2020-2024

ANALYSIS REPORT

SNACK IT UP! estd 2019

Report by: Aastha Agarwal

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BRIEF HISTORY OF
Of the Company

Snack Eat Up!, India's leading fast-food restaurant chain, serving millions of satisfied customers daily across numerous cities with over 1,000 locations.

We pride ourselves on offering the largest selection of SKUs in the industry, catering to diverse tastes with our extensive menu of signature snacks, mouth-watering burgers, irresistible desserts, and refreshing beverages. Our commitment to providing fast, flavorful, and affordable meals without compromising on quality drives us to innovate and enhance the customer experience continuously.

Each visit to Snack Eat Up! promises exceptional quality, warm hospitality, and a welcoming atmosphere, making it the perfect place for friends and families to create lasting memories.

PROBLEM STATEMENT

Client is seeking a comprehensive dashboard to monitor and analyze their business' financial performance. The dashboard should provide insights into the following key areas:

Performance Analysis

Cost Analysis

Budget Analysis

This dashboard will serve as a vital tool for strategic decision-making and financial management.

ORIGINAL DATA DICTIONARY

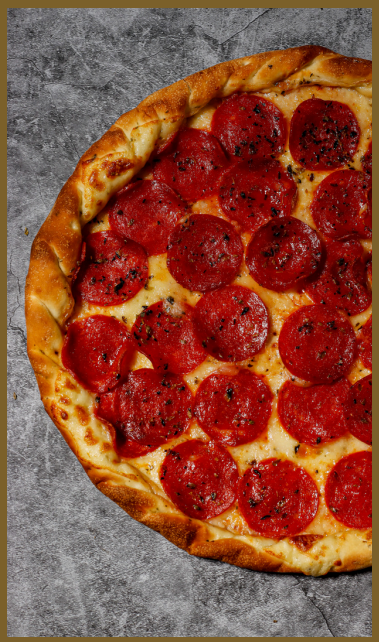
Name	Meaning
Year	2020 - 2024
Quarter	Q1, Q2, Q3, Q4
Month	Jan - Dec
Cluster_Head	Name of the cluster head
Sku Code	Code identifying the sales quarter
Sku_Description	Description of the Stock Keeping Unit
Category	Product category
Sub_Category	Subcategory within the product category
Product	Specific product name
Sub_Product	Variant or sub-type of the product
Channel	Sales channel (e.g., retail, online)
Sales	Total sales amount
Volumemetric	Volume of product sold
Gross_Sale	Total revenue before discounts
Discount	Total discount amount
Trade_Space	Space allocated for the product
Total_T_And_D	Total trade and discount (clarify if needed)
Net_Revenue	Net revenue after discounts and trade
Raw_Material_Cost	Cost of raw materials
Packaging_Cost	Cost of packaging
Industrial_Fixed_Cost	Fixed costs related to industrial operations
Industrial_Variable_Cost	Variable costs related to industrial operations
Total_Fixed_And_Variable_Cost	Sum of industrial fixed and variable costs
Cogs	Cost of Goods Sold
Gross_Profit	Gross profit (revenue minus COGS)
Gross_Profit_Percent	Gross profit as a percentage of revenue
Marketing_Cost	Marketing expenses
S_And_D_Cost	Sales and distribution costs
G_And_A_Cost	General and administrative costs
Other_Inclusive_And_Exclusive_Cost	Other inclusive and exclusive costs (clarify)
Ebitda	Earnings Before Interest, Taxes, Depreciation, and Amortization
Depreciation	Depreciation expense
One_Off_Item	Non-recurring expenses or income
Tax	Total tax amount
Interest	Total interest expense
Interest_Expense	Interest expense (same as interest?)
Net_Profit	Net profit after all expenses and taxes

EXCEL

All Kind of Data Preparation is Done using MS Excel.





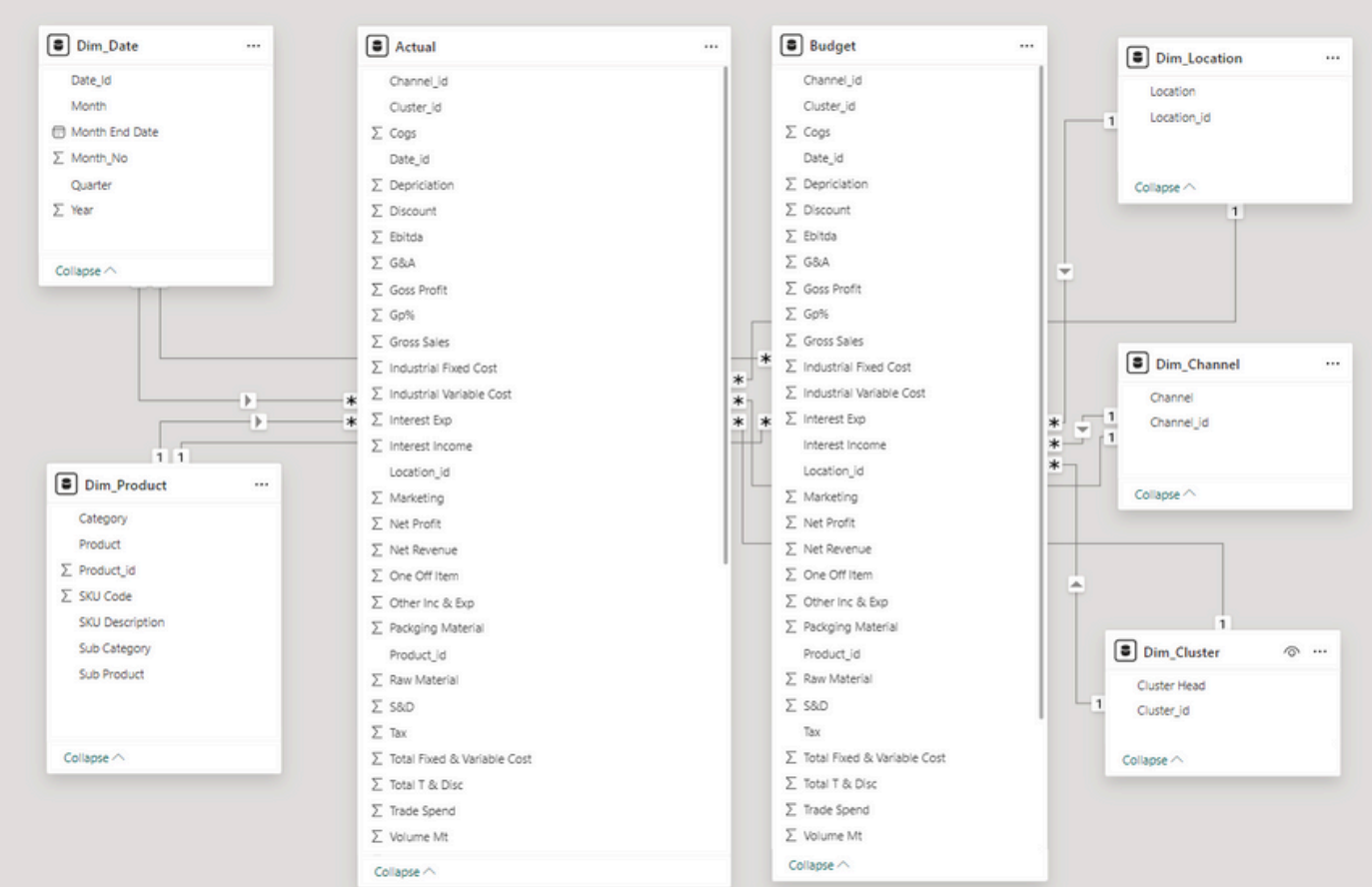



PLANNED DATA MODEL

- We planned to separate the data into fact and dimension tables for better analysis and visualization.
  - Dimension tables include
    - Dim_Location
    - Dim_Channel
    - Dim_Date
    - Dim_Product
    - Dim_Cluster
  - Fact tables include
    - Actual
    - Budget

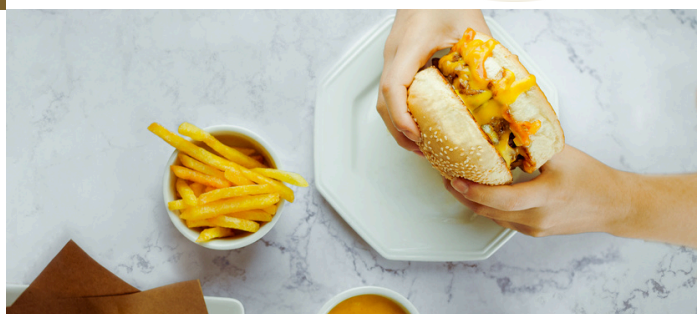
SCHEMA USED -

FACT CONSTELLATION a.k.a GALAXY SCHEMA



STEPS TAKEN

FOR DATA PREPARATION & DATA CLEANING



DATA ARRANGEMENT

- We separated the data into fact and dimension tables for better analysis and visualization

ACTUAL TABLE

- Introduced new header named Product_Id (Primary Key for the Table) and assigned Product ID to each record
- Mapped it on SKU Code

BUDGET TABLE

- Introduced new header named Product_Id (Primary Key for the Table)
- Mapped it on SKU Code

DIM_CLUSTER

- Contains details about the Cluster Head
- Assigned them Cluster ID (Primary Key)

DIM_PRODUCT

- Contains details about the Product
- As per the SKU Details

DIM_LOCATION

- Contains details about the Location in which the company is operating
- Assigned them Channel ID (Primary Key)

DIM_CHANNEL

- Contains details about the Channels
- Assigned them Channel ID (Primary Key)

DIM_DATE

- Contains details Date related Details
- Assigned them Date ID (Primary Key)
- Added Extra necessary columns as well
  - Month
  - Month End Date
  - Year
  - Quarter

SHORTCUTS

- `Alt + AM`: For generating unique elements in Excel.

- `Ctrl + C` + `Ctrl + Alt + V`: To paste data as values, ensuring data integrity during transformations.

ADVANCED FEATURES USED

- VLOOKUPs
- Range Locking

FINAL STEPS

- Joining Tables by mapping Primary key from each Dimension table to the Primary Key (Product ID) of the Fact Tables.

DATA DICTIONARY

FACT TABLES

Actual / Budget Fact Tables

Name	Meaning
Product_id	Primary Key for each record
Date_id	Foreign Key to Dim_Date Table
Cluster_id	Foreign Key to Dim_Cluster Table
Channel_id	Foreign Key to Dim_Channel Table
Location_id	Foreign Key to Dim_Location Table
Volume Mt	Volume of product sold
Gross Sales	Total revenue before discounts
Discount	Total discount amount
Trade Space	Space allocated for the product
Net_Revenue	Net revenue after discounts and trade
Raw_Material_Cost	Cost of raw materials
Packaging_Cost	Cost of packaging
Industrial_Fixed_Cost	Fixed costs related to industrial operations
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DATA DICTIONARY

DIMENSION TABLES

Dim_Channel

Name	Meaning
Channel ID	Primary Key for the Dim_Channel Table
Channel	Sales channel (e.g., retail, online)

Dim_Channel

Name	Meaning
Location ID	Primary Key for the Dim_Location Table
Location	Areas that the business is operating in

Dim_Cluster

Name	Meaning
Cluster ID	Primary Key for the Dim_Cluster Table
Cluster Head	Name of the cluster head

Dim_Date

Name	Meaning
Date ID	Primary Key for the Dim_Date Table
Year	2020 - 2024
Quarter	Q1, Q2, Q3, Q4
Month	Jan - Dec / 1 - 12
Month End Date	Date at end of each month

Dim_Product

Name	Meaning
Product ID	Primary Key for the Dim_Product Table
Sku Code	Code identifying the sales quarter
Sku_Description	Description of the Stock Keeping Unit
Category	Product category
Sub_Category	Subcategory within the product category
Product	Specific product name
Sub_Product	Variant or sub-type of the product

POWERBI

All Kind of Data Visualization is Done using MS Excel.






STEPS TAKEN

FOR DATA VISUALIZATION

DATA EXTRACT

- Format - **MS Excel Workbook**
- The workbook contained 7 Sheets
- 2 Fact Tables and 5 Dimension Tables was there.

DATA TRANSFORMATION

1.. **Error & Empty Data Check:**
   - We thoroughly checked for errors, empty data entries, and potential duplications. Necessary corrections were made to maintain data integrity.
2. **Data Type Check:**
   - Ensured all columns had appropriate data types (e.g., text, numeric, date) for accurate analysis.
3. **Inconsistency Check:**
   - Reviewed the data for any inconsistencies, such as mismatched categories or erroneous entries, and corrected them.

DATA LOAD

- After transformations, the cleaned and modelled data was loaded into PowerBI for visualization.

DATA MODELLING

- The modelled data was used to create relationships between tables, enabling complex analyses and interactive dashboard elements.

MEASURE CREATION USING DAX

- Added Extra necessary measures
  - Ebitda
  - Revenue
  - Total GP%
  - Total Volume sold
  - Total Profits
  - etc.

CHOOSING THE RIGHT VISUALIZATIONS

- Chose the best suitable Visuals to solve every Insight that would contribute in Data Driven Decision Making

FINAL STEPS

- Adding Necessary Filters
- Adding Necessary Visual Edits
- Added Necessary KPIs

ADVANCED FEATURES USED

- Navigation
- Edit Interactions
- Using DAX Functions
- Creating Measures

FINAL DATA MODEL

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  - Dimension tables include
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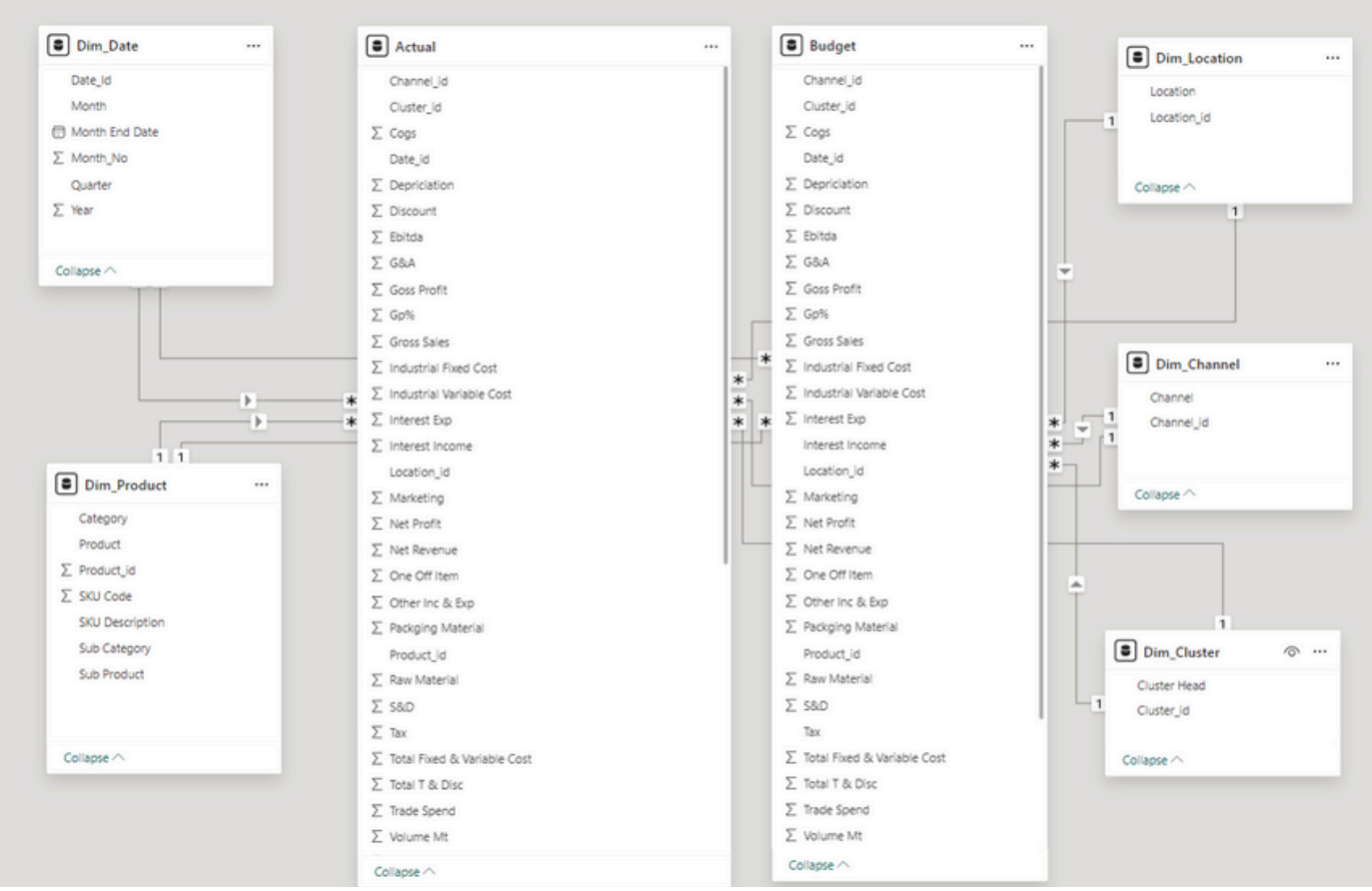


REPORTING

CONCLUSION, INSIGHTS & SUGGESTIONS






INSIGHTS & CONCLUSIONS

The analysis conducted through the Power BI dashboard for "Snack Eat Up!" reveals crucial aspects of the company's financial performance across multiple dimensions, including categories, locations, cluster heads, and cost structures. The insights gained from this analysis not only highlight the current state of the business but also point to specific areas that require strategic intervention.

- **Revenue Trends and Growth Potential:**
  - Net Revenue has fluctuated between 2020 and 2024, peaking in 2022 with a subsequent decline in 2023. The partial recovery in 2024 indicates a need for consistent growth strategies. Segment B shows negative YoY growth in 2023, potentially due to market pressures, internal inefficiencies, or weak demand generation.

- **Category Performance:**
  - The **Protein Pack category** is the top revenue generator, indicating strong market demand. Other categories like Country Fries and Crunch & Munch are stable but show less aggressive growth. Categories like Frosted Fare and Frosty Veggies display volatility, possibly due to seasonal demand or market-specific factors.

- **Location Insights:**
  - **Uttar Pradesh (UP), Gujarat,** and **Maharashtra** are key markets driving revenue. Regions like Karnataka and Tamil Nadu, though lower in revenue, show growth potential, offering opportunities for targeted expansion.

- **Cluster Head Performance:**
  - Cluster heads show varying effectiveness. **Umar** manages the highest revenue segment, while **Harshal and Kasfur's segments are less consistent**, indicating a need for tailored training or resource allocation to standardize performance.

- **Cost Structure Analysis:**
  - **Raw Material Cost is the largest expense, followed by Trade & Discount Costs.** There may be opportunities to optimize procurement and discount strategies.
  - The **low Marketing Cost** suggests efficiency but may also indicate underinvestment, which could be hindering revenue growth.

- **Expense Distribution:**
  - **Expenses align with revenue generation, particularly in high-revenue regions like UP and Gujarat.**
  - This indicates effective financial management, though there are opportunities for cost optimization where expenses are high but not yielding proportionate revenue gains.

SUGGESTIONS

To address the decline in YoY growth, particularly in Segment B, the company should:

1. **Strengthen Revenue Growth Strategies:** Revisit marketing, product offerings, and customer engagement initiatives by launching targeted campaigns, introducing new products, and exploring partnerships.

2. **Diversify and Innovate Product Offerings:** Focus on underperforming categories by introducing new flavors, limited-time offers, and healthier options. Market research should be conducted to stay ahead of trends.

3. **Expand into High-Growth Regions:** Invest in localized marketing, expand distribution, and tailor products to regional tastes in growth areas like Karnataka and Tamil Nadu.

4. **Optimize Cost Management:** Reduce raw material and trade discount costs through bulk purchasing, long-term contracts, and more targeted, data-driven promotions.

5. **Enhance Cluster Head Performance:** Standardize training for cluster heads, conduct regular performance reviews, offer incentives, and promote cross-cluster collaboration.

6. **Increase Marketing Investment:** Boost marketing spend, particularly in underperforming regions, leveraging digital marketing, social media, and data analytics to improve ROI.

DASHBOARD

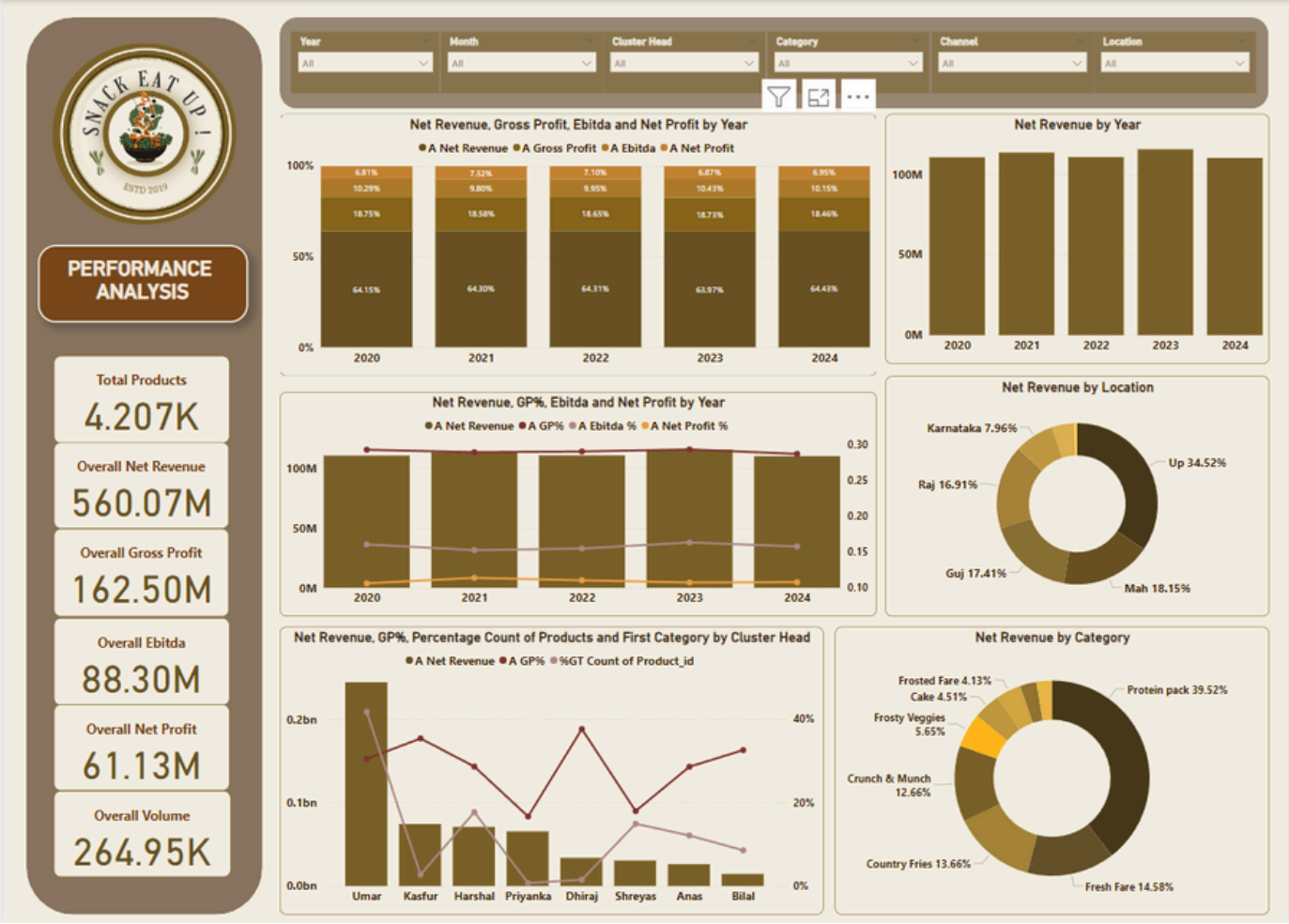
SNIPPETS OF THE REPORT





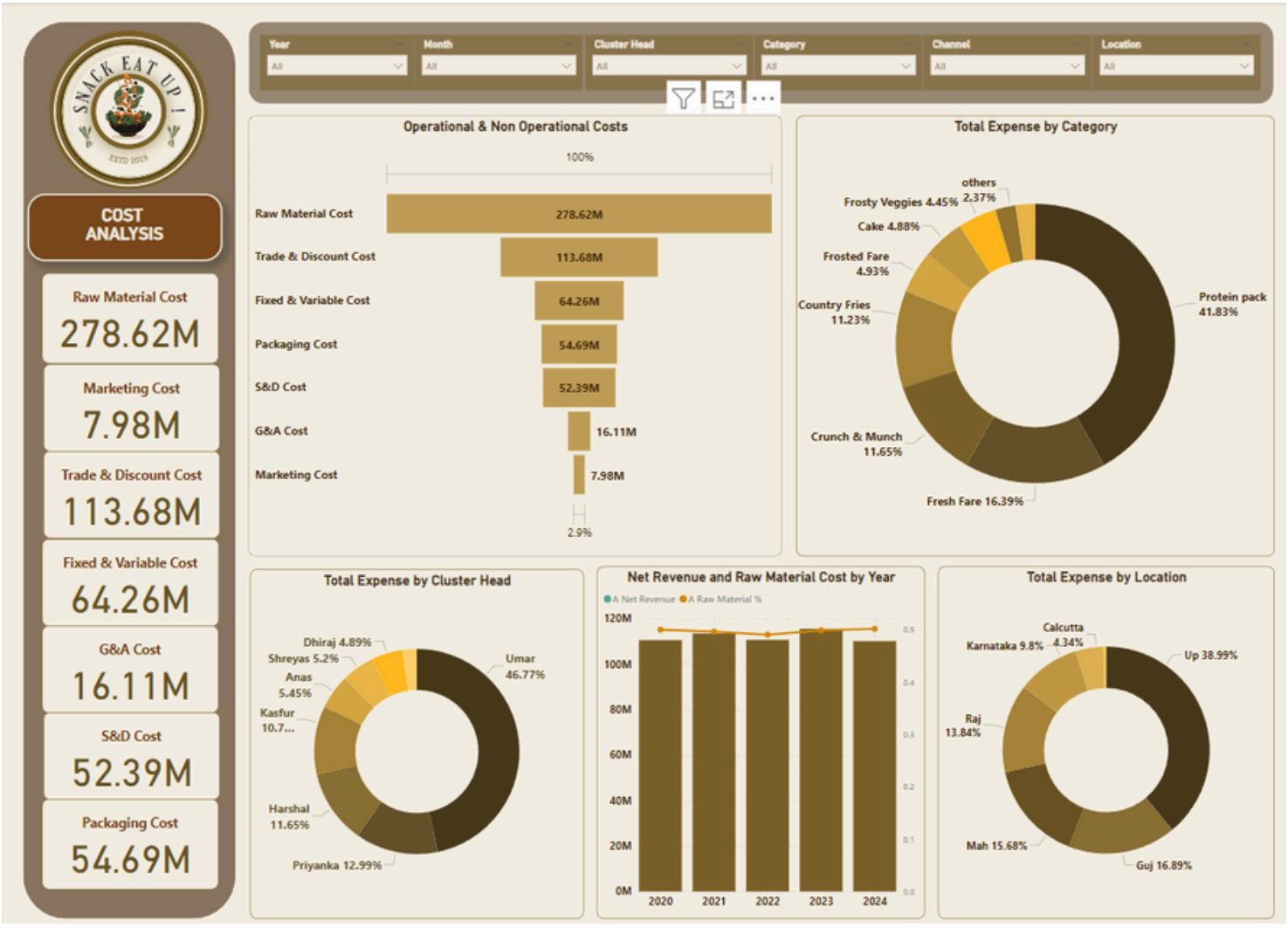

REPORT SNIPPET

PERFORMANCE ANALYSIS



REPORT SNIPPET

COST ANALYSIS

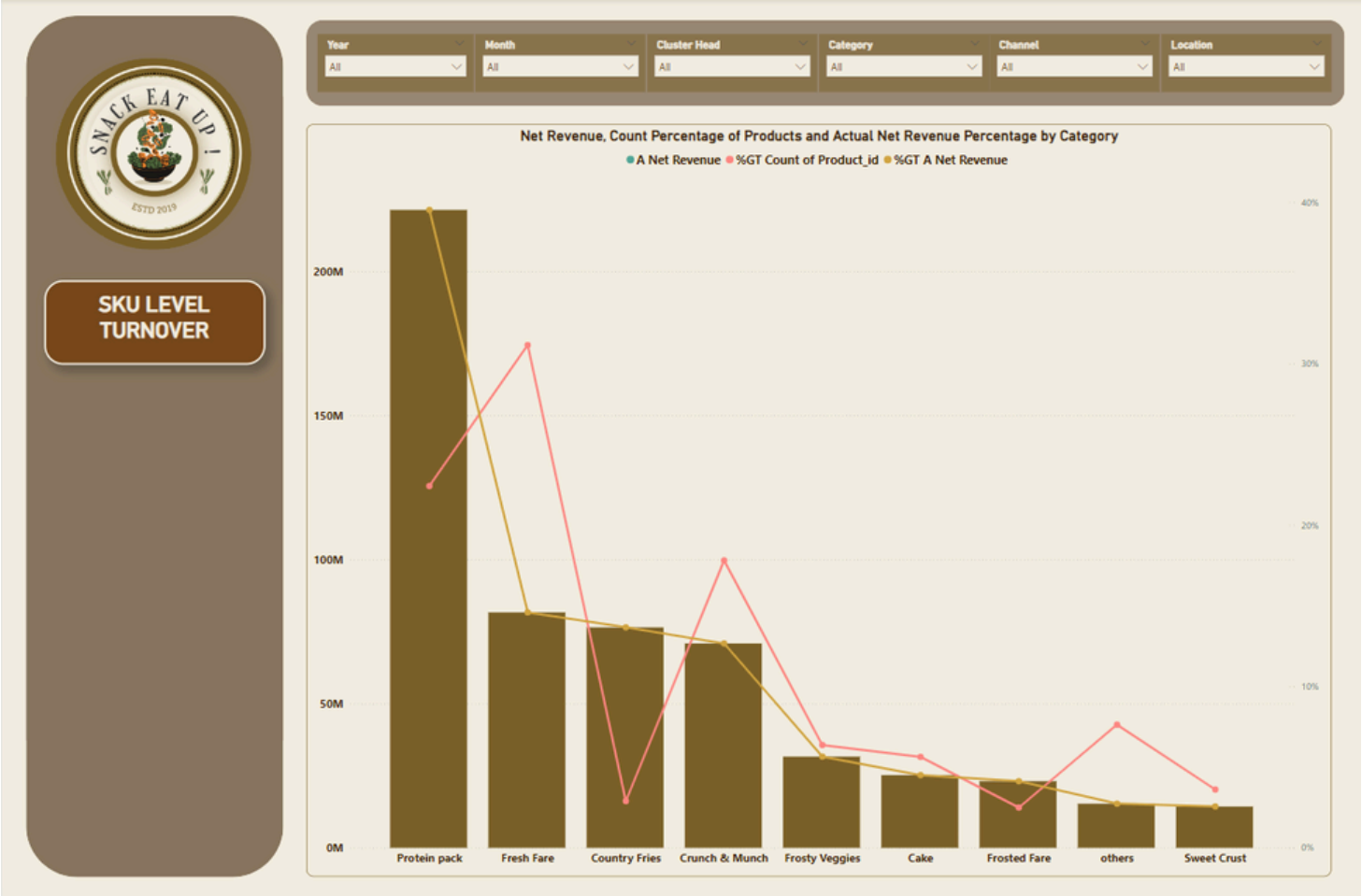


REPORT SNIPPET

BUDGET ANALYSIS

REPORT SNIPPET

SKU TURNOVER



THANK YOU

TOOLS USED - **MS Excel, Power BI**
TECH STACK **- Data Analysis, Data Scrubbing & Arrangement , ETL, Data Visualization, Data Modelling**

Report by: Aastha Agarwal