IIT Madras

BS Degree

Business Data Management

Final submission

Optimising sales of a B2B Garment shop

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Executive Summary

The proposed capstone project is centred around the objective of enhancing the sales and marketing strategy of a textile shop that offers a range of textile products such as readymade clothes for kids and adults. The primary goal is to improve the shop's quarterly and annual revenue by optimising their sales and marketing efforts.

To achieve this, the project will entail an in-depth analysis of the sales data from the previous financial year of the shop. This analysis will also consider their target market, competitors, product offerings, pricing, and sales channels. Identifying the gaps and areas of improvement in the current strategy will be a critical aspect of this analysis.

After a thorough analysis, I will provide recommendations to address the problem areas we have identified. These recommendations will help the textile shop improve its sales and marketing strategy, increase its revenue and market share.

The report will include an analysis of the sales data of one financial year to identify patterns and trends in the sales data available to us. This analysis will involve comparing the revenue generated for each quarter. I will also identify the best and worst performing quarters, enabling us to understand where the shop can focus its efforts to improve sales.

To effectively analyze the sales data and make informed business decisions, I will be utilizing various Excel tools such as pivot tables, bar graphs, and line graphs that can provide valuable graphical representations. These tools enable a visual representation of the sales data, making it easier to identify trends, patterns, and key insights.

creating pivot tables in Excel can quickly summarize and aggregate sales data based on different criteria, such as product categories, regions, or time periods. This allows for a comprehensive view of sales performance across different dimensions, helping to identify the outperforming and underperforming products.

By analyzing the outperforming and underperforming products using these Excel tools, the business can make data-driven decisions to optimize revenue generation. For instance, if certain products consistently outperform others, the business can allocate more resources, marketing efforts, and inventory space to capitalize on their success. Conversely, if specific products are consistently underperforming, the business can evaluate the reasons behind their lackluster performance and consider strategic adjustments, such as pricing changes or product improvements.

Detailed Explanation of Analysis Process

Objective 1 : Increasing revenue of the 2nd quarter of the financial year which has the lowest sales .

- The sales data of the whole financial year was analysed with the help of tools like pivot table and bar chart to identify the quarter and months with the lowest revenue.
- It was found that the 2nd quarter i.e. the months of July , August and September generated low revenues compared to the other months.
- To identify the trends contributing to the low sales , the sales data of these months were analysed in more detail.
- The major causes which were identified were outdated readymade clothes collection, low inventory capacity and competition from other businesses.
- To resolve the above issues solutions were discussed like offering some discounts on outdated clothes , increasing the inventory and promoting their high value clothes category to their consignees .

Objective 2 : Increasing the inventory capacity so as to generate maximum profit during the high sales winter months.

- After a detailed analysis of the sales data of whole financial year , it was visible that the business is generating maximum revenue during the 3rd and the 4th quarter.
- The business still had the potential to maximise some more profits by taking adequate measures.
- The woolen clothes like sweaters , jackets and inner wears like trousers and bodywarmers are in huge demand during the winter season.

- Due to the low inventory size the business is unable to keep large stocks of these high value and high demand products .

- To resolve the above issue strategies were discussed like renting out inventory of other shops and storing these products in optimum quantity to generate better profits.

Objective 3 : Outdated readymade garments in some categories are contributing to low sales in some financial quarters .

- I found out that there was a huge stock of outdated readymade garments of summer collection in the shop which were contributing to low sales and low demand among their consignees.

- Currently the owner isn't following any marketing strategies and isn't collecting any feedback from its consignee's shops to understand the current situation in the market and latest fashion trends.

- The business is offering the same summer collection every year because of which it is losing the summer collection market share every year to it's competitors.

Objective 4 : Increasing the overall profitability of the business and facing the e - commerce.

- During my discussion with the business owner we discussed the competition which his shop is facing in the age of e - commerce. Big brands like AJIO, Myntra etc. are attracting a lot of their customers and day by day it's becoming difficult for them to survive.

- The business isn't offering anything new which is different from the online e - commerce clothing brands. To be ahead of the competition the shop must include some unique customer experience techniques to attract consignees demands.

- Currently the shop is following the same age old method of business and is having no online presence at all . By making their business online and advertising and

doing some market research they can expand their business by reaching out to new consignee shops which in turn would expand their customer base indirectly.

- The business has not yet adopted a digital inventory management system and is relying only on manual methods. Apart from this they also haven't made any online payment method channel and collects revenue in Cash or cheque.
- They currently take 9-10 days to deliver orders to their consignee shops , this can be minimized by investing in the supply chain systems. Maximum time goes in packaging of the products . For this they can hire some more employees and reduce the delivery time to 5-6 days.

Results and Findings

Revenue Analysis

The below graph shows the revenue generated in each month of the financial year.

Figure 1

- The above analysis shows that December , January , February and March are the highest revenue generating months, with March being the highest.
- In the months of June , July , Aug and September the business is struggling to generate revenue.
- The analysis shows that the average monthly revenue sales of each month of the financial year stands at ₹659,211.33 with the standard deviation being ₹54,439.26
- Minimum and Maximum Monthly Revenue:

  The minimum monthly revenue is 5,84,338 INR (recorded in July), and the maximum monthly revenue is 8,99,910 INR (recorded in March).
- Range of Monthly Revenue:

  Range = Maximum Monthly Revenue - Minimum Monthly Revenue

  Range = 8,99,910 INR - 5,84,338 INR

  Range = 3,15,572 INR

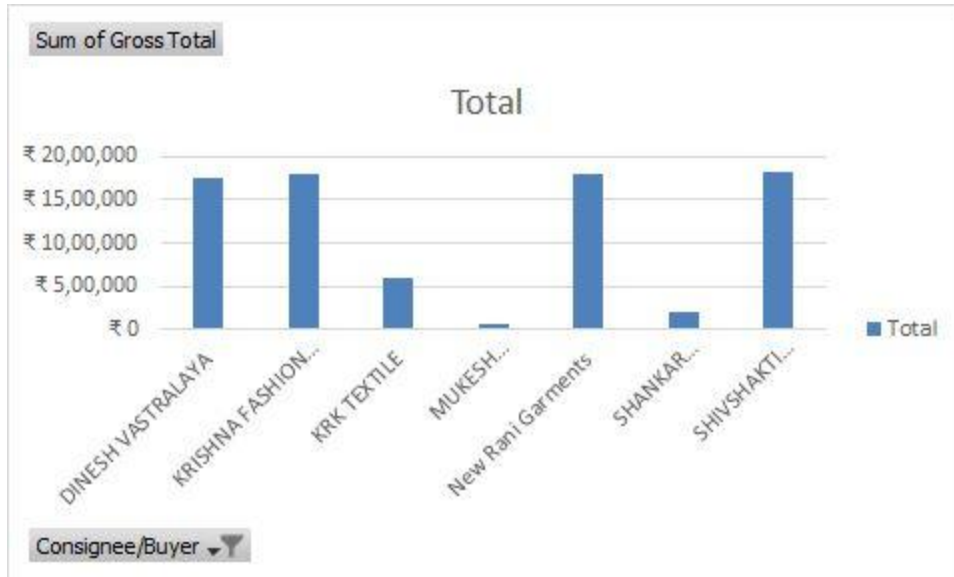The below graph shows the revenue generated from each consignee shop.

Figure 2

- The above analysis shows the revenue generated from each consignee shop which is doing business with this shop. There are a total of 7 consignees which the shop is currently dealing with .

- Dinesh vastralaya , Krishna fashion world , New rani garments and shivshakti handloom are the major consignees. 80% of the revenue comes from these 4 consignees only.

- The minimum revenue is generated from mukesh vastralay which is ₹72,920 and the maximum revenue is generated from shivshakti handloom - ₹18,32,017 in one financial year.

- The average revenue per consignee currently stands at ₹1,452,216 and the standard deviation is ₹41,642.

Volume Analysis

The below pivot table and bar graph represents the quantity of the top 20 products of the shop

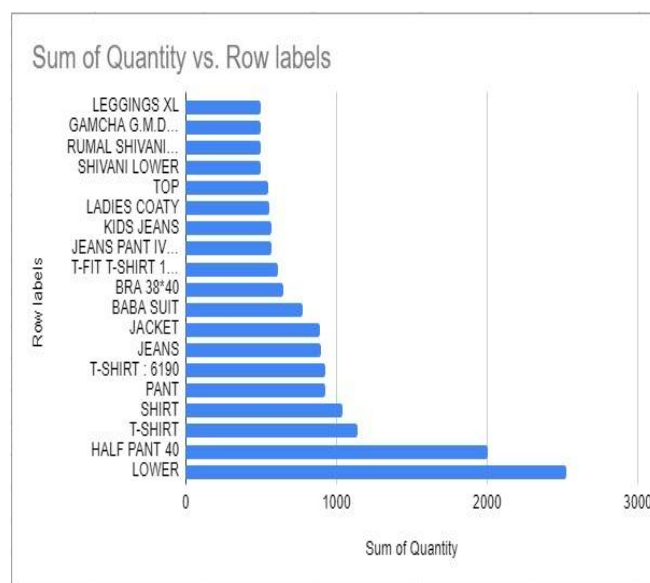| Row labels	Sum of Quantity
LEGGINGS XL	500
GAMCHA G.M.DEEP NO-1	500
RUMAL SHIVANI PREMIUM	500
SHIVANI LOWER	500
TOP	550
LADIES COATY	555
KIDS JEANS	568
JEANS PANT IVANS MRP 1125	573
T-FIT T-SHIRT 1610 MOMENT	615
BRA 38*40	650
BABA SUIT	780
JACKET	890
JEANS	899
T-SHIRT : 6190	925
PANT	925
SHIRT	1044
T-SHIRT	1139
HALF PANT 40	2005
LOWER	2527
GRAND TOTAL	16645

Figure 3

Figure 4

- With the help of the above analysis we can see that the largest selling product (quantity wise) is Lower , Half pant 40 , T-shirt , Shirt , Pant etc.
- We can see that the Jackets , baba suit , Ivans jeans etc. also have the huge potential to sell in large quantities but due to low inventory storage they are currently less in number.
- The majority of Items are currently related to men's garments only , a few items of ladies garments and only one kid's garment.
- The shop should diversify it's garment collection and should advertise it's variety of collection for each age group also.

Volume Vs Revenue Analysis

The below pivot table shows the sum of quantity and sum of value of top 20 products of the shop

Row labels	Sum of Quantity	Sum of Value
LEGGINGS XL	500	47500
GAMCHA G.M.DEEP NO-1	500	45000
RUMAL SHIVANI PREMIUM	500	45000
SHIVANI LOWER	500	53750
TOP	550	93500
LADIES COATY	555	90750
KIDS JEANS	568	140020
JEANS PANT IVANS MRP 1125	573	228875
T-FIT T-SHIRT 1610 MOMENT	615	92250
BRA 38*40	650	45500
BABA SUIT	780	187000
JACKET	890	434400
JEANS	899	283785
T-SHIRT : 6190	925	187300
PANT	925	325975
SHIRT	1044	356560
T-SHIRT	1139	334000
HALF PANT 40	2005	265800
LOWER	2527	449680
GRAND TOTAL	16645	3706645

Figure 5

- From the above pivot table we can observe that some products like Ivans Jeans, Jackets , shirts generate high value even when in low quantity.
- The owner should try maximizing these particular products to reach optimum profit in the business.
- By comparing the above sum of quantity sold to the sum of quantity in inventory, it can be determined which products are overstocked or understocked and adjust inventory levels accordingly.

Analysis Of Underperforming Products.

Below pivot table shows the sales data of top 20 underperforming products of the shop , their sum of quantity and sum of values

Row Labels	Sum of Quantity	Sum of Value
Dutta Pant 30	5	1575
Dutta Pant 32	5	1875
DUTTA PLAN	20	10400
CAPRI SET R.N.V.S - 70	25	3725
CAPRI SET R N V S - 45	30	3690
Girls Item	30	6150
Girl Jeans	30	12450
CAPRI SET R.N.V.S - 55	30	4020
CAPRI SET R. N. V.S - 50	35	4515
CHILD CAPRI	35	2842
CAPRI SET R.N.V.S - 65	40	5800
CAPRI SET R.N .V.S - 75	40	6200
CAPRI SET R.N.V.S - 60	45	6300
1-Royal Rider R/n H/slv Chest Print 02	45	2934
WRAMUP-JR (TROUSER SIZE 55)	50	17500
1-Royal Rider R/n H/slv Chest Print 01	50	3125
803 DENIM WITH BELT	55	46750
1-Royal Rider R/n H/slv Chest Print 03	55	3745.5
Ghamcha Cow Brand	55	2172.5
1-Royal Rider R/n H/slv Chest Print 06	60	4692
FREELINE SANDO	60	5940
Grand Total	**800**	**156401**

Figure 6

- From the above pivot table we can analyse the top 20 underperforming products which are not generating much revenue.
- These products can be made profitable with the help of price adjustment , if the price is high we can offer some discounts to create demand.
- With the help of advertisements and lucrative discounts also we can clear these inventories so as to make some space for new profitable inventories.

Interpretation of result and recommendation

After doing the above detailed analysis of the sales data we came up with some solutions and recommendations to solve the objective problems , which are as follows : -

Recommendation 1 : Increasing revenue of the 2nd quarter of the financial year which has the lowest sales .

- The major factors which were contributing to the low revenue in the 2nd quarter were outdated garment categories , price of these categories was also too high due to which many consignees were not purchasing them.
- I suggested some strategies to cope up with this problem such as , clearing these outdated categories inventory by offering some discounts .
- The owner should also do some marketing research among it's competitors and consignees and see which products people are preferring more in these months.
- The business should increase the variety of it's summer collections and should cater to every age group and increase the collection of ladies garments .

Recommendation 2 : Increasing the inventory capacity so as to generate maximum profit during the high sales winter months.

- It is evident after the detailed analysis of the top 20 performing products that the maximum profit generating categories of products are sold during the winter months of the year i.e. during the 3rd and 4th quarter of the financial year.
- Due to the low inventory capacity the business is failing to generate the maximum output from these quarters. If the inventory size would have been large , then the shop can store more quantities of these products.

- To solve this problem the owner can lease out temporary storage warehouses for these 2 quarters. Where he can store surplus quantities.
- I also saw that the shop is not having any specific winter wear for women's , for this I recommended the shop owner to include some winter collection specially for women like ladies winter cardigans , winter woolen caps and overcoats etc.

Recommendation 3 : Outdated readymade garments in some categories are contributing to low sales in some financial quarters .

- It was recommended to conduct a market research to identify which categories of readymade garments are selling well and which ones are not. This can help the business to focus on stocking items that are in demand, rather than those that are not.
- Offering some discounts or promotions on slow-moving inventory to attract buyers to purchase these items. This can help to clear out old stock and make room for new, more popular items.
- Introducing new product lines that are more in line with current fashion trends or customer preferences. This can help to attract new customers and increase sales overall.

Recommendation 4 : Increasing the overall profitability of the business and facing the e - commerce.
- I found out that the business is also facing stiff competition from Big brands like AJIO, Myntra etc. which are attracting a lot of their customers and day by day it's becoming difficult for them to survive.
- I suggested some solutions for the above problem which includes offering unique products or services that customers cannot find online. This could include custom-made garments, alterations or personal styling services.

- Offer customers the option to purchase products online as well as in-store. Implementing an omnichannel strategy will help to increase sales and reach a wider customer base.
- Incorporating technology such as mobile payments, POS systems, inventory management software, and customer relationship management (CRM) systems to streamline operations and improve efficiency.
- Optimizing the supply chain to ensure that delivering products to customers happens in a timely and cost-effective manner. This could include partnering with local manufacturers or investing in a better inventory management system to reduce waste and improve profitability.

Conclusion

The sales data of the whole financial year has been thoroughly analyzed, including revenue and quantity-wise analysis. This has allowed us to gain valuable insights into the business's sales trends and patterns. By analyzing the sales revenue generated from each consignee, we were able to identify which consignee were contributing the most to the business's revenue. This information can be used to develop targeted marketing strategies to retain these high-value consignees and attract new ones.

Quarterly analysis was conducted by observing the sales data of each month. This has helped us identify any seasonal trends or patterns in sales, which can be used to inform marketing and inventory management decisions. By understanding these trends, businesses can optimize their sales and revenue in each quarter of the financial year.

Furthermore, we analyzed the top 20 highest revenue-generating products. This information can be used to ensure that these products remain in stock and continue to generate revenue for the business. Additionally, we identified the underperforming 20 products. These products may require some attention to make them profitable. We discussed ways to make underperforming categories profitable, such as price adjustments, marketing strategy improvements, and product improvements. By implementing these solutions, businesses can optimize their product offerings and improve profitability.

The business is currently experiencing intense competition from prominent e-commerce retail giants such as AJIO, Myntra, Amazon, Flipkart, and others. In order to tackle this challenge, I have proposed several strategic changes to help the business remain competitive and even gain an advantage in the market.

investing more in the supply chain is crucial for reducing transit time to consignees. A faster and more efficient supply chain can lead to improved customer satisfaction, as customers will receive their orders promptly. By investing in advanced logistics systems, optimizing warehouse management, and exploring last-mile delivery options, the business can enhance its operational efficiency and gain a competitive edge over its rivals.

To further increase revenue and capture a larger market share, I recommended the owner to expand the business's reach by finding new consignees in additional districts within the state. This expansion strategy allows the business to tap into previously untapped markets and broaden its customer base. However, it is important to conduct thorough market research in these new districts to gain insights into the local demands and preferences. By understanding the specific needs and preferences of customers in each district, the business can tailor its product offerings to cater to the local market effectively.

Studying the local market dynamics is a crucial step in this process. By analyzing consumer behavior, preferences, and purchasing patterns, the business can identify emerging trends and adapt its product portfolio accordingly. This market research can help the business make informed decisions about which products to prioritize, ensuring that it meets the demands of the local customers and stands out from the competition.

Based on all of the above, we have recommended some viable solutions to the objective problems identified in the sales data analysis. These solutions are tailored to the specific needs of the business and take into account the unique challenges and opportunities facing the business. By implementing these solutions, businesses can optimize their sales and revenue and achieve their financial goals. It's important to note that these solutions should be continuously monitored and adjusted as needed to ensure ongoing success.

LINK

Link of the sales data which I have used is below:

🟩 Sales_Data.xlsx