Business Data Management Capstone Project

TEXTILE INDUSTRY

Submitted By:

Shweta Jha 21f2001336 21f2001336@ds.study.iitm.ac.in



IITM Online BS Degree Program,
Indian Institute of Technology, Madras, Chennai Tamil Nadu,
India, 600036

Introduction

The proposed capstone project is centered around enhancing the sales and purchase marketing strategy of a textile industry that offers a range of textile products such as sarees and suits for ladies.

Increase the sales in February month which has the lowest sales month as well as purchase month

Reduce the defects in the products



OBJECTIVES



Enhance the skillset of employees as well as the knowledge of the manager

Reduction in the quantity of the design which was not successful throughout the market

Hire an employee for maintenance of the data

Company's Background





The company that I am working with is Daksh Creation, which is in the textile industry. I visited this company in 2021. The Daksh Creation was launched approx. 6-7 years ago, by Sankar Mishra. The company has 15 machines for embroidery work, which run continuously under the supervision of one artificer. Under each machine, there were 5-6 machines that produced the same type of product. As the machine runs continuously, three artificers work on a single machine in different shifts. In this way, the unit can provide outcomes 24 hours a day. They are generally taking a break twice a year for a week. For a few months, the market is down and sales also fall. Sometimes it falls to zero, but the machine runs at full capacity for future sale production.

Result and Findings

Sales	Amount	Amount in Month	Quantity	Quantity in Month
Maximum	2282553.55	Sep	3085	Nov
Minimum	407497	Jan	210	Feb
Average	1386464.792		1510.833333	
Standard Deviation	756227.785		1129.866615	

The maximum amount of product sales to the particular Anaya Designer is 7764178.75, and the minimum amount of product sales to the particular Het Creation is 554610. The maximum amount of product sales to the particular Anaya Designer is 8855, and the minimum amount of product sales to the particular Het Creation is 210.

Purchase	Amount	Month for Amount	Quantity	Month for Quantity
Maximum	947623.87	Dec	25529.13	Sep
Minimum	223349.63	Feb	2289.23	Feb
Average	561795.32		14617.43167	
Standard Deviation	238575.2672		9297.265338	

The maximum amount of products purchased from the particular Raj Fashion is 753466, and the minimum amount of products purchased from the particular Allia Fashion, is 336.

The maximum quantity of products purchased from the particular Purv Enterprise is 51898.1, and the minimum quantity of products purchased from the particular M.F.ENTERPRISE and Mamta Telecom is 1.

The maximum amount of product sales in the month of September is 2282553.55, and the minimum amount of product sales in the month of January is 407497.

The maximum quantity of product sales in the month of November is 3085, and the minimum quantity of product sales in the month of February is 210.

Sales	Amount	Particular of Amount	Quantity	Particular of Quantity
Maximum	7764178.75	Anaya Designer	8855	Anaya Designer
Minimum	554610	Het Creation	210	Het Creation
Average	4159394.375		4532.5	
Standard Deviation	5097934.953		6112.938123	

The maximum amount of products purchased in the month of December is 947623.87, and the minimum amount of products purchased in the month of February is 223349.63. The maximum quantity of products purchased in the month of September is 25529.13, and the minimum quantity of products purchased in the month of February is 2289.23.

Purchase	Amount	Particular of Amount	Quantity	Particular of Quantity
Maximum	753466	Raj Fashion	51898.1	Purv Enterprise
Minimum	336	Allia Fashion	1	M.F.ENTERPRISE and Mamta Telecom
Average	105336.6		2740.768438	
Standard Deviation	178494.7		9315.771539	

Sales Data

Sales	Price	Item name
Maximum	24492.5	D.NO;47
Minimum	0	Plain Sari and R.F
Average	4958.218	
Standard Deviation	6584.994088	
Variance	43362147.14	

I observe that the item "D.NO;47" has the highest sales price with a value of 24492.5, and items "Plain Sari and R.F" has the lowest sales price with a value of 0. It concluded that items "Plain Sari and R.F" sell free in the market, which is why they don't have any profit on these items. So, I advise him to minimize the creation of these products or simply stop the creation of these products.

I observe that the item "D.NO;47" has the highest sales quantity with a value of 1418, and item "D.NO;36" has the lowest sales quantity with a value of 7. The mean of this price data is 362.6, the variance is 166041.67, and the standard deviation is 407.48.

Sales	Quantity	Item name
Maximum	1418	D.NO;47
Minimum	7	D.NO;36
Average	362.6	
Standard Deviation	407.4821059	
Variance	166041.6667	

Sales	Total Amount	Item name
Maximum	1638077.8	D.NO;47
Minimum	0	Plain Sari and R.F
Average	332751.55	
Standard Deviation	430068.0189	
Variance	1.84959E+11	

I observe that the item "D.NO;47" has the highest sales total amount with a value of 1638077.8, and item "Plain Sari and R.F" has the lowest sales total amount with a value of 0. It concluded that items "Plain Sari and R.F" sell free in the market, which is why they don't have any profit on these items. So, I advise him to minimize the creation of these products or simply stop the creation of these products.

Purchase Data

Purchase	Price	Item name
Maximum	404664.43	Job Work
Minimum	14.58	Fabric Glue
Average	28870.90563	
Standard Deviation	100576.8321	
Variance	10115699152	

I observe that the item "Job Work" has the highest purchasing price with a value of 404664.43, and the item "Fabric Glue" has the lowest purchasing price with a value of 14.58.

I observe that the item "Sperparts" has the highest purchasing quantity with a value of 53779.1, and item "Bussy A/C Software" has the lowest purchasing quantity with a value of 1.

Purchase	Quantity	Item name
Maximum	53779.1	Sperparts
Minimum	1	Bussy A/C Software
Average	5481.5369	
Standard Deviation	13371.565	
Variance	178798738	

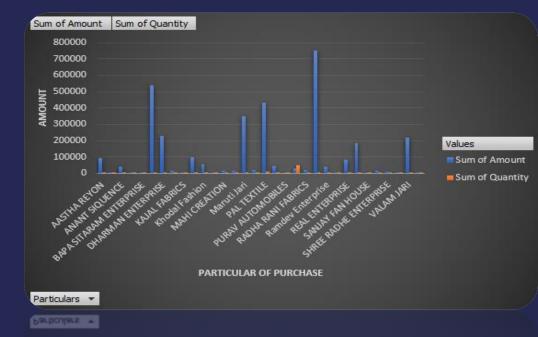
Purchase	Total Amount	Item name
Maximum	1004349	Job Work
Minimum	1257.62	Fan_Havells 6L Floagro Cng
Average	210667.1458	
Standard Deviation	288074.6078	
Variance	82986979654	

I observe that the item "Job Work" has the highest purchasing total amount with a value of 1004349, and item "Fan_Havells 6L Floagro Cng" has the lowest purchasing total amount with a value of 1257.62.

Graphs









Recommendations

Recommendation 1: Increase the sales in February month which has the lowest sales month

- To increase the sales in February month firstly we have to purchase more products for this month because this month also has the lowest purchase amount.
- Also, they can do machine repair work this month that utilizes their time.
- One more work they can do this month, go to the market and under the market choice so they can product people choice related products.

Recommendation 2: Enhance the skillset of employees as well as the knowledge of the manager

- To come out of this problem employees have to explore more about machines.
- The manager has to make it mandatory that all the employees have the skills to manage the machine in the absence of engineers.
- This will have one other profit in the company, this will save the money which we spend on the engineers.



Recommendation 3: Hire an employee for maintenance of the data

- To come out of the data maintenance problem, the manager has to hire an employee who has great knowledge of Excel.
- Another way to overcome this problem is to use applications made for data maintenance purposes.
- One best recommendation is the owner should learn to work on Excel himself this will save their money which they invest in the other employees.

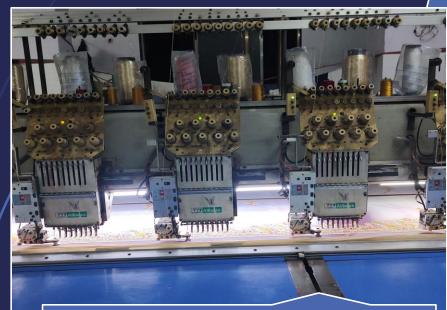
Recommendation 4: Reduce the defects in the products

- To reduce the defects in the products they have to check the machine from time to time.
- Hire only those employees who have great knowledge to run the machine and also have to know about how to repair the machines.
- Sometimes the manager may also need to do this that's why they also have to know about how to repair the machine.

Recommendation 5: Reduction in the quantity of the design which was not successful throughout the market

- To overcome this issue they have to use a strategy such as firstly they have to make only a few samples of products of the same design and try to sell them in the market.
- If that design hits the market then they are free to continue creating that design product.
- Otherwise, they have the opportunity to stop creating that design product.
- It will save the waste of products, time, and money.

Conclusion



Thank

You

The analysis of Daksh Creation sales and purchase data has provided valuable insights and recommendations for improving the company's profitability and management.

December month is the highest purchase month and February month is the lowest purchase month. It also revealed that September month is the highest sales month and February month is the lowest sales month.

This company's maximum sales of their products to Anaya Designer company and minimum sales of their products to Het Creation company. It also revealed that this company's purchase maximum from Raj Fashion company and the minimum purchase from Allia Fashion company.

After visiting this company, looking at all the data, and making conversation with the owner, staff members, and workers I conclude that this business is on the right track, and if they apply my all recommendations their company will reach a high level of profit in the minimum timeslot.