Case Study: Adidas US Sales 2020–2021

A. Adidas

In the face of increasingly intense market competition, Adidas needs to gain deeper insights into the sales performance of its various distribution channels, particularly among Store, Outlet, and Online methods. This study aims to analyze Adidas's sales transaction data over a specific period, with a focus on comparing the performance of these three channels. Through this analysis, the study seeks to uncover insights that can help the company optimize its sales strategies, increase profitability, and maximize operational efficiency. The data used includes product information, unit price, number of units sold, total sales, operating profit, operating margin, and sales method (Store, Outlet, and Online). Using a systematic analytical approach, this study will evaluate sales trends, best-selling products, and the financial performance of each sales method. The results of this study will form the basis for strategic recommendations that Adidas can implement to achieve sustainable business growth.

1. ASK

1.1 Business Task

1. How does Adidas's sales performance differ across the Store, Outlet, and Online sales methods?
2. Which products or categories are the most profitable and best-selling within each sales method?
3. What strategies can be implemented to improve profitability and sales efficiency based on this analysis?

1.2 Stakeholders

1. **Adidas US Marketing Team**: The team responsible for developing marketing strategies, sales campaigns, and partnerships with retailers to enhance Adidas's sales performance and market share in the United States.
2. **Adidas US Data Analytics Team**: This team is in charge of collecting, cleaning, and analyzing Adidas's sales data. As a junior data analyst, you are joining this team to support data processing and provide insights that help inform strategic decision-making.
3. **Adidas North America Executive Team**: The leadership group overseeing business performance across the North American region, making decisions based on reports and recommendations from the marketing and analytics teams.

2. PREPARE

2.1 Data Used

The dataset used in this study is sourced from Kaggle and titled **"Adidas US Sales Data 2020–2021"**. It can be accessed through the following link: https://www.kaggle.com/datasets/manish9569/adidas-us-sales-data. This dataset contains historical sales information for Adidas. Using a systematic analytical approach, this study will evaluate sales trends, top-performing products, and financial performance across each distribution channel.

2.2 Information About Our Dataset

This dataset is a compilation of Adidas product sales in the United States during 2020 and 2021. The data was collected from various distribution channels, namely physical stores (Store), discount outlets (Outlet), and online platforms (Online). Each entry in the dataset includes detailed information about individual sales transactions. The dataset consists of thousands of rows, enabling in-depth analysis of sales performance by channel, product, and time.

2.3 Data Structure

Column	Description

Invoice Date	Date of the transaction
Retailer / Retailer ID	Identifier of the selling store or retailer
Region / State / City	Geographic sales location
Product	Type of product
Price per Unit	Price per unit
Units Sold	Number of units sold
Total Sales	Total revenue from the sale
Operating Profit	Operating profit
Operating Margin	Percentage margin of profit
Sales Method	Sales method used (Store, Outlet, Online)

2.4 Accessibility and Privacy of Data

This dataset is public and made available on Kaggle by an independent contributor. It originates from Adidas's sales records in the United States and has been formatted for business analysis purposes. The dataset does not contain any personal or sensitive information, as all transactions are aggregated and anonymized. Access to the dataset does not require special permission and it can be freely downloaded via the official Kaggle link.

2.5 ROCCC Data

- **Reliable**: The dataset is sourced from a trusted platform (Kaggle) and is based on actual Adidas sales data in the U.S.
- **Original**: It represents raw data exported from Adidas's retail sales system, reflecting real market conditions.
- **Comprehensive**: It includes complete information on products, pricing, units sold, profit margins, store locations, and distribution channels (Store, Outlet, Online).
- **Current**: The data reflects recent sales conditions at the time of collection, specifically for the years 2020 and 2021.
- **Cited**: The dataset is taken from a clearly referenced source: https://www.kaggle.com/datasets/manish9569/adidas-us-sales-data, and is used in a legitimate analytical context.

3. PROCESS

3.1 Tools

I will conduct the analysis using Microsoft Excel, considering the dataset is moderately sized, containing 9,648 rows. Excel is an appropriate tool for this scale of data and allows me to strengthen my data analysis skills. By utilizing features such as PivotTables, Power Query, formulas, and dynamic charts, I can efficiently perform data cleaning, exploration, trend analysis, and visualization.

3.2 Data Cleaning

No	Step	Description	Code / Handling	Result / Objective
1	Load dataset	Import CSV file into Excel Workbook	-	To obtain a unified dataset: Adidas_US_Sales
2	Count rows & columns	Count the number of rows and columns	`=COUNT(B2:B9649)=COUNTA(A1:M1)`	Rows = 9,648Columns = 13
3	Standardize values	Remove $ and , symbols and convert Indian number format to international (e.g., 1,00,000 → 100,000)	`Ctrl + H (Find $, replace all)`	Standardization for easier reading and analysis

		in **Price per Unit**, **Total Sales**, and **Operating Profit** columns		
4	Data type conversion	Convert data types in columns	-	- Retailer, Retailer ID, Region, State, City, Product, Sales Method → Text - Invoice Date → Date - Price per Unit, Units Sold, Total Sales, Operating Profit, Operating Margin → Number
5	Rename columns	Change all column names to lowercase and use underscores	-	Example: retailer, retailer_id, invoice_date, sales_method, etc.
6	Standardize text values	Remove excess spaces and capitalize the first letter of each word in text-type columns	`=PROPER(TRIM(column))`	Clean and consistent text format
7	Validate total_sales	Validate total_sales by recalculating as price_per_unit * units_sold	`=IF(ABS(total_sales - (price_per_unit * units_sold)) < 0.01, "match", "mismatch")`	5,762 “match”3,885 “mismatch”
8	Standardize total_sales	Replace original total_sales with calculated value	`=price_per_unit * units_sold`	Avoid inaccurate analysis
9	Validate operating_margin	Validate operating_margin as operating_profit / total_sales	`=IF(ABS(operating_margin - (operating_profit / total_sales)) < 0.01, "match", "mismatch")`	8,625 “match”1,019 “mismatch”4 #DIV/0! errors
10	Correct operating_profit	Adjust operating_profit values that exceed total_sales	`=IF(operating_profit > total_sales, operating_profit / 10, operating_profit)`	Ensure data is logical and proportional
11	Replace operating_margin	Replace original operating_margin with recalculated value	`=operating_profit / total_sales`	Ensure accurate and standardized margin
12	Extract year	Extract year from invoice_date	`=YEAR(date)`	Create new year column
13	Extract month	Extract month from invoice_date	`=MONTH(date)`	Create new month column
14	Extract day	Extract day name from invoice_date	`=TEXT(C2, "dddd")`	Create new day column
15	Extract day_of_week	Identify whether a date is a weekday or	`=IF(OR(WEEKDAY(C2)=1,WEEKDAY(C2)=7),"Wee`	Create new day_of_week

		weekend	kend","Weekday")	column
16	Check missing values	Check for missing values across all columns	=COUNTBLANK(A2:Q9649)	No missing values
17	Check duplicates	Check for duplicate entries	Remove Duplicates	No duplicate data found
18	Check unique values	Check unique values in text-type columns	PivotTable	All values are unique
19	Check negative values	Identify negative values in numeric columns	=COUNTIF(L2:L9649, "<0")	All values are positive: price_per_unit > 0 units_sold > 0 total_sales > 0 operating_profit > 0 operating_margin > 0
20	Check retailer_id length	Validate character length in retailer_id column	=LEN(retailer_id)	All IDs have 7 characters
21	Check retailer_id vs retailer	Compare retailer_id with retailer to identify overlaps	PivotTable	Some retailers use multiple IDs. No issue as retailer_id is not analyzed and is treated as text
22	Handle #DIV/0! anomaly	Identify rows causing #DIV/0! in operating_margin	Filter	4 rows have zero in units_sold, total_sales, and operating_profit, so operating_margin is set to 0
23	Check value ranges	Review range of values in numeric columns	Descriptive Statistics via Data Analysis Toolpak	All values fall within safe ranges for analysis

No	Validation Item	Related Columns	Description / Purpose	Status	Notes
1	Count of columns & rows	All columns	To verify the final number of columns and rows after data cleaning	Done	Rows = 9,648; Columns = 17
2	Data types	All columns	Ensure each column's data type matches its intended use	Done	All data types confirmed and appropriate
3	Missing values	All columns	Ensure there are no empty values that could disrupt calculations	Done	No missing values found
4	Duplicates	All columns	Ensure there are no duplicate rows	Done	No duplicates found

5	Unique values	Text columns: retailer, retailer_id, year, month, day, day_of_week, region, state, city, product, sales_method	To check the variety of categorical dimensions	Done	Values reviewed via PivotTable; all unique values documented
6	Data ranges	price_per_unit, units_sold, total_sales, operating_profit, operating_margin	Ensure all values fall within reasonable, non-extreme ranges	Done	All values are within safe analytical range
7	Negative values	price_per_unit, units_sold, total_sales, operating_profit, operating_margin	Negative values are not relevant in the sales context and must be avoided	Done	No negative values found
8	Zero values	units_sold, total_sales, operating_profit	Check for zero values that may lead to division errors	Done	4 cases found and properly handled
9	#DIV/0! anomalies	operating_margin	Division by zero resulting in errors, replaced with 0	Done	All 4 cases resolved to avoid calculation errors
10	Validate total_sales	price_per_unit * units_sold vs. total_sales	Check consistency of total_sales with direct calculation	Done	Original values replaced with calculated results
11	Validate operating_margin	operating_profit / total_sales vs. operating_margin	Ensure consistency of margin calculations	Done	All values validated and aligned
12	Number format	Numeric columns	Adjust Indian number formatting to international (e.g., 3,00,000 → 300,000)	Done	Format fully standardized
13	retailer_id length	retailer_id	Ensure ID length is consistent	Done	All IDs are 7 digits long
14	Relationship between retailer	retailer vs. retailer_id	Some retailers have multiple IDs —	Done	No changes needed, treated as

	& ID		acceptable as not included in analysis		text field only

4. Analysis

4.1 Descriptive Statistic by Sales Method

Metric	In-store	Outlet	Online
Avg. Units Sold	397	281	192
Max Units Sold	1,250	1,275	1,150
Min Units Sold	25	0	0
StdDev Units Sold	203	232	176
Var Units Sold	41,376	53,914	31,071
Avg. Price/Unit ($)	49	42	46
Max Price/Unit ($)	110	100	110
Min Price/Unit ($)	10	7	9
StdDev Price/Unit ($)	16	14	14
Var Price/Unit ($²)	243	193	210
Avg. Total Sales ($)	20,497	13,096	9,197
Max Total Sales ($)	82,500	78,000	82,500
Min Total Sales ($)	750	0	0
StdDev Total Sales ($)	14,451	13,463	9,953
Var Total Sales ($²)	208,838,946	181,241,583	99,053,831
Avg. Operating Profit	7,333	4,940	3,999
Max Operating Profit	37,125	39,000	34,125
Min Operating Profit	263	0	0
StdDev Operating Profit	5,654	5,139	4,018
Var Operating Profit	31,964,350	26,409,974	16,142,382
Avg. Operating Margin %	36	39	46
Max Operating Margin %	65	72	80
Min Operating Margin %	15	10	21
StdDev Margin (%)	7	9	9
Var Margin (%)²	49	85	78

Intepretation:

1. In-Store Sales: The in-store channel recorded the highest average performance in terms of units sold (397) and total sales ($20.5K), indicating that it generates the largest transaction volume. It also had the highest average price per unit ($49), reflecting strong product marketability in physical locations. The fact that it never recorded transactions with zero values indicates strong operational stability. However, it also had the lowest operating margin (36%), suggesting low efficiency despite the high volume. A high variation in pricing and profit indicates significant fluctuations in pricing strategy and product performance. Overall, the in-store channel is strong in volume and stability, but requires improvement in cost efficiency and pricing strategy to boost profitability.

2. Outlet Sales: Outlets showed the highest maximum profit ($39K) and the highest units sold in a single transaction (1,275), suggesting high performance potential under certain conditions. Its operating margin (39%) is better than in-store, although still lower than online. The highest standard deviation in units sold (232) and the presence of transactions with zero sales and profit indicate inconsistencies across product performance. The lowest average price per unit ($42) likely reflects discounted or clearance items. While the outlet channel has great potential to drive high volume and profit, it requires tighter control and optimization to improve consistency and operational efficiency.
3. Online Sales: The online channel had the highest average operating margin (46%), with even the minimum margin remaining high (21%), indicating strong efficiency and profitability. It showed the lowest variation in sales and profit, suggesting consistent product performance. However, it had the lowest average volume: units sold (192) and total sales ($9.2K), significantly lower than other channels. There were some transactions with zero sales or profit, although fewer than in the outlet channel. Overall, online is the most efficient and profitable channel, with consistent performance. It is well-suited for expansion, but requires strategic initiatives to increase volume and market reach.

4.2 Total of Units Sold by Sales Method

Row Labels	Sum of units_sold
Online	939,093
Outlet	849,778
In-store	689,990
Grand Total	**2,478,861**

Interpretation:

Based on the sales analysis by method, it is evident that Online sales recorded the highest number of units sold, totaling 939,093 units. Meanwhile, the In-store method recorded the lowest sales volume, with 689,990 units sold. This indicates that the Online sales channel is the most productive in terms of sales volume. This trend reflects a shift in consumer behavior toward digital purchasing, likely driven by shopping habits developed during the pandemic period, where online buying became more common. In conclusion, online sales are no longer just a supplementary channel but have become the new backbone of the company's sales strategy.

4.3 Total Sales by Sales Method

Row Labels	Sum of total_sales
Online	44,965,657
Outlet	39,536,618
In-store	35,664,375
Grand Total	**120,166,650**

Interpretation:

Sales data from 2020–2021 show that the Online sales method contributed the highest total sales, amounting to $44,965,657, followed by Outlet sales with $39,536,618, and In-store sales with $35,664,375. This confirms that Online sales are the largest revenue contributor, consistent with earlier findings regarding sales volume. Therefore, Online sales can be considered the main growth driver for Adidas sales at present. Meanwhile, the Outlet channel continues to demonstrate solid performance, reflecting a stable market potential within that segment. In contrast, the In-store method recorded the lowest total sales, indicating the need for a

repositioning strategy to remain relevant and competitive amid shifting consumer behaviors.

4.4 Total of Operating Profit by Sales Method

Row Labels	Sum of operating_profit
Online	19,552,644
Outlet	14,913,340
In-store	12,759,138
Grand Total	**47,225,122**

Interpretation:

During the 2020–2021 period, the **Online channel recorded the highest operating profit of $19,552,644**, surpassing the **Outlet channel with $14,913,340** and **In-store with $12,759,138**. This finding indicates that the Online channel not only generated the highest volume and revenue but also contributed the greatest profit. This suggests operational efficiency, higher margins, or more effective pricing strategies within this channel. The Outlet channel still recorded significant profit, although it is likely that products were sold with larger discounts. This indicates that the Outlet business model is effective in driving high sales volume while maintaining profitability. Meanwhile, the In-store channel generated the lowest operating profit. The low profit is likely influenced by high fixed costs, such as physical store rent, staff salaries, and daily operations, which put pressure on profit margins.

4.5 Avg. of Operating Margin by Sales Method

Row Labels	Average of operating_margin
Online	46
Outlet	39
In-store	36
Grand Total	**42**

Interpretation:

Online has the highest average operating margin at **46%**, followed by **Outlet (39%)** and **In-store (36%)**. This indicates that online sales not only excel in terms of volume and absolute profit but are also the most efficient in generating profit per dollar of sales. This is likely due to lower operational costs and more optimal pricing strategies. The Outlet channel has a fairly good margin, although lower than Online, possibly due to discounts and promotions aimed at clearing inventory. Meanwhile, the In-store channel records the lowest margin, indicating high physical store operational costs and pricing strategies that need to be reevaluated.

4.6 Avg. of Price Per Unit by Sales Method

Row Labels	Average of price_per_unit
In-store	$49
Online	$46
Outlet	$42
Grand Total	**$45**

Interpretation:

The highest average price per unit is found in the In-store channel at **$49**, followed by **Online at $46**, and **Outlet with the lowest price at $42**. The higher prices in physical stores reflect the sale of premium or new product categories, as well as the need to cover higher operational costs, meaning product prices must be sufficient to maintain profitability. The Online channel shows a fairly high average price,

indicating sales of both regular and premium products, not just discounted items, reinforcing its role as a flexible channel that reaches various customer segments. Meanwhile, the Outlet channel sells products at the lowest prices, consistent with its characteristic as a discount or clearance channel aimed at accelerating inventory turnover.

4.7 Total of Units Sold per Product by Sales Method

Sum of units_sold	Column Labels			
Row Labels	**In-store**	**Online**	**Outlet**	**Grand Total**
Men's Street Footwear	176,030	225,121	192,169	593,320
Women's Apparel	120,500	163,937	149,390	433,827
Men's Athletic Footwear	117,150	163,855	154,521	435,526
Women's Street Footwear	105,485	147,659	139,125	392,269
Women's Athletic Footwear	85,450	120,755	111,031	317,236
Men's Apparel	85,375	117,766	103,542	306,683
Grand Total	**689,990**	**939,093**	**849,778**	**2,478,861**

Interpretation:

Sales volume analysis of Adidas products during 2020–2021 shows that the **Online channel led sales across all product categories**, followed by **Outlet** and **In-store**. The **best-selling product** was **Men's Street Footwear**, with **593,320 units sold**, of which **Online contributed the largest share (225,121 units)**. Products like **Women's Apparel** and **Men's Athletic Footwear** also showed strong performance, following similar sales patterns. Meanwhile, categories such as **Women's Street Footwear**, **Women's Athletic Footwear**, and **Men's Apparel** recorded lower but still significant sales volumes—also dominated by the Online channel. These findings indicate a **shift in consumer behavior toward increased comfort with digital shopping**, further reinforcing the **strategic importance of the Online channel in driving Adidas' sales volume**.

4.8 Total Sales per Product by Sales Method

Sum of total_sales	Column Labels			
Row Labels	**Outlet**	**Online**	**In-store**	**Grand Total**
Men's Street Footwear	8,430,411	10,365,158	8,885,200	27,680,769
Women's Apparel	7,879,955	8,966,155	7,024,875	23,870,985
Men's Athletic Footwear	7,016,446	7,625,859	5,934,875	20,577,180
Women's Street Footwear	6,063,365	6,303,273	4,834,925	17,201,563
Men's Apparel	5,254,012	6,334,120	4,932,500	16,520,632
Women's Athletic Footwear	4,892,429	5,371,092	4,052,000	14,315,521
Grand Total	**39,536,618**	**44,965,657**	**35,664,375**	**120,166,650**

Interpretation:

During the 2020 - 2021 period, **Men's Street Footwear recorded the highest total sales across all sales methods, reaching $27.68 million**. This indicates strong commercial appeal and consistent performance across all channels. **Women's Apparel ($23.87 million)** and **Men's Athletic Footwear ($20.58 million)** also demonstrated strong revenue performance, particularly through the **Online and Outlet channels**. This suggests that both products are well-suited for **digital marketing** and **discount-driven sales** in Outlets. Other products such as **Women's Street Footwear ($17.20 million)**, **Men's Apparel ($16.52 million)**, and **Women's Athletic Footwear ($14.32 million)** fall into the mid-revenue category but still contribute significantly. While their sales volume is lower than the top three

categories, their total revenue remains substantial **indicating potential for high margins**, depending on unit price and operational costs. The **Online channel contributed the largest share of revenue for nearly every product category**, solidifying its role as the **most strategic and efficient distribution channel** in supporting revenue growth.

4.9 Total of Operating Profit per Product by Sales Method

Sum of operating_profit	Column Labels			
Row Labels	**In-store**	**Online**	**Outlet**	**Grand Total**
Men's Street Footwear	3,486,712	4,715,567	3,426,794	11,629,073
Women's Apparel	2,628,513	4,104,337	2,952,379	9,685,230
Men's Athletic Footwear	1,970,240	3,143,949	2,323,298	7,437,487
Men's Apparel	1,747,452	2,626,930	2,007,052	6,381,434
Women's Street Footwear	1,569,358	2,634,923	2,289,763	6,494,045
Women's Athletic Footwear	1,356,864	2,326,936	1,914,053	5,597,854
Grand Total	**12,759,138**	**19,552,644**	**14,913,340**	**47,225,122**

Interpretation:

During 2020–2021, **Adidas generated a total operating profit of $47.23 million** across all channels and product categories. **Online was the largest contributor**, with **$19.55 million**, outperforming **Outlet ($14.91 million)** and **In-store ($12.76 million)**. By product, **Men's Street Footwear recorded the highest profit at $11.63 million**, reinforcing its role as a key pillar of growth. This was followed by **Women's Apparel ($9.69 million)**, **Men's Athletic Footwear ($7.44 million)**, and **Men's Apparel ($6.38 million)** as other major contributors. Women's categories such as **Women's Street Footwear ($6.49 million)** and **Women's Athletic Footwear ($5.60 million)** also showed strong potential, despite lower sales volumes. Across all categories, the **Online channel consistently delivered the highest profit**, reaffirming the **efficiency and profitability of Adidas' digital strategy**.

4.10 Avg. of Operating Margin per Product by Sales Method

Average of operating_margin	Column Labels			
Row Labels	**In-store**	**Online**	**Outlet**	**Grand Total**
Men's Street Footwear	38%	49%	42%	45%
Women's Apparel	38%	49%	40%	44%
Men's Apparel	36%	45%	38%	41%
Men's Athletic Footwear	34%	44%	37%	40%
Women's Athletic Footwear	34%	46%	41%	42%
Women's Street Footwear	33%	45%	39%	41%
Grand Total	**36%**	**46%**	**39%**	**42%**

Interpretation:

Adidas recorded an **average operating margin of 42%** across all channels during 2020–2021. The **Online channel achieved the highest margin at 46%**, significantly outperforming **Outlet (39%)** and **In-store (36%)**, highlighting the **high efficiency of the digital channel**. The products with the highest margins were **Men's Street Footwear (45%)** and **Women's Apparel (44%)**, demonstrating a strong combination of **sales volume and profitability**. Other products, such as **Women's Athletic Footwear (42%)** and **Men's Apparel (41%)**, also posted competitive margins. This data reinforces the position of the **Online channel and the footwear segment** as key drivers of **Adidas' overall profit margins**.

4.11 Avg. of Price per Unit per Product by Sales Method

Average of price_per_unit	Column Labels			
Row Labels	**In-store**	**Online**	**Outlet**	**Grand Total**
Women's Apparel	$56	$53	$48	$52
Men's Apparel	$55	$51	$46	$50
Men's Street Footwear	$49	$45	$40	$44
Men's Athletic Footwear	$47	$44	$41	$44
Women's Athletic Footwear	$43	$42	$39	$41
Women's Street Footwear	$43	$40	$39	$40
Grand Total	**$49**	**$46**	**$42**	**$45**

Interpretation:

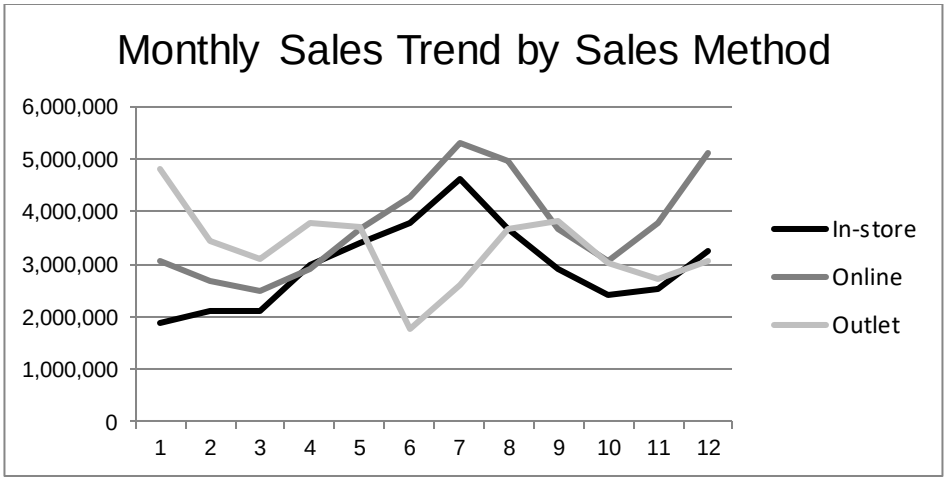
From the table, it can be concluded that the **highest average selling price per unit** comes from the **In-store sales method ($49)**, followed by **Online ($46)**, and the lowest is **Outlet ($42)**. This reflects a typical **channel-based pricing strategy in retail**:

- **In-store** tends to sell at higher prices due to the in-person shopping experience and product exclusivity.
- **Online** offers slightly lower prices to drive higher sales volumes.
- **Outlet** uses discount pricing to clear out inventory and attract price-sensitive customers.

By product category, **Women's Apparel ($52)** and **Men's Apparel ($50)** have the highest average prices. This aligns with their contribution to profit, suggesting **a premium perception and strong purchasing power** from consumers in these segments. In contrast, **footwear products are sold at lower average prices** (around **$40–$44**), but still contribute significantly to both sales and profit due to their **high sales volume**.

4.12 Monthly Sales Trend by Sales Method

Sum of total_sales	Column Labels			
Row Labels	**In-store**	**Online**	**Outlet**	**Grand Total**
1	1,865,250	3,052,183	4,827,334	9,744,767
2	2,110,375	2,697,713	3,455,765	8,263,853
3	2,103,500	2,474,328	3,117,156	7,694,984
4	2,988,975	2,920,440	3,782,005	9,691,420
5	3,395,775	3,657,434	3,688,511	10,741,720
6	3,769,125	4,275,477	1,758,545	9,803,147
7	4,633,250	5,314,502	2,602,667	12,550,419
8	3,662,775	4,961,959	3,668,492	12,293,226
9	2,917,625	3,674,149	3,813,810	10,405,584
10	2,428,300	3,072,472	3,037,986	8,538,758
11	2,535,425	3,768,526	2,719,489	9,023,440
12	3,254,000	5,096,474	3,064,858	11,415,332
Grand Total	**35,664,375**	**44,965,657**	**39,536,618**	**120,166,650**



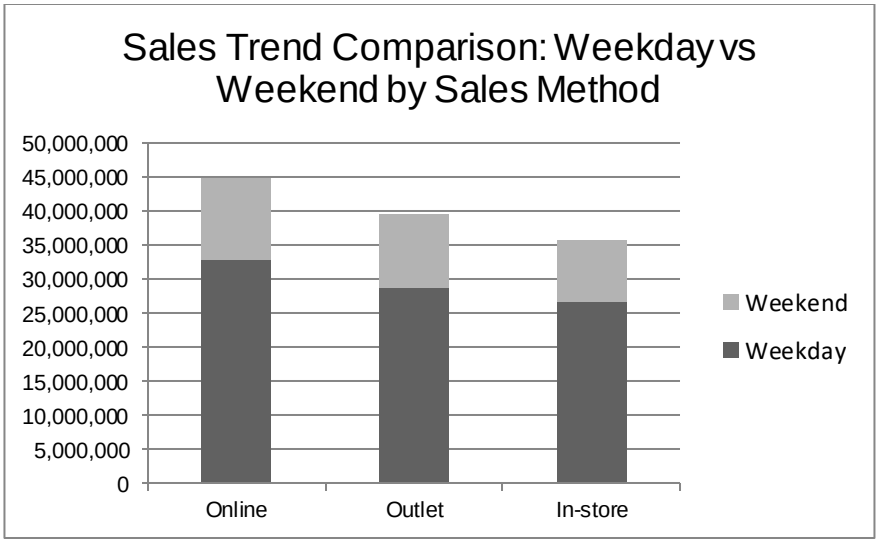
Interpretation:

Monthly sales trend analysis reveals an interesting pattern in the performance of Adidas' three sales channels:

1. **Online** consistently recorded the **highest monthly sales volume**, with a **total of $44.97 million over two years**. A noticeable upward trend was observed, particularly during the mid-to-late months of the year (June to December), likely driven by **seasonal promotions**, **major shopping events** (e.g., **Black Friday, Christmas**), and a growing **preference for digital shopping**. Online sales also demonstrated **strong stability**, with no sharp declines, reinforcing the channel's role as the **backbone of Adidas' sales performance**.
2. **Outlet** sales contributed significantly as well, totaling **$39.54 million**, with sales peaking in **January and May**. However, this channel experienced **greater fluctuations**, most notably a significant drop in **June (around $1.75 million)**, which may be tied to **inventory cycles or seasonal product transitions**. This suggests that the outlet channel is **more sensitive to seasonality and stock availability**, requiring **more dynamic inventory and promotional strategies**.
3. **In-store (physical stores)** had the **lowest total sales** among the three, at **$35.66 million annually**. Nevertheless, it showed **steady growth**, with a sales peak in **July**. Sales dips were observed in the **early months of the year and in October**, indicating that **in-store performance is still subject to seasonal factors**, and may be **impacted by competition from online channels**.

4.13 Sales Trend Comparison: Weekday vs Weekend by Sales Method

Sum of total_sales	Column Labels		
Row Labels	**Weekday**	**Weekend**	**Grand Total**
Online	32,870,302	12,095,355	44,965,657
Outlet	28,656,031	10,880,587	39,536,618
In-store	26,797,300	8,867,075	35,664,375
Grand Total	**88,323,633**	**31,843,017**	**120,166,650**



Interpretation:

A comparative analysis of sales between weekdays and weekends reveals distinct consumer behavior patterns across Adidas' three sales channels. Overall, **weekday sales significantly outperformed weekend sales**, with **$88.32 million** in total weekday revenue compared to **$31.84 million** on weekends. This suggests that **Adidas customers are generally more active shoppers during weekdays**, regardless of whether they purchase **online, at outlets, or in physical stores**.

- **Online** recorded the **highest sales** for both weekdays (**$32.87 million**) and weekends (**$12.10 million**), reinforcing its strong and consistent performance.
- **Outlet** sales reached **$28.66 million** on weekdays but declined to **$10.88 million** on weekends.
- **In-store** sales also saw a drop, from **$26.80 million** on weekdays to **$8.87 million** on weekends.

These patterns suggest that while weekend foot traffic might intuitively seem higher, **actual purchasing activity is concentrated on weekdays**, possibly due to **routine shopping behavior**, **work-related commuting purchases**, or **weekday promotional campaigns**.

4.14 Final Conclusions

1. Sales Performance by Channel:

- **Online**: The most productive channel, with the highest **sales volume**, **total revenue**, and **operating margin (46%)**. This indicates optimal efficiency and profitability, supported by the growing consumer shift toward digital shopping. The channel also demonstrates strong stability and continuous growth.
- **Outlet**: Shows high potential for **maximum sales and profit**, but with significant fluctuations. The **lowest average selling price** reflects its focus on discounts and stock clearance. While margins are lower than online, this channel effectively drives **large sales volume** with **moderate profitability**.
- **In-store**: Has the **highest average price per unit** and **stable sales volume**, but records the **lowest total revenue and operating profit**. With the **lowest margin (36%)**, the channel faces high cost pressure (e.g., rent, staffing). Despite this, it remains essential for **brand experience**, but requires strategic **efficiency improvements**.

2. Most Profitable and Best-Selling Products by Channel:

- **Men's Street Footwear** is the top-performing product across all channels in terms of both **sales volume** and **profit contribution**.

- **Women's Apparel** and **Men's Athletic Footwear** also demonstrate strong performance in both volume and profitability, especially in **Online** and **Outlet** channels.
- **Apparel categories** (Men's and Women's) tend to have **higher prices** and **better margins**, indicating a **premium segment**. **Footwear**, while lower in price per unit, drives **high volume and revenue**.

3. Strategies to Improve Profitability and Efficiency:

To achieve higher profitability, operational efficiency, and optimal customer experience across Online, Outlet, and In-store channels, Adidas should implement the following strategic initiatives:

- **Online – Drive Margin Growth Through Digitalization and Data**
  1. Focus on developing the online channel as the primary sales platform, prioritizing high-margin products such as *Men's Street Footwear* and *Women's Apparel*.
  2. Leverage data analytics to personalize offers, enhance promotional effectiveness, and support upselling and cross-selling strategies.
  3. Improve logistics infrastructure and user experience to increase conversion rates and customer satisfaction.

  Risks:
  1. Logistics and shipping costs may rise as online transaction volumes increase, requiring supply chain efficiency.
  2. Overreliance on digital platforms (such as marketplaces) can reduce margin control if not strategically managed.
- **Outlet – Efficient Stock Management and Controlled Product Liquidation**
  1. Use outlet stores to manage excess inventory through planned promotions and discounts, focusing on products like *Men's Athletic Footwear* and *Women's Street Footwear*.
  2. Implement fast stock rotation and product bundling strategies to maintain cash flow and maximize storage utilization.

  Risks:
  1. Excessive discounting may harm brand value and lead to **brand dilution**.
  2. Monthly sales fluctuations highlight the need for more accurate demand forecasting to avoid overstocking.
- **In-store – Differentiation Through Experience and Premium Products**
  1. Position physical stores as brand experience centers, highlighting premium products such as *Women's and Men's Apparel*.
  2. Introduce exclusive products and limited collaborations to attract customers and boost average transaction value.
  3. Integrate technology (such as AR) to enhance in-store interaction and drive purchase conversions.

  Risks:
  1. Fixed operating costs (e.g., rent and staff salaries) remain high even when sales volume is lower than online channels.
  2. Technology investments such as AR require time and funding, and must be supported with proper staff training to be successful.

B. Link Dashboard

https://public.tableau.com/app/profile/farhah.farhah/viz/AdidasUs2020-2021/AdidasUs2020-2021