# **Brief: Data Analysis for Mavin Toys**

#### Introduction:

Mavin Toys, a renowned player in the toy manufacturing and retail industry, has consistently delighted children and families with innovative products. In the ever-evolving landscape of consumer preferences, Mavin Toys recognizes the imperative of leveraging data-driven insights to optimize product offerings, sales strategies, and operational efficiency. This brief outlines the rationale behind analyzing the dataset and the potential benefits it holds for Mavin Toys.

#### **Dataset Overview:**

The dataset in question encompasses critical variables including Sale ID, Date, Units Bought, Product ID, Product Name, Product Category, Product Cost, Product Price, Sales, Store ID, Store Name, Store City, and Store Location. This repository of information is a goldmine of opportunities to uncover patterns, trends, and correlations that can steer Mavin Toys toward more informed decision-making.

### **Objectives:**

The primary objective of this dataset analysis is to extract actionable insights that will inform Mavi Toys' strategic direction. The specific goals include:

- Sales Patterns Understanding: Uncover trends and patterns in sales to adapt strategies for peak and off-peak periods.
- Product Performance Evaluation: Evaluate the performance of products in terms of sales volume and profitability.
- **Store Location Impact:** Examine the influence of store location on sales and profitability metrics.
- **Pricing Strategy Refinement**: Analyze the relationship between product cost, price, and sales to optimize pricing strategies.
- **Operational Efficiency Enhancement:** Identify opportunities for efficiency improvement in the supply chain based on sales trends.

## Questions

- 1. What is the overall trend in sales over time?
- 2. Which product categories have the highest and lowest sales volume?
- 3. How does the cost and price of products impact sales and profit?
- 4. Which products are the top sellers in terms of quantity sold?
- 5. What is the profit margin/ average profit margin for each product category?
- 6. How does the location of the store impact sales performance?
- 7. Which store locations generate the highest and lowest revenue?
- 8. How does the number of units bought correlate with the store's location?
- 9. What is the distribution of sales across different cities?
- 10. How does the product category influence the price of products?
- 11. Are there specific days or months when sales peak or decline?
- 12. Is there a difference in sales performance based on store name?
- 13. How does the average profit per sale vary across different product categories?
- 14. Are there any seasonal trends in the units bought for specific product categories?
- 15. What is the relationship between store city and the average profit per sale?

Recommendations are welcome.