Project Title

Toycraft Tales: Tableau's Vision into Toy Manufacturer Data

Team ID: LTVIP2026TMIDS24922

Team Size: 4

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1. INTRODUCTION

1.1 Project Overview

This project explores the US toy manufacturing industry using Tableau. It focuses on analyzing patterns, trends, and state-wise performance from the years 2005 to 2016.
The dashboard and storyboards help stakeholders derive insights for strategic decisions.

1.2 Purpose

To visualize toy manufacturer data to identify trends over time, state contributions, and distribution of manufacturing units using Tableau's interactive dashboards.

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2. IDEATION PHASE

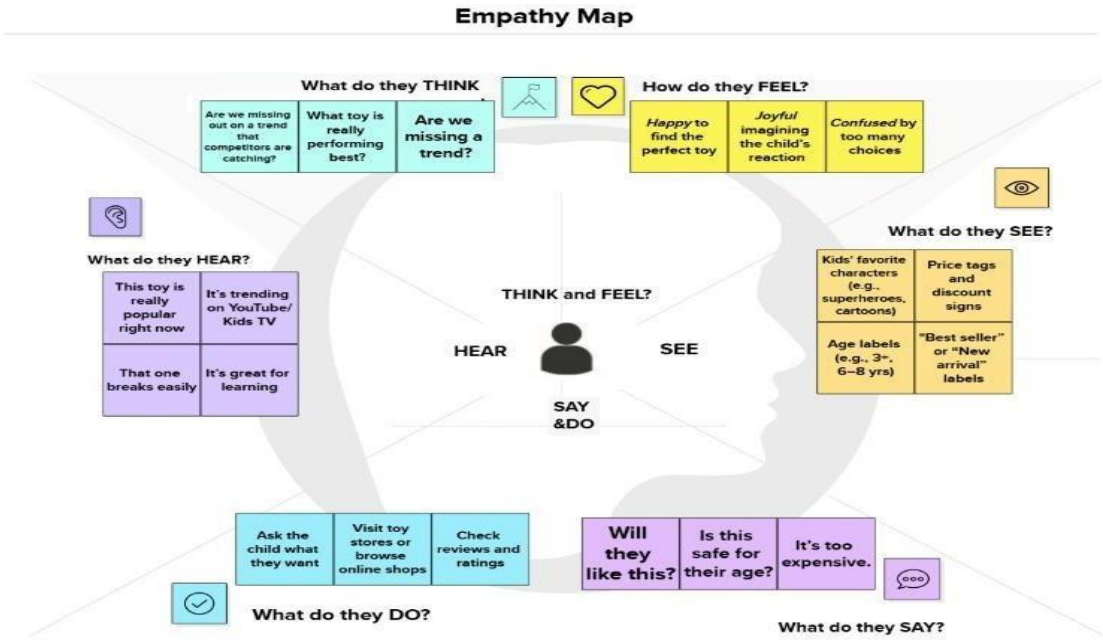
2.1 Problem Statement

Toy manufacturers lack visibility into historical production data and geographic performance, making it difficult to plan future strategies.

2.2 Empathy Map Canvas

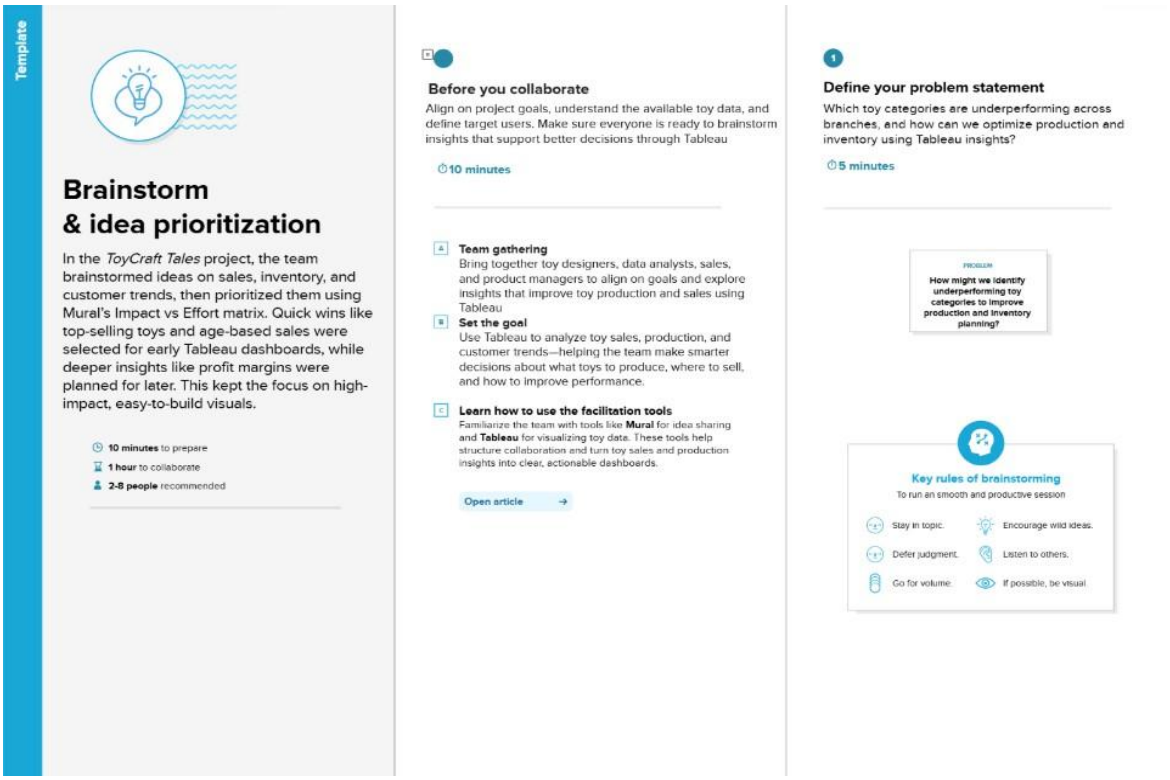
- **Who?**: Toy manufacturers, decision-makers, stakeholders

- **Think & Feel?**: Want clarity, insight into trends
- **See?**: Fragmented or raw data
- **Hear?**: Need for dashboards
- **Say & Do?**: Seek visual insights
- **Pain?**: No centralized visibility
- **Gain?**: One-stop analytical dashboard



2.3 Brainstorming

- Use Tableau for interactive visuals
- Analyze time-based decline/growth
- Use maps and pie charts for geographic spread
- Show high/low performing states



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3. REQUIREMENT ANALYSIS

3.1 Customer Journey Map

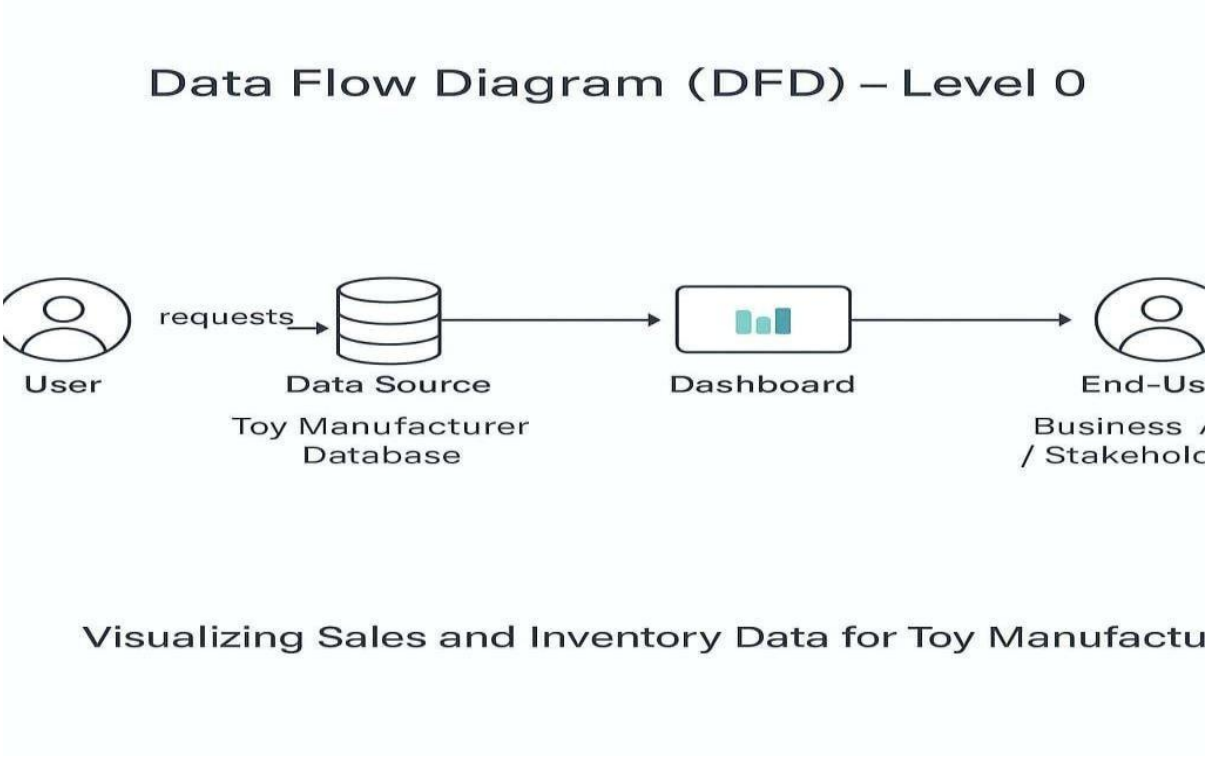
Stage	Actions	Emotions	Pain Points
Data Access	Load CSVs into Tableau	Curious	Raw data not easily readable
Visualization	Create charts, dashboards	Confident	Layout alignment issues
Insights	Story creation, analysis sharing	Informed	Limited export options

3.2 Solution Requirement

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	• Registration through Form • Registration through Gmail
FR-2	User Login	• Login with Email and Password
FR-3	Profile Management	• create/update Client profile • create/update freelancer Profile(including skills and portfolio)
FR-4	Project Management(client)	• Post new project and view bids on project • select freelancer for project • review submitted work • Provide feedback/Rating for freelancer.
FR-5	Project management(Freelancer)	• Browser/Filter projects • submit Bids on projects • submit completed project work.
FR-6	Communication&collaboration	• Integrated Chat System for Client-Freelancer Communication • Real-time Updates and Notifications
FR-7	Admin Panel	• Manage Users(clients and freelancers) • Manage Projects/transactions

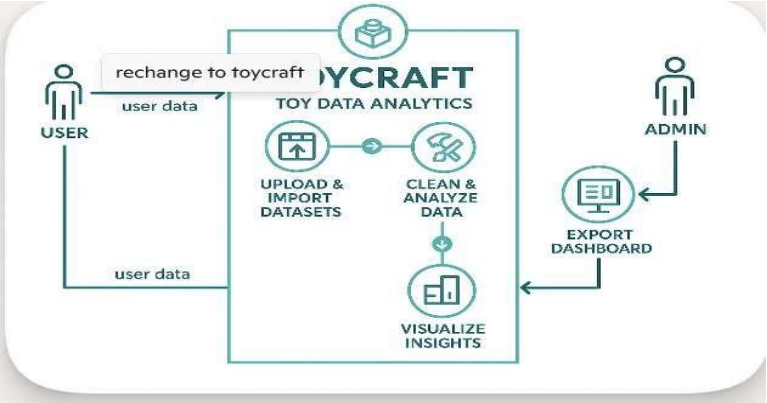
3.3 Data Flow Diagram

CSV File → Tableau Data Pane → Visual Charts → Dashboard → Insights



3.4 Technology Stack

- **Tool**: Tableau
- **Language**: Drag-and-drop interface, no code
- **Data**: CSV - Week 39: US Toy Manufacturers (2005–2016)



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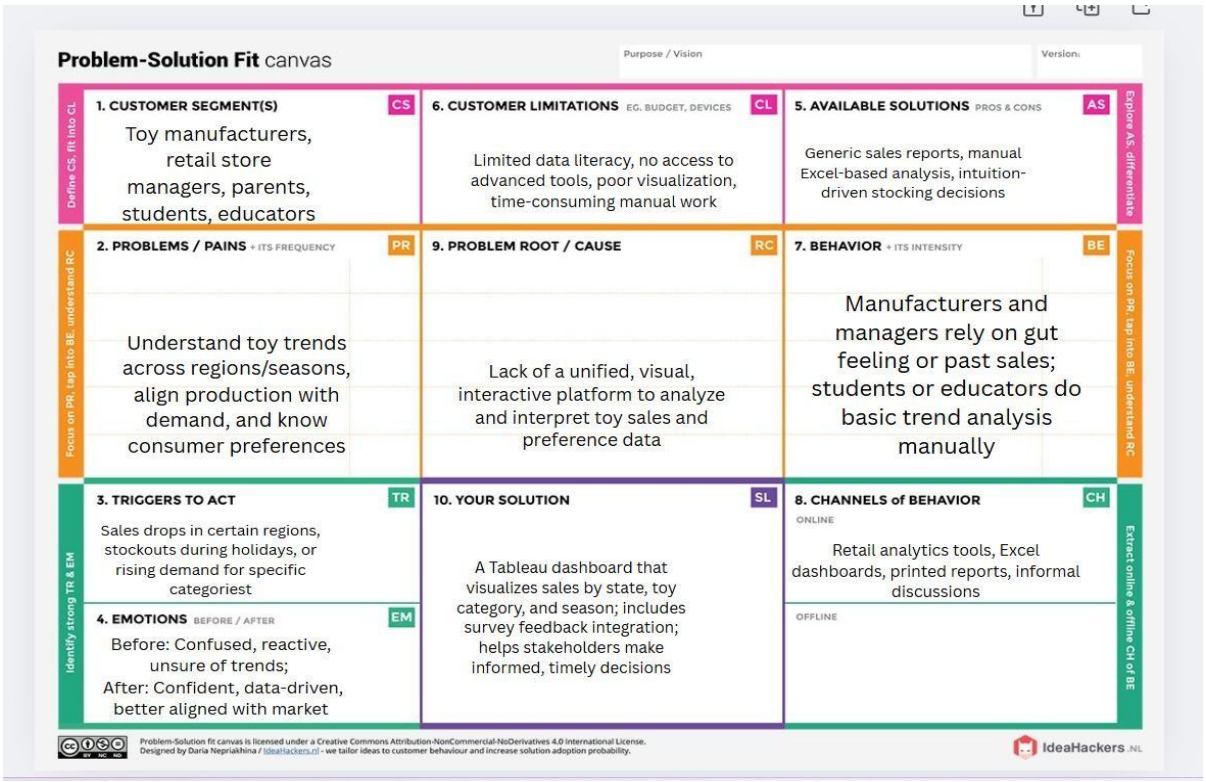
4. PROJECT DESIGN

4.1 Problem Solution Fit

The project fits by transforming raw manufacturer data into valuable visual narratives using Tableau's interactive capabilities.



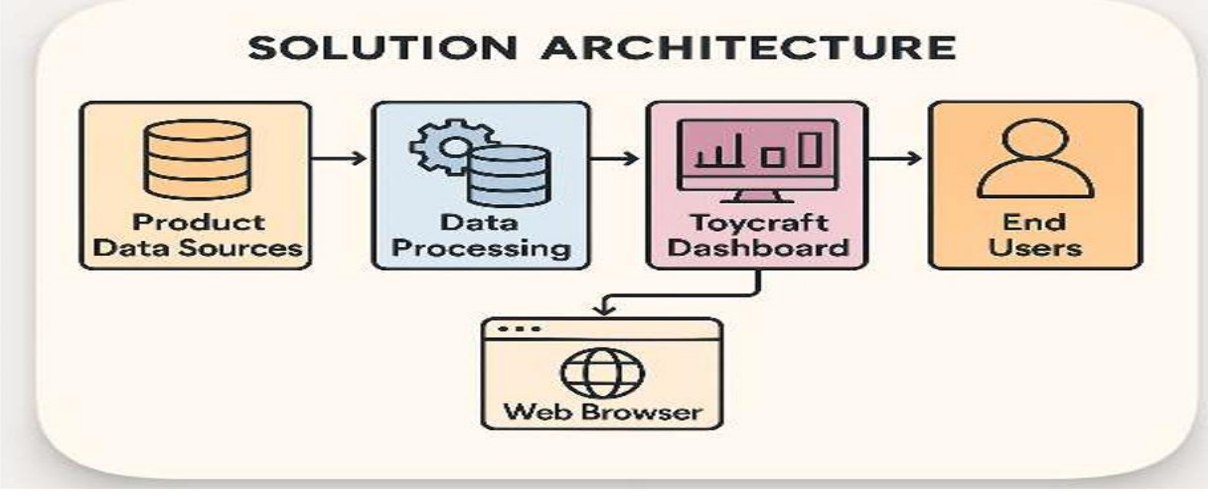
4.2 Proposed Solution

An interactive Tableau dashboard and story board to showcase manufacturer trends, top-performing states, and manufacturer counts.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Toy manufacturers and stakeholders lack clear insights into toy sales trends, consumer preferences, and regional demand, making it difficult to optimize inventory, marketing, and production strategies.
2.	Idea / Solution description	The project provides a Tableau-based interactive dashboard that visualizes toy manufacturing data, showing seasonal sales trends, regional preferences, and consumer feedback collected through surveys. It helps users make data-driven decisions.
3.	Novelty / Uniqueness	Combines real-time survey feedback with historical manufacturing data; user-friendly filters and visuals allow even non-technical users to analyze toy trends across states, seasons, and categories.
4.	Social Impact / Customer Satisfaction	Helps parents, educators, and retailers understand and choose suitable toys. Enhances customer satisfaction by aligning toy offerings with actual preferences and promoting informed purchases.
5.	Business Model (Revenue Model)	Potential monetization through freemium access: free insights for users, and premium access for manufacturers or retailers seeking advanced filters, forecasting, or regional breakdowns.
6.	Scalability of the Solution	Easily scalable by adding more data (e.g., multi-year sales), new toy categories, additional regions, or advanced predictive features like trend forecasting and personalization.

4.3 Solution Architecture

- **Input**: Dataset (CSV)
- **Process**: Import → Clean → Visualize
- **Output**: Dashboards + Storytelling

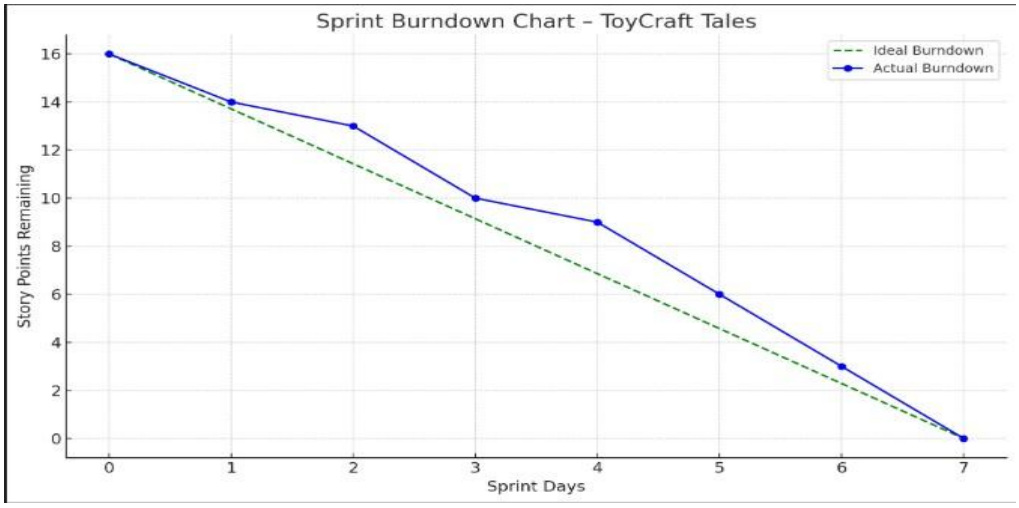


5.PROJECT PLANNING & SCHEDULING

5.1Project Planning

Phase	Timeline	Tools Used
Data Collection	Day 1	CSV, Excel
Visualization	Days 2–3	Tableau
Dashboard Design	Day 4	Tableau
Story Creation	Day 5	Tableau

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	11	3 days	29 Jan 2026	31 Jan 2026	11	31 Jan 2026
Sprint-2	10	3 days	01 Feb 2026	03 Feb 2026	10	03 Feb 2026
Sprint-3	07	3 days	04 Feb 2026	06 Feb 2026	07	06 Feb 2026
Sprint-4	07	3 days	07 Feb 2026	09 Feb 2026	07	09 Feb 2026



6.FUNCTIONAL AND PERFORMANCE TESTING

6.1 Performance Testing

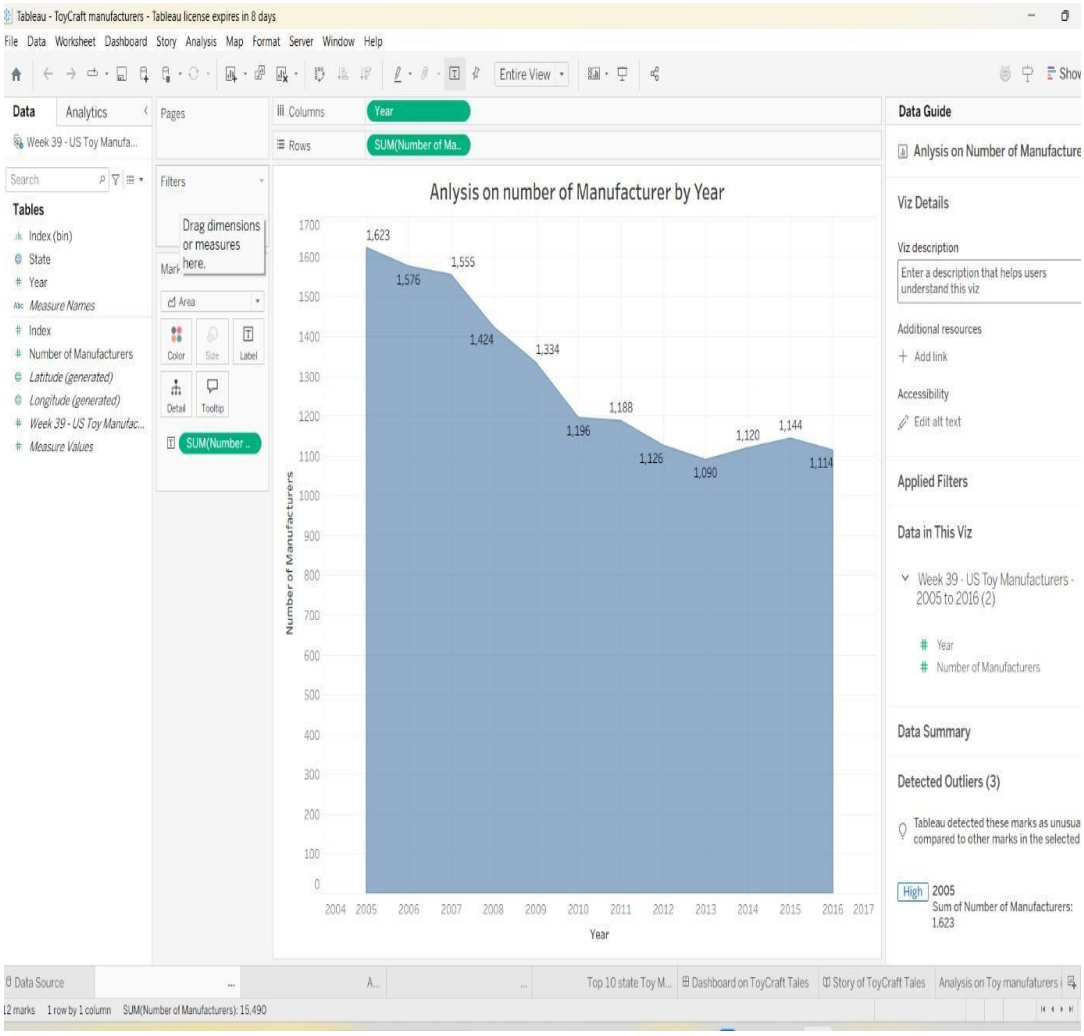
- **Dashboard Loading Time**: Less than 2 seconds

S.No	Parameter	Screenshot / Values
1.	**Data Rendered**	Dawt,index,State,Year,Number of Manufacturers
2.	**Data Preprocessing**	Cleaned columns, formatted values
3	**Utilization of Filters**	Index,State,Year,Number of Manufacturers
4	**Calculated Fields Used**	Index,State,Year,Number of Manufacturers,DAWT.csv
5	**Dashboard Design**	No. of Visualizations / Graphs - **5**
6	**Story Design**	No. of Visualizations / Graphs - **5**

7. RESULTS

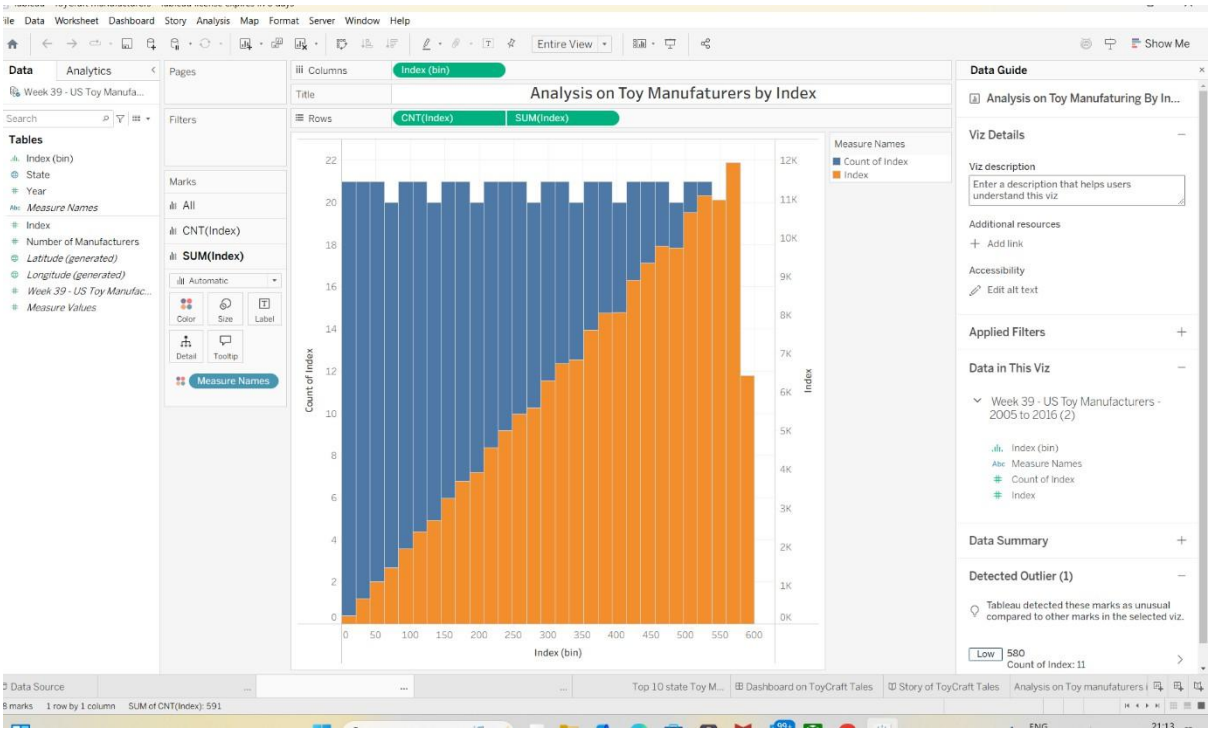
7.1Number of Manufacturers Over Time

Chart showing decline in manufacturers from 2005 to 201



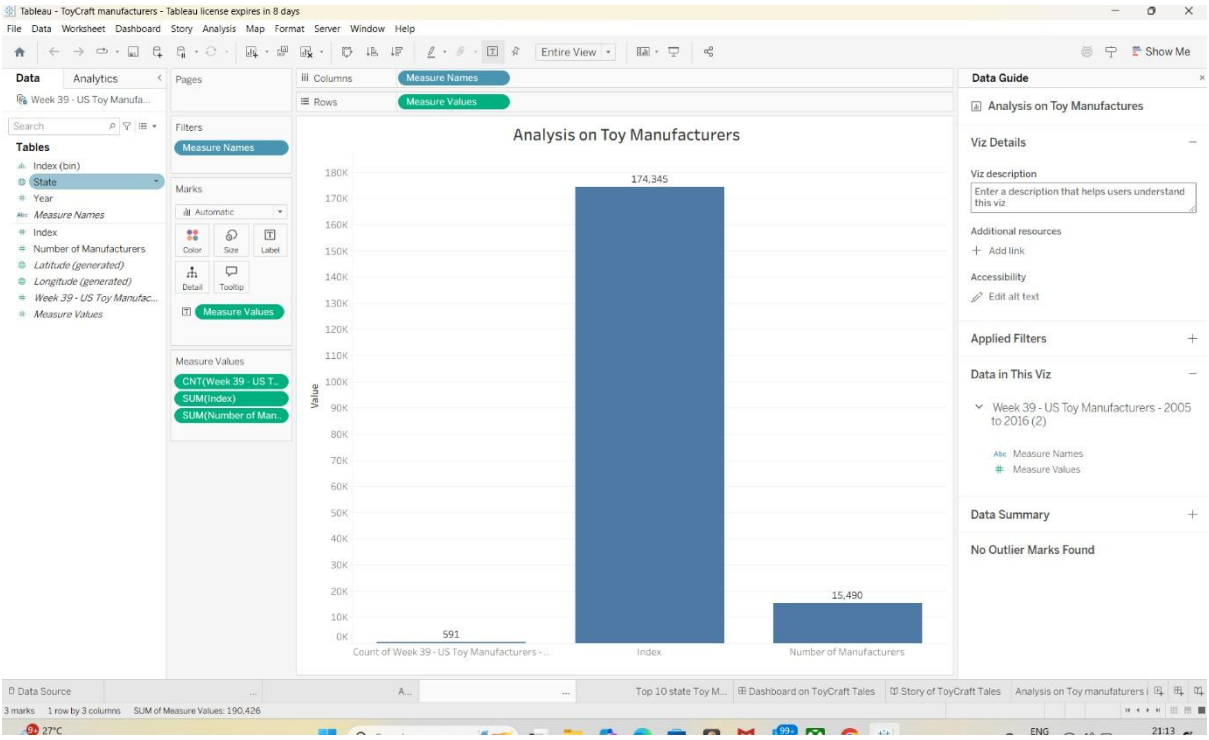
7.2 Index Distribution of Manufacturers

Bar chart showing count and sum of index



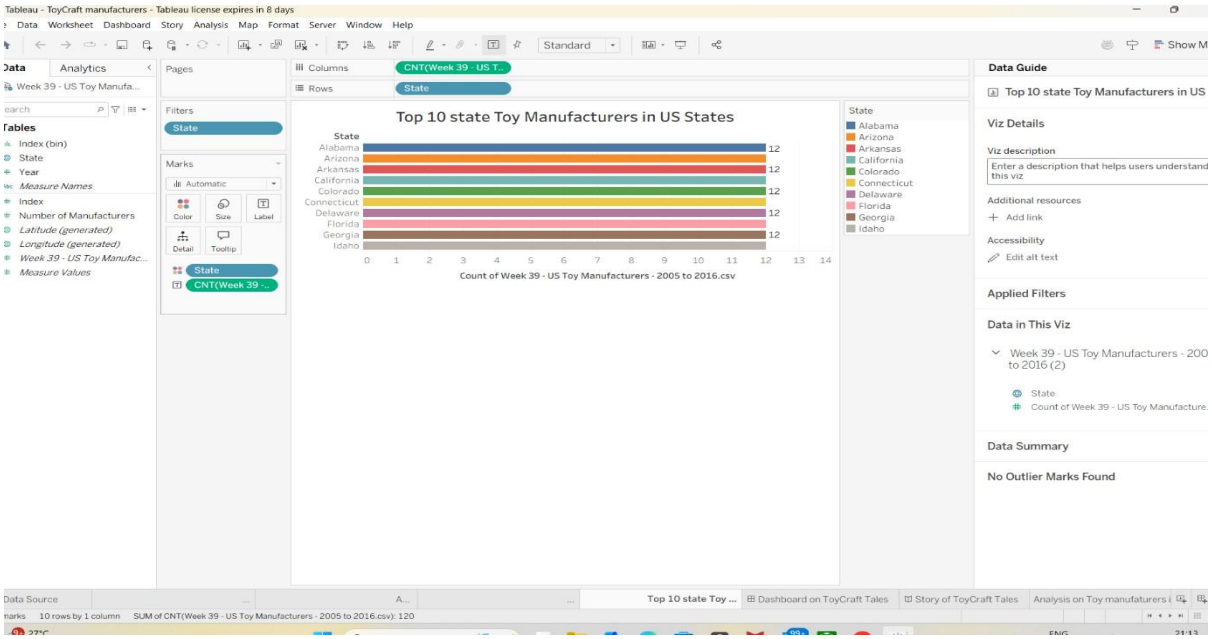
7.3 Measure Comparison Chart

Vertical bars for index and manufacturer count



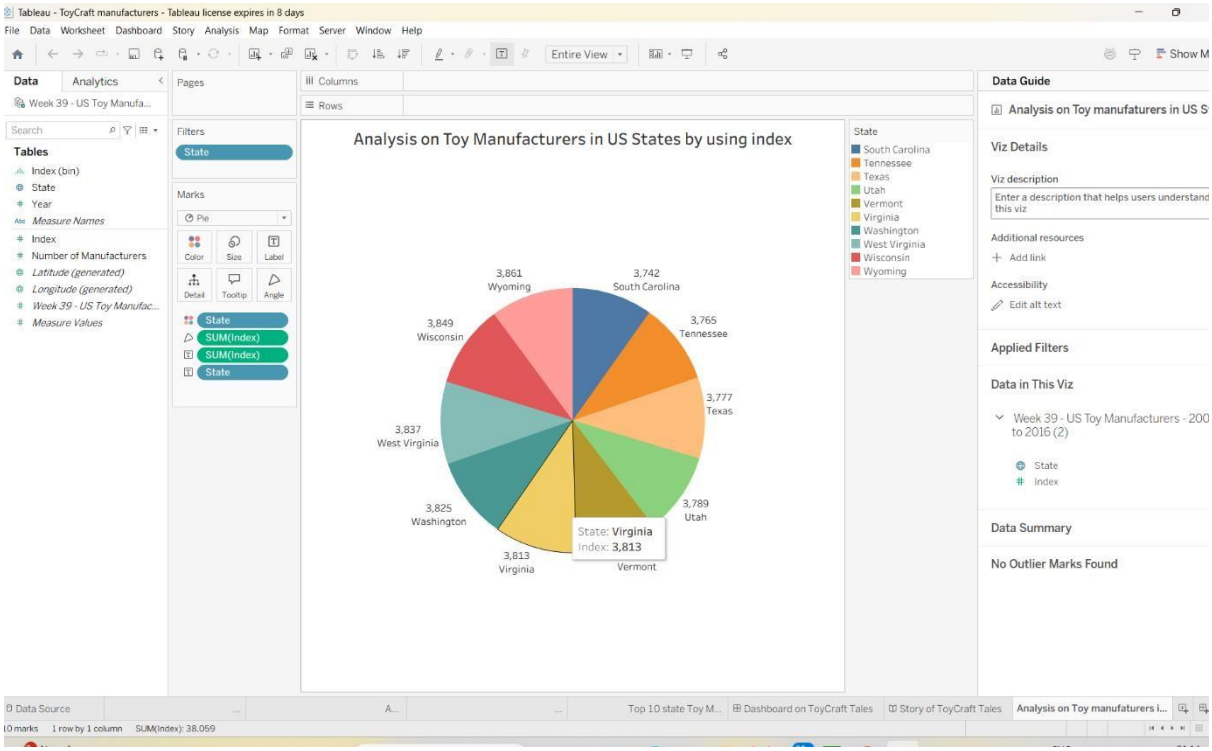
7.4 Top 10 States by Manufacturer Count

Horizontal bar chart



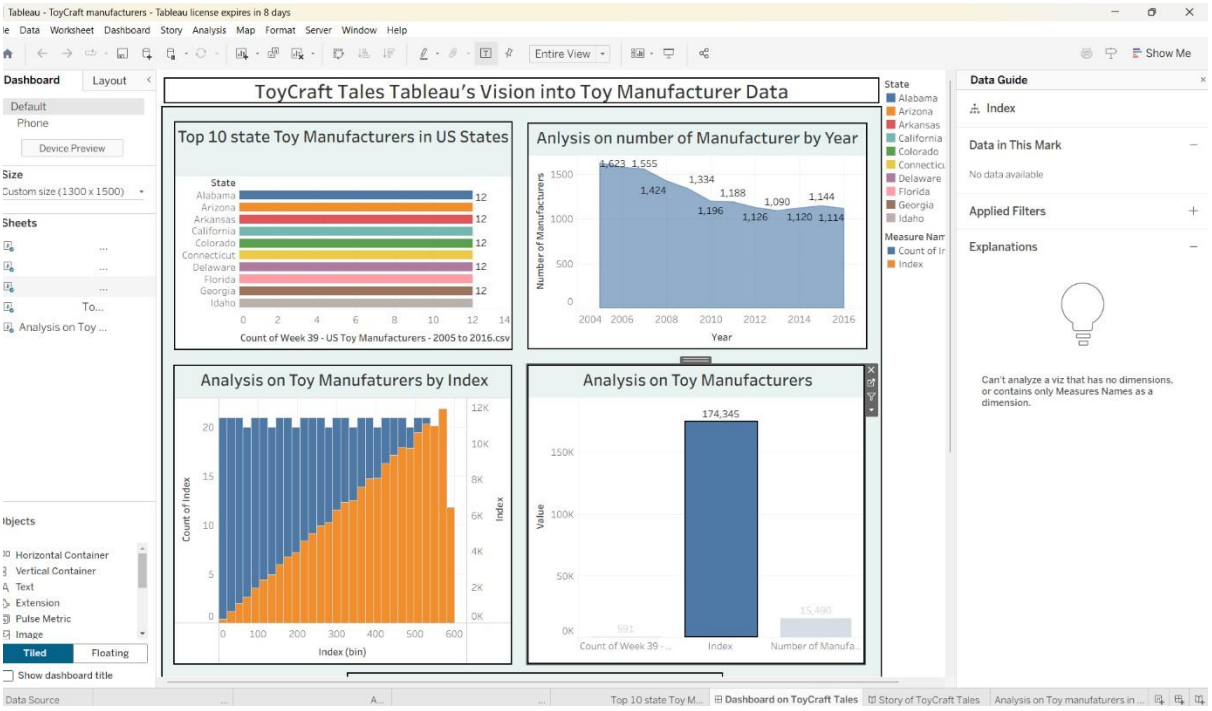
7.5 Pie Chart – Index by States

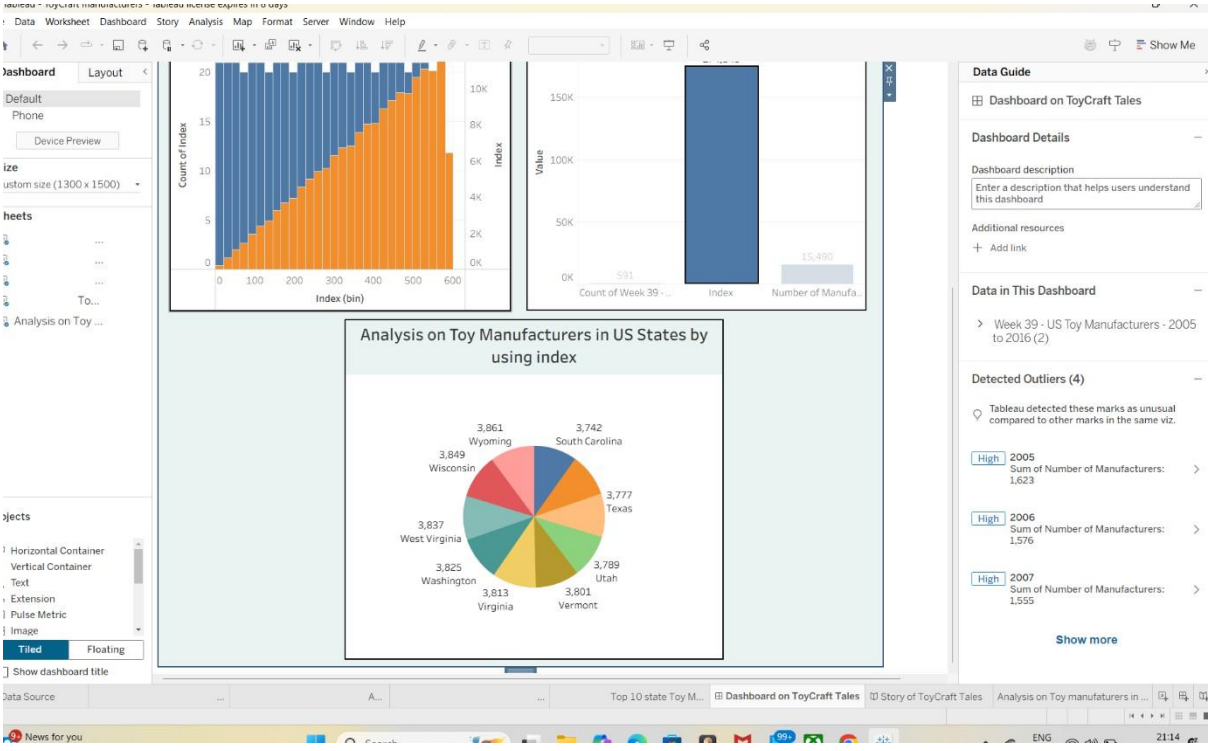
Pie chart distribution of index



7.6 Final Dashboard View

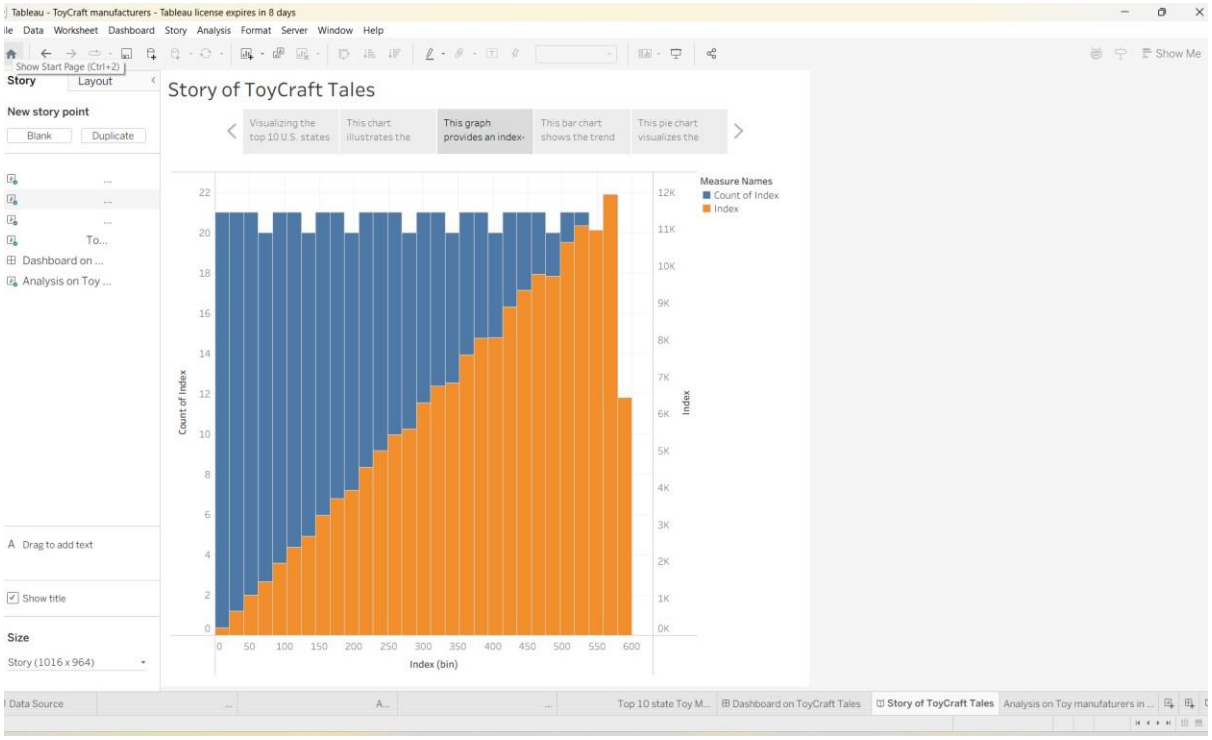
Full Tableau dashboard





7.7 Storyboard View

Story point with navigation tabs



8 ADVANTAGES & DISADVANTAGES

Advantages

- Interactive and dynamic visuals
- Fast insights without programming
- Clear trend and state-wise distribution

Disadvantages

- Limited customization outside Tableau
- Desktop version has licensing limits
- No predictive analytics

9 CONCLUSION

The Tableau-based visualization system successfully uncovers historical trends in toy manufacturing, enabling better strategic planning and stakeholder insights.

10 FUTURE SCOPE

- Integration with live data sources
- Predictive analytics using Python/ML
- Mobile responsive dashboards
- Export functionality for reports

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11 APPENDIX

Source Code

No programming used – Tableau visual interface

Dataset Link

Dataset: Week 39 – US Toy Manufacturers (2005–2016)