PERFUME SALES AND MARKET INSIGHTS

GODSPOWER CHIBUZO IGNATIUS AUGUST, 2025

SYNOPSIS



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- Process Workflow
- Raw Data
- Data Cleaning Process
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- Recommendation
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PROJECT OVERVIEW







ebay_mens_perfume and ebay_womens_perfu me (2022-2024)

Power BI and Power Query Editor

Sales trend, regional and gender based insights



PROCESS WORKFLOW



Data Collection

Both Datasets were downloaded and loaded into Power Query Editor first with duplicates of original files kept safely

Data Cleaning and Preparation

Power Query was used to remove irrelevant columns, append both tables, and perform other necessary general cleanup

Analysis

Various measures was created with a few columns added to enhance proper analysis using appropriate DAX

Visualization

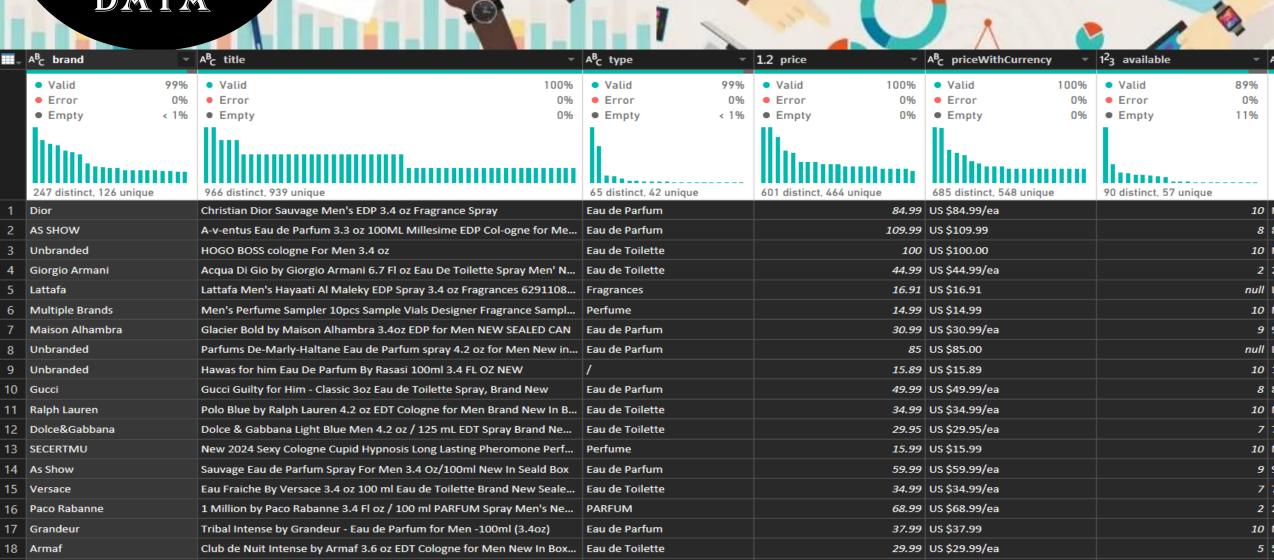
A 2-paged dashboard was created using various charts to properly represent findings from the analysis

UNCLEAN DATA

19 Carolina Herrera

21 Dolce & Gabbana

20 Dior



Eau de Toilette

39.99 US \$39.99/ea

29.94 US \$29.94/ea

83.95 US \$83.95

10

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Carolina Herrera 212 NYC Men's Cologne EDT 3.4oz 100ml New Sealed

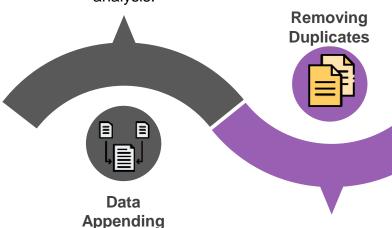
Dior Sauvage Eau de Toilette 3.4 Oz 100ml Brand New Sealed Free shi... | Eau de Toilette

Light Blue by Dolce & Gabbana 4.2 oz Cologne for Men Tester with Cap | Eau de Toilette

DATA CLEANING PROCESSES

Data Appending

Both datasets were combined into one master dataset to allow for unified cleaning and analysis.



Removing Duplicates

Duplicates were found and eliminated to prevent doublecounting and ultimately, wrong analysis

Handling Missing Values

Missing entries in various columns were ignored or excluded during analysis to maintain accuracy.

Handling

Missing Values

Standardize Values



Standardize Values

Some data types was changed, columns were renamed, some were split by a delimiter and some values replaced

Creating Derived Columns

New fields and tables were engineered (e.g., Revenue, Date Table etc) from raw data to support deeper insights in the analysis.



Creating Derived Columns

CLEAN DATASET

\$10.99

\$69.99

\$40.99

\$65.97

\$27.3

\$159.99

\$18.99

\$124.96

\$21.95

\$259.09

\$94.99

\$57.46

\$25.7

\$69.02

\$22.99

\$89.25

\$15.99

\$18.99

\$49.99

\$35

\$15

\$11

Eau de Parfum

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

Item Location

116 Allen Park, Michigan, United States

25 Sacramento, California, United States

3 Windsor Mill, Maryland, United States

44 Miami, Florida, United States

131 Dallas, Texas, United States

34 New York, USA, Hong Kong

179 Katy, Texas, United States

37 Katy, Texas, United States

160 Miami, Florida, United States

8 Miami, Florida, United States

448 Pearland, Texas, United States

1024 Katy, Texas, United States

456 Edison, New Jersey, United States

202 Edison, New Jersey, United States

370 Edison, New Jersey, United States

52 Bogota, New Jersey, United States

39 Lynwood, California, United States

655 New York, New York, United States

139 Falls Church, Virginia, United States

78 Detroit, Michigan, United States

36 Englewood Cliffs, New Jersey, United States Male

122 North Brungwick New Jorgey United States

72 New York, New York, United States

157 Dayton, New Jersey, Hong Kong

702 Albany, New York, United States

16 Detroit, Michigan, United States

179 Hackensack, New Jersey, United States

12 Los Angeles, California, United States

151 Hackensack, New Jersey, United States

Gen

Male

Brand *	Title •	Type 💌	Price *	Available 💌	Quantity Sold •
Dior	Christian Dior Sauvage Men's EDP 3.4 oz Fragrance Spray	Eau de Parfum	\$84.99	10	116
Grandeur	Tribal Intense by Grandeur - Eau de Parfum for Men -100ml (3.4oz)	Eau de Parfum	\$37.99	10	44
Afnan	Turathi Blue by Afnan for men EDP 3oz New in Sealed Box	Eau de Parfum	\$33.7	10	13
Giorgio Armani	Acqua Di Gio Profumo by Giorgio Armani 4.2oz Cologne For Men New in Box	Eau de Parfum	\$119.99	10	34
Yves Saint Laurent	Yves Saint Laurent Y Men's Eau De Parfum 3.4 oz/100 ml	Eau de Parfum	\$47.88	10	25
Rasasi	RASASI DAREEJ 3.4 oz-100 ml Men EDP Spray New & Sealed New sale	Eau de Parfum	\$25.99	10	:

D&G DOLCE & GABBANA LIGHT BLUE EAU INTENSE MEN 1.5ml .05oz x 5 COLOGNE SAMPLES | Eau de Parfum

Savage for Men- 3.4 Oz Men's Eau De Parfum. Men's Casual Cologne 100ml

Dolce & Gabbana 4.2oz Intenso EDP Sealed Men's Cologne

Tres Nuit by Armaf 3.4 oz EDP Cologne for Men New In Box

Valentino Uomo Born in Roma Intense 10ml Spray For Men.

Aventus by Creed, 3.3 oz Millesime EDP Spray for Men

Brioni Intense by Brioni, 3.4 oz EDP Spray for Men

Al Wataniah Kayaan Classic 3.4oz EDP

Dossier Aromatic Watermelon Eau de Parfum. Size: 50ml / 1.7oz

Herod by Parfums de Marly 2.5 oz EDP Cologne for Men New In Box

Louis Vuitton Imagination Eau De Parfum Sample Spray - 2ml/0.06oz

Yeah! By Maison Alhambra 3.4/3.3 oz Edp Spray For Men New In Box

Light Blue Eau Intense by Dolce & Gabbana, 6.7 oz EDP Spray for Men

Creed Aventus Men Eau De Parfum Vial Spray SIZE 2.5 ml On Card NEW

Gucci Guilty Cologne for Men EDT 3oz Luxurious Daring Adventure

Version Brada Luna Bossa carbon (ATTITUDE NOID FOR MEN 2.4 OZ FO

Sauvage Eau De Parfum 3.4 oz / 100 ml EDP Spray For Men New In Seald Box

Dolce & Gabbana Light Blue Eau Intense 6.7 oz. EDP Spray for Men. New in Box

SAUVAGE by Christian Dior EDP For Men 6.8 oz / 200 ml *NEW IN SEALED BOX*

Jean Paul Gaultier Le Male LE PARFUM 4.2 oz. Eau de Parfum INTENSE Spray. NO BOX

Dossier Musky Oakmoss Eau de Parfum Natural Fragrance 1.7 Oz Cologne New no Box

Polo Red Intense by Ralph Lauren 2.5 oz / 75 ml Edp spy cologne for men homme

Raghba For Man EDP Spray 100MI (3.4 FI.OZ)+Free Deodorant Spray By Lattafa

Cologne

AS SHOW

Armaf

Dolce & Gabbana

Dolce&Gabbana

Dolce&Gabbana

Christian Dior

Parfums de Marly

Jean Paul Gaultier

Dolce & Gabbana

Louis Vuitton

By Al Hambra

Ralph Lauren

Al Wataniah

MAACADENIA

Valentino

Dossier

Creed

Lalique

Dossier

Creed

Lattafa

Gucci



KEY PERFORMANCE INSIGHT

1999
Total Listings

1.25M
Total Qty Sold

\$43.18Average Price

\$19.7M
Total Revenue

36.44K

Total Qty Available



1999 total listings was recorded



Almost 20 million dollars was gotten from the over 1.2 million products sold



Over 1.2 million perfumes were sold

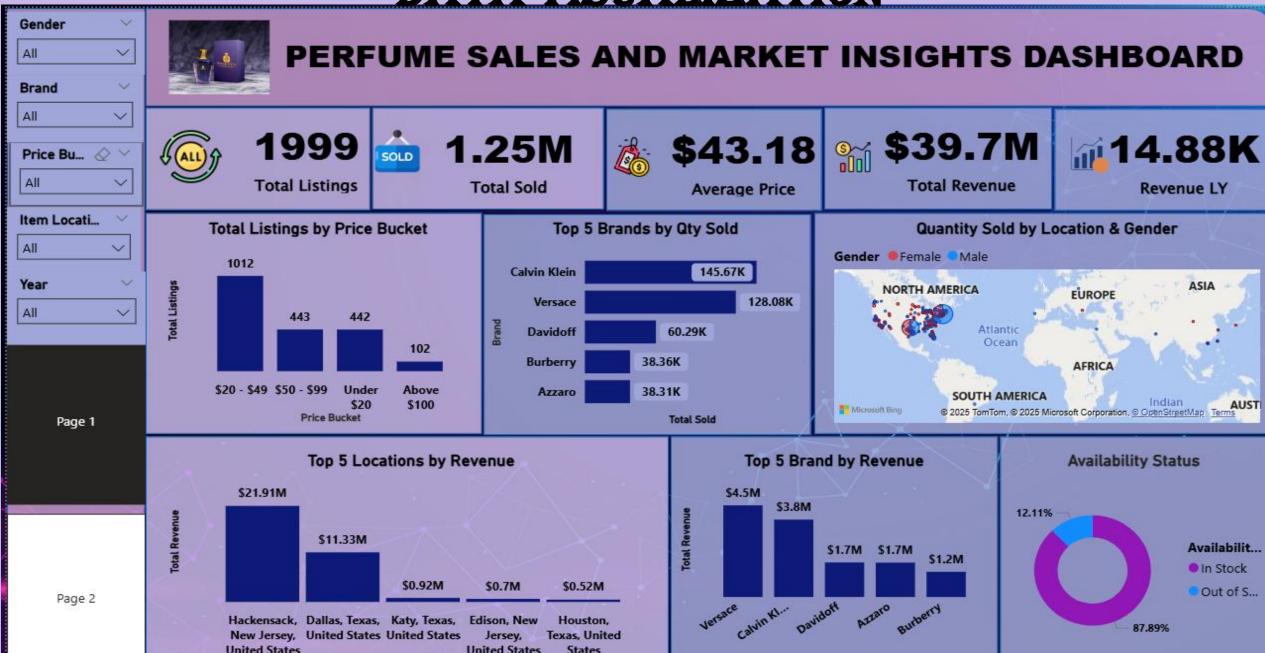


Total number of available products is Estimated to be about 36,000



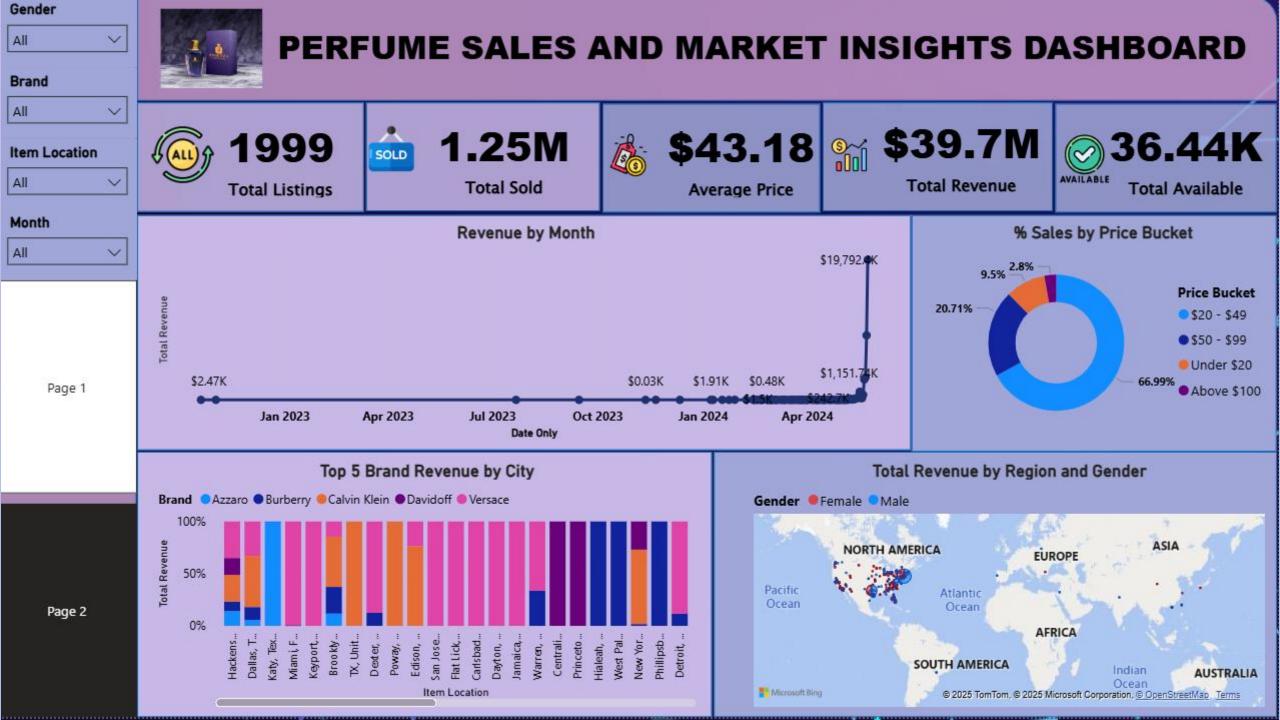
Average price of all perfumes combined For both males ad female is \$43.18

DATA VISUALIZATION



Brand

Item Location





1. Optimize Product Pricing Strategies

- Explore Opportunities in Underperforming Price Buckets: Sales above \$100 are minimal (~2.8%), suggesting price sensitivity. If entering premium, emphasize exclusivity and added value.
- Focus on \$20-\$49 Range: Since ~67% of sales come from this bucket, prioritize promotions, stocking, and campaigns here it's the customer sweet spot.

2. Forecast Demand & Improve Inventory Planning

- Address Stock-Out Issues: With 12% of listings out of stock, improve replenishment, especially for fast movers, to avoid lost revenue.
- Investigate May 2024 Revenue Spike: Identify drivers (promotion, bulk orders, events). If replicable, integrate into future demand planning.



3. Understand Regional Buying Behavior

Capitalize on High-Revenue Locations:
Hackensack, NJ, and Dallas, TX, contribute
disproportionately to revenue (~\$21M and \$11M
respectively). Expanding targeted advertising and
regional distribution in these areas could further
boost sales.

4. Develop Targeted Marketing Based on Customer Preferences

- Leverage Top-Performing Brands: Calvin Klein,
 Versace, and Davidoff dominate sales and
 revenue. Use exclusive deals, bundles, or loyalty
 campaigns to strengthen engagement.
- Reinforce Mid-Range Pricing Strategy: Since most customers shop mid-tier, tailor marketing narratives around *value for money* and *affordable luxury*.

LIMITATIONS

i. Incomplete Date Records: Some transactions had missing dates, which affected trend analysis. This makes it hard to fully capture seasonality and year-on-year comparisons.

ii. Unreliable Stock Availability Data:

Many listings recorded stock levels vaguely (e.g., "more than 10 available" or "about 5 available"). For analysis, arbitrary values (like 10) had to be assigned. This means the "Available Quantity" analysis is only approximate, not exact, which could mislead stock vs. sales comparisons.



LIMITATIONS

iii. Sparse Historical **Transaction** For 2022 2023, **Records:** and transactions were extremely few (only 2 in 2022, and 3 in 2023). Even in 2024, bulk of transactions the were concentrated in April when the dataset ended, making it impossible to identify true yearly trends or seasonality patterns.



CONCLUSION

This analysis provided key insights into perfume sales, pricing, brand performance, and customer preferences.

Despite data limitations, the dashboard showed trends that can guide inventory management and marketing focus.

With improved data quality and consistent records, even deeper insights can be achieved.

THANK YOU FOR YOUR TIME