# WITH GRAPHS AND DATABASE

SUPER DATA ANALYTICS

"This presentation covers key insights from our Superstore data analysis. We'll examine sales trends, product performance, regional variations, and customer segments to drive strategic decisions and improve profitability."

DATABASE STRUCTURE

| Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID	Customer Name	Segment	Country	City	State	Postal Code	Region	Product ID	Category
1	CA-2016-152156	11/8/2016	11/11/2016	Second Class	CG-12520	Claire Gute	Consumer	United States	Henderson	Kentucky	42420	South	FUR-BO-10001798	Furniture
2	CA-2016-152156	11/8/2016	11/11/2016	Second Class	CG-12520	Claire Gute	Consumer	United States	Henderson	Kentucky	42420	South	FUR-CH-10000454	Furniture
3	CA-2016-138688	6/12/2016	6/16/2016	Second Class	DV-13045	Darrin Van Huff	Corporate	United States	Los Angeles	California	90036	West	OFF-LA-10000240	Office Sup
4	US-2015-108966	10/11/2015	10/18/2015	Standard Class	SO-20335	Sean O'Donnell	Consumer	United States	Fort Lauderdale	Florida	33311	South	FUR-TA-10000577	Furniture
5	US-2015-108966	10/11/2015	10/18/2015	Standard Class	SO-20335	Sean O'Donnell	Consumer	United States	Fort Lauderdale	Florida	33311	South	OFF-ST-10000760	Office Sup
6	CA-2014-115812	6/9/2014	6/14/2014	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	FUR-FU-10001487	Furniture
7	CA-2014-115812	6/9/2014	6/14/2014	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	OFF-AR-10002833	Office Sup
8	CA-2014-115812	6/9/2014	6/14/2014	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	TEC-PH-10002275	Technolog
9	CA-2014-115812	6/9/2014	6/14/2014	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	OFF-BI-10003910	Office Sup
10	CA-2014-115812	6/9/2014	6/14/2014	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	OFF-AP-10002892	Office Sup
11	CA-2014-115812	6/9/2014	6/14/2014	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	FUR-TA-10001539	Furniture
12	CA-2014-115812	6/9/2014	6/14/2014	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	TEC-PH-10002033	Technolog
13	CA-2017-114412	4/15/2017	4/20/2017	Standard Class	AA-10480	Andrew Allen	Consumer	United States	Concord	North C...	28027	South	OFF-PA-10002365	Office Sup
14	CA-2016-161389	12/5/2016	12/10/2016	Standard Class	IM-15070	Irene Maddox	Consumer	United States	Seattle	Washing...	98103	West	OFF-BI-10003656	Office Sup
15	US-2015-118983	11/22/2015	11/26/2015	Standard Class	HP-14815	Harold Pawlan	Home Off...	United States	Fort Worth	Texas	76106	Central	OFF-AP-10002311	Office Sup
16	US-2015-118983	11/22/2015	11/26/2015	Standard Class	HP-14815	Harold Pawlan	Home Off...	United States	Fort Worth	Texas	76106	Central	OFF-BI-10000756	Office Sup
17	CA-2014-105893	11/11/2014	11/18/2014	Standard Class	PK-19075	Pete Kriz	Consumer	United States	Madison	Wisconsin	53711	Central	OFF-ST-10004186	Office Sup
18	CA-2014-167164	5/13/2014	5/15/2014	Second Class	AG-10270	Alejandro Grove	Consumer	United States	West Jordan	Utah	84084	West	OFF-ST-10000107	Office Sup
19	CA-2014-143336	8/27/2014	9/1/2014	Second Class	ZD-21925	Zuschuss Donatelli	Consumer	United States	San Francisco	California	94109	West	OFF-AR-10003056	Office Sup
20	CA-2014-143336	8/27/2014	9/1/2014	Second Class	ZD-21925	Zuschuss Donatelli	Consumer	United States	San Francisco	California	94109	West	TEC-PH-10001949	Technolog

1 - HOW DO SALES VARY ACROSS DIFFERENT REGIONS?

REGIONAL SALES ANALYSIS REVEALS DISTINCT PATTERNS: WEST LEADS IN REVENUE, FOLLOWED BY EAST AND CENTRAL. SOUTH SHOWS LOWER PERFORMANCE. FACTORS INCLUDE POPULATION DENSITY, ECONOMIC CONDITIONS, AND CONSUMER PREFERENCES.


Total Sales by Region
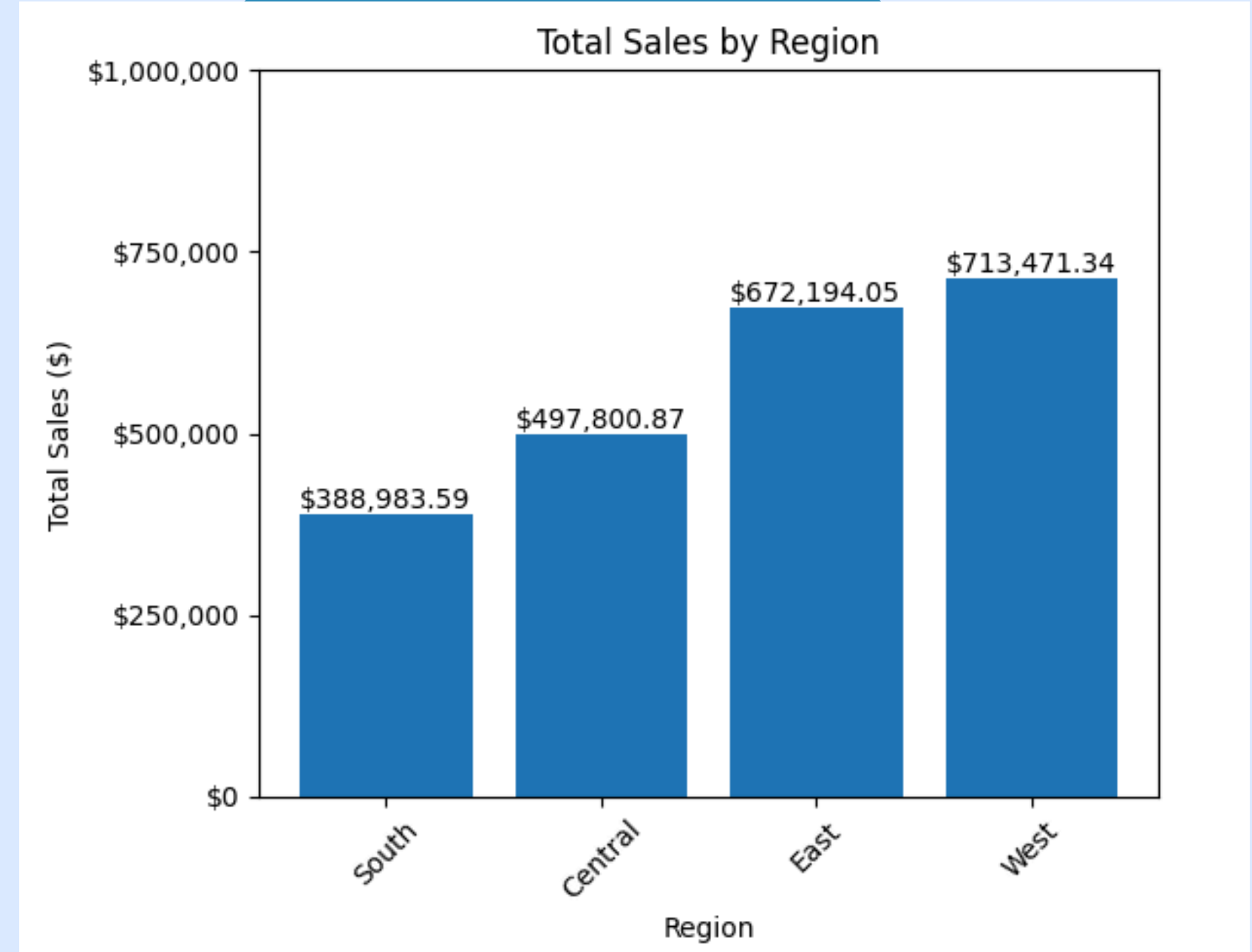
2 - What's the distribution of order quantities?

Most orders consist of small quantities, with a decreasing frequency for larger quantities. There's a long tail distribution, with occasional bulk orders skewing the average higher than the median.


Distribution of Orders by Average Quantity
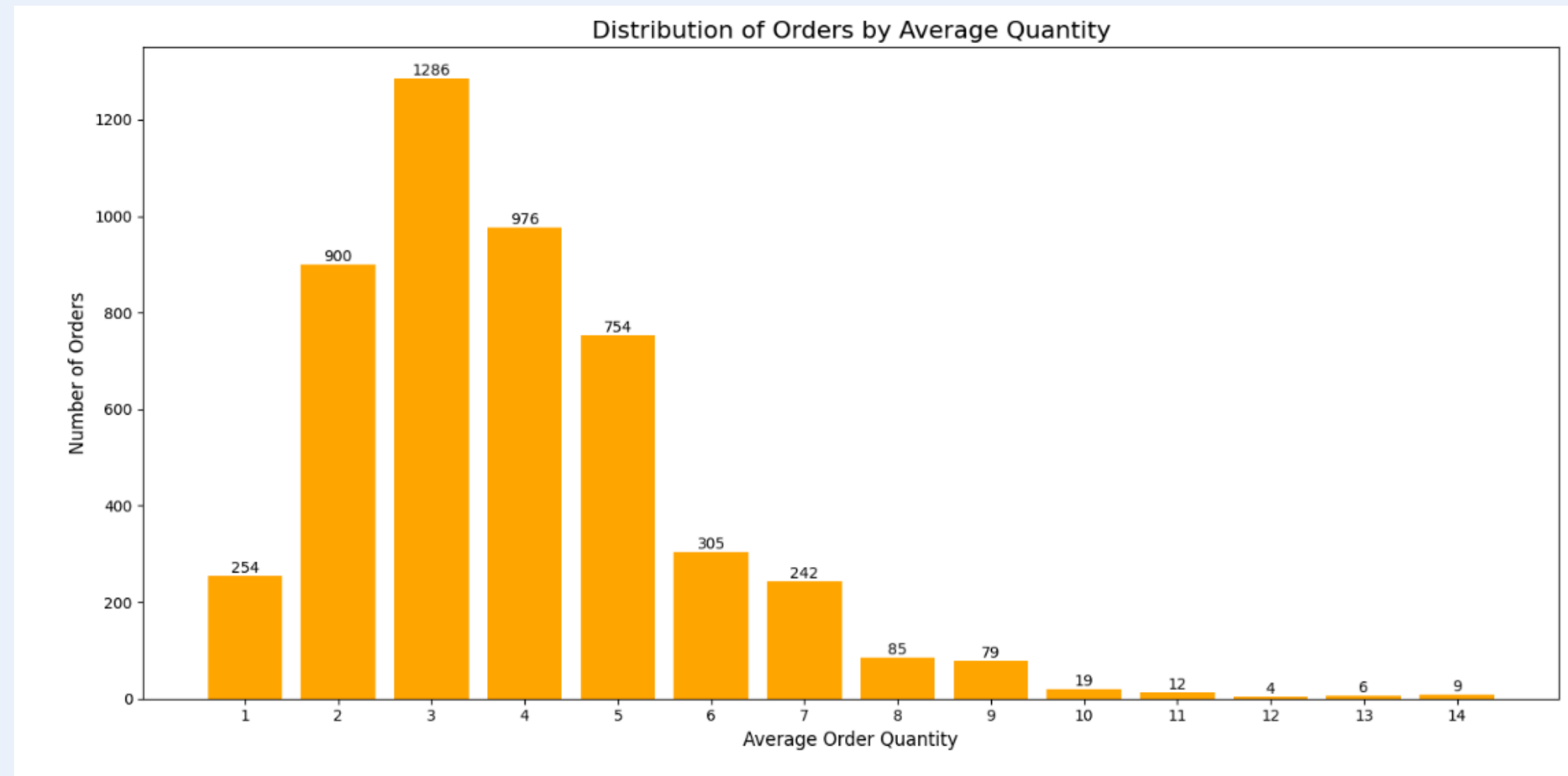
3 - HOW DO SALES TREND OVER TIME ?

Sales show an overall upward trend with seasonal fluctuations. Peak periods occur during holidays, especially Q4. Year-over-year growth is evident, with occasional dips possibly due to economic factors or competition.

Average Sales Trend by Year

Furntiure
31%

Technology
36.8%

Office supllies
32.3%
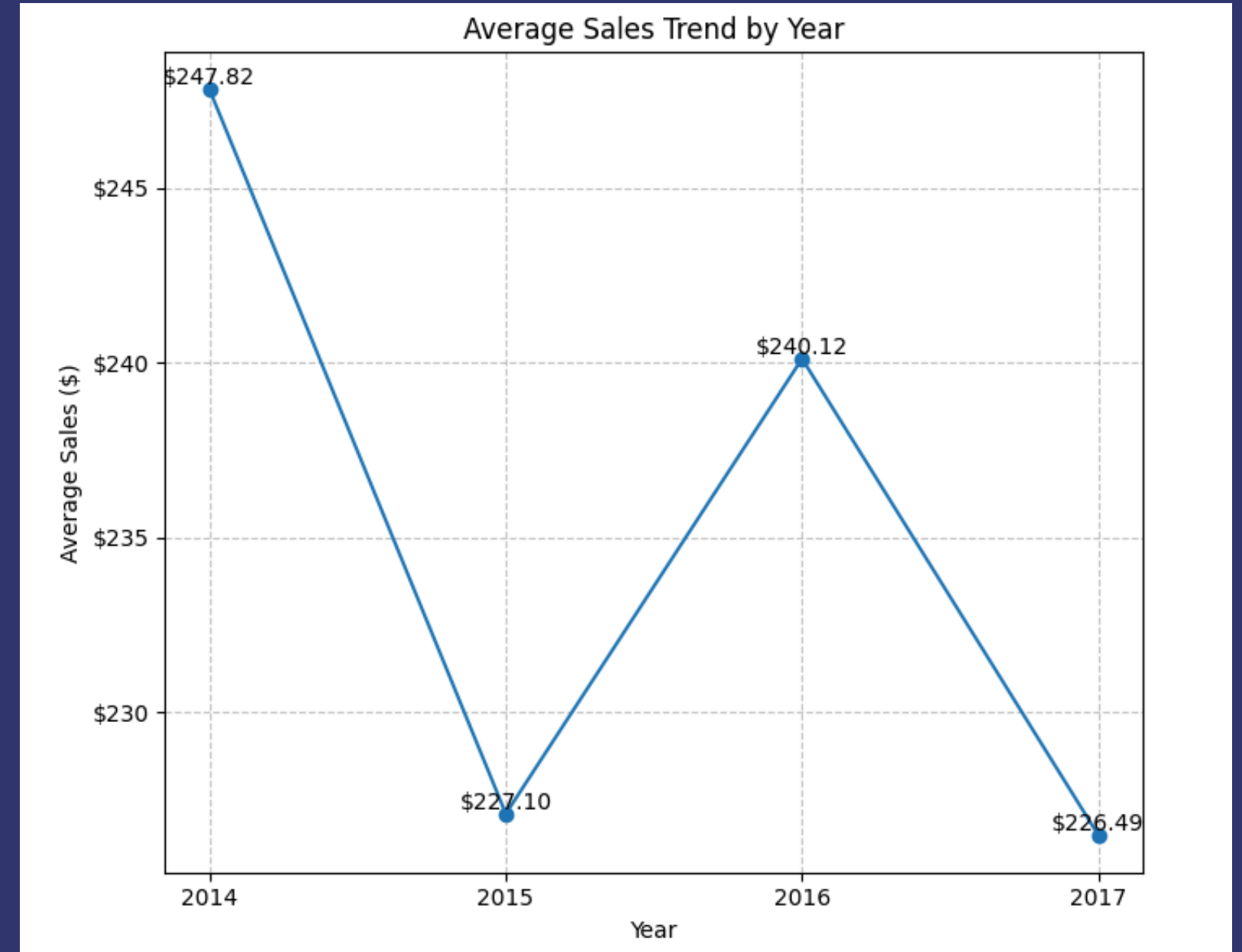
4 - WHAT'S THE BREAKDOWN OF SALES BY PRODUCT CATEGORY?
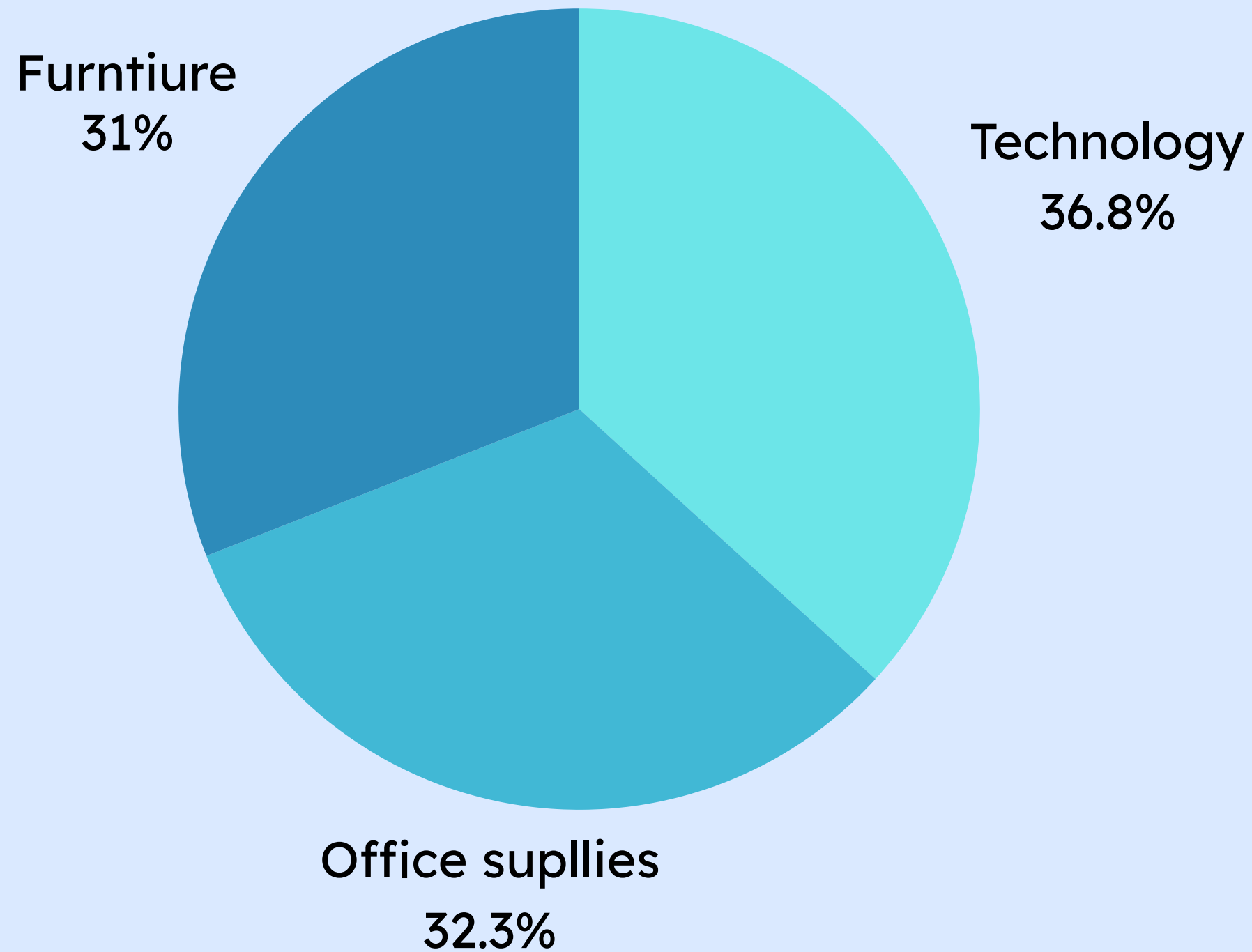
Technology leads in sales, followed by Furniture, then Office Supplies. Each category shows distinct profit margins. Subcategories within these main groups reveal further insights into product performance and customer preferences.
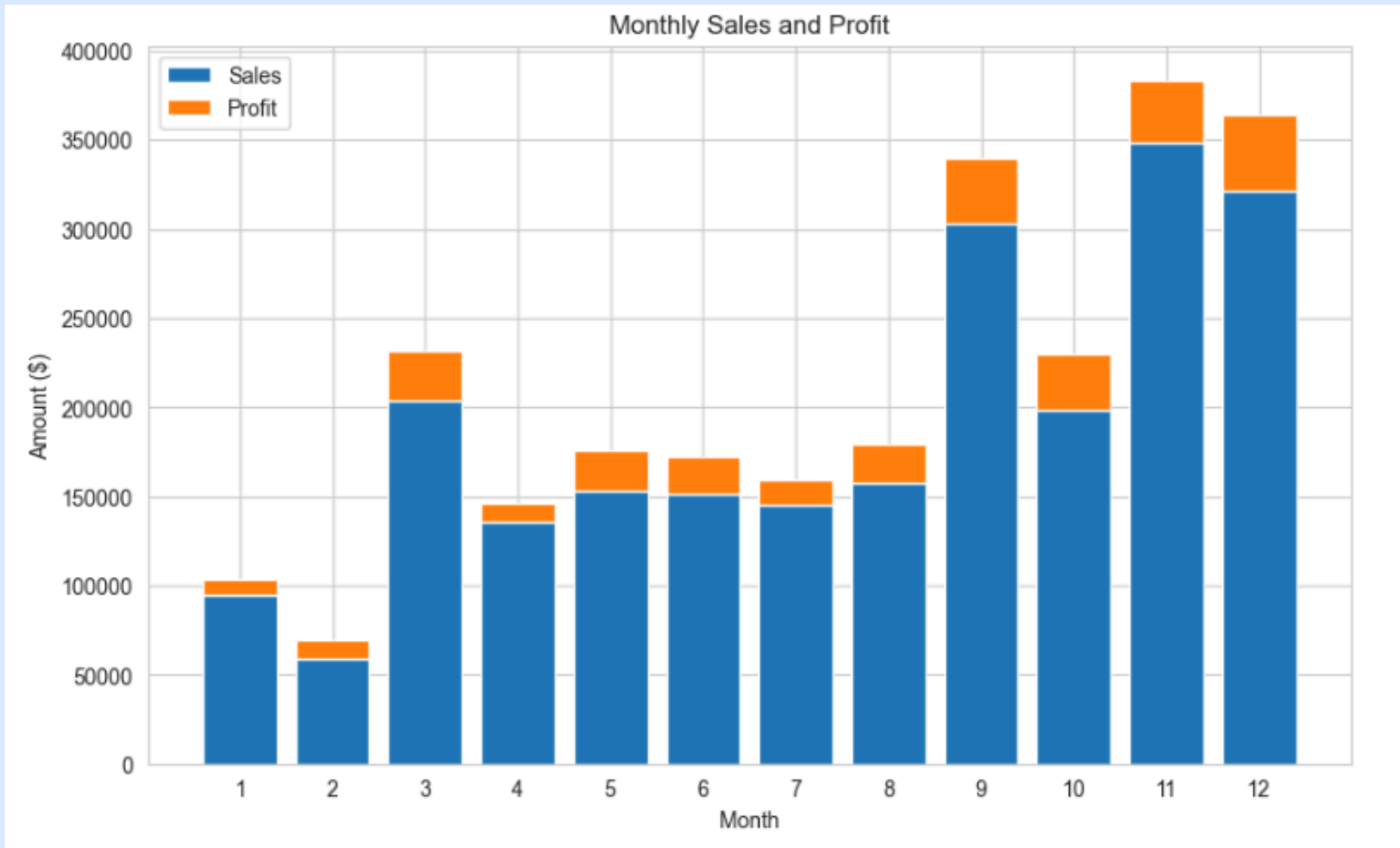
Monthly Sales and Profit
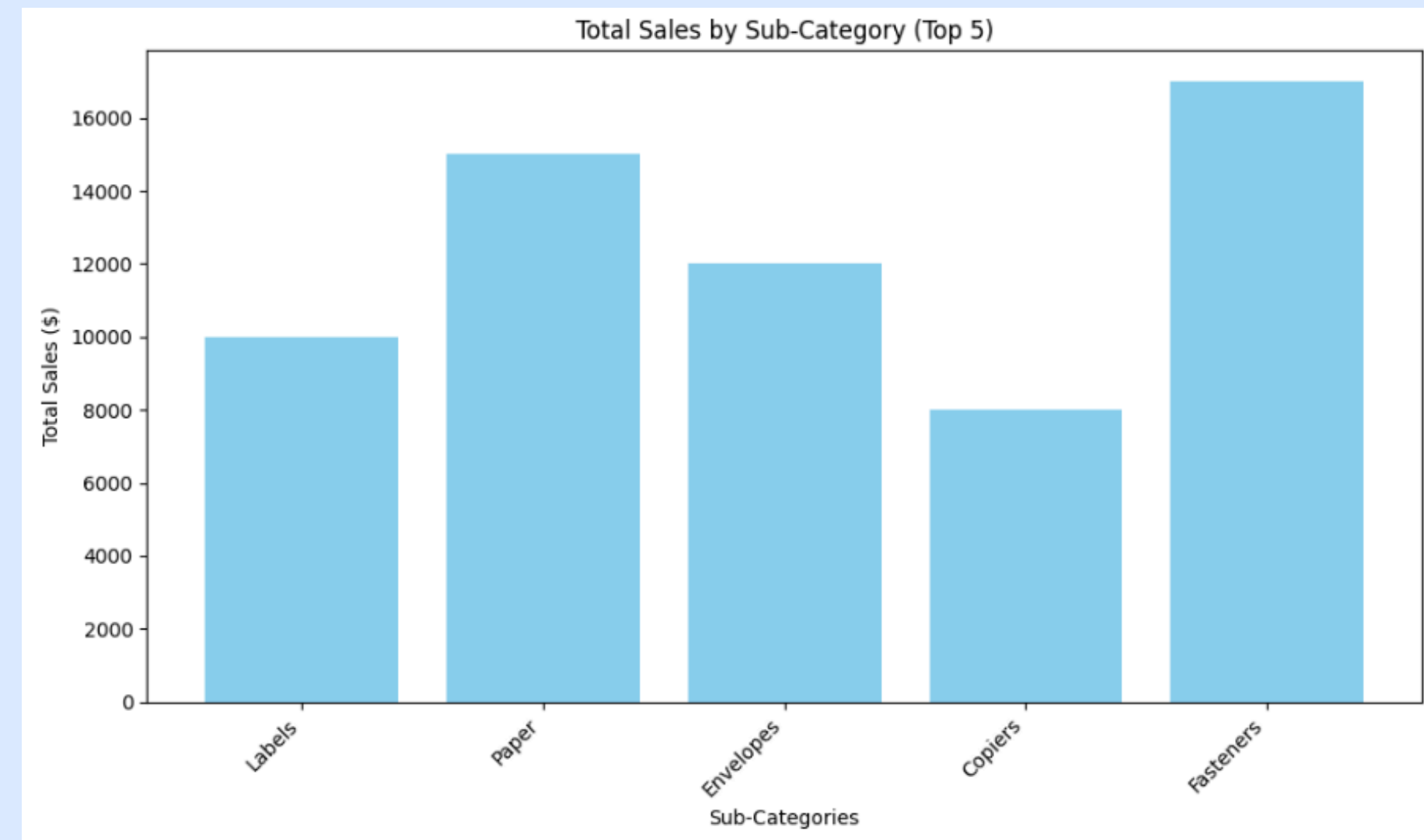
MOST PERFORMED SALES ARE IN NOVEMBER

Sales peak during holiday seasons, especially November-December. Summer months show moderate performance. January often experiences a post-holiday slump. Profit margins fluctuate, with promotional periods potentially reducing per-sale profitability despite increased volume.

KEY TAKEAWAYS AND NEXT STEPS

- Regional sales variations present growth opportunities
- Order quantity distribution informs inventory management
- Seasonal trends guide marketing and staffing decisions
- Product category performance directs focus areas
- Profit-sales correlation highlights optimization potential
- Monthly fluctuations impact strategy planning

Next Steps:

1   Develop targeted strategies for underperforming regions

2   Optimize inventory based on order patterns

3   Implement data-driven decision making across departments

"Thank you for your attention. Questions?"