

The header image features a light beige background with various stationery items: a spiral-bound notebook with a pen on the left, a gold pen and a brown envelope with a clip on the right, and two small tags at the bottom right.

PROJECT DOCUMENTATION

CUSTOMER SEGMENTATION USING RFM

By MHNF Studio

Description

In order to enable more successful marketing strategies, the project's goal is to use RFM research to divide customers into discrete segments based on their purchase behavior. Businesses may improve customer experiences and increase loyalty by comprehending consumer purchase trends. RFM analysis aids in the identification of important consumer segments, such as lost, at-risk, and loyal customers. RFM scores are determined for every customer by the analysis:

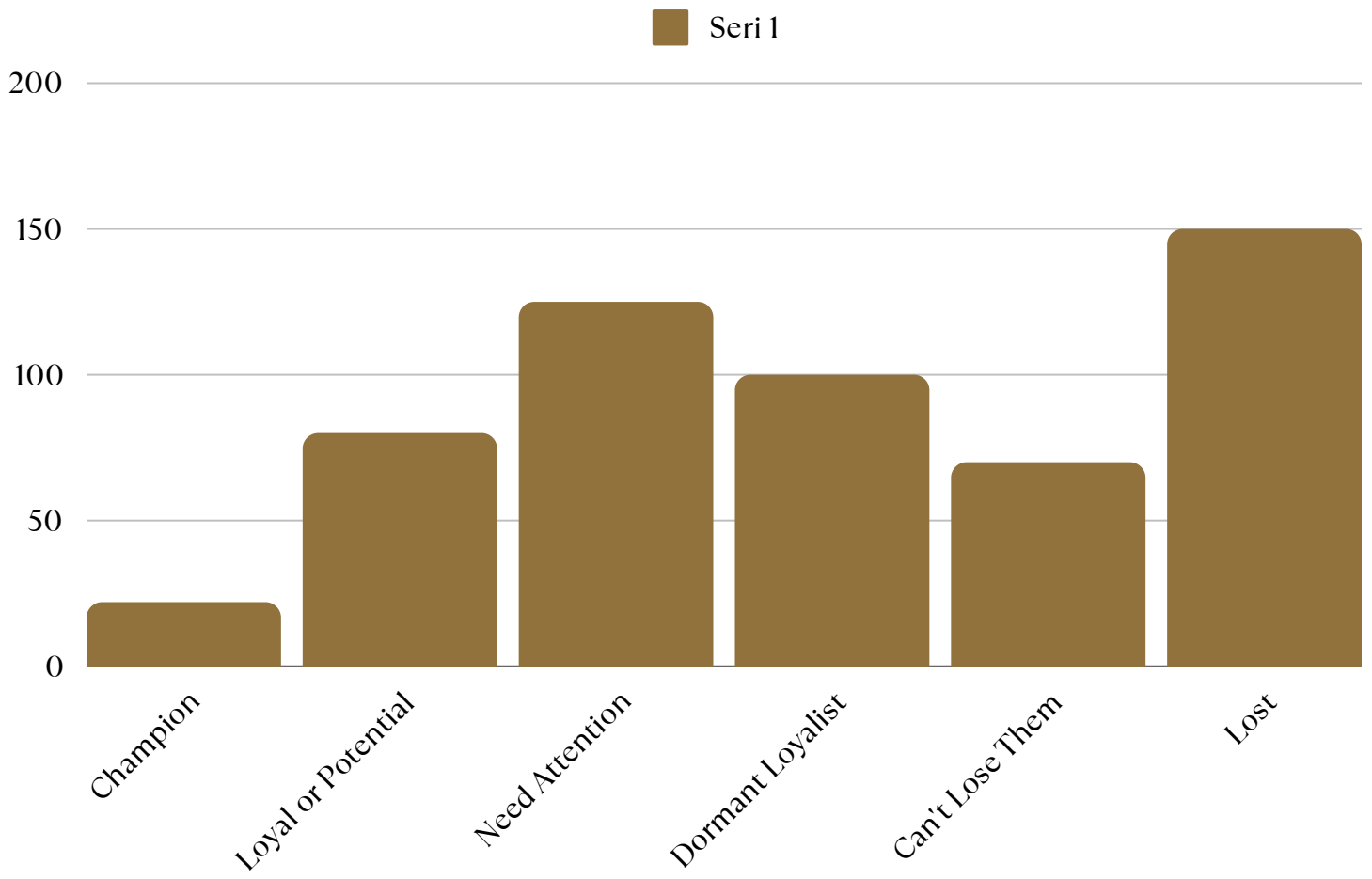
- **Recency (R):** The time since a customer last bought something.
- **Frequency (F):** How frequently a consumer buys something.
- **Monetary (M):** The amount of money spent by a client.

Implementation Process

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| <i>Data Collecting</i> | Information about the customer, including purchase values, transaction dates, and transaction amounts. |
| <i>Data Pre-processing</i> | <ul style="list-style-type: none"> • Data cleaning through the elimination of duplicates and missing values. • Converting date formats to calculate Recency. • combining transactions for each customer. |
| <i>Calculating RFM</i> | Calculate each customer's R, F, and M values. Then, using quantiles, award scores (1-5) to each measure. |
| <i>Segmentation</i> | Segments can be defined using the RFM score combinations: Segments like Champion, Loyal, At Risk, Lost, and so forth are examples. |
| <i>Visualization</i> | <ul style="list-style-type: none"> • Distribution of customer segments using bar charts. • Heatmaps that show the relationships between RFM metrics. • scatter plots that illustrate the connections between monetary values and frequency. |

Segments and Action

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| <i>Champions</i> | <p>Customers who made the most recent, frequent, and expensive purchases.</p> <ul style="list-style-type: none"> ● Offer special discounts, early access on fresh products, and loyalty benefits. |
| <i>Loyal or Potential Loyalist</i> | <p>Customers who frequently purchase and show consistent loyalty over time.</p> <ul style="list-style-type: none"> ● Provide a referral scheme to promote word-of-mouth advertising. ● Boost their frequency by sending promotional offers. |
| <i>Need Attention</i> | <p>Customer who spend less yet are more frequent and recent.</p> <ul style="list-style-type: none"> ● Reestablish contact with promotions or tailored messaging. ● Emphasize the features of the goods to make it more valuable to buy. |
| <i>Dormant Loyalist</i> | <p>Customer who have made regular purchases in the past but haven't come back in a while.</p> <ul style="list-style-type: none"> ● Reengage with customized promotions or rewards for loyalty. ● Provide promotions with a time restriction to regain interest. |
| <i>Can't Lose Them</i> | <p>High-value customers who are at high risk of being lost due to inactivity.</p> <ul style="list-style-type: none"> ● To get them back, use individualized communications and compelling rewards. ● Provide premium memberships or VIP benefits. |
| <i>Lost</i> | <p>Customers who haven't purchased for a long time, with frequency and monetary value.</p> <ul style="list-style-type: none"> ● Send surveys to understand why they stopped purchasing. |



Result

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| <i>Visualization</i> | <ul style="list-style-type: none"> • The largest segment is <i>Lost</i>, indicating many customers have not made recent purchases • Champion and Loyal are the most profitable segments, but they have fewer customers. |
| <i>Key Action</i> | <ul style="list-style-type: none"> • implementing strategies that will help Champions and Loyal Segment remain viable; the customers in this market are few but extremely precious. • more focus on retaining the segment “can't lose them” instead of retaining the “lost” segment |
| <i>Impact on Business</i> | <ul style="list-style-type: none"> • Maintenance of high-value segments such as Champion and Loyal is the major goal of enhanced customer retention. • Resources are distributed to the most promising sectors. • Promoting more frequent purchases from mid-tier sectors lead to an improved CLV. • Businesses can re-engage customers who are At Risk and Dormant Loyalists by detecting attrition early. • Spending on low-value segments is reduced through resource optimization. • Segmentation analysis yields actionable insights that inform strategic decision-making. |

Conclusion

Businesses can better analyze consumer behavior, prioritize important categories, and execute focused initiatives with the use of RFM segmentation. Businesses may improve engagement, make effective use of resources, and generate long-term revenue by concentrating on retention, reactivation, and expansion. This strategy guarantees data-driven choices for sustained performance.