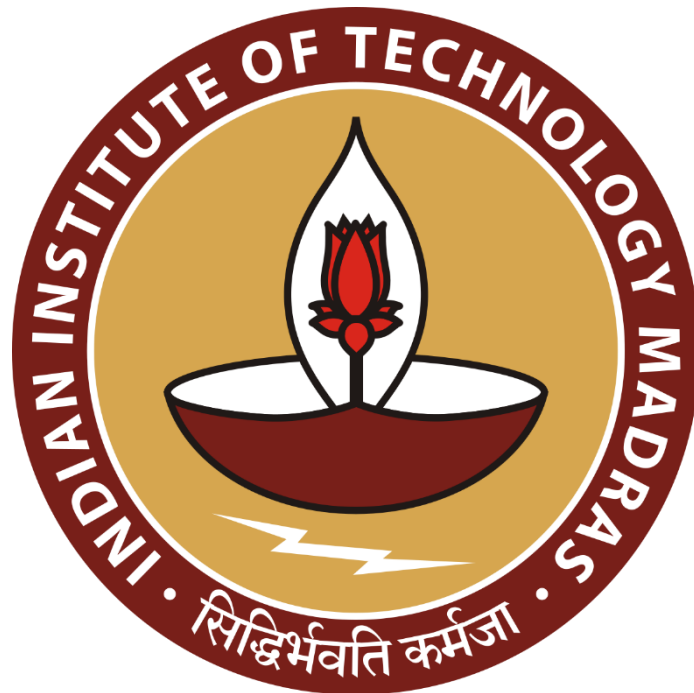# Revitalizing Resilience:

A Strategic Analysis for a Customer-Centric Sales and Marketing Enhancement Plan at PJ Computer

A Mid Term Submission Report for the BDM capstone Project

Submitted by

Name: Anish Maity

Roll number: 21f3000417

IITM Online BS Degree Program,

Indian Institute of Technology, Madras, Chennai

Tamil Nadu, India, 600036

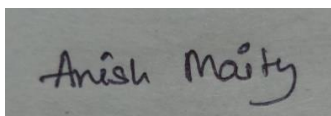# Contents

Declaration Statement

I am working on a Project titled "**Revitalizing Resilience: A Strategic Analysis for a Customer-Centric Sales and Marketing Enhancement Plan at PJ Computer** ". I extend my appreciation to PJ Computer, for providing the necessary resources that enabled me to conduct my project.

I hereby assert that the data presented and assessed in this project report is genuine and precise to the utmost extent of my knowledge and capabilities. The data has been gathered from primary sources and carefully analysed to assure its reliability.

Additionally, I affirm that all procedures employed for the purpose of data collection and analysis have been duly explained in this report. The outcomes and inferences derived from the data are an accurate depiction of the findings acquired through thorough analytical procedures.

I am dedicated to adhering to the principles of academic honesty and integrity, and I am receptive to any additional examination or validation of the data contained in this project report.

I understand that the execution of this project is intended for individual completion and is not to be undertaken collectively. I thus affirm that I am not engaged in any form of collaboration with other individuals, and that all the work undertaken has been solely conducted by me. In the event that plagiarism is detected in the report at any stage of the project's completion, I am fully aware and prepared to accept disciplinary measures imposed by the relevant authority.

I understand that all recommendations made in this project report are within the context of the academic project taken up towards course fulfilment in the BS Degree Program offered by IIT Madras. The institution does not endorse any of the claims or comments.

Signature of Candidate: (**Digital Signature**)

Name: Anish Maity

Date: 10.04.2024

1 Executive Summary and Title

The data I have collected is from cyber cafe shop situated in a rural area in Purba Medinipur, West Bengal. This report highlights some insight into problems and current situations faced by the shop , along with suggestions and recommendations derived from an in-depth analysis of " PJ Computer." The aim is to restore a positive image as a good cyber cafe and make some profit.

The issue at hand is that this cyber cafe initially provided low-cost services and produced small advice according to the problems of customers. However, it is currently facing significant business losses. The new customers are coming, asking about solution of their problems and leaving, so now maximum customer is old customer. They have also highlighted certain real-world challenges including a lack of customer attraction, competition with other shops and also some selfish people, who are spoiling the thoughts of people about the shop. Unfortunately, their reputation as a reputable cyber cafe has suffered.

When we revealed the sales data ,**firstly** it finds out top most selling items, allowing Cyber cafe to focus on and optimize these popular items.
Secondly, targeting the new customers with good offers and marketing efforts, will help them to increase their sales.
By incorporating customer feedback helps in improving business.
And for Competition with other businesses in market they should give best service and good offers to attract customers .
This project also suggest to introduce social media adds for attract customer.

In conclusion, implementing data driven strategies , analysing sales data ,
can help them to overcome the challenges faced by them.

2 Proof Of Originality Of Data:

Photos Of Cyber cafe:

Letter From The Head of The Cyber cafe:

AUTHENTICATION LETTER

Name- Pranabendu Jana

Email id- support@pjcomputer.co.in

Business- PJ Computer

Address- Bhuniajibarh, Ramnagar I, 721455.

To whom it may concern,

I trust this letter finds you well. I am Pranabendu Jana, hearby confirm my consent for the request of Mr. Anish Maity, student of IIT Madras to access and utilize the sales data of my shop "PJ Computer" for his academic project.

This authorization is effective form 1st November, 2023 until he finishes his project.

Please be advised that this consent is granted solely for the purpose of his academic project, and any use of the data beyond this scope would require additional authorization. I trust that you will handle the information responsibly and ethically.

If there are any specific terms or conditions you would like to discuss regarding the use of the data or if you need further assistance, please do not hesitate to reach out.

I wish you the very best in your academic pursuits and hope that the insights gained from our sales data contribute significantly to the success of your project.

Thank you for choosing " PJ Computer" for your research, and I look forward to hearing about the outcomes of your analysis.

Your Sincerely

Signature

Date: 1/11/2023

Photos With The Owner and Original data:

a) Photo with owner

b) Original data

A short video interacting with the business owner is available in this link. The business owner is camera shy and not proficient in speaking English. So the conversation is done in his native language.

I will try to provide a good enough translation of the conversation link.

The given data from the owner is in excel format but there was some customer name and phone numbers so I processed the data before analysis.

3 Data Collection:

The sales data of a 4 months , that had been cleaned and processed after collecting from the cyber cafe owner is available here link.

Date	Invoice no	Item Name	Quantity	Unit Price	Total Amount
12/01/2023	INV/22-23/1013	Vidyalaxmi Education Loan Professional Fee	1	299	299
12/01/2023	INV/22-23/1014	Vidyalaxmi Education Loan Professional Fee	2	50	100
12/01/2023	INV/22-23/1015	Health ID Card	1	100	100
12/01/2023	INV/22-23/1016	Professional Fee/Service Charge	1	100	100
12/02/2023	INV/22-23/1017	Professional Fee/Service Charge	1	299	299
12/02/2023	INV/22-23/1018	NSP Scholarship Application Service Charge	1	299	299
12/02/2023	INV/22-23/1019	NSP Scholarship Application Service Charge	1	299	299
12/02/2023	INV/22-23/1020	NSP Scholarship Application Service Charge	1	200	200
12/04/2023	INV/22-23/1021	Professional Fee/Service Charge	2	50	100
12/04/2023	INV/22-23/1022	Photo	1	299	299
12/04/2023	INV/22-23/1023	NSP Scholarship Application Service Charge	1	149	149
		National Scholarship (Beedi			

The data looks like this.

4 Metadata :

The data that has been provided by the cyber cafe is as follows:

• Data Source: This data was given to me by the owner as a part of their daily sales record.

• Methodology of Data Collection: I had reached to the shop owner , discussed about their problems and asked them for sales data and the above data was collected through cyber cafe's point-of-sales system.

• Data Collection Date: This data was Collected over a period of month starting from 1st December, 2023 to 26th March.

• Data Format: The data is in a tabular format, here the columns representing date ,invoice number, total amount, quantity and service item name sold by the Cyber cafe and each row representing the sales of items on each day.

• Data Quality: The data is of good quality , with no obvious errors or inconsistency.

• Data Usage: The given data has been used to identify the most selling time and performance of cyber cafe.

5 Descriptive Statistics :

From the above sales data , we want to make some descriptive statistics .

- The average item sales per day is 5.

- The average sale price is 1299 everyday.

- At the time of march the sale quantity is higher.

- Maximum price sale a day is 6620.

- Minimum price sale is 70.

6 Analysis Process and Method :

The data I obtained in Microsoft Excel with some customer data I have removed customer name and detail. Google spreadsheets is the main tool that I used for analysis the sales data.

After taking the data, some basics pre-processing tasks were performed and that involved of removing rows or columns which had missing data.

To make statistical conclusion, I used some features that include finding max, min, average, standard deviation etc, and correlation features among variables help to identify dependency between those variables.

To visualise the data, I used some plotting features of spreadsheets.

So, following methods have been taken

• Descriptive Statistics: It is used to get an overview of sales of the cyber cafe. The average sales per day, min, max, standard deviation etc are the key factors of it.

• Visualization : For the visualization purpose , some bar chart, line chart had been used.

• Analysis: To look on the trend of sales, a snapshot of data had been analysed using line graph of spreadsheets and also a parallel bar chart has been shown to it.

• Conclusion : I made some conclusions of these data and recommended them to apply on their business.
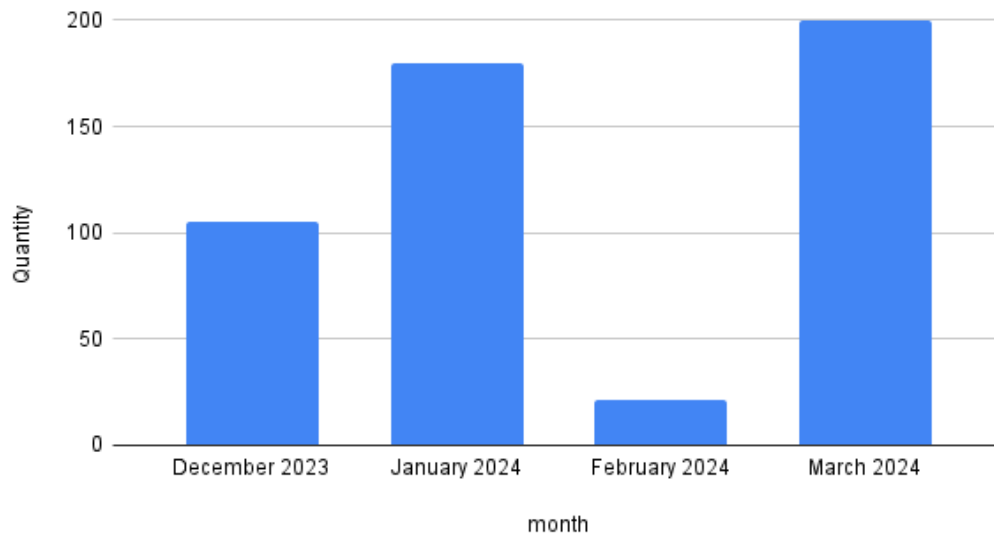
7 Graphs and Table Obtained from Data :
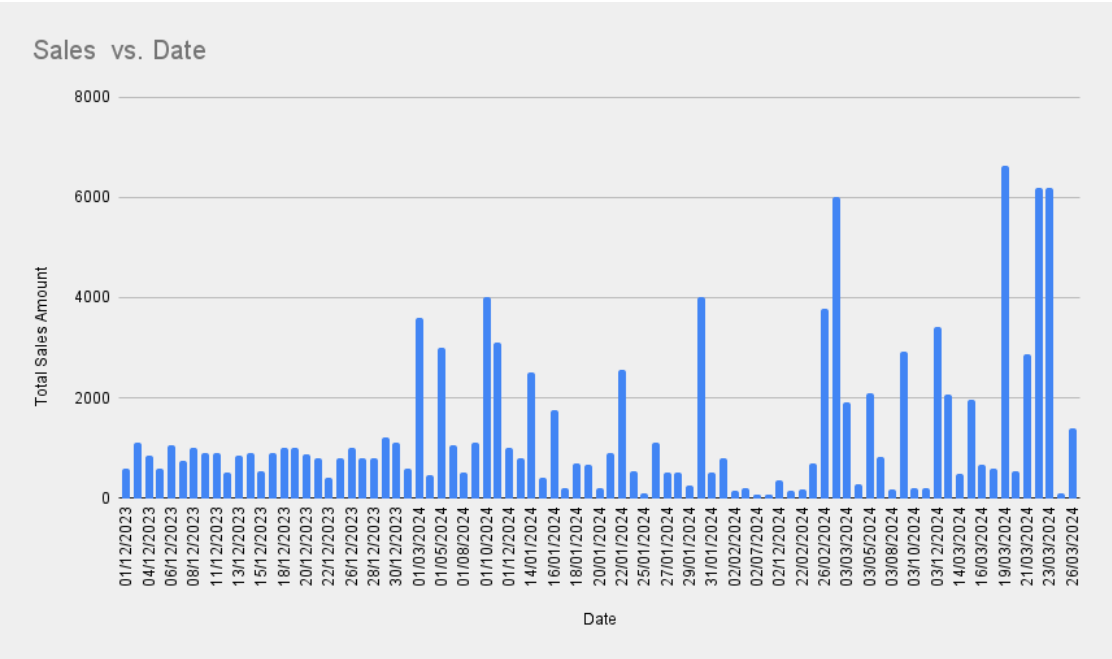
Every day sales data
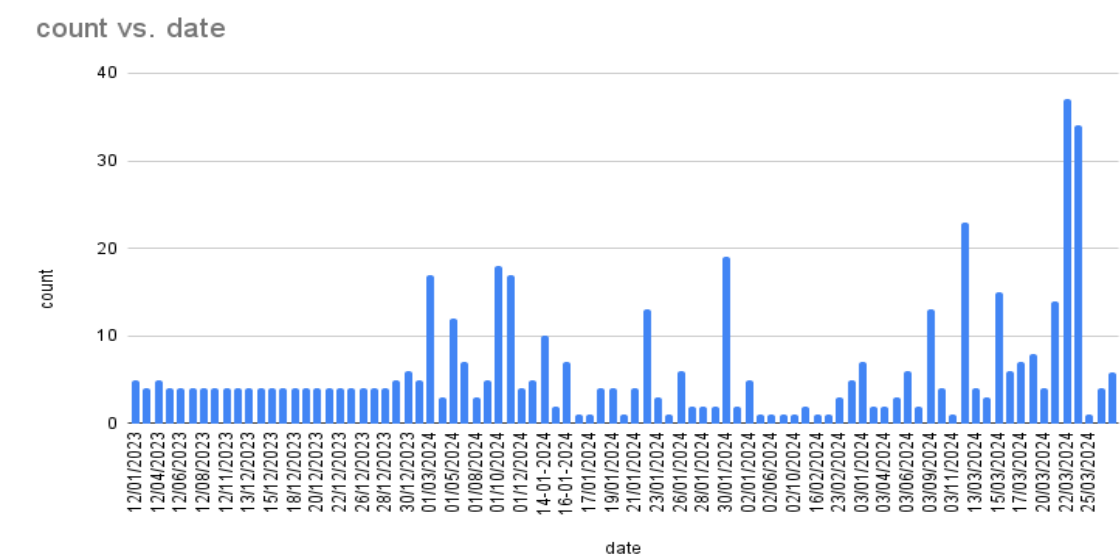
everyday sale item quantity

Monthly sale quantity

8 Results and Discussion :

Here are some results and findings from the above:

- in monthly data in the time February the sale quantity is minimum so at this time owner should introduce new services that are not there in market.
- At the December month the daily sales quantity is relatively consistent because of the season ending time the students are not the main customer ,this time owner should target the other customer.
- At the march time the maximum services is for students   so we can see the increase in sales data , I recement at this time owner should increase the staff so that more services can be given and more profit can be made.
- Scholarship is a more popular service owner can make marketing with this service that can attract more students as customer.
- Owner should focus on more government scheme so that other than student can come and get service that is also a good way of making profit.