### **Customer Segmentation & Retention**

**RFM Analysis** 

### **Company Overview**

- Small in scale
- Niche market
- Low marketing budget





Create a Kinder Planet Hoodie, Oversized Hoodie... Ad by Etsy seller

\*\*\*\* (7.5k)

\$16.03 \$45.80 (65% off)



Lana Del Rey Poster, 10 Different Lana Del Rey Pos... Ad by Etsy seller

\*\*\*\* (272)

\$13.98 \$23.30 (40% off)



Iced Coffee Cup - Handmade Glassware and Bar... Ad by Etsy seller

\*\*\*\* (236)

\$15.36 \$21.95 (30% off)

Ad by Etsy seller \*\*\*\* (41)

\$10.45 \$14.92 (30% off)

FREE shipping



\$5.25 \$7.00 (25% off)



Beautiful Can Cooler | Pretty Seltzer Insulator | Dr... Beautiful Can Cooler | Pretty Seltzer Insulator | Dr... \$5.25 \$7.00 (25% off)



Gallery of Henri Matisse pastel prints set of 3, ton,... \*\*\*\* (12)

\$5.44 \$10.87 (50% off)



New Yorker Magazine Cover, 18 October 1976, Vin...

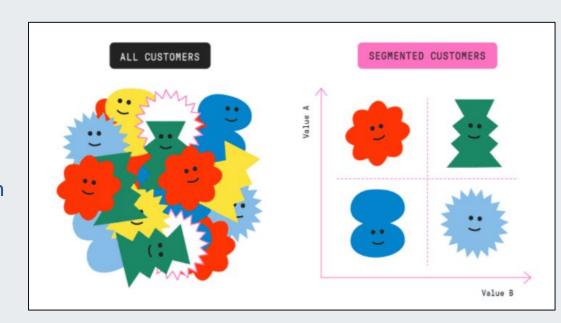
Sort by: Lowest Price 11

Crochet Swirly Cat Coasters- Cat Coasters- Cute .. \*\*\*\*(35)

\$5.50

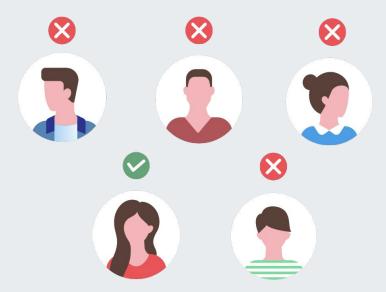
## Why Segment Customers

- Organized insights
- Targeted marketing solutions
- Improved sales and customer retention



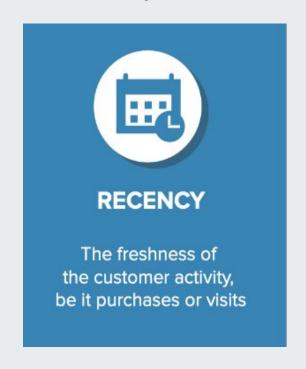
## RFM Analysis: Find our valuable customers

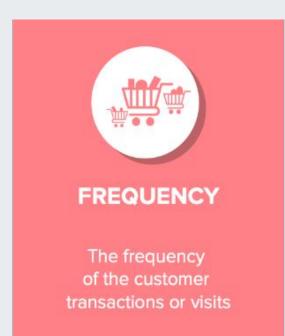
- Who are our best customers?
- Which of our customers might leave?
- Who have the potential to become best customers?



# What is RFM Analysis

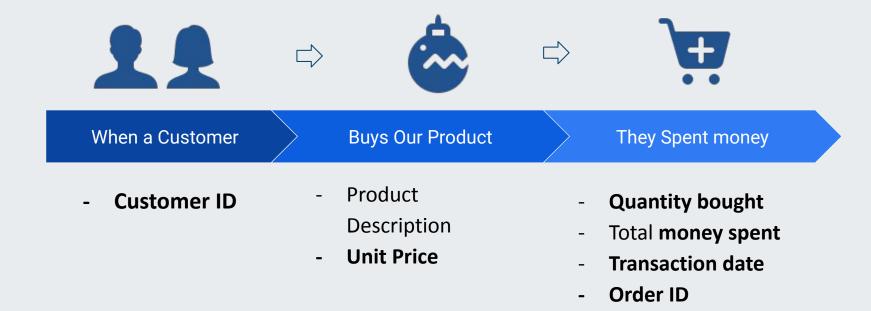
How recently, how often, and how much money a customer has given our brand



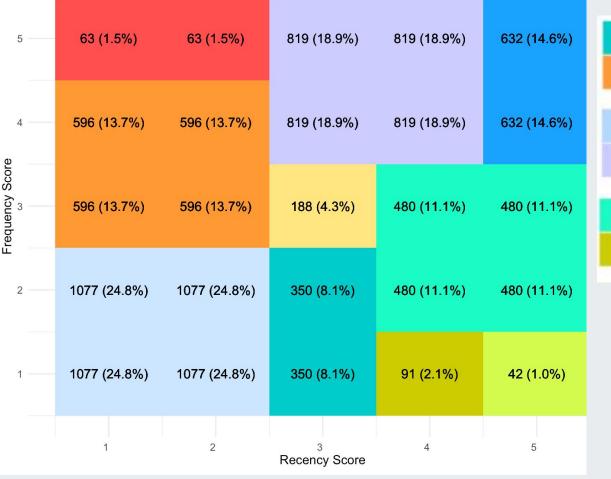




### From Customer Journey To Our data



## How do we segment our customers





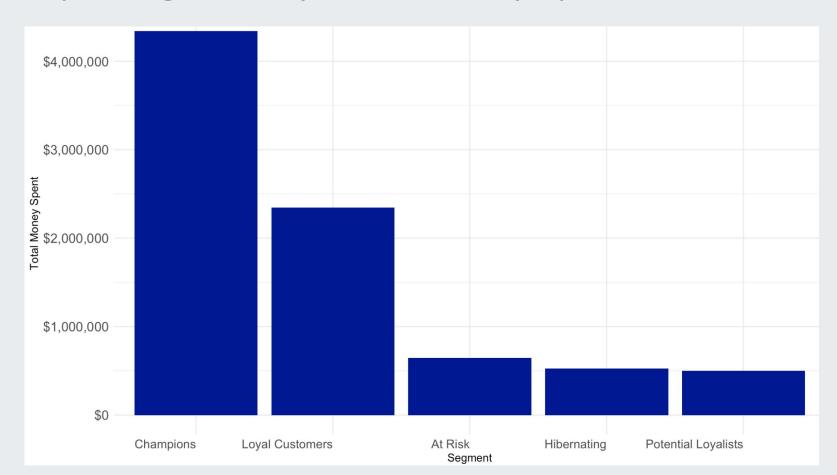
### How do we segment our customers



#### Over 80% of Customers:

- Hibernating-25%
- Loyal Customer-20%
- Champions-15%
- At Risk
- Potential Loyalists

# Top 5 Segment by Total Money Spent



### The Five Segments

- Champions
- Loyal Customers
- At-Risk Customers
- Hibernating Customers
- Potential Loyalists

- Referral Programs
- **Exclusive Offers**
- **Special Discounts**
- Limited-time Deals
- Unique Value Proposition

### **Projected Outcome**

- Enhanced Customer Understanding
- Cost-effective Marketing Solutions
- Improved Resource Allocation
- Increased Customer Retention
- More Accurate Predictions of Future Trends

## Appendix A: Heatmap for 10 Segmentations

```
ggplot(rfm_counts2, aes(x = RecencyScore, y = FrequencyScore, fill = Segment)) +
    geom_tile(color = "white") +
    geom_text(aes(label = sprintf("%s (%0.1f%%)", SegmentCount, TotalPercentage)), size = 3.5) +
    scale_fill_manual(values = color_scheme) + # your_color_scheme should be a named vector of colors
    labs(title = "Recency and Frequency Grid", x = "Recency Score", y = "Frequency Score", fill = "Segment") +
    theme_minimal() +
    theme(
        plot.title = element_text(hjust = 0.5),
        axis.text.x = element_text(angle = 0, vjust = 0.5, hjust = 1),
        axis.text.y = element_text(hjust = 0.5),
        legend.position = "bottom",
        legend.title.align = 0.5
```

Software: R Studio

### Appendix B: Bar Chart for Top 5 Segment by Total Money Spent

```
ggplot(top_money_summary, aes(x = reorder(Segment, -TotalMoneySpent), y = TotalMoneySpent)) +
    geom_bar(stat = "identity", fill = "darkblue") +
    labs(x = "Segment", y = "Total Money Spent", title = "Total Money Spent for Top 5 Customer Segment") +
    theme_minimal() +
    theme(axis.text.x = element_text(hjust = 1, size = 12), axis.text.y = element_text(size = 13)) +
    scale_y_continuous(labels = scales::dollar_format()) # Format y-axis labels
#new graph for money
top_money_summary <- money_summary %>%
    arrange(desc(TotalMoneySpent)) %>%
```

Software: R Studio

head(5)

### Appendix C: RFM Research & Implementation

Optimal Selection for Direct Mail: https://www.jstor.org/stable/184136?seq=1

Customer Segmentation and Strategy Development Based on User Behavior Analysis, RFM Model and Data Mining Techniques: A Case Study: <a href="https://ieeexplore.ieee.org/abstract/document/8592638">https://ieeexplore.ieee.org/abstract/document/8592638</a>

New RFM-D classification model for improving customer analysis and response prediction: <a href="https://www.sciencedirect.com/science/article/pii/S2090447923001430">https://www.sciencedirect.com/science/article/pii/S2090447923001430</a>

CUSTOMER SEGMENTATION AND PROFILING WITH RFM ANALYSIS:

https://www.researchgate.net/publication/340924556\_CUSTOMER\_SEGMENTATION\_AND\_PROFILING\_WITH\_RFM\_ANALYSIS#:~:text=RFM%20is%20a%20model%20used,an%20integer%20number%2C%20typically

[Guide]: RFM Analysis w/ predictive segmentation examples: <a href="https://www.barilliance.com/rfm-analysis/">https://www.barilliance.com/rfm-analysis/</a>

[Dataset]: <a href="https://www.kaggle.com/code/nazlisener/customer-segmentation-using-rfm/input">https://www.kaggle.com/code/nazlisener/customer-segmentation-using-rfm/input</a>