

# **USER BEHAVIOR AND CARD USAGE ANALYSIS**

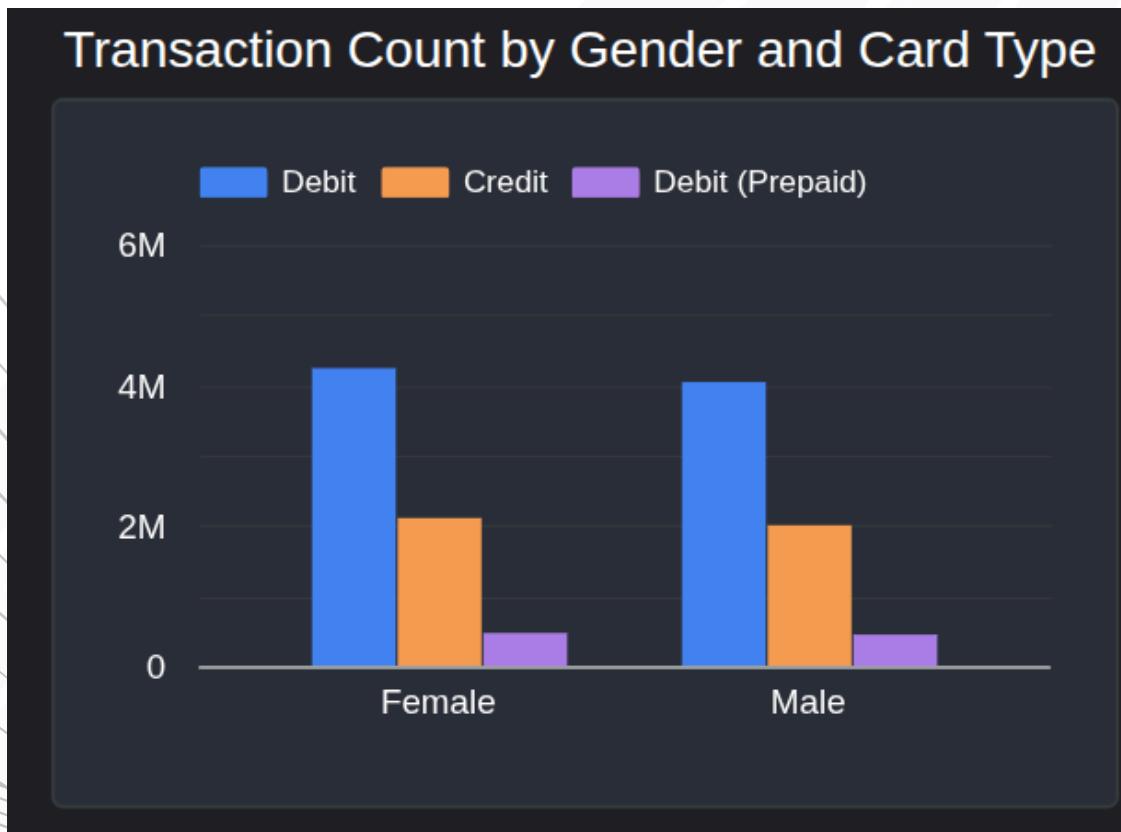
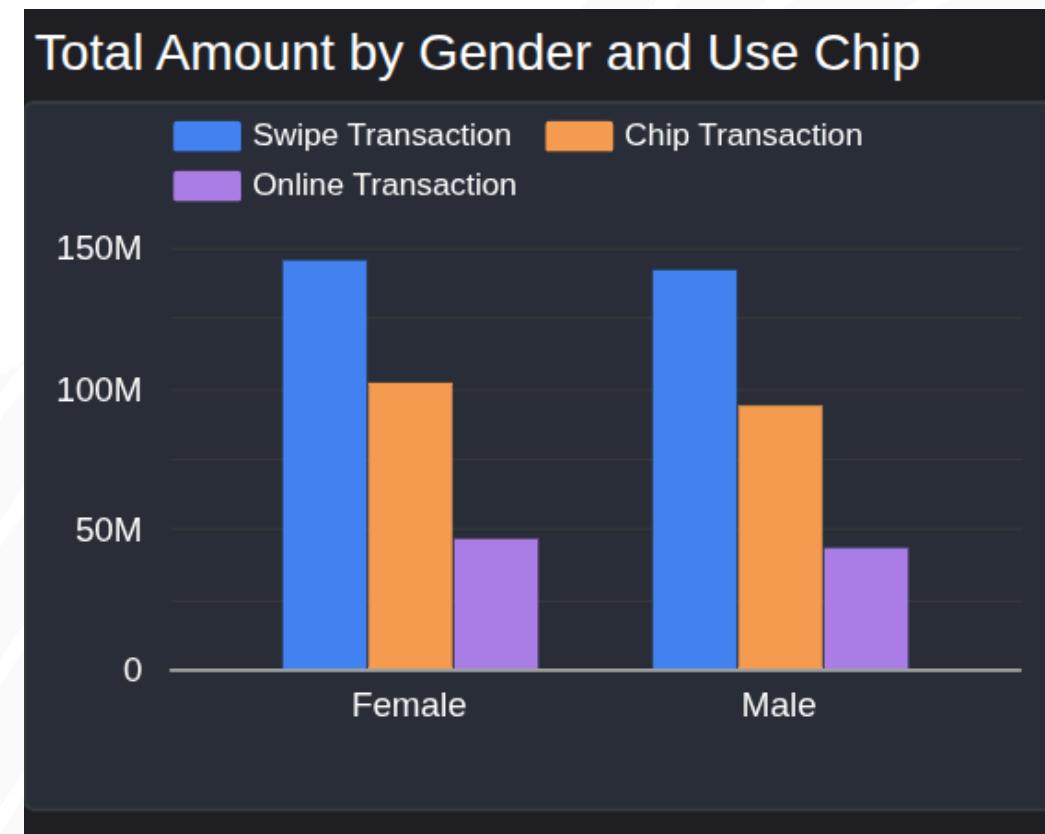
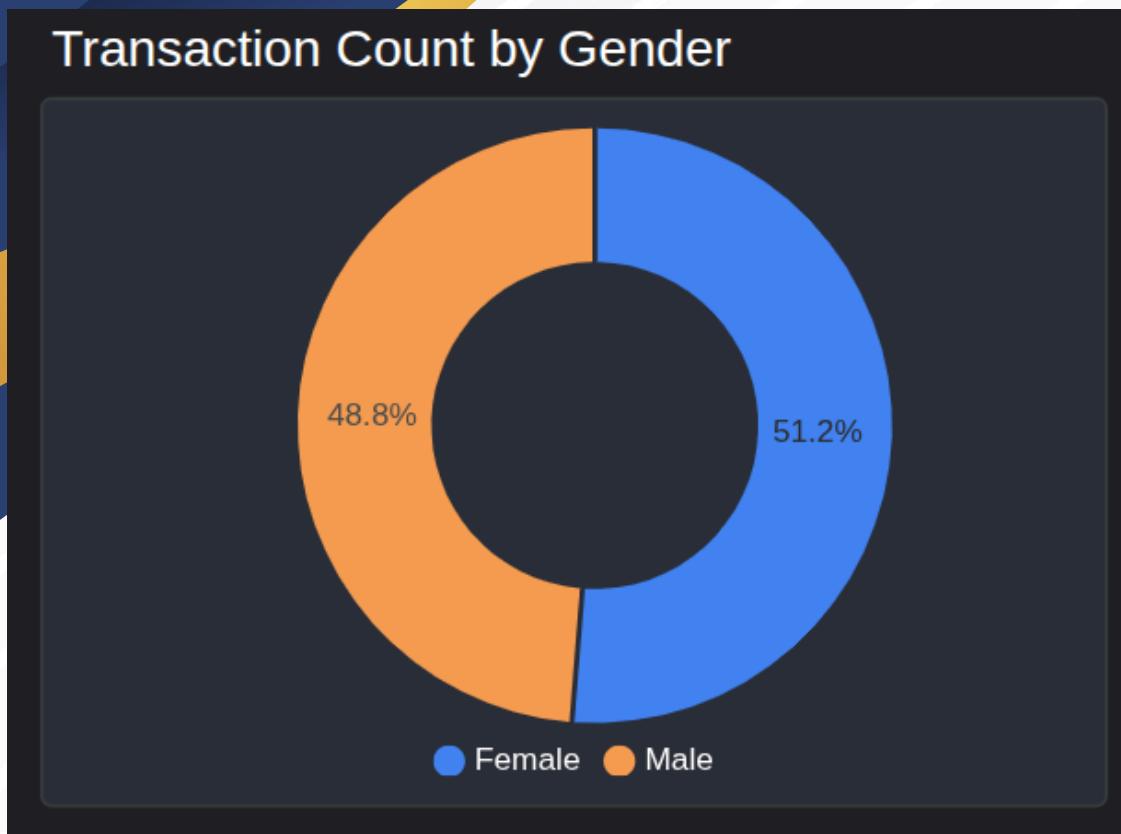
# OBJECTIVE

To analyze user profiles (gender, age, credit score, location), card ownership (brand and type), and transaction behavior (volume, amount, channel, MCC, and user segmentation) in order to identify spending patterns, customer segments, and inactive users.

# DATASET

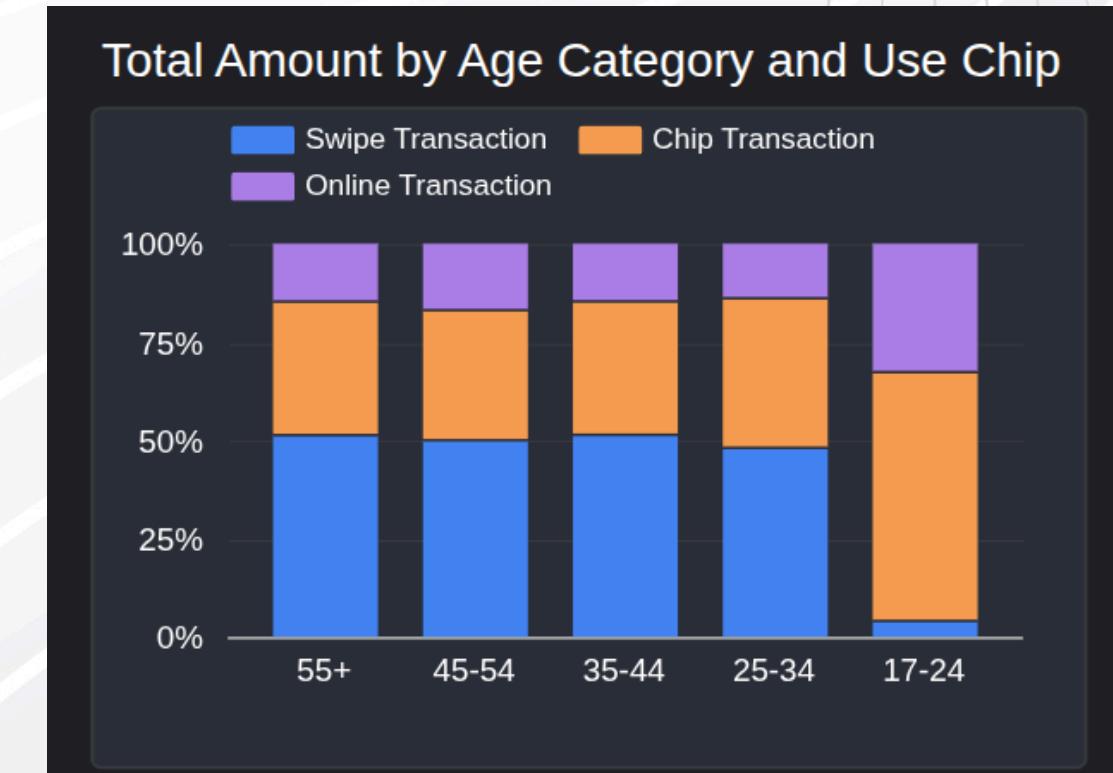
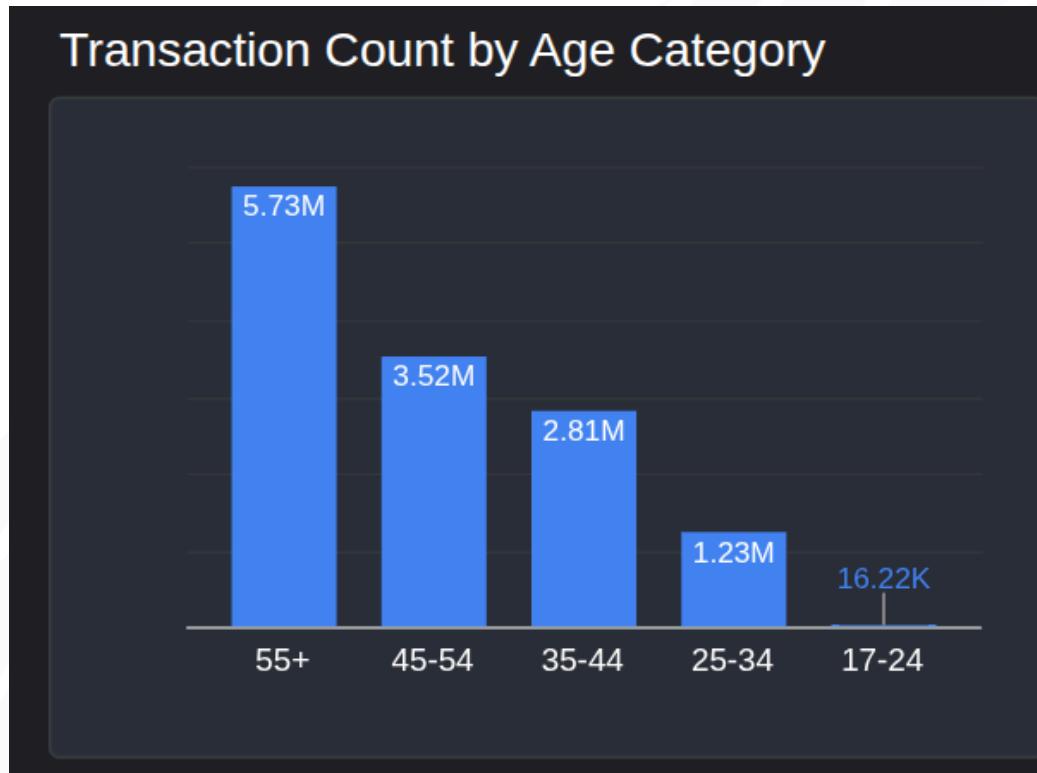
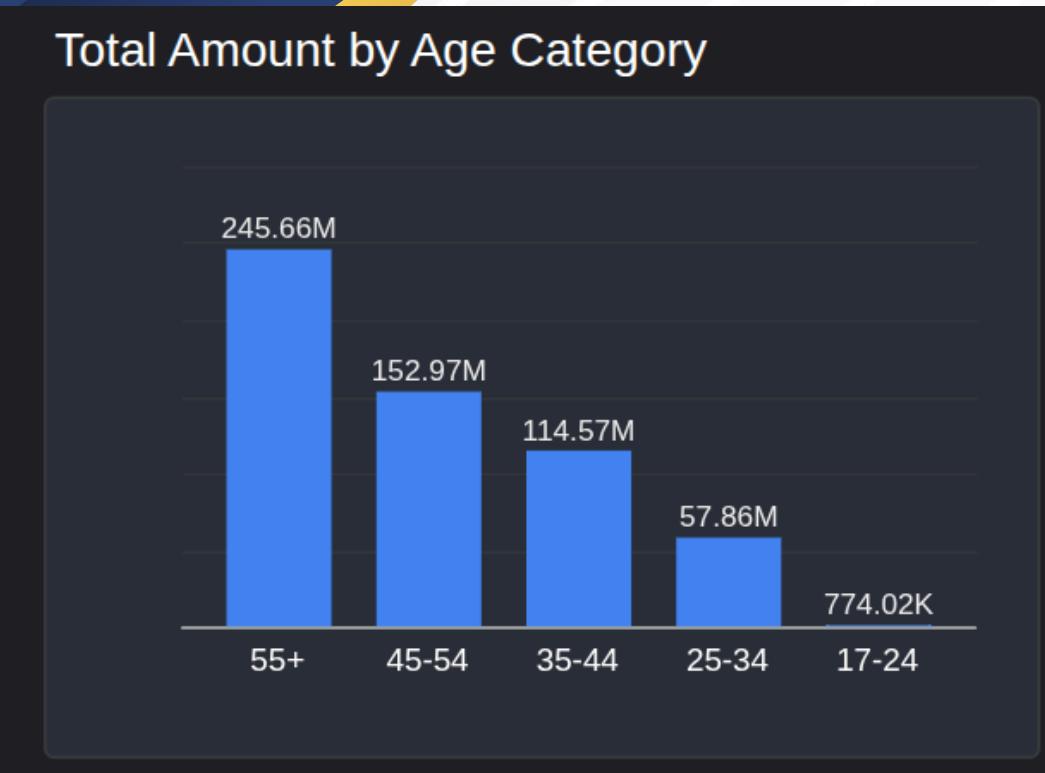
- Users → demographic & financial information.
- Cards → card portfolio (brand, type, credit limit, expiry, security features).
- Transactions → transaction-level data (amount, channel, merchant, MCC).

# ANALYSIS



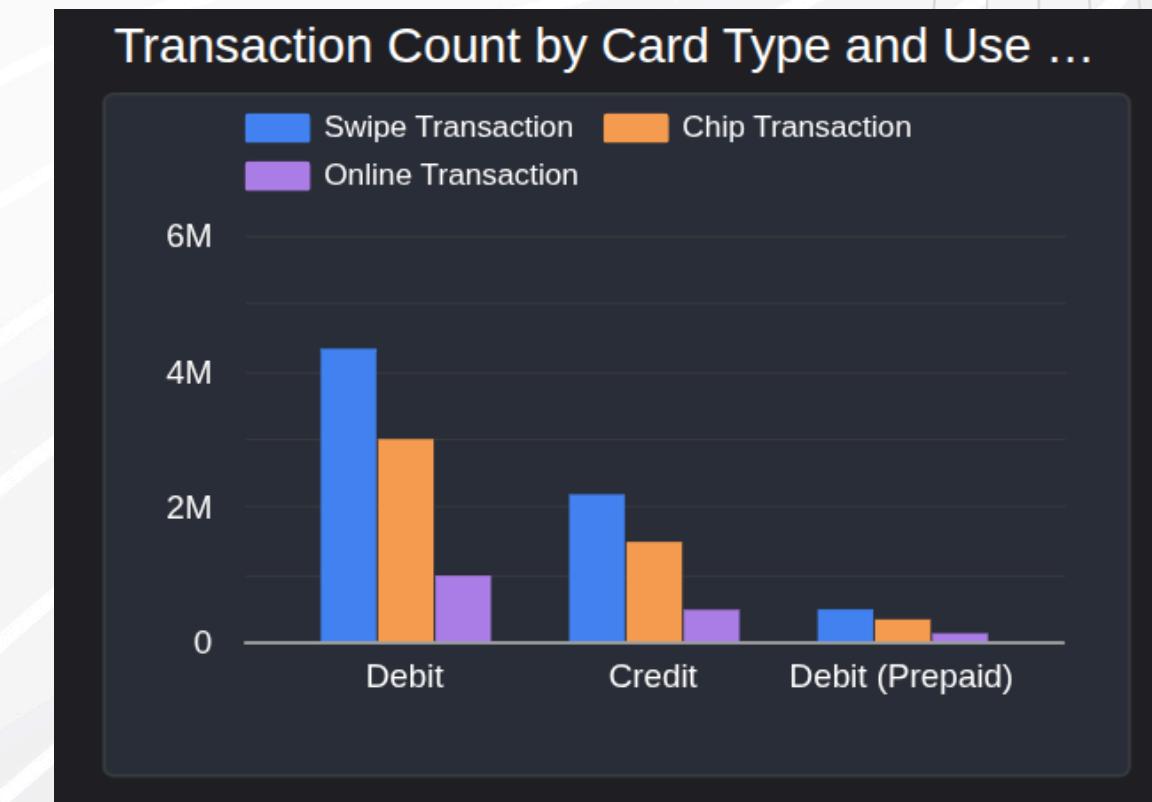
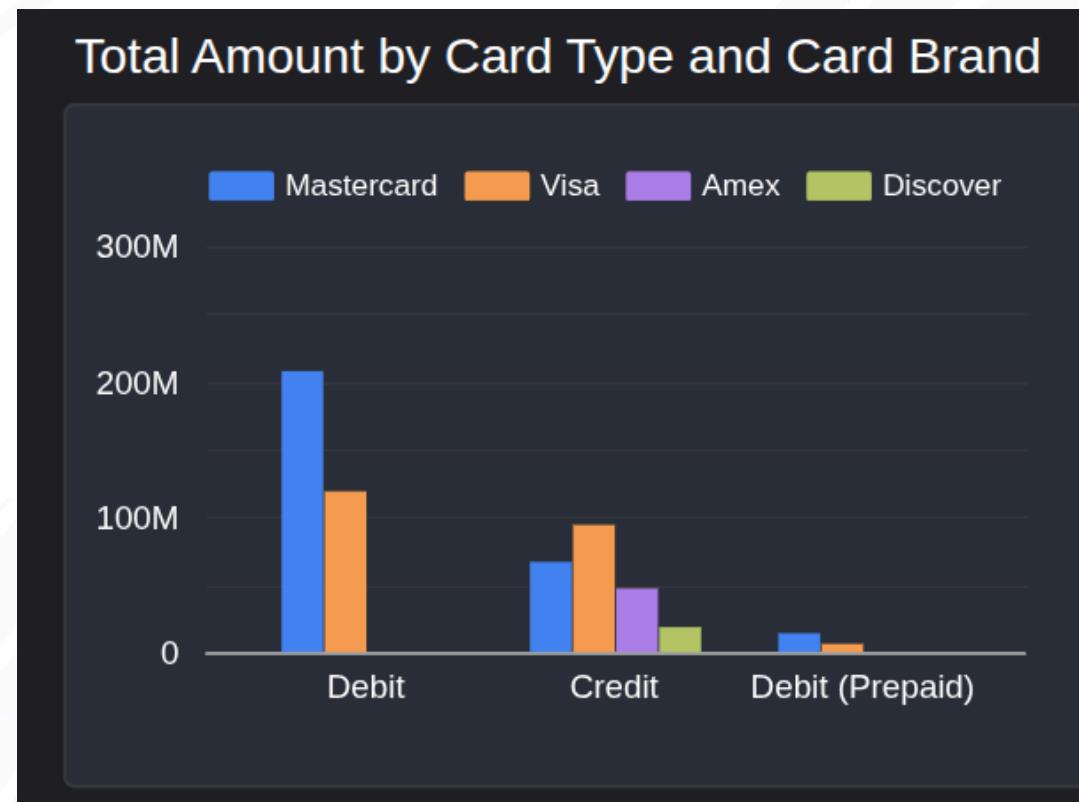
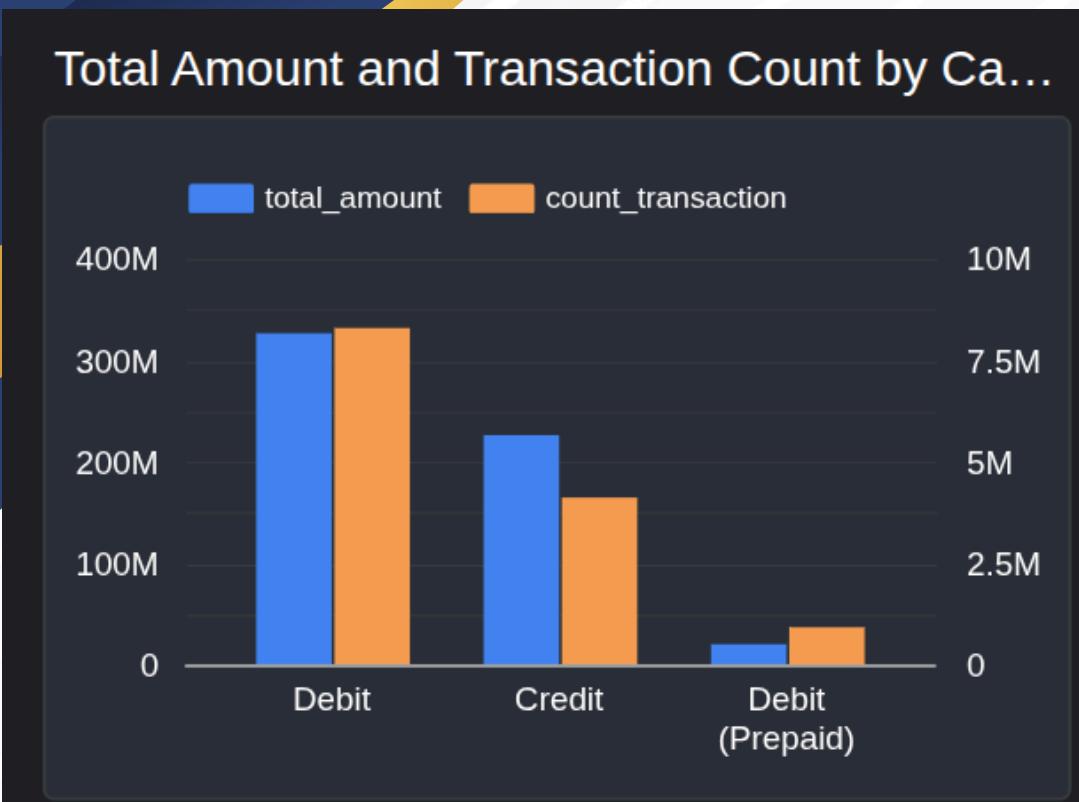
Transactions are slightly dominated by female users, with debit cards as the most frequently used type, and total spending is highest through physical channels (Swipe/Chip), while online transactions remain smaller but show potential growth.

# ANALYSIS



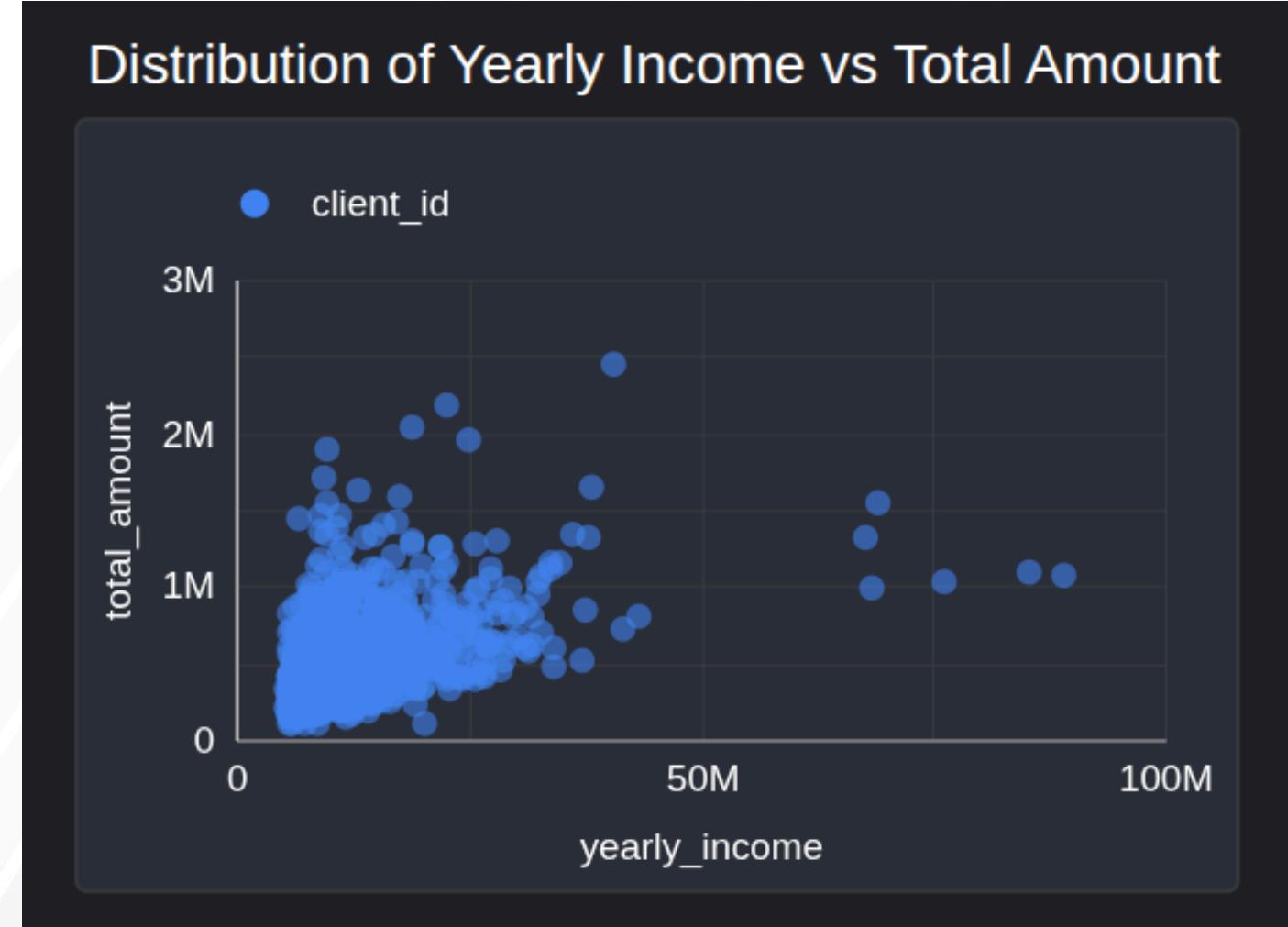
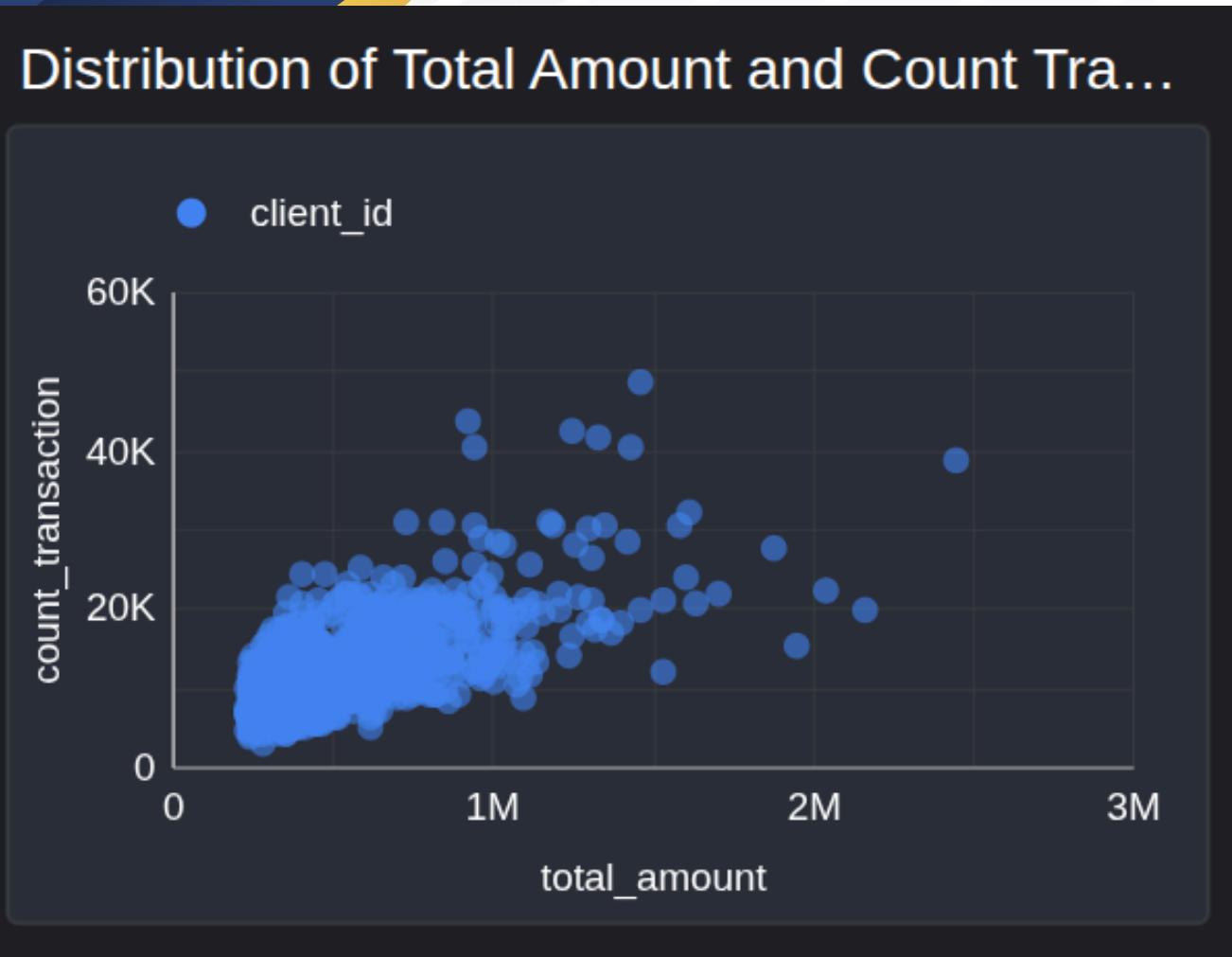
Spending and transactions are dominated by older users (55+), who rely heavily on physical channels, while younger users contribute less today but are more digital-oriented, signaling future growth potential in online transactions.

# ANALYSIS



Debit cards dominate both in transaction volume and total spending (driven by Mastercard), while credit cards contribute significant spending (mainly via Visa). Across all card types, transactions are still heavily concentrated in physical channels (Swipe/Chip), with online usage remaining small but growing.

# ANALYSIS



Income levels do not strongly predict spending behavior, while spending and transaction counts reveal distinct user segments—from high-frequency micro spenders to low-frequency big spenders—highlighting opportunities for targeted strategies.

# ANALYSIS

Top 10 MCC by Transaction Count

	mcc	count_transaction ▾
1.	5411	1.593M
2.	5499	1.461M
3.	5541	1.425M
4.	5812	999.738K
5.	5912	772.913K
6.	4784	674.135K
7.	5300	601.942K
8.	4829	589.140K
9.	4121	500.662K
10.	5814	499.659K

Top 10 MCC by Total Amount

	mcc	total_amount ▾
1.	4829	53.159M
2.	5411	40.971M
3.	5300	37.698M
4.	5912	35.114M
5.	5541	29.570M
6.	4900	27.650M
7.	5311	27.032M
8.	5812	26.348M
9.	7538	24.956M
10.	4814	24.726M

Groceries, fuel, and restaurants drive the highest transaction volumes, while money transfers, wholesale, and utilities dominate in transaction value—highlighting different drivers of frequency vs spending power.

# CONCLUSION

- Debit cards are most frequently used for daily necessities, while credit cards are utilized for high-value transactions.
- Users aged 55+ dominate both in transaction volume and value, while younger users (17-24) are driving the growth of online transactions.
- Groceries and fuel lead in transaction count, whereas money transfers and wholesale dominate in total transaction value.
- Income does not always determine spending, but transaction patterns reveal clear segments—opening opportunities for personalized strategies.

# BUSINESS RECOMMENDATIONS

- Card Products: promote debit for daily needs; enhance credit card loyalty programs; drive online transactions (e-commerce & digital payments).
- Segmentation: micro spenders → small promos; big spenders → premium benefits; inactive users → targeted reactivation.
- Channels: maintain swipe/chip, encourage migration to online & contactless.
- Merchant Partnerships: focus on groceries, fuel, restaurants, pharmacies (high frequency) & money transfers, wholesale (high value).

# THANK YOU