**Shopcribe**

**Sales Performance and Strategic Insights Report**

**Executive Summary**

This report provides an in-depth analysis of Shopcribe's sales performance from 2021 to 2023, highlighting key trends, state-wise insights, customer behavior, and financial metrics. It outlines areas for improvement and offers strategic recommendations to enhance customer satisfaction and drive growth. By leveraging data-driven insights, Shopcribe can optimize operations and strengthen its market presence.

**1. Introduction**

Shopcribe operates in a competitive e-commerce landscape, and understanding sales performance is crucial for informed decision-making. This report analyzes sales trends, customer behavior, and operational efficiencies, aiming to identify opportunities for growth and improvement.

**2. Data Overview**

**Customer Details:**

* **Customer ID:** A unique identifier for each customer.
* **Customer Age:** Captures the age of customers for demographic analysis**.**
* **Gender:** Customer’s gender, useful for understanding purchasing patterns across different demographics.

**Product Details:**

* **Product ID:** Unique identifier for each product.
* **Product Name:** The name of the product**.**
* **MRP (Maximum Retail Price):** Original retail price before discounts**.**
* **Discount Price:** Price after applying any discounts.
* **Category:** Product category for segmentation and analysis**.**

**Order Details:**

* **Order ID:** Unique identifier for each order.
* **Bill Number:** Unique bill identifier.
* **Time Spent on Website:** Time users spend on the platform during a session.
* **Rating:** Customer rating for the product.
* **Marketing/Advertisement:** Track if the order resulted from a specific marketing campaign.
* **Ship Mode:** Mode of shipment selected (standard, express, etc.).
* **Order Status:** Current status of the order (processed, shipped, delivered, canceled).
* **Order, Delivery, and Cancellation Dates:** Key timestamps for tracking the order lifecycle.
* **Payment Method:** Payment options (Credit Card, PayPal, etc.).
* **Pin Code**: Customer location information for geographic analysis.
* **Total Order Value:** Total amount for the order including discounts and shipping charges.
* **Payment Status:** Tracks if the payment was successful or failed.
* **No of Clicks:** Number of interactions with the product before purchase**.**
* **Year, Month, Day:** Temporal data for analyzing trends.
* **Shipping Charges:** Cost of shipping for the order**.**
* **Delivery Time**: Time taken to deliver the order.
* **Cancellation Rate:** Percentage of orders canceled by the customer**.**
* **Order-Days of Week:** Captures the day orders, deliveries, or cancellations occur to identify trends.
* **Previous Orders and Cancellations:** Helps analyze the customer’s order and cancellation history.
* **Cancellation Lead Time:** Time between order placement and cancellation.
* **Order Period**: Identifies if it’s a festive or promotional period.

**4. Feature Engineering Suggestions:**

**Interaction Features:**

* **Customer-Product Interaction:** Track how frequently customers order specific products to capture loyalty or preferences.
* **Customer-Category Interaction:** Create metrics to analyze how customers prefer certain product categories over time.

**Temporal Features:**

* **Seasonal Trends:** Identify shopping trends over seasons, months, or quarters.
* **Order Time Features:** Analyze at what times of the day orders are placed and delivered to find customer activity peaks.

**Geographic Features:**

* **Region Aggregates:** Aggregate data at state or city levels to find regional trends in purchasing power and delivery time efficiencies.

**Behavioral Features:**

* **Customer Loyalty:** Quantify loyalty with repeat purchase metrics.
* **Order Frequency:** Track how often a customer places orders, which can help predict future purchases.

**Discount Features:**

* **Discount Effectiveness:** Create features that measure how discounts influence purchase decisions.
  + **Discounted\_Order:** A binary flag that indicates if the order had a discount.
  + **Avg\_Discount\_Percentage:** The average discount given across orders.
  + **Avg\_Order\_Value\_Discounted:** Measures the average value of orders with a discount applied.

**Cancellation Analysis:**

* **Cancellation Reasons**: Categorize reasons for cancellations to understand customer dissatisfaction patterns.

**Customer Segmentation:**

* **Customer Segments:** Use clustering methods to group customers by purchasing behavior, discount sensitivity, and order frequency.

**5. Key Metrics for Analysis:**

**Features Related to Discount Effectiveness:**

1. **Discounted\_Order:** Whether an order had a discount applied (0 or 1).
2. **Discount\_Ratio:** The ratio of discounted orders to total orders.
3. **Avg\_Discount\_Percentage**: Average percentage discount applied across all customer orders.
4. **Avg\_Order\_Value\_Discounted**: Average order value for discounted orders.
5. **Avg\_Order\_Value\_Non\_Discounted:** Average order value for non-discounted orders.

**Features Related to Geographic Aggregates:**

1. **Avg\_Order\_Value\_State:** Average order value by state.
2. **Avg\_Delivery\_Time\_State:** Average delivery time across different states.
3. **Avg\_Order\_Value\_City:** Drill down into city-level purchasing power.
4. **Avg\_Delivery\_Time\_City:** City-specific delivery efficiency metrics.

**3. Key Insights**

**Customer Insights**

• Total Customers: 25,000

• Average Customer Age: 43 years

• Average Rating: 3.1

• Average Time Spent on Website: 10.15 minutes

• States Covered: 4 (Andhra Pradesh, Gujarat, Maharashtra, Telangana)

• Cities Covered: 40

**Yearly Sales Summary**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Total Customers** | **Average Rating** | **Total MRP (₹)** | **Total Discount (₹)** | **Total Order Value (₹)** | **Total Shipping Charges (₹)** |
| **2021** | **8,310** | **3.0** | **8.32 million** | **6.4 million** | **6.37 million** | **313,000** |
| **2022** | **8,325** | **3.0** | **8.50 million** | **6.16 million** | **6.46 million** | **299,000** |
| **2023** | **8,365** | **3.3** | **8.53 million** | **6.18 million** | **6.50 million** | **308,000** |
| **Total** | **25,000** | **3.1** | **25.34 million** | **18.39 million** | **19.32 million** | **920,000** |

**State-wise Performance**

**1. Andhra Pradesh**

**• Order Status:**

○ Delivered: 3.23k (51%)

○ Shipped: 2.25k (35%)

○ Cancelled: 0.46k (7.38%)

○ Returned: 328 (5%)

**• Sales per Year:**

○ 2021: 152 billion (32%)

○ 2022: 1.58 billion (34%)

○ 2023: 1.54 billion (33%)

**• Subscriptions:**

○ Free Pass: 3,505

○ Premium: 2,039

○ Premium Plus: 816

○ Total: 6,360

**• Total Sales:**

○ Free Pass Total: ₹2,622,807,924.27

○ Premium Total: ₹1,430,884,228.59

○ Premium Plus Total: ₹576,845,788

**• Average Metrics:**

○ Average Order Day of Week: 3.03

○ Average Discount Percentage: 27%

○ Cancellation Rate: 0.07

**• Top-Selling Products:**

1. Amul Butter

2. Amul Milk

3. Arial Liquid Detergent

4. Cavin Chocolate Milkshake

**2. Gujarat**

**• Order Status:**

○ Delivered: 3.26k (52%)

○ Shipped: 2.18k (34%)

○ Cancelled: 0.44k (7%)

○ Returned: 367 (6%)

**• Sales per Year:**

○ 2021: 152 billion (32%)

○ 2022: 1.52 billion (32%)

○ 2023: 1.58 billion (34%)

**• Subscriptions:**

○ Free Pass: 3,546

○ Premium: 2,020

○ Premium Plus: 780

○ Total: 6,346

**• Total Sales:**

○ Free Pass Total: ₹2,639,586,532

○ Premium Total: ₹1,443,040,836

○ Premium Plus Total: ₹531,027,200

**• Average Metrics:**

○ Average Order Day of Week: 3.01

○ Average Discount Percentage: 27%

○ Cancellation Rate: 0.07

**• Top-Selling Products:**

**1**. Waag Bakari Masala Tea

2. Amul Butter

3. Sunfeast Dark Fantasy Cake

**3. Maharashtra**

**• Order Status:**

○ Delivered: 3.32k (52%)

○ Shipped: 2.23k (35%)

○ Cancelled: 0.48k (7%)

○ Returned: 318 (5%)

**• Sales per Year:**

○ 2021: 153 billion (32%)

○ 2022: 1.53 billion (32%)

○ 2023: 1.62 billion (34%)

**• Subscriptions:**

○ Free Pass: 3,633

○ Premium: 2,005

○ Premium Plus: 797

○ Total: 6,435

**• Total Sales:**

○ Free Pass Total: ₹2,704,368,577

○ Premium Total: ₹1,398,094,314

○ Premium Plus Total: ₹576,845,788

**• Average Metrics:**

○ Average Order Day of Week: 3.07

○ Average Discount Percentage: 27%

○ Cancellation Rate: 0.08

**• Top-Selling Products:**

1. Harpic Bathroom Cleaner

2. Moong Dal

3. Amul Milk

4. Cavin Chocolate Milkshake

**4. Telangana**

**• Order Status:**

○ Delivered: 3.21k (52%)

○ Shipped: 2.2k (35%)

○ Cancelled: 0.4k (6%)

○ Returned: 337 (5%)

**• Sales per Year:**

○ 2021: 148 billion (32%)

○ 2022: 1.58 billion (34%)

○ 2023: 1.48 billion (32%)

**• Subscriptions:**

○ Free Pass: 3,496

○ Premium: 1,916

○ Premium Plus: 819

○ Total: 6,231

**• Total Sales:**

○ Free Pass Total: ₹2,604,547,520

○ Premium Total: ₹1,368,388,083

○ Premium Plus Total: ₹562,241,446

**• Average Metrics:**

○ Average Order Day of Week: 2.98

○ Average Discount Percentage: 27%

○ Cancellation Rate: 0.07

**• Top-Selling Products:**

1. Harpic Bathroom Cleaner

2. Parle Cookies

3. Amul Butter

4. Soya Drink Vanilla

**Product Insights**

**Marketing Channels for Products:**

**• Branded Products:**

○ Facebook: 30%

○ Friends: 28%

○ Instagram: 30%

○ Other: 30%

○ TV: 34.83%

**• Imported Products:**

○ Facebook: 19%

○ Friends: 21%

○ Instagram: 20%

○ Other: 20%

○ TV: 17%

**• Local Products:**

○ Facebook: 50%

○ Friends: 50%

○ Instagram: 51%

○ Other: 49%

TV: 48%

**4. Sales Performance Overview**

* **Overall Growth**: Sales have shown a steady increase, from ₹6.37 billion in 2021 to ₹6.50 billion in 2023, indicating robust market presence despite fluctuations.
* **Customer Satisfaction**: The average rating has improved from 3.0 in 2021 to 3.3 in 2023, reflecting enhanced customer satisfaction and engagement.

**5. State-wise Insights**

**Andhra Pradesh**

* **Cancellation Rate**: 7.38% cancellations indicate potential issues with product availability or customer satisfaction.
* **Key Products**: Amul Butter and Milk are top sellers, signaling strong demand for dairy products.

**Gujarat**

* **Sales Performance**: Sales increased from ₹1.52 billion in 2022 to ₹1.58 billion in 2023.
* **Product Preferences**: High interest in local products, especially tea and cakes.

**Maharashtra**

* **Sales Growth**: Consistent growth with sales reaching ₹1.62 billion in 2023.
* **Product Opportunities**: Best-sellers include bathroom cleaners and staples like Moong Dal, highlighting a focus on hygiene and essential goods.

**Telangana**

* **Declining Sales**: A decrease from ₹1.58 billion in 2022 to ₹1.48 billion in 2023 raises concerns.
* **Cancellations**: A 6% cancellation rate suggests the need for improved customer service or product delivery.

**6. Areas for Improvement**

**Customer Retention**

* **Focus on Cancellations**: Implement strategies to reduce cancellations, particularly in Andhra Pradesh and Telangana, by enhancing product delivery timelines and customer service.

**Marketing Strategies**

* **Targeted Advertising**: Utilize data from popular marketing channels (e.g., Facebook, TV) to tailor campaigns based on local preferences.

**Product Offerings**

* **Expand Product Range**: Introduce local and essential goods in states with declining sales, such as Telangana, and consider seasonal promotions.

**Subscription Plans**

* **Enhance Flexibility**: Offer more flexible subscription plans to attract new subscribers and retain existing customers.

**7. Future Enhancements**

**Data-Driven Decisions**

* **Invest in Analytics**: Implement advanced analytics tools to monitor customer behavior and sales patterns for informed decision-making regarding inventory and marketing strategies.

**Customer Feedback Loop**

* **Regular Surveys**: Establish feedback mechanisms to understand customer pain points and improve service quality.

**Technology Upgrades**

* **Optimize User Experience**: Enhance the online shopping experience through user-friendly interfaces and faster loading times.

**Logistics Optimization**

* **Strengthen Delivery Operations**: Address delivery issues by partnering with reliable courier services to ensure timely deliveries.

**8. Focus Areas**

**Immediate Focus**

* **Andhra Pradesh and Telangana**: These states require immediate attention due to high cancellation rates and declining sales.

**Long-Term Focus**

* **Maharashtra**: Shows potential for growth; further investments in marketing and customer engagement could yield significant returns.

**9. Detailed Customer Behavior Analysis**

**Demographics**

* **Customer Age**: The average customer age is around 43, indicating a mature customer base. Marketing strategies should be tailored to suit this demographic.

**Purchase Patterns**

* **Frequency of Orders**: Understanding average order frequency will help target retention strategies effectively.
* **Seasonal Trends**: Analyzing seasonal sales trends will identify peak periods for promotional strategies.

**10. Financial Metrics Analysis**

**Sales by Subscription Type**

* **Free Pass vs. Premium**: Revenue from Premium subscriptions is significant; promoting the benefits of upgrading from Free Pass could enhance revenue.
* **Shipping Charges**: Analyzing the total shipping charges collected will reveal impacts on customer decisions.

**Discount Effectiveness**

* **Average Discount Percentage**: At 27%, discounts significantly influence purchasing decisions. Assessing their impact on sales will help refine pricing strategies.
* **Sales Performance During Discounts**: Evaluating sales during discount campaigns will inform future promotional strategies.

**11. Market Segmentation**

**Customer Segmentation**

* **Behavioral Segmentation**: Classify customers based on purchasing behavior (e.g., frequent vs. occasional buyers) to tailor marketing strategies.
* **Geographic Segmentation**: Segment marketing campaigns based on state-specific data to enhance effectiveness.

**Product Segmentation**

* **High Demand Products**: Maintain stock and marketing focus on best-sellers like Amul Butter and Harpic Bathroom Cleaner.
* **Cross-Selling Opportunities**: Explore complementary products for best-sellers to encourage bundling strategies.

**12. Performance Comparison by State**

**Order Status Analysis**

* **Delivery vs. Cancellations**: Compare the ratio of delivered orders to cancellations. States with high cancellation rates may benefit from targeted interventions.
* **Returns Analysis**: Investigate return reasons to improve product descriptions and quality.

**Sales Growth Analysis**

* **Yearly Sales Growth**: Assess which states have shown the highest growth rates to identify strategic focus areas.
* **Contribution to Total Sales**: Determine each state's percentage contribution to overall sales for prioritization.

**13. Strategic Recommendations**

**Marketing Initiatives**

* **Localized Campaigns**: Develop campaigns tailored to each state's unique preferences, such as emphasizing local products in Gujarat.
* **Loyalty Programs**: Introduce programs to encourage repeat purchases, particularly for Premium customers.

**Operational Enhancements**

* **Logistics Partnerships**: Strengthen partnerships with logistics providers to minimize delivery issues, especially in high-cancellation states.
* **Inventory Management**: Implement better inventory forecasting based on demand analysis to reduce stockouts.

**Customer Engagement**

* **Educational Content**: Create content that educates customers about the benefits of Premium subscriptions and top-selling products.
* **Feedback Mechanisms**: Regularly collect feedback on products and services for continuous improvement.

**14. Conclusion**

By enhancing the analysis with a focus on customer behavior, financial metrics, and strategic recommendations, Shopcribe can better position itself in the market. The insights gained from this report will facilitate targeted marketing efforts, operational improvements, and ultimately drive sales growth across states. Implementing these strategies will lead to increased customer satisfaction and a stronger competitive advantage.

**Appendices**

* **Data Sources**: [List of data sources used for analysis]
* **Methodology**: [Overview of the methodologies employed in the analysis]