

A top-down view of a wooden surface. In the upper center, a large pile of dark brown coffee beans is scattered. A metal scoop is filled with beans, resting on the pile. A single star anise is placed near the scoop. To the right, a white ceramic cup filled with a latte and a heart-shaped milk foam design sits on a white saucer. A metal spoon lies on the wooden surface next to the saucer. The background is a light-colored wooden plank surface.

Coffee Chain Sales Analysis

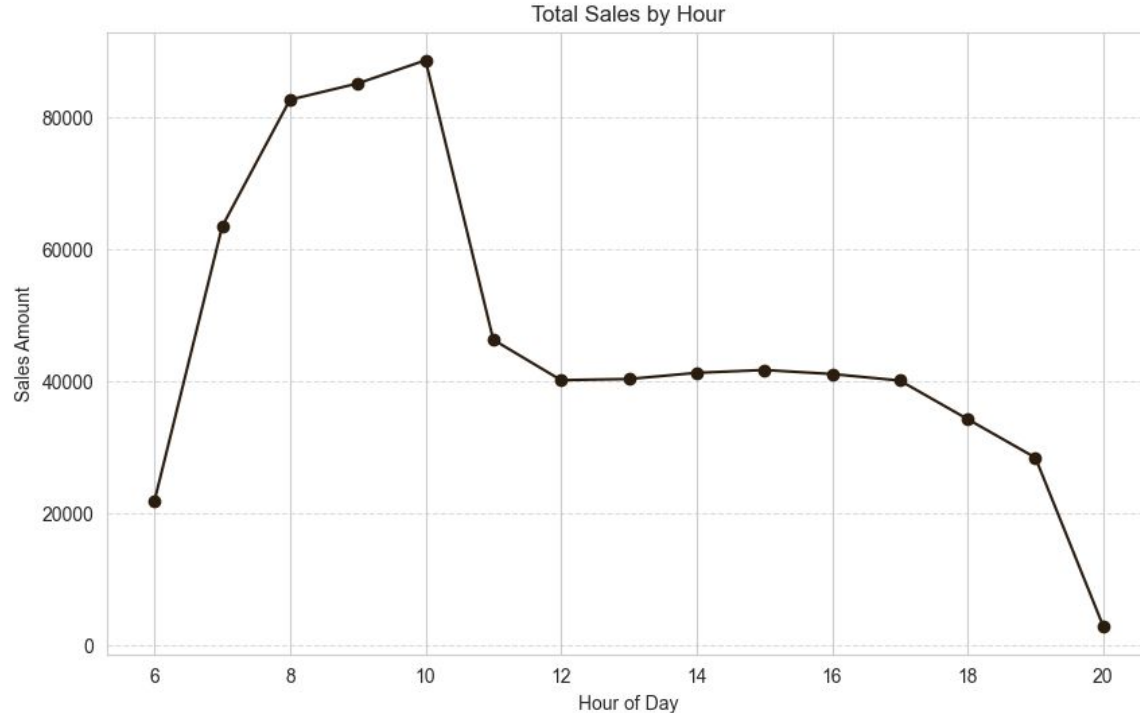
Understand sales patterns across time, stores, and products

Data Overview & Preparation

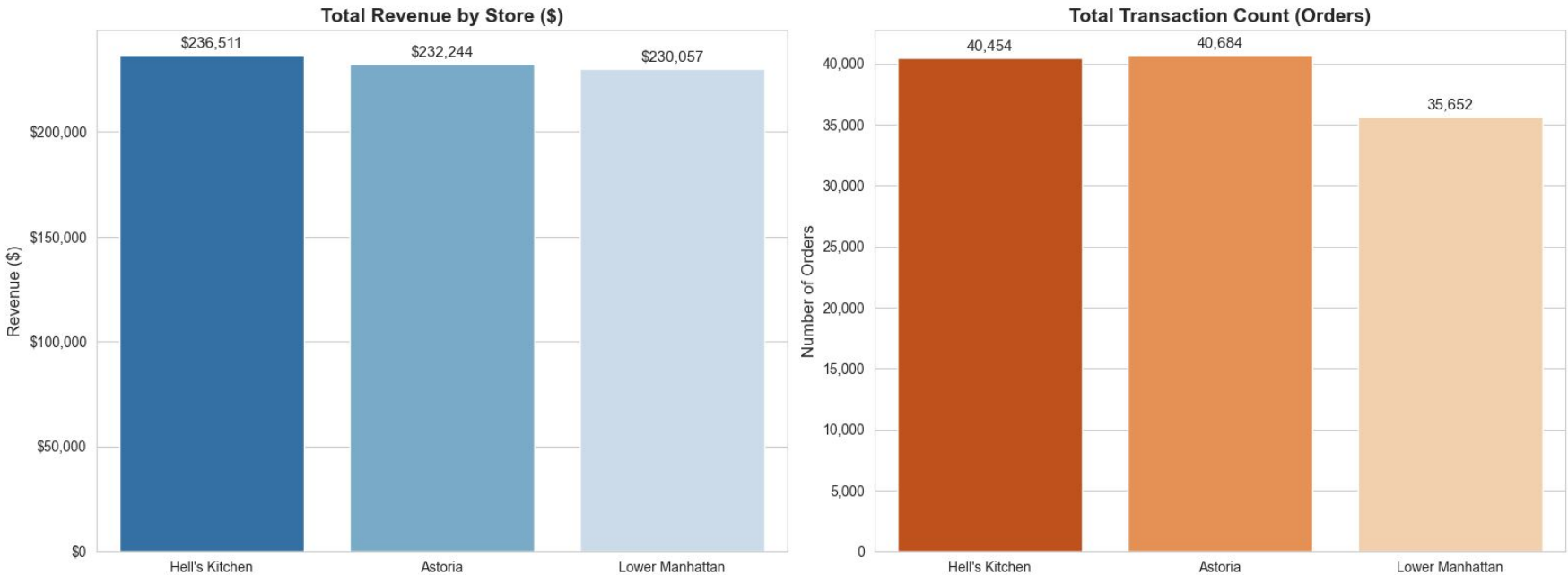
- Restored real order with basket ID using unique store id and timestamps
- Constructed revenue from transactional data
- Derived time features into month, date, hour
- Detected pricing inconsistencies at the product level

Sales by Time of Day

Sales peak during morning hours, indicating commuter-driven demand.

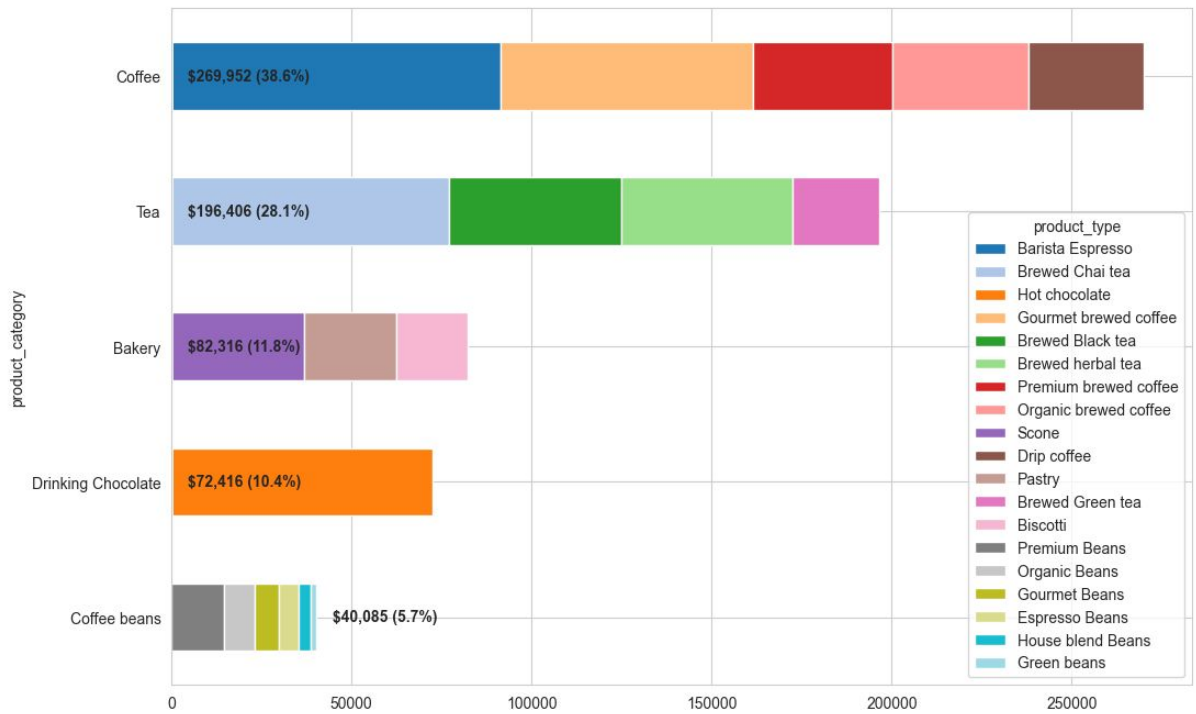


Store-Level Performance



KPI	Hell's Kitchen	Astoria	Lower Manhattan
AOV (Average Order Value)	\$5.85	\$5.71	\$6.45
UPT (Unit per transaction)	1.77	1.74	2.01

Product Categories & Best-Selling Items

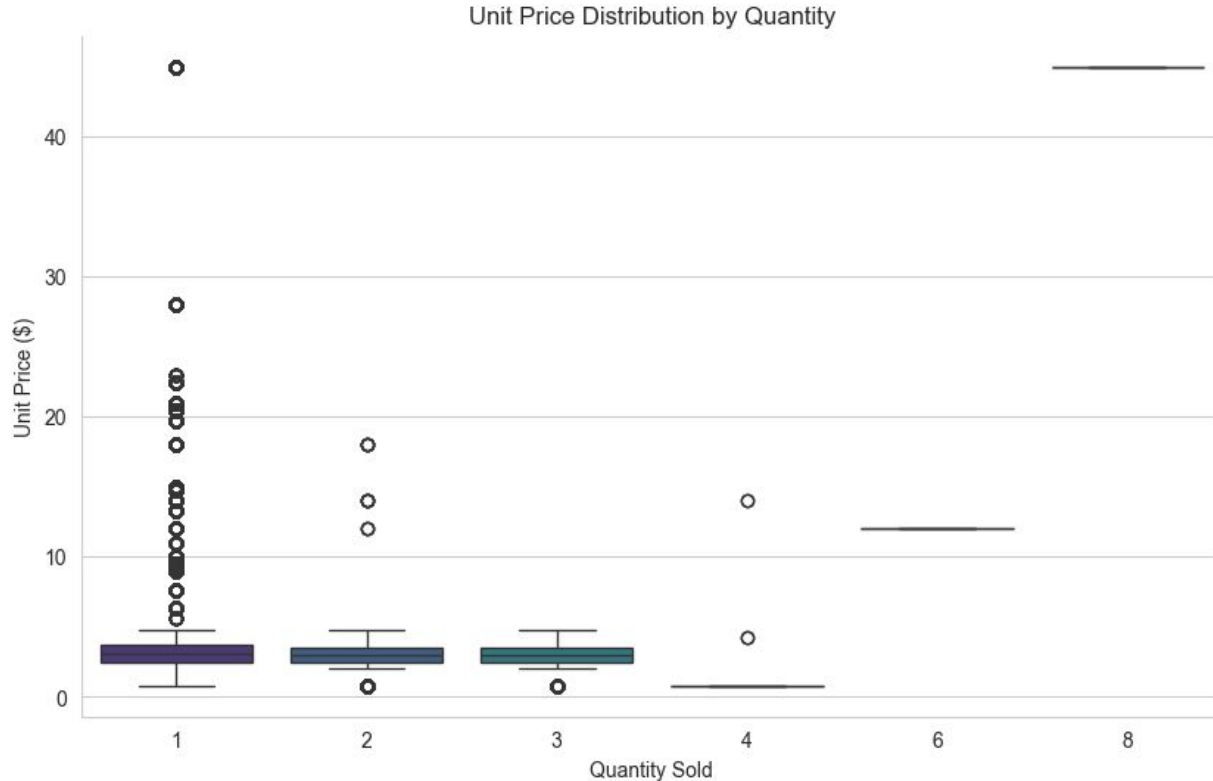


Best Sellers:

Product	Qty Sold
Ethiopia	13271
Our Old Time Diner Blend	13074
Columbian Medium Roast	13068
Brazilian	13012
Jamaican Coffee River	12431
Morning Sunrise Chai	9157
Latte	9099
Earl Grey	9095

A small number of categories and products account for most revenue.

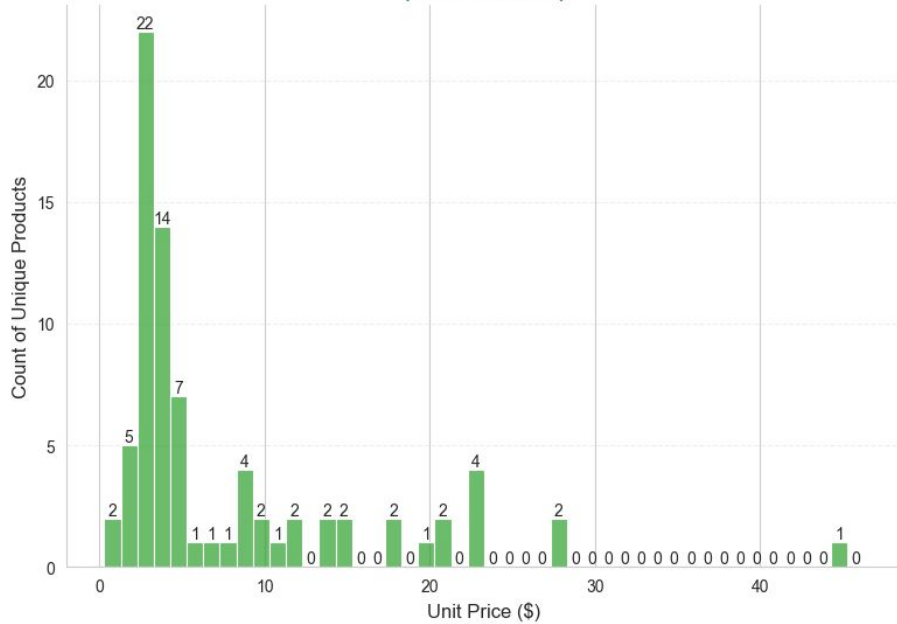
Price vs. Quantity Sold



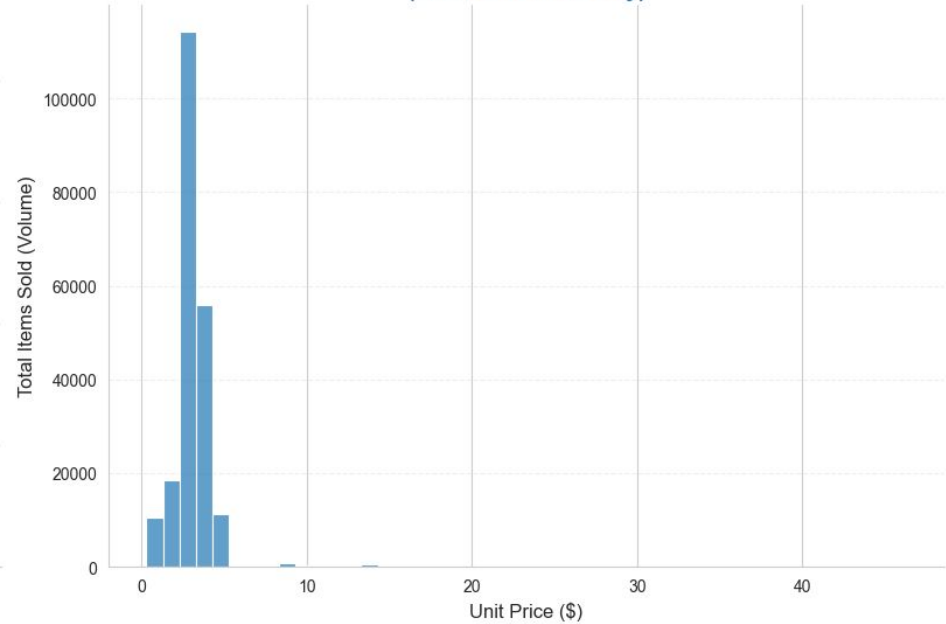
Correlation Coefficient:
-0.1235,
the relationship
between price and
quantity sold is weak
since most of the items
are purchased 1 per
order.

Menu Count by Price vs. Sales Volume by Price

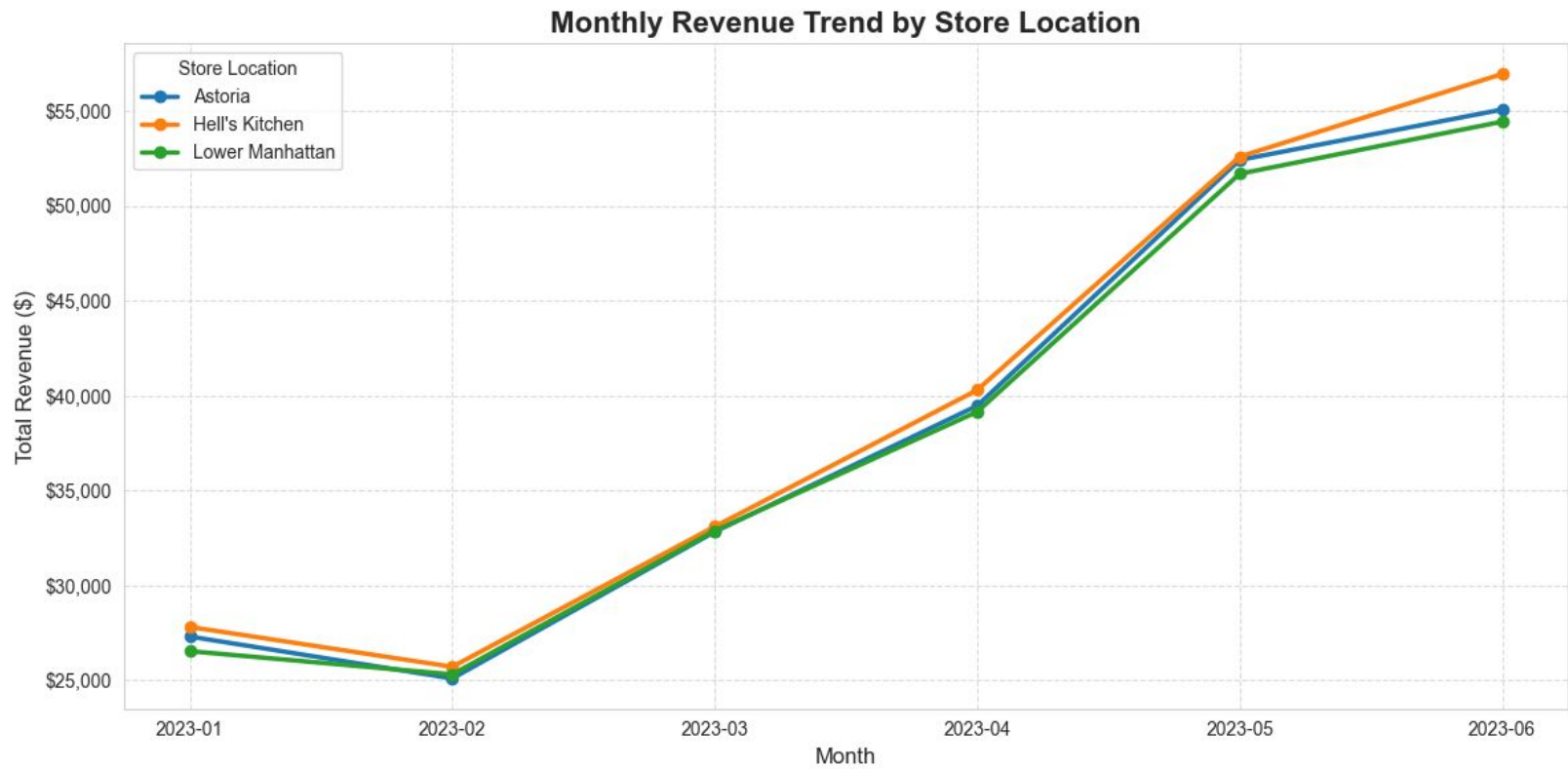
Supply: Menu Count by Price
(What we offer)



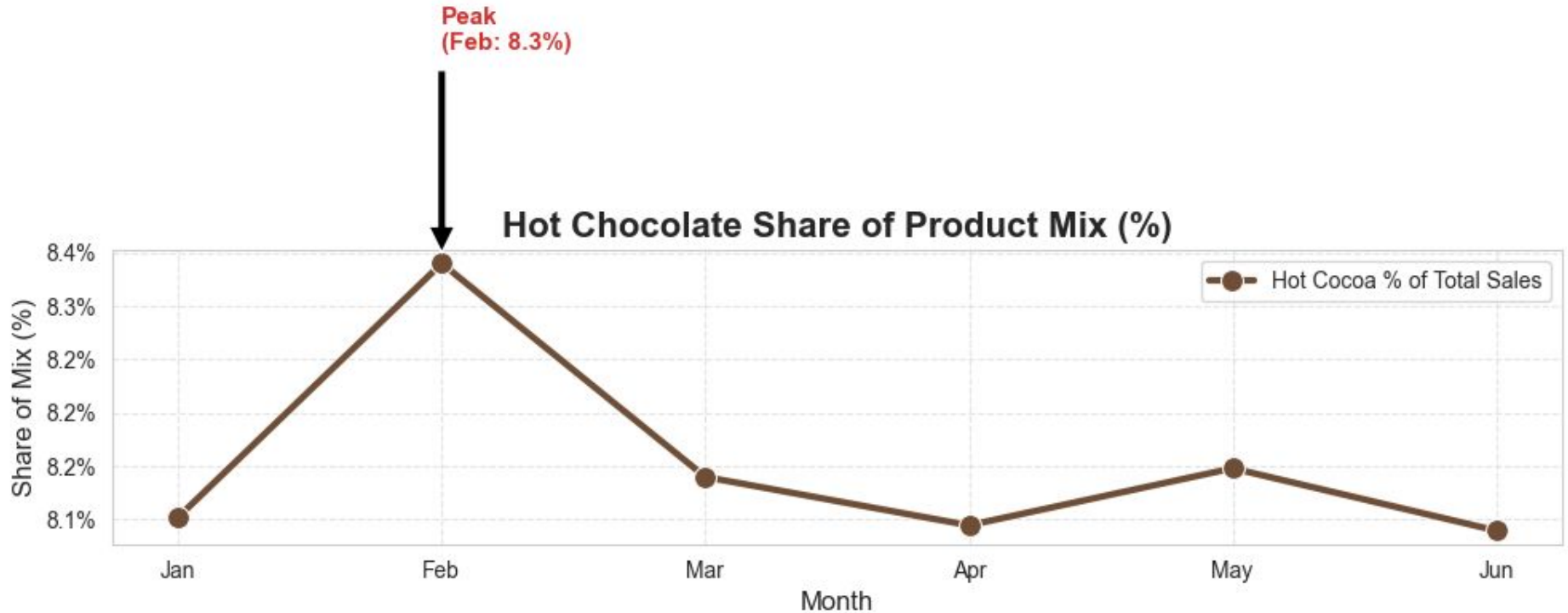
Demand: Sales Volume by Price
(What customers buy)



Monthly Sales Trends



Monthly Sale Trends of Hot Chocolate



The share of hot chocolate is quite stable during seasons.