

# 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