

TASK 2

DATA VISUALIZATION & STORYTELLING

Data Analyst Internship

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Tools Used: Python (Matplotlib), Pandas

Dataset: Superstore.csv

OBJECTIVE:

TO ANALYZE SUPERSTORE SALES DATA AND CREATE CLEAR, INSIGHT-DRIVEN VISUALIZATIONS USING PYTHON (MATPLOTLIB) THAT HELP BUSINESSES MAKE BETTER DECISIONS.

- **Dataset** : Superstore.csv
- **It contains:**
 - Product names and categories
 - Sales, Quantity, Profit
 - Customer segments
 - Order dates and regions

KEY QUESTIONS ANSWERED:

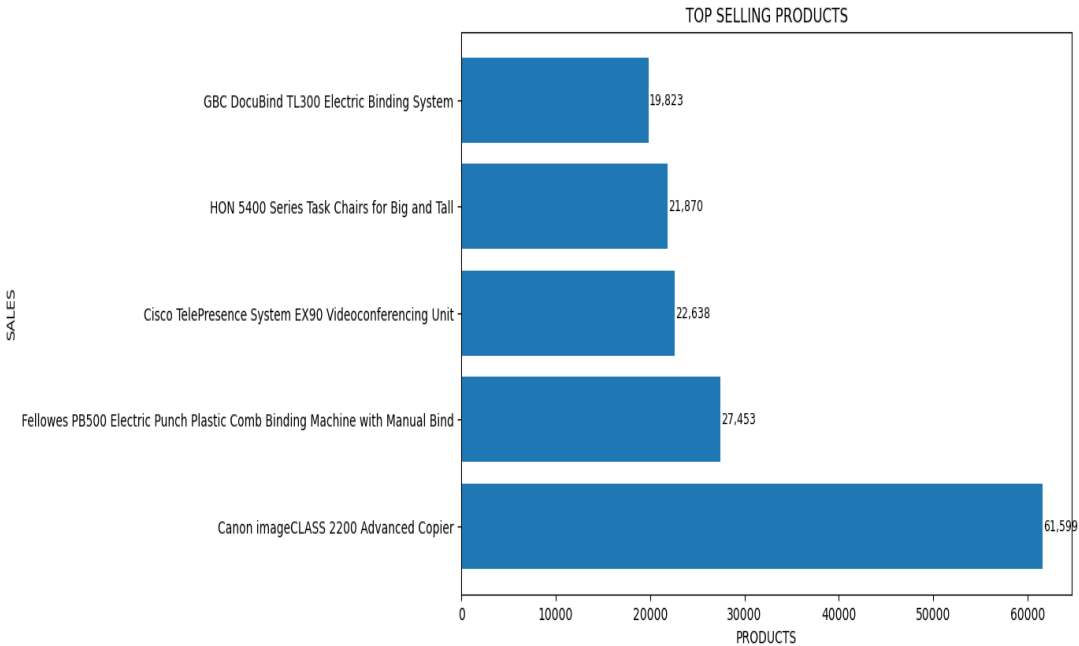
1. WHICH PRODUCTS HAVE THE HIGHEST AND LOWEST SALES?
2. WHICH CUSTOMER SEGMENTS ARE MOST PROFITABLE?
3. HOW CAN WE IMPROVE BUSINESS PERFORMANCE USING DATA?

TOP-SELLING PRODUCTS BASED ON TOTAL SALES

top_products

	Product Name	Sales
0	Canon imageCLASS 2200 Advanced Copier	61599.824
1	Fellowes PB500 Electric Punch Plastic Comb Bin...	27453.384
2	Cisco TelePresence System EX90 Videoconferenci...	22638.480
3	HON 5400 Series Task Chairs for Big and Tall	21870.576
4	GBC DocuBind TL300 Electric Binding System	19823.479

Top-selling product: Canon imageCLASS 2200 Advanced Copier with sales of ₹61599.824



INSIGHT : THESE PRODUCTS GENERATE THE MOST REVENUE.

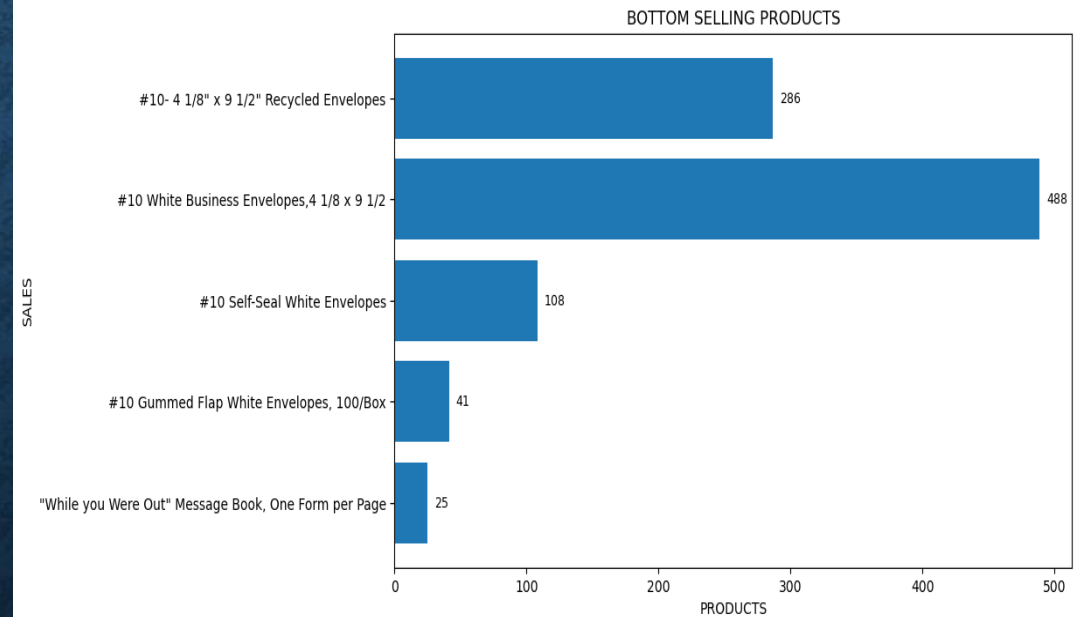
RECOMMENDATION : INCREASE STOCK AND PROMOTIONS FOR THESE.

LEAST PROFITABLE CATEGORY AND REGION

bottom_products

	Product Name	Sales
0	"While you Were Out" Message Book, One Form pe...	25.228
1	#10 Gummed Flap White Envelopes, 100/Box	41.300
2	#10 Self-Seal White Envelopes	108.682
3	#10 White Business Envelopes,4 1/8 x 9 1/2	488.904
4	#10- 4 1/8" x 9 1/2" Recycled Envelopes	286.672

Bottom-selling product: Eureka Disposable Bags for Sanitaire Vibra Groomer I Upright Vac with sales of ₹1.624



INSIGHT : LOW SALES MAY BE DUE TO LOW DEMAND OR MARKETING.

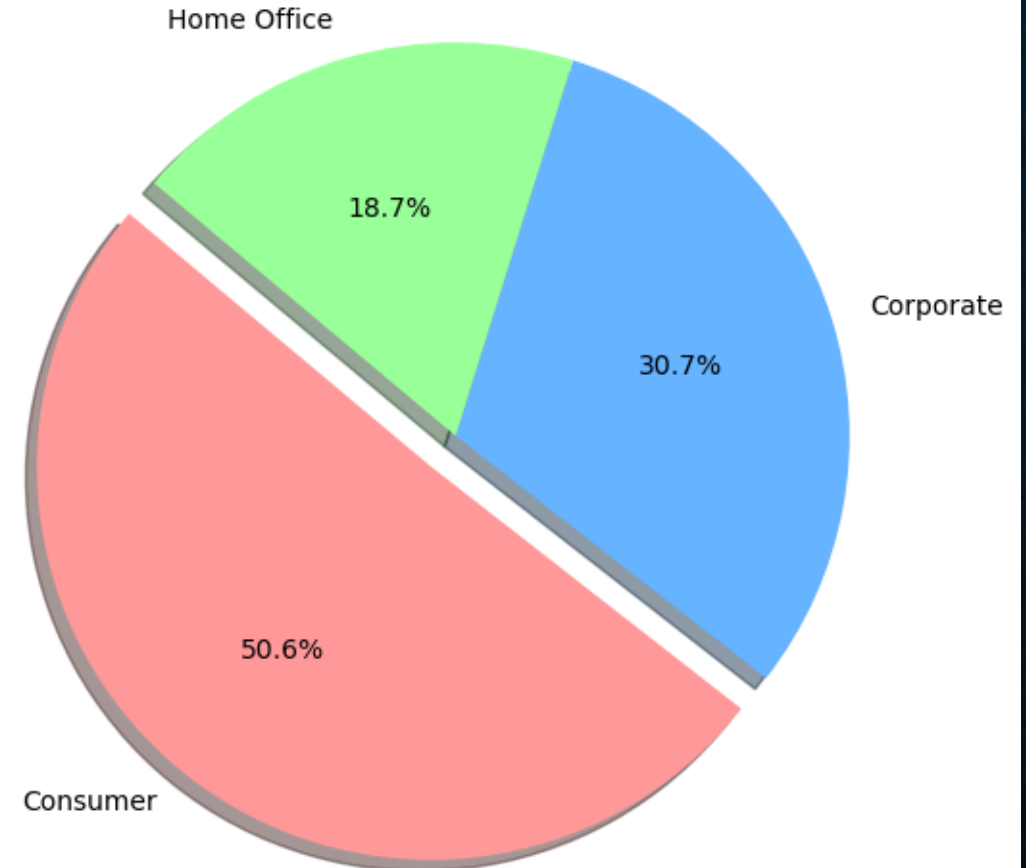
RECOMMENDATION : ANALYZE FURTHER OR CONSIDER DISCOUNTING/DISCONTINUATION.

CUSTOMER SEGMENT ANALYSIS

segment_data

	Segment	Sales	Profit
0	Consumer	1.161401e+06	134119.2092
1	Corporate	7.061464e+05	91979.1340
2	Home Office	4.296531e+05	60298.6785

Sales Distribution by Customer Segment



INSIGHT :

1. CUSTOMER SEGMENTS HAVE SIMILAR PERFORMANCE IN SALES AND PROFIT.
2. BALANCED ENGAGEMENT ACROSS SEGMENTS IS A POSITIVE SIGN.

SUMMARY

THE ANALYSIS WAS FOCUSED ON IDENTIFYING WHICH PRODUCTS AND SEGMENTS PERFORMED BEST OR WORST. THESE VISUAL INSIGHTS CAN HELP BUSINESSES IMPROVE MARKETING AND INVENTORY STRATEGY.