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## 1. Abstract

Businesses across the world are adopting new strategies every day to keep themselves in the game. **Grace Hypermarket** is a well-established company in India with multiple branches across Chennai. In this project, as the newly hired BIBA team of Grace Hypermarket, we try to analyze the various aspects of the company using visualization and CRM tools. We do so to expose the current scenario of the company and how to improve the current trend without affecting the underlying principles and regulations of the company.

## 2. Introduction

Grace Hypermarket was started in 2000 by Mr. Udayakumar after running a grocery store for 27 years since 1973. The first store was based in Chennai, India. The store initially dealt with all supermarket products and groceries. Since 2019, there has been an expansion of the store as a hypermarket to deal with a wider range of products. Currently, the store manages 6 major sectors:

- Electronic Accessories
- Fashion Accessories
- Food and Beverage
- Health and Beauty
- Home and Lifestyle
- Sports and Travel

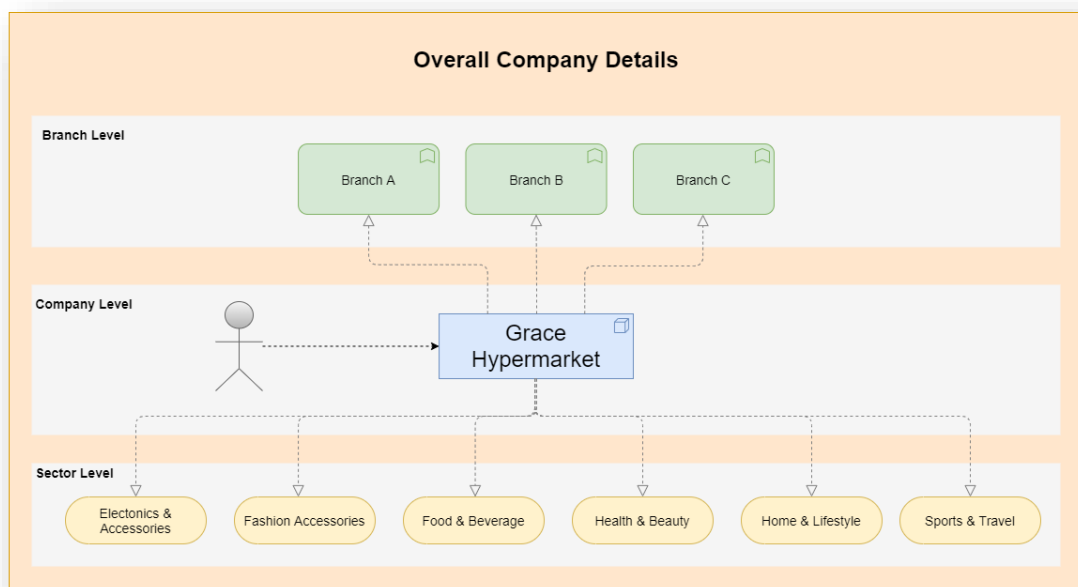


Fig. 1. Company Architecture

The store supports both offline and online purchases providing on-time customer services. It ensures its customers are highly satisfied with the purchase by providing goods at a nominal price and weekly once a new custom of grace treats is initiated wherein selected

products are given at half the price. Besides these, grace is also an active member of the Chalkpiece, an NGO initiative. The NGO is a combined initiative by grace and another supermarket giant whose motive is to provide education to underprivileged kids.

Since the expansion, it has been hard for the company to keep track of sales and customer behavior for all of its three branches with the existing traditional technologies. As the BIBA team, our task is to analyze all the aspects of the store since the expansion and provide necessary information on the sale, income, rating, payment, memberships, etc wherever it is required

### 3. Scope of the Project

The scope of this project pertains to two major segments of the company:

- **Product Sales and Income:**  
The product and sales segment focuses on high-selling products, how to improve low-selling products, strategies to improve the current sale, etc. This module helps the BIBA team to identify the products that are least sold and provide a solution ( in our case suggest selling the product with a high selling product as a combo or sell the product in grace treats, that is put up weekly)
- **Customer Satisfaction:**  
The customer satisfaction segment is based on customer behavior, customer loyalty, customer retention, increased memberships, and customer ratings. Identify the root cause of customer dissatisfaction, cancellation of memberships, drop in the ratings, and so on

### 4. System Design

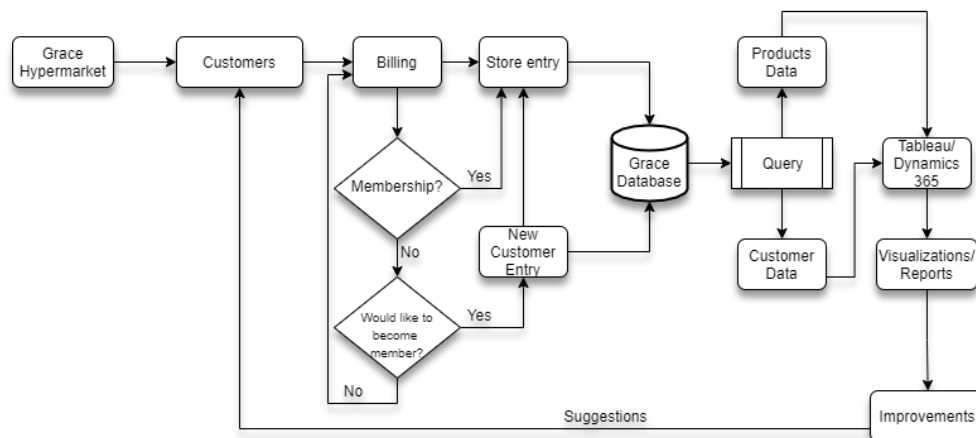


Fig. 2. System Design

The entire system is segmented to provide a better understanding.

- **Customer Interaction:** A customer completed the purchase and during the time of billing, membership details are asked for. If the customer is not a member already, he is explained the potential benefits of the membership and if willing, a membership card is provided and the details are logged into the new

membership database. If not, the billing is completed and the data is stored in the database

- Database: The details logged in the database are then used to perform further analysis and improvements. In this project, the team is focusing mainly on the products and customer table. This is queried and the data is then fed to the newly implemented tools: Tableau and Dynamics 365
- Tableau is used to visualize and obtain insights from the data fed and Dynamics sales are used to maintain customer relationships, create potential opportunities, etc.
- The results obtained from the tools are then used to create reports and suggest solutions based on the company's performance: Which products are selling low, which branch is performing low in terms of sales, how to increase the sales, and so on

## 5. Database Design

The architecture of the database plays a key role for each business. A perfect database prevents redundancies over time, effectively supplies data lagging behind, and connects to other databases using appropriate attachments.

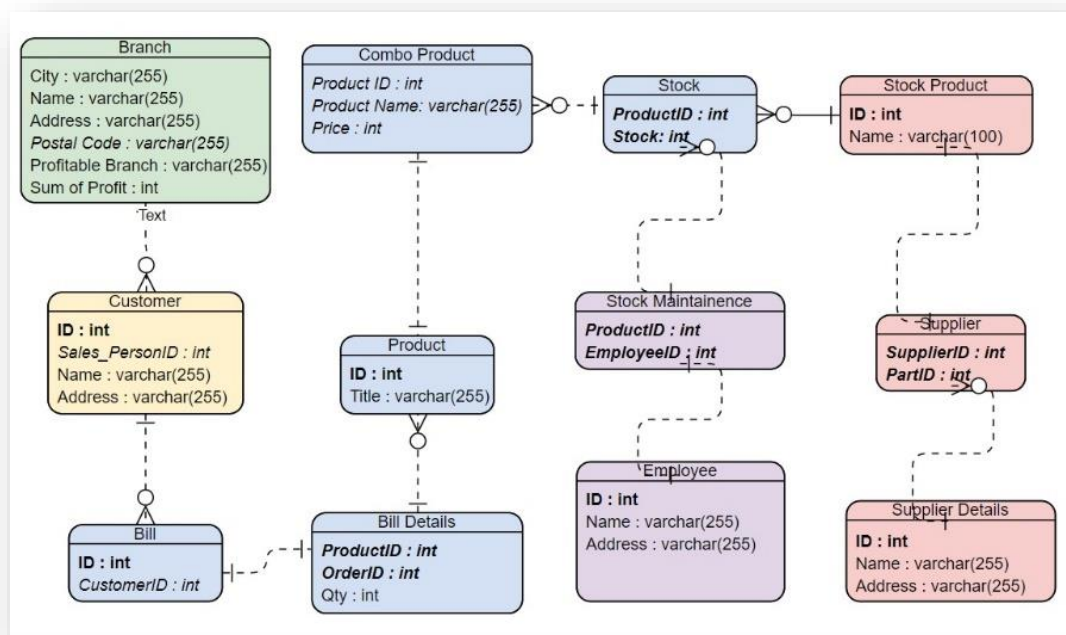


Fig. 3. Database Design

We have 12 tables for end-to-end implementation of the database. It starts with the 'Branch' table where the entry of the customer starts here and then it goes to customer and Bill tables. Then it connects to the bill details page where 'ProductID' is the primary key and 'ID' is a foreign key in the Products table. This table maintains all the available products. If the particular product is not available then it is moved to the Stock table. This helps the

supermarket to maintain the stocks effectively. If the stock is in end-state then an alert will be sent to the particular supplier.

Customer buying product falls into another table called 'Combo Product'. This helps to track the record of low selling products combined with high selling products as combo products. It helps us clear the stocks effectively and give us revenue as well.

The following gives the overview of the primary key foreign key relationships for our database:

- The branch table is linked with Customer by the '**Postal Code**' column.
- The customer table is related by '**ID**' in the Bill table. '**ProductID**' in bill details is related to Product in '**ID**'.
- ProductID is related to the 'Combo Product' table by the 'ID' column.
- **Stock and stock maintenance** are related by again **ProductID**. Then again this will relates to the supplier and supplier details table.

## 6. Dataset Description

- Sales and Income of Grace Hypermarket: The sales and income dataset was pulled from Kaggle. The dataset contains invoice\_id, branch of purchase, date of purchase, items sold, price, units, total price, tax, rating, etc.  
Source: <https://www.kaggle.com/aungpyaeap/supermarket-sales>
- Food and Beverage of Branch B: This dataset was obtained from Kaggle. It gives details on the date, number of units sold in cookies, coffee, pies, cakes, smoothies, and whether the product was promoted on that day. The data was modified and used for visualization  
Source: <https://www.kaggle.com/sanu12300/bakery-sales-data-2006-19>
- Customer Details: This dataset was created using Mockaroo. The dataset contains customer name, email, amount of purchase, date of purchase, units sold, etc.  
Source: <https://www.mockaroo.com/>

## Implementation

### 7. Business Model

Grace Hypermarket is based on the Business to Consumer Model (B2C). The company retails products directly to the customers.

#### B2C Model:

Selling a product directly to the customer is called the Business to Consumer model. This is an alternative to the Business to Business model. B2C deals with a huge number of customers but gives u slow revenue. B2B deals with smaller clients but with high revenue. It has five types of models that provide organizations to move their business online.



Fig. 4. Business to Consumer model

#### i. Direct Sellers

a. Selling the product directly to customers. This includes smaller companies as well the large companies like Apple and Microsoft

#### ii. Online Intermediate

a. Companies didn't sell their products directly to customers. Instead, they will sell their products to the seller and they will deliver to the particular customer

b. E-commerce sites like Amazon, Walmart, Flipkart acts as a seller and deliver the products directly to the customer

#### iii. Advertisement Based B2C:

a. It becomes more and more popular since most of us are on Social media platform

b. In this, the company buys an advertisement space from the media platforms and posts their ads on the platform to buy their products.

c. The ads are personalized on every user experience.

#### iv. Community-based B2C:

a. It takes the advantage of the online and like-minded community from around the shared interest. This gives the company a lead to sell their product.

#### v. Fee-based B2c:

a. Companies will put a subscription fee to get or watch their content. This makes the company sell its product directly to the customer.

b. Companies like Netflix, Hotstar follows the same process.

## 8. Balanced Scorecard

A balanced scorecard is a strategic framework to lay down financial, internal, learning, and customer focus. It helps to balance out financial aspects of the company based on customer and internal aspects of the company while improving the learning aspects.



Fig. 5. Balanced Scorecard

- i. **Financial Focus:** Financial data is used to analyze how well the organization is performing financially. For our company, the aim is to improve sales, increase investments, implement expansions, etc.
- ii. **Customer Focus:** Placing customers as the main focus is important in the case of retail. As a retail company, our focus is to provide better customer service, deliver qualified products, sell goods at a nominal price and maintain customer loyalty.
- iii. **Learning Focus:** Learning and growth is important for any organization. This can be analyzed by investigating training and knowledge resources. The purpose is to capture and analyze how well the employees are performing individually and as a team. Grace aims to construct a new team for the future, conduct town hall meetings, provide graduate programs, etc.
- iv. **Internal Process Focus:** This is evaluated to understand the overall business process. To track delays, supply time, vendors, etc. As a supermarket giant, it is required of us to ensure employee retention, be socially responsible, distribute the resources and ensure better supply chain management.

## 9. SWOT Analysis

We analyze operations annually to ensure that a profitable company is operated as effectively as possible. While the business can be evaluated in several respects, a SWOT analysis is one of the most

efficient processes. SWOT review (**Strengths, Weakness, Opportunities, and Threats**) is a strategic tool that allows the enterprise to solve its problems and identify what new things lead to. SWOT research aims mostly at helping companies become fully informed of all aspects of corporate decision-making. SWOT has been an important study of important business choices for business owners. By knowing what you lack, you will risk disappointment and eliminate the dangers that otherwise will not catch you. Better still, you will begin building a plan that separates you from your rivals and succeed in your industry effectively.

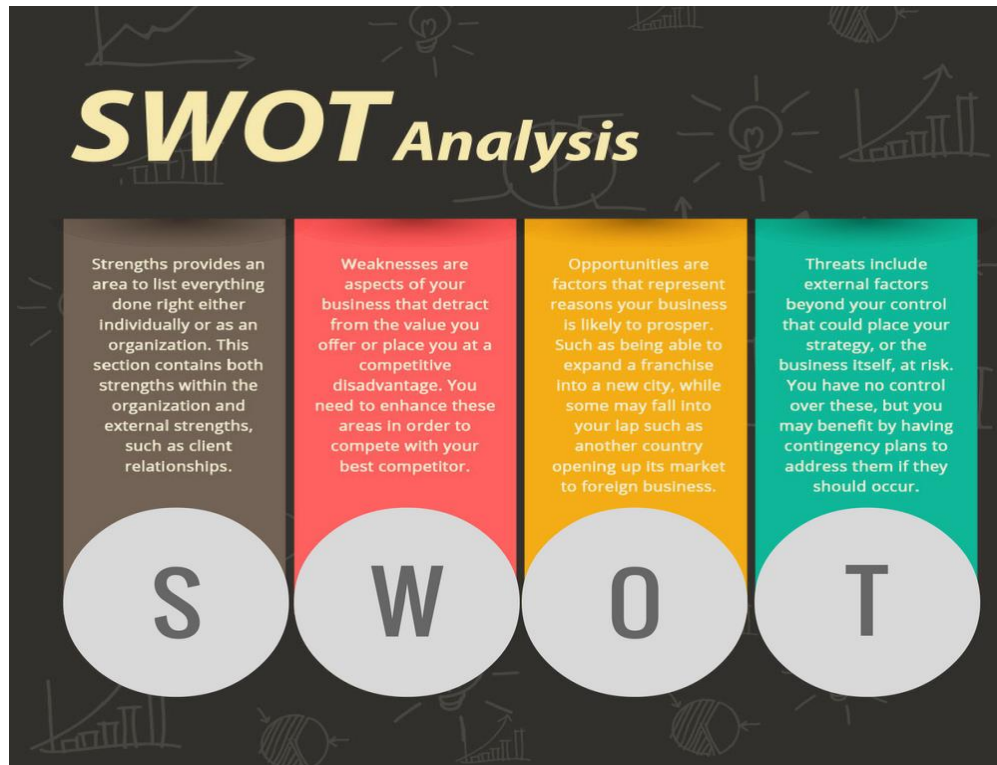


Fig. 6. SWOT Analysis

### 9.1.Strengths:

- To assess the behavior and disposition of the customer to recognize new clients.
- Concessions are provided for the established future customer to strive for an organization's high return.
- Offer flat sales on non-sold goods and on those products which fall inside the next sales list with the least priority.
- Consumers would be supported in the industry through strong consumer relations.
- Keep strong relationships with providers and staff.
- Advertising on flat prices or merchandise promotions and for prospective buyers to increase the brand's eventual strength.
- Special or cost-effective services.

### 9.2.Weakness:

- If there is not adequate marketing of the goods, coupons, and other offers, retail companies can experience a business deficit as opposed to their rivals.
- Lack of substantial financial means.
- The lack of an organization's professional workforce.



- Failure to recognize the items for sale.
- Poor chain and facilities procurement control.

### 9.3.Opportunities:

- Expand annually the selection of goods which could raise consumer interest in searching or acquiring new products.
- Focus on fewer sold products to be able to market to the consumers. This attracts more interest from customers.
- Domain integration technology to improve revenue and concentrate on sales and results lagging regions.
- To provide the workforce with adequate opportunities to improve market development and expertise.

### 9.4.Threats:

- Distributors should be reliable.
- Adaptation needs for technological change.
- Maintaining consistency and requirements for quality.
- Adequate human and land resources.
- Competition in prices with other firms.
- Maintaining stocks

## 10. Tableau Implementation

Tableau is a visualization software focused on Business Intelligence. These kinds of visualization tools help to reveal hidden insights from raw data. Usually, companies that are leading in the market have huge loads of raw data incoming from multiple departments within the organization. An organization is not just a single entity but is divided into multiple hierarchies of departments. So it becomes tedious to maintain such a huge volume of data and extract useful insights from it.

As the BIBA team, we have created 3 dashboards, each monitored by various levels of authority and department.

- **Income and Sales Senior Manager Dashboard**

The Income and Sales Dashboard was created for manager view. It contains details about overall sales and income of all the 3 branches. It has 3 components and a single entity, loss percentage.

- i) Loss Percent: Displays the overall loss of all the three branches combined for Quarter-1( January, February, and March across Branch A, B, and C)
- ii) Gross Income in Thousand: This chart displays the gross income earned by all the 3 branches for all 6 sectors for Q1
- iii) Total Units Sold: This chart describes the number of units from each sector sold for Q1 across all 3 branches.
- iv) Total Income: The last chart provides the total revenue collected by the company without any deductions ( Tax, GST, Vendor commission, etc)



Fig. 7. Income and Sales dashboard

**Business Insight:** It was found that after the expansion, the company's revenue dropped in between and is struggling in terms of profit. A loss margin of 10% was faced. Overall, branch B was performing low, and that the lowest-performing department is Food and Beverage.

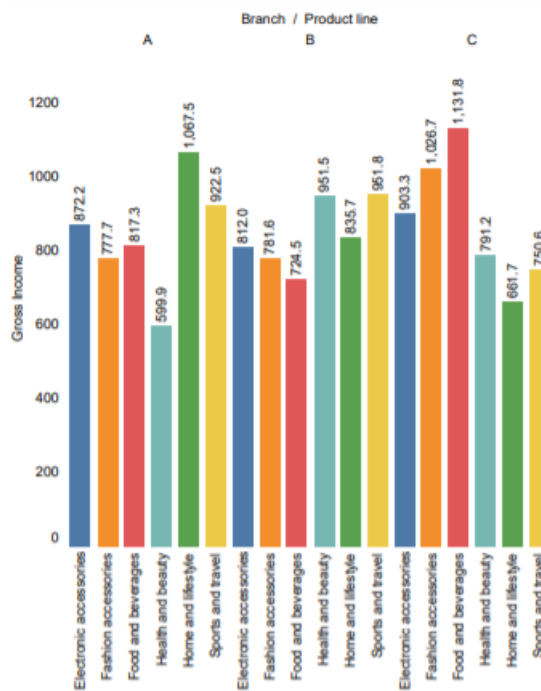


Fig. 8. Gross revenue for all three branches

- Customer Behaviour Manager Dashboard**

The Customer behavior dashboard displays the customer review rate, membership details, and mode of payment by customers.

- i) Customer Payment: The modes of payment used most by the customers are displayed in this chart across all three branches.
- ii) Total Membership: This chart displays the number of customers who are in existing membership across all three branches for Q1.
- iii) Customer Rating: The customer rating chart displays the ratings given by the purchasers (both members and non-members) across all three branches.

**Business Insight:** It is evident that customers of Branch A prefer to pay by Ewallet, branch B prefers the credit card and branch C prefers both credit card and cash payment equally. Regarding memberships, there was a dip during February, and branches A and C have managed to pull in more memberships while B is still struggling and the count is going down. As in the rate of memberships, branch B is the lowest in terms of customer ratings.

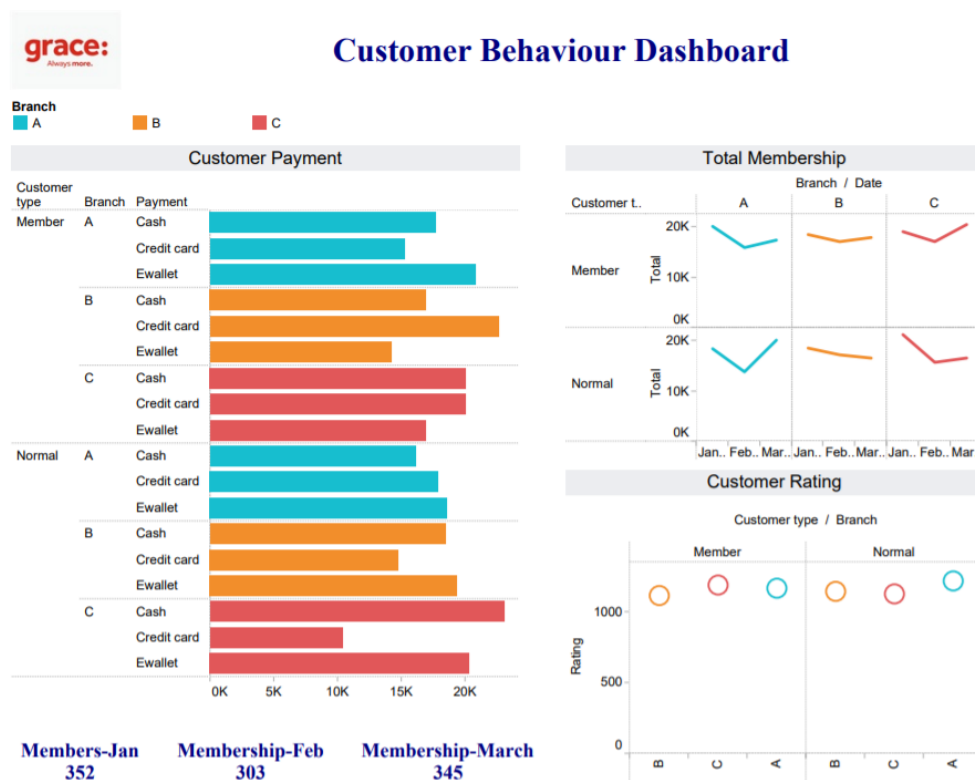


Fig. 9. Customer behavior dashboard

- Food and Beverage in Branch B for Q1 – Retail Store Dashboard

It is evident from the first two dashboards that branch B is performing poorly in terms of sales, the third dashboard concentrates on branch B, Food and Beverage department.

- i) Total units of food sold for Q1 is displayed
- ii) Gross Income in Thousand: The gross income earned by branch B across all 6 departments.
- iii) Branch B Food and Beverage Units Sold: This chart displays the units sold in the food section for 5 types( cakes, cookies, coffee, smoothies, pies).

**Business Insights:** As evident from other charts, Branch B is performing poorly in terms of sales. The overall revenue is pulled down by the food and beverage department.

Except for cakes, all other food items are sold very less and there is a steep decline from January to February. And it is still struggling to boost the sales in this department.

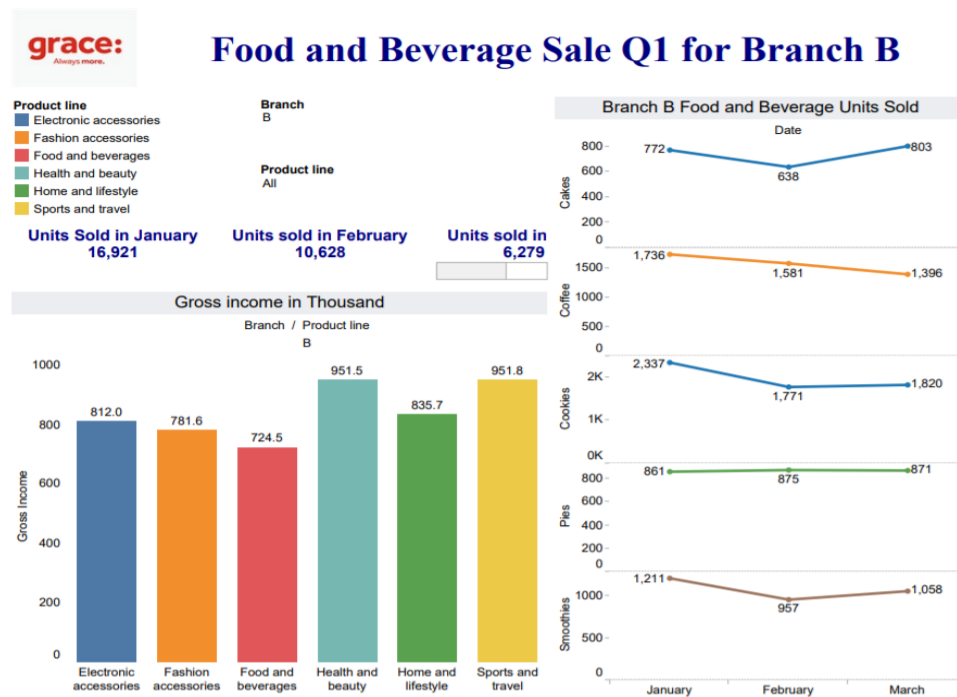


Fig. 10. Food and beverage sales for branch B

## 11. Dynamics 365 Implementation

CRM – Customer Relationship Management is a kind of strategy used by the organization to handle the customers, potential customers in which CRM plays a vital role in helping organizations to have and build a good relationship with customers, increase sales, improve service with customers, and overall improving the business. In this project, Microsoft Dynamics 365 has been used to handle our business processes. As there are several groups in Dynamics, Sales has been chosen since the project deals with the sales of Grace Hyper Market

The main components of Dynamic 365 are Lead, Opportunity, contact, Account.

- **Lead:** Lead in dynamics is said to be an individual or an organization who has a basic idea about the product and has the potential with whom the organization would be having business deals in the future.
- **Opportunity:** once the lead gets qualified, the next step would be the opportunity where the business process takes place. An organization applying for different deals where each deal is said to be the opportunity.
- **Account:** The basic information of the customer would be recorded in his / her account. based on the business they are involved with the organization.
- **Contact:** Information related to an individual, basically a customer associated with the account.

Overall the project deals with product and customer types, the above-mentioned steps have been implemented within the project

### 11.1.Dynamics 365 Steps :

As mentioned the store name is to be Grace Hyper Market where it has multiple branches across the city and from a supermarket the business organization has faced an improvement and introduced new food and beverages sector where the business face a dip in food sales as where the low selling product is to merge with two other high selling product as a combo which would be a solution to improve the business

**Step 1:** Individual products like cookies, cake, and smoothie are added to the system as shown below in (fig11, fig 12, fig 13 )

The screenshot shows the 'Product: cookie' form in Dynamics 365. The form is in 'Draft' status. It has tabs for 'SUMMARY', 'QUANTITY FACTORS', 'ADDITIONAL DETAILS', 'Notes', and 'Related'. The 'SUMMARY' tab is active. The form contains the following fields:

Field	Value
Name	cookie
Product ID	3452
Valid From	14/05/2021
Valid To	16/06/2022
Description	---
Unit Group	Default Unit
Default Unit	Primary Unit
Default Price List	---
Decimals Supported	2
Subject	---
List Price	---

Fig. 11. First Product

The screenshot shows the 'Product: cake' form in Dynamics 365. The form is in 'Draft' status. It has tabs for 'SUMMARY', 'QUANTITY FACTORS', 'ADDITIONAL DETAILS', 'Notes', and 'Related'. The 'SUMMARY' tab is active. The form contains the following fields:

Field	Value
Name	cake
Product ID	1345
Valid From	13/05/2021
Valid To	26/05/2021
Description	---
Unit Group	Default Unit
Default Unit	Primary Unit
Default Price List	---
Decimals Supported	2
Subject	---
List Price	---

Fig. 12. Second Product

SM

**Product: Smoothie**  
Product · Project Information

SUMMARY
QUANTITY FACTORS
ADDITIONAL DETAILS
Notes
Related

Name	* Smoothie
Product ID	* 5679
Valid From	12/05/2021
Valid To	14/05/2021
Description	---

Unit Group	* Default Unit
Default Unit	* Primary Unit
Default Price List	---
Decimals Supported	* 2
Subject	---
List Price	---

Fig. 13. Third Product

**Step 2:** Once the products are added they are combined into a single family as shown in the below figure, along with the other properties like number and size of the basket as shown in (fig 14, fig 15)

ST

**Product Family: Sweet Tooth combo**  
Product · Product

PRODUCT DETAILS
Product Properties
NOTES
FIELD SERVICE
Related

Name	* Sweet Tooth combo
Product ID	* SW123
Parent	---
Valid From	---
Valid To	---
Description	---

Unit Group	---
Default Unit	---
Default Price List	---
Decimals Supported	---
Subject	---

Fig. 14. Steps in creating family

ST

**Product Family: Sweet Tooth combo**  
Product · Product

PRODUCT DETAILS
**Product Properties**
NOTES
FIELD SERVICE
Related

Draft  
Status

✓	Name ↑ ↓	Base Property ↓	Data Type ↓	Read-Only ↓	Required ↓	Hidden ↓	Default Val.
	Number of place	---	Whole Number	No	No	No	---
	---Size of the basket	---	Option Set	No	Yes	No	---

Fig. 15. Family creation in dynamics

**Step 3:** Once the family has been created, as next step bundle which contains the combination of three products has been created in dynamics as shown in where the above-created family and the products have been added into the bundle as shown in (fig 16)

**Bundle: Combos**  
Product · Product ▾

**PRODUCT DETAILS** Bundle Products Product Properties Additional Details NOTES FIELD SERVICE Related

Name	* Combos
Product ID	* CB123
Parent	<a href="#">Sweet Tooth combo</a>
Valid From	18/05/2021
Valid To	20/05/2021
Description	---

Unit Group	* <a href="#">Default Unit</a>
Default Unit	* <a href="#">Primary Unit</a>
Default Price List	---
Decimals Supported	* 2
Subject	---

Fig. 16. Bundle Creation in Dynamics

**Bundle: Combos**  
Product · Product ▾

**PRODUCT DETAILS** **Bundle Products** Product Properties Additional Details NOTES FIELD SERVICE Related

+ New Product Associati...

✓ Associated Product ▾	Quantity ▾	Unit ▾	Required ▾
<a href="#">cookie</a>	3.00000	<a href="#">Primary Unit</a>	Required
<a href="#">cake</a>	4.00000	<a href="#">Primary Unit</a>	Required
<a href="#">Smoothie</a>	4.00000	<a href="#">Primary Unit</a>	Required

Fig. 17. Adding combo into a bundle

**Bundle: Combos**  
Product · Product ▾

**PRODUCT DETAILS** Bundle Products **Product Properties** Additional Details NOTES FIELD SERVICE Related

+ New Property Refresh ⋮

✓	Name ↑ ▾	Base Property ▾	Data Type ▾	Read-Only ▾	Required ▾	Hidden ▾	Default Val
	Number of place	---	Whole Number	No	No	No	---
	---Size of the basket	---	Option Set	No	Yes	No	---

Fig. 18. Product Properties

**Combos**  
Opportunity · Opportunity ▾

Est. Close Date Est. Revenue **In Progress** Status [Srivathsav Venugopal](#) Owner

**Opportunity Sales Process** Active for less than one mi... **Qualify (< 1 Min)** Develop Propose Close

**Summary** Products Quotes Field Service Files Related

Topic	* Combos
Contact	---
Account	<a href="#">Adventure Works (sample)</a>
Purchase Timeframe	---
Currency	* <a href="#">Rupee</a>
Budget Amount	---

**Timeline** + ▾ ⋮

Search timeline

Enter a note...

**Auto-post on Combos**  
Opportunity: Created by Srivathsav Venugopal for Account Adventure W... 12:26 ▾

Fig. 19. creating the opportunity for combo

**Step 4:** Now the combos to be sold as a single product and been created as an opportunity to Adventure works, and it shows that Adventure works seem to be interested in it as shown in( fig 20)

The screenshot shows the 'Qualify' stage of the 'Opportunity Sales Process' for an opportunity named 'Compos'. The process is active for 1 minute. The 'Qualify' stage is highlighted with a red circle. The 'Summary' tab is selected, showing details for 'Topic: Compos', 'Contact: Anu D', 'Account: Adventure Works (sample)', 'Purchase Timeframe: This Quarter', 'Currency: Rupee', and 'Budget Amount: ₹300.00'. A checklist on the right shows tasks: 'Identify Account' (checked), 'Purchase Timeframe' (checked), 'Estimated Budget' (checked, value ₹3000.00), 'Purchase Process' (checked, value Individual), 'Identify Decision Maker' (checked, value completed), and 'Capture Summary' (checked, value done). A 'Next Stage' button is at the bottom.

Fig. 20. Steps in creating the opportunity for combo

**Step 6:** Now the product gets qualified where the budget of the product contact and other factors are updated as shown in (fig 21) and once after that, it moves to the development stage where stakeholders and competitors are to be found and moved to the next stage known as the proposal stage.

The screenshot shows the 'Develop' stage of the 'Opportunity Sales Process' for 'Compos'. The process is active for 1 minute. The 'Develop' stage is highlighted with a red circle. The 'Summary' tab is selected, showing details for 'Topic: Compos', 'Contact: Anu D', 'Account: Adventure Works (sample)', 'Purchase Timeframe: This Quarter', 'Currency: Rupee', and 'Budget Amount: ₹3,000.00'. A checklist on the right shows tasks: 'Customer Need' (checked, value Combo numbers), 'Proposed Solution' (checked, value y), 'Identify Stakeholders' (checked, value completed), and 'Identify Competitors' (checked, value completed). A 'Next Stage' button is at the bottom.

Fig. 21. Combo opportunity

**Step 7:** In the proposal stage, a general proposal would be given to the customer as in which it would be the process where the customer would have a more clear understanding of the project by presentations and once after that the lead gets closed

The screenshot shows the 'Propose' stage of the 'Opportunity Sales Process' for 'Compos'. The process is completed in 10 minutes. The 'Propose' stage is highlighted with a red circle. The 'Summary' tab is selected, showing details for 'Topic: Compos', 'Contact: Anu D', 'Account: Adventure Works (sample)', 'Purchase Timeframe: This Quarter', 'Currency: Rupee', and 'Budget Amount: ₹3,000.00'. A 'Timeline' section on the right shows a search bar, a note entry field, and an 'Auto-post on Compos' event: 'Opportunity: Created by Srivathsav Venugopal for Account Adventure W...' with a timestamp of 12:26.

Fig. 22. Combo opportunity



**Step 8:** Once after all the proposal is done as shown ( fig 22 ) the case has been closed, by finishing all the business procedures from both sides as shown above in and the process of low selling modules and overall, the implementation of dynamics is being explained

### One time big purchase by the customers in the past:

In this categorization, customers who have shown up rare shopping in the shop but the bill amount is to be large when compared with other customers and seems to be the potential customers by which the overall profit and sales have increased due to the potential customers. where based on the data the customers are filtered and potential customers are chosen and below the steps followed in dynamics are listed out.

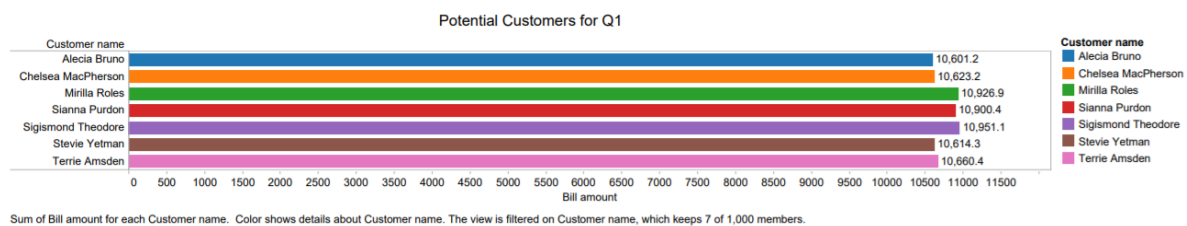


Fig. 23. Potential one time customers of the past who made a huge transaction

As from the above fig, we could see that Mirilla Roles, Sigismond Theodore, Sianna Purden are the ones among the customers to have a huge bill payment in a single shopping

**Step 1:** From above, the customers mentioned are to be selected and a lead is to be created and as they are to be the potential targets and through this, the selected customers are to be encouraged to buy more products from the business organization and have an increase in revenue.

**Step 2:** Leads are being created for the above-mentioned customers namely Sianna Purdon, Sigimond Theodore, Mirilla roles as shown below in

**Sianna purdon**  
Lead - Lead

Lead Source: Warm, Rating: New, Status: Srivathsav Venugopal, Owner: Srivathsav Venugopal

Lead to Opportunity Sales: Active for less than one mo...

Qualify (< 1 Min)

Summary Details Files Related

Topic: promotional offer

Type: Item based

First Name: Sianna

Last Name: purdon

Job Title: ---

Business Phone: ---

Auto-post on Sianna purdon  
Srivathsav Venugopal created Sianna purdon 14:42

Fig. 24. First Lead

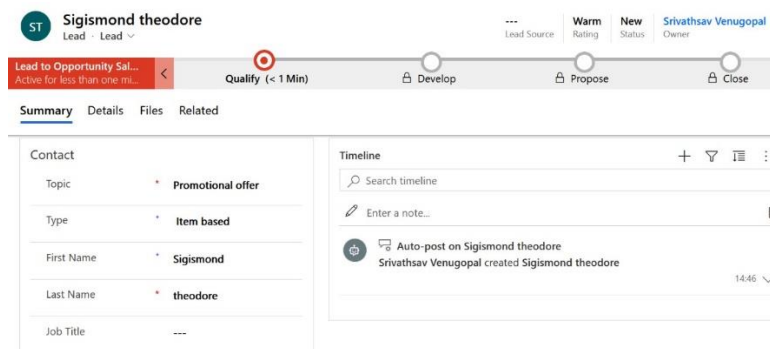


Fig.25. Second Lead

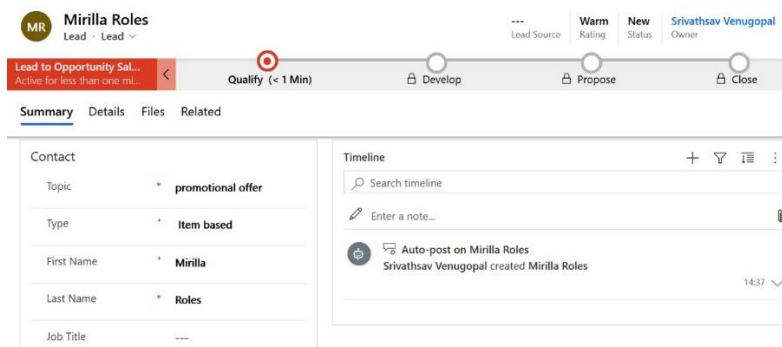


Fig. 26. Third Lead

My Open Leads ▼ Search this view

✓   Name <span>↑</span> <span>▼</span>	Topic <span>▼</span>	Status Reason <span>▼</span>	Created On <span>▼</span>
<a href="#">Mirilla Roles</a>	promotional offer	New	04/05/2021 14:37
<a href="#">Sianna purdon</a>	promotional offer	New	04/05/2021 14:42
<a href="#">Sigismund theodore</a>	Promotional offer	New	04/05/2021 14:46

Fig. 27. Open Leads

**Step 3:** From the above (fig 27) the open leads are shown in which the leads created for the customers are portrayed.

**Step 4:** As the leads are created, from three leads only two are converted to be an opportunity. where Mirilla roles, Sigismund customer leads are converted to be an opportunity since Sianna customer lead fails to be converted to opportunity and the other two are fixed to be the primary target as they have shopped when compared with other.

Once after the transformation to opportunities, they undergo the same steps and procedures are followed above for the combo product. The steps followed in the opportunity is being cleanly explained below

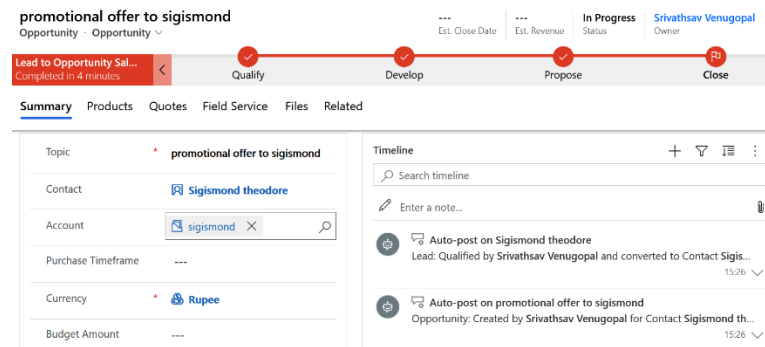


Fig. 28. An opportunity created for the first customer

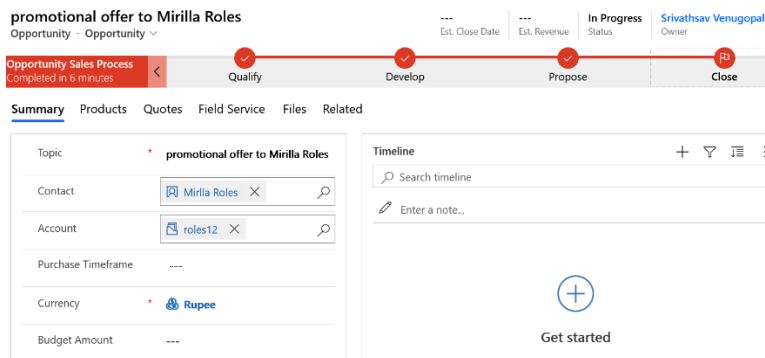


Fig. 29. An opportunity created for the second customer

From the above-mentioned figures both the customers undergo the same steps as to where firstly the customers in the summary page where the basic information is entered and once after that the customer gets qualified they move to the next stage namely develop where they have a clear understanding about the product and once after that move to the next step which is proposed where the stakeholders and other competitors are to be found in the process and then being moved to the final step as close where the case gets closed and both the opportunities got closed as won and the business process among both sides get closed and the whole process comes to an end and thus the implementation of dynamics 365 over the targeted (potential) customers is explained.

### Sales Pipeline:

A sales pipeline based on existing opportunities has been created as shown in (fig 29 ) in which the data shown is for existing opportunities in the dynamics account. Once the potential customers were filtered and approached by creating individual opportunities the overall revenue had an increase and the overall income gained during each stage were portrayed and from the sales representing circle, the won, open, and lost opportunities are being represented. The pipeline build represented the development, propose, close and qualified. where the qualified case was more when compared with the other and the revenue gained by the sales stage by qualify was more so, from the pipeline the number of cases qualified was more and the pipeline built was the existing data in dynamics.

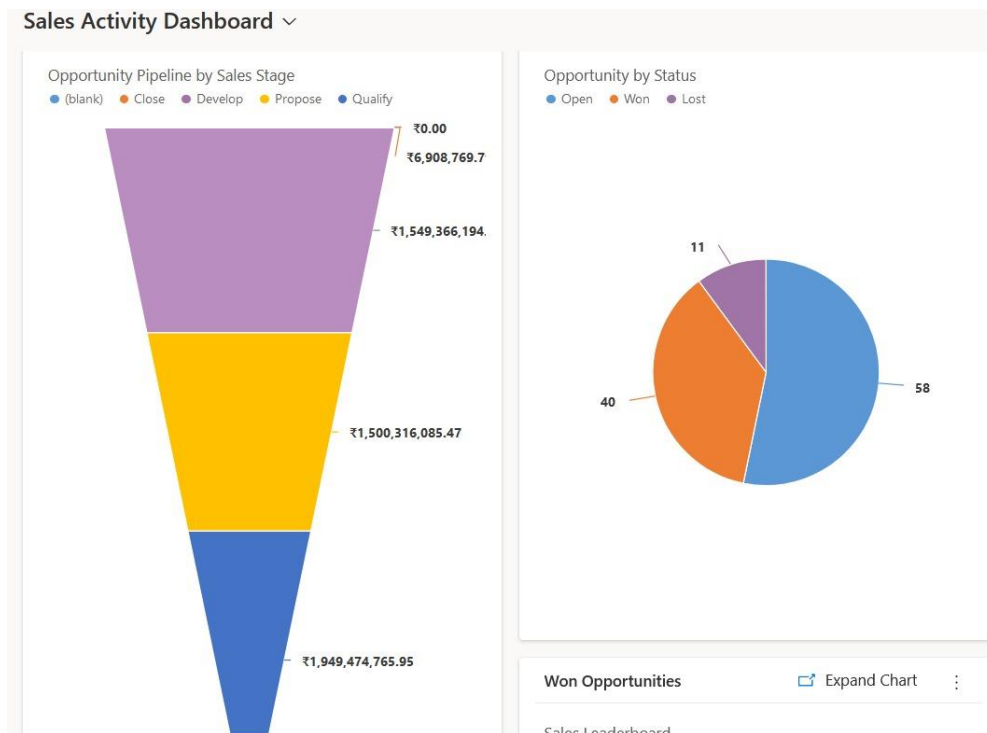


Fig. 29. Sales Pipeline

## 12. Solution :

### 12.1.General Improvements

Currently, Branch B is performing poorly in all aspects of the company. It was found the overall sale was pulled down due to poor performance by the food and beverage department. A survey conducted showed that the selling price of the goods was high for that particular area and that the customers would like to have new flavors of baked goods. Concentrating on this aspect might help to boost the performance of branch B.

### 12.2.E-Wallet :

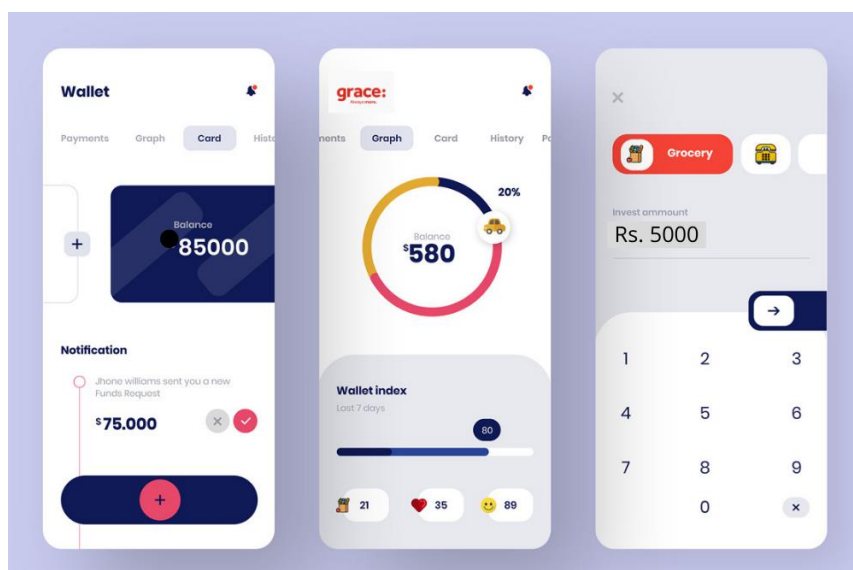


Fig. 30. E-wallet for grace hypermarket with improved offers and cashback

To retain the potential customers, we can give them new vouchers or cashback to the wallet of the hypermarket. The wallet belongs to Grace Hypermarket. The company can be benefitted from the potential customers as well they can get profited from their wallet. Customers make use of the cashback and vouchers in wallets. So whenever they come to purchase any items, they will use the wallet for their transactions. This is a win-win situation for both customers and the company.

## 12. Why use Tableau and Dynamics 365? Advantages

- One of the main advantages of implementing this solution for this project is to filter the top buying customers who were the reason behind high yield revenue for the organization, which wasn't a more time-consuming factor.
- Since there was a smooth approach towards filtering the potential customers was easy, they were individually targeted and been provided with more discounts and offers to make them shop more often and which automatically resulted in good revenue for the organization.
- The low selling products were combined with the high selling products and sold as a combo which resulted in a good sales rate for the food sector which was recently introduced by the organization.
- The price rate for the low selling products was decreased to improve the sales for the organization
- The data stored in the database is raw and it is very hard to interpret just by seeing the text. Using Tableau revealed important insights, the ongoing loss, and dip in between were identified.

## 13. Future Expansion

- As the business organization target to yield more customers and revenue and mainly concentrate the relationship with the customers, some modifications that Grace Hyper Market can have in future years are
- An application can be built which would help customers in shopping as from any part of the city, and the customer interaction with the shop will increase and as there are smooth process in shopping people would prefer this shop more often than other shops
- The above solution will increase the number of customers and relationships with customers will increase.
- Home delivery needs to be implemented by the organization as the business flow will be more smooth by introducing these features.
- More number of branches needs to be introduced and food sector needs improvement like introducing more dishes

## 14. Distribution of Workload

Student	Individual Works	Combined Works
Sarath Kumar Samynathan	<ul style="list-style-type: none"> <li>• Database &amp; Entity Diagram design</li> <li>• Dataset Creation and Modification</li> <li>• Architecture Design and Business Model</li> </ul>	<ul style="list-style-type: none"> <li>• Project idea</li> <li>• Project Report</li> <li>• Final Solution</li> </ul>

Srivathsav Venugopal	<ul style="list-style-type: none"> <li>• Microsoft Dynamic CRM</li> <li>• CRM Documentation and Reporting</li> <li>• Evaluation techniques and Future Potential, Dynamics Pipeline</li> </ul>	<ul style="list-style-type: none"> <li>• Dataset collection finalizing</li> </ul>
Sruthi Prabakaran Paruthipattu	<ul style="list-style-type: none"> <li>• Tableau Implementation</li> <li>• Report visualization and Business insights</li> <li>• Project Scope and Evaluation</li> </ul>	

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