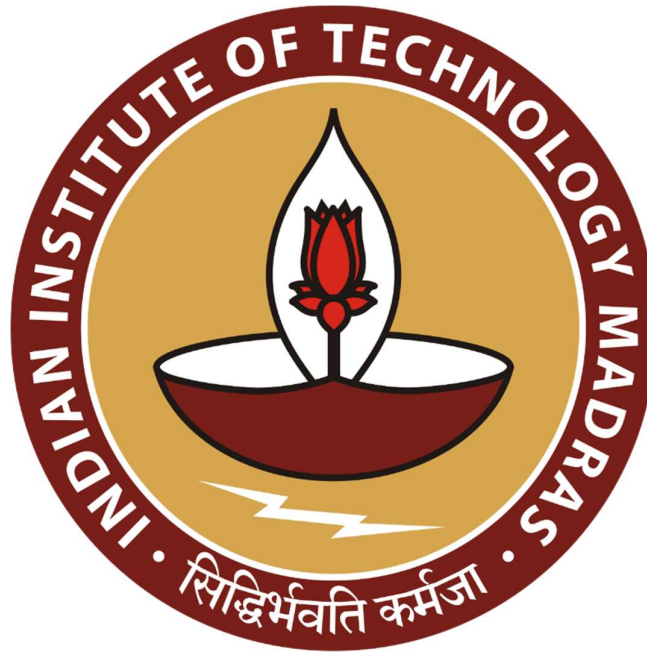


# **Culinary Efficiency: Revolutionizing Restaurant Performance**

**A Proposal report for the BDM capstone Project**



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## 1. Executive Summary and Title:

This capstone Project focuses on an in-depth study of a B2C restaurant located in the outskirts of Avadi, Chennai. This establishment specializes in the food segment, offering a range of culinary delights to its customers.

Restaurant owners face significant challenges in generating profits due to various factors. Despite operating in a bustling area, high operational costs, intense competition, and fluctuating customer demand hinder profitability. Uneven inventory management results in wastage, shortages, and suboptimal resource utilization. Furthermore, effective data management, including sales data, customer information, and operational metrics, poses a critical issue. Inefficient data practices impede informed decision-making and accurate performance tracking.

The capstone Project takes an analytical approach to address challenges by leveraging tools and theories. It aims to identify causes of minimal profit, optimize inventory management, and enhance data management. Through data analysis, it seeks to gain insights into customer preferences, market trends, and operational inefficiencies. The project's objectives include increasing profitability, streamlining inventory management, and providing improved data management practices to gain better insights from the data. By focusing on these areas, the project aims to drive growth and ensure long-term success.

## 2. Organization Background:

The business chosen for this project is a vibrant B2C restaurant named Tea Traffic. Situated in the bustling city of Chennai, Tamil Nadu, in southern India, Tea Traffic is owned and operated by Mr. Jagranath. The establishment was inaugurated approximately a year ago in 2022, a period marked by the challenging circumstances of the COVID-19 pandemic. Tea Traffic boasts a delightful array of fast foods, delectable breakfast options, and irresistible snacks. The menu is carefully curated to cater to diverse tastes and preferences, ensuring there is something for everyone. As a relatively new player in the market, Tea Traffic has predominantly relied on offline sales channels to reach its customer base. Currently, Tea Traffic operates with a small but dedicated team consisting of Mr. Jagranath, the visionary owner, and one employee. Together, they ensure that customers receive impeccable service and a warm ambiance that keeps them coming back for more.

### Restaurant Images:



Fig 2.1 (Restaurant Image)



Fig 2.2 (Restaurant Image)



Fig 2.3 (Restaurant Image)

### 3. **Problem Statement:**

#### 3.1 **Identifying Causes of Minimal Profit:**

Analyzing operational costs, pricing strategies, and market competition to pinpoint the underlying factors contributing to minimal profit, enabling effective strategies for increased profitability.

#### 3.2 **Optimizing Inventory Management:**

Analyzing inventory data and supply chain processes to develop strategies that minimize waste, reduce stockouts, and improve overall inventory management efficiency.

#### 3.3 **Enhancing Data Management:**

Addressing data collection, storage, and analysis challenges to improve accuracy and accessibility, enabling better decision-making and performance tracking.

#### **4. Background of Problem**

##### **4.1 Identifying Causes of Minimal Profit:**

The restaurant faces the challenge of minimal profit generation due to various factors. High operational costs, such as ingredients and utilities, have a significant impact on the profit margins. Additionally, fluctuating customer demand, influenced by seasonality and economic conditions, further complicates the profit generation process. Pricing strategies, menu offerings, and customer satisfaction levels also play crucial roles in determining the profitability of the restaurant.

##### **4.2 Optimizing Inventory Management:**

Uneven inventory management poses significant challenges. Inadequate forecasting and demand planning often lead to overstocking or stockouts, resulting in financial losses and dissatisfied customers. The inefficient utilization of ingredients contributes to wastage and increased costs. The complexity of managing perishable and seasonal ingredients adds another layer of complexity to the inventory management, requiring careful monitoring and timely procurement.

##### **4.3 Enhancing Data Management:**

The restaurant faces challenges in data management. Inconsistent data entry practices, fragmented systems, and a lack of integration between different platforms lead to data discrepancies and hinder accurate analysis. The absence of standardized reporting formats and dashboards makes it challenging to gain comprehensive insights into business performance. Limited data visibility and accessibility across departments hinder collaboration and the ability to track key performance indicators accurately.

#### **5. Problem Solving Approach:**

##### **5.1 Identifying Causes of Minimal Profit:**

Thorough analysis of the restaurant's business operations, including cost analysis, menu evaluation, and market research, will be conducted. This approach aims to identify the underlying causes of minimal profit and develop effective strategies to address them.

Intended data collection involves gathering financial data and menu sales data. This comprehensive data collection provides insights into the restaurant's financial performance and customer dynamics.

For analysis, Microsoft Excel and statistical analysis techniques will be used. These analysis tools offer robust capabilities for data analysis, enabling meaningful interpretation of the collected data.

##### **5.2 Optimizing Inventory Management:**

Various methods, such as forecasting, demand planning, and inventory optimization techniques, will be employed to enhance inventory management. This approach focuses on efficient inventory management and cost reduction.

Intended data collection involves collecting historical sales data, inventory records, and market trends. This data collection provides a comprehensive understanding of inventory dynamics and customer demand patterns.

For analysis, Microsoft Excel, and statistical techniques will be utilized. These analysis tools enable effective inventory management and data-driven decision-making.

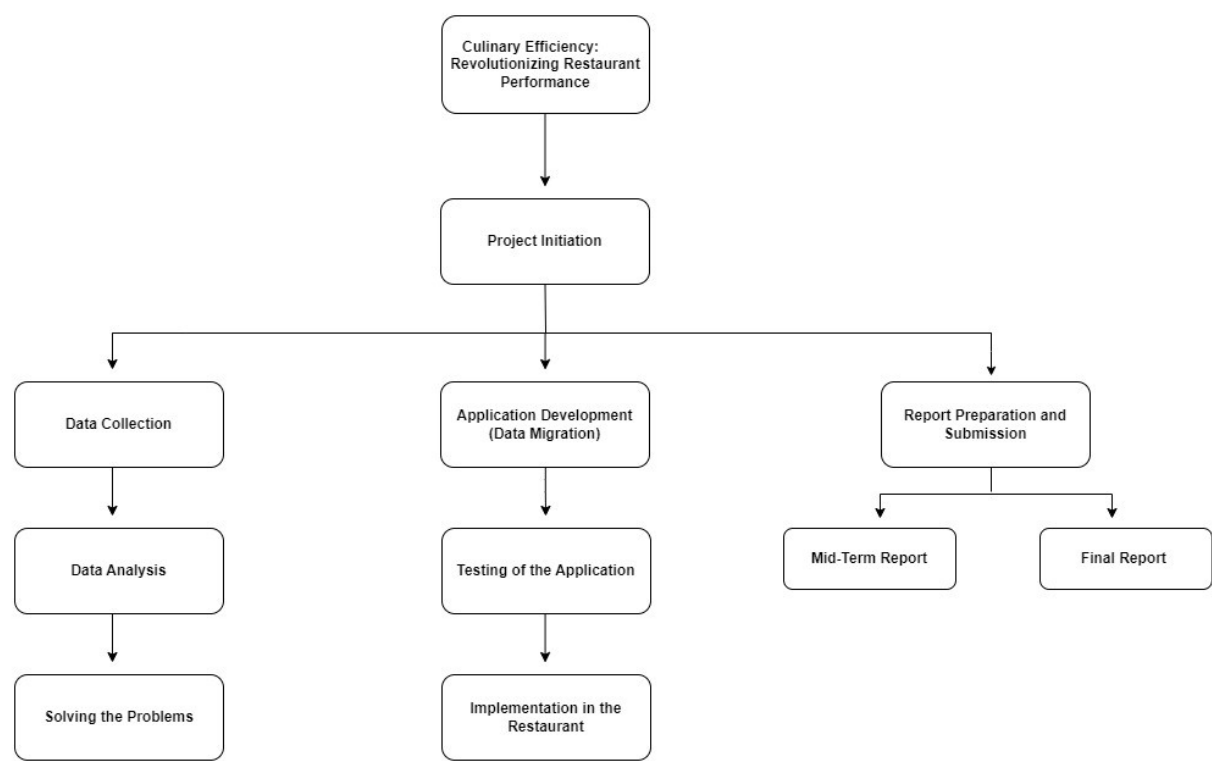
**5.3 Enhancing Data Management:**

The restaurant will be provided with comprehensive support in implementing a centralized and secure data management solution utilizing Python and MySQL. This application aims to significantly enhance data organization, storage, and analysis processes, ensuring streamlined workflows and efficient data entry and retrieval. The incorporation of user-friendly features will simplify data management tasks, empowering the restaurant staff to work more effectively. By transitioning from traditional offline data management to a robust online system, the restaurant will benefit from improved accessibility, data integrity, and security. This transition will enable the restaurant to make better-informed decisions based on accurate and up-to-date data, ultimately leading to enhanced operational efficiency and overall business performance.

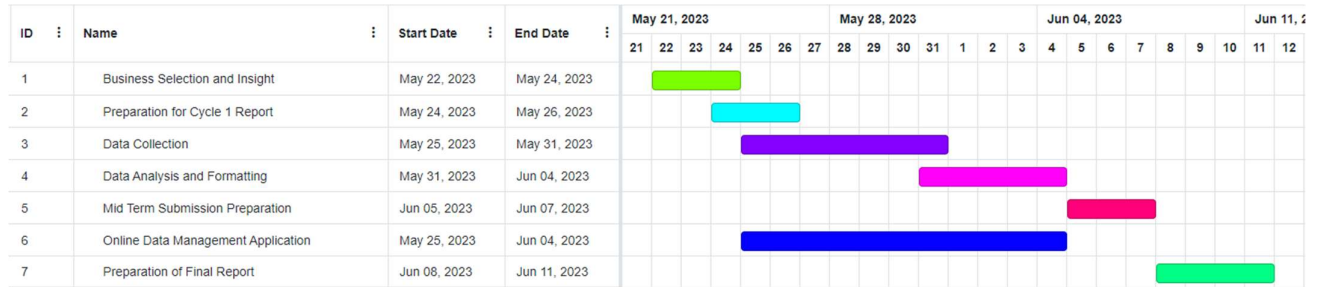
**6. Expected Timeline:**

The projected timeline for this project spans over a duration of one month and encompasses various tasks, including meticulous business selection, comprehensive data collection, precise data formatting, and meticulous application development. Each task will be executed with utmost professionalism and attention to detail, ensuring the successful implementation of the project within the designated timeframe.

**Workflow breakdown:**



### **Gantt Chart:**



### **7. Expected Outcome:**

The primary aim of this project is to support the restaurant in achieving its goals of enhanced profitability, streamlined inventory management, and improved data management. Through the implementation of customized strategies and the utilization of advanced tools, the objective is to facilitate increased profitability, optimize inventory levels, and establish efficient data management systems. The focus is on empowering the restaurant to make informed decisions, maximize operational efficiency, and ensure sustained success in their business endeavours. By providing a simple and effective solution tailored to their specific needs, this project aims to drive positive outcomes and pave the way for long-term growth and profitability for the restaurant.