

Optimize Problems to Increase sales volume of an Automobile shop

A Proposal report for the BDM capstone Project

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Content

- 1. Executive Summary and Title**
- 2. Organization Background**
- 3. Problem Statement**
 - 3.1 Problem statement 1: Unorganized data in register copy.**
 - 3.2 Problem statement 2: Poor inventory management.**
 - 3.3 Problem statement 3: Data Privacy.**
 - 3.4 Problem statement 4: Technology upgradation to reach out to customers.**
 - 3.5 Problem statement 5: EMI options for customers.**
 - 3.6 Problem statement 6: Inventory goes waste.**
 - 3.7 Problem statement 7: online presence.**
 - 3.8 Problem statement 8 : Low revenue.**
- 4. Background of the Problem**
- 5. Problem Solving Approach**
- 6. Expected Timeline**
- 7. Expected Outcome**

Declaration Statement

I, on this occasion, take an opportunity to convey my deep sense of respect and gratitude to **Kumar Battery & Automobiles** for making necessary arrangements for time being to conduct this study for my project titled "**Optimize Problems to Increase sales volume of an Automobile shop**". The information used and interpreted in this report is a true reflection of the available data to the best of my knowledge and belief. Data was taken from the verified sources and it was analyzed well before making it available for the readers.

I declare that the entire work has been prepared by the author and that all methods of collecting and analysis of data which were used herein have been properly referenced in this report. This is a science-based process and the results and conclusions derived by this data hold true for the analytical processes that has been rigorous with the data. I commit to hold myself to a high standard of academic honesty and integrity and to

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

Name:

Date:

1.EXECUTIVE SUMMARY

This project enlightens the automobile shop named Kumar battery & automobiles and the problems and the challenges faced by the shop in recent times. The shop Kumar battery & automobiles operates on both B2B and B2C models selling a range of automotive products including batteries, spare parts, and accessories. However, the shop is currently facing several challenges. The primary issue is low revenue, driven by insufficient sales during both off-peak and peak seasons. Additionally, the shop is experiencing increasing competition in the market .

To address these issues, various analytical approaches will be employed to achieve a positive outcome . We will begin by analyzing the opening and closing stock to manage the inventory which will be based upon sales data. With this analysis we can get info about which product generates the most revenue and which months have the highest sales.

One important aspect in which the shop is lacking behind is the online presence of itself and the Data management . Currently, everything goes under register copy which is quite not easy to analyze at times due to which the inventory management is also poor. We will try to tackle these issues with our analytical approaches.

Another important aspect to consider is building strong and good relationship with both suppliers and the wholesale purchasers. By negotiating with better terms and staying updated with the latest automotive products , the shop can offer a wider variety of demanding products .This will not only attract more orders but also help in maintaining a competitive edge in the market.

Moreover , we will put emphasis upon making the in-store purchasing better and easy. This will include better store layout, attractive displays, and ensuring that staff are trained to provide excellent customer service . Creating a better in-store shopping environment can encourage repeat visits and boost overall sales.

In summary, the combination of every aspect like inventory management, trend analysis, customer engagement, store improvement, and strong supplier relationships will provide a comprehensive approach to solving the problems faced by Kumar Battery & Automobiles. Implementing these strategies effectively will help increase sales, improve revenue, and ensure long-term sustainability and growth for the shop.

2. Organization Background

The Business firm I am working with named “Kumar Battery & Automobiles” is an automobile shop. The shop was established in 1995 and since then it is in the automobile sector. The shop is located in the main city Patna from the very start. During that time Ajay Kumar singh who is the owner of the shop invested 35000 rupees and started this business. Since the very start the shop deals in the automobile parts of trucks and cars but over the time new products like Batteries and Inverter too were added including motorbike parts and accessories. The shop gets its supplies from various other companies as the sector has a diverse product base. It consists of Bearings, mobils,brake pads,clutch plate, battery, jacks and alot others.The shop deals in with the brands like Exide , Castrol , servo and other MSME s. When the shop was started there was no other automobile shop in the area but over the course of time more shops and business firms opened up and also the vehicle parts too are changing day by day.

3. Problem Statement

- 3.1} Problem statement 1 : The shop has unorganized Data of its inventory and sales and that too in register copy.
- 3.2} Problem statement 2 : Due to the lack of proper technology upgradation the shop lacks proper inventory management .
- 3.3} Problem statement 3 : There is no Data privacy of the shop as everything is inside a copy register so anyone can access easily.
- 3.4} Problem statement 4 : The shop needs a technology upgradation to reach out to its potential and prospect customers at times.
- 3.5} Problem statement 5 : The shop has not the facility to provide EMI options to customers.
- 3.6} Problem statement 6 : Due to improper management and lack of Data the shop's inventory goes waste.
- 3.7} Problem statement 7 : The shop has no online presence in the market.

4. Background of the problem

The shop currently is operating with critical challenges that are hampering its efficiency and potential for growth. As the shop has unorganized data and follows the traditional method of book keeping and inventory management this is leading to its inefficiencies in tracking and managing stock and not just that also creating significant issues with the data retrieval and in maintaining accuracy. This lack in proper technology upgradation has resulted in difficulties in maintaining optimal stock levels and often leading to inventory waste.

Additionally the shop is currently facing issues in keeping its data privacy. As it follows the traditional methods of book keeping it though poses certain risk over who can access to its sensitive data. Also due to the

absence of technology upgradation the shop is struggling to reach out to customers with new offers or for reviews.

In this competitive edge the shop lacks the facility of proving EMI options to their customers which is a significant draw back in today's flexible payment environment .

Finally the shop has no online presence in the market which severally hampers its growth. As it is limiting its visibility and reach in this digital age. The shop is missing out on the vast potential of e-commerce and the availability to attract and retain customer base. These combined issues highlight the urgent need for technological upgradation and implementation of modern inventory and sales management systems to enhance the shop's operational efficiency, data security, customer reach, and overall business growth.

5. Problem Solving Approach

To address the numerous problems faced by the shop, we will now use a comprehensive and systematic approach to cater those challenges . For that -

Firstly after receiving the data. We would digitalize its sales and inventory data by implementing digital inventory and sales management system. One of the means to achieve this by installing point-of-sale (POS) system which records sales data in real time. This will give an organized & accurate which can also be easily accessible and will facilitate efficient inventory tracking and management.

Now once the data is digitized and organized we will use various tools like Excel, Meta verse and looker studio to create a visual representation of data. We will employ bar chart , histogram, scatter plot and other graphical representation tools that will help in identifying patterns, trends, and anomalies in the sales and inventory data.

The visualized data then can be used to understand the trends and key insights that further will help in pinpointing the root causes of the shop's inventory management issues, sales patterns, and potential areas for improvement.

Now based on the insights received from the data analysis potential solutions can be proposed which may will include implementing a more sophisticated inventory management system, optimizing stock levels, introducing new sales strategies, or enhancing customer engagement methods.

By implementing these solutions, the shop can transform its operations, improve efficiency, and significantly enhance its market competitiveness.

6. Expected Timeline

7. Expected Outcome

After following the steps systematically, we can have the expected outcome like :

7.1 Better and optimized stock data.

7.2 The shop can focus on frequent and high margin products.

7.3 With a clear view of sales trends and inventory levels, the shop can plan orders more effectively.

7.4 The shop can have digitized records which will result in more organized and easily accessible data.

7.5 Can order stock based on trends.

7.6 The shop will eventually get a digital presence.