DATA ANALYTICS

Internship Assignment

- Jay Gohil

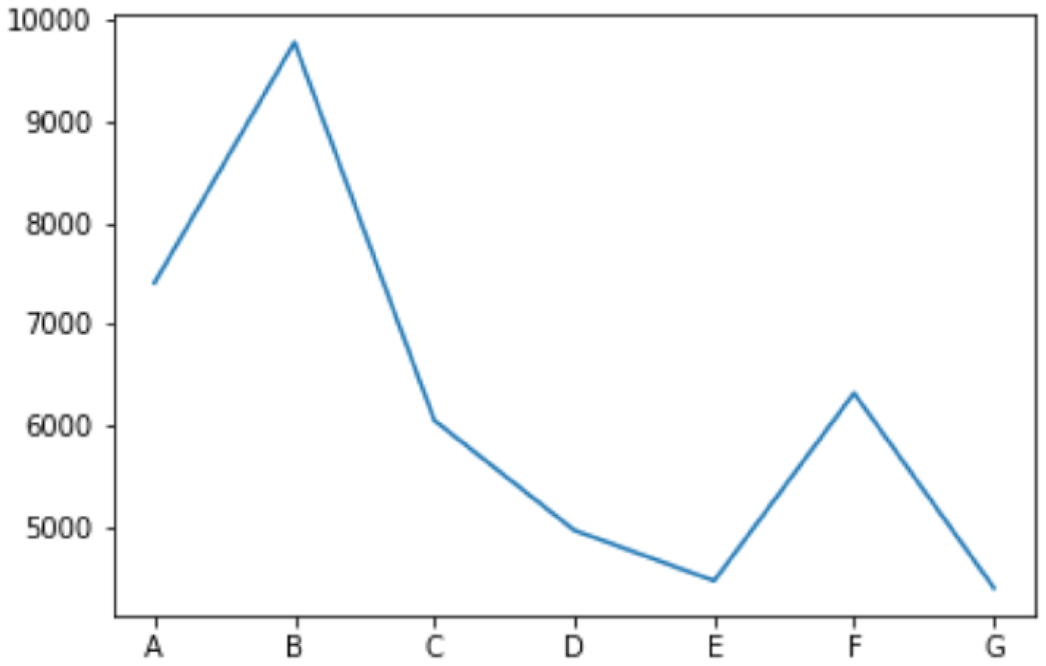
What are the insights taken from the data?

Upon thoroughly examining the dataset provided, I took two groups – occurrence (origin, region and product itself) and result (sales, time required and refund) into consideration.

Thereafter, I gained insights from cross-matching each group elements with each other, giving out 12 different insights that might benefit the sales team.

[Concrete data available in python notebook.]

INSIGHTS FROM DATA

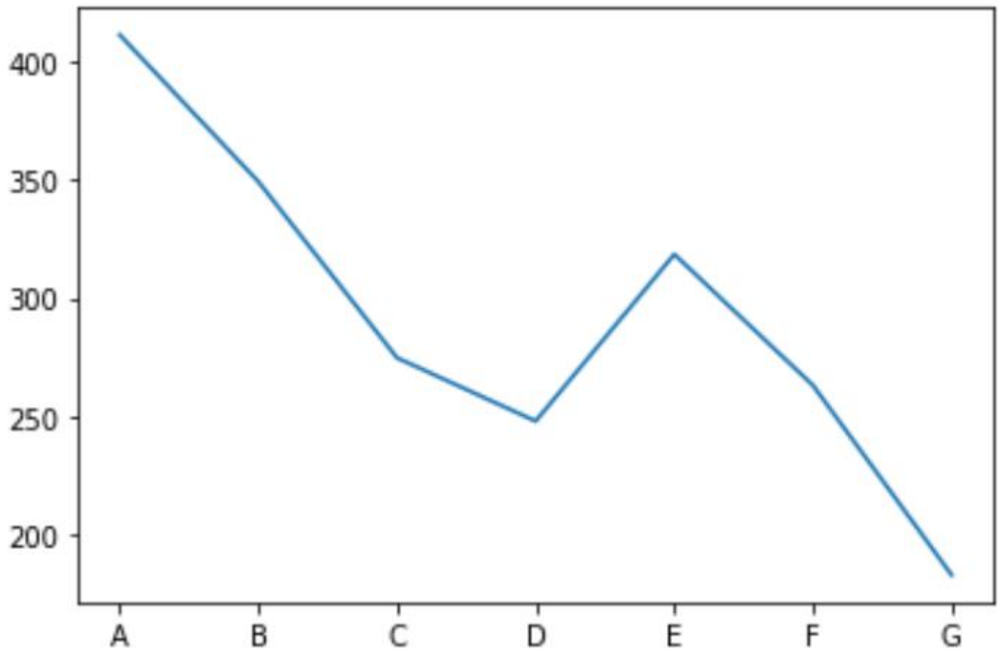


INSIGHT 1

Sales Value | Product

What are the insights gained?

The graph, backed up by data generated through data engineering using Python, clearly shows that the product “B” provides the highest amount of sales (followed by A) while E & G provide the least amount of sales. Thus, while considering complete sales, the sales team should pitch product “B” and “A”!

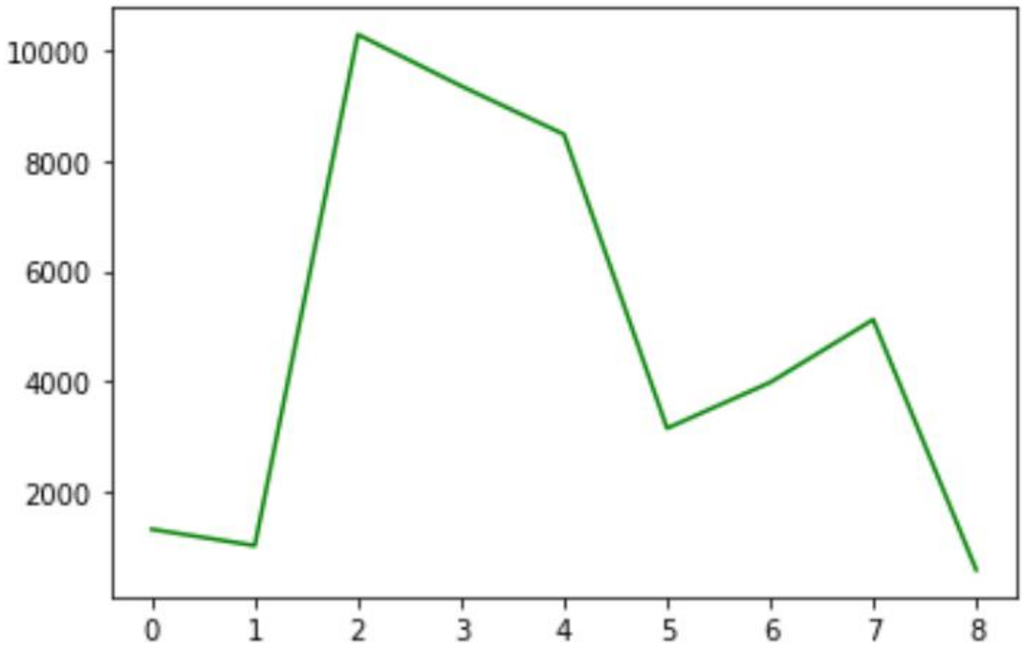


INSIGHT 2

Sales Value (per transaction) | Product

What are the insights gained?

The graph clearly shows that when it comes to ‘per transaction values’, product “A” provides the highest amount of sales (followed by B and E) while G provides the least amount of sales value. Thus, while considering efficient and most effective sales product, the sales team should pitch product “A” and “B” more!

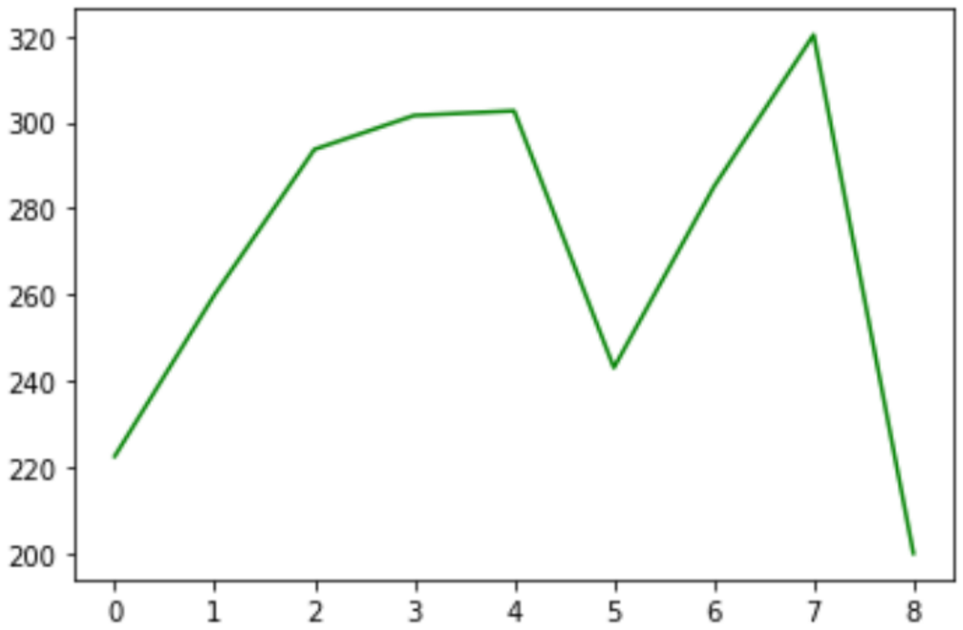


INSIGHT 3

Sales Value | Origin

What are the insights gained?

The graph clearly shows that the origin 2 and 3 groups (corresponding to social and organic search) provide the highest amount of sales; while origin 8, 1 and 0 (corresponding to other, display and referral) provide the least amount of sales value. Hence, the sales team should consider pitching heavily to social and organic search groups for better returns (sales value).

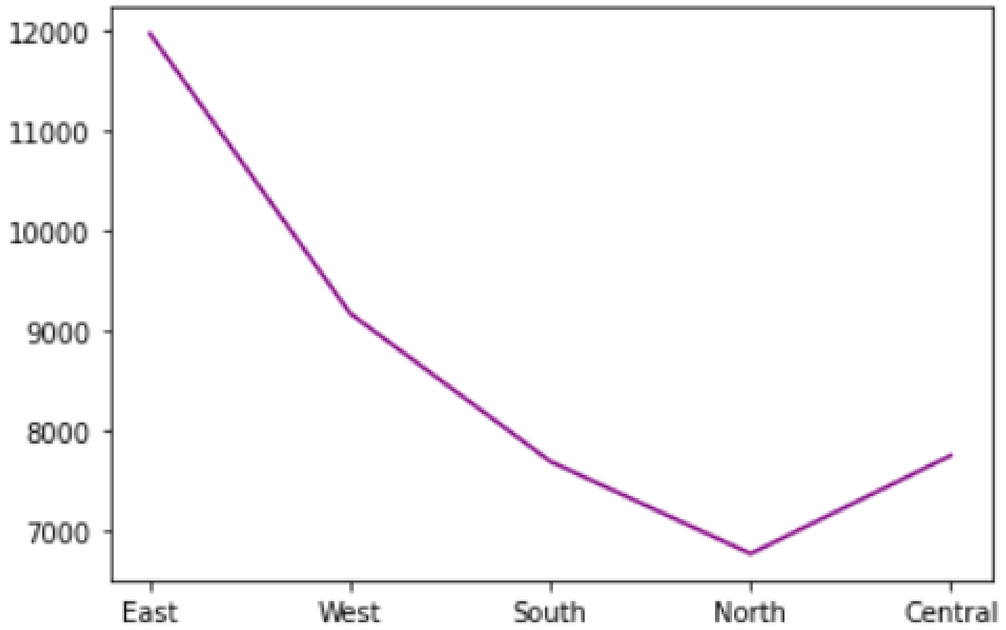


INSIGHT 4

Sales Value (per transaction) | Origin

What are the insights gained?

The graph clearly shows that when it comes to ‘per transaction values’, the origin 7 (unknown) provides the highest amount of sales (followed by 4, 3 and 2) while 8 and 0 provide the least amount of sales value. So, as 7th is unknown group, the sales team should focus on pitching to groups 4, 3 ad 2 (paid search, organic search and social sales) for effective sales conversion.

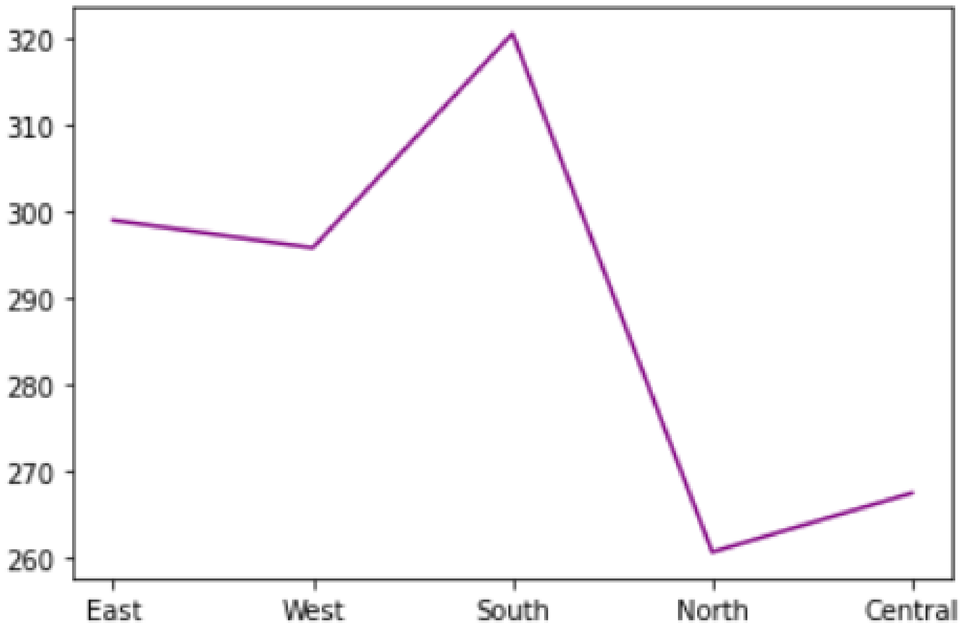


INSIGHT 5

Sales Value | Region

What are the insights gained?

The graph clearly shows that the east region provides the highest amount of sales value; while north origin provides the least amount of sales value. Therefore, the sales team should consider pitching heavily to east region customers for better returns (sales value).

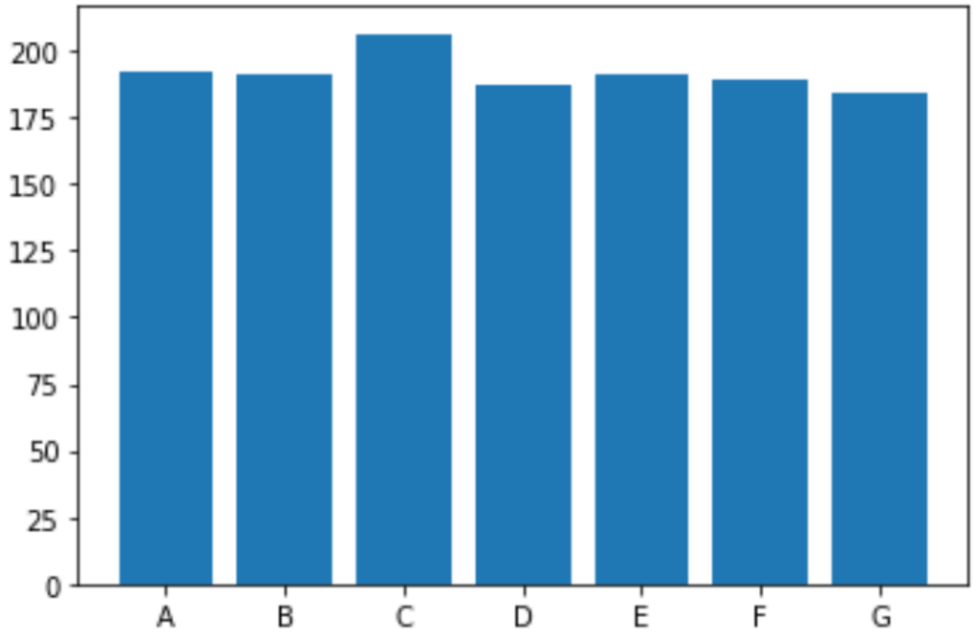


INSIGHT 6

Sales Value (per transaction) | Region

What are the insights gained?

The graph clearly shows that when it comes to ‘per transaction values’, the south region provides the highest amount of sales (followed by east and west) while north and central region give the least amount of sales value. Thus, as the per-transaction difference is not humongous, the sales team should focus on pitching to south (and east - west) regions and de-emphasis on northern and central regions.

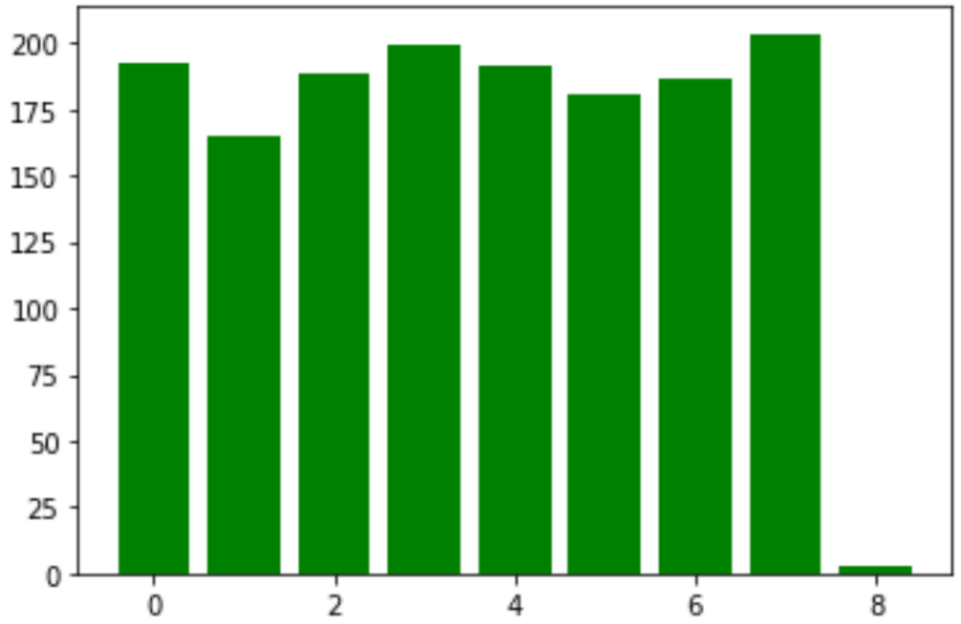


INSIGHT 7

Time | Product

What are the insights gained?

The graph portrays the average time required for each product to execute (sales transaction), and clearly shows that products G and F take the least time to execute (followed by D, E, B and A); while product C takes the maximum time to execute. Therefore, as F and G are not applicable, the sales team should consider pitching products D (followed by E, B and A) for ‘fast and quick’ returns (sales value).

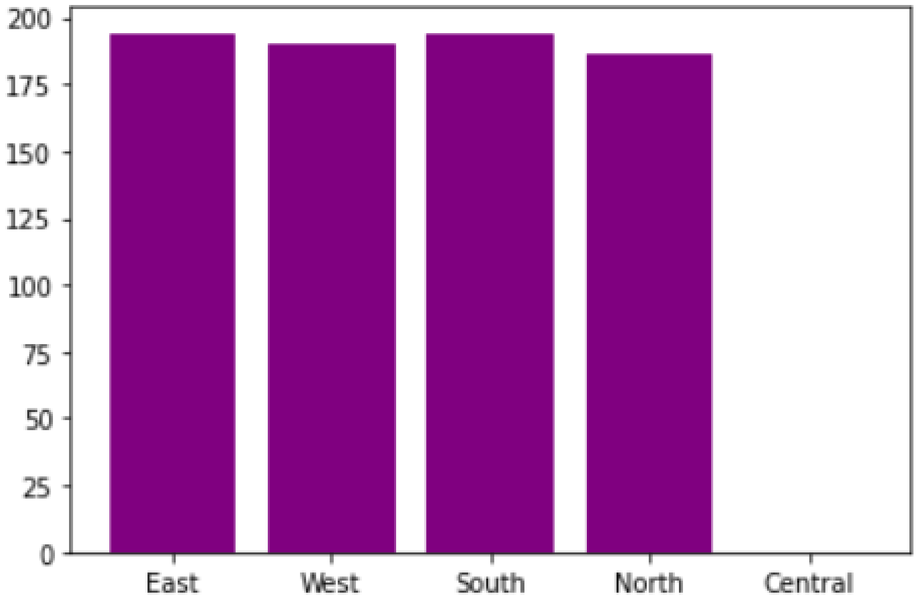


INSIGHT 8

Time | Origin

What are the insights gained?

The graph clearly shows that the origin group 8 takes drastically less time to execute (followed by 1 and 5); while origin group 7 takes the maximum time to execute (followed by 3 and 0). Therefore, as group 8 is N/A, the sales team should consider pitching to groups 1 and 5 (corresponding to display and direct traffic) for ‘fast and quick’ returns (sales value).

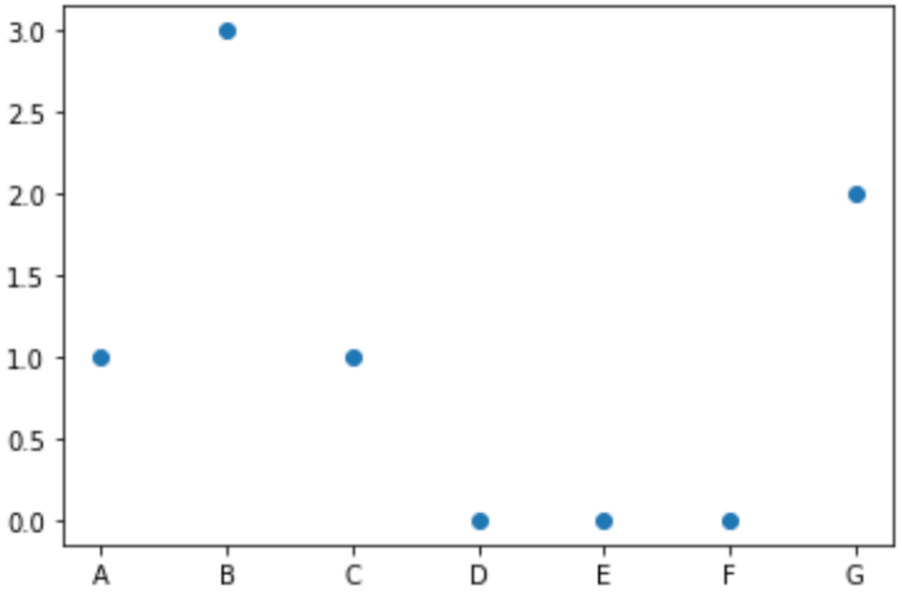


INSIGHT 9

Time | Region

What are the insights gained?

The graph clearly shows that north and west regions take less time to execute (as there’s no data for Central region); while east and south regions take the maximum time to execute. Thus, the sales team should consider pitching to north and west regions more for ‘fast and quick’ returns (sales value).

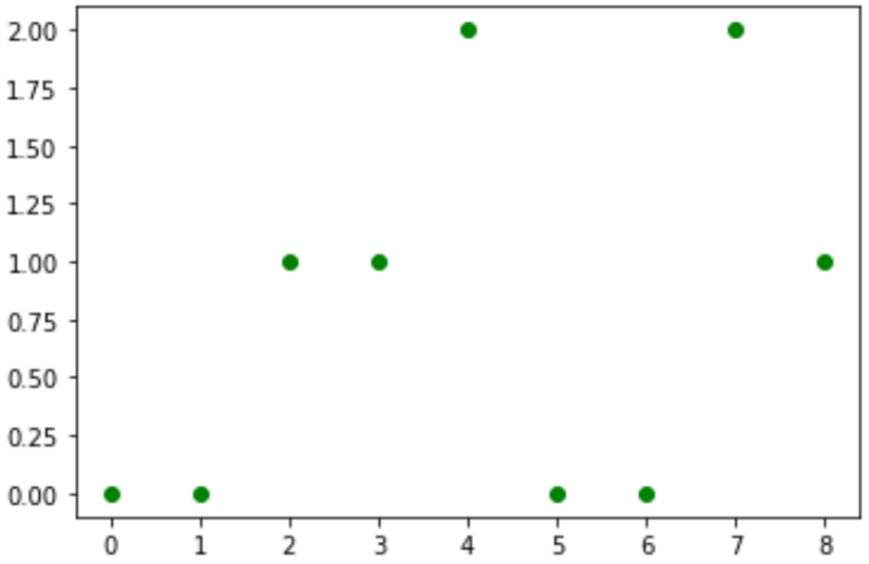


INSIGHT 10

Refund | Product

What are the insights gained?

The graph shows the number of refunds for each product, and clearly portrays that products D, E, F have no refunds; while product B has had the highest number (3) of refunds. So, theoretically, the sales team should consider pitching more for products D, E and F for least amount of refunds.

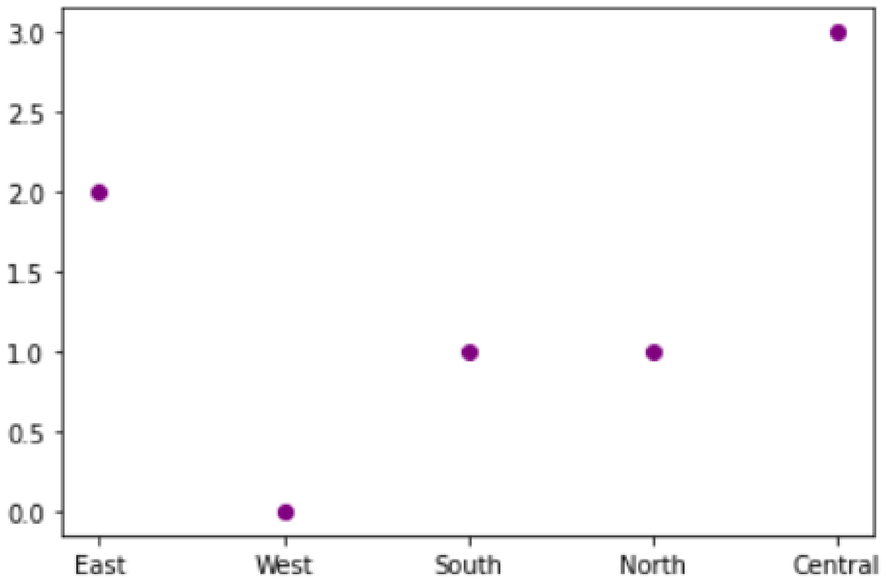


INSIGHT 11

Refund | Origin

What are the insights gained?

The graph shows that origin groups 0, 1, 5 and 6 have no refunds; while groups 4 and 7 have had highest number (2) of refunds. So, theoretically, the sales team should consider pitching more to 0, 1, 5 and 6 groups (corresponding to referral, display, direct traffic and email) for least amount of refunds.



INSIGHT 12

Refund | Region

What are the insights gained?

The graph shows the number of refunds for each region, and clearly portrays that west region has no refunds; while central region has the highest number (3) of refunds. So, theoretically, the sales team should consider pitching more to western region (followed by north and south) for least amount of refunds.

What are my final thoughts?

Here, not considering the refund insights (as the total number was negligible) and the total sales value (as per-transaction values provide much better sales' prospects), here are my final thoughts…

Comprehensively, the sales team should focus on products A and B (especially for social and organic search groups from east/west region) as they take overall take less time and provide the maximum per-transaction value.

FINAL THOUGHTS

THANK YOU !