# **Business Insights & Recommendations**

### 1. Revenue Trends

Revenue spikes strongly in November–December (holiday sales), then dips in January. This suggests the business is highly seasonal.

Direction: Highlight this seasonality in dashboards. Recommend inventory ramp-ups & campaign spending increases in Q4, and possibly retention-focused campaigns in January to soften the post-holiday dip.

### 2. Product Performance

Top Categories: Electronics and Apparel dominate revenue. Subcategories like Mobile Accessories and Women's Apparel show consistent strength.

Underperformers: Toys and some Beauty products under-index compared to marketing spend.

#### Direction:

- Recommend reallocating spend toward high-ROI categories.
- Suggest bundling weaker categories with popular ones (e.g., Toys as holiday add-ons with Electronics).

# 3. Customer Segments

Premium accounts often enjoy free shipping and yield higher average order values. South and Midwest regions show recent revenue growth momentum, while West lags behind.

### Direction:

- Suggest running regional promotions in the West to boost demand.
- Position Premium membership upsell campaigns they correlate with higher basket sizes and retention.

# 4. Marketing Channels

Conversion: Email has the highest conversion rate but only accounts for  $\sim 10-15\%$  of total sessions. Paid Search brings volume but weaker conversion.

ROI: ROI analysis shows Email and Referral outperform in return on spend, while Display Ads are often negative ROI.

#### Direction:

- Recommend shifting budget from Display → Email & Referral programs.
- Strengthen Email campaigns with segmentation (loyalty, lapsed, prospects).
- Test scaling Paid Search with stricter keyword bidding to improve ROI.

## 5. Returns & Customer Experience

Return rate  $\sim$ 6%, slightly high for e-commerce. Categories with the highest returns include Apparel and certain Electronics.

#### Direction:

- Recommend a fit/size recommendation tool for Apparel to reduce returns.
- Improve product descriptions/photos for Electronics accessories.
- Build a return-reason tracking field in the dataset for deeper analysis later.

# 6. Growth Opportunities

Regional: The South shows strong recent 6-month growth; invest in marketing + logistics there.

Customer Retention: With 35% of sessions tied to known customers, there's room to expand account sign-ups and loyalty programs.

#### Direction:

- Recommend a regional warehouse expansion or faster shipping option in the South.
- Incentivize account creation (discount on first purchase with registration).

# **Examples of Executive Summary**

**Project Title:** NCR Ride Analytics

**Period:** January 1, 2023 – June 30, 2025

### **Key Metrics**

• **Total Net Revenue:** \$14,413,415.15

• **Total Orders:** 50,000

• Average Net Revenue per Order: \$288.27

• **Return Rate:** 6.03%

• Overall Session Conversion: 3.53%

# **Top Categories by Revenue (Top 5)**

- 1. **Electronics** \$5,690,276.52
- 2. **Sports** \$2,918,356.25
- 3. **Home** \$2,177,977.55
- 4. **Apparel** \$1,845,384.32
- 5. **Beauty** \$1,488,629.24

### **Channel Conversion**

Channel	Sessions	Transactions	S Conversion Rate
Display	17,988	680	3.78%
Referral	21,617	788	3.65%
Direct	21,644	784	3.62%
Social	21,511	763	3.55%
Email	25,281	881	3.48%
Paid Search	32,325	1,108	3.43%
Organic Search	39,634	1,347	3.40%

# **Channel ROI (Proxy)**

Channel	Spend	Revenue	ROI
Direct	\$137.19	\$1,704,624.22	12,424.28
Organic Search	\$2,021.14	\$3,165,866.59	1,565.38
Referral	\$2,371.65	\$1,745,701.08	735.07
Email	\$90,868.16	\$1,981,729.16	20.81
Display	\$204,765.13	\$1,443,098.46	6.05
Social	\$287,831.65	\$1,754,883.51	5.10
Paid Search	\$679,960.41	\$2,617,512.13	2.85