Detailed Project Report (DPR)

Project Title

Product Line Profitability & Margin Performance Analysis – Nassau Candy Distributor

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Student Name

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Project Type

Business Analyst Internship Project

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1. Introduction

In today’s competitive FMCG and distribution industry, understanding product-level profitability is critical for making informed business decisions. This project focuses on analyzing sales and profitability data for Nassau Candy Distributor to evaluate product performance and identify opportunities to improve overall margins and profitability.

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2. Project Objective

The main objectives of this project are: - To analyze product-wise sales performance - To calculate gross profit and gross margin percentage - To identify high-performing and low-performing products - To evaluate weighted gross margin for accurate profitability assessment - To provide business insights and recommendations

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3. Dataset Description

The dataset used in this project contains sales and cost information for various candy products distributed by Nassau Candy Distributor.

Dataset File: - Nassau Candy Distributor.csv

Key Fields in Dataset: - Product Name - Sales - Cost - Gross Profit - Other transactional attributes

The dataset represents real-world business data and was used for practical profitability analysis.

4. Tools and Technologies Used

The following tools were used to complete this project: - Microsoft Excel - Excel Pivot Tables - Calculated Fields and Formulas - GitHub for project repository and version control

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5. Methodology

The analysis was performed using the following step-by-step approach:

1. Data Cleaning:
2. Imported CSV dataset into Excel
3. Verified column structure and formatting
4. Ensured numeric fields were correctly formatted
5. Calculations:
6. Calculated Gross Profit where required
7. Created Gross Margin Percentage using formula: Gross Margin % = Gross Profit / Sales
8. Weighted Gross Margin:
9. Used Pivot Tables to calculate weighted gross margin
10. Ensured margin was weighted by total sales to avoid misleading averages
11. Pivot Table Analysis:
12. Created Pivot Tables for:
13. Product-wise Total Sales
14. Product-wise Gross Profit
15. Weighted Gross Margin Percentage
16. Validation:
17. Checked formulas for accuracy
18. Ensured values were realistic and consistent

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6. Key Performance Indicators (KPIs)

The following KPIs were analyzed: - Total Sales by Product - Total Gross Profit by Product - Gross Margin Percentage - Weighted Gross Margin Percentage

These KPIs help in understanding both volume performance and profitability quality.

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7. Key Findings and Insights

Based on the analysis, the following insights were identified:

- Wonka Bar product variants contribute the highest share of gross profit
- A small number of products drive the majority of total profitability
- Some products generate sales but have low margins, reducing overall profitability
- Weighted gross margin provides a more accurate view than simple average margin

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8. Business Recommendations

Based on the analysis, the following recommendations are suggested:

- Focus sales and marketing efforts on high-margin, high-profit products
- Review pricing and cost structure for low-margin products
- Consider rationalizing or discontinuing consistently low-performing products
- Use weighted margin analysis for future profitability tracking

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9. Business Impact

This project supports business decision-making by: - Improving visibility into product-level profitability - Supporting pricing and product portfolio strategy - Helping management prioritize high-impact products - Enhancing overall profit optimization

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10. Conclusion

This project demonstrates practical business analysis skills using real-world data. By leveraging Excel Pivot Tables and weighted margin calculations, meaningful business insights were generated to support profitability and strategic decision-making for Nassau Candy Distributor.

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11. GitHub Repository Link

https://github.com/aditim1101-spec/nassau-candy-profitability-analysis

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Declaration

I hereby declare that this project work is an original analysis performed for academic and internship learning purposes.

Signature: Aditi Mishra Date: January 2026