

# Toycraft Tales: Tableau's Vision Into Toy Manufacturer Data

## 1. INTRODUCTION

### 1.1 Project Overview

ToyCraft Tales: Tableau's Vision into Toy Manufacturer Data Employ Tableau to delve into Toy Manufacturers' data, uncovering market trends, production patterns, and consumer preferences. Craft interactive visualizations to guide strategic decisions and enhance market competitiveness. The Toy Manufacturers' Data Exploration and Visualization Project aims to leverage the power of Tableau to provide a comprehensive analysis of the toy manufacturing industry. By delving into the vast dataset encompassing various facets of the industry, the project seeks to uncover valuable insights related to market trends, production patterns, and consumer preferences. Utilize Tableau to dissect market trends within the toy manufacturing sector. Explore historical sales data, identify emerging market demands, and highlight patterns that can inform strategic decisions. By visualizing market dynamics over time, the project aims to offer a deep understanding of the industry's evolution. Analyze consumer behaviour and preferences by examining data related to popular toy categories, demographic trends, and purchasing patterns. Develop interactive visualizations that highlight consumer preferences, enabling manufacturers to align their product offerings with market demands. This insight is crucial for tailoring product development strategies to meet customer expectations.

**Scenario 1: Market Trend Analysis for Seasonal Products:** The project could delve into historical sales data for different types of toys across various seasons and holidays. By visualizing the sales trends over the years, manufacturers can identify patterns in consumer preferences during specific times of the year. For instance, they might find that certain types of toys sell better during the holiday season, while others have higher demand during summer months. Armed with this insight, toy manufacturers can adjust their production schedules and marketing strategies accordingly to maximize sales and meet seasonal demands effectively.

**Scenario 2: Consumer Preference Analysis Across Demographics:** Using demographic data such as age, gender, and location, the project could analyze consumer preferences for different types of toys. Interactive visualizations can be created to show

how preferences vary among different demographic groups. For example, it might reveal that teenagers in urban areas have a higher preference for electronic toys, while younger children in rural areas prefer traditional toys such as dolls and action figures. This information can help manufacturers tailor their product offerings and marketing campaigns to target specific demographic segments more effectively.

**Scenario 3: Product Performance Comparison Across Regions:** By analyzing sales data across different regions or countries, the project could identify which toy categories perform better in certain geographic areas. For instance, it might find that educational toys are more popular in regions with a strong emphasis on education, while outdoor toys sell better in areas with favourable weather conditions. Visualizations could illustrate these regional differences in demand, allowing manufacturers to optimize their distribution channels and inventory management strategies to better serve each market.

## 1.2 Purpose

The purpose of this project is to analyze and visualize historical toy manufacturing data (2005–2016) to uncover meaningful insights about market trends, seasonal sales patterns, product category performance, and regional consumer preferences. By leveraging Tableau, the project aims to transform raw sales data into interactive dashboards that can support strategic planning, product development, and marketing decisions within the toy manufacturing industry. This solution is designed to:

- Help decision-makers identify top-performing toy categories and high demand periods (e.g., holiday seasons)
- Provide regional and demographic insights to align with consumer behaviour
- Enable accurate forecasting of future demand using historical trends
- Deliver a user-friendly visual interface for stakeholders to explore insights in real time

## 2. IDEATION PHASE

### 2.1 Problem Statement

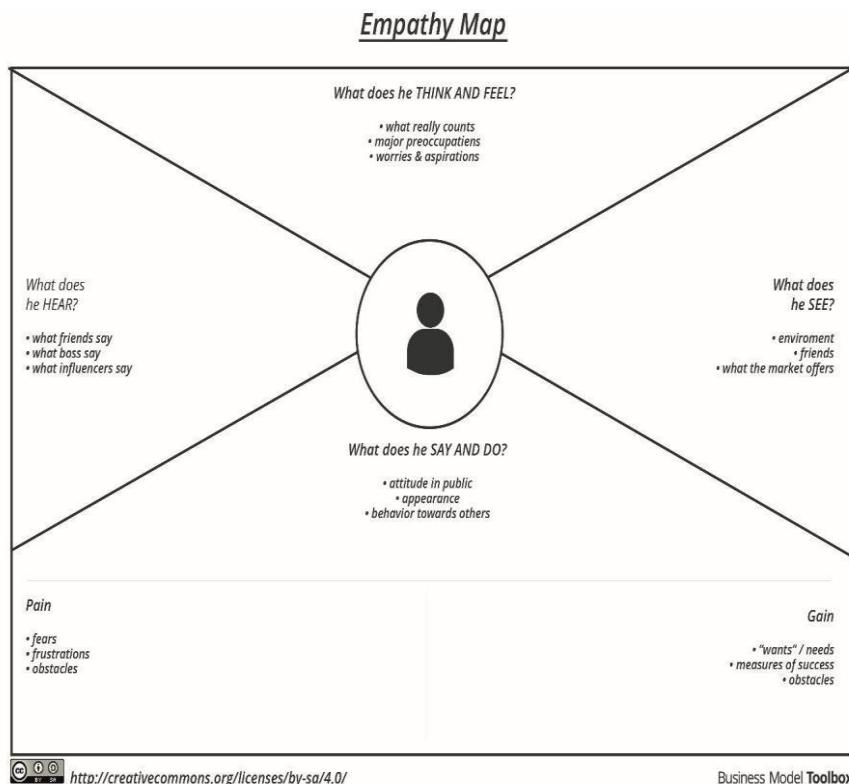
| I am   | I'm trying to  | But  | Because  | Which makes me feel   |
|--|--|--|--|---|
| I am<br><br>parent looking to buy toys for my child<br><br>customer shopping for a birthday gift | I'm trying to<br><br>find toys that are fun, safe, and age-appropriate<br><br>find a popular toy that kids will love | But<br><br>there are too many options and I'm not sure which ones are good quality<br><br>I don't know what's trending right now | Because<br><br>I don't have clear information or reviews to compare<br><br>stores don't show which toys are the most popular | Which makes me feel<br><br>confused and worried about choosing the wrong toy<br><br>unsure and stressed about making the right choice |
|  |  |  |  |   |

| Problem Statement (PS) | I am (Customer)                         | I'm trying to                                     | But                                      | Because  | Which makes me feel  |
|------------------------|---|---|--|--|----------------------|
| PS-1                   | parent looking to buy toys for my child | find toys that are fun, safe, and age-appropriate | I'm not sure which ones are good quality | I don't have clear information or reviews to compare | confused and worried |
| PS-2                   | customer shopping for a birthday gift   | find a popular toy that kids will love            | I don't know what's trending right now   | stores don't show which toys are the most popular    | unsure and stressed  |

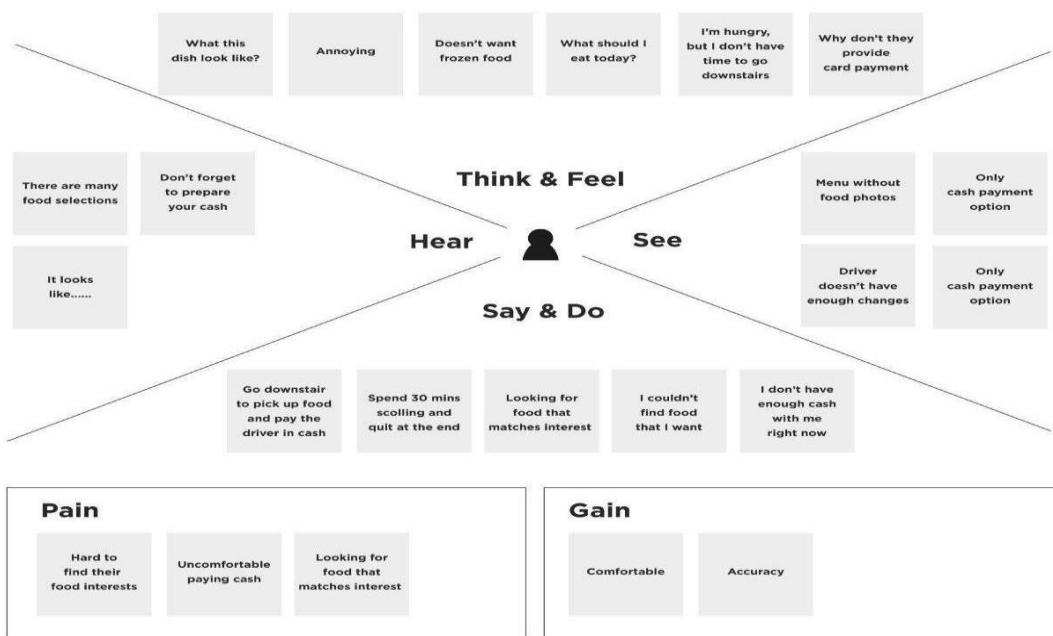
## 2.2 Empathy Map Canvas

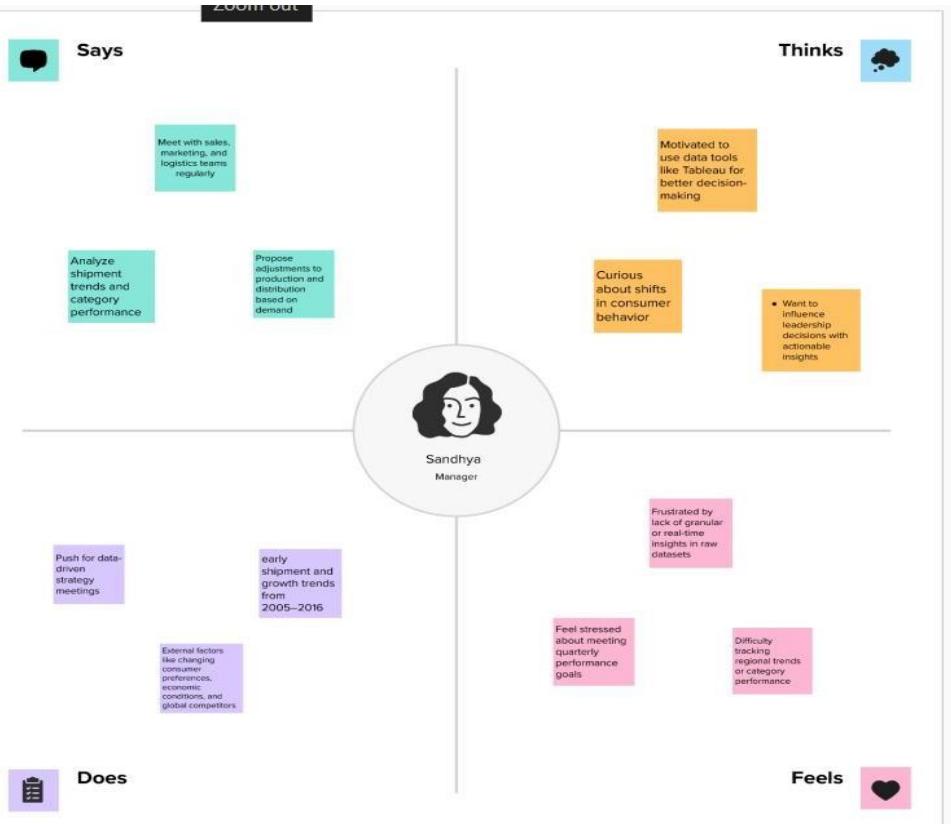
- An empathy map is a simple, easy-to-digest visual that captures knowledge about a user's behaviours and attitudes.
- It is a useful tool to helps teams better understand their users.
- Creating an effective solution requires understanding the true problem and the person who is experiencing it. The exercise of creating the map helps participants consider things from the user's perspective along with his or her goals and challenges.

➤ Example:



**Example: Food Ordering & Delivery Application**





## 2.3 Brainstorming

### Step-1: Team Gathering, collaboration and select the problem statement

**Template**

**Brainstorm & idea prioritization**

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

10 minutes to prepare  
1 hour to collaborate  
2-8 people recommended

**Before you collaborate**

A little bit of preparation goes a long way with this session. Here's what you need to do to get going.

10 minutes

**1 Define your problem statement**

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

5 minutes

**Problem**

Toy manufacturers face difficulty in predicting market demand, understanding consumer preferences, and optimizing production due to lack of clear, visual insights from historical data

**Key rules of brainstorming**

To run a smooth and productive session

- Stay in topic.
- Encourage wild ideas.
- Defer judgment.
- Listen to others.
- Go for volume.
- If possible, be visual.

## Step-2: Brainstorm, Idea Listing and Grouping

**2 Brainstorm**

Write down any ideas that come to mind that address your problem statement.

⌚ 10 minutes

**TIP**: You can add a sticky note and fit the text in [ ] brackets if needed, can be part of your idea.

| Tanmayee  | B.Manasa   | U.Manasa   |
|---|--|--|
| By using the tableau prepare unique visualizations<br><br>gives some analysis too and make visuals for that | Create interactive dashboards with filters for year, region, and category.<br><br>Add KPI titles     | analysis on which toys are preferred by different age groups<br><br>add some dashboards                  |
| <b>G.Kavya</b>  |  |  |
| add some stories<br><br>add some kpi's to understand it easily  | Match production volume with regional purchasing trends<br><br>Track toy performance vs. competitors | create the different visualizations to understand the data<br><br>use some tool tips                     |
| <b>S.Bhuvaneswari</b>   |  |  |
|   |  | By using the tableau prepare unique visualizations<br><br>add some dashboards<br><br>Add some KPI titles |

**3 Group ideas**

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and break it up into smaller sub-groups.

⌚ 20 minutes

**TIP**: Add a sticky note indicating where to move a cluster to [ ] brackets if needed, can be part of your idea.

## Step-3: Idea prioritization

**1 Prioritize**

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

⌚ 20 minutes

**TIP**: Prioritization can use stick points to point at where the idea belongs on the grid. That way, take can use the points to move the idea from position holding the key on the response.

**After you collaborate**

You can export the mural as an image or pdf to share with members of your company who might find it helpful.

**Quick add-ons**

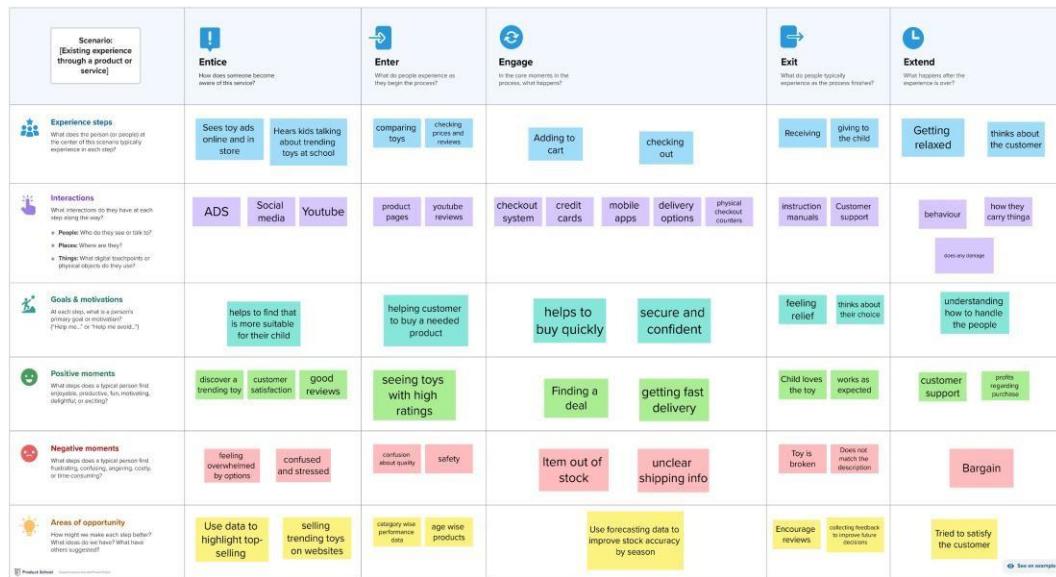
- Share the mural**: Share a view link to the mural with stakeholders to keep them in the loop about the outcome of the session.
- Export the mural**: Export a copy of the mural as a PNG or PDF to attach to emails, include in slides, or save in your drive.

**Keep moving forward**

- Strategy blueprint**: Define the components of a new idea or strategy.  
[Open the template →](#)
- Customer experience journey map**: Understand customer needs, motivations, and obstacles for an experience.  
[Open the template →](#)
- Strengths, weaknesses, opportunities & threats**: Identify strengths, weaknesses, opportunities, and threats (SWOT) to develop a plan.  
[Open the template →](#)

### 3. REQUIREMENT ANALYSIS

#### 3.1 Customer Journey map



#### 3.2 Solution Requirement

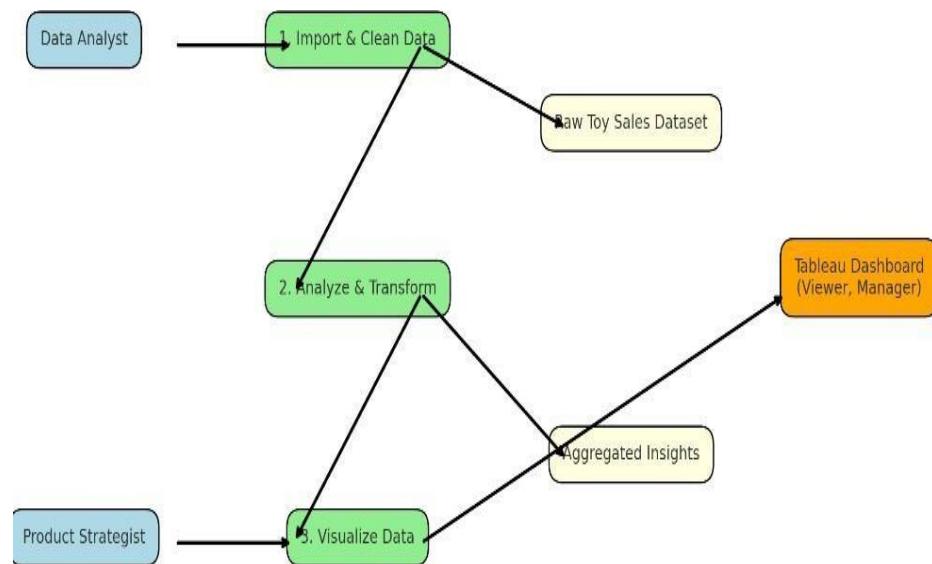
##### Functional Requirements

| FR No. | Functional Requirement (Epic)    | Sub Requirement (Story / Sub-Task)                   |
|--------|----------------------------------|--|
| FR-1   | Data Upload & Integration        | Import toy industry CSV data into Tableau            |
|        |                                  | Clean and format data for consistency and structure  |
| FR-2   | Market Trend Analysis            | Analyze annual shipment growth and total market size |
|        |                                  | Highlight seasonal spikes                            |
| FR-3   | Category Performance Dashboard   | Visualize toy categories across years                |
|        |                                  | Identify top-selling categories over time            |
| FR-4   | Regional & Demographic Filtering | Add filters by region, age group, and consumer type  |
|        |                                  | Enable dynamic charts that respond to selections     |
| FR-5   | Unified Dashboard                | Combine all insights into a single dashboard         |
|        |                                  | Allow stakeholders to export reports or snapshots    |

## Non-Functional Requirements

| NFR NO. | Non-Functional Requirements | Description  |
|---------|-----------------------------|--|
| NFR-1   | Usability                   | Dashboard should be intuitive, with tooltips and clear legends   |
| NFR-2   | Security                    | Only authorized users can upload/edit data in Tableau            |
| NFR-2   | Reliability                 | Dashboard should load consistently across devices and users      |
| NFR-4   | Performance                 | Visuals must load in under 2 seconds even with full dataset      |
| NFR-5   | Availability                | Dashboard should be accessible 24/7 via Tableau Public or Server |
| NFR-6   | Scalability                 | Should handle additional years/categories without redesign       |

### 3.3 Data Flow Diagram

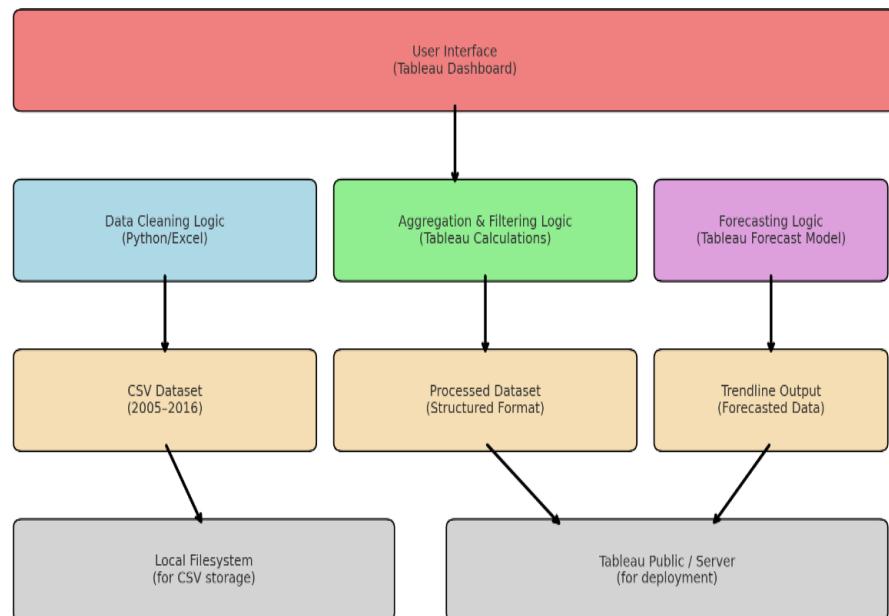


## User Stories

| User Type          | Functional Requirement (Epic) | User Story Number | User Story / Task  | Acceptance criteria                                 | Priority | Release  |
|--------------------|-------------------------------|-------------------|--|---|----------|----------|
| Data Analyst       | Data Upload                   | USN-1             | As a data analyst, I want to import and clean toy sales data for analysis  | Data is cleaned and imported into Tableau correctly | High     | Sprint-1 |
| Data Analyst       | Data Transformation           | USN-2             | As an analyst, I want to aggregate data by category, region, and year      | Aggregated dataset is ready for chart building      | High     | Sprint-1 |
| Product Strategist | Trend visualizations          | USN-3             | As a strategist, I want to see annual shipment and growth trends           | Trendline appears with historical context           | High     | Sprint-1 |
| Marketing manager  | Consumer Behaviour Insights   | USN-4             | As a marketer, I want to filter toy preferences by region and demographics | Filtered visuals update dynamically                 | Medium   | Sprint-2 |
| Product Manager    | Category comparision          | USN-5             | As a product manager, I want to compare toy                                | Bar/line charts for categories are generated        | Medium   | Sprint-2 |

## 3.4 Technology Stack

### Technical Architecture



**Table-1: Components & Technologies:**

| S.No | Component                       | Description   | Technology                        |
|------|---------------------------------|---|-----------------------------------|
| 1.   | User Interface                  | Dashboard interface for users to interact with data | Tableau Public                    |
| 2.   | Application Logic-1             | Data cleaning and transformation                    | Excel(pre-Tableau)                |
| 3.   | Application Logic-2             | Data aggregation by year, category, region          | Tableau calculated fields         |
| 4.   | Application Logic-3             | Forecasting based on historical trends              | Tableau Forecasting               |
| 5.   | Database                        | CSV dataset with shipment and category info         | Excel sheet                       |
| 6.   | Cloud Database                  | Not applicable                                      | Tableau cloud                     |
| 7.   | File Storage                    | Upload and store toy dataset                        | Local drives or google drive      |
| 8.   | External API-1                  | Weather data to correlate seasonality               | Open WeatherAPI                   |
| 9.   | External API-2                  | Social media trend integration                      | Google Trends                     |
| 10.  | Machine Learning Model          | Predictive modeling                                 | Tableau's built-in forecast model |
| 11.  | Infrastructure (Server / Cloud) | Cloud-hosted dashboard viewable by users            | Tableau Server/Tableau public     |

**Table-2: Application Characteristics:**

| S.No | Characteristics          | Description  | Technology                    |
|------|--------------------------|--|-------------------------------|
| 1.   | Open-Source Frameworks   | Python (data cleaning)   | Python                        |
| 2.   | Security Implementations | Restricted access via Tableau login                                      | IAM (Tableau server)          |
| 3.   | Scalable Architecture    | Tableau scales to multiple dashboards/users without code changes         | Tableau cloud Architecture    |
| 4.   | Availability             | Dashboard hosted on Tableau Public with 24/7 access                      | Tableau server/Tableau public |
| 5.   | Performance              | Optimized visual queries, aggregated filters, and trendline calculations | Tableau filtering             |

## 4. PROJECT DESIGN

### 4.1 Problem Solution Fit

The diagram outlines a value proposition for small-to-medium U.S. toy manufacturers who struggle with analyzing historical sales data and making data-driven decisions due to limited tools and expertise. It presents a domain-specific analytics solution that simplifies data processing, trend visualization, and insight generation to improve decision-making and business performance.

|   |   |  |
|---|---|--|
| <p><b>1. CUSTOMER SEGMENT(S)</b></p> <p>Small-to-medium U.S. toy manufacturing companies operating from 2005 to 2016</p>  | <p><b>6. CUSTOMER LIMITATIONS</b></p> <ul style="list-style-type: none"> <li>Budget constraints for sophisticated tools.</li> <li>Lack of in-house technical expertise.</li> <li>Dependency on legacy systems.</li> </ul>   | <p><b>5. AVAILABLE SOLUTIONS</b> <small>PLUSES &amp; MINUSES</small></p> <ul style="list-style-type: none"> <li>Manual Excel analysis (time-consuming, error-prone).</li> <li>General-purpose BI tools (complex setup, non-domain-specific).</li> <li>Consultant-driven reports (expensive, not scalable)</li> </ul> |
| <p><b>2. PROBLEMS / PAINS + ITS FREQUENCY</b></p> <ul style="list-style-type: none"> <li>Lack of tools to analyze historical manufacturing and sales data.</li> <li>Difficulty identifying trends and seasonal shifts.</li> <li>Inability to make data-backed decisions.</li> <li>Fragmented or inaccessible archival data.</li> </ul>  | <p><b>9. PROBLEM ROOT / CAUSE</b></p> <p><i>Root Cause:</i> Lack of easy-to-use, tailored analytics solutions for the toy manufacturing domain.</p> <p><i>Frequency:</i> Occurs every fiscal quarter and peak business periods</p>  | <p><b>7. BEHAVIOR + ITS INTENSITY</b></p> <ul style="list-style-type: none"> <li>Maintain Excel-based records.</li> <li>Intermittently review past data during key decisions.</li> <li>Attend trade shows and research online for tools.</li> <li>Outsource occasional analytics.</li> </ul>                         |
| <p><b>3. TRIGGERS TO ACT</b></p> <p>Annual business reviews and planning cycles.</p> <p>Increase in market competition.</p> <p>Demand for modern, analytics-driven reporting from management.</p> <p><b>4. EMOTIONS</b></p> <ul style="list-style-type: none"> <li><i>Before:</i> Frustration, confusion, indecision, fear of missed opportunities.</li> <li><i>After:</i> Confidence, clarity, empowerment, improved decision-making.</li> </ul> | <p><b>10. YOUR SOLUTION</b></p> <p>A cloud-based, domain-specific analytics platform allowing toy manufacturers to upload historical data (e.g., spreadsheets), process and visualize trends, and receive actionable business insights. Features include dashboard generation, trend reports, and integration options for legacy system</p> | <p><b>8. CHANNELS OF BEHAVIOR</b></p> <ul style="list-style-type: none"> <li>Online: Manufacturer forums, LinkedIn groups, trade websites.</li> <li>Offline: Industry expos, consultant meetings, internal planning workshops.</li> </ul>  |

Define: CS, fit into CL

Focus on PR, tap into BE, understand RC

Identify strong TR & EM

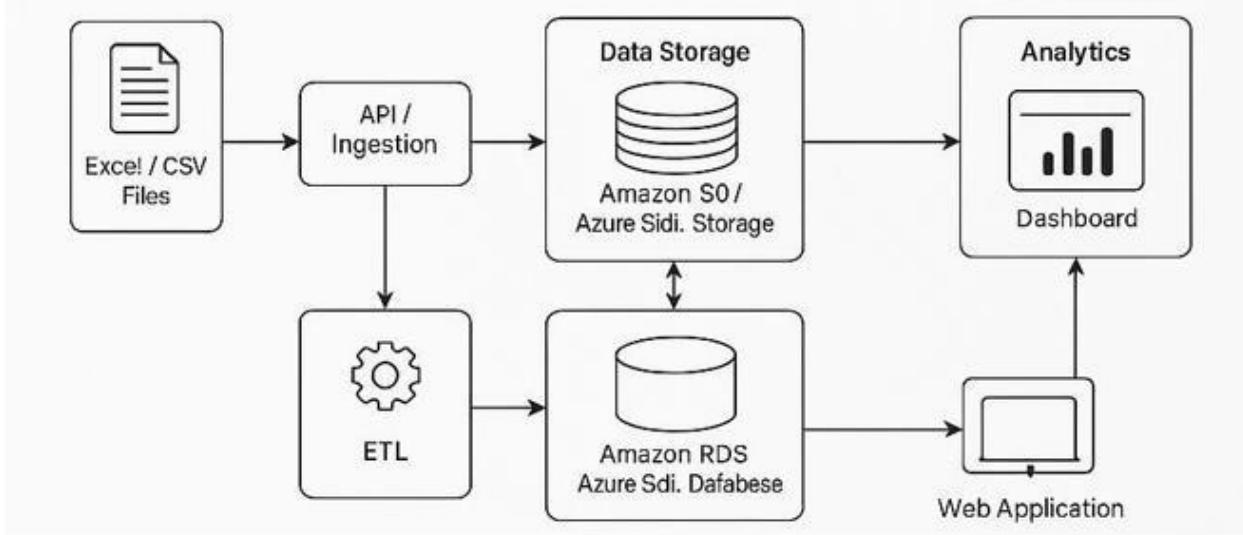
## 4.2 Proposed Solution

| S.No | Parameter                                | Description   |
|------|--|---|
| 1.   | Problem Statement (Problem to be solved) | Toy manufacturers and decision-makers lack a clear understanding of historical market trends, seasonal demand, and category-wise performance due to raw, unstructured spreadsheet data                              |
| 2.   | Idea / Solution description              | The proposed solution is a Tableau-based interactive dashboard that transforms 12 years of toy sales data into meaningful visual insights   |
| 3.   | Novelty / Uniqueness                     | The solution bridges the gap between raw data and strategic decision-making using a no-code, real-time analytics platform   |
| 4.   | Social Impact / Customer Satisfaction    | helps deliver toys customers actually want—leading to higher customer satisfaction and reduced waste  |
| 5.   | Business Model (Revenue Model)           | The dashboard can be offered as a SaaS solution or internal tool for toy manufacturers to optimize marketing, inventory, and sales operations   |
| 6.   | Scalability of the Solution              | The solution is scalable—more data (new years, product lines, or regions) can be integrated without modifying the core dashboard. Tableau supports enterprise-level deployment via Tableau Server or Tableau Cloud. |

## 4.3 Solution Architecture

The diagram illustrates the architecture and data flow for toy sales analysis. Sales data is first collected from Excel or CSV files and sent through an API for ingestion. The data is then processed using ETL operations and stored in cloud storage services such as Amazon S3 or Azure Storage, as well as in databases like Amazon RDS or Azure SQL Database. Finally, the stored data is accessed by a web application and displayed on an analytics dashboard to provide insights and visual reports.

Figure 1: Architecture and data flow for toy sales analysis



## 5. PROJECT PLANNING & SCHEDULING

### 5.1 Project Planning

| Sprint   | Functional Requirement (Epic) | User story Number | User Story /Task   | Story Points | Priority | Team Members |
|----------|-------------------------------|-------------------|--|--------------|----------|--------------|
| Sprint-1 | Data Preparation & Import     | USN-1             | As a data analyst, I want to clean and import the toy sales dataset into Tableau                 | 3            | High     | Pradeep      |
| Sprint-1 | Initial Market Trends View    | USN-2             | As a strategist, I want to create a basic trends dashboard showing shipment and growth over time | 2            | High     | Pradeep      |

|          |                              |       |  |   |        |         |
|----------|------------------------------|-------|--|---|--------|---------|
| Sprint-2 | Category & Seasonal Insights | USN-3 | As a product manager, I want to compare toy category | 3 | Medium | Pradeep |
|----------|------------------------------|-------|--|---|--------|---------|

| Sprint   | Functional Requirement (Epic) | User story Number | User Story /Task   | Story Points | Priority | Team Members |
|----------|-------------------------------|-------------------|--|--------------|----------|--------------|
|          |                               |                   | performance and seasonal spike   |              |          |              |
| Sprint-2 | Consumer Demographics Filter  | USN-4             | As a marketer, I want to filter data by region and age group to identify preferences           | 3            | Medium   | Pradeep      |
| Sprint-3 | Dashboard and story           | USN-5             | As a stakeholder, I want an integrated dashboard with trendlines and filters for strategic use | 4            | High     | Pradeep      |

**Project Tracker, Velocity & Burndown Chart: (4 Marks)**

| 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 | 5                  | 3 Days   | 30 JANUARY 2026   | 01 JANUARY 2026           | 5   | 01 JANUARY 2026              |
| Sprint-2 | 6                  | 3 Days   | 02 JANUARY 2026   | 07 JANUARY 2026           | 6   | 07 JANUARY 2026              |
| Sprint-3 | 4                  | 2 Days   | 08 JANUARY 2026   | 11 JANUARY 2026           | 4   | 11 JANUARY 2026              |

**Velocity:**

Total story points completed: 15

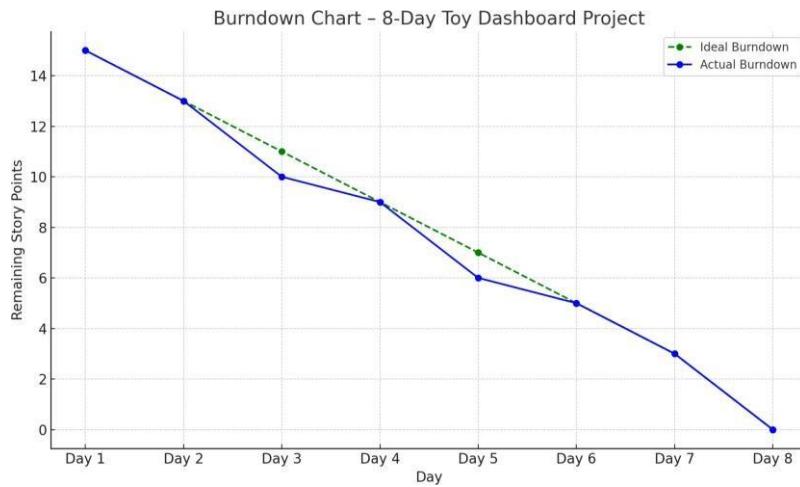
Total project duration: 8 working days

Average team velocity:

$$15 \div 8 = \sim 1.88 \text{ story points per day}$$

**Burndown Chart:**

A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development, methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.



## 6. FUNCTIONAL AND PERFORMANCE TESTING

### 6.1 Performance Testing

| S.NO | Parameter               | Screenshot/values               |
|------|-------------------------|---------------------------------|
| 1.   | Data Rendered           | Shown below                     |
| 2.   | Data Preprocessing      | Shown below                     |
| 3.   | Utilization of Filters  | Shown below                     |
| 4.   | Calculation fields Used | Shown below                     |
| 5.   | Dashboard design        | No of Visualizations / Graphs-5 |
| 6.   | Story Design            | No of Visualizations / Graphs-5 |

## Data Rendered

**Table Details**

- Engine: InnoDB
- Row format: Dynamic
- Column count: 4
- Table rows: 591
- Avg row length: 110
- Data length: 64.0 KB
- Index length: 0.0 bytes
- Max data length: 0.0 bytes
- Data free: 0.0 bytes
- Table size (estimate): 64.0 KB
- File format:
- Data path:
- Update time: 2026-02-05 19:05:40
- Create time: 2026-02-05 19:03:38

Information on this page may be outdated. Click [Analyze Table](#) to update it.

**Columns:**

| index | State | Year | Number of Manufacturers |
|-------|-------|------|-------------------------|
| int   | text  | int  | int                     |

**Output:**

| Action Output | # | Time | Action | Message | Duration / Fetch |
|---------------|---|------|--------|---------|------------------|
| Action Output | # | Time | Action | Message | Duration / Fetch |

Object Info Session

## Utilization of filters

**Dashboard** Layout

Default Desktop Phone Device Preview

Size Custom size (1000 x 1000)

Sheets

- Area Chart
- Index
- Toy Manufacturer
- Top 10 ...
- Analysis On Toy...

Objects

- Horizontal Container
- Vertical Container
- Text
- Extension
- Pulse Metric
- Image

Tiled Floating Show dashboard title

**Toy Crafts Tableau's Vision Into Toy Manufacturer Data**

**Analysis On Number Of Manufacturer By Year**

Number of Manufacturer

1500  
1,555 1,334 1,188 1,144  
1,576 1,424 1,196 1,120  
2006 2008 2010 2012 2014 2016

**Analysis On Toy Manufacturer By Index**

Index (bin)

Count of Index

10K  
10 5K  
0K  
20.7 82.8 144.9 207.0 269.1 331.2 393.3 455.4 517.5  
11 12 14 16 18 20 21

**Analysis On Toy Manufacturer**

Value

200K  
174,345  
591 15,490  
Count of Week 39 - US Toy Manuf...

**Top 10 States Toy Manufacturer In US State**

State

Alabama 12  
Arizona 12  
Arkansas 12  
California 12  
Colorado 12  
Connecticut 5  
Count of Week 39 - US Toy Manuf...

**Analysis On Toy Manufacturer In US State By Index**

3,861 3,742

Measure Names

- Count of Index
- Index

Count of Index

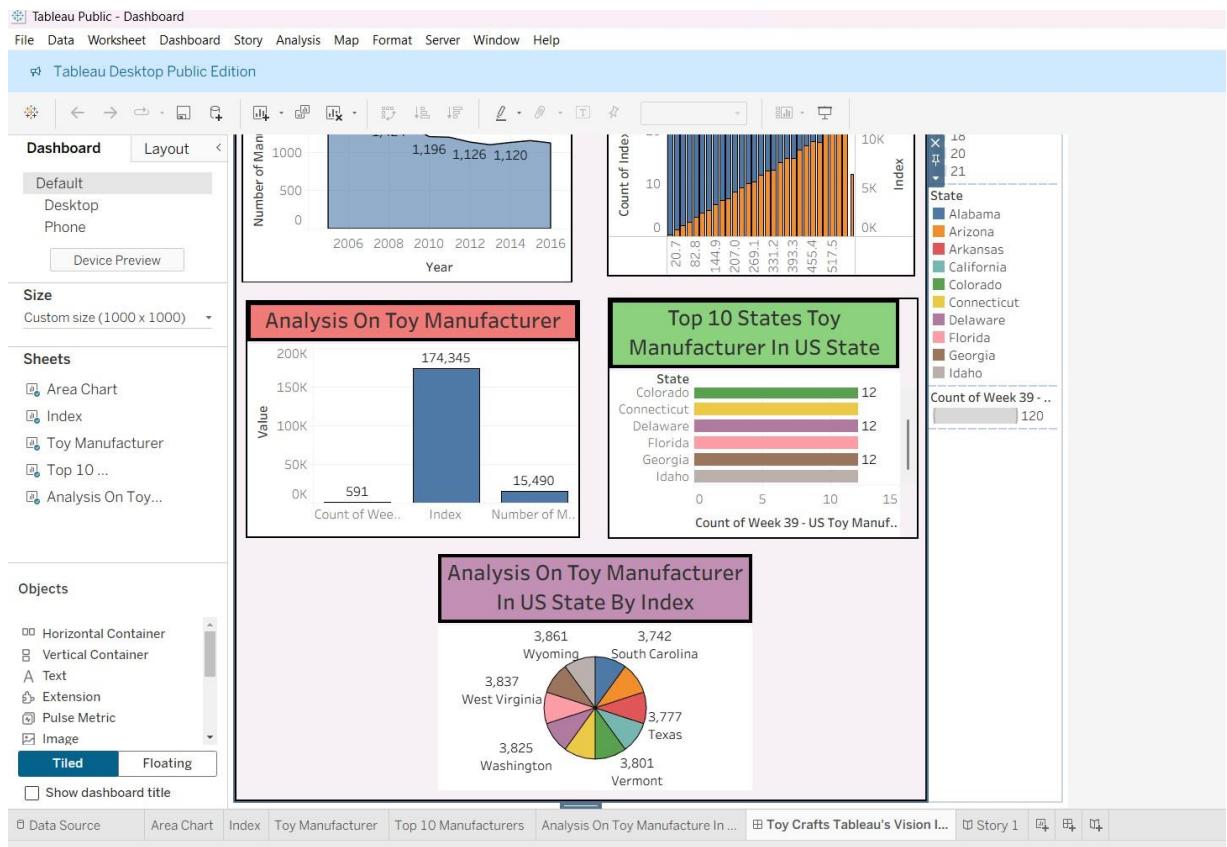
- 11
- 12
- 14
- 16
- 18
- 20
- 21

State

- Alabama
- Arizona
- Arkansas
- California
- Colorado
- Connecticut
- Delaware
- Florida
- Georgia
- Idaho

Count of Week 39 - ... 120

Data Source Area Chart Index Toy Manufacturer Top 10 Manufacturers Analysis On Toy Manufacture In ... Toy Crafts Tableau's Vision I... Story 1



## Calculation fields Used

The screenshot shows the SSMS Navigator pane displaying the schema and structure of the "week 39 - us toy manufa" table. The table has the following structure:

| Column                  | Type |
|-------------------------|------|
| index                   | int  |
| State                   | text |
| Year                    | int  |
| Number of Manufacturers | int  |

The table is located in the "toycraft\_tales" database, under the "Tables" node. The "Information" pane at the bottom provides details about the table, including its name and column definitions.

Tableau Desktop Public Edition

Data Analytics < Page

Week 39 - US Toy Manufa...

Search

**Tables**

- .d. Index (bin)
- .d. Number of Manufacturers (...)
- State
- # Year
- Abc Measure Names
- # Index
- # Number of Manufacturers
- # Latitude (generated)
- # Longitude (generated)
- # Week 39 - US Toy Manufac...
- # Measure Values

## Dashboard design

Tableau Public - Hiranmai Sri

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Tableau Desktop Public Edition

Dashboard Layout

Default Desktop Phone Device Preview

Size Custom size (1000 x 1000)

Sheets

- Area Chart
- Index
- Toy Manufacturer
- Top 10 ...
- Analysis On Toy...

Objects

- Horizontal Container
- Vertical Container
- A Text
- Extension
- Pulse Metric
- Image

Tiled Floating

Show dashboard title

Toy Crafts Tableau's Vision Into Toy Manufacturer Data

Analysis On Number Of Manufacturer By Year

Analysis On Toy Manufacturer By Index

Analysis On Toy Manufacturer

Top 10 States Toy Manufacturer In US State

Analysis On Toy Manufacturer In US State By Index

Measure Names

- Count of Index
- Index

Count of Index

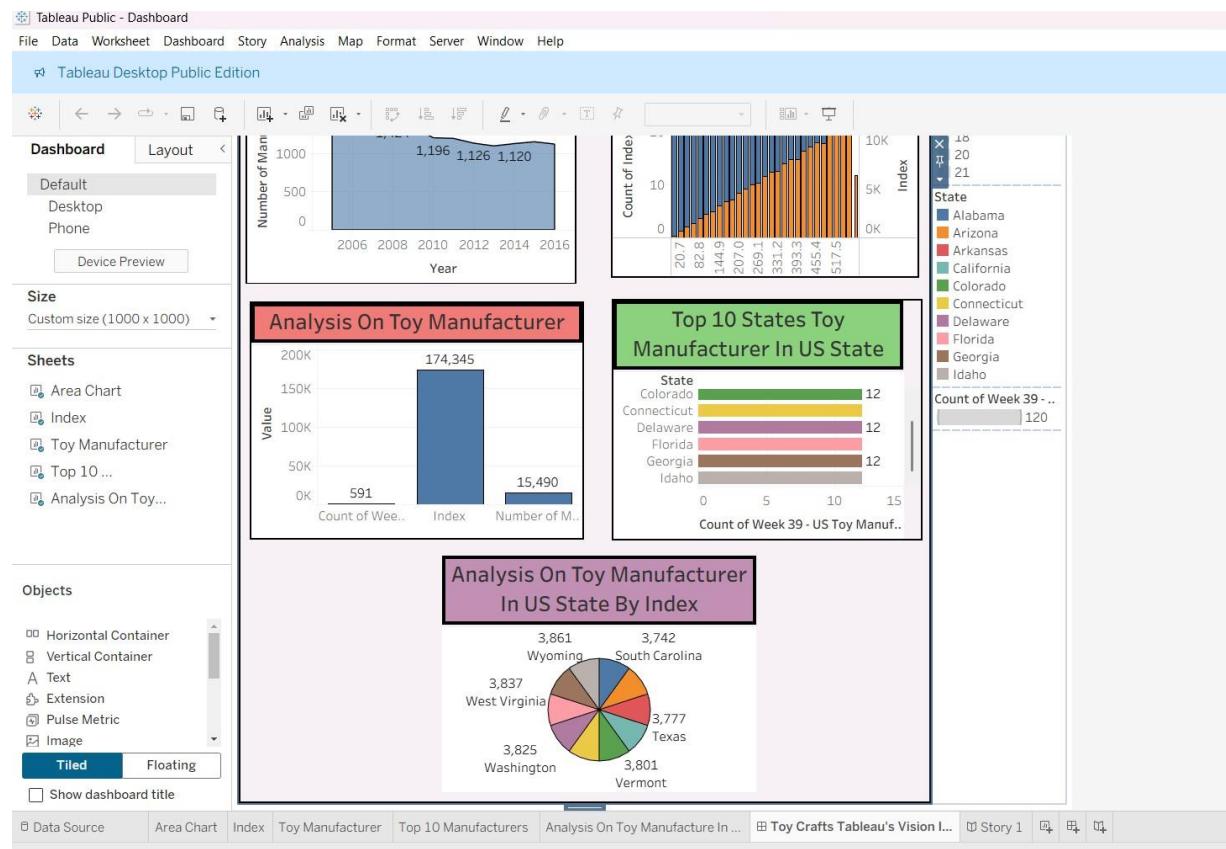
- 11
- 12
- 14
- 16
- 18
- 20
- 21

State

- Alabama
- Arizona
- Arkansas
- California
- Colorado
- Connecticut
- Delaware
- Florida
- Georgia
- Idaho

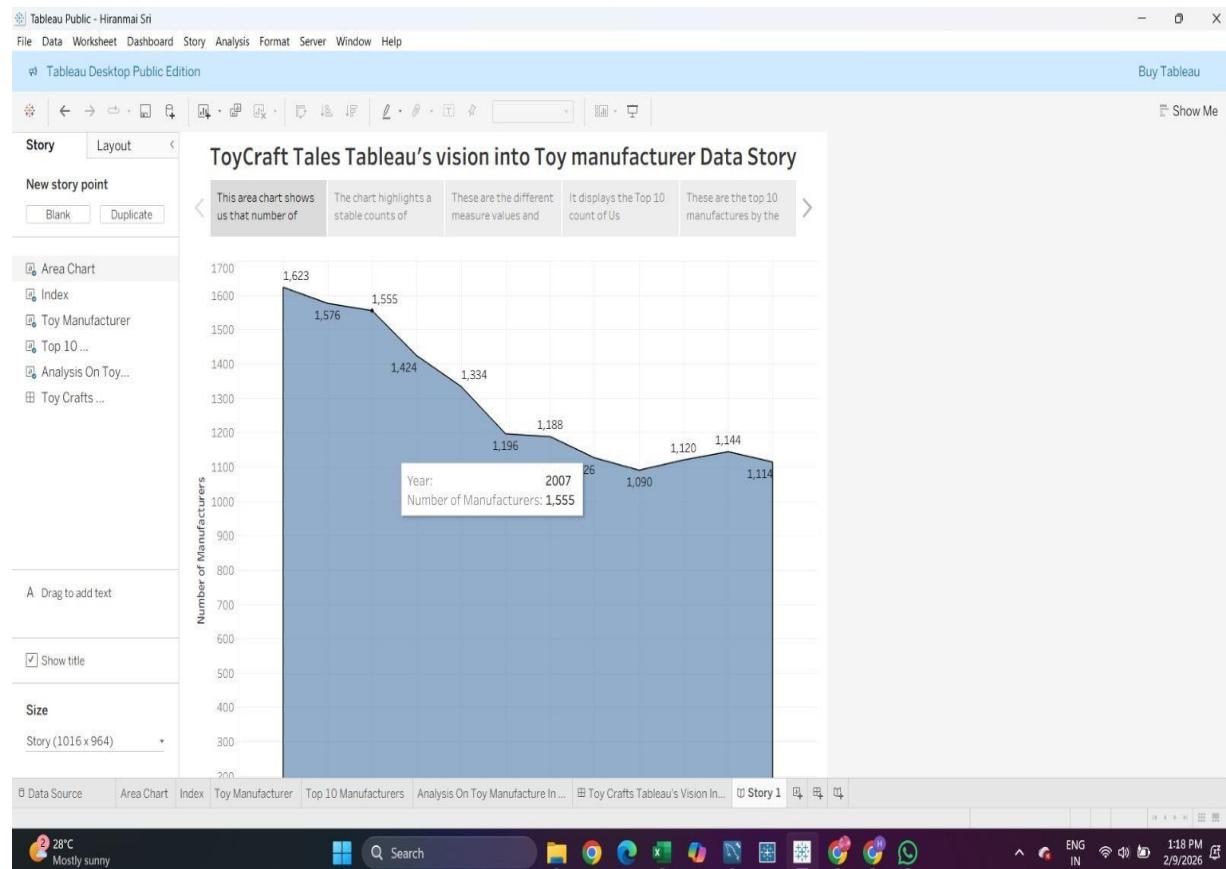
Count of Week 39 - ...

Data Source Area Chart Index Toy Manufacturer Top 10 Manufacturers Analysis On Toy Manufacture In ... Toy Crafts Tableau's Vision I... Story 1



1. Analysis of the number of Manufacturers by Year
2. Analysis of Toy Manufacturer by Index
3. Analysis of toy Manufacturers in US state By Index
4. Analysis of Toy Manufacturers
5. Top 10 states toy manufacturer in US state

## Story design

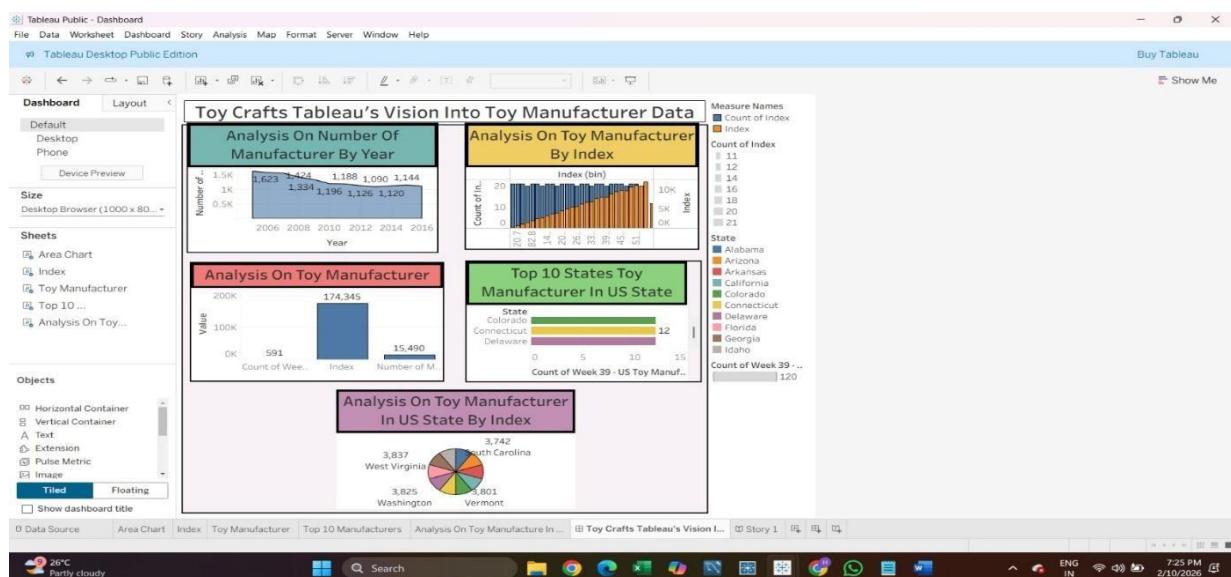


The story design in Tableau presents the analysis through a structured sequence of visualizations, enabling users to understand insights step by step. Each story point highlights a specific aspect of toy manufacturer data, such as yearly trends, manufacturer index analysis, regional distribution, and top-performing manufacturers. The use of an area chart helps visualize changes in the number of manufacturers over time, making trend identification easier. Interactive navigation allows users to move between different analytical views, improving clarity, engagement, and data-driven decision-making.

## 7. RESULTS

### 7.1 Output Screenshots

- The Tableau dashboards provided:
- Clear visualization of market trends.
- Identification of top-performing manufacturers.
- Regional analysis.
- Data-driven strategic insights.



## 8. ADVANTAGES & DISADVANTAGES

### Advantages

- Easy visual interpretation.
- Interactive filters.
- Scalable design.
- Improved decision-making.

### Disadvantages

- Depends on data quality
- May require significant development time

## **9. CONCLUSION**

This project successfully transformed raw toy manufacturer data into interactive visual dashboards using Tableau. The developed system enables stakeholders to analyze market trends efficiently, understand manufacturer performance, and identify regional and category-wise insights through clear visualizations. By converting complex datasets into meaningful graphical representations, the project improves data interpretation and supports informed strategic decision-making.

The interactive features such as filters, calculated fields, and story-based dashboards enhance user experience and allow dynamic exploration of data. The project demonstrates how data visualization tools can bridge the gap between raw information and actionable insights, helping businesses optimize planning, marketing strategies, and operational efficiency.

Overall, ToyCraft Tales showcases the practical application of data analytics and visualization in solving real-world business challenges. It highlights the importance of structured data analysis and provides a scalable solution that can be expanded with additional datasets or advanced analytical features in the future.

## **10. FUTURE SCOPE**

- Real-time data integration for live market analysis.
- AI-based predictive analytics for forecasting trends and demand.
- Mobile-friendly dashboard version for easy access.
- Expansion of dataset coverage to include global markets.
- Integration with cloud platforms for collaborative analytics.
- Advanced filtering and personalization features for users.
- Automated report generation for faster business insights.
- Implementation of machine learning models for deeper pattern analysis.

## **11. APPENDIX & LINKS**

### **DATASET LINK**

<https://www.kaggle.com/datasets/thedevastator/toy-manufacturers-in-us-states?select=Week+39+-+US+Toy+Manufacturers+-+2005+to+2016.hyper>

### **DASHBOARD LINK**

[https://public.tableau.com/app/profile/kodi.pradeep/viz/AnalysisonnumberofManufacturerbyYear\\_17714160591870/Dashboard1](https://public.tableau.com/app/profile/kodi.pradeep/viz/AnalysisonnumberofManufacturerbyYear_17714160591870/Dashboard1)

### **STORY LINK**

[https://public.tableau.com/app/profile/kodi.pradeep/viz/AnalysisonnumberofManufacturerbyYear\\_17714160591870/Story1](https://public.tableau.com/app/profile/kodi.pradeep/viz/AnalysisonnumberofManufacturerbyYear_17714160591870/Story1)

### **PROFILE LINK**

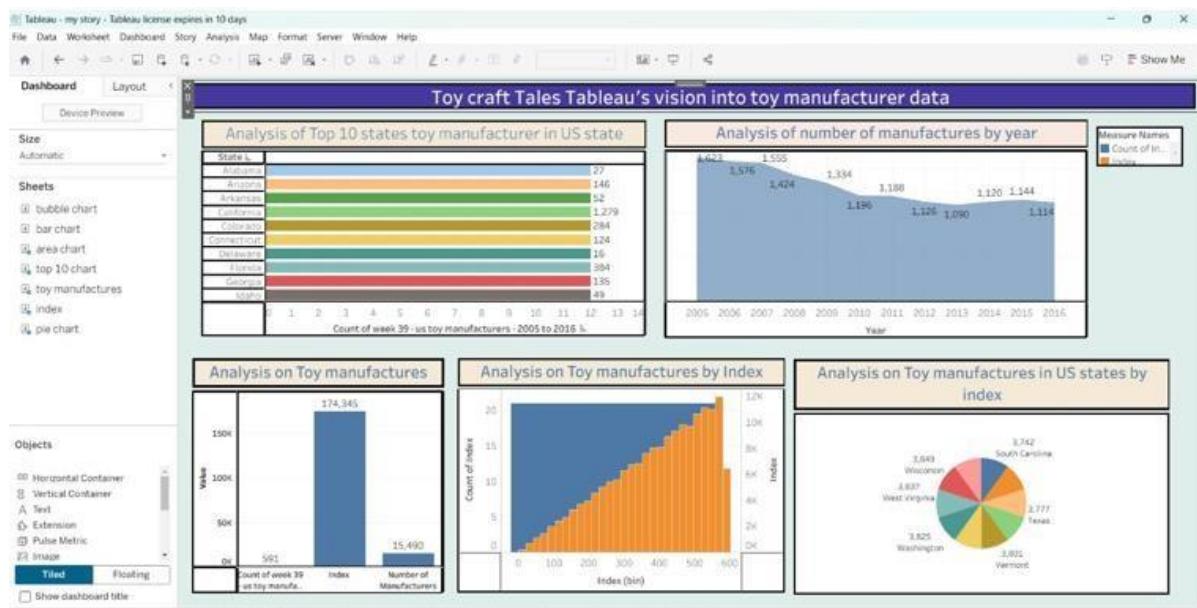
<https://public.tableau.com/app/profile/kodi.pradeep>

### **DEMO LINK**

<https://drive.google.com/file/d/1fIuJioYy0S92ies8tt6QpxBgO3lesvfR/view?usp=sharing>

## SCREENSHOTS OF DASHBOARD AND STORY

### DASHBOARD



### STORY

