



ADIDAS SALES ANALYSIS

PRESENTED BY KARYNA AVETISOVA

MEET OUR TEAM



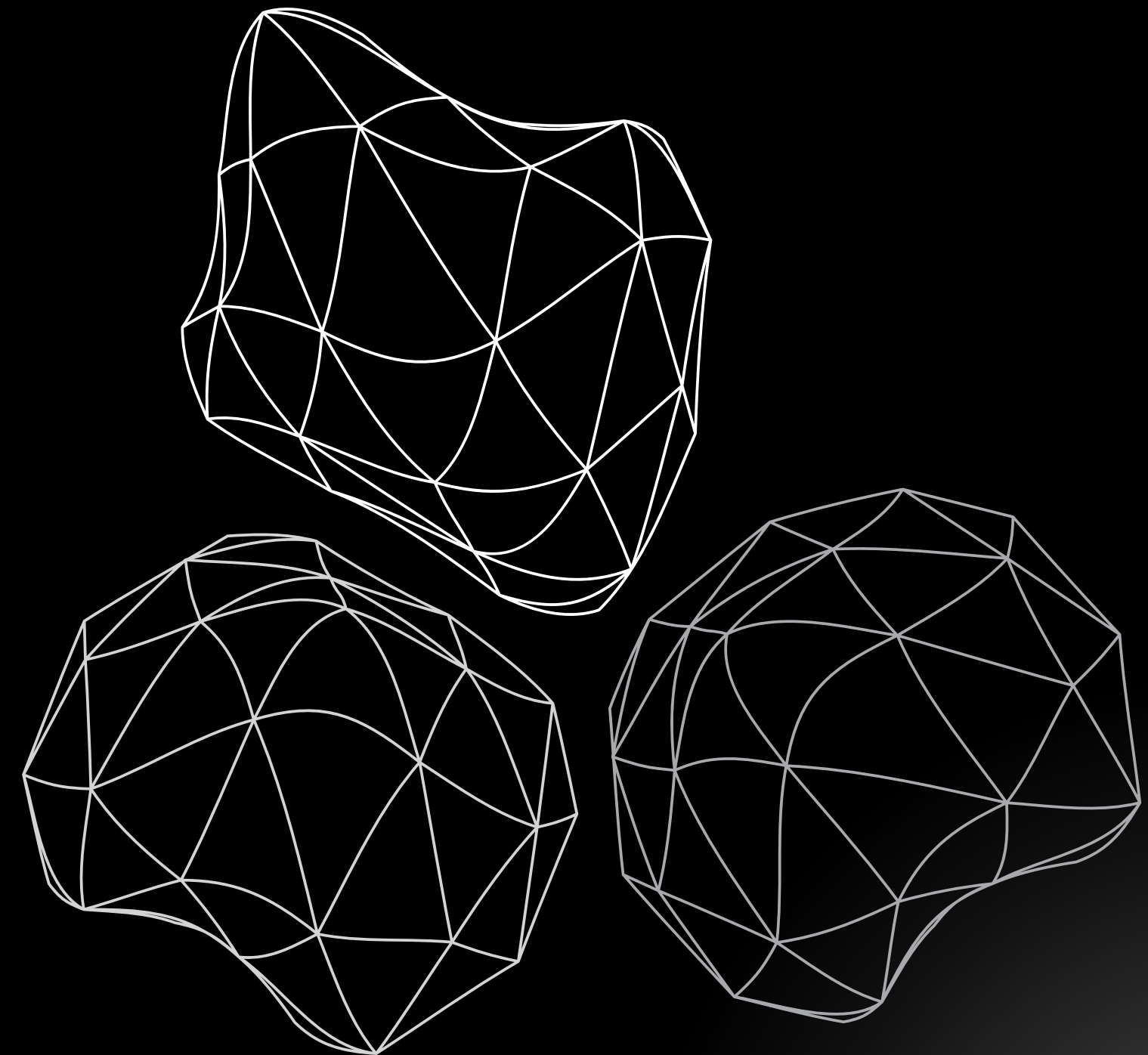
Karyna Avetisova
Data Analyst

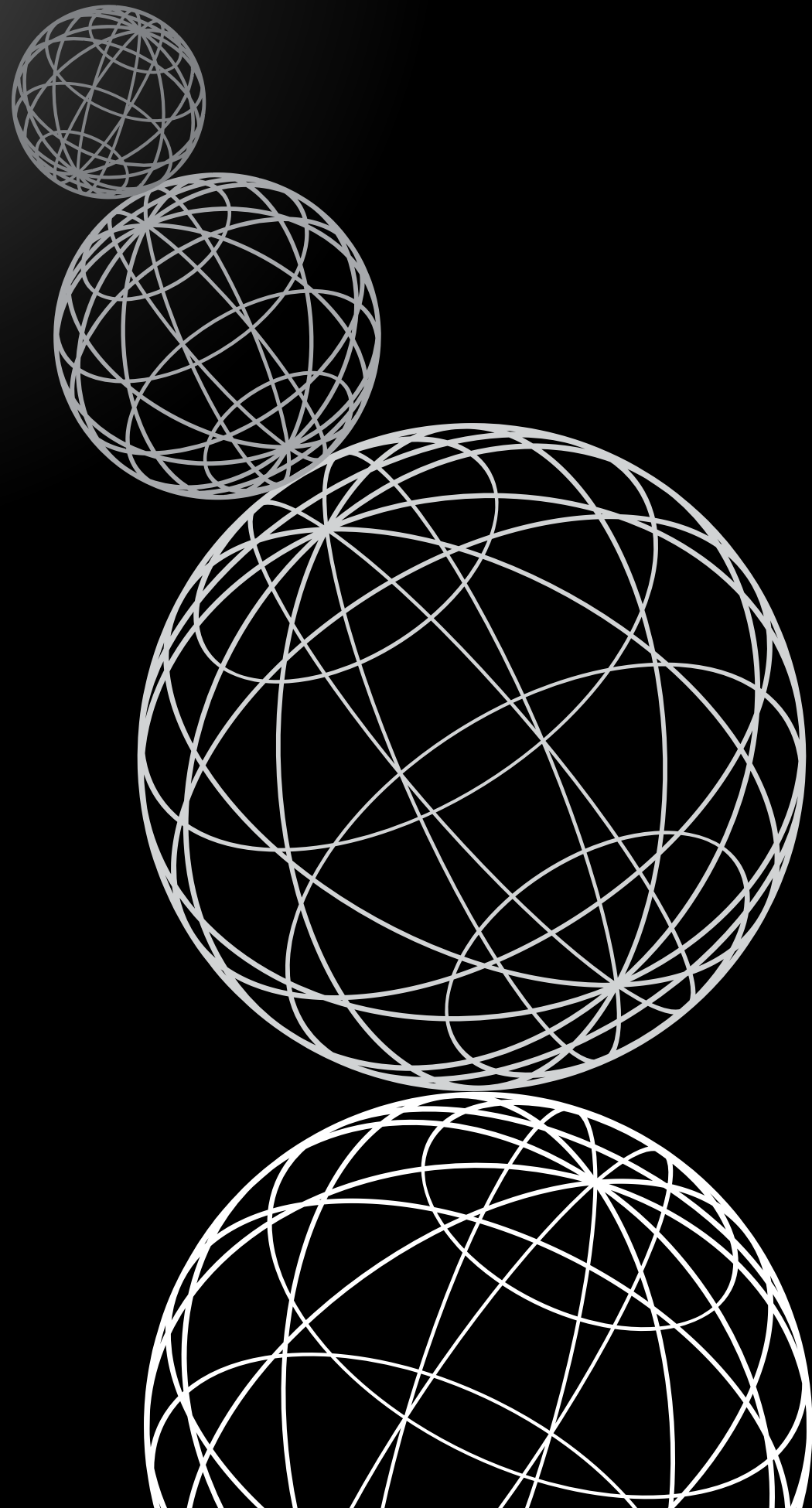
ABOUT COMPANY

Adidas is one of the world's leading manufacturers of sportswear, footwear, and accessories.

The company operates in more than 160 countries, offering innovative products and promoting an active lifestyle for millions of people around the globe.

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ABOUT PROJECT

The goal of this project is to analyze Adidas sales performance across retailers, products, and regions in the U.S. market.

The task is to identify key factors influencing revenue and profitability, detect underperforming segments, and propose data-driven strategies to optimize product mix, pricing, and retailer partnerships.

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DATA OVERVIEW

The dataset contains detailed sales information for Adidas products across U.S. retailers.

It includes key fields such as retailer name, region, state, product category, units sold, total sales, operating profit, and sales method.

The data covers transactions over multiple months and serves as the foundation for evaluating performance trends and profitability drivers.

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TOOLS & METHODOLOGY

Google Sheets

- Initial data review and formatting.
- Basic error checks.

Python

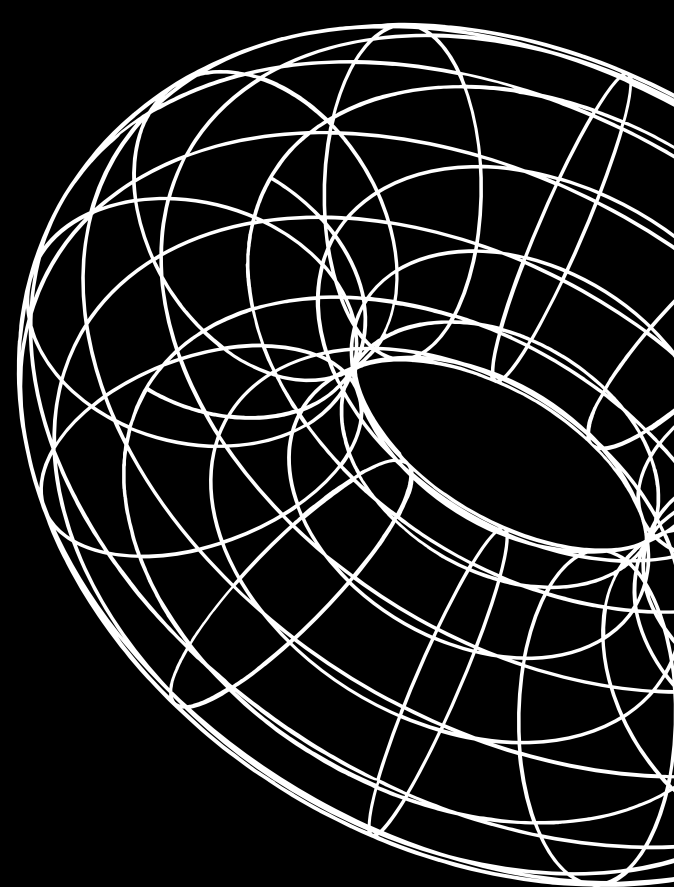
- Detailed data cleaning, validation, and anomaly detection.

PowerBI

- Data visualization
- DAX operations
- Dashboard creation



MISSION

1. Which retailers generate the highest total sales and profit?
 2. Which retailers have the lowest operating margins despite high sales?
 3. Which products and product categories drive the most sales volume?
 4. Which products have the best operating margin performance?
 5. What are the overall sales trends over time?
 6. How does the sales method (In-store, Online, Outlet) affect total revenue and profitability?
 7. What is the relationship between price per unit and units sold?
 8. What is the average price per unit, and how does it vary across retailers and products?
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EXECUTIVE SUMMARY

\$900M

Total Sales

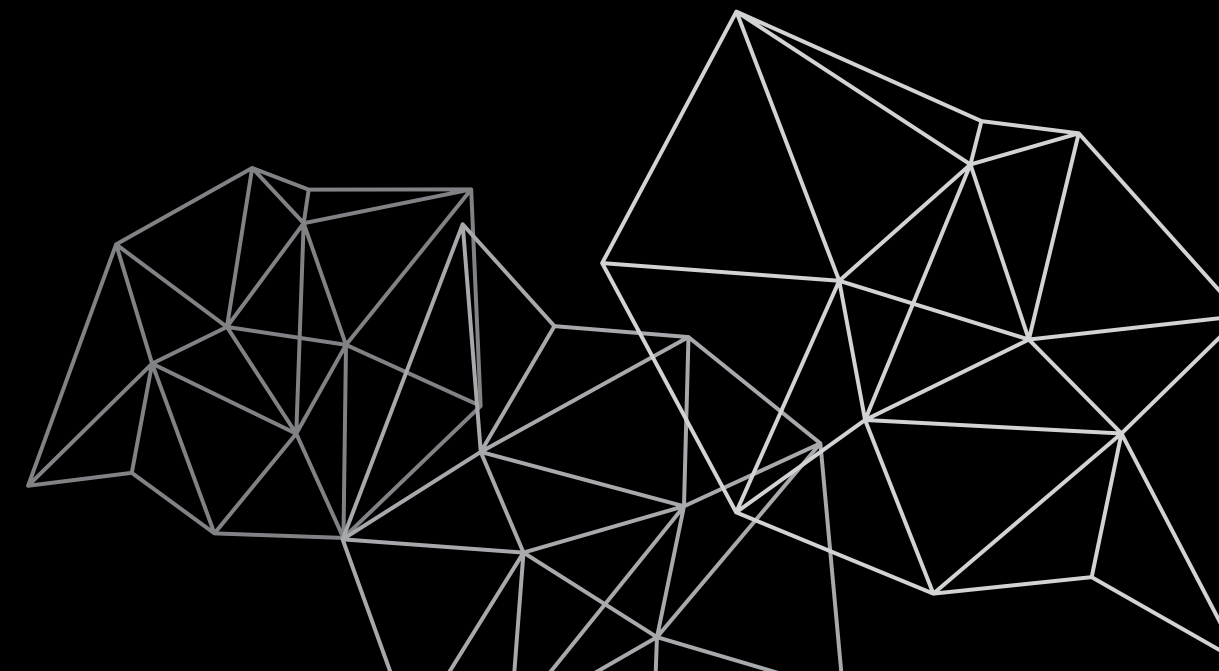
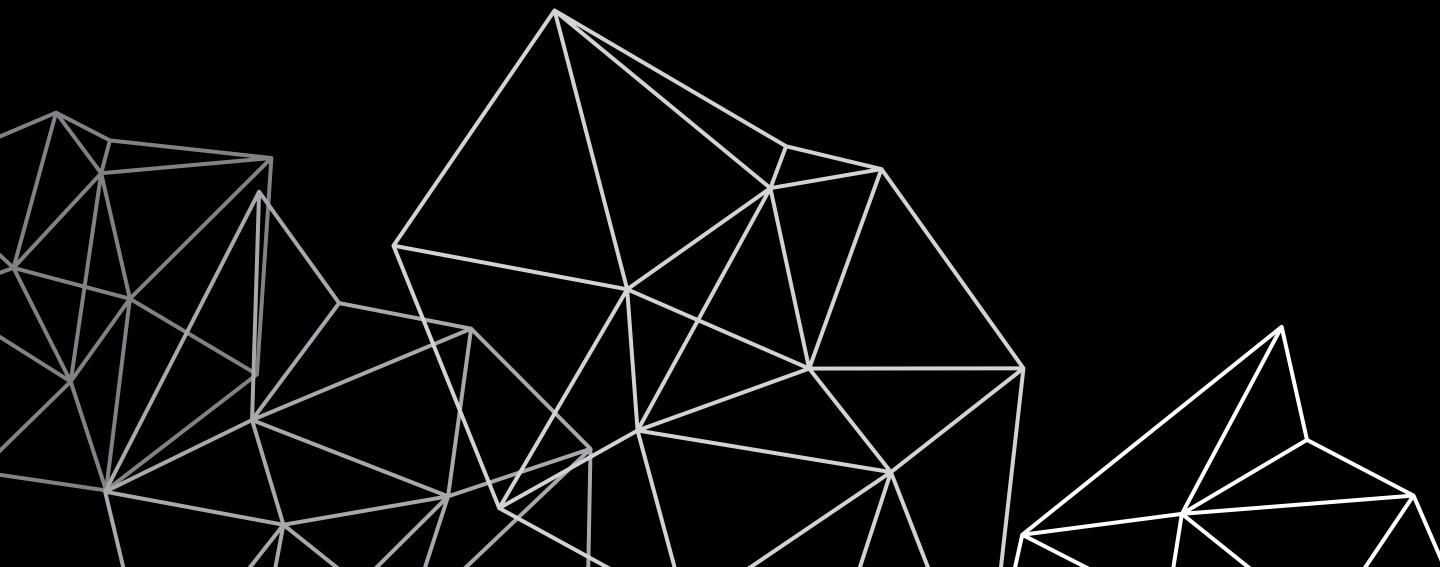
\$332M

Operating Profit

37%

Operating Margin

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EXECUTIVE SUMMARY

In total, our sales reached around \$900M with an operating profit of about \$332M, giving a margin close to 37%.

Most sales come from in-store purchases, but online brings the best margins (~38.8%) and higher prices per unit.

*Among retailers, **West Gear is the leader in revenue**, while **Sports Direct shows the best profitability** (~40–41%). Walmart is underperforming (~33%).*

***Men's Street Footwear brings in the most money and profit**, and premium products help keep prices higher.*

Main focus: increase online and premium sales, fix Walmart's margin, and keep West Gear's strong results.

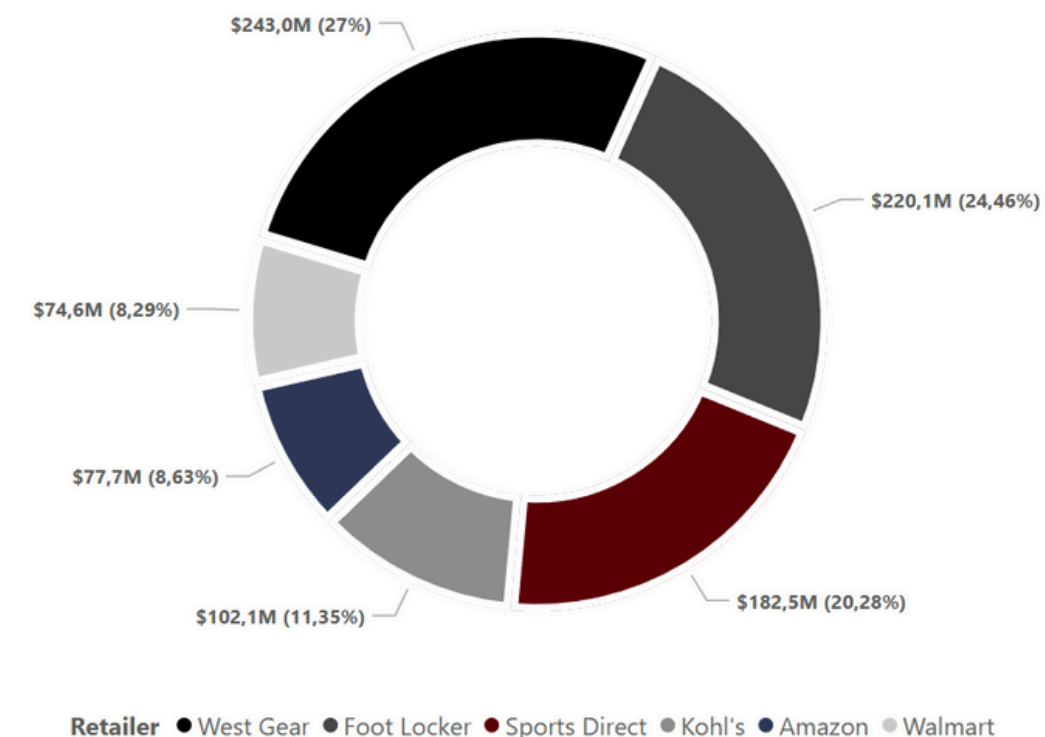
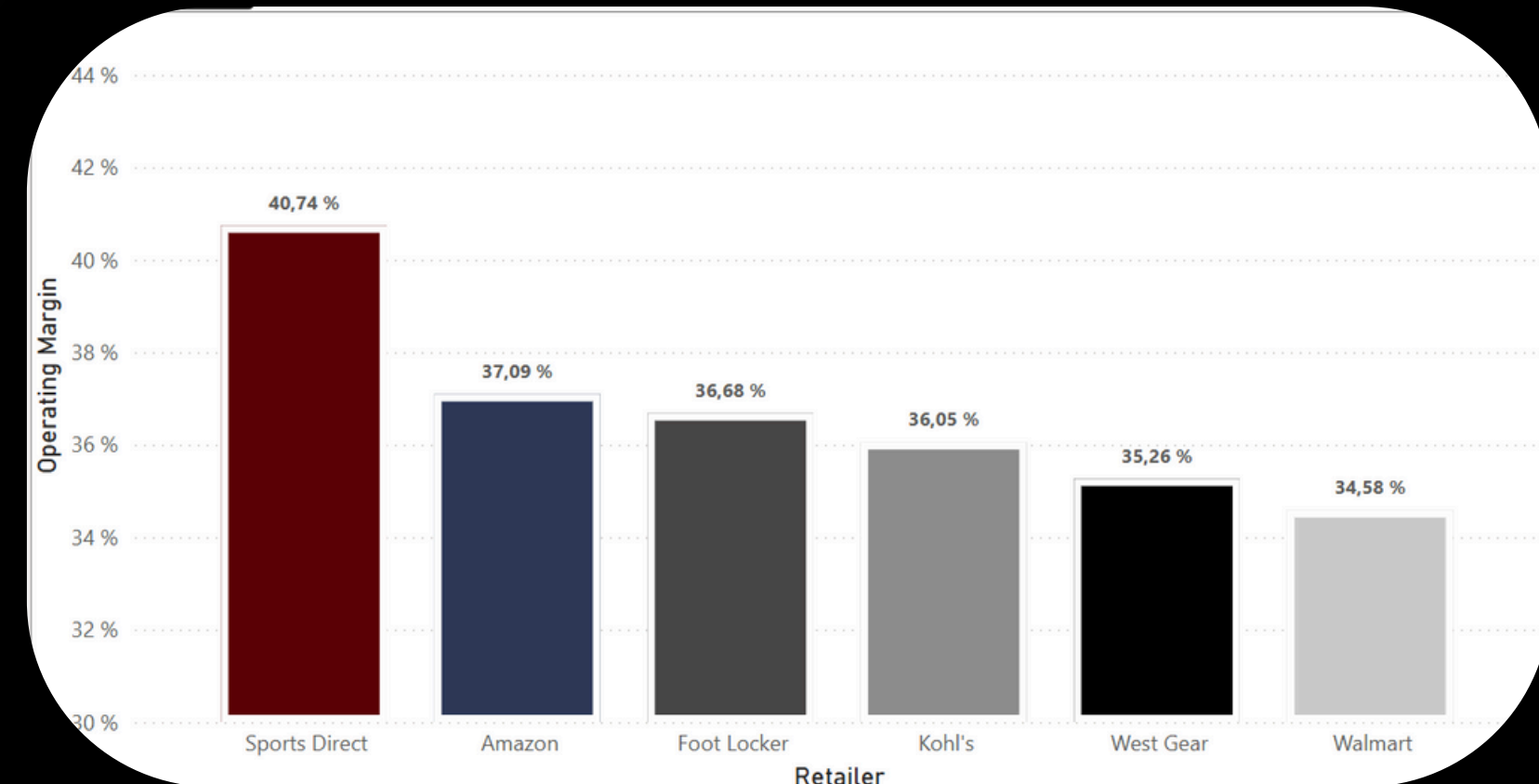
RETAILERS

What we see:

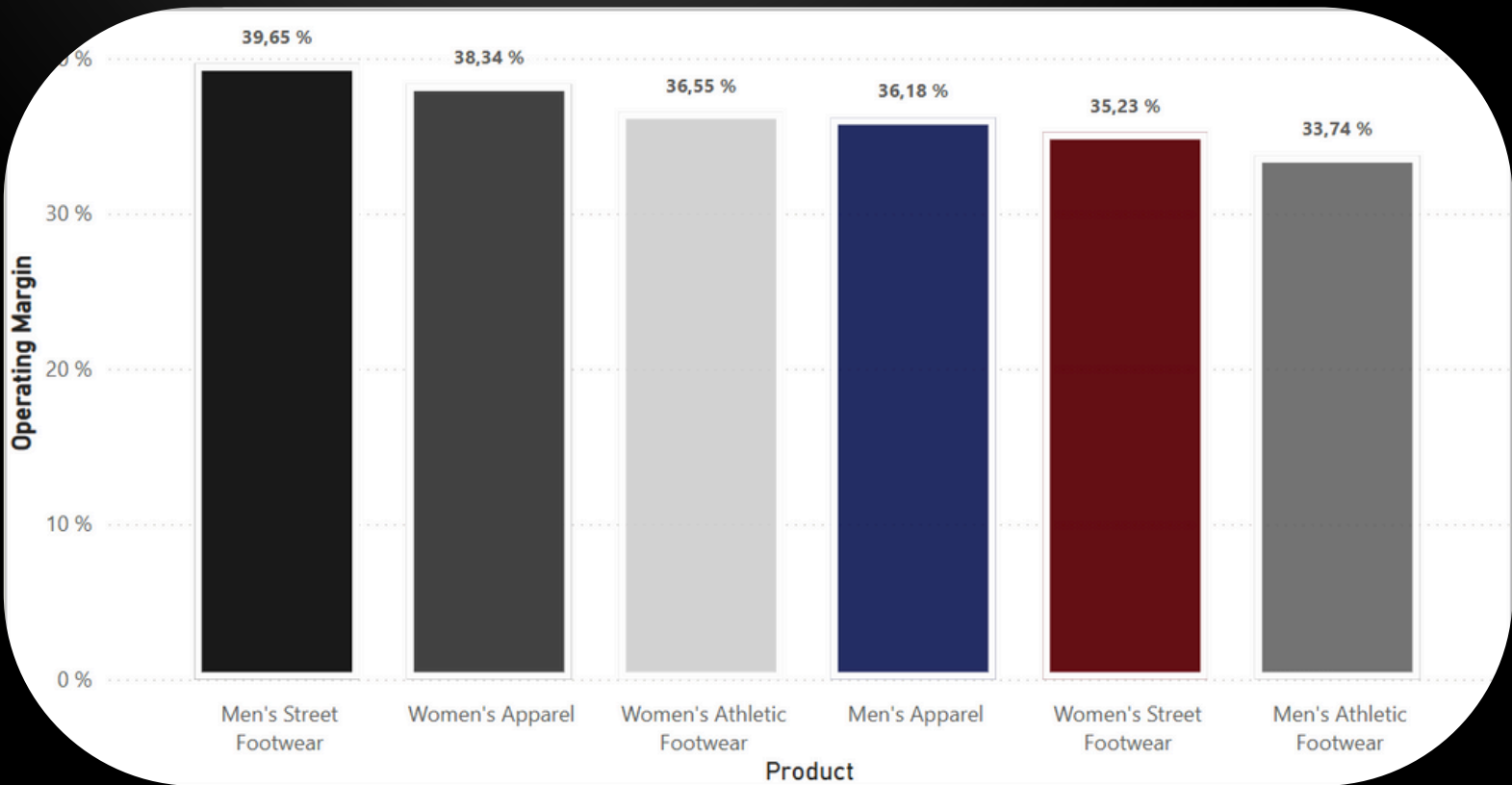
West Gear leads by total sales. Sports Direct has the highest margin (~40–41%), while Walmart shows the lowest (~34–35%). Amazon and Foot Locker are in the middle (~36–37%).

Recommendations:

1. Walmart: target margin ~36.5%. Fewer deep discounts, remove low-price SKUs, add upsells or premium bundles.
2. Sports Direct: scale top-selling SKUs, focus on limited editions and collaborations.
3. West Gear: maintain sales volume, test a small price increase (+1–2%) in premium subcategories.



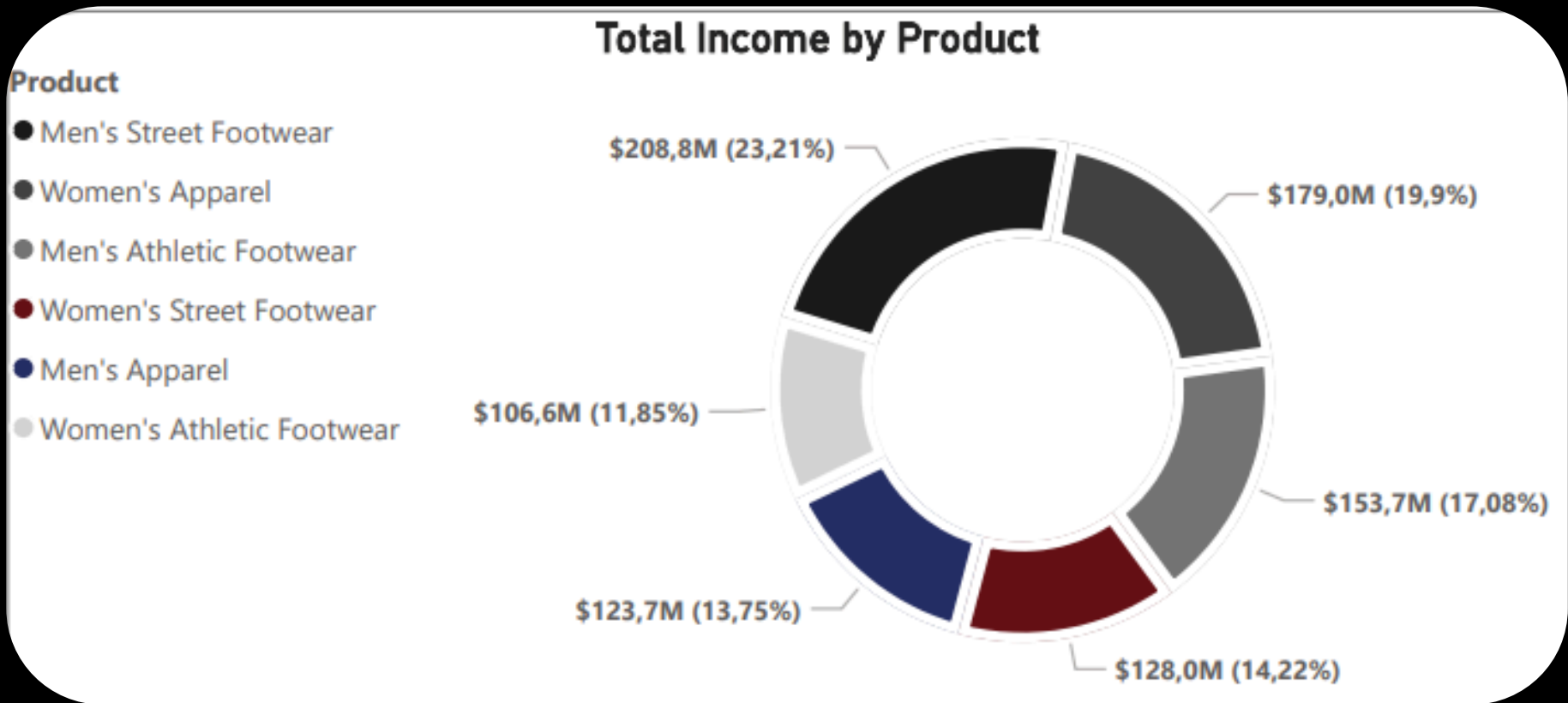
PRODUCTS



What we see:

Men's Street Footwear is the top product in both sales and profit.

Premium products with higher prices (\$50–55) also bring better margins.



The plan is to focus on the top 20% of SKUs that make up 80% of sales, and reduce low-profit bundles.

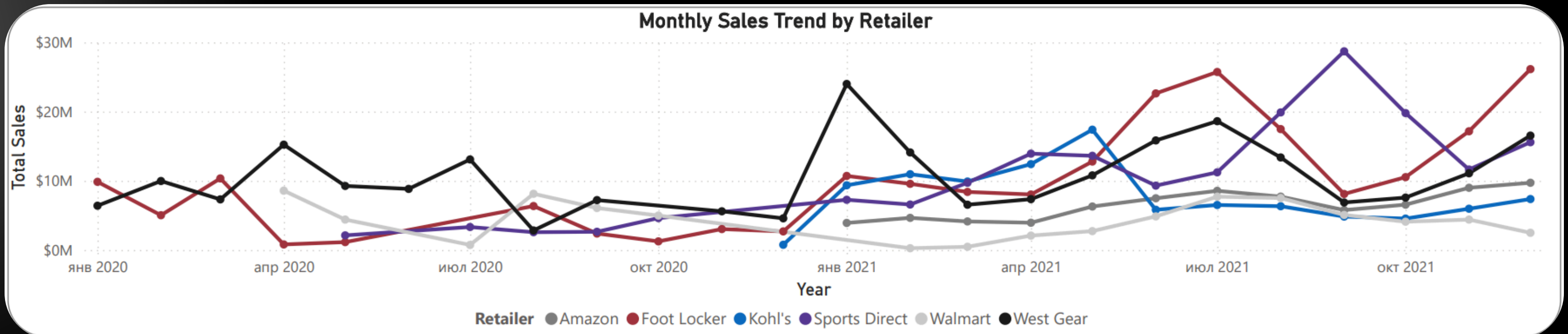
DEMAND DYNAMICS

What we see: after late-2020 softness, 2021 trends upward with a summer peak; AUR ~ \$45–50, PPU ~ \$18–20 (portfolio-level).

Risk: deep discounts in peak months compress margin.

Recommendations:

1. Plan inventory and promo load for seasonal peaks.
2. Cap blanket discounts in peak; target PPU \geq \$18.5.
3. Weekly elasticity watchlist: AUR \rightarrow Units for top SKUs.



SALES METHOD

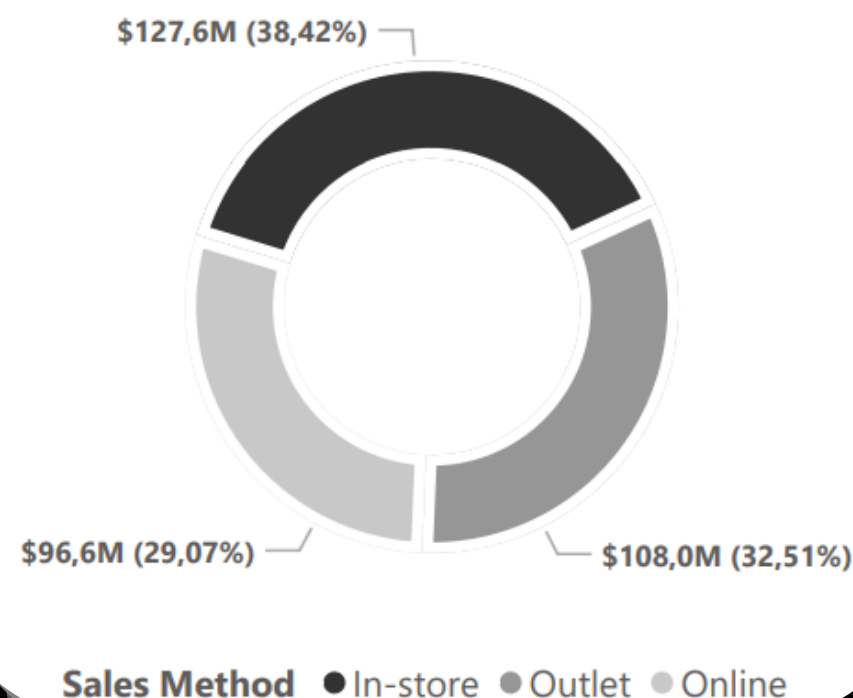
What we see:

In-store makes up about 40% of total revenue, online around 33%, and outlets about 27%.

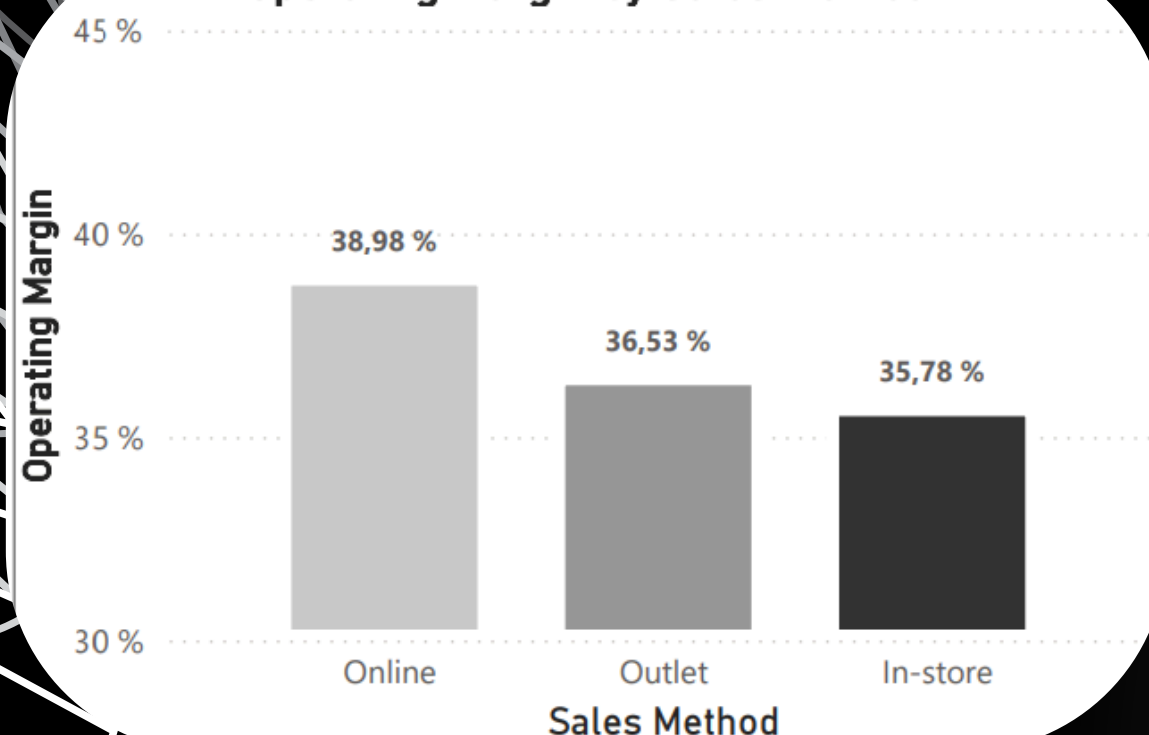
Online is the most profitable (margin ~39%), followed by outlets (~36%) and in-store (~36%).

In the short term, we should grow online sales (+2–3%) through exclusive offers, while keeping in-store and outlet margins stable.

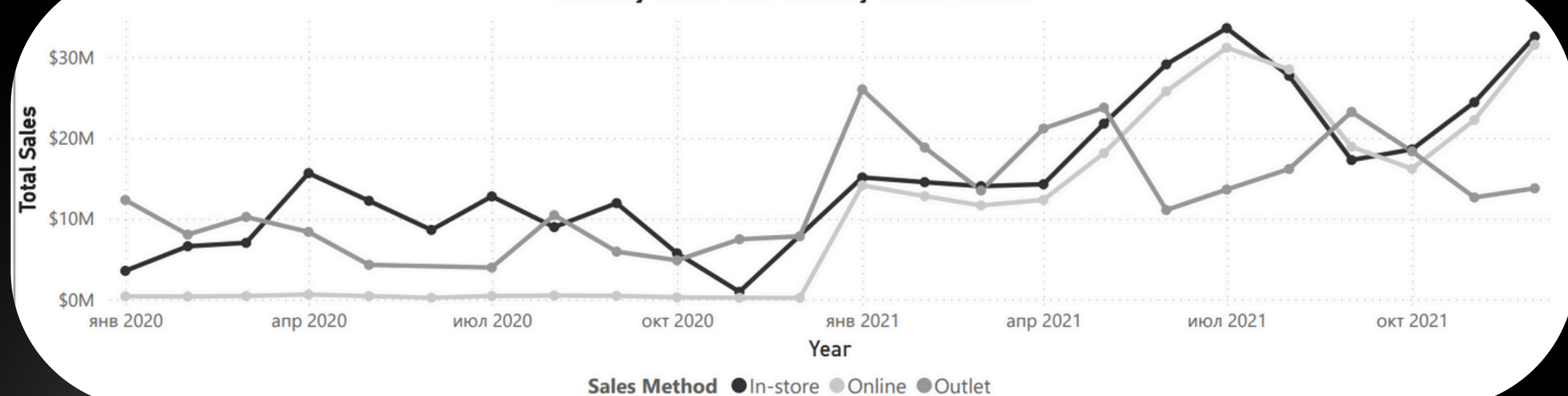
Total Profit by Sales Method



Operating Margin by Sales Method



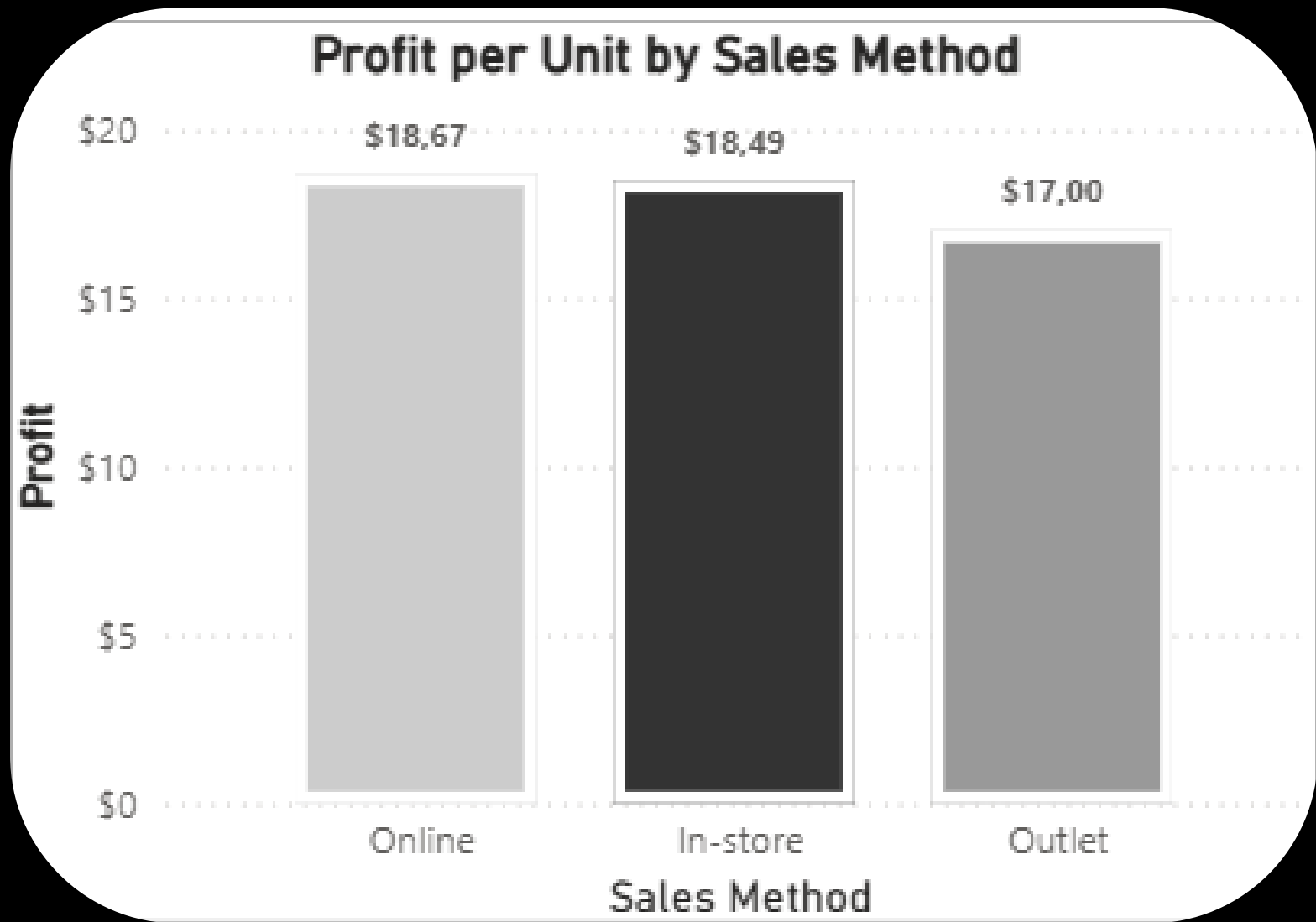
Monthly Sales over Time by Sales Method



The **overall average price per unit (AUR)** is about **\$45–50**, but it differs by retailer and product.

Online channels and premium categories tend to have higher prices — for example, Sports Direct and West Gear keep AUR above \$48, while Walmart sells more budget SKUs with an AUR closer to \$43–44.

Among products, **premium footwear and apparel lines have the highest prices**, while accessories and outlet items are at the lower end.



RELATIONSHIP BETWEEN PRICE PER UNIT AND UNITS SOLD

Overall, there's a **mild negative relationship between price per unit and units sold** — as prices increase, sales volumes usually decline.

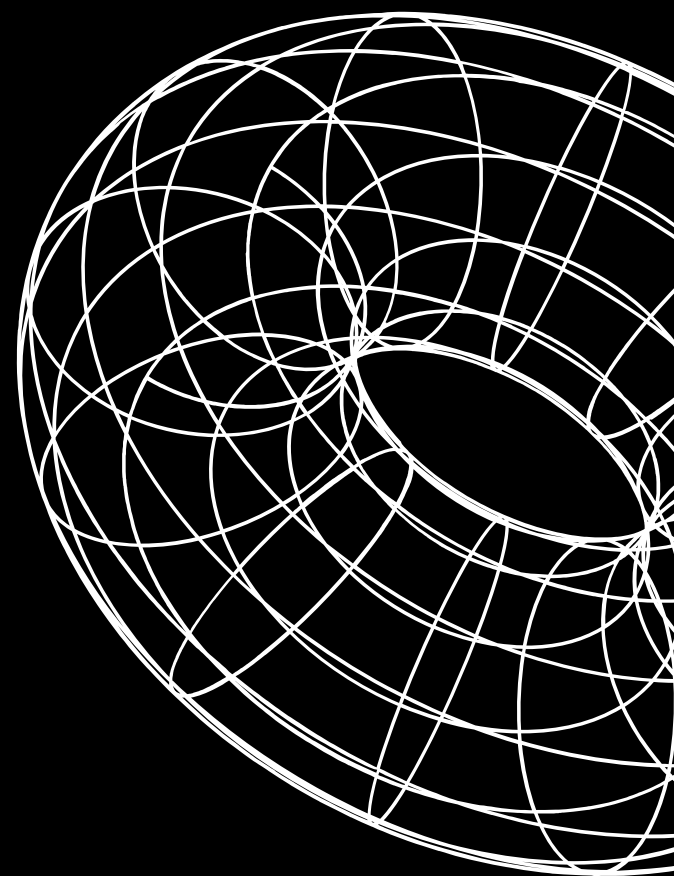
However, this **trend is not linear**: some premium products (like Men's Street Footwear) maintain strong demand even at higher prices, showing lower price sensitivity.

This suggests that **pricing strategy should differ by category** — discounts help mainly for budget lines, while premium ones can sustain higher prices without losing volume.

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KEY TAKEAWAYS:

- **West Gear brings the highest revenue**, while Sports Direct shows the best profitability (~40% margin).
 - Walmart has the lowest margin and could benefit from reducing discounts and focusing on higher-value SKUs.
 - The **Online channel delivers the best operating margin** compared to In-store and Outlet.
 - Premium product categories maintain strong demand even with higher prices, showing low price sensitivity.
 - Overall, focusing on Online growth, premium product mix, and margin optimization can improve total profitability.
- 



CONTACTS

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THANK YOU

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ANNEX

PIVOT TABLES

<i>Retailer</i>	<i>SUM из Total Sales</i>	<i>SUM из Operating Profit</i>	<i>AVERAGE из Price per Unit</i>	<i>SUM из Units Sold</i>
Amazon	\$77 698 912	\$28 818 503	\$48,76	197 990
Foot Locker	\$220 094 720	\$80 722 125	\$44,78	604 369
Kohl's	\$102 114 753	\$36 811 253	\$44,61	287 375
Sports Direct	\$182 470 997	\$74 332 955	\$42,05	557 640
Walmart	\$74 558 410	\$25 782 053	\$47,18	206 225
West Gear	\$242 964 333	\$85 667 873	\$46,74	625 262
Итого	\$899 902 125	\$332 134 761	\$45,22	2 478 861

<i>Product</i>	<i>SUM из Total Sales</i>	<i>SUM из Units Sold</i>	<i>SUM из Operating Profit</i>	<i>AVERAGE из Price per Unit</i>
Men's Apparel	\$123 728 632	306 683	\$44 763 030	\$50,32
Men's Athletic Footwear	\$153 673 680	435 526	\$51 846 888	\$43,78
Men's Street Footwear	\$208 826 244	593 320	\$82 802 261	\$44,24
Women's Apparel	\$179 038 860	433 827	\$68 650 971	\$51,60
Women's Athletic Footwear	\$106 631 896	317 236	\$38 975 785	\$41,11
Women's Street Footwear	\$128 002 813	392 269	\$45 095 827	\$40,25
Итого	\$899 902 125	2 478 861	\$332 134 761	\$45,22

<i>Sales Method</i>	<i>SUM из Total Sales</i>	<i>SUM из Units Sold</i>	<i>SUM из Operating Profit</i>
In-store	\$356 643 750	689 990	\$127 591 288
Online	\$247 672 882	939 093	\$96 555 176
Outlet	\$295 585 493	849 778	\$107 988 297
Итого	\$899 902 125	2 478 861	\$332 134 761

ANNEX PYTHON

```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns

file_path = r"C:\Users\Карина\Downloads\Adidas_US_Sales_Datasets.csv"

df = pd.read_csv(file_path)

print("✅ Файл успішно завантажено!")
print("Розмір датафрейму:", df.shape)
print("\nПерші строки:")
display(df.head(5))
```

Last executed at 2025-10-09 00:26:45 in 2.84s

✅ Файл успішно завантажено!
Розмір датафрейму: (9648, 13)

Перші строки:

	Retailer	Retailer ID	Invoice Date	Region	State	City	Product	Price per Unit	Units Sold	Total Sales	Operating Profit	Operating Margin	Sales Method
0	Foot Locker	1185732	1/1/2020	Northeast	New York	New York	Men's Street Footwear	\$50,00	1 200	\$600 000	\$300 000	50%	In-store
1	Foot Locker	1185732	1/2/2020	Northeast	New York	New York	Men's Athletic Footwear	\$50,00	1 000	\$500 000	\$150 000	30%	In-store
2	Foot Locker	1185732	1/3/2020	Northeast	New York	New York	Women's Street Footwear	\$40,00	1 000	\$400 000	\$140 000	35%	In-store

```
print("\n🔍 Аналіз пропусків:")

missing_summary = (
    df.isna()
    .sum()
    .reset_index()
    .rename(columns={'index': 'column', 0: 'missing_count'})
)
missing_summary['missing_%'] = (missing_summary['missing_count'] / len(df) * 100).round(2)

display(missing_summary.sort_values('missing_%', ascending=False))
```

Last executed at 2025-10-09 00:30:21 in 34ms

🔍 Аналіз пропусків:

	column	missing_count	missing_%
0	Retailer	0	0.0
1	Retailer ID	0	0.0
2	Invoice Date	0	0.0
3	Region	0	0.0
4	State	0	0.0
5	City	0	0.0
6	Product	0	0.0
7	Price per Unit	0	0.0

```
duplicate_count = df.duplicated().sum()

print(f"\nКількість повних дублікатів строк: {duplicate_count}")

if duplicate_count > 0:
    print("\nПерші 5 дубльованих строк:")
    display(df[df.duplicated()].head())
else:
    print("✅ Дублікати відсутні.")
```

Last executed at 2025-10-09 00:31:19 in 26ms

Кількість повних дублікатів строк: 0
✅ Дублікати відсутні.

```
print("\nЗагальна інформація по даних:")
df.info()
```

Last executed at 2025-10-09 00:28:24 in 26ms

Загальна інформація по даних:
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 9648 entries, 0 to 9647
Data columns (total 13 columns):

#	Column	Non-Null Count	Dtype
0	Retailer	9648 non-null	object
1	Retailer ID	9648 non-null	int64
2	Invoice Date	9648 non-null	object
3	Region	9648 non-null	object
4	State	9648 non-null	object
5	City	9648 non-null	object
6	Product	9648 non-null	object
7	Price per Unit	9648 non-null	object
8	Units Sold	9648 non-null	object
9	Total Sales	9648 non-null	object
10	Operating Profit	9648 non-null	object
11	Operating Margin	9648 non-null	object
12	Sales Method	9648 non-null	object

dtypes: int64(1), object(12)
memory usage: 980.0+ KB