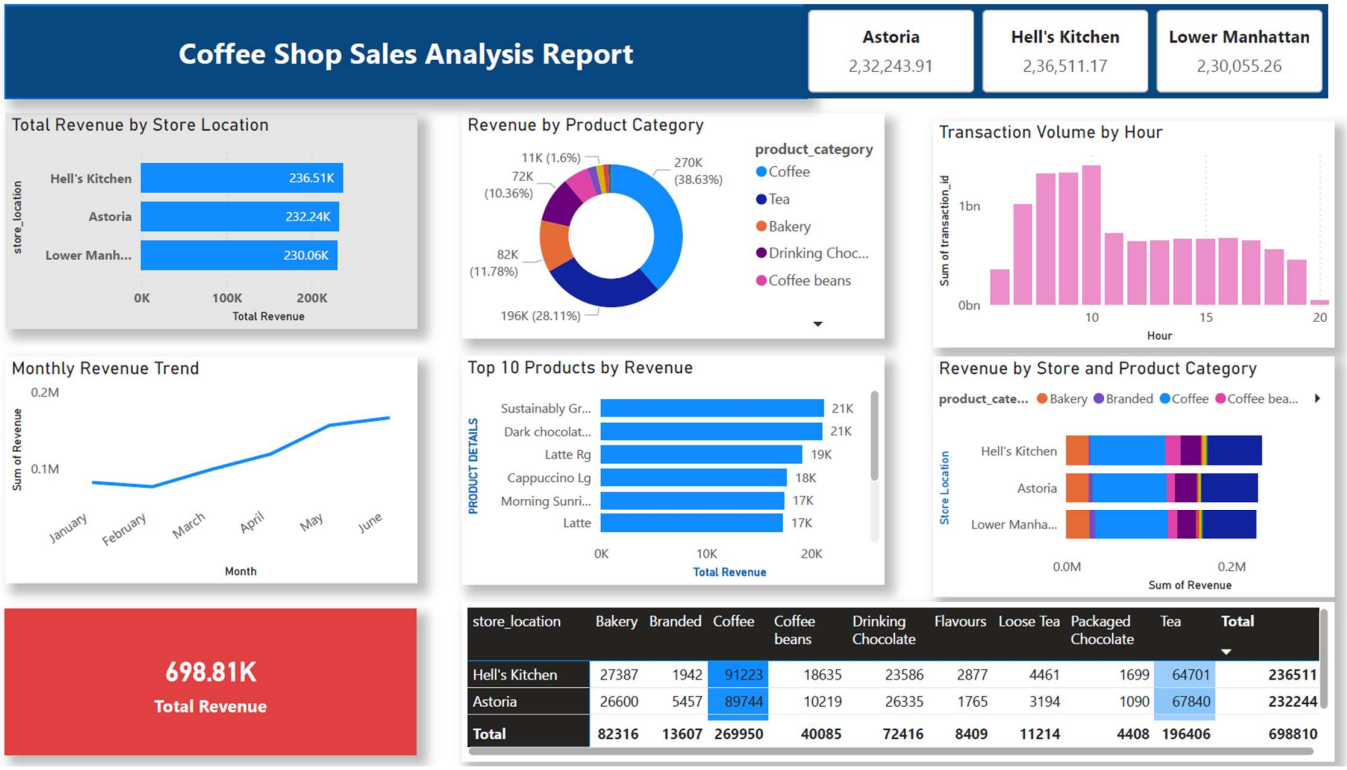
Coffee Shop Sales Analysis for Business Decision-Making



store_location	Bakery	Branded	Coffee	Coffee beans	Drinking Chocolate	Flavours	Loose Tea	Packaged Chocolate	Tea	Total
Hell's Kitchen	27387	1942	91223	18635	23586	2877	4461	1699	64701	**236511**
Astoria	26600	5457	89744	10219	26335	1765	3194	1090	67840	**232244**
Total	**82316**	**13607**	**269950**	**40085**	**72416**	**8409**	**11214**	**4408**	**196406**	**698810**

Analysis & Decision-Making Questions

1. Which store location has the highest revenue? What might explain this?
   - ***Hell's Kitchen = 236.51K***
   - Astoria = 232.24K
   - Lower Manhattan = 230.06K
   - ⇨ ***Hell's Kitchen is the top-performing store***

   Explanation:
   - Higher foot traffic (dense residential + office area)
   - Larger proportion of high-value beverages (Coffee, Tea, Packaged items)
   - Possibly higher average transaction value
   - More morning commuter traffic

2. What are the two peak hours for transactions? How could management use this information?
   From the chart **Transaction Volume by Hour**, the clear spikes are:
   - 9 AM
   - 10 AM

   These are the dominant morning rush hours.
   How management can use this info:
   - Schedule more baristas during 8:30–10:30 AM
   - Prepare high-demand items in advance (lattes, cappuccinos, pastries)
   - Run promotions right before peak hours (e.g., "8 AM Early Bird")
   - Improve order-ahead capacity to reduce queue length

3. Which product category generates the most revenue? Should the company expand this category?

   From the donut chart:
   - Coffee – ~270K (≈38.6%) => Top category
   - Tea and Drinking Chocolate follow, but far behind.
   - ***Coffee is the strongest revenue driver.***

   Should the company expand it?
   Yes => but strategically. Coffee already dominates, meaning:
   Expand:
   - More specialty brews, seasonal blends, cold brew variants
   - Branded packaged coffee for retail shelves

   But also diversify to avoid over-reliance. Tea and Bakery categories show potential but are underdeveloped.

4. Looking at monthly trends, is revenue growing, declining, or stable? What actions might you recommend?

   From the line chart:
   - January to February dips slightly
   - February to June shows steady growth, with June highest

   Revenue is steadily growing month-to-month.
   Recommendations:
   - Increase summer promotions => trend shows rising demand
   - Investigate February dip (seasonality? weather?)
   - Consider adding staff or inventory for Q2 as sales climb

5. Which individual product is the top seller? What does this tell you about customer preferences?

   From the "Top 10 Products by Revenue":
   The top items include:
   - Sustainably Grown Coffee – 21K
   - Dark Chocolate Large – 21K
   - Latte Regular – 19K

   Top Seller: Sustainably Grown Coffee (21K).
   Interpretation:
   - Customers value premium, ethical, or high-quality coffee.
   - There is demand for specialty and environment-conscious products.
   - This suggests a market opportunity for:
     - Fair-trade products
     - Single-origin beans
     - Cold brews, pour-overs, artisan offerings

6. Looking at the stacked bar chart, does each store have the same product mix, or do some stores sell more of certain categories? What business decisions could this inform?

   The chart shows **clear differences** across stores:
   - Hell's Kitchen sells a larger share of Coffee and Tea.
   - Astoria sells more Packaged items and Drinking Chocolate.
   - Lower Manhattan shows more balanced sales but slightly less Bakery.

   Stores do NOT have the same product mix: Each location has unique customer preferences.
   Business decisions enabled:
   - ***Tailored inventory:***
     Stock more coffee at Hell's Kitchen, more chocolate products at Astoria.
   - ***Location-specific promotions:***
     Promote premium coffee in Hell's Kitchen, seasonal chocolate drinks in Astoria.
   - ***Operational optimization:***
     Staff specialized baristas where certain drinks dominate.
   - ***Menu localization:***
     Consider store-specific featured items.

Business Summary:

- Hell's Kitchen is the top revenue store
- Peak hours are 9.00 - 10.00 AM
- Coffee drives most revenue (38%)
- Monthly revenue is steadily increasing
- Top product: Sustainably Grown Coffee
- Product mix varies significantly by store, enabling targeted strategy