# **Project Report**

#### 1. INTRODUCTION

### 1.1 Project Overview

This project uses Tableau to visualize toy manufacturing data and reveal business insights.

### 1.2 Purpose

The goal is to build dashboards that help identify underperforming toy categories.

#### 2. IDEATION PHASE

#### 2.1 Problem Statement

How can we find underperforming toy categories to improve inventory and production?

### 2.2 Empathy Map Canvas

Parents want safe, educational toys; they see ads, compare products, and value happy children.

### 2.3 Brainstorming

The team generated ideas around toy sales, returns, stock levels, and seasonal trends.

### 3. REQUIREMENT ANALYSIS

#### 3.1 Customer Journey Map

Customers see ads, explore options, purchase toys, use them, and give feedback.

#### **3.2 Solution Requirements**

We need filters, sales-inventory comparison, and category insights in dashboards.

#### 3.3 Data Flow Diagram

Data flows from CSV files to Tableau through cleaning and visualization.

### 3.4 Technology Stack

We used Tableau, Excel, and optionally Python for preprocessing.

#### 4. PROJECT DESIGN

#### **4.1 Problem Solution Fit**

The dashboards reveal weak toy categories to improve stock planning.

### **4.2 Proposed Solution**

Dashboards include sales trends, inventory heatmaps, and category filters.

#### **4.3 Solution Architecture**

Users interact with Tableau dashboards powered by cleaned toy data.

### 5. PROJECT PLANNING s SCHEDULING

### **5.1 Project Planning**

The project included four weekly stages: data prep, brainstorming, building, and testing.

#### 6. FUNCTIONAL AND PERFORMANCE TESTING

### **6.1 Performance Testing**

Dashboards were tested for speed, filter response, and visual clarity.

#### 7. RESULTS

### 7.1 Output Screenshots

Dashboards show sales by toy category, inventory heatmaps, and trends by month.

#### 8. ADVANTAGES s DISADVANTAGES

Advantages include clarity and interactivity; disadvantages depend on data quality.

### **G. CONCLUSION**

The dashboards helped find low-performing toys and guided better planning.

## 10. FUTURE SCOPE

Future ideas include real-time data, forecasting, and customer sentiment analysis.

# 11. APPENDIX

The appendix includes data samples, team roles, empathy maps, and brainstorming notes.