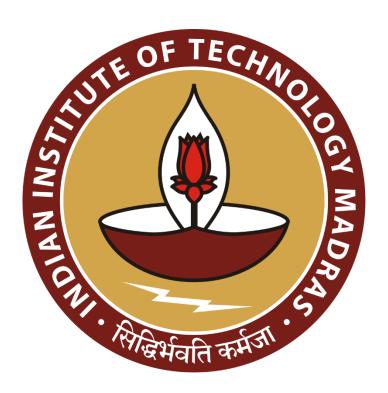
Detailed Analysis on NN Traders

A Proposal report for the BDM capstone Project

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Declaration Statement

I am working on a Project titled "Detailed Analysis on NN Traders". I extend my appreciation to

NN Traders, 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 analyzed 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 fulfillment in the BS Degree Program offered by IIT

Madras. The institution does not endorse any of the claims or comments.

Signature of Candidate: Md Anas Alam

Name: Md Anas Alam

Date: 01-06-2024

1 Executive Summary and Title

NN traders is a B2b business specialized in selling home textiles such as curtains, Bedsheets, doormats, blankets and more similar products in Rourkela and its nearby region.

Most of the challenges faced by the business is due to inefficient inventory management which leads to deadstock and resource-intrusive transportation.

The issue will be resolved by analyzing the data provided by the business with various efficient analysis tools and methods to get a beneficial outcome. I am planning to deploy Trend analysis for sales and inventory data for the given project.

The anticipated outcome will help the business to grow by minimizing the deadstock and maximizing the sales of the company.

2 Organization Background

NN Traders is a Mid-sized level company with specialization in selling home textile products such as curtains, bedsheets and other similar products. It was started in the year 2017 with dedication and hardwork of the owner "Mr. Noorain Shahid" and his friend. Over the years NN Traders has built a reputation in the segment of home textiles among the retailers and small wholesalers by providing high quality and reliable products. However, as the business expands it faces new challenges such as inefficiency in data management and operation which led to the necessity of the implementation of advanced data management techniques which will help in enhancing and maintaining its competitive edge.

3 Problem Statement

- 3.1 Problem Statement 1: Inconsistency and Inefficiency in inventory management leading to quality degradation of the product and deadstocks resulting in financial losses.
- 3.2 Problem Statement 2: Time-consuming transportation of goods leading to stockouts and overstock which make it too hard to meet the market demand and missing sales opportunities resulting in lagging behind competitors.
- 3.3 Problem Statement 3: Delay in payment by customer causing cash flow problems making it difficult to meet day-to-day operational expenses and paying suppliers on time which is ultimately leading to increase in Borrowing cost.

4 Background of the Problem

Each problem has been categorized into three sub-category i.e (Major cause of the problem, Internal problem, External problem) with explanation provided below:

4.1 Inefficient Management of Inventory:

- 4.1.1 Major cause problem: One of the major causes of the problem arises due to lack of proper inventory management system, without proper and in-place inventory management system it is difficult to track inventory accurately which leads to Disorganization of item, Overstocking and Stockouts.
- 4.1.2 Internal Problem: Lack of training and skills within the employees to manage the inventory effectively, Insufficient data collection and analysis and poor communication between the employees and the owner can be the internal cause of the problem.
- 4.1.3 External Problem: Problems with suppliers such as unreliable supply or inconsistent supply or fluctuation in market demand may be the cause of external problems.

4.2 Defaults and Logistics Inefficiency:

- 4.1.1 Major cause of problem: Inability or unwillingness of the customer to pay and time and Inefficient planning in Transportation and distribution process.
- 4.1.2 Internal cause of problem: Lack of systematic approach to monitor and check customer credit score and Inefficient route planning with lack of coordination with the supplier leads to delay in supply.
- 4.1.3 External problem: Market competition, customer financial health and economic downturns forcing business to lenient credit terms and increasing chances of default whereas transportation disruption and sudden market fluctuation disrupts planned logistic operations.

5 Problem Solving Approach

Major issues faced by NN Trades are regarding Inefficient Inventory management, Delay in payments by the costumer and Delay in delivery by the supplier. We need to identify and analyze each issue in details and come up with a solution that will help NN Traders, some of the strategic method that we can use to solve the identified problems are listed below:

5.1 Details about method used with justification:

- 5.1.1 Efficient Inventory management Technique: By implementing efficient inventory management system we can analyze the sales and inventory data from the company that will give us Insights about the outflow and inflow of the goods for a particular period of time and enable us to:
 - Real-time tracking and visibility of stock levels resulting in reducing error and misinterpretation.

- Forecast market demands accurately and reduce the risk of overstock or stockouts in the inventory and identify seasonal trends.
- Continuous monitoring and advancement of inventory practice by performing detailed analysis of the data provided and ensuring loss prevention.
- 5.1.2 Default and logistic inefficiency: Default in payment by the customer and Inefficiency in logistics and operation is another major issue faced by the business. By addressing these problems we can significantly improve business performance by reducing financial loss, better decision making ability and enhancing customer satisfaction. Here is how we can achieve it:
 - Clearly communicating terms and conditions with the customers and closely monitoring customers credit score.
 - Closely monitoring and analyzing trends to identify areas for improvement for default rates and providing flexible payment options such as installments and online payments for collection process efficiency.
 - Improved communication and collaboration with suppliers which helps in better order forecast, delivery schedule and discuss potential issues.
 - Analyzing inventory performance through inventory data for optimizing orders process and scheduling better and streamlined delivery processes.

5.2 Details about intended Data collection with justification:

We have intended to collect sales and inventory data from NN traders because it is like a treasure map for us, guiding us to identify the root cause of the problem. This data will also provide us with an overview of the company's financial health, complexity in supply chain and individual product performance across any given interval of time.

Sales data act as a guide, disclosing trends in sales, product effectiveness and performance and revealing customer performance. By analyzing these trends NN traders can plan their product pricing and prepare market strategies.

Inventory data, on the other hand, give us real time inventory checks and help us forecast market demand and minimize the risk of stockout and overstock.

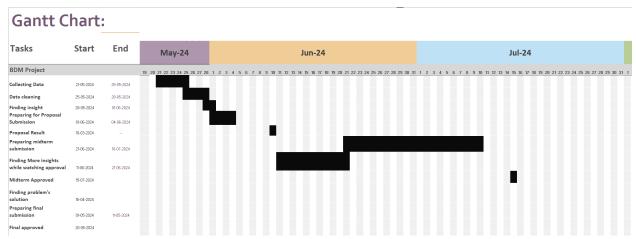
5.3 Details about analysis tools with justification:

Analysis tools and software help us to dig into data to find meaningful insight, patterns and trends. For this particular project we rely on Microsoft Excel as a major tool because it is easy to use and widely available. It provides tools for creating pivot tables and pareto charts which will help in data visualization and identifying trends. Excel can perform complex calculations for our statistical analysis and overall it provides free templates for various needs that will help us in project timeline planning and preparing Gantt charts.

6 Expected Timeline

6.1 Work breakdown structure (WBS) acts as a blueprint for our task. It breaks down the task to small manageable tasks along with the transparency in it. It not only enhances project management but also optimizes project planning and track progress which ensures the completion of tasks in time.

6.2 Gantt Chart:



7 Expected Outcome

- 7.1 After performing analysis on sales and inventory data the outcome will help the company in maximizing sales, minimizing deadstock and meet the customer satisfaction by predicting the fluctuation in market demands.
- 7.2 Efficient logistics and operation by optimizing order by predicting market demands and improvement in cash flow between the company and the customer overall resulting in building good relations with the customer and company's growth.