**CUSTOMER RELATIONSHIP MANAGEMENT**

**DETAILED REPORT: MAXIMIZING THE EFFECTIVENESS OF MARKETING CAMPAIGNS**

**1. OVERVIEW OF REVENUE**

* **Total Sales Revenue:** 233K USD
* **Revenue from Subscriptions:** 63K USD
* **Subscribed Customers:** 1,053
* **Average Purchase Frequency:** 89.13
* **Subscription Revenue Ratio:** 26.88%

**2. STATISTICS BY SUBSCRIPTION STATUS**

* **Number of Customers by Subscription Status:**
  + Subscribed: 1,053 (27%)
  + Not Subscribed: 2,847 (73%)
* **Total Purchase Amount (USD) by Subscription Status:**
  + Subscribed: 62,645 USD (26.88%)
  + Not Subscribed: 170,436 USD (73.12%)

**3. STATISTICS BY CATEGORY AND GENDER**

* **Total Purchase Amount (USD) by Category and Gender:**
  + **Clothing:**
    - Female: 33,636 USD
    - Male: 70,628 USD
  + **Accessories:**
    - Female: 23,819 USD
    - Male: 50,381 USD
  + **Footwear:**
    - Female: 11,835 USD
    - Male: 24,258 USD
  + **Outerwear:**
    - Female: 5,901 USD
    - Male: 12,623 USD
* **Total Purchase Amount (USD) by Category:**
  + **Clothing:** 104,264 USD
  + **Accessories:** 74,200 USD
  + **Footwear:** 36,093 USD
  + **Outerwear:** 18,524 USD

**Insights:**

* **Clothing** is the highest-grossing category, with male customers spending significantly more.
* **Accessories** is the second-highest category, also dominated by male spending.

**4. STATISTICS BY STATE**

* **Top 10 States by Revenue (USD):**
  + MT: 5,784 USD
  + IL: 5,617 USD
  + CA: 5,605 USD
  + ID: 5,587 USD
  + NV: 5,514 USD
  + AL: 5,261 USD
  + NY: 5,257 USD
  + ND: 5,220 USD
  + WV: 5,174 USD
  + NE: 5,172 USD

**Insights:**

* Revenue is relatively evenly distributed across states, but **MT, IL, and CA** lead in sales.

**5. RECOMMENDATIONS TO OPTIMIZE MARKETING CAMPAIGNS**

1. **Focus on Male Customers:**
   * Strengthen campaigns promoting **Clothing** and **Accessories**, as male customers consistently spend more.
   * Offer targeted discounts or exclusive deals for male customers, particularly in top-performing states.
2. **Encourage Non-Subscribers to Join:**
   * Non-subscribers (73% of customers) make up the majority but contribute proportionately less revenue (73.12%).
   * Implement subscription incentives, such as:
     + Exclusive discounts for subscribers.
     + Early access to new products.
     + Free shipping for subscribers.
3. **Boost Revenue in High-Potential States:**
   * Focus local campaigns on high-revenue states like **MT, IL, and CA**.
   * Tailor promotional offers to suit regional preferences.
4. **Enhance Cross-Selling Strategies:**
   * Bundle related categories (e.g., Clothing + Accessories or Footwear + Outerwear).
   * Introduce combo deals to increase Average Order Value (AOV).

**CONCLUSION**

Focusing on male customers, converting non-subscribers into subscribers, and optimizing campaigns in high-revenue states will maximize marketing effectiveness and drive overall revenue growth.

**DETAILED REPORT: CUSTOMER RETENTION ANALYSIS**

**1. OVERVIEW OF CUSTOMER RETENTION**

Based on the collected data, the current customer retention rate is 27%, while the churn rate is 73%. This indicates a significant number of customers are at risk of leaving, presenting a major challenge in maintaining current customers and ensuring stable revenue.

**2. REVENUE ANALYSIS BY SUBSCRIPTION STATUS AND GENDER**

**1. Subscription Status:**

* **Subscribed Customers:** Revenue is $63K, with spending distributed across different genders and product categories. However, subscribed customers generate less revenue compared to non-subscribed customers.
* **Non-Subscribed Customers:** Revenue is $170K, which is significantly higher than subscribed customers. This group is crucial and needs to be converted into subscribed customers to sustain stable revenue.

**2. Gender Breakdown:**

* **Male:** Males dominate both the subscribed and non-subscribed groups, with spending spread across categories like Clothing, Accessories, Footwear, and Outerwear. Their overall spending is fairly balanced.
* **Female:** Females spend most in the Clothing and Accessories categories, but their total revenue is lower than males, despite a higher number of female customers in the non-subscribed group

**3. REVENUE ANALYSIS BY CHURN PROBABILITY**

The data shows that customers with a higher churn probability tend to spend more than those with a lower churn probability. This suggests that reducing churn is even more critical, as these customers represent a larger revenue opportunity but are also at risk of leaving.

* **Churn Probability 0.10 (Low):** Revenue from both subscribed and non-subscribed customers is relatively balanced, but non-subscribed customers contribute more revenue due to their larger numbers.
* **Churn Probability 0.50 and 0.60:** Customers in these groups make frequent purchases (up to 90 times) and generate substantial revenue. This group needs particular attention, as they represent both a high revenue source and a high churn risk.

**4. PURCHASE FREQUENCY ANALYSIS**

The analysis of purchase frequency shows that customers who buy frequently (weekly, fortnightly) tend to be subscribed and provide steady revenue.

* **Weekly and Fortnightly Purchasers:** These customers are the core group, making frequent purchases and generating consistent revenue.
* **Monthly, Quarterly, and Annual Purchasers:** These customers contribute less revenue but still need to be engaged through strategies that encourage increased spending.

**5. AGE GROUP AND CHURN PROBABILITY**

Churn probability varies across different age groups:

* **56+:** The churn probability is the highest (460.90), indicating this group is at significant risk. Special care should be taken to cater to their needs and preferences through tailored products and services.
* **46-55 and 36-45:** These groups have moderately high churn probabilities. Strategies should be implemented to offer relevant promotions and products.
* **18-25:** This age group has the lowest churn probability but generates less revenue. Strategies to increase spending and foster purchasing habits among younger customers are essential.

**6. REVENUE ANALYSIS BY CATEGORY**

* **Clothing:** The highest revenue category, with significant contributions from both subscribed and non-subscribed customers. However, non-subscribed customers contribute three times the revenue of subscribed customers. Strategies should focus on converting non-subscribed customers in this category into subscribers.
* **Accessories and Footwear:** Both categories also show high revenue from non-subscribed customers. Subscription strategies could center on these categories to strengthen customer engagement.
* **Outerwear:** Although revenue is lower, Outerwear remains an important category. Promotional efforts should target both subscribed and non-subscribed customers to increase sales in this category.

**7. RECOMMENDED RETENTION STRATEGIES:**

1. **Enhance Subscription Programs:** For non-subscribed customers, increase efforts to encourage subscriptions, especially in high-revenue categories like Clothing and Accessories.
2. **Focus on High Churn Probability Customers:** Pay special attention to customers with high churn probabilities (0.50 and above), especially those with frequent purchasing behavior. Offering exclusive deals and retention-focused strategies can help prevent them from leaving.
3. **Encourage Frequent Purchases:** Promote frequent purchases (weekly, monthly) through tailored promotions and discounts. Rewarding loyal customers can drive consistent revenue.
4. **Tailor Products and Services for Older Age Groups:** Groups like 56+ and 46-55 have higher churn rates and need specialized products and services that cater to their needs.

**8. CONCLUSION:**

To improve customer retention and reduce churn, it is essential to implement diverse strategies targeting high-churn risk customers, focusing on enhancing the benefits of subscription programs, and promoting frequent purchasing habits through targeted offers and promotions.

**DETAILED REPORT: MAXIMIZE CUSTOMER VALUE**

**1. MAXIMIZING CUSTOMER VALUE**

* **Cross-Selling Revenue**: $233K with a **100% cross-selling rate**.
* **High-Value Customers**: There are **1,447 high-value customers**, contributing significantly to the revenue.

**2. PURCHASE ANALYSIS BY CATEGORY AND ITEM**

* **Top Categories by Purchase Amount**:
  + **Clothing**: $104.26K (the dominant category)
  + **Accessories**: $74.20K
  + **Footwear**: $36.09K
  + **Outerwear**: $18.52K
* **Top Items in Each Category**:
  + **Clothing**: Items like Shirt, Blouse, and Dress generate the most sales.
  + **Accessories**: Jewelry and Sunglasses stand out.
  + **Footwear**: Shoes and Sandals have the highest sales.
  + **Outerwear**: Coat and Jacket are the leading products.

**3. GENDER ANALYSIS**

* **Male** customers account for **67.74%** of the total sales.
* **Female** customers account for **32.26%** of the total sales.

**4. SEASONAL PURCHASE**

* **Fall** leads with **$60,018** in purchases, followed by Spring, Winter, and Summer.

**5. PURCHASE FREQUENCY AND REVIEW RATINGS**

* **Annual Purchases**: Average spend of **$60.17** with a review rating of **3.8**.
* **Bi-Weekly Purchases**: Highest average spend of **$60.69**, but with a slightly lower review rating of **3.7**.
* **Every 3 Months Purchases**: Average spend of **$60.08** and a review rating of **3.8**.
* **Fortnightly Purchases**: Average spend of **$59.05** with a review rating of **3.8**.
* **Monthly Purchases**: Average spend of **$59.33** and a review rating of **3.8**.
* **Quarterly Purchases**: Average spend of **$59.98** with a review rating of **3.7**.
* **Weekly Purchases**: Average spend of **$58.97** with a review rating of **3.8**.

**6. PURCHASE AMOUNT BY CATEGORY**

* **Clothing**: $104K
* **Accessories**: $74K
* **Footwear**: $36K
* **Outerwear**: $19K

**7. PURCHASE FREQUENCY, AMOUNT, AND RATINGS BY CATEGORY**

* **Clothing**:
  + Average Frequency: **89.63**
  + Total Purchase Amount: **$104.26K**
  + Average Review Rating: **3.72**
* **Accessories**:
  + Average Frequency: **89.97**
  + Total Purchase Amount: **$74.20K**
  + Average Review Rating: **3.77**
* **Footwear**:
  + Average Frequency: **88.18**
  + Total Purchase Amount: **$36.09K**
  + Average Review Rating: **3.79**
* **Outerwear**:
  + Average Frequency: **85.01**
  + Total Purchase Amount: **$18.52K**
  + Average Review Rating: **3.75**

**8. CONCLUSION**

* **Cross-Selling** is highly effective and contributes significantly to the revenue. Expanding product pairings for cross-selling could further drive growth.
* **High-value customers** should be targeted with personalized offers or loyalty programs to maintain engagement and increase spending.
* **Gender and seasonal trends** suggest that targeted campaigns for male customers or seasonal promotions (especially for Fall) could lead to higher sales.
* **Category-specific strategies**: Focus on Footwear and Accessories, as these categories show higher purchase frequency and stronger customer ratings.

**DETAILED REPORT: ANALYSIS OF HIGHLY-VALUED CUSTOMER (HVC) DATA**

**1. HVC RATE AND REVENUE**

* **HVC Rate**: 19.97% is the percentage of customers categorized as HVC within the total customer base. This is a strong indicator of a significant portion of customers being highly valuable, and there is potential for repeated purchases from them.
* **Revenue from HVC**: $72,000 from HVC customers contributes a substantial portion of the total revenue. This underscores the importance of retaining HVC customers for sustained business growth.
* **Average Loyalty Score (89.13)** shows a high level of customer loyalty, which is essential for maintaining consistent revenue from this group.

**2. PURCHASE AMOUNT AND AVERAGE REVIEW RATING BY AGE GROUP**

(All age groups have an average review rating of **4.8**, indicating high customer satisfaction across the board.)

* **56+ years**: This age group has a relatively smaller number of customers but contributes a significant amount in total revenue ($3,888). The higher spend can be attributed to purchasing more premium or essential products.
* **18-25 years**: Despite being a younger demographic, they are still making significant purchases ($2,777) and show high loyalty, making them a key group to nurture for long-term growth.
* **46-55 years** and **36-45 years**: These middle-aged groups have steady purchase behaviors, but their contribution to total revenue is lower than younger groups. They likely have a stable income, spending on necessary and quality items.
* **26-35 years**: This group has the lowest purchase amount ($2,221), which could indicate a preference for less expensive or fewer items.

**3. PAYMENT METHOD SEGMENTATION**

The payment method data reveals a balanced distribution of HVCs across various platforms:

* **Credit Card**: The most commonly used payment method (35 customers). This suggests that HVCs are making larger purchases and prefer credit card payments for convenience.
* **Venmo and Debit Cards**: These methods are more common among younger customers, showing a shift in payment preferences, especially for digital payments.
* **Other methods (Cash, Bank Transfer, PayPal)**: Though less common, these methods still show that a segment of customers prefers traditional or secure payment methods for larger transactions.

**4. STATE SEGMENTATION**

* **IN**: The state with the highest number of HVCs (7 customers). This could indicate that marketing or regional strategies are particularly effective in this state.
* **MT, PA, TX**: These states show solid representation with 6 HVCs each, which might suggest successful marketing efforts or a higher demand in these areas.
* **Other states**: States like CO, GA, NH, NJ, NY, WA, WY have fewer HVCs, which could mean untapped potential or areas where marketing and outreach efforts need to be ramped up.

**5. CATEGORY AND SEASON SEGMENTATION**

* **Outerwear**: This category has a lower number of customers in each season, with 3 to 5 HVCs across all seasons. This could suggest that outerwear is more of a seasonal need or is purchased less frequently.
* **Footwear**: Footwear shows the highest number of customers in **Fall** (13 HVCs), which could indicate that footwear is highly in demand during this season. It is also popular in **Spring** and **Summer**, showing consistent interest throughout the year.
* **Accessories**: Accessories are most popular in **Summer** (14 HVCs), but their demand is spread fairly evenly across all seasons. This category has the potential for year-round sales.
* **Clothing**: Clothing shows a fairly evenly distributed demand across all seasons, with higher numbers in **Spring** (23 HVCs) and **Winter** (22 HVCs). Clothing is likely a year-round essential, making it a key revenue driver.

**6. CONCLUSION**

1. **Focus on the 18-25 Age Group**: This group shows significant potential for future growth, as they are spending consistently and demonstrating high loyalty. Targeted marketing and loyalty programs aimed at this group could yield long-term benefits.
2. **Optimize Payment Methods**: With a preference for credit cards and Venmo, encouraging these payment methods through promotions or discounts can enhance convenience for customers and increase average order value.
3. **Expand Efforts in Underrepresented States**: States like CO, GA, NH, NJ, NY, WA, and WY have lower numbers of HVCs, which suggests untapped potential. These areas could benefit from targeted marketing strategies or regional promotions.
4. **Leverage Popular Categories**: Clothing, footwear, and accessories show consistent demand across various seasons. Focusing on these categories through promotions or seasonal campaigns can help boost sales.
5. **Tailor Seasonal Strategies**: There are clear trends in seasonality for certain categories. Footwear, for example, sees higher demand in Fall, while accessories are more popular in Summer. Tailoring marketing strategies to these seasonal preferences can improve sales efficiency.

**DETAILED REPORT: BRAND IMAGE**

**1. OVERVIEW OF SENTIMENT TRENDS**

* **Positive Sentiment Rate**: **42.15%**, indicating a moderately good perception of the brand, but there is still room for improvement.
* **Negative Sentiment Rate**: **21.72%**, which is lower than the positive sentiment, but it requires attention to reduce this further.
* **Average Review Rating**: **3.75**, reflecting a fair customer experience, but not exceptional.

**2. SENTIMENT ANALYSIS BY PRODUCT CATEGORIES**

* **Sandals (80 Positive Reviews)** and **Hat (71 Positive Reviews)** receive the highest positive feedback. These products should be leveraged in promotional campaigns to reinforce the brand's strengths.

**Categories with Lower Positive Sentiment**

* **Jeans (46 Positive Reviews)** and **Sneakers (60 Positive Reviews)** have relatively low satisfaction rates. It would be worth improving the quality or design of these products.

**Neutral Sentiment**

* Products like **Sweaters, Belts, Scarves** have higher neutral sentiment. This presents an opportunity to convert these neutral customers into positive ones through proactive engagement or improved experiences.

**Negative Sentiment**

* Negative sentiment is fairly distributed, but **Shirts (51 Negative Reviews)** stand out. This product should be examined more closely to address customer complaints.

**3. SENTIMENT ANALYSIS BY STATE**

**States with High Positive Sentiment Rates**

* **Wisconsin (WI - 53.33%)**, **Maine (ME - 50.65%)**, and **Washington (WA - 49.32%)** have the highest positive sentiment rates. These regions can be targeted with customer loyalty programs or special promotions to further strengthen brand perception.

**States with Lower Positive Sentiment Rates**

* **New Hampshire (NH - 29.58%)**, **Vermont (VT - 32.94%)**, and **West Virginia (WV - 33.33%)** have the lowest positive sentiment rates. It would be beneficial to explore local issues and adjust marketing strategies in these states to improve the brand's image.

**4. CONCLUSION**

1. **Improve Product Quality**
   * Focus on improving products with lower positive reviews and higher negative sentiment, such as **Jeans, Shirts, Sneakers**, by enhancing quality, fit, or design.
2. **Leverage High-Performing Products**
   * Promote products with high positive sentiment, like **Sandals, Hats, Boots**, in marketing campaigns to reinforce positive customer experiences.
3. **Address Neutral Sentiment**
   * For products with high neutral sentiment (e.g., Sweaters, Belts, Scarves), collect customer feedback and create strategies to convert them into more positive sentiments.
4. **State-Specific Strategies**
   * Develop targeted campaigns for states with lower positive sentiment, like **NH, VT, WV**, addressing localized issues and adapting marketing approaches.
5. **Continuous Monitoring and Adjustment**
   * Regularly monitor sentiment trends and adjust strategies as needed to improve overall customer satisfaction and brand perception.