

# **BDM Capstone Project**

## **Title**

**Fruitful Solutions : Finding Opportunities for Growth and Profitability of a Fruit Chaat Vendor's Business**

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## Executive Summary:

This project aims to analyze a few months of revenue and inventory data from a small fruit chaat and juice vendor business based in the urban city of Roorkee, In this project I will work to identify the root causes of instability and provide the owner with valuable suggestions for revenue improvement and stock/Inventory management. Through this analysis, the owner will gain a deeper understanding of the underlying factors affecting their business and be equipped to better implement solutions in day to day working.

The business in discussion works on the B2C model in the unorganized sector. In order to perform an optimal analysis of sales and management of inventory, the collected data will be further divided into two types of datasets, one containing the sales portion of the business and the other containing the inventory portion of the business. This will allow for a better understanding of the business's sales and performance and enable us to develop targeted strategies for revenue improvement and inventory management.

To identify a solution, I will employ both qualitative and quantitative research methods.

Qualitative data will be gathered through traditional methods like via questionnaires and discussions with the business owner to uncover any underlying issues that may be affecting the business.

Quantitative data will be collected daily to provide reliable and objective insights that can be used to understand important statistics and identify patterns and trends in sales and inventory. This data will be used to create an excel sheet to assess management in inventory and business

## Organizational details & Background:



Shree Balaji Fruit Chaat Bhandar, owned by Mr. Keshav, is a well-known fruit chaat and juice vendor based in the city of Roorkee, in the Haridwar district of Uttarakhand. Mr. Keshav started this business in 2015, after working odd jobs and learning about the business from his brother who was already in the same field. He began his journey as an owner by selling fruit chaat from a 'thela', which he would take around the city and over so many years in this business, he has established a loyal and regular customer base.

Mr. Keshav's menu card offers a variety of chaats, juices, and other snacks. He has also introduced pulse and sprout-based chaats, which have become one of his best-selling items in his menu. Over the years, Shree Balaji Fruit Chaat Bhandar has gained a reputation as one of the best fruit chaat vendors in Roorkee.

But this success doesn't shield the business encountered by such other businesses in the unorganized sector. Going forward, I plan to continue interacting with him to gain a better understanding of his business operations and his strategies for addressing any challenges he may face.

## Problem Statement:

The major problems faced by the business are:

- Inconsistent revenue gains during seasonal changes.
- Improper management of inventories which leads to wastage of big amounts of fruits which stacks up to the loss figure.

Some other Problems faced are:

- Hard to keep record of the sales in unorganized sector jobs.
- Incorrect procurement of fruits and pulses which is sometimes more or less than required.

## Background of the problem:

The fruit chaat and juice industry in India is a highly competitive market, with many small vendors and businesses operating in every city and town. Shree Balaji Fruit Chaat Bhandar operates in the city of Roorkee in Uttarakhand, where there is a high demand for fresh and healthy food options. However, despite its popularity and success, the business faces several challenges that are common to many small vendors in the industry. One of the primary challenges is the inconsistent availability and quality of fruits, which can impact the business's ability to maintain product quality and customer satisfaction. Every kind of sector is affected by seasonal changes but the ones in the unorganized sector are hit the hardest. Better analyzing of the sales data with inventory management might help in tackling this problem. As for difficulty in keeping the records of sales for a 'thela' operator will be made easy with the help of google forms. There is no such one big problem but rather Mr Keshav faces a smaller set of problems which then compounds and affects his business collectively.

## Problem solving approach:

### Details about the methods used

To provide an accurate analysis of the business, a combination of qualitative and quantitative research methods will be used. By using both methods, the study will gain insights into the business's performance and its market demand, which will aid in identifying growth opportunities and strategies.

Qualitative analysis: One of the qualitative analysis methods is conducting interviews with the business owner with a prepared set of questionnaires to better facilitate smooth and productive interviews, and to better spot the factors which affect the sales other than what is collected in the quantitative analysis. This will provide the study with an understanding of the business's reality with respect to the day to day difficulties it faces and open doors to their potential solutions.

Quantitative analysis: The quantitative analysis will involve collecting and analyzing data on the business's sales of the sold types of chaats and juices and their quantity and its inventory regarding the initial procurement of the fruits which are then converted to products of utilities, which are the 'chaat' and 'juice' products in this case and how much fruit was carry forwarded to use for the next day and how much of it was discarded and its total value. All of the collected data through forms will then be filtered into two datasets, one containing the sales and revenue side of the business and the other containing the Inventory data containing the starting and the closing inventory data of each business day.

## **Data Collection**

The study will collect detailed information about the business's sales performance over the past 2-3 months with the help of google forms which are easy to fill and understand, also google forms allow linking of excel sheets to the form, thereby completely eliminating the use of pen and paper in the data collection process. This data will then be processed to and condensed into two separate excel sheets regarding sales/revenue and inventory. The collection through the interviews will be done through a set of pre planned questionnaires with the owner of the business. Therefore, the qualitative analysis will provide further insights that will complement the quantitative analysis.

## **Details about the analysis tools used**

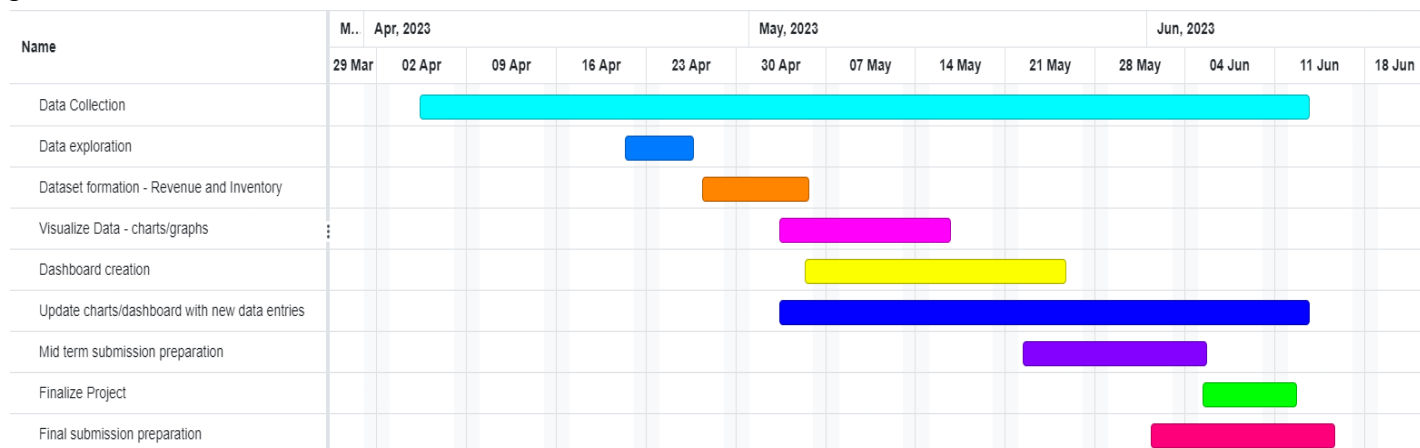
The data collected for this study will undergo thorough processing and analysis utilizing Microsoft Excel's sophisticated tools, such as pivot tables and charts, in order to create easily comprehensible datasets. By utilizing these tools, the data will be effectively organized and analyzed, thereby enhancing the accuracy and reliability of the findings. In addition, one of my diploma courses called Tools in data science will allow me to use a tool called Power BI, which will be used to create easy to understand reports and dashboards that present data using visually appealing and digestible charts, such as pie charts, waterfall charts, and column charts. The reports will provide a clear and concise

overview of the business's trends in sales and inventories, thereby enabling a precise identification of areas that require improvement.

## Expected Timeline:

The given gantt chart explains the workflow and their schedules which will be followed through the entirety of this project.

The entire timeline is broken into 9 smaller sections and their respective start dates and their deadlines. The timeline is made keeping the rule of Reasonable and Achievable goals in mind.



## Expected Outcome:

The expected outcome of the project is to provide Mr. Keshav with a set of actionable recommendations that will help him address the challenges he faces in his fruit chaat and juice business. These recommendations will be based on a thorough analysis of his business data and a deep understanding of his operational and financial challenges. The recommendations will be aimed at optimizing his business operations, increasing revenue, and improving customer satisfaction.

By implementing these recommendations, Mr. Keshav will be able to streamline his supply chain, manage his inventory better, optimize his marketing efforts, and improve his financial planning and record-keeping. This will result in improved profitability, increased customer satisfaction, and greater stability and sustainability for his business.