

# E-Commerce Sales Analytics - Executive Overview

Clear all slicers

\$1.31bn

Total Revenue

\$1.26bn

Net Revenue

3M

Units Sold

\$4,209.86 ↑

AOV KPI

Year

Select all

2022

2023

2024

Quarter, Month

All

Category

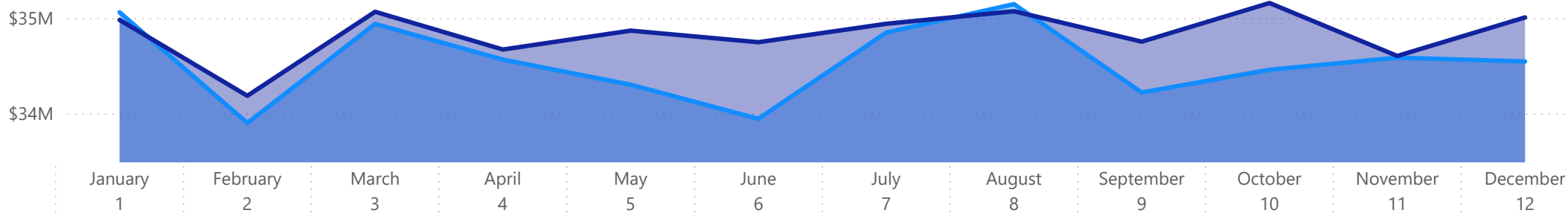
All

Region

All

Net Revenue over Time (Month Hierarchy)

Rolling 30D Revenue Net Revenue LY

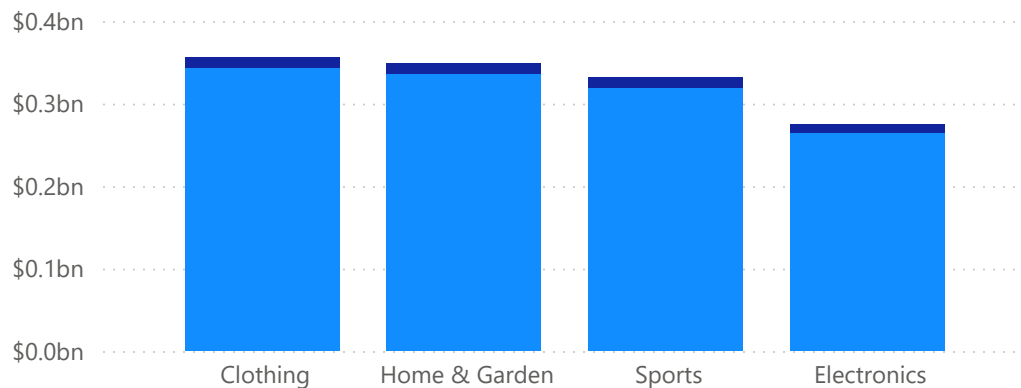


Revenue by region



Category contribution

Net Revenue Discount Amount



# E-Commerce Sales Analytics - Product & Category Performance

Clear all slicers

Hill-Hamilton Eco Phone

Top Product Name

100%

Top Product Contribution %

4.49K

Top Product - SKU Concentration

\$6.57M

Top Product - Revenue

TopN

50

Brand

All

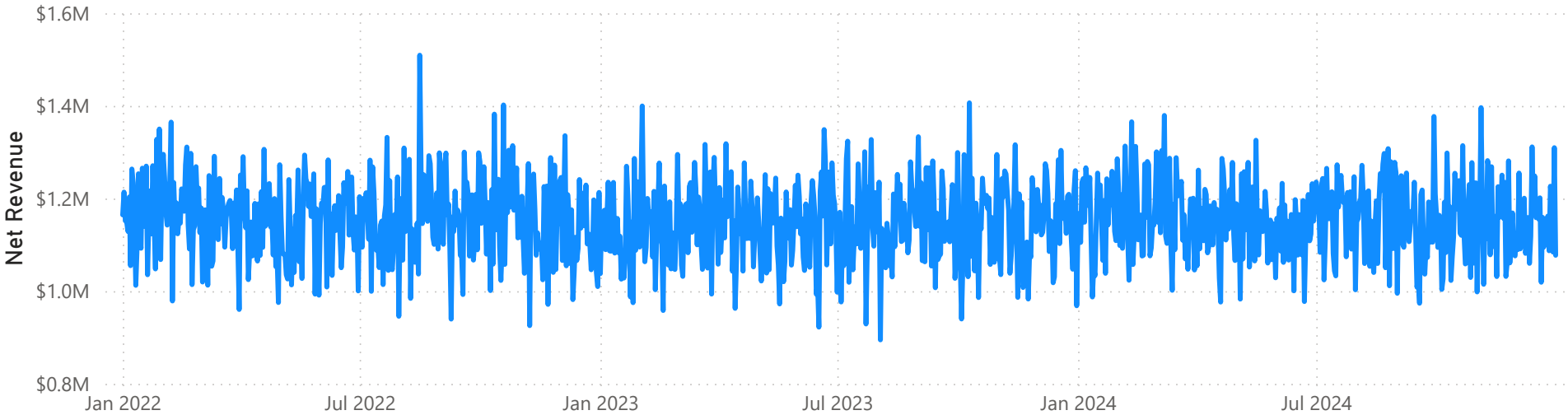
PromotionName

All

ProductName

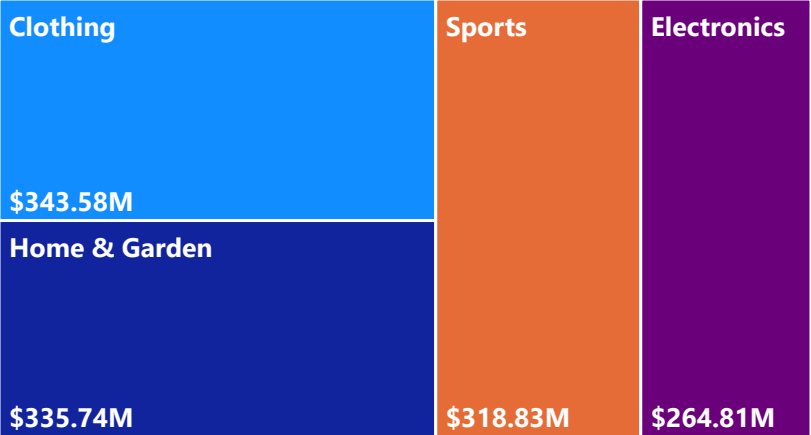
All

Product trend line



ProductName	Net Revenue	Units Sold	Discount Amount	Gross Margin	Product Rating
Hill-Hamilton Eco Phone	\$6,289,903.74	13498	\$262,343.75		4.49K
Phillips Smart Backpack	\$4,671,465.42	5365	\$187,069.53		4.49K
Lewis-Hernandez Classic With	\$4,602,806.37	5384	\$171,910.40		4.49K
Case-Wheeler Tv Ago	\$4,529,037.51	5097	\$171,227.67		4.49K
Initech Fund And	\$4,502,360.93	5343	\$185,746.62		4.49K
Stark Classic Shoes	\$4,490,019.94	8475	\$174,330.76		4.49K
Case-Wheeler Development Ago	\$4,419,674.90	8178	\$178,423.01		4.49K

Net Revenue by Category and SubCategory



# E-Commerce Sales Analytics - Customer and Geography Analysis

31K

Customer Count

281

New Customers

30K

Returning Customers



Clear all slicers

99.1% ↑

Repeat Purchase Rate KPI

Segment

All

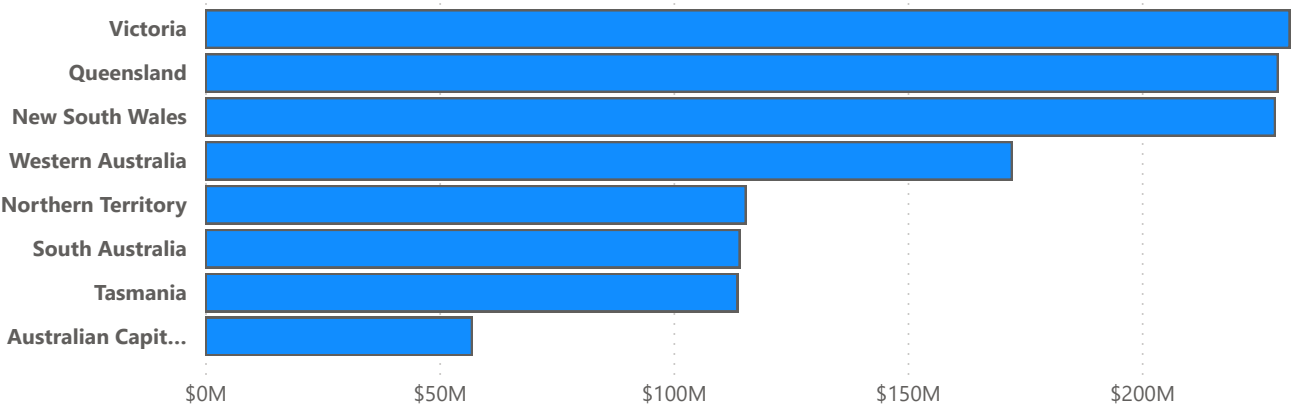
Region

All

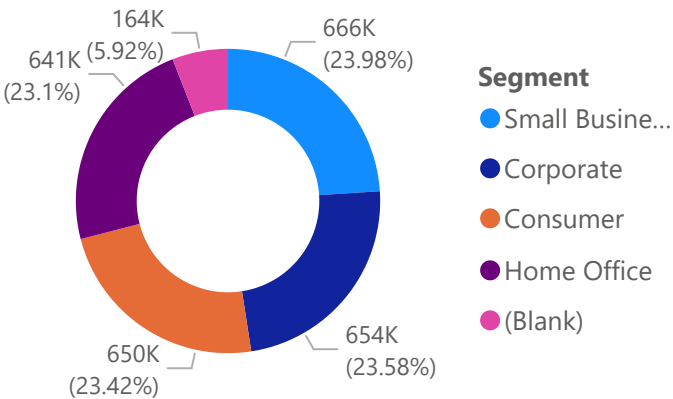
State

All

Net Revenue by State



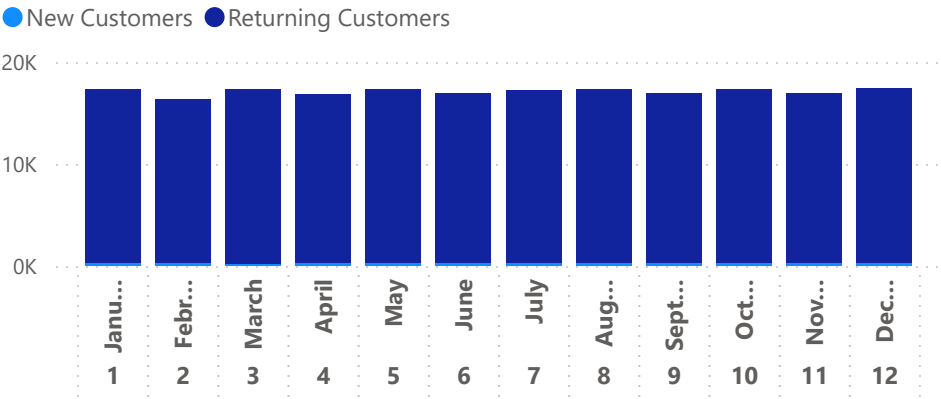
Units Sold by Segment



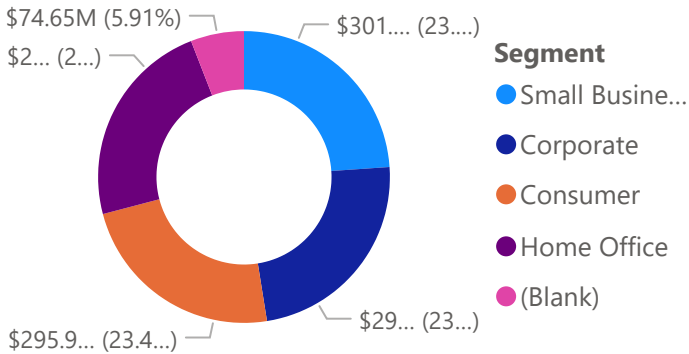
Net Revenue and RPR by City



New vs. returning trend



Net Revenue by Segment



# E-Commerce Sales Analytics - Discount & Promotion Impact

Clear all slicers

PromotionType

All

Date

1/01/2022

31/12/2024

\$48.37M

Discount Amount

3.68%

Discount %

\$161.22

Average Discount per Order

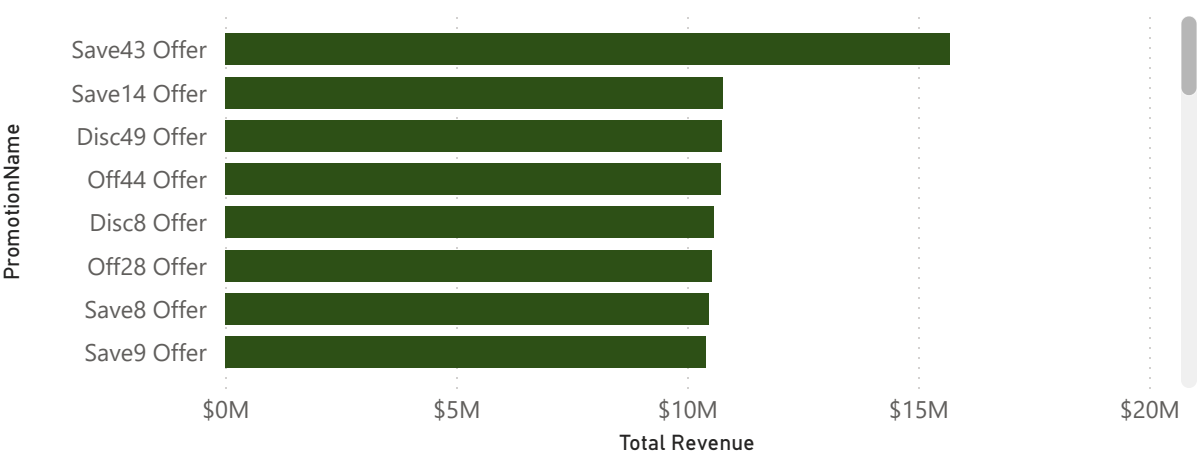
\$552.55M

Gross Margin

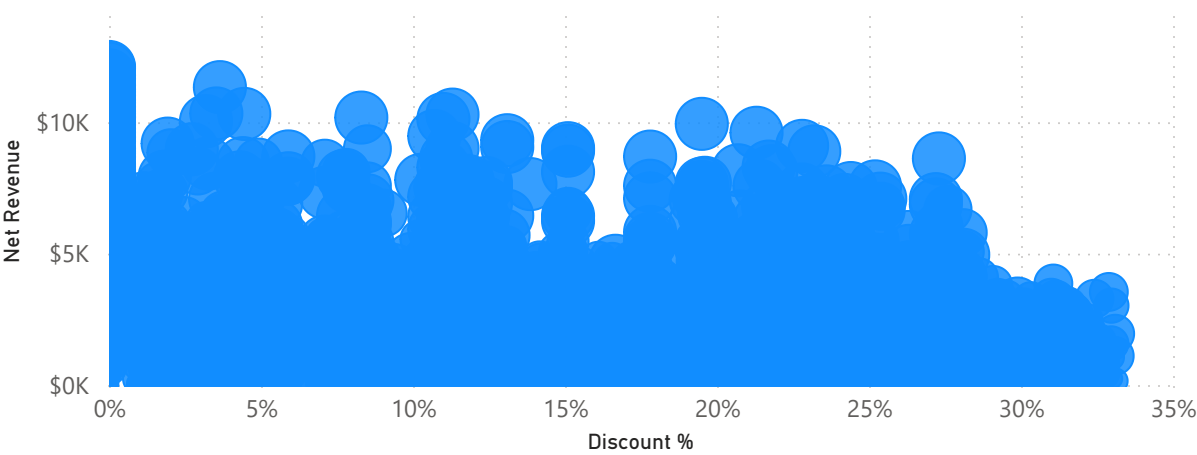
Promotions Table

PromotionName	Discount %	Net Revenue	Units Sold	Gross Margin
+ Disc41 Offer	27.76%	\$3,637,429.51	10877	\$906,821.42
+ Off27 Offer	27.35%	\$3,752,591.07	10829	\$946,745.54
+ Deal47 Offer	25.33%	\$3,858,345.59	10853	\$1,061,437.88
+ Promo11 Offer	23.95%	\$3,881,846.35	10776	\$1,094,277.51
+ Promo10 Offer	22.92%	\$3,908,254.58	10694	\$1,170,282.41
+ Off13 Offer	23.76%	\$3,935,256.99	11049	\$1,136,654.04
+ Save16 Offer	23.85%	\$3,948,316.96	11039	\$1,134,594.84
+ Deal7 Offer	23.02%	\$4,048,897.75	11056	\$1,191,903.02
+ Promo32 Offer	23.34%	\$4,049,636.07	11176	\$1,192,642.66
+ Deal28 Offer	22.95%	\$4,069,515.14	11012	\$1,215,357.19
+ Deal49 Offer	21.86%	\$4,124,250.65	11076	\$1,263,773.31
+ Disc11 Offer	17.97%	\$4,213,704.08	11074	\$1,418,614.15
+ Save27 Offer	19.68%	\$4,251,264.12	11328	\$1,377,179.02
+ Save50 Offer	15.26%	\$4,368,394.92	10940	\$1,569,614.23
+ Deal29 Offer	19.75%	\$4,436,492.59	11340	\$1,464,334.43
+ Save15 Offer	13.25%	\$4,471,085.02	10862	\$1,695,615.59
+ Save23 Offer	11.94%	\$4,526,111.35	10860	\$1,739,137.58
+ Disc21 Offer	11.46%	\$4,589,430.63	11041	\$1,782,054.00
+ Deal25 Offer	12.57%	\$4,681,484.24	11326	\$1,775,131.83
+ Promo34 Offer	11.17%	\$4,788,813.23	11402	\$1,871,587.13
+ Deal24 Offer	8.66%	\$4,793,499.88	11029	\$1,942,379.03
+ Disc6 Offer	6.06%	\$4,806,087.57	10961	\$2,024,806.18
+ Deal26 Offer	8.41%	\$4,827,554.85	11190	\$1,967,190.02
+ Off26 Offer	8.65%	\$4,921,898.09	11238	\$1,983,368.59

Net Revenue vs Discounts by Promotion



Revenue, Discounts & Units by Order Line



# E-Commerce Sales Analytics - Data Quality & Validation

Clear all slicers

925332 Total Sales	1096 Total Days Recorded	23 Total Categories	30600 Total Customers	50 Total Promotions	300000 Total Orders
22 Total Geographies	1030 Total Products	2024-12-31 Last Refreshed	Missing values		

Customers	Days	Geographies	Orders	Products	Promotions	Catogories
30596	1096	22	300000	1030	51	23

## ETL & Data Quality Summary

Data was ingested into staging tables (stg\_) and transformed into clean reporting tables (clean\_) using Power Query. Key cleaning steps included removing duplicates, trimming text, applying Proper Case to names and categories, standardizing data types (currency, percentage, date), and handling nulls. Enrichments included deriving product brands, standardizing promotion types, and filling missing customer emails with "No Email." Staging and raw tables were disabled post-validation to optimize the model. Calculated fields and measures were created in DAX to support margin analysis, customer growth, category revenue, AOV, and trend indicators. A margin proxy was computed where product cost data existed, with remaining calculations handled in DAX.

### Data Quality Limitations:

- ~80% of PromotionKeys in sales data are null, limiting promotion-level analysis
- Incomplete product cost data affects margin accuracy
- ~4% of Segment values in DimCustomer are null
- Some customer email data is synthetic
- Minor join mismatches exist: 30,600 CustomerKeys in clean\_DimCustomer vs 30,596 in clean\_FactOrders (4 customers had no orders), and 50 PromotionKeys in clean\_DimPromotions vs 51 mapped in clean\_FactSales (historical or inactive promotions in sales data)

Email Count Product Count Promotion Count Segment Count

