

Biscuit Sales Performance Dashboard

1. Introduction

In today's competitive consumer goods market, companies no longer succeed by simply selling more products — they succeed by understanding *who* buys, *what* they buy, *where* they buy from, and *why* they choose certain products over others.

For example, global FMCG brands like **Mondelez** and **Nestlé** rely heavily on sales analytics dashboards to identify profitable customers, optimize pricing strategies, and target the right age groups. Without these insights, businesses risk investing resources in low-return products or markets.

This Biscuit Sales Performance Dashboard was designed to provide a **360-degree view of sales, profitability, customer behavior, and geographic performance**, enabling data-driven decision-making and strategic planning.

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3. Problem Statement

The business had access to large volumes of sales data but lacked a **centralized analytical view** to answer critical business questions such as:

- Which biscuit brand is the most profitable?
- Who are the highest-value customers?
- Which locations generate the most revenue?
- Which age group contributes the most to sales?
- How do payment methods affect revenue distribution?

Without clear insights, decision-makers struggled to prioritize profitable segments and optimize sales strategies.

4. Objectives of the Analysis

The main objectives of this project were to:

- Evaluate overall sales performance, revenue, cost, and profit
- Identify the most profitable **brands, customers, locations, and salespersons**
- Analyze revenue contribution by **age group, gender, and payment method**
- Highlight opportunities for revenue growth and cost optimization
- Present insights in a clear, interactive Power BI dashboard

5. Dataset & Tool Overview

- **Tool Used:** Microsoft Power BI
- **Dataset Type:** Sales transaction data
- **Key Metrics Analyzed:**
 - ❖ Quantity Sold
 - ❖ Cost of Goods Sold (COGS)

- ❖ Revenue
 - ❖ Profit
 - ❖ Profit Margin
- **Key Dimensions:**
 - Product Category
 - Customer
 - Age Group
 - Gender
 - Payment Method
 - Geographic Location

6. Dashboard Overview

The dashboard provides a high-level summary of business performance, including:

- **Quantity Sold:** 3,050,309 units
- **Total Revenue:** \$61,567,883
- **Total Profit:** \$26,784,833
- **Profit Margin:** 44%

Interactive slicers allow users to filter results by **payment method, location, and age group**, enabling dynamic exploration of insights.

7. Key Findings & Insights (Chart-by-Chart Storytelling)

a. Overall Business Performance (KPI Cards)

Business Question: *Is the business profitable overall?*

- The company achieved a **44% profit margin**, indicating strong pricing strategy and effective cost management.

- High profit relative to COGS shows operational efficiency.

b. Revenue Distribution by Product Category

Business Question: *Do premium or low-priced products drive revenue?*

- **Expensive biscuit products account for ~90% of total revenue.**
- Premium pricing plays a critical role in overall profitability.

Insight: The business should protect and expand premium product lines.

c. Revenue Contribution by Age Group

Business Question: *Which age group generates the most revenue?*

- Customers aged **60–74** contribute the highest share of revenue.
- Younger age groups contribute less comparatively.

Insight: Older consumers are a key target market for biscuit sales.

d. Top 5 Customers by Revenue Contribution

Business Question: *Who are the most valuable customers?*

- **Robert Hernandez** alone contributes over **45%** of top customer revenue.
- Revenue concentration suggests reliance on a small group of high-value customers.

Insight: Strong opportunity for loyalty and retention programs.

e. Revenue Share by Geographic Location

Business Question: *Which locations perform best?*

- **San Antonio** emerges as the most profitable location.
- Other cities contribute fairly evenly but at lower levels.

Insight: San Antonio can serve as a benchmark for best-performing sales strategies.

f. Revenue Distribution by Payment Method

Business Question: *How do customers prefer to pay?*

- Revenue is evenly distributed across:
 - ❖ Cash
 - ❖ Credit Card
 - ❖ Debit Card
 - ❖ Mobile Payment

Insight: Offering multiple payment options supports revenue stability.

8. Conclusion

The Biscuit Sales Dashboard successfully transforms raw sales data into meaningful business insights. The analysis reveals that profitability is driven primarily by **premium products, older age groups, and specific high-performing customers and locations.**

The dashboard empowers stakeholders to make faster, smarter, and more informed decisions using interactive visuals and filters.

9. Recommendations

- Invest more in **premium biscuit products**
- Develop **loyalty programs** for top-performing customers
- Expand successful strategies used in **San Antonio** to other regions
- Design targeted marketing campaigns for **high-value age groups**
- Monitor customer concentration risk by growing mid-tier customers

10. Challenges Encountered

- Data cleaning and standardization
- Ensuring accurate profit and margin calculations
- Designing visuals that balance clarity with depth
- Aligning multiple dimensions for effective storytelling

These challenges were resolved through careful data modeling and validation in Power BI.

11. References

- Internal Sales Transaction Dataset
- Microsoft Power BI Documentation
- Retail & FMCG Analytics Best Practices