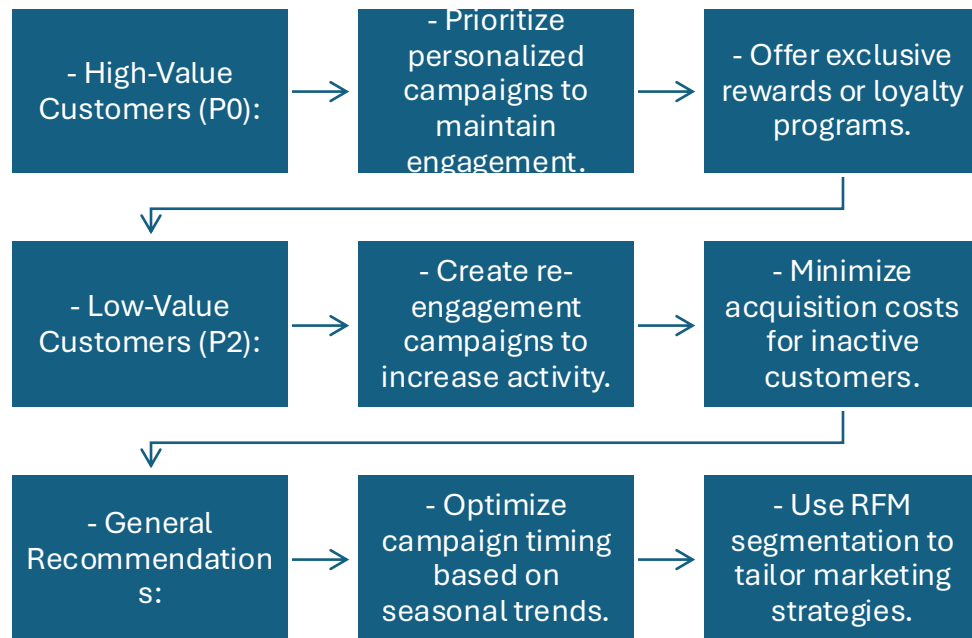
- Seasonal spikes are observed during specific months (e.g., holidays).



- Campaign responses align with these trends, enhancing their impact.



Business Recommendations



Conclusion



- High-value customers (P0) are the backbone of revenue.



- Campaign responses are concentrated in specific customer segments.



- Time series trends reveal seasonal opportunities and overall growth.



- Insights from this analysis can drive strategic marketing efforts, boost revenue, and enhance customer loyalty.