

GROUP 10

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INSY 442 - Data Analysis and Visualization

Vestiaire Collective

Product and Seller Performance Analysis

November 27, 2024



Agenda

- 01. Overview: Vestiaire Collective**
- 02. Research Statement - Problem**
- 03. Result - Product and Seller Insights**
- 04. Recommendation**
- 05. Key takeaway**

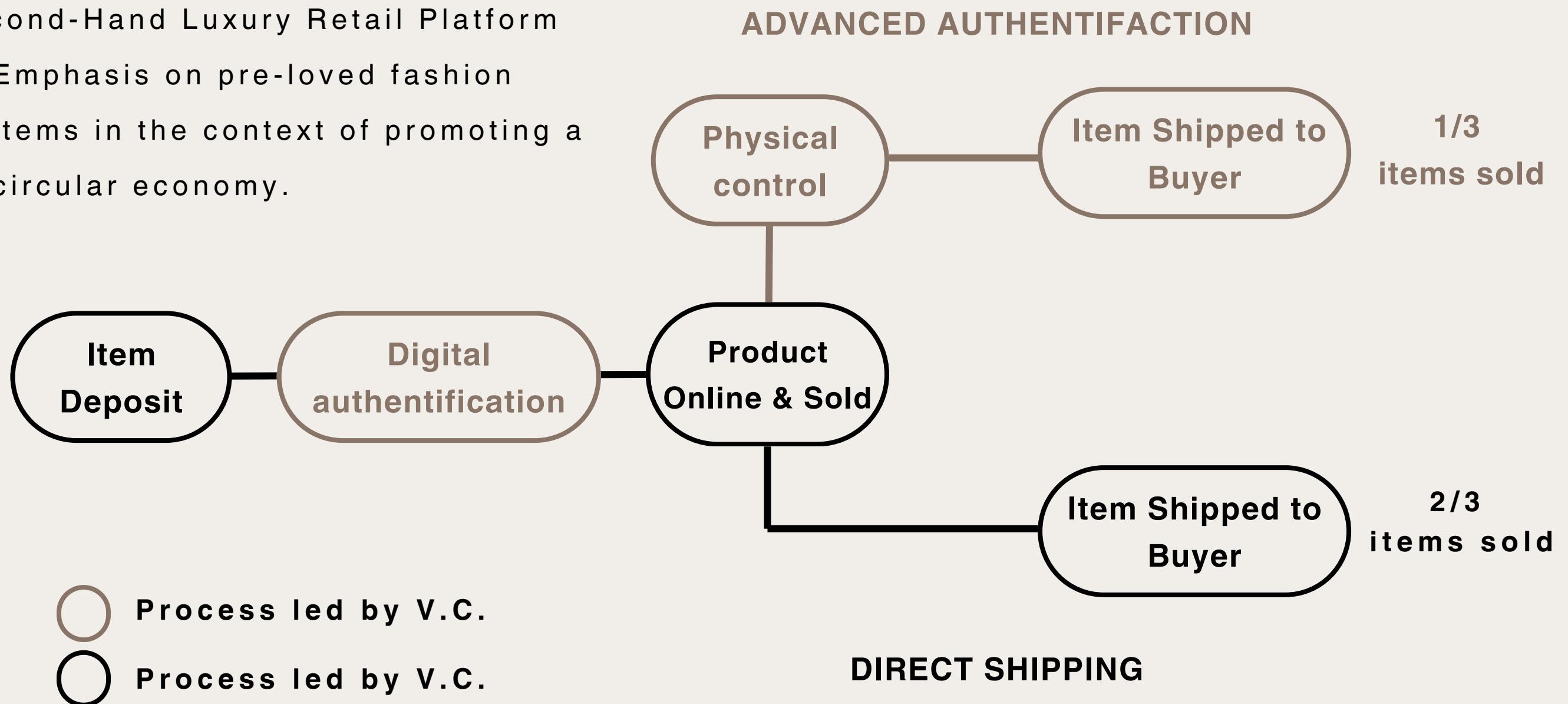


Overview

Business Model



Second-Hand Luxury Retail Platform
• Emphasis on pre-loved fashion items in the context of promoting a circular economy.



Research Statement



Eco-awareness rising
in fashion

Number of sellers is
growing fast

**Vestiaire
Collective**

Increase in unsold
inventory

“ WHAT FACTORS INFLUENCE WHETHER A
PRODUCT IS SOLD ON VESTIAIRE COLLECTIVE? ”

Help **clear seller inventories** and support Vestiaire Collective's
mission to **mitigate “fast fashion [’s] devastating impact”**
(v.C., 2022)

Overview

Problem

Results

Recommendations

Takeaways

Data Collection and Methods



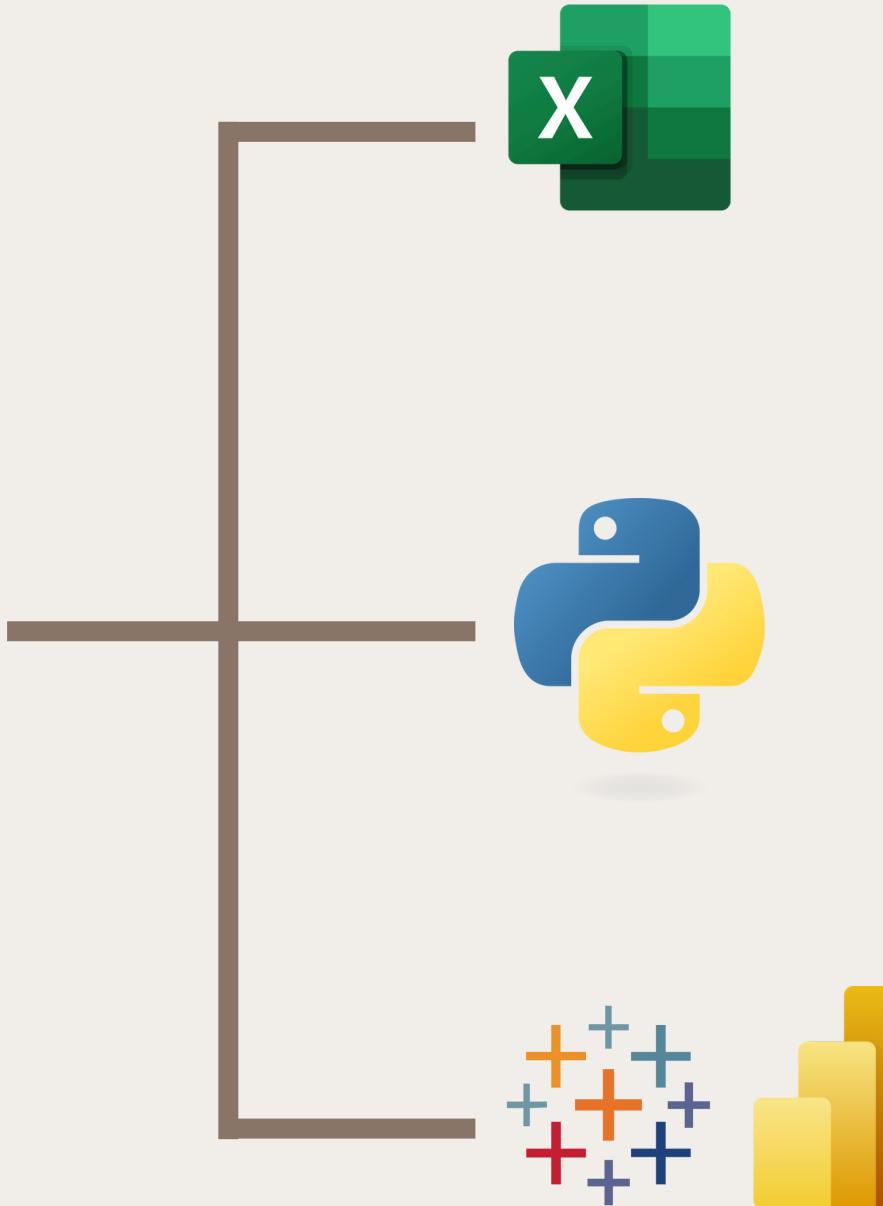
MAY 2024: VESTIAIRE COLLECTIVE DATASET

Dataset

- Completeness, Credibility, and Capability - Usability Score of 10
- 900,00 Rows; 36 Columns

Variables

- Independent Variables: From **Products and Sellers**
- Dependent Variable: **Sold** - Binary Variable (True/False)
- Lack of Date Variable



TRANSFORMATION

- Grouping for Dimension Reduction (IF, AND): *Color, Material, Brand*
- Creation of *Authenticated* based on V.C.'s Report (DNFP) using IF, AND, RAND

PREDICTION and REDUCTION

- Dataset Reduction: 900,000 to 450,000 rows (randomness) due to limited computer power.
- Decision tree: *Sold* (D.V.) and I.V.
 - 0.8 accuracy

VISUALISATION

- Power Bi: Product Insights
- Tableau: Seller Insights

Overview

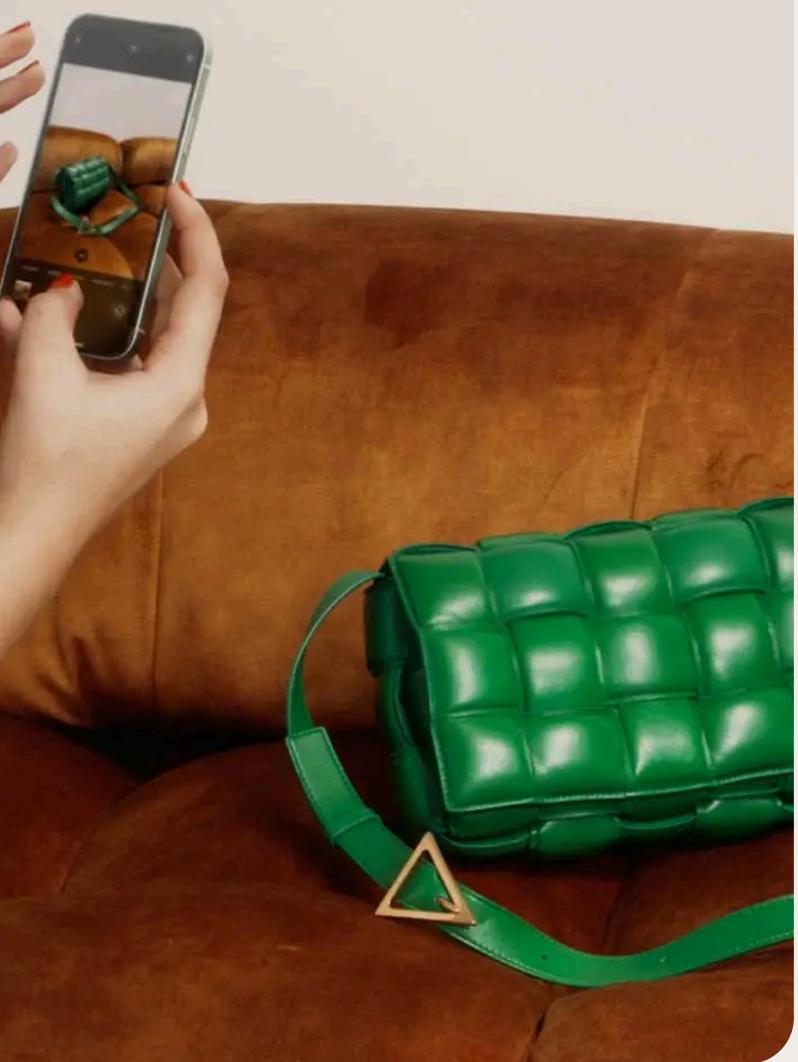
Problem

Results

Recommendations

Takeaways

Results



Vestiaire Collective **Product** Portfolio Insights

Vestiaire Collective **Seller** Portfolio Insights

Overview

Problem

Results

Recommendations

Takeaways

Products

Brand Analysis

About the Dataset

Number of products on the dataset

450.26K

Number of different product listed

6799

Number of brands

7664

Overview

Problem

Results

Recommendations

Takeaways

Products

Brand Analysis

Brand popularity according to number of products

Adidas
Chanel Balenciaga Nike
Valentino Garavani Yves Saint Laurent
Gucci Dolce & Gabbana Dior Hermès
Polo Ralph Lauren Louis Vuitton
Prada Versace
Fendi

TOP 3 BRANDS

GUCCI - D&G - Burberry

Gucci

- More than 21,000 items
- Highest number of sold items.

Why is Gucci Predominant?

- Strategic Partnership with Vestiaire Collective

Overview

Problem

Results

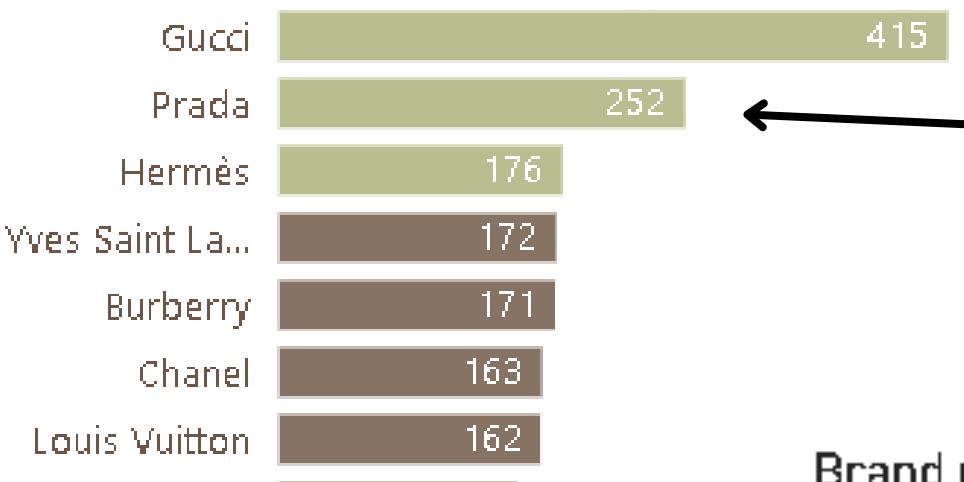
Recommendations

Takeaways

Products

Brand Analysis

Brand popularity for sold product



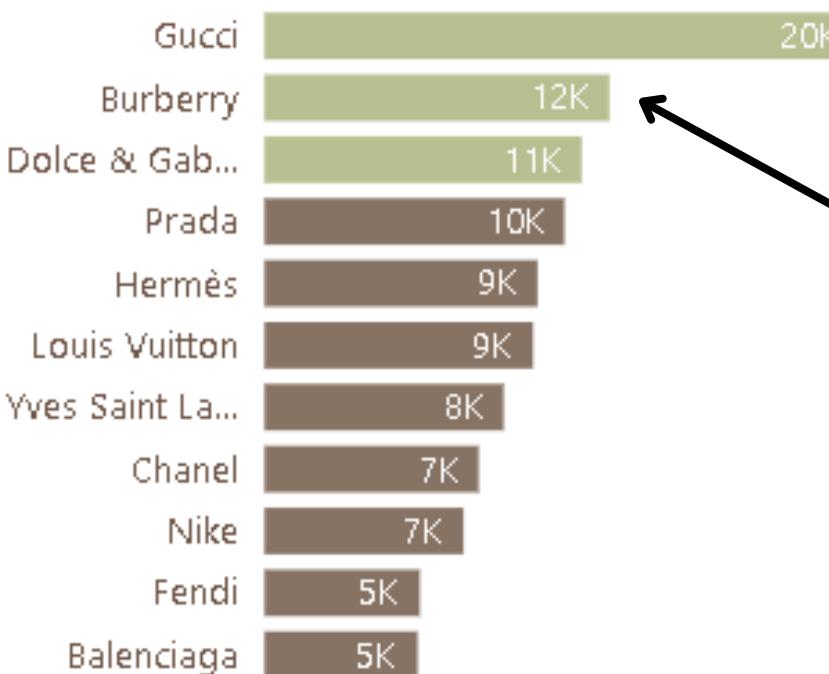
Prada

- Second in Sold items

Burberry

- Fifth in Sold items

Brand popularity for Unsold product



Burberry

- Second in Unsold items

Prada

- Fourth in Unsold items

BRAND DISPARITY

Burberry vs. Prada

Consumer preferences in brand

- Not equal to seller offering

Disproportionate volume of unsold inventory

- Oversaturation and mismatched demand

Overview

Problem

Results

Recommendations

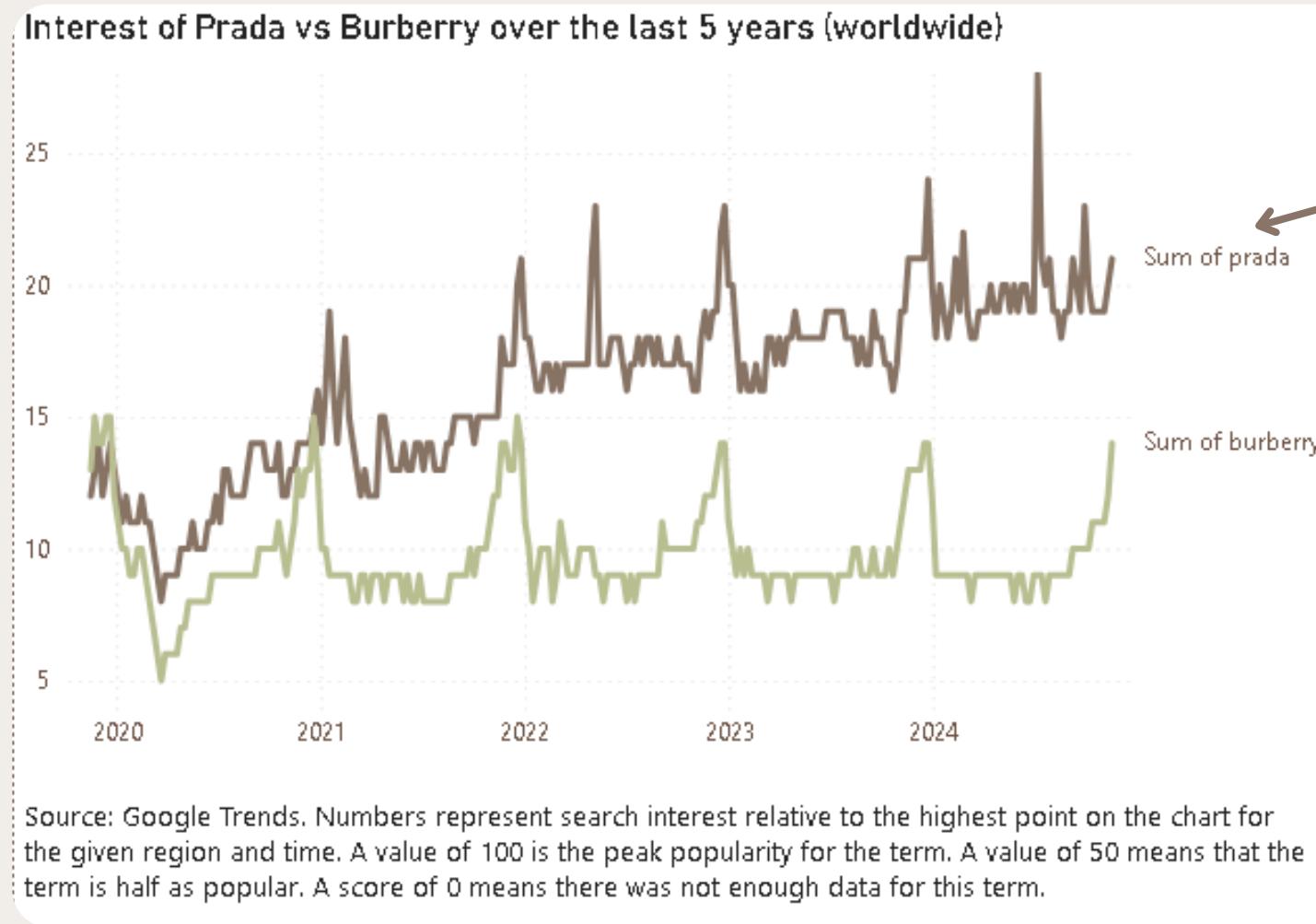
Takeaways

Products

Brand Analysis

An explanation to supply and demand discrepancy

Prada, Gucci and Burberry



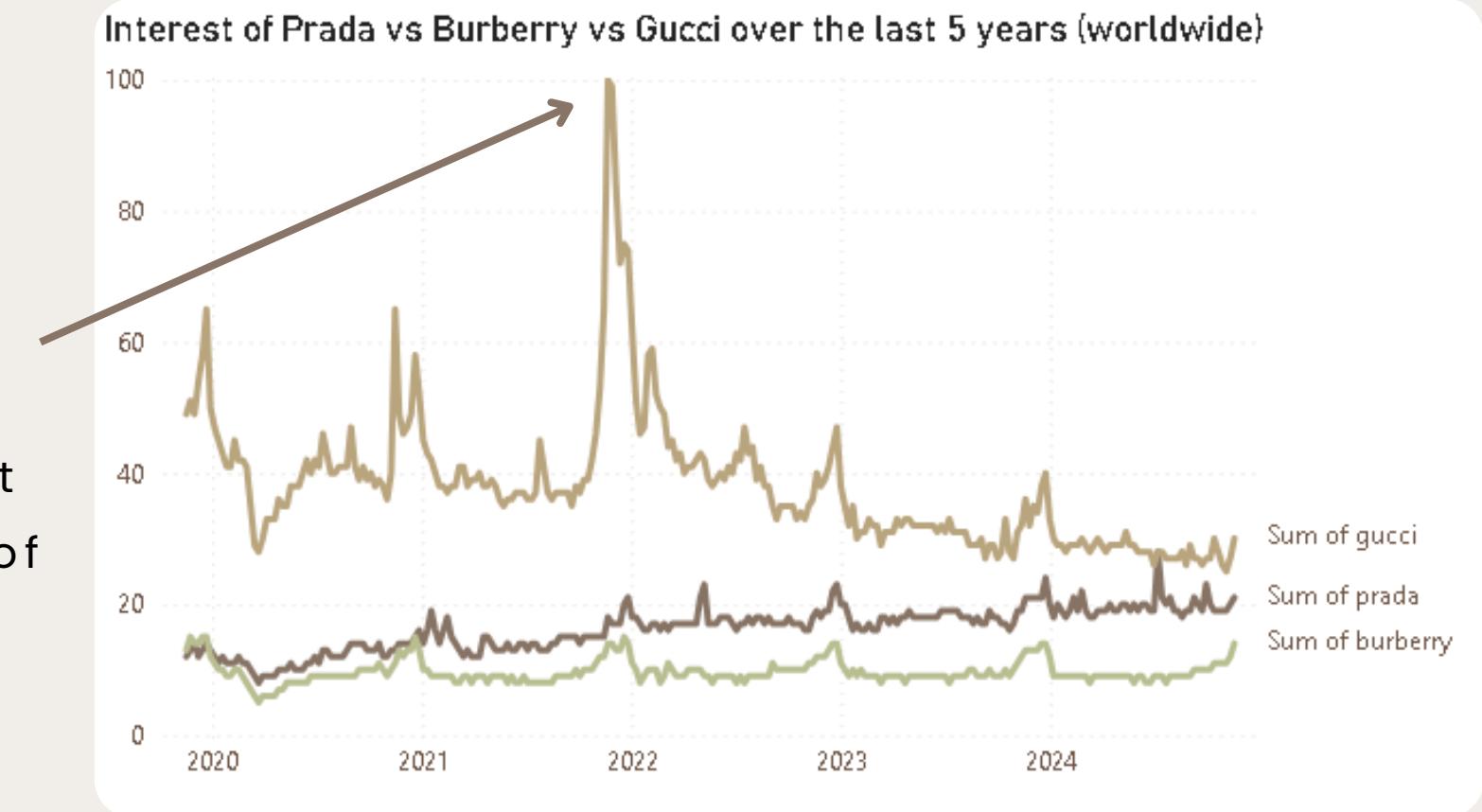
Prada with fewer listings than **Burberry**:

- Better alignment with buyer preferences
- Consistent search interest over time

Number of product listed per brand
Burberry 11925
Dolce & Gabbana 10955
Gucci 20625
Prada 10470

Gucci leads search interest

- Popularity of V.C.



Overview

Problem

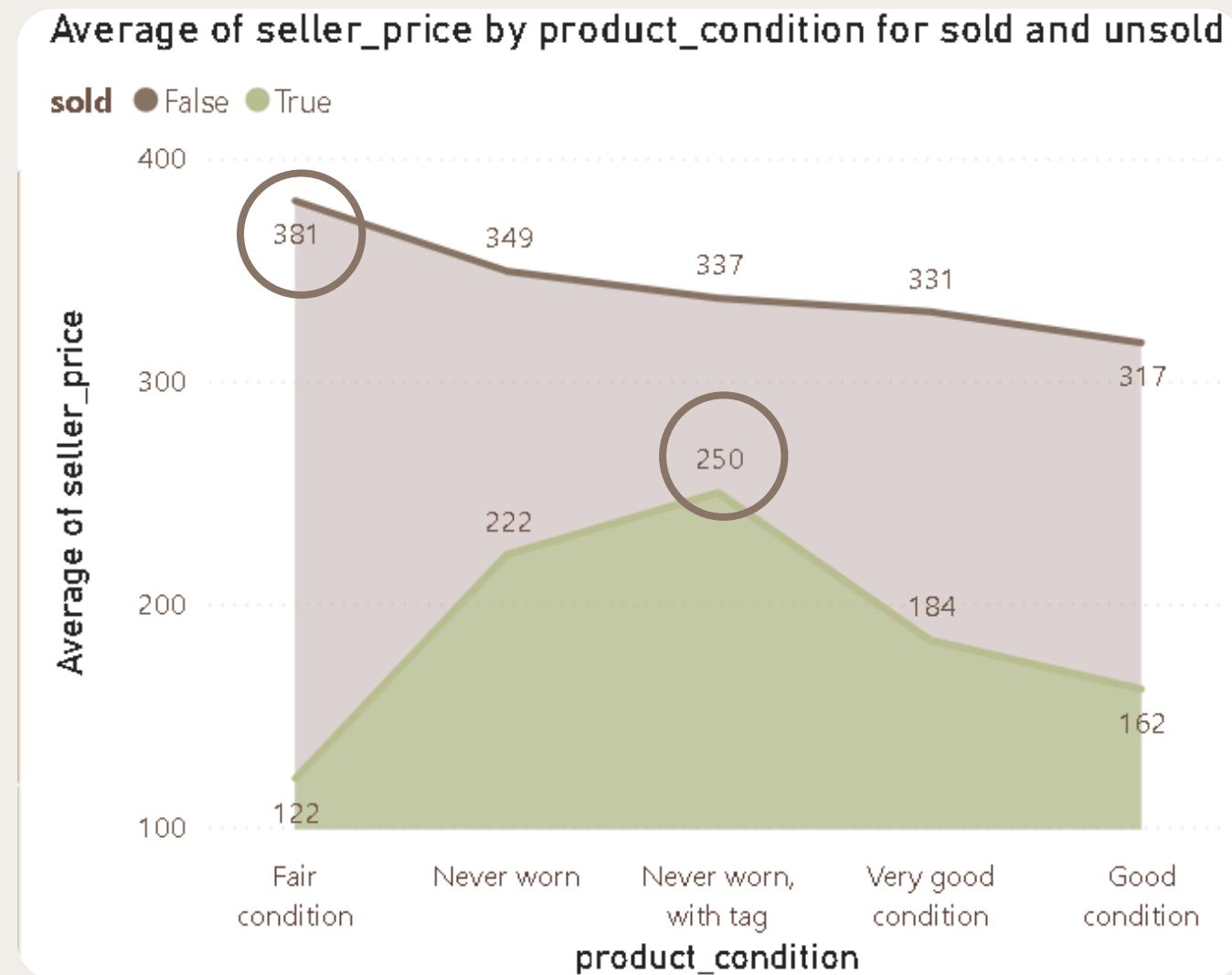
Results

Recommendations

Takeaways

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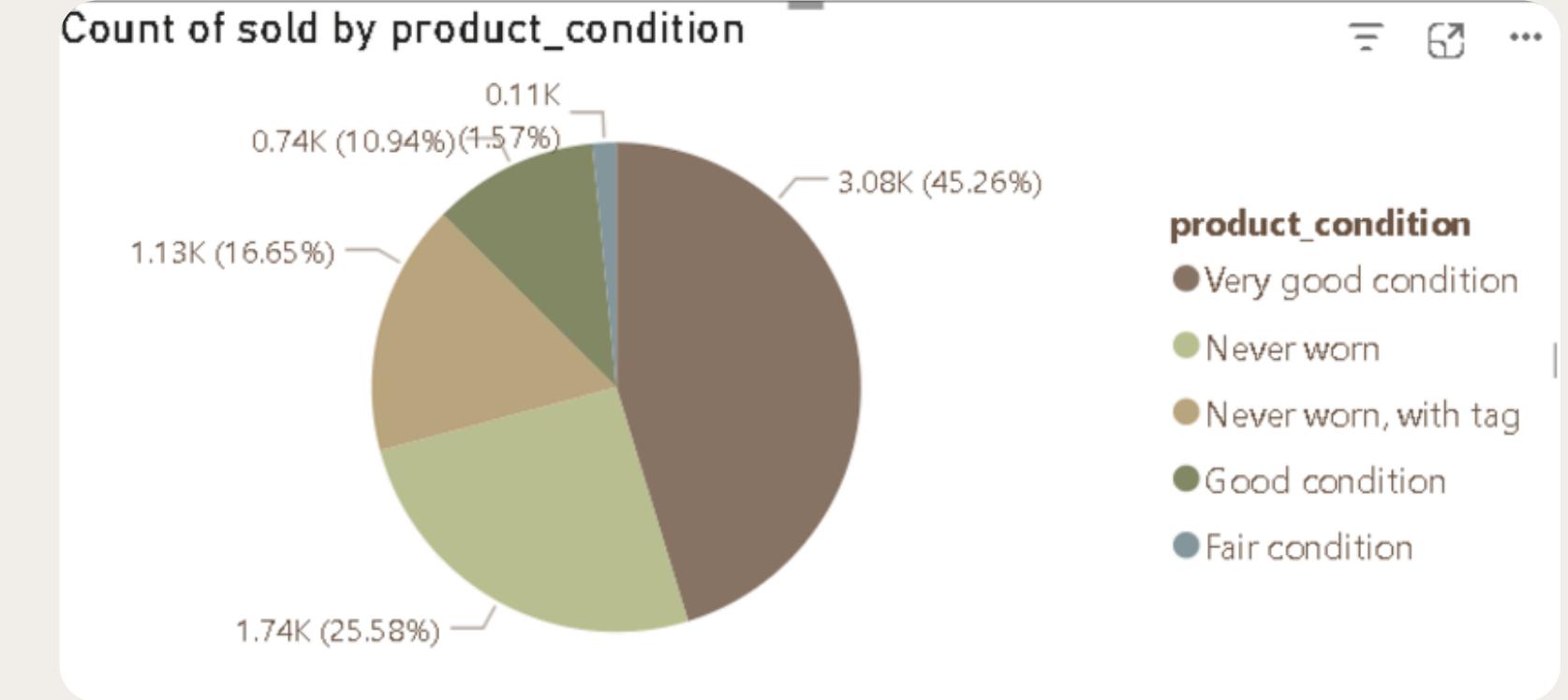
Condition and Material Analysis



Successful Pricing Patterns

Price aligned with condition = **higher sale**.

Overpricing items with poor condition = **inventory stagnation**.



Condition Matters

“very good condition” and “never worn”

- 70% of all sales
- Preferences for **reliable items**

Overview

Problem

Results

Recommendations

Takeaways

Products

Condition and Material Analysis



WHY “FAIR CONDITION” HAS THE HIGHEST AVERAGE PRICE?

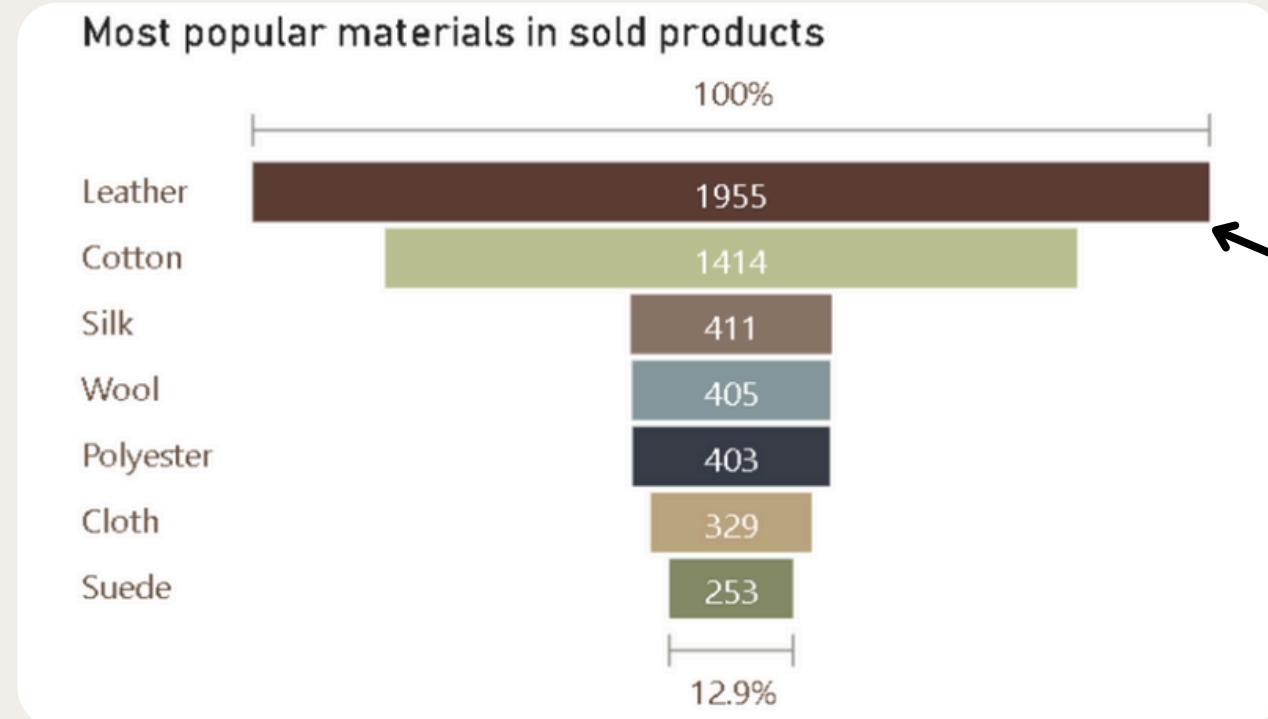
Omega product in “fair condition” priced at **\$1,620** = mismatch between condition and pricing expectations.

- Relatively unpopular brand +
- Lower condition +
- Above avg price =
- Product unsold**



Products

Condition and Material Analysis



For the Top 2 materials, the preferred condition is "Very Good" and not "never worn". Why?

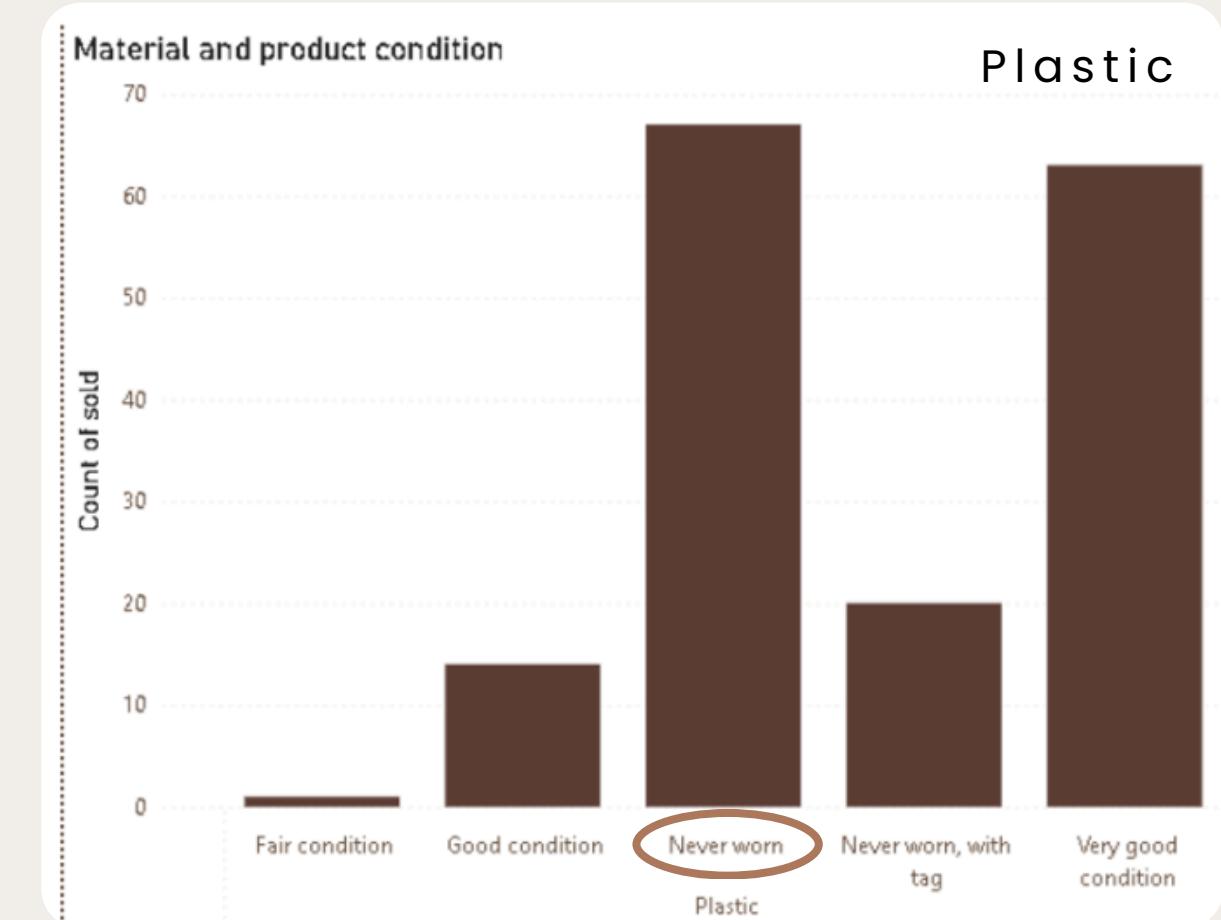
1. Brand-new items prices are not enough low compared to stores.
2. Buyer's acceptance of used item.

Natural fabrics are the **most popular** because associated with **durability**

What about **least popular?**

Plastic most successful condition is "**Never worn**"

= Less durable material, so more at risk to tear.



Overview

Problem

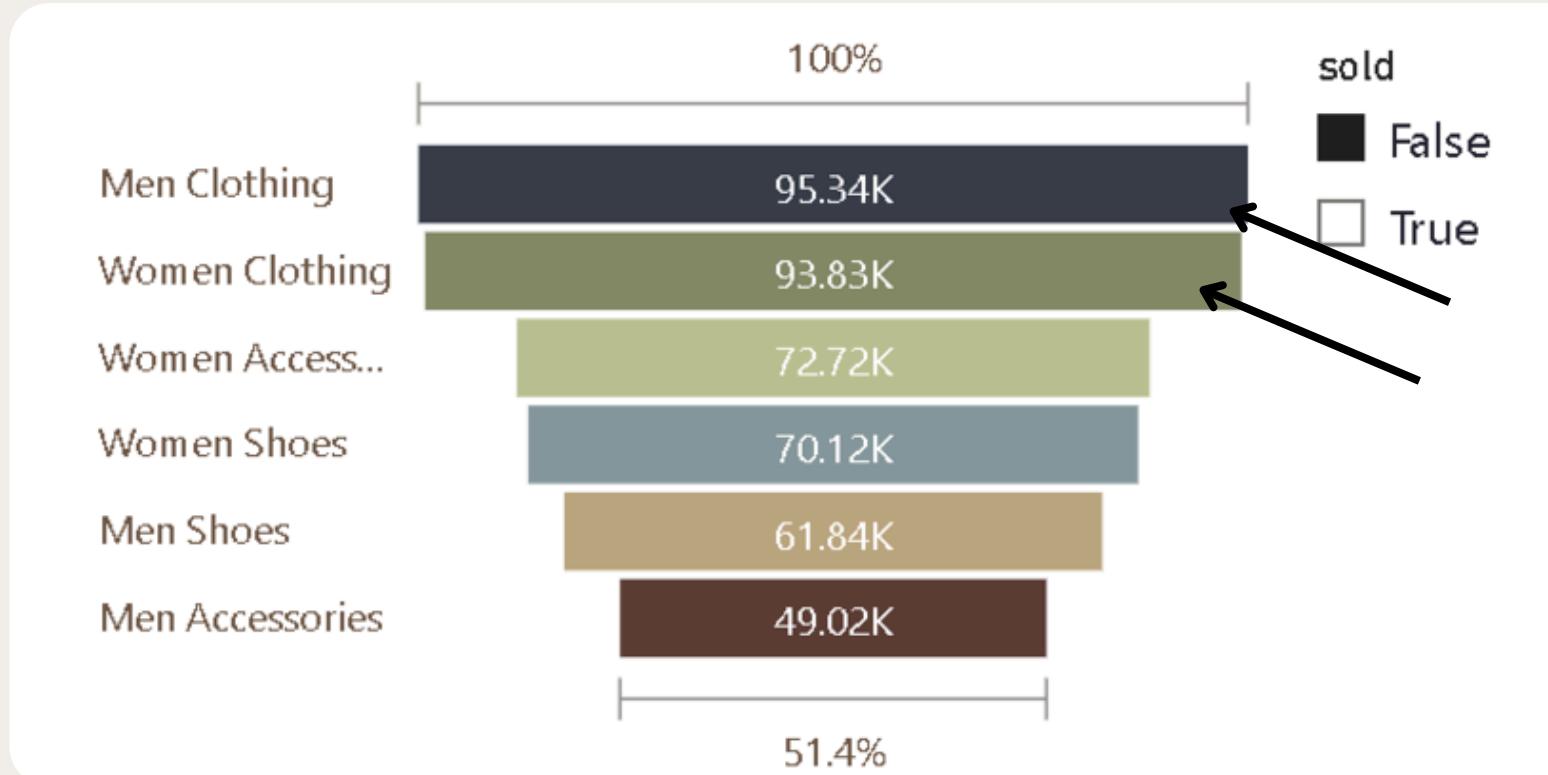
Results

Recommendations

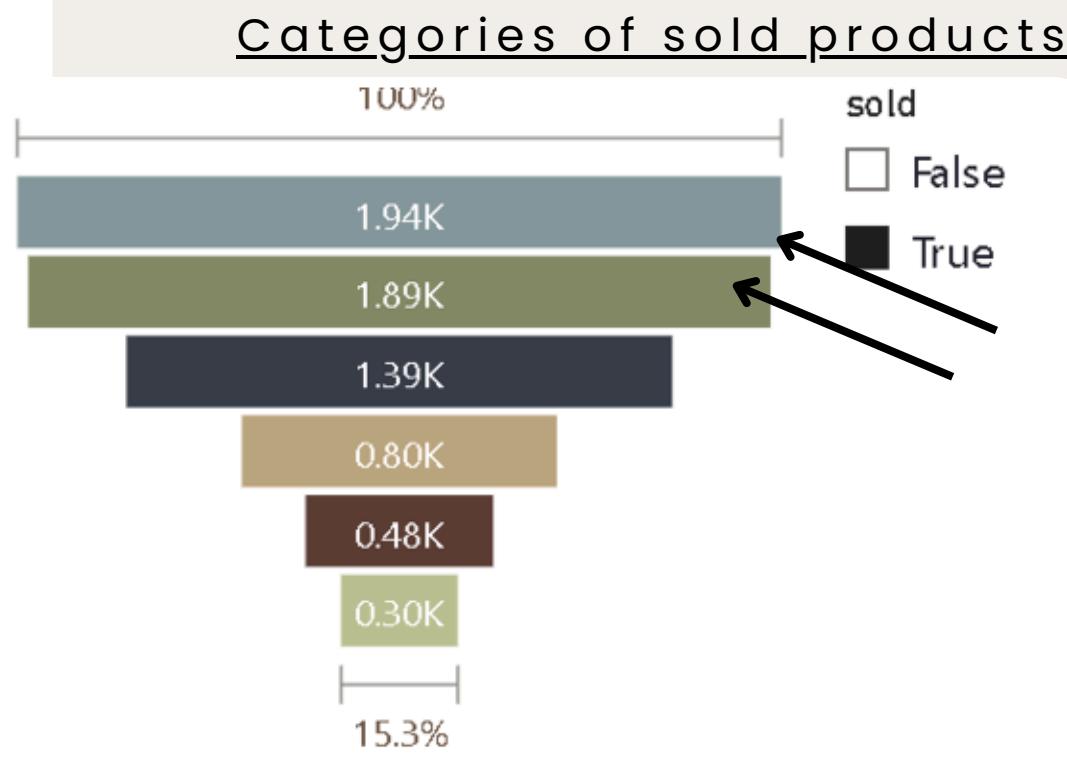
Takeaways

Products

Category Analysis



- **Disparity** between categories in terms of sales performance.
- **Women's Shoes and Clothing = top performers**
- **Men's Clothing and Women's Accessories = high unsold.**
 - Overestimated demand



Overview

Problem

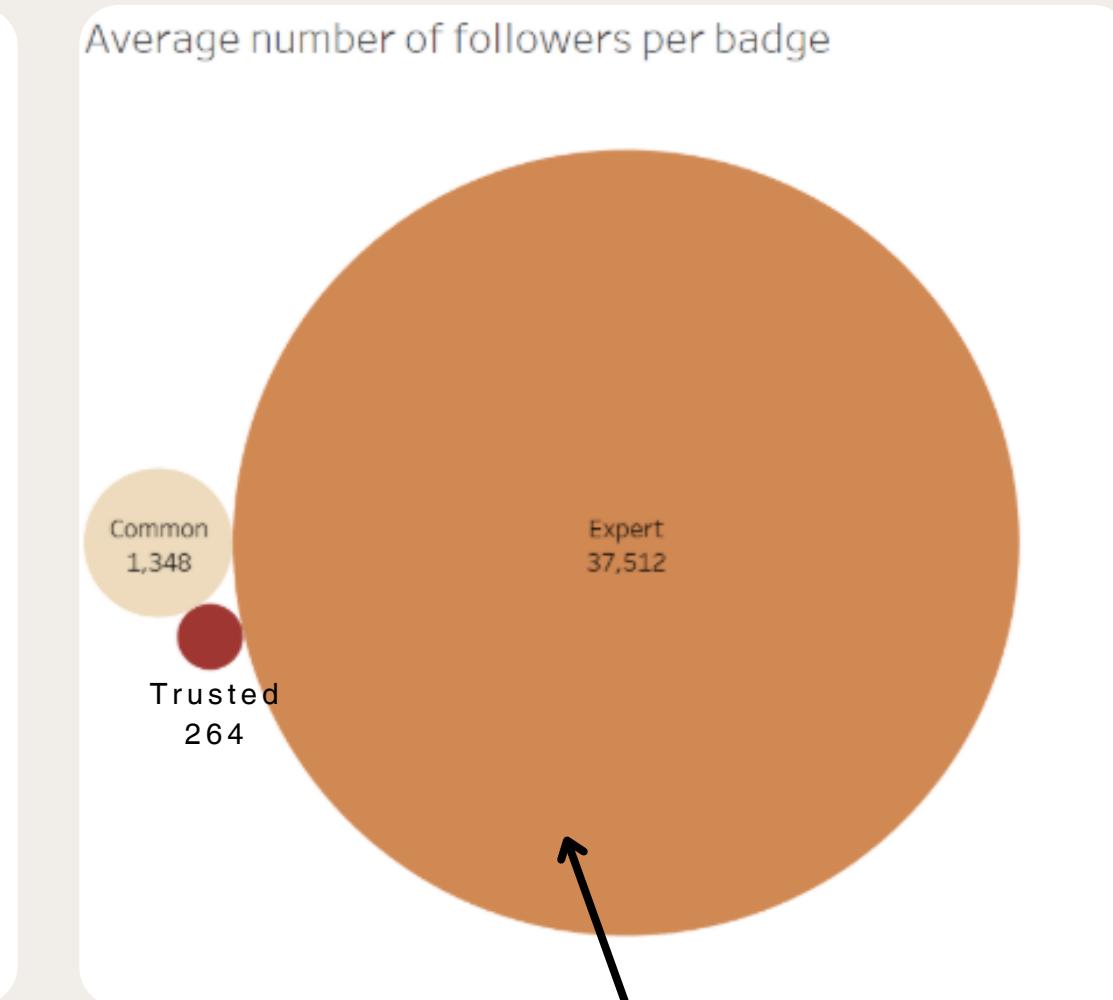
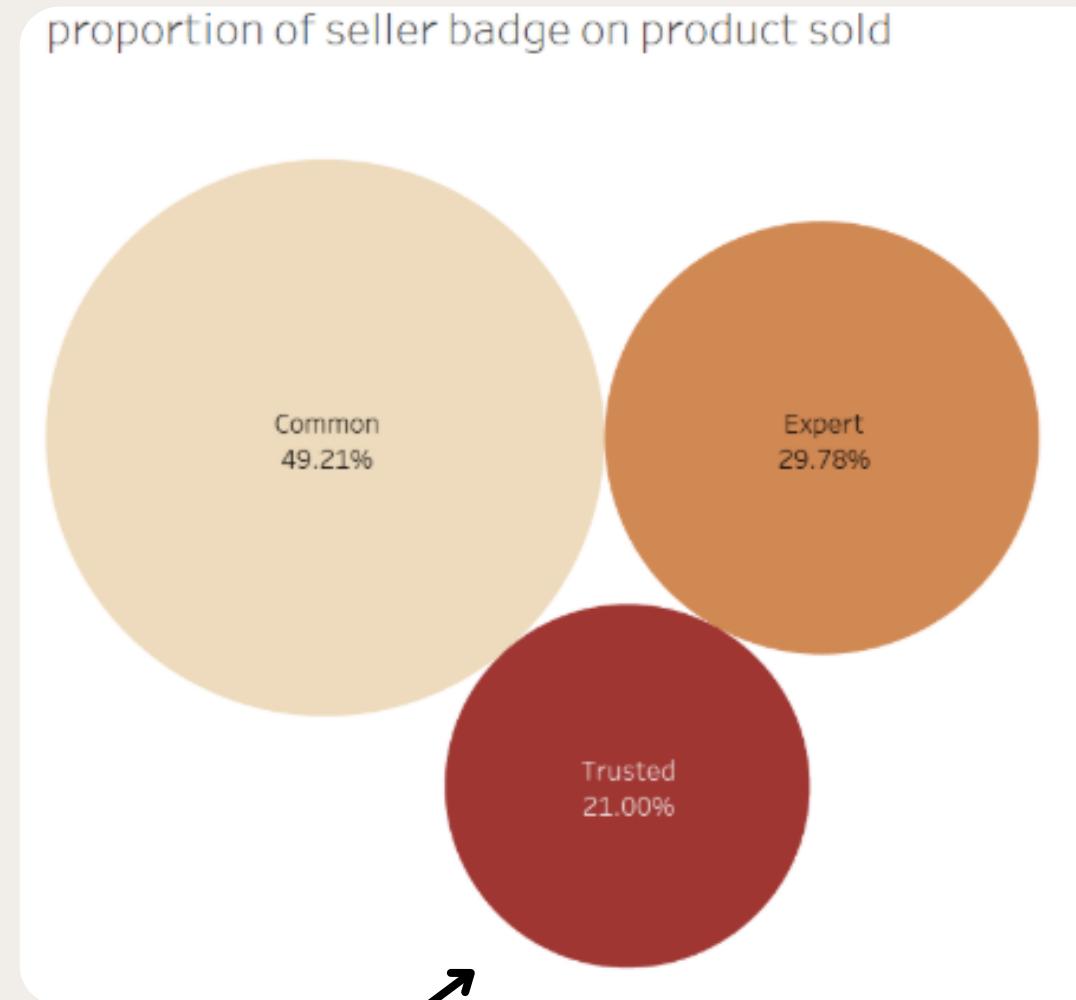
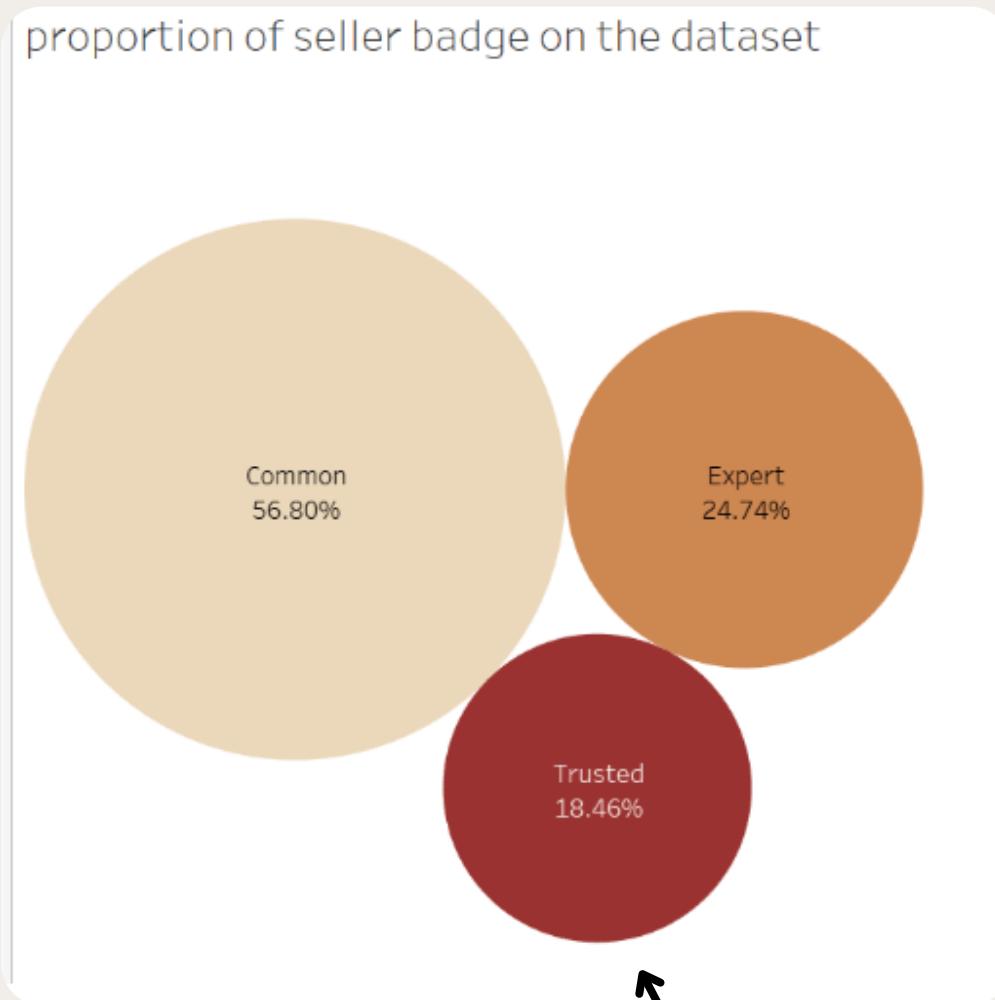
Results

Recommendations

Takeaways

Seller

Seller Badge Analysis



Higher proportion of
Trusted badges in
Sold

Expert sellers have
the highest number of
followers on avg

Overview

Problem

Results

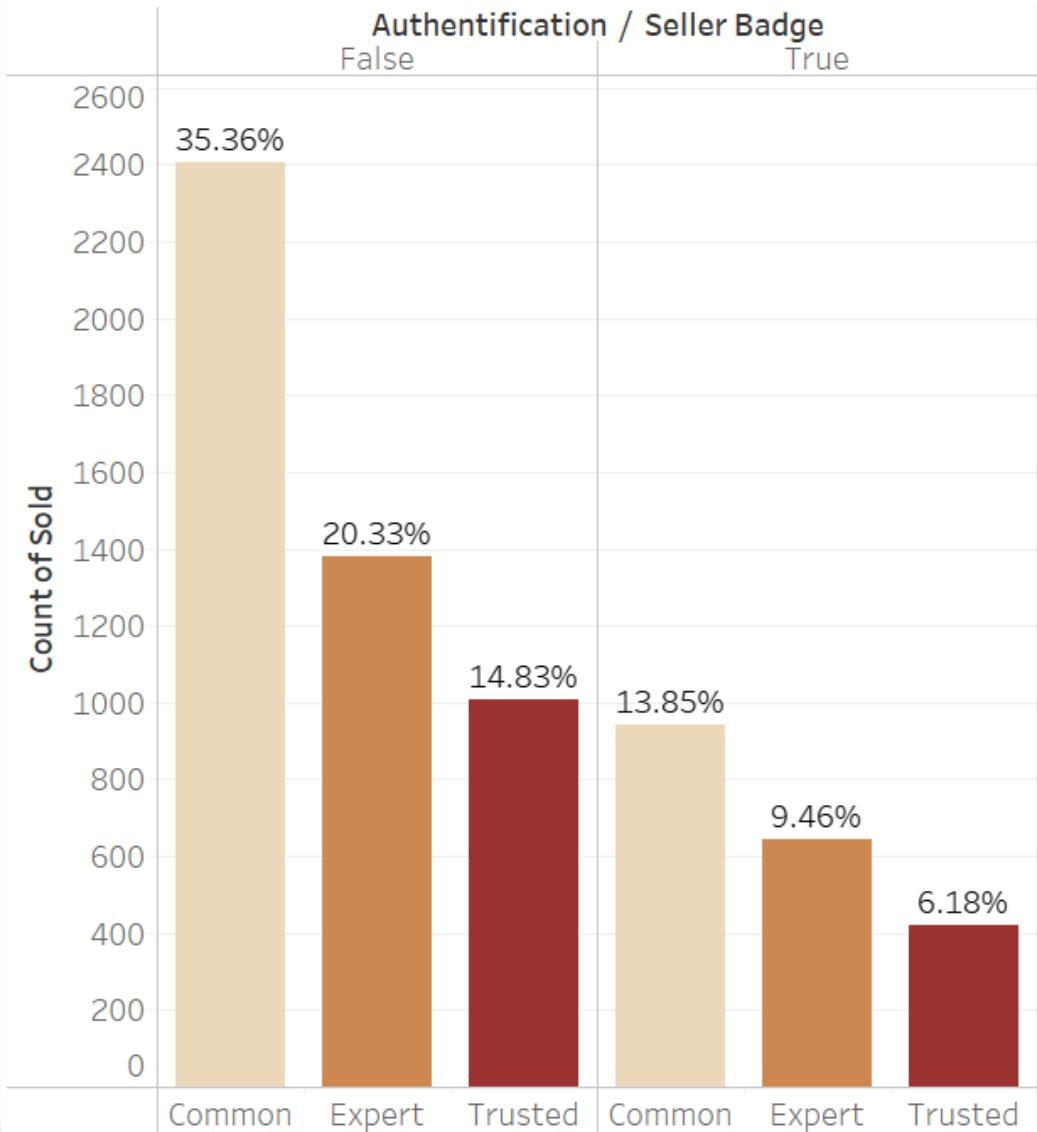
Recommendations

Takeaways

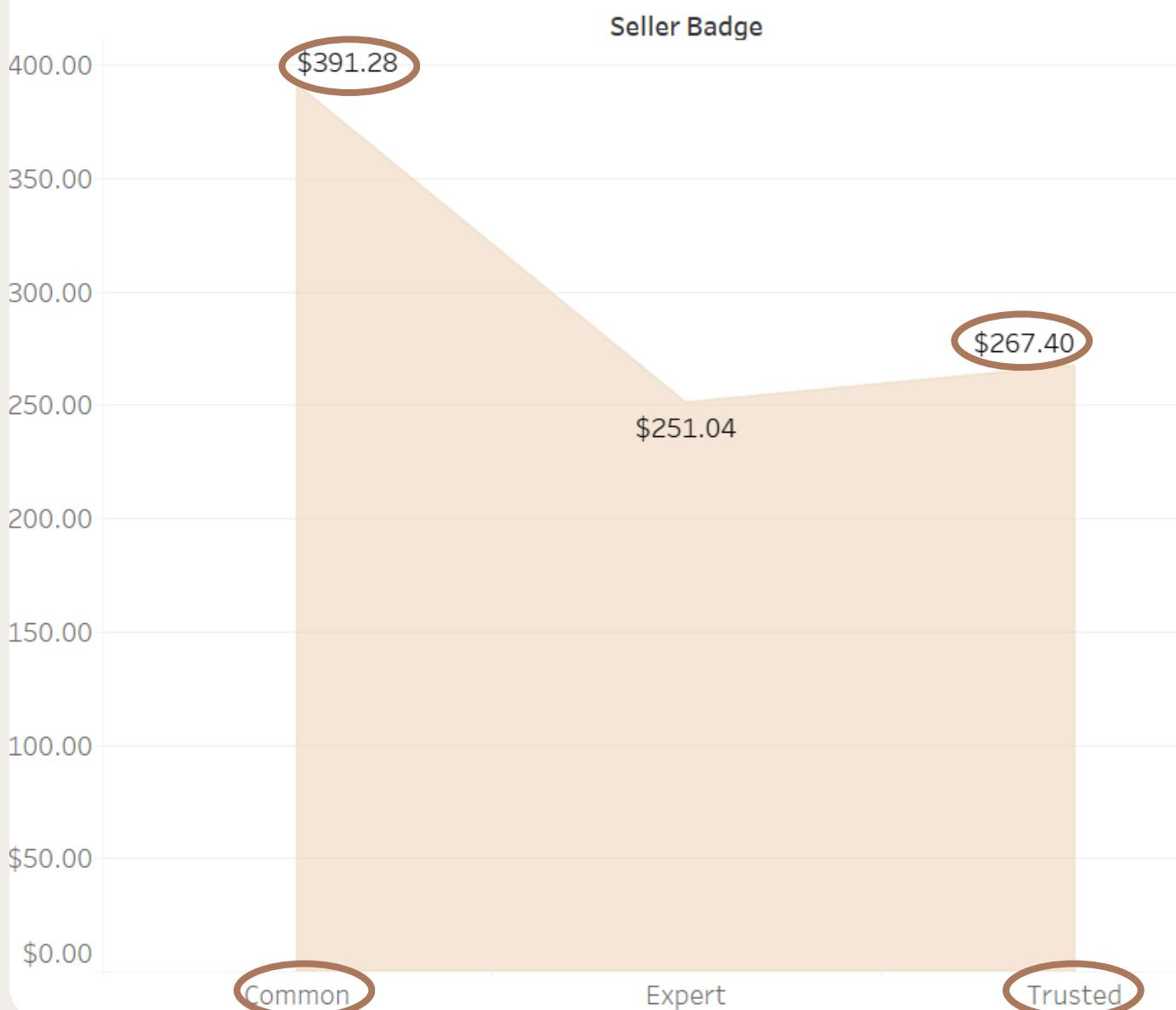
Seller

Seller Badge Analysis

proportion of sold product per badges and it received authentication or not



of seller price per badge



“Common sellers” list the most expensive product on average.

Overview

Problem

Results

Recommendations

Takeaways

Seller

Location Analysis

France, Italy, the UK and the United States have the highest sellers performance.

Number of seller per country

Seller Country =

Italy	34,170
France	24,291
United Kingdom	13,221
United States	10,655
Germany	7,768
Spain	6,055
Romania	2,842
Poland	2,490
Netherlands	2,226
Greece	2,108
Hong Kong	2,074
Belgium	1,878
Sweden	1,802
Australia	1,558
Switzerland	1,436
Austria	1,409
Denmark	1,200
Portugal	1,091

Seller country per...



product sold

product sold
and average

sum of seller
earning

sum of
product listed



Count of Sold

1 1,777



Overview

Problem

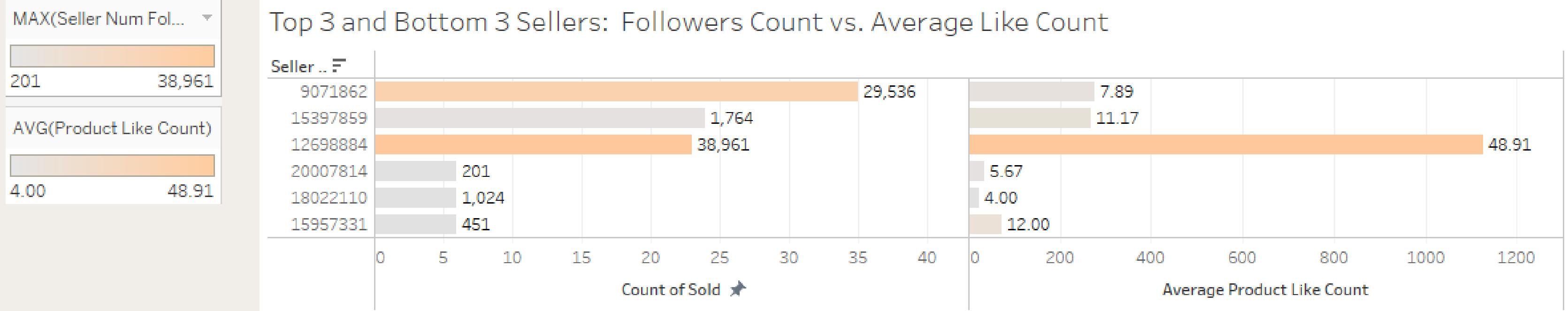
Results

Recommendations

Takeaways

Seller

Engagement Analysis



Contradictory Results

- Increased followers does not necessarily lead to a growth in engagement

Overview

Problem

Results

Recommendations

Takeaways

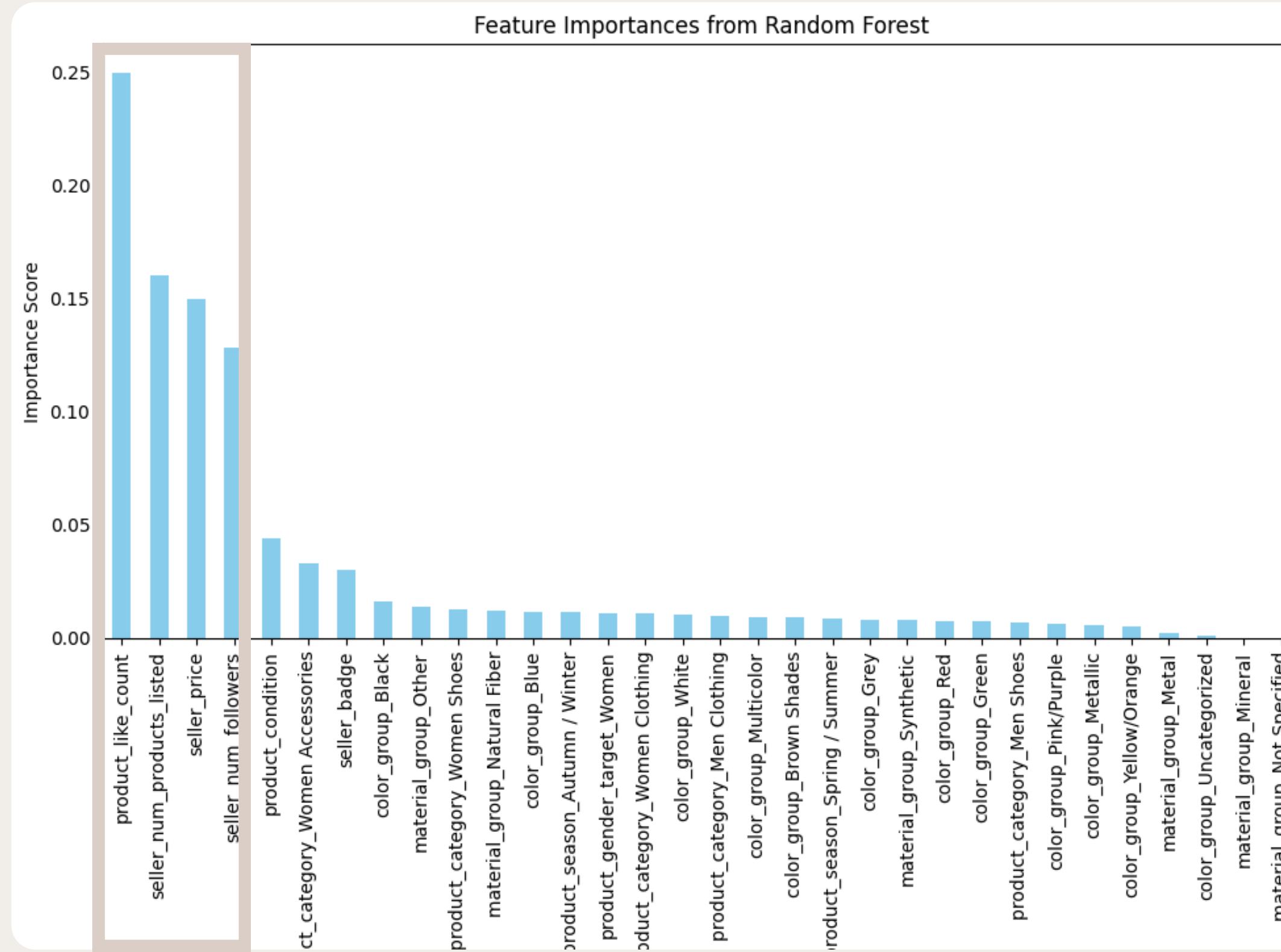
Recommendations

01. Focus on key criterias.
02. Boost demand for unsold brands by fostering partnerships.
03. Customized recommendations for sellers.



Focus on key criterias

First Recommendation



IMPORTANT VARIABLES TO FOCUS AS A SELLER

product_like_count	0.249575
seller_num_products_listed	0.160166
seller_price	0.149539
seller_num_followers	0.128189

Natural materials are also key considerations to align with V.C. positioning.

Overview

Problem

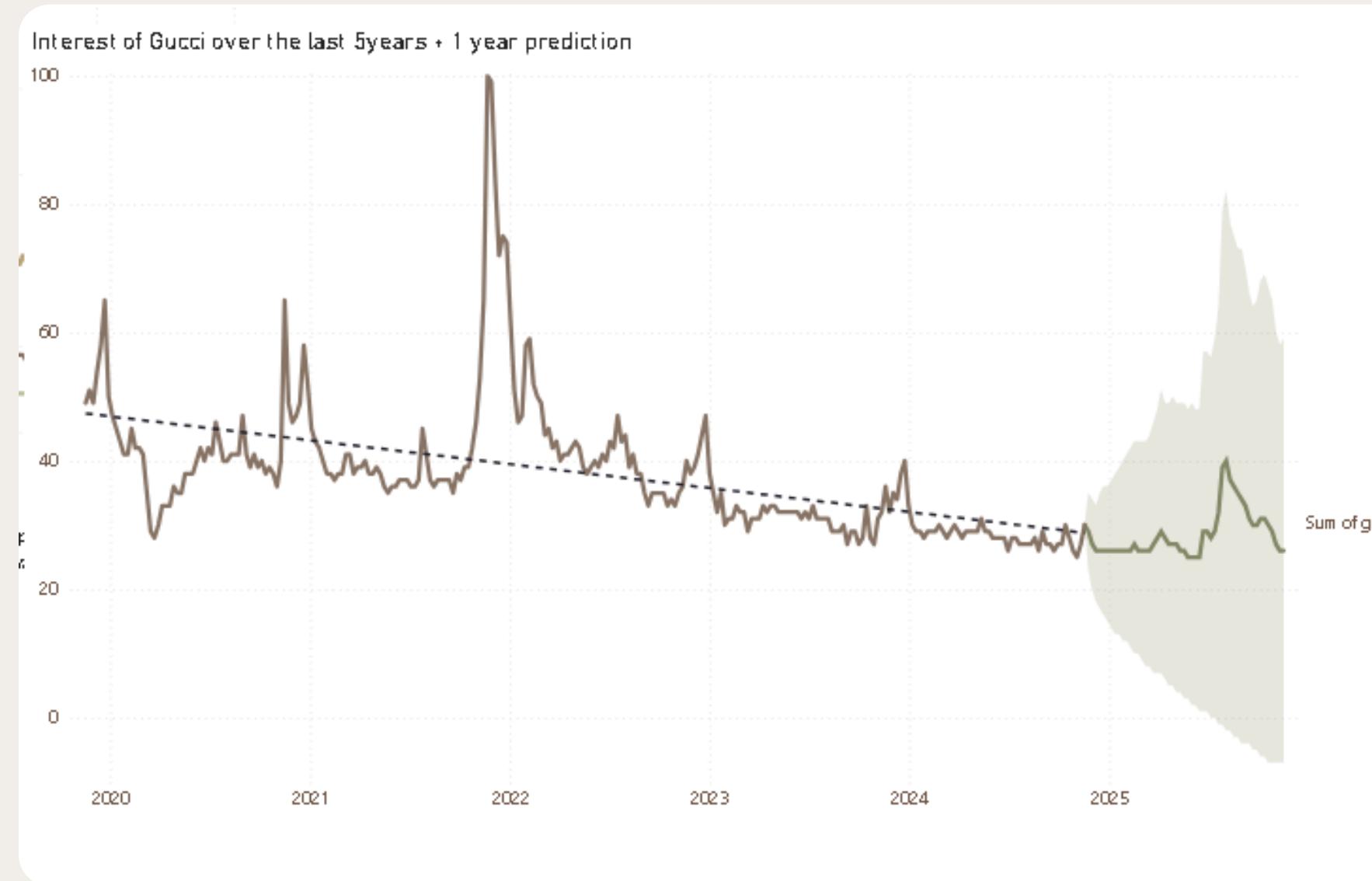
Results

Recommendations

Takeaways

Increase Partnerships

Second Recommendation



Gucci's forecasted interest shows no major upcoming spike.

- Space for other luxury brands to gain **visibility** on the platform.

A lot of brands are available on the platform but not sold (e.g. D&G)

Explore successful partnerships like with Gucci's

Vestiaire
Collective

X ?



PRADA



...

Overview

Problem

Results

Recommendations

Takeaways

Personnalised advices to sellers

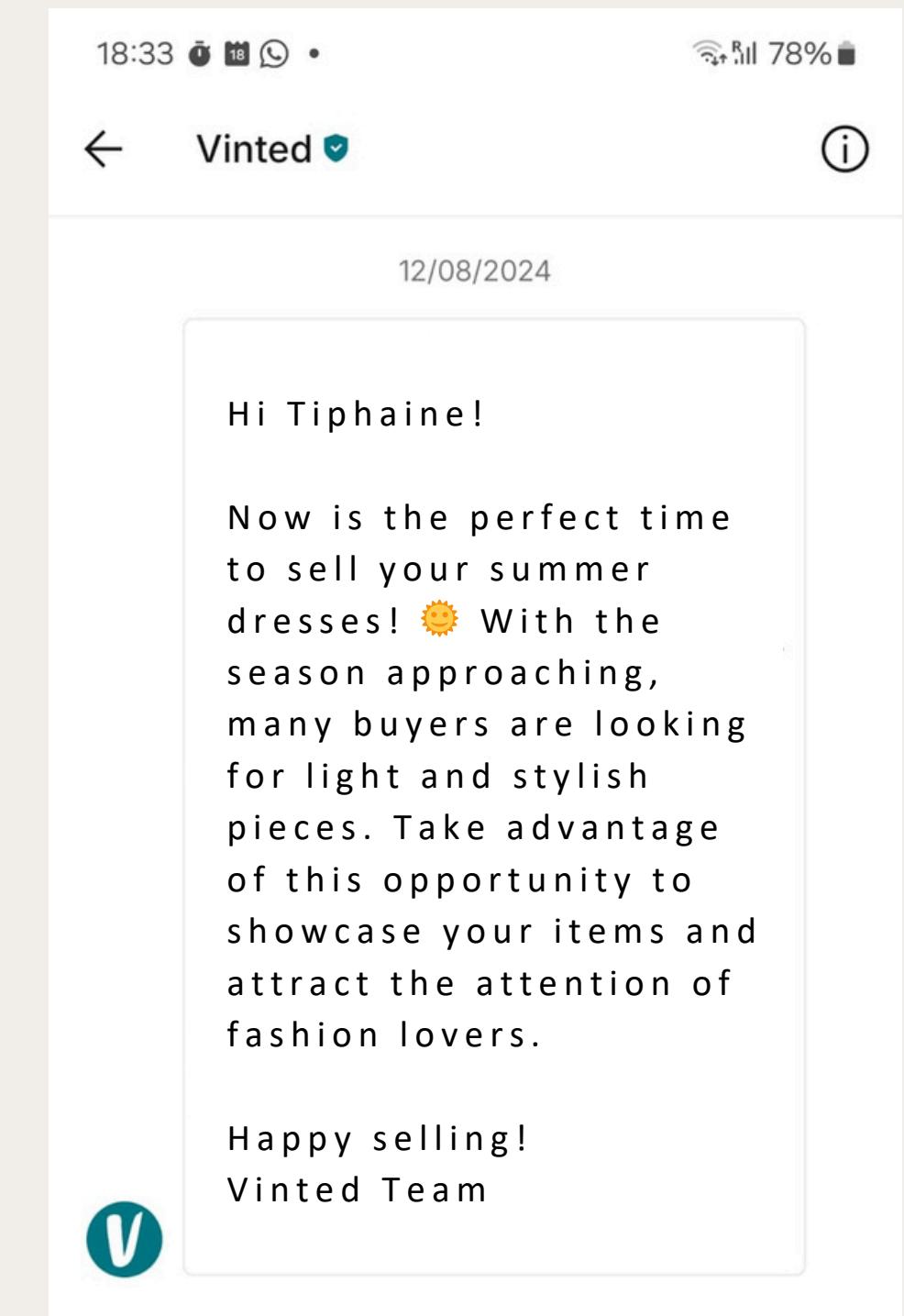
Third Recommendation



Inspiration from Vinted's strategy

- Send personalized messages to sellers, advising them on the best products to list at specific times to boost sales.

Helps sellers list their products at the right time and increases sales for less popular categories.



Overview

Problem

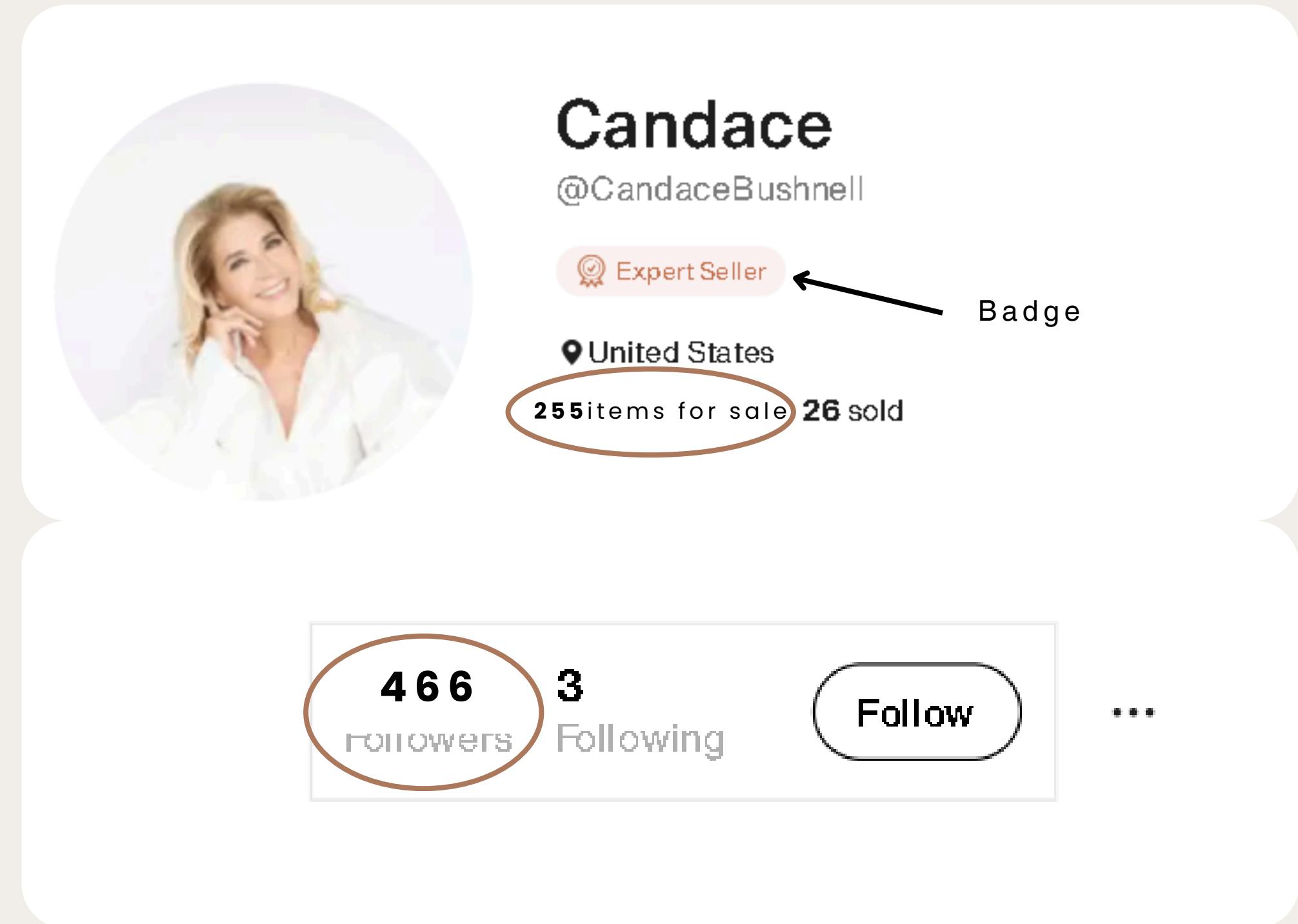
Results

Recommendations

Takeaways

Mock Seller

Takeaways



Overview

Problem

Results

Recommendations

Takeaways

Mock Product

Takeaways

Gucci ← Brand
Glitter maxi dress ← Category
Black Friday

22 ❤ Number of likes

🕒 EXPRESS DELIVERY

USD 1,822 ← Seller price
40 IT Sizing guide

Very good condition ← Condition
Silver, glitter, cotton ← Material

Physical authentication included

Use WELCOMEVC for 10% off your first order (app only). ⓘ

Add to Bag Make an Offer Chat

Vestiaire Collective United States More info
Estimated delivery: 3 working day(s) More info
Quality control completed More info

The product is a long, flowing, silver-grey maxi dress with a subtle glitter texture. It features a ruffled neckline and long sleeves. There are five smaller thumbnail images below the main image, showing different views of the dress.

Overview

Problem

Results

Recommendations

Takeaways

Thank You.

Any questions?

