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 & 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 & DISADVANTAGES

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

9. 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.