

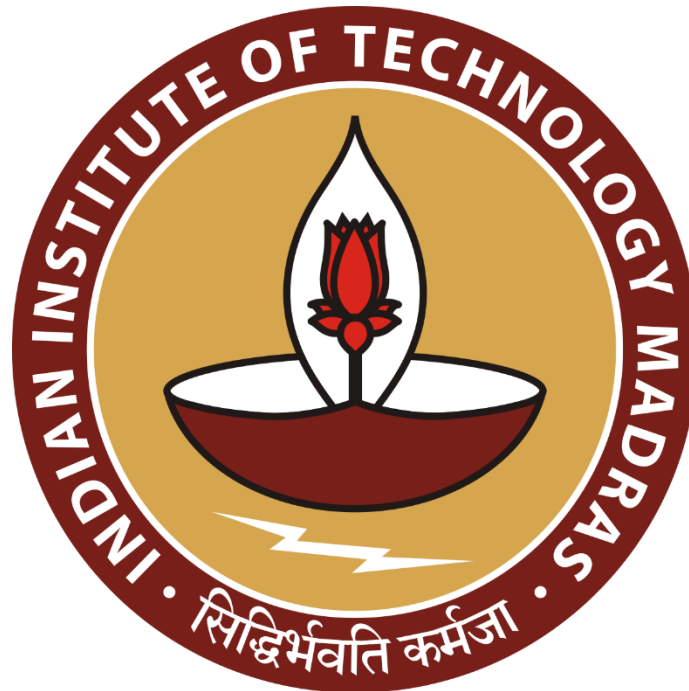
# Revolutionizing Fashion: Leveraging Data-Driven Solutions for Anvi Be Yourself

A Final submission report for the BDM capstone Project

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# **Revolutionizing Fashion: Leveraging Data-Driven Solutions for**

## **Anvi Be Yourself**

### **1 EXECUTIVE SUMMARY**

ANVI -Be Yourself is a dynamic fashion brand operating across diverse e-commerce platforms, committed to delivering high-quality fashion products nationwide. With a strong vision for expansion, the company seeks to overcome existing business challenges. Among these challenges, effective inventory management and staying up to date with evolving fashion trends are paramount.

In the ever-fluctuating land of the fashion industry, ANVI -Be Yourself encounters intricate issues concerning inventory management and determining optimal product life cycles. These challenges necessitate an innovative approach to sustain operational excellence and customer satisfaction.

To address these concerns, our project emphasizes data-driven analysis as a pivotal solution. For the intricacies of inventory management, a demand based strategy will be employed. By meticulously examining sales data alongside external variables, the aim to predict demand with precision will be tried to be achieved. Such insights will enable the company to harmonize inventory levels, ultimately optimizing resources and minimizing overstock or understock situations.

Similarly, tackling the problem of product age necessitates a strategic approach. Through comprehensive analysis, delving into fashion blogs and customer reviews, pinpointing emergent trends will be done. These insights will serve as the cornerstone for curating new trends, ensuring that product portfolios remain relevant and aligned with consumer preferences.

The anticipated outcomes of the data-driven initiatives hold a good potential to try and optimize ANVI -Be Yourself's operations. By addressing these pivotal challenges, the company is hopefully ready to elevate its overall efficiency, thereby adding profitability and establishing a stronger market presence.

In conclusion, this project is poised to help ANVI -Be Yourself Fashion Brand to make its way through fashion commerce with awareness and innovation. Through data-driven solutions, the company is primed to face challenges, streamline operations, and improve its competitive edge, thereby fostering sustained growth and prosperity.

## 2 EXPLANATION OF ANALYSIS PROCESS AND METHOD

The analysis process and methods for this project differs according to the problem statement and the data available related to that particular problem.

Looking further at the customer segmentation issue, the dataset has been divided based on the 6 zones according to the Indian map where each zone contains at least 4 states.

- North Zone
  - East Zone
  - North-East Zone
  - West Zone
  - South Zone
  - Central Zone
- Further, Months have been divided in the form of quarters with 3 months of the year forming one quarter and then segregated based on the quantity sold in these regions. According to what I feel, if both the quarters show an increase or an almost equal demand based on the region, it can be conclusive that more customers are attracted to the product from that particular region and hence more shadow has to be put on the customers from these zones.
  - Of course, there might be external factors like population as well to be taken into consideration but still according to the analysis, even if North east and the East zone is combined, it is almost equal to the segmentation of the central zone(quantity sold). Hence, this is one of the approaches that is being followed.
  - Furthermore, looking at which product is the most sold in the highest selling region would further aid in looking at the profitability issue by trying to get more of the fabric that is present in the inventory and can be used to make the higher selling products and hence reducing inventory and fabric aging as well.

4	Count of QTY	QUARTER		
5	ZONE	Q1	Q2	Grand Total
6	Central Zone	4517	4377	8894
7	East Zone	2770	2573	5343
8	North East Zone	1105	1079	2184
9	North Zone	10287	10884	21171
10	South Zone	6391	6119	12510
11	West Zone	5788	5810	11598
12	Grand Total	30858	30842	61700

Size	Count of SKU Name
L	11924
M	15518
S	12402
XL	7914
XS	7055
XXL	6857
XXS	6
Grand Total	61676

- Diving further into the issue, **Size based classification** is one of the methods that was found to be useful while performing the analysis. I feel that this was useful as customers buy the products based on the Size of clothes that is available and hence looking at the segmentation of customers based on size gives a very clear picture of which size is more in demand and which size is comparatively less dominant or preferred amongst the customers.
- This size based segmentation was done zone wise and hence it would become more transparent to compare if the most demanded size was same across all the zones or if there is a particular zone where a different size away from the trend was more dominant or not and hence focus on distributing the product quantities based on the sizes preferred in that particular zone.
- Customer segmentation leads to increasing profitability because of the information of knowing what type of products and where we would be trying to target to try improving sales.
- Improving profitability and sustaining is one of the most important considerations of any successful business and hence in this case as the company is an e-commerce based fashion business, segregation of the sales of all the products across various platforms is performed.

Channel Name		Values									
AJIO		AMAZON_IN_API		Anvibys		BEYOND FOLLOW		FLIPKART			
Month	Sum of Selling Price	Sum of QTY	Sum of Selling Price	Sum of QTY	Sum of Selling Price	Sum of QTY	Sum of Selling Price	Sum of QTY	Sum of Selling Price	Sum of QTY	
Jan	784338.62	1031	82049	73			6243	7	469544	604	
Feb	716062.67	991	68472.14	74	3465.35	3	2100	2	592866	804	
Mar	1671025.37	2384	195113.38	237	5561	5			941423	1405	
Apr	1180527.99	1698	121332.34	141					501433	670	
May	1189319.36	1640	103159.16	119			490	1	415870	513	
Jun	853811.17	1198	66462.16	81	1590	1	1433.6	2	315203	355	
Grand Total	6395085.18	8942	636588.18	725	10616.35	9	10266.6	12	3236339	4351	

Figure 3 : Platform wise sales and quantity sold

CENTRAL ZONE		
	Sum of Sellin	Sum of QTY
AJIO		
AMAZON	116113.58	133
FLIPKART	640297	870
LIMEROAD	243667	335
LULU & SKY	9955	11
MEESHO	137436	243
MYNTRAA	4103556	4919
NYKAA	1905276.22	2158
TATA CLIQ	165907.19	184

Figure 4 : Platform wise sales and qty sold(Central)

EAST ZONE		
	Sum of Selling Price	Sum of QTY
AJIO		
AMAZON	56260	66
FLIPKART	708719	922
LIMEROAD	149798	196
LULU & SKY	5278	7
MEESHO	110713	176
MYNTRAA	2194957	2602
NYKAA	1112951	1235
TATA CLIQ	111958.4	125

Figure 5 : Platform wise sales and qty sold(East)

- In India, there are variety of platforms for e-commerce and having a greater reach across all the platforms leads to having more of the products being sold but it is not feasible to have

equal amount of sales across all of these e-commerce platforms and hence trying to focus on the platforms which give better returns is the analysis that is being tried to be done.

- Consumer behavior can be noticed as well and hence it contributes as a factor for the Customer Segmentation issue as well.
- The figure 3, 4 and 5 provide a detailed monthly analysis of the platform wise sales classified based on the zones and hence it provides a comprehensive analysis method of as to which platform is performing the best classified into different zones.
- It also gives an opportunity to analyze and target the appropriate platforms to increase sales and revenue. It might happen that one of the platforms exceeds the rest in a particular zone in terms of sales but the same situation might not repeat in another zone and hence it gives a further detailed analysis breakdown of which platform to target zone wise.
- Considerations of festivals and other important occasions could also add onto the sales and platform trends and hence this also becomes an additional parameter for further analysis to get a better understanding of the sales.
- A great inventory is very important for any e-commerce firm and it is even more crucial to ramp up the inventory during the SALE period and festival months in order to cater to the demands of the customers. Inventory management, hence, becomes a very crucial analytical parameter which needs to be dealt with in multiple ways so that a good and a crucial output may be obtained for the optimum inventory levels.
- This could be done by taking stock of the inventory data and it can be classified based on higher selling states, zones. Further, optimum inventory could be obtained by analyzing which product or SKU is the highest selling SKU and based on those comparisons, an optimal inventory could be suggested to the company.
- Apart from the best SKU classification, a thorough comparison in sales could be made by referring to the previous year's data and if an upward trend is obtained after the analysis, the inventory level could be ramped up or an alternative solution could be given based on the analysis.
- Further, customers find color very important as one of their parameters while choosing a dress and hence classification based on Color of the material could be done after analyzing the buying trend based on the colors that the customers prefer and thus helping the company to keep products which they know will sell faster and better.

Sum of Total Inventory		SIZE-letter												
Color		1	3	5	L	M	S	XL	XS	XXL	XXS	(blank)	Grand Total	
Black		42				631	1040	971	436	745	361		1	4227
Maroon						722	1032	884	410	424	454			3926
Blue						595	791	831	412	498	422			3549
Green						521	391	367	229	213	121		4	1846
Mint Green						329	436	372	192	291	163			1783
Pink						378	406	293	246	176	208			1707
White						203	204	287	174	220	86			1174
Red						191	359	108	151	194	73	11		1087
Orange						148	169	358	81	149	59			964
Multi						160	142	104	243	63	171			883
Brown						167	149	147	100	85	69			717
Yellow						60	93	102	71	44	58			428
Burgundy						22	63	62	42	138	36			363
Grey						87	72	75	13	28	27			302
Peach				71	31	31	29	22	27	45				256
Multi Colour										144				144
Dark Pink						48	44							92
Purple						18	15	38	5	14				90
Navy Blue										56	31			87
Beige						5	20	21	10	3	13			72

Figure 6 : Color wise clothing sold based on sizes

- By doing so, the company will be able to meet the customer demand and also reduce the inventory shelf life leading to lower fabric aging which can also indicate to them that they can introduce a new product into the market. But, a caution to be noted here, if a new product is released into the market, they should target the high selling zones with minimum inventory and accordingly increase the levels based on the response.
- Inventory can also be controlled by removing old products and replacing them with new ones. But this has to be done with high performing products and only when a new fashion comes into the market.
- This could be done by comparing the sales of the product in the current and previous year and see if there is a declining trend month wise and if that is noted, then that shows a sign that the existing inventory might increase and it is time to bring a change into the market.
- The life of a product especially in the fashion industry is the most important as trends in the fashion industry change on a very frequent basis and hence inventory management becomes very important.
- The product life issue could be reduced by identifying the increasing trend quarter wise, by targeting or predicting a native festival that may be coming up which would see an increase in buying power from customers as well and hence trying to sell products during that period.

FABRIC				
FABRIC AVAILABLE			81380.07	meters
AVERAGE FABRIC AGEING			409	

Figure 7 : Fabric Statistics

- Fabric Usage is directly related to how many clothes have been produced and fabric aging is a parameter that needs to be kept under control as older the fabric becomes, the more the quality of the fabric reduces. The current fabric aging is around 400 days.
- To bring this under a specific limit, I think focusing on the above mentioned problem solutions will all lead to an increase in the amount of sales and hence more of the raw fabric being turned into finished products, hence reducing the fabric aging issue.

### 3 RESULTS AND FINDINGS

- Customer segmentation was one of the issues that I had mentioned in the initial analysis explanation and hence addressing this issue, a good amount of analysis has been done in accordance with the problem solving approach that I had mentioned about.
- As previously mentioned, the division of the country into various regions of North, South, East, West, etc. provided a strong basis for a good analysis and comparison in order to break down the segmentation issue into fine and detailed analysis.
- As part of the customer segmentation, a comparison with the 3 most profitable and 3 least profitable states is performed and it is safe to conclude that while most of the zones have good number of customers and good profits, the north east zone conversely has a lower number of profits and sales.
- There may be many external factors that may be affecting the same and hence it is in the interest of the company to prioritize sales to higher selling zones by not compromising on the lower selling one as well.

HIGHEST SALES	Haryana	9380956.92
2nd Highest	Maharashtra	7515786.84
3rd Highest	Karnataka	5597890.96
Lowest Sales	Mizoram	48393.5
2nd Lowest Sales	Sikkim	70961
3rd Lowest	Manipur	72576

Figure 8 : Top and bottom states sales comparison



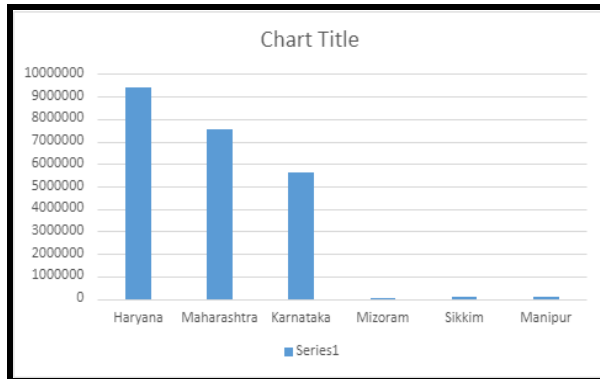


Figure 9 : State comparison graph

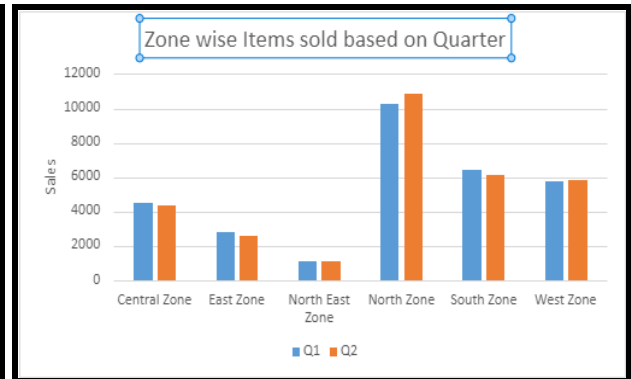


Figure 10 : Zone comparison graph

- As sales and the quantity of item sold have a very strong correlation, and hence it becomes safe to conclude that the revenue and the quantity sold are in proportion with each other,
- An excerpt can be seen in figure 8 which gives the highest sales across the country and it can be concluded that states belonging to north, west and south zones may come in the top 3 list of zones with highest sales and this can be supported with the previous point mentioned about the correlation and figure 10 bolsters the conclusion made in the previous point.
- To further support the analysis, a histogram has been plotted between sales and zones to deduce a favorable analytical outcome of how the zones are performing.
- The figure 11 clearly suggests that North, South and West zones remain at the top of sales for the company and hence those regions set up a very good customer and market base for the company's good profitability and revenue.

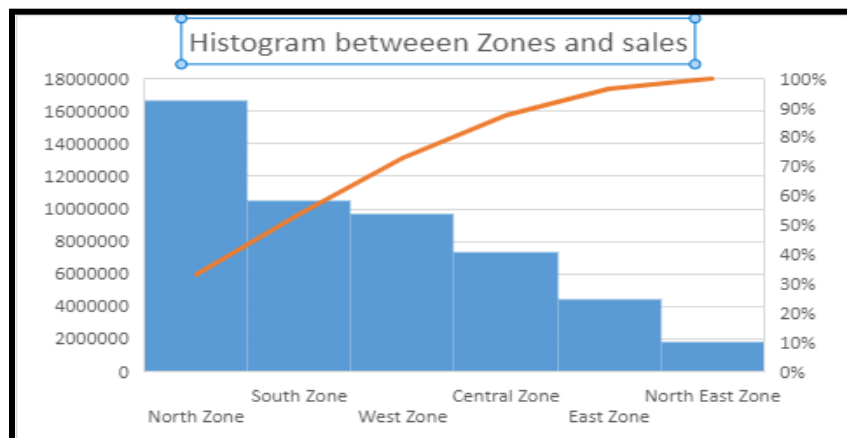
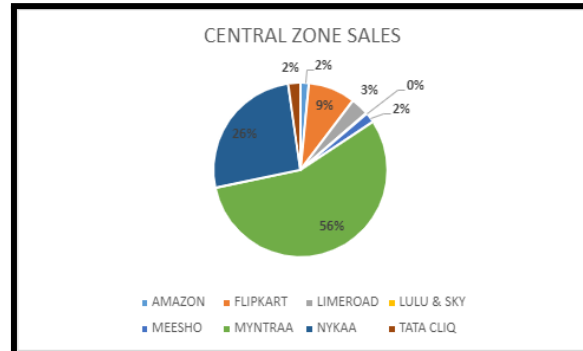


Figure 11 : Histogram plot between sales and zones

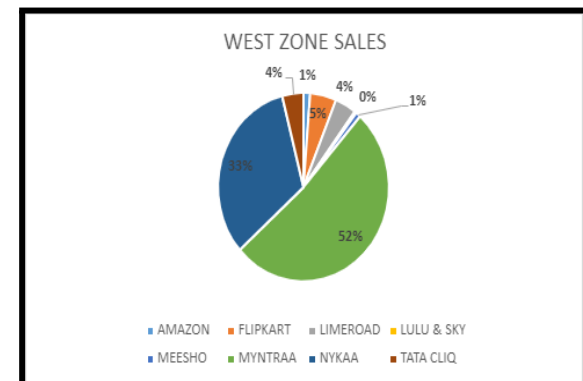
- Profits are a very important factor for any company and more the profits relate to the company planning to expand and bolster their presence. In the case of this company where e-commerce platform sales decide how profitable the company is going to become, a detailed analysis of the platform wise sales and segregation is done in order to get a segregated zone wise, platform based sales and performance when compared with all the other platforms.

- In the below figure, a pie chart with percentage values is plotted to get a very visually easy graph to deduce information from and hence come to a good and nice conclusion.

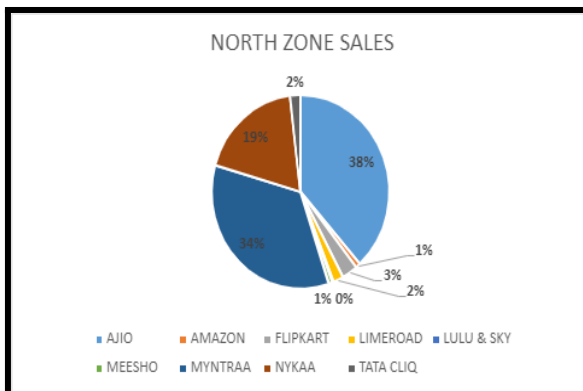
	CENTRAL ZONE	
	Sum of Sellin	Sum of QTY
AJIO		
AMAZON	116113.58	133
FLIPKART	640297	870
LIMEROAD	243667	335
LULU & SKY	9955	11
MEESHO	137436	243
MYNTRAA	4103556	4919
NYKAA	1905276.22	2158
TATA CLIQ	165907.19	184



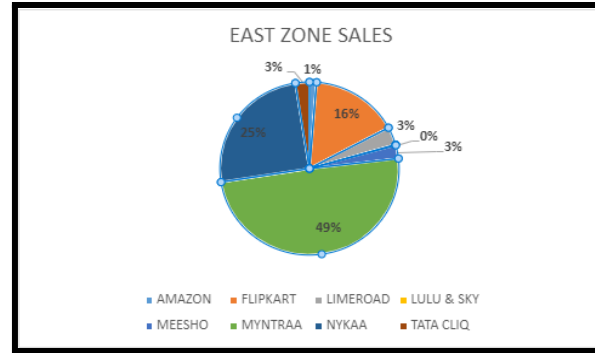
	WEST ZONE	
	Sum of Sellin	Sum of QTY
AJIO		
AMAZON	117935.56	136
FLIPKART	482904	659
LIMEROAD	389465	522
LULU & SKY	34194	40
MEESHO	89723	159
MYNTRAA	5024861	6065
NYKAA	3151060.14	3570
TATA CLIQ	389708	437



	NORTH ZONE	
	Sum of Sellin	Sum of QTY
AJIO	6395085.18	8942
AMAZON	143124.18	164
FLIPKART	476584	660
LIMEROAD	312003	430
LULU & SKY	36372	43
MEESHO	110147	183
MYNTRAA	5770712	6879
NYKAA	3113213.94	3504
TATA CLIQ	311074.06	341



EAST ZONE	
Sum of Selling Price	Sum of QTY
56260	66
708719	922
149798	196
5278	7
110713	176
2194957	2602
1112951	1235
111958.4	125



NORTH EAST ZONE	
Sum of Selling Price	Sum of QTY
AJIO	
AMAZON	19175
FLIPKART	348995
LIMEROAD	106593
LULU & SKY	6795
MEESHO	75514
MYNTRAA	831924
NYKAA	422179.3
TATA CLIQ	21653.77
	20

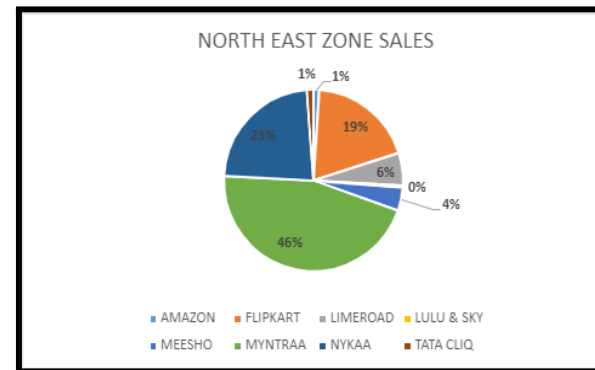


Figure 12 : Zone wise analysis based on platforms

Figure 13 : Pie chart comparison of the data

- From the above analysis done on various platforms, it can be inferred that many or most of the zones have seen Myntra fashion as the primary go-to platform for purchasing their products.
- Myntra proved to be a very high selling platform across the different zones and that is clearly visible from all the pie charts that are displayed here. Nykaa fashion comes in second place in most of the zones that are displayed above. From this analysis, concluding about diverting the focus to these 2 platforms by improving their marketing techniques and increasing the amount of inventory on these platforms will help the company see a better output.
- In addition to these platform sales, each of them witnesses a spike in the months of February, June, September and December. These can be possible due to a lot of reasons.
- One of the main reasons for this spike could be the onset of the festival seasons during or after these months. And, another reason could be due to the mega SALE that the particular platforms offer.



Figure 14 : Sales across various platforms graph spike

- The spikes during the course of February and March as mentioned earlier is mainly due to the festivals and corresponding Mega SALE. Like Amazon has its great Amazon Holi Sale from 3-6 March, Ajio had its mega SALE from 3-19 march and hence the spike is clearly evident.
- The inventory in these months can be ramped up due to positive buying from the customers and can also introduce new and better products to see how the products perform during these times. The SKUs that were least selling could also be sold here and hence they could get rid of the old inventory in stock which were previously causing losses to them.
- The inventory issue that is existing could be solved by making a detailed comparison between current year and previous year sales month wise and then perform an analysis as to if there is a need to increase the inventory for the upcoming year or the upcoming months.

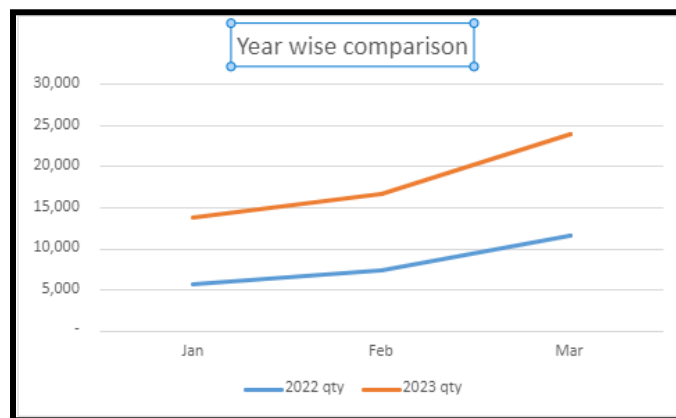


Figure 15 : Year wise comparison

- In figure 15, a clear increase in demand is seen from the starting of the year(2023) as compared to 2022 and hence this shows a clear indication that there is a need to have a greater inventory in the coming years in order to meet the demands of the customers and also in order to make a substantial amount of profit for the company as well.
- Inventory can be managed by taking a good look at how each of the products or SKUs are performing with respect to the other and from figure 16,17, it can be inferred that **Brown-Black Top** is the highest selling item not only across the individual zones but also across the country.

- Taking note of the point above, it can be easily inferred that the material or fabric that is required to make these high selling products should be procured more and used more and the corresponding colors(Brown and Black in this case) should also be taken note of.

Count of QTY			
SKU Name	QUARTER	Q1	Q2
Brown - Black Top		826	684
Red & White Polka Raffle Dress		312	300
Multi Print Shrit		157	154
Black & Beige Floral Bodycon String Dress		114	196
Black lycra net top		142	129
Red Floral Printed Top		160	100
Beige Brown Stylish Crop Top		103	130
Maroon front slit dress		115	117
Black Buta Top		136	77
Stylish Animal Print Dress		125	81
Black Floral Midi Dress with front Slit		64	131
Tie & Die Shirt Dress		137	57
ANVI Be Yourself Blue Print Smocked Chiffon Crop Top		95	94
ANVI Be Yourself Women A-line Pink Dress ()		81	99
Animal Prints Pleated Skirt		96	73
Red Floral Volume Sleeve Shirt		122	40
Orange gather printed dress		92	66
Grand Total		1106	947

Figure 16 : SKU/product wise sale based on zones

Count of QTY			
SKU Name	QUARTER	Q1	Q2
Brown - Black Top		4050	3315
Red & White Polka Raffle Dress		1318	1106
Black & Beige Floral Bodycon String Dress		856	1044
WOMENS SOLID BLUE ASYMMETRICAL GATHRED SKIRT		782	627
ANVI Be Yourself Casual Animal Print Women Purple Top ()		790	616
Black lycra net top		744	625
Beige Brown Stylish Crop Top		585	726
Red Floral Printed Top		733	526
Multi Print Shrit		581	617
Red Floral Volume Sleeve Shirt		738	430
ANVI Be Yourself Blue Print Smocked Chiffon Crop Top		537	596
Black Buta Top		651	432
ANVI Be Yourself Women A-line Pink Dress ()		461	530
Tie & Die Shirt Dress		582	404
ANVI Be Yourself Solid Women Asymetric Red Skirt ()		502	378
ANVI Be Yourself Women Blue Printed A-line Midi Skirt		392	418
Maroon front slit dress		365	442
Party Puff Sleeves Floral Print Women Blue Top		208	547
Grand Total		2053	1106

Figure 17 : Nationwide SKU/Product sale

- As mentioned about the sizes earlier, the inventory levels can be optimized by looking at the size preferred by the valued customers and based on which size is most selling, more of the product can be kept in stock and produced more as well.

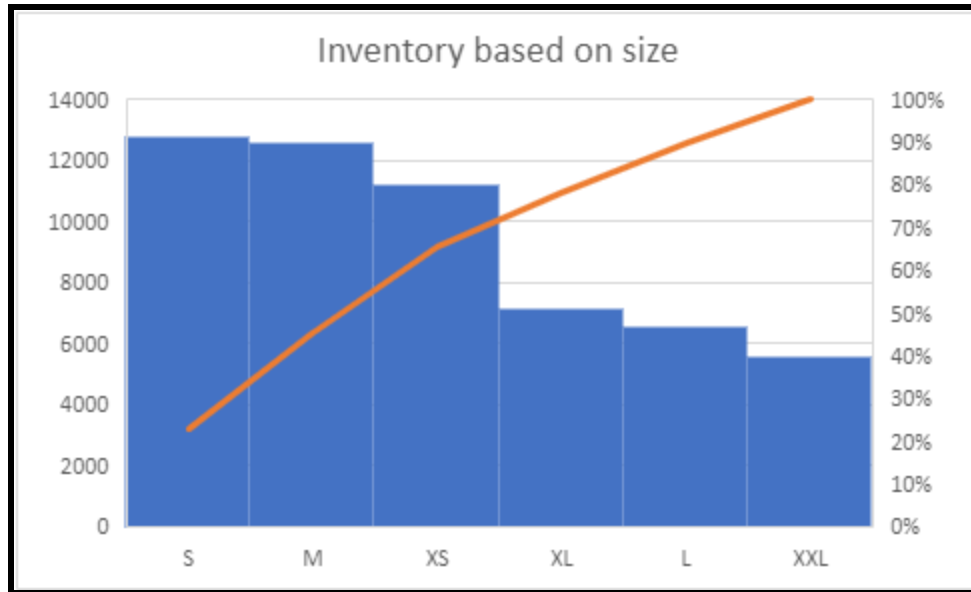


Figure 18 : Inventory based on the size

- Inventory can also be looked at by comparing the various year sales and thereby inferring as to which months have higher sales and the ones with lower sales.
- Now, every fashion product might not be perfect and might receive a negative review and the similar case is with this company as well. There are numerous reasons as to why a customer wouldn't be satisfied with the product and the customers are provided with a feedback option as well to review the product. In figure 19, a quantitative comparison is done between the reviews and is sorted in descending order.

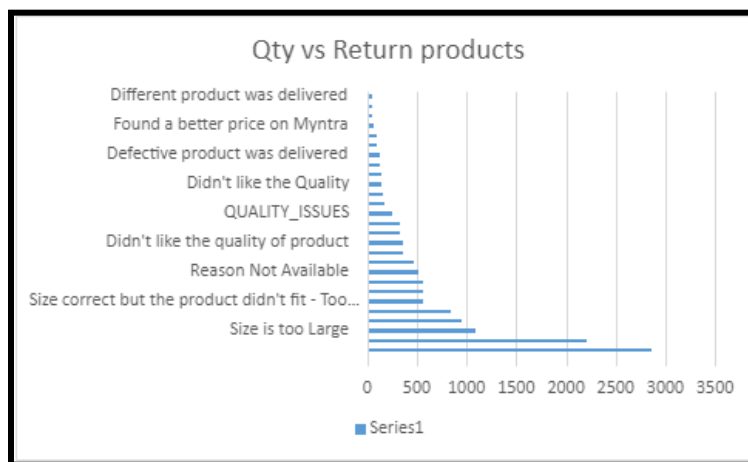


Figure 19 : Plot between quantity vs return reason

- In the above figure, it is clearly seen that **size issues** is the most common one and fitting is too large is the next one and hence the company should be taking note of all of this in order to incorporate this in their complaint logs and try to rectify their products so that the number of return orders reduce and hence not piling up the inventory further

Return Reason	Count of QTY
I did not like the fit	2866
Size is too Small	2201
Size is too Large	1093
Received a poor quality product	954
It did not look good on me	847
Size correct but the product didn't fit - Too Small	570
SIZE_FIT_ISSUES	570
Didn't like the product - Didn't look good on me	566
Reason Not Available	516
Product image was better than the actual product	464
Product didn't fit- Too Small	364
Didn't like the quality of product	360
I do not need it anymore	333
Product looked old	323
QUALITY_ISSUES	248
Color is different	171
Product didn't fit- Too Large	167

Figure 20 : Reason wise cumulative complaint quantities

## 4 INTERPRETATION OF RESULTS AND RECOMMENDATIONS

- The results and findings stated in the above section have been done after thorough analysis and extensive research of the metadata that was provided by the company.
- After plotting the graph based on the data, there are certain conclusions that can be drawn from the same and from these conclusions, a series of recommendations could be provided to the company which would not only be helpful to them in the short run but it could also be beneficial to them in the long term game plan towards becoming a more sustainable and profitable business.
- Firstly, based on the customer segmentation done and the detailed analysis performed, it is safe to conclude that North, West and South zones are the highest performing zones and this is proved through various analyses based on zone wise sales, zone wise quantity sold and zone wise customers.
- If more focus is given towards these regions in the future while keeping in mind the distributions of the stocks across the platforms, then it might lead to better sales and profitability.
- This can be done by showing a lesser amount of delivery time in these regions by keeping adequate necessary arrangements in order to try and make most of the profits from these regions and hence increasing their presence on the e-commerce platforms and in the fashion industry as well.

- The platforms on which the company is selling their products is a very important consideration. If the company aimlessly targets the highest selling e-commerce platform in the country compared to the others, it may not help as each e-commerce platform in India has its own specialization and hence selling their products on platforms where fashion products are quite demanding should be preferred compared to the rest.
- The pie-chart segregation and analysis zone wise was to iterate this particular fact of where the company should be targeting and in what amounts.
- The distribution clearly showed that Nykaa Fashion and Myntra platform took more than 50% of the total products that they were selling. This was not in a particular zone or two but rather across all the zones, the two platforms mentioned before ruled their market share and hence the business should be more oriented towards these platforms.
- But, also to keep in mind that the other platforms should not be compromised, just that the higher selling platforms should be given more attention compared to the rest.
- Furthermore, a solution of comparing sales of previous years also had been mentioned above in the results and findings and in figure 21 and 22, a detailed analysis is put into a simple table that can be easily interpreted.

2021	Sum of Quantity	Sum of Total cost	2022	Sum of Quantity	Sum of Total cost	2023	Sum of Quantity	Sum of Total cost
Aug	6731	1,265,606	Jan	9109	1,936,936	Jan	7045	1,832,448
Sep	6131	1,045,025	Feb	7391	1,670,999	Feb	8202	2,114,253
Oct	11084	1,955,537	Mar	4651	969,672	Mar	7274	1,721,211
Nov	10663	2,149,159	Apr	8408	1,884,562	<b>2023 Total</b>	<b>22521</b>	<b>5,667,912</b>
Dec	18753	3,891,561	May	5723	1,255,476			
<b>2021 Total</b>	<b>53362</b>	<b>10,306,887</b>	Jun	10487	2,345,938			
			Jul	12087	2,563,653			
			Aug	4676	1,160,016			
			Sep	10254	2,401,820			
			Oct	6841	1,581,858			
			Nov	5066	1,325,191			
			Dec	7117	2,079,705			
			<b>2022 Total</b>	<b>91810</b>	<b>21,175,825</b>			

Figure 21 : Yearly comparison of sales and quantity data

- Year after year, the company has shown a substantial increase in sales and the quantity sold which is a good sign for the company but one important result could be noticed if January of 2022 and 2023 is compared. This is the month where 2022 has performed better than 2023 and a decline of 5% in sales is seen even though February and March have seen an increase of 3% and 54% respectively.
- The company could therefore focus on the months which are showing lesser amount of sales than the previous year and try to find out appropriate reasons as to why this must be occurring.



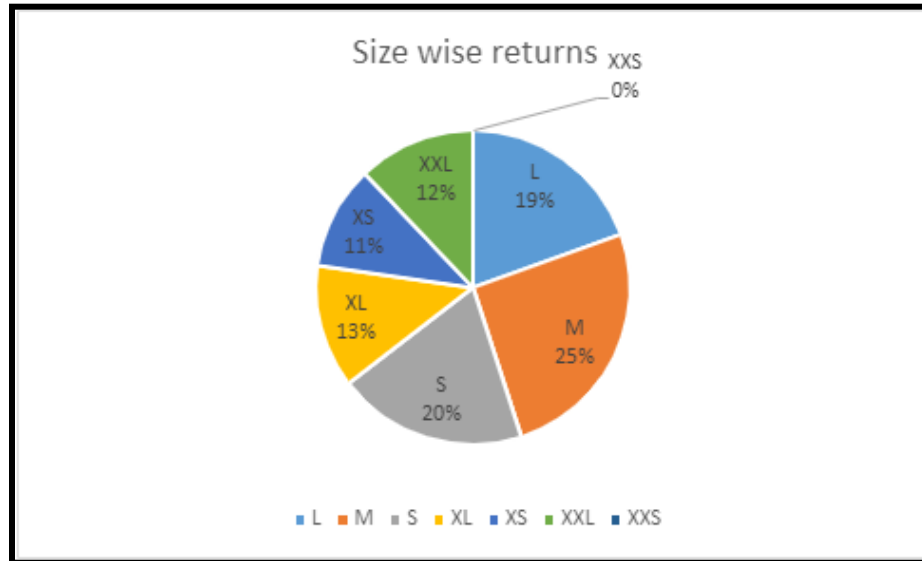
- The inventory issue was also well highlighted in the results and findings section but there is a drawback that the company needs to take care of which is depicted in figure 22.
- In **figure 21**, in the sales metadata section, Brown-Black top was the largest selling product but in the inventory metadata section, after performing some analysis, Brown-Black top did not have the largest inventory even though it was the highest selling across the country and hence the company should take note of this.
- If the inventory is in sync with the SKUs sales, then it will be easy for the company to manage the demand and supply levels and hence it will be profitable for the company.

Item Name	Sum of Total (Stock on hand)
Red Floral Printed Top	2205
Brown - Black Top	1692
Mint Green Floral Printed Top	1628
Stylish Yellow Printed Crop Top	1139
ANVI Be Yourself Casual Animal Print Women Purple Top ( )	953
Batwing Solid Crop Shirt	851
WOMENS SOLID BLUE ASYMMETRICAL GATHRED SKIRT	832
Dark Blue Raffle Floral Dress	760
Aqua Blue Chiffon Flared Dress	688
Orange Chiffon Flared Dress	663
Tie & Die Shirt Dress	633
Black Chiffon Flared Dress	611
Multi Print Shrit	595
Solid Navy Blue Dress with front Slit	527
Long Maxi Dress	514

*Figure 22 : Inventory based SKU's*

- Based on the sales and the zone wise distribution, an analysis was done and an optimal level of around 140% of the monthly quantity sold must be kept in order to meet the demand. The extra 20% is kept with considerations from external factors such as festivals, SALE periods, etc.
- The 140% is suggested only for the high selling inventories or SKUs but for the ones with the lower selling SKUs, a suggestion of keeping at least 110% of the current value and try to focus more on the higher selling ones with better marketing strategies and other considerations especially on the higher selling platforms.
- The inventory management improvement could also be done by the size segregation, and from the analysis **S and M** sizes are the most selling ones and a suggestion to the company that all of the products should at least contain these sizes apart from the others as this is the best way to sell the existing inventory.

- The company should also consider the negative reviews or feedback that is given and in the Sales metadata, an analysis of the return reasons column was done based on the reason and size classification and the results of the same is in the pie chart format in figure 23 below.



*Figure 23 : Size wise return percentage*

- It can be inferred from the above representation that even though sizes M and S are the highest selling sizes, these 2 sizes are facing the most number of returns or negative reviews as well from the customers.
- In my opinion, the company must address these issues and make sure that the fabric design that is used for the production is tweaked and tested and then compared with the current results.
- If the number of returns reduces, then the tweaks are successful and they can be more profitable by not having to keep the already sold inventory in their pile again.
- Product returns are a burden to the company as it adds on to the operating costs as well as the storage costs which the company must try to avoid as much as possible.
- Fabric aging is also a key parameter that was mentioned in the previous section and the current fabric aging is around 400 days, but if the inventory is well maintained and the designs are tweaked so that the returns reduce and more number of clothes are sold, then the age of the fabric will definitely reduce, thereby making way for a newer fabric or material to be introduced in the market.

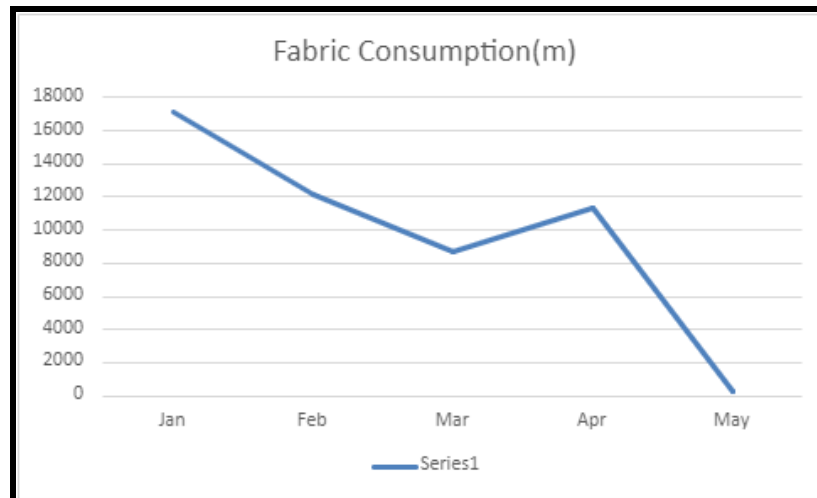


Figure 24 : Fabric Consumption

- This is the fabric consumption for 2023 from Jan to May. The fabric usage is in sync with the number of quantities sold when compared to 2022 until April but May is showing a decline in the consumption amount which is not a great sign. And from the above analysis, March was termed to be a festival or a SALE period but the fabric consumption is less comparatively in that month as well which is again not a positive sign.
- The sales are there but if fabric consumption is not high, it could mean that either new products are not frequently introduced which is a major requirement in the fashion industry or the company already has a lot of inventory which they might be required to finish.
- New products must be introduced at a frequent basis as the trends in fashion keeps changing and if new products are launched at a frequent basis, first on the platform where the sales are highest and then maybe after its success there, it can be launched on the other platforms as well.
- 2022 showed a great increase in sales in June and July months which means that if the trend is followed, the same would be required for 2023 as well but this is not the case here from the consumption trend. Hence, a recommendation of trying to maintain at the levels of the previous year or keeping more than required will be a necessity as mentioned earlier as well.
- Looking at some of the other e-commerce based fashion brands, a price comparison check was done and the prices of this company was quite competitive with those of some other brands of similar business. Moreover, increasing prices in India beyond a certain limit is not a wise decision unless the company is marketed as a luxury brand which is not the case here.
- Better marketing strategies on the e-commerce platforms will further bolster their presence especially during the SALE season as more customers will be making their presence on the platforms.

- To summarize, all the points mentioned above in this section of the report will hopefully be useful to the company in order to improve their performance and business. Additionally, trying to address the problem statement mentioned is the main objective and this report tries to answer the problems that were addressed in the problem statement mentioned earlier.