



CNESTOGA COLLEGE

Reporting System and Database Development



Dashboard Proposal

Chocolate Company - Confectionery Insight Project

MARCH 2024

School of Applied Computer Science and Information Technology



Table of Contacts

Proposal Leads	3
Abstract	4
Project Introduction	5
Sales Dashboard	6
Marketing Dashboard	7
Brand Performance Dashboard	8
Supply Chain Dashboard	9
Dashboard Mockup	10
Final Dashboard	12
Data Source	14
Data Model	15
Tool Selection	16
Team Roles and Responsibilities	17
Bibliography	18

Proposal Leads



Abinaya Kalaiarasan - 8953115

Chief Marketing Manager

Job Description – Responsible for overseeing the planning, development, and execution of an organization's marketing and advertising initiatives, creative influence to business strategy.



Gurjot Singh - 8946091

Chief Financial Officer

Job Description – Managing the financial actions of a company. The CFO's duties include tracking cash flow and financial planning, analyzing the company's financial strengths and weaknesses, and proposing corrective actions.



Sasikala Palanivel - 8947487

Chief Procurement Officer

Job Description – Leads an organization's procurement department and oversees the acquisitions of goods and services made by the organization.



Abstract

Analyzing data from the previous five years, "Confectionary Insights" thoroughly analyzes the candy and chocolate industries. The study uses advanced statistical techniques to analyze various industry aspects, including raw materials, geographic patterns, age group preferences, market growth, revenue dynamics, and internal brand popularity.

The project aims to comprehensively understand the candy/chocolate industry, serve as a dashboard, and provide actionable insights for industry stakeholders. "Confectionary Insights" aims to provide valuable insights into the chocolate sector by analyzing the relationship between raw materials, consumer demographics, and company strategies. This research provides a comprehensive analysis for strategic decision-making in a rapidly changing market influenced by evolving consumer preferences and industry dynamics over the past half-decade.



Project Introduction

The confectionery/chocolate industry, a global market worth billions, produces sweet food items like chocolates, candies, and pastries. Analyzing data on raw materials, marketing trends, and brand performance helps in informed decision-making, identifying target markets, optimizing offerings, and enhancing business efficiency.



Sales Dashboard

The Sales Dashboard manages the company's income and sales activities. This dashboard oversees all income-generating aspects, including sales, pricing, and revenue optimization. Its primary objective is ensuring the company meets its financial goals and maximizes profitability.

Key Performance Indicators (KPIs):

Total Revenue and Profit: Calculates the revenue and profit for the past five years.

Sales Growth Rate: Year Over Year Profit by comparing with the Revenue, which indicates the growth or decline in sales performance.

Sales Pipeline Value: Total Purchase Order will show which product sales contribute more.

Sales Performance by Manager: Performance metrics of sales manager such as total revenue generated, profit margin, sales growth rate, etc., in each region.

Sales by Age Group: The sales by age group KPI measures the distribution of sales revenue across different age demographics.

Marketing Dashboard

The Marketing Dashboard aims to improve the confectionery/chocolate industry's brand image by boosting sales, increasing brand popularity, and engaging with the target audience. Analyzing competitors is vital for refining strategies and staying competitive.

Key Performance Indicators (KPIs):

Total Spend: Total amount spent on marketing activities.

Spend by Product Category: Breakdown of spending across different product categories.

Social SOV: Percentage of brand presence on social media compared to competitors.

Spend YoY: Year-over-year percentage change in marketing expenditure.

Audience Ratio: Allocation of budget to specific target audience segments.

Purchase Data by Audience & Channel: Purchase behavior analysis based on audience demographics and marketing channels.

Brand Performance Dashboard

The Brand Performance Dashboard offers a summary of brand success through metrics like brand count, profit, and trends. It includes Repeated Purchase Metrics, CSAT scores, Brand Awareness By Region, and Brand Profit By Managers. These insights enable stakeholders to enhance strategies, leverage strengths, and improve weaknesses for sustained growth and competitive edge.

Key Performance Indicators (KPIs):

No of Brands: Total count of brands being monitored or managed.

Total Profit: Overall profit generated from all brands.

Brand Profit by Month: Profit generated by each brand, broken down every month.

Repeated Purchase Metric: Measurement of customers who repeat purchases of the same brand over a specified period.

Customer Satisfaction Score: CSAT scores are aggregated monthly to gauge brand satisfaction.

Brand Awareness: Level of brand recognition in different geographical regions.

Supply Chain Dashboard

The Supply Chain Dashboard offers insights on supplier management, compliance, cost savings, and delivery modes. It aids in strategic decision-making, optimizing supplier relationships, ensuring compliance, and identifying cost-saving opportunities to enhance supply chain efficiency.

Key Performance Indicators (KPIs):

Total Number of Suppliers: Count all suppliers engaged within the supply chain network.

Supplier Compliance: Percentage of supplier compliance with contractual agreements, categorized by location and expenditure.

Supplier Location: Geographic distribution of suppliers within the supply chain network.

Total Cost Savings: Aggregate savings achieved through cost optimization initiatives within each fiscal year.

Total Cost Savings by Mode of Delivery: Breakdown of cost savings achieved based on different modes of delivery or transportation utilized within the supply chain.

Dashboard Mockup

Sales Dashboard

2019	2020	2021	2022	2023
Total Revenue	Revenue & Profit by Year Over Year			
Total Profit				
Purchase Order	Profit by Age Group			
Channel based sale	Manager based on Region			

Marketing Dashboard

2019	2020	2021	2022	2023		
Total Amount Spent	Product Category by Amount Spent		Social Share of Voice			
Amount Spent by Year Over Year		Target Audience Ratio				
Purchase Data by Audience		Marketing Channel				

Dashboard Mockup

Brand Performance Dashboard

2019	2020	2021	2022	2023
Number of Brand	Repeated Purchase Metric			
Total Profit by brand				
Brand Profit by Month		Month wise Customer Satisfaction Score		
Brand Awareness by Region		Brand Profit by Manager		

Supply Chain Dashboard

2019	2020	2021	2022	2023
Total Number of Supplier	Supplier Compliance			
Supplier Performance Metric		Total Cost Savings by Mode of Delivery		
Total Cost Saving by year				

Final Dashboard

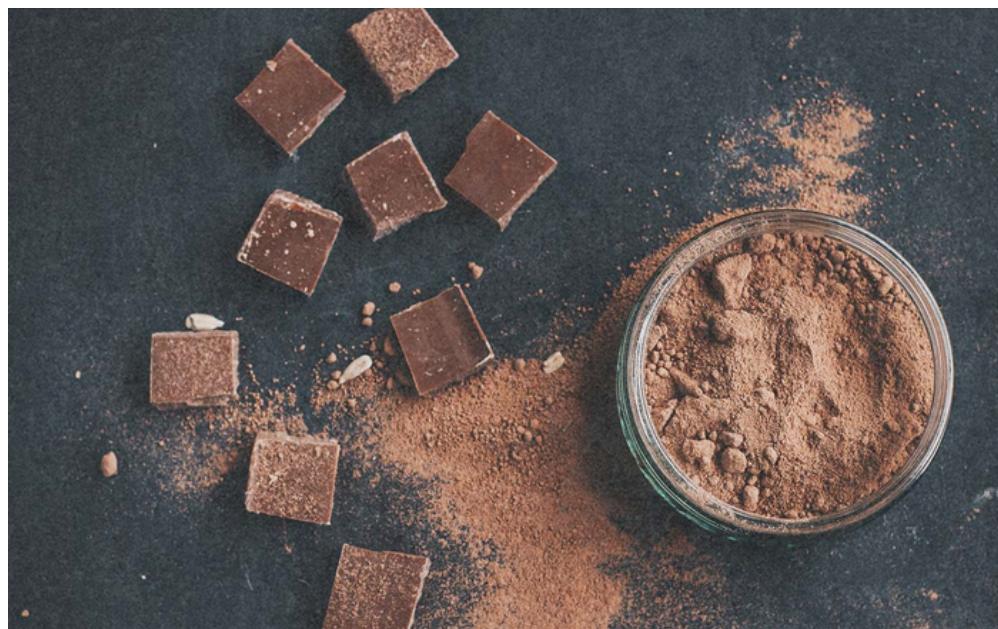


Final Dashboard

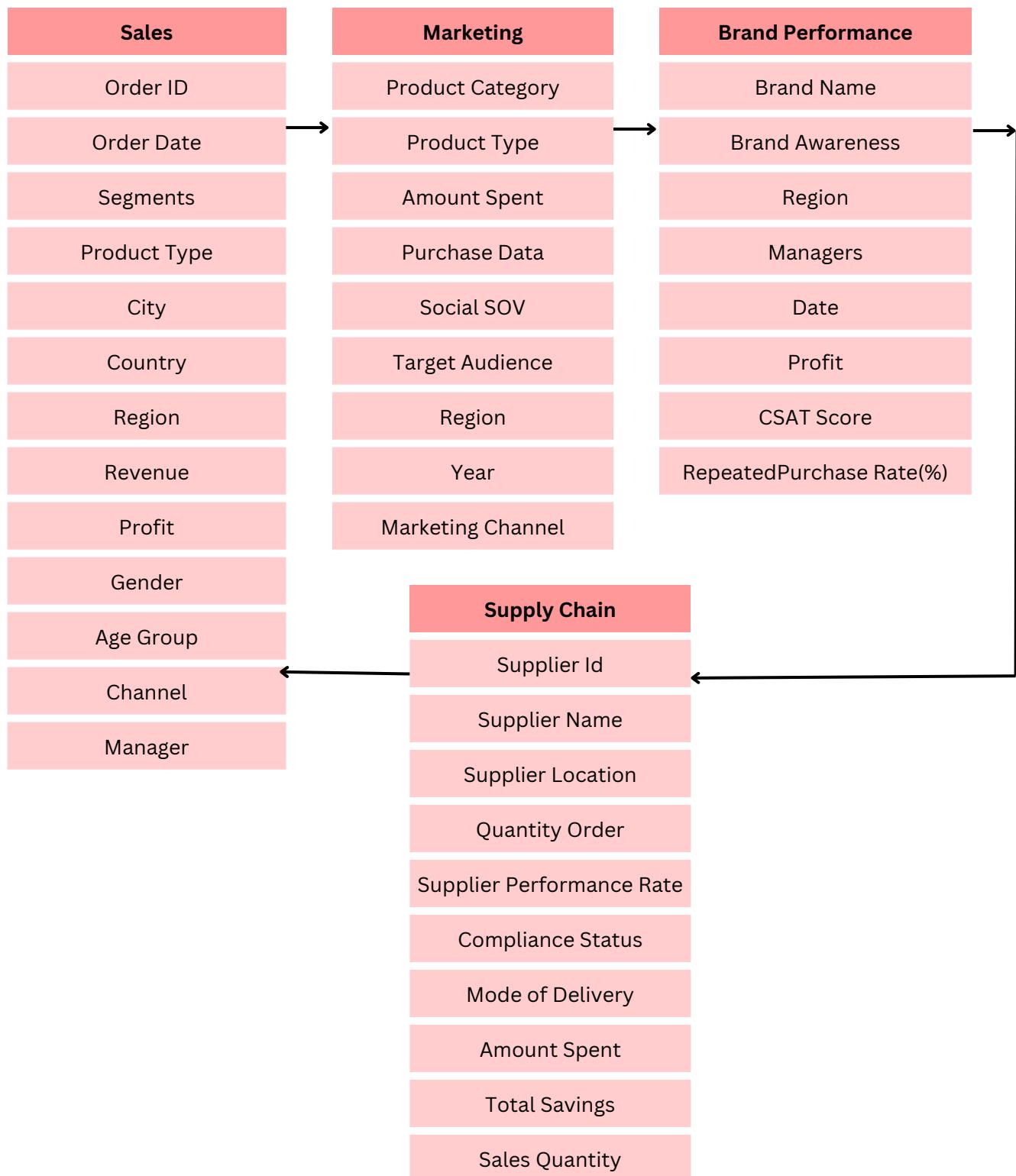


Data Source

- Total Number of Suppliers
- Suppliers Compliance
- Supplier Location
- Total Cost Savings
- Mode of Delivery
- No of Brands
- Brand Profit
- Repeated Purchase Metric
- CSAT Score
- Brand Awareness
- Brand Profit By Managers
- Total Amount Spent
- Product Category
- Social Share of Voice (SOV)
- Amount Spent by YOY
- Target Audience Ratio
- Purchase data
- Marketing Channel



Data Model



Tool Selection



Power BI Desktop is a free application that enables users to connect, transform, and visualize data from multiple sources. It integrates Microsoft's query engine, data modeling, and visualization technologies, allowing users to create visuals and reports for sharing within their organization. This combination of tools makes it easier to model, build, share, and extend new insights from data.

Team Roles and Responsibilities

Roles	Abinaya	Gurjot	Sasikala
Financial Information	✓		
Internal Brand Information	✓		
Marketing Info			✓
Revenue Info			✓
Demographics Info		✓	
Data Source and Data Model	✓	✓	✓
Documentation	✓	✓	✓
Data Collection	✓	✓	✓
Dashboard Mockup	✓	✓	✓
Dashboard Visualization	✓	✓	✓
Dashboard Screenshot			✓

Bibliography

- Statista. (2023). Chocolate Confectionery - Global | Statista Market Forecast. Statista. <https://www.statista.com/outlook/cmo/food/confectionery-snacks/confectionery/chocolate-confectionery/worldwide>
- (2023, March 10). What Are the Departments in a Business? (plus Their Uses); Indeed Editor Team. <https://www.indeed.com/career-advice/career-development/business-departments>
- (2024, February 2). What is the Average Transaction Value and how to calculate it | DashThis. (n.d.). Dashthis.com. <https://dashthis.com/kpi-examples/average-transaction-value/>
- (2024, February 2). How to measure the success of your growth marketing efforts. (n.d.). Abmatic.ai. <https://abmatic.ai/blog/how-to-measure-success-of-growth-marketing-efforts>
- Abby. (2023, June 21). Growth marketing metrics to measure your success. Dashly Blog. <https://www.dashly.io/blog/growth-marketing-metrics/>
- 15 Important Growth Marketing Metrics to Track (and Why) | Growth Center | Twilio Segment. (n.d.). Segment. <https://segment.com/growth-center/growth-marketing/metrics/>
- Hayes, A. (2022, August 23). Everything You Need to Know About Market Share. Investopedia. <https://www.investopedia.com/terms/m/marketshare.asp#:~:text=Market%20share%20is%20calculated%20by>
- Asalekar, S. (2021, September 2). Procurement department | roles, duties & responsibilities. AI & Machine Learning Blog. <https://nanonets.com/blog/purchasing-department/>
- (2021, December 15). 8 Important KPIs for the procurement department. Essential Business Guides. <https://www.zoho.com/expense/articles/8-essential-kpis-for-the-purchasing-department.html>
- Setting KPIs for Bakery and Confectionery Businesses. (n.d.). [Www.linkedin.com. https://www.linkedin.com/pulse/setting-kpis-bakery-confectionery-businesses-mark-bradford/](https://www.linkedin.com/pulse/setting-kpis-bakery-confectionery-businesses-mark-bradford/)

Bibliography

- Procurement KPIs & Metrics. Top 18 Procurement Kpis. (n.d.).
Www.datapine.com. February 2, 2024. <https://www.datapine.com/kpi-examples-and-templates/procurement#emergency-purchase-ratio>
- Ropp, M. (2022, October 6). Cost savings vs cost avoidance: What's the difference? RFP360. <https://rfp360.com/cost-savings-vs-cost-avoidance/>
- Yanova, M. A., Sharopatova, A. V., & Lozkin, I. F. (2021). The effectiveness of the using new raw materials in the production of confectionery products. 848(1), 012045–012045. <https://iopscience.iop.org/article/10.1088/1755-1315/848/1/012045/pdf>
- (2023, August 27). Indeed Editorial Team. Marketing Team Roles, Skills, and Responsibilities. <https://ca.indeed.com/career-advice/career-development/marketing-team>
- Sandra. (2022, August 5). What Are The Roles And Responsibilities Of A Sales Team? 5 Steps To Create A Great Sales Team. Apptivo.
<https://www.apptivo.com/blog/what-are-the-roles-and-responsibilities-of-a-sales-team-5-steps-to-create-a-great-sales-team/#:~:text=A%20sales%20team%20is%20solely>
- Shields, K. (2021). Chapter 3: Managing a Customer Service Team. Ecampusontario.pressbooks.pub, 3(5).
<https://ecampusontario.pressbooks.pub/customercentricstrategy/chapter/chapter-3-managing-a-customer-service-team/>
- (2024, February 2). Managing your employer brand. (n.d.).
Www.robertwalters.be. <https://www.robertwalters.be/insights/hiring-advice/blog/is-employer-branding-a-marketing-or-hr-function.html#:~:text=Role%20of%20HR%20in%20building%20the%20employer%20brand&text=HR%20also%20sets%20company%20policies,responsibility%20of%20the%20HR%20function>
- (2023, December 2). The Importance of Financial Analysis in ROI Management; FasterCapital. <https://fastercapital.com/content/The-Importance-of-Financial-Analysis-in-ROI-Management.html>