Data Visualization and Dashboard Portfolio
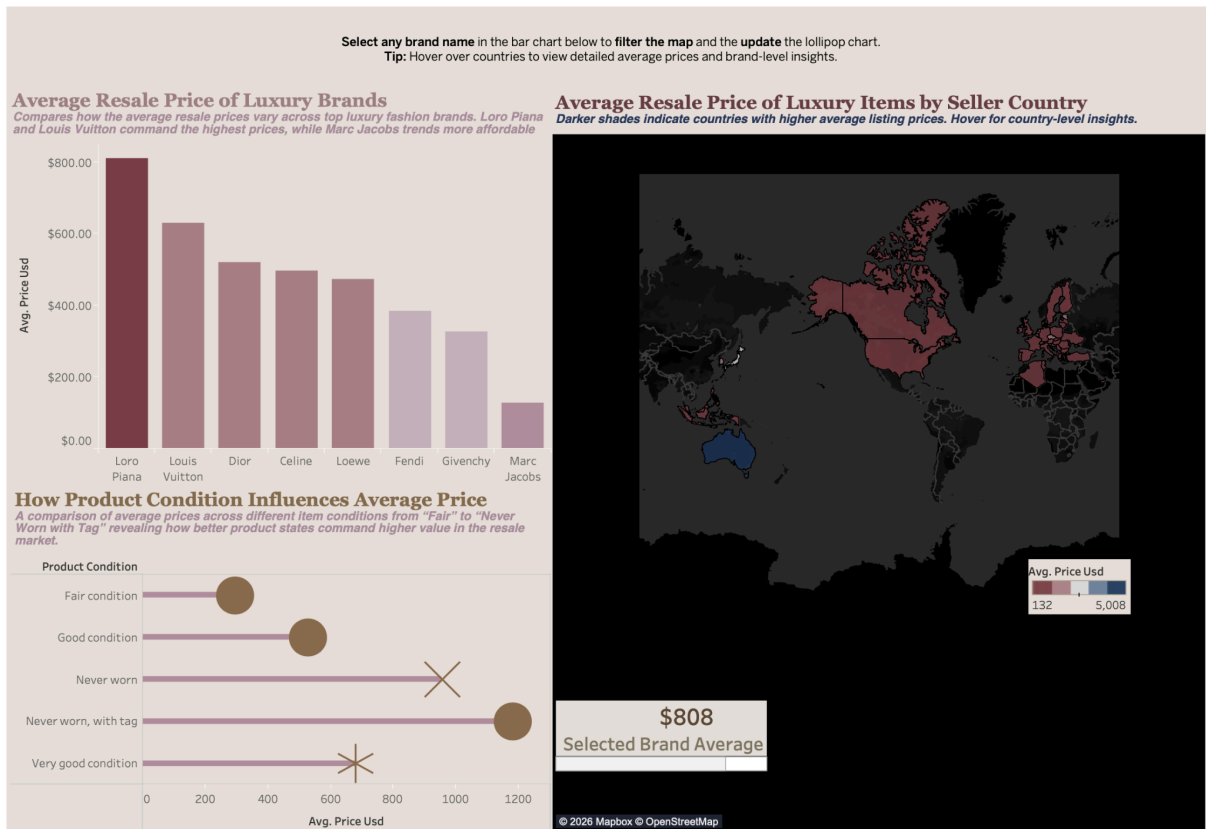
Portfolio Overview

This document presents a curated set of analytics dashboards developed to support pricing analysis, customer segmentation, and marketplace performance evaluation in the global luxury resale market. The dashboards are designed to translate complex datasets into clear, actionable insights that support business decision making. Emphasis is placed on interpretability, stakeholder usability, and alignment with real world business questions.

Each dashboard demonstrates a progression from high level market understanding to focused, brand specific analysis, reflecting an end to end analytical approach commonly required in senior and lead analytics roles.

Dashboard 1: Pricing Drivers and Geographic Trends

Overview:

This dashboard analyzes how resale pricing varies across luxury brands, seller locations, and product conditions. It integrates brand level comparisons with geographic insights to highlight where pricing premiums emerge and how market dynamics differ by region.

Key Questions Addressed:
- Which luxury brands command the highest average resale prices
- How seller country and geography influence listing prices
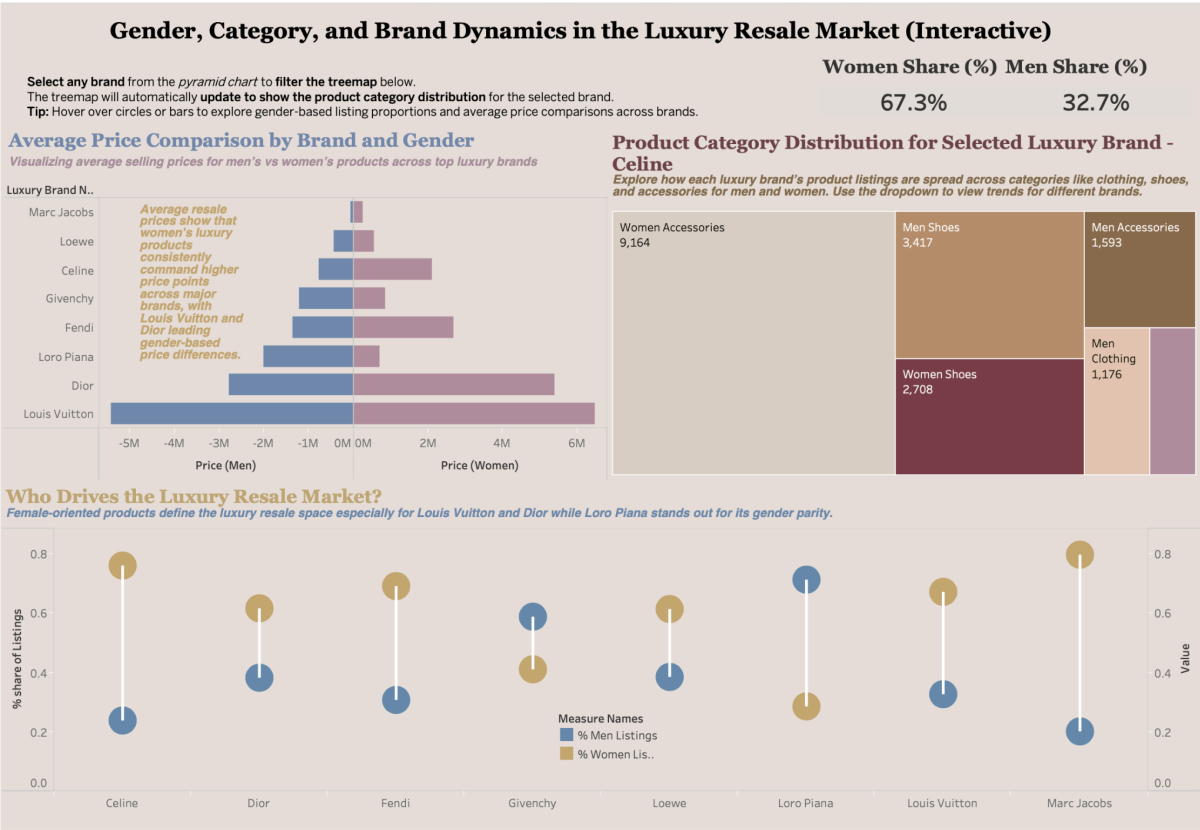- How product condition contributes to observed price variation

Key Insights:
- Heritage luxury brands consistently achieve higher average resale prices compared to mid tier brands
- Product condition is a primary driver of price variation, with top condition items commanding substantial premiums
- Seller geography shows meaningful variation, with certain regions exhibiting consistently higher average resale prices

Business Value:
This dashboard enables pricing and marketplace teams to identify premium segments, understand regional pricing behavior, and refine pricing guidance based on brand strength and condition sensitivity. It supports more consistent and transparent pricing strategies across markets.

Dashboard 2: Gender, Category, and Brand Dynamics

Gender, Category, and Brand Dynamics in the Luxury Resale Market (Interactive)

Select any brand from the *pyramid chart* to **filter the treemap** below.
The treemap will automatically **update to show the product category distribution** for the selected brand.
Tip: Hover over circles or bars to explore gender-based listing proportions and average price comparisons across brands.

Women Share (%)   Men Share (%)
67.3%   32.7%

Average Price Comparison by Brand and Gender
Visualizing average selling prices for men's vs women's products across top luxury brands

Average resale prices show that women's luxury products consistently command higher price points across major brands, with Louis Vuitton and Dior leading gender-based price differences.

Product Category Distribution for Selected Luxury Brand – Celine
Explore how each luxury brand's product listings are spread across categories like clothing, shoes, and accessories for men and women. Use the dropdown to view trends for different brands.

Women Accessories 9,164
Men Shoes 3,417
Men Accessories 1,593
Women Shoes 2,708
Men Clothing 1,176

Who Drives the Luxury Resale Market?
Female-oriented products define the luxury resale space especially for Louis Vuitton and Dior while Loro Piana stands out for its gender parity.

Measure Names
■ % Men Listings
■ % Women Lis..

Overview:
This dashboard examines how product categories and customer segments contribute to overall marketplace composition and pricing behavior. It highlights differences in listing share and pricing across men and women focused products while enabling brand level comparisons.

Key Questions Addressed:
- How product listings are distributed across customer segments
- Whether pricing behavior differs by gender focused categories
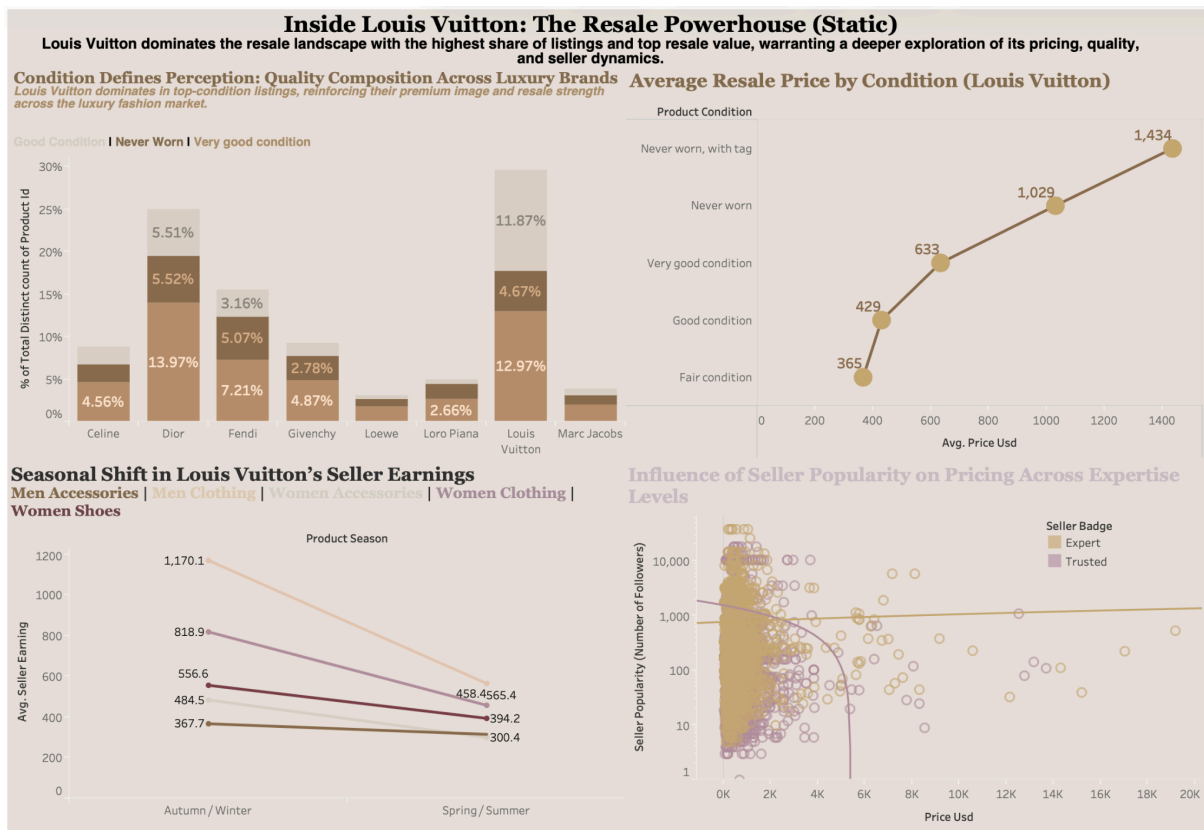- How brand portfolios vary in terms of category and segment composition

Key Insights:
- Women focused products represent a larger share of total listings across most major luxury brands
- Women focused categories consistently command higher average resale prices
- Certain brands exhibit more balanced gender representation, while others show strong segment specialization

Business Value:
This dashboard supports segmentation driven decision making by helping stakeholders understand demand composition and pricing differences across customer segments. The insights can inform category investment, assortment planning, and targeted marketplace strategies.

Dashboard 3: Brand Level Deep Dive – Louis Vuitton Case Study

Inside Louis Vuitton: The Resale Powerhouse (Static)
Louis Vuitton dominates the resale landscape with the highest share of listings and top resale value, warranting a deeper exploration of its pricing, quality, and seller dynamics.

Overview:

This dashboard provides a focused, brand level analysis of Louis Vuitton to illustrate how deeper investigation can uncover drivers of performance within a single high impact brand. The analysis integrates product condition, seasonality, and seller behavior to explain resale performance.

Key Questions Addressed:

- How product condition influences resale pricing within a single brand
- How seasonal trends affect seller earnings across categories
- Whether seller popularity and credibility correlate with pricing outcomes

Key Insights:

- Top condition Louis Vuitton items account for a disproportionate share of high value listings
- Seasonal patterns reveal higher average seller earnings during autumn and winter compared to spring and summer
- Seller popularity and credibility are associated with higher average prices, though diminishing returns are observed at higher popularity levels

Business Value:

This dashboard demonstrates how brand specific deep dives can inform pricing optimization, seller quality frameworks, and seasonal strategy planning. It reflects the type of focused analysis often required to support leadership decisions for high value product segments.

Design and Development Approach:

All dashboards were developed using Tableau with a focus on clarity, consistency, and business relevance. Data preparation and feature engineering were performed within Tableau using calculated fields, data relationships, and structured aggregations to ensure accuracy and consistency across analyses.

Design principles applied across dashboards include:
- Clear alignment between visuals and business questions
- Consistent use of scales and color palettes to support comparison
- Limited but purposeful interactivity to enhance insight discovery
- Layouts optimized for executive and stakeholder review

Summary:
This portfolio demonstrates my approach to data visualization as a strategic decision support tool rather than a reporting artifact. By combining pricing analysis, segmentation insights, and brand level deep dives, the dashboards illustrate how analytics can be used to guide business strategy, improve transparency, and support data driven decision making at scale.

The structure and insights presented align closely with the expectations of senior and lead analytics roles that require both technical rigor and strong business communication skills.