



# TOYCRAFTS TALES

Tableau's Vision into Toy Manufacturer Data  
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# INTRODUCTION

The toy manufacturing industry is an important part of the overall manufacturing ecosystem in the United States. It contributes not only to economic growth but also to employment generation and regional business development. Over the years, toy manufacturers have expanded across different states based on factors such as availability of resources, skilled labor, logistics, and market demand. Understanding how these manufacturers are distributed geographically and how their presence changes over time can provide valuable insights for businesses, analysts, and policy makers.

In today's data-driven world, large volumes of information are generated every year. However, raw data in tables or spreadsheets often fails to communicate meaningful insights clearly. This is where data visualization plays a crucial role. Visualization tools help transform complex datasets into easy-to-understand visuals such as charts, maps, and dashboards. These visuals allow users to identify patterns, trends, and relationships that would otherwise remain hidden in raw numbers.

This project titled **“ToyCraft Tales – Tableau’s Vision into Toy Manufacturer Data”** focuses on analyzing and visualizing toy manufacturer data across U.S. states using Tableau. The project uses historical data spanning from 2005 to 2016 to study how toy manufacturing units are distributed across different regions and how these patterns evolve over time. By presenting the data through interactive dashboards and story-based visualizations, the project enables users to explore the information intuitively without requiring deep technical knowledge.

The motivation behind this project is to bridge the gap between raw data and decision-making. Many organizations possess data but lack effective ways to interpret it. Through this project, data visualization is used as a medium to convert static information into engaging and insightful stories. The Tableau Story feature is especially useful in guiding users step by step through the analysis, making the insights easier to understand and remember.

Overall, this project demonstrates how business intelligence tools like Tableau can be used to analyze real-world datasets and present findings in a meaningful and impactful way. It highlights the importance of visual storytelling in modern data analysis and showcases how data can be used not just for reporting, but for understanding and decision support.

## 1.1 Project Overview

The **ToyCraft Tales** project is a data visualization and storytelling application developed using Tableau Public. It is based on a Kaggle dataset that contains information about toy manufacturers located across various U.S. states over a period of twelve years, from 2005 to 2016. The dataset includes details that allow analysis of state-wise manufacturer presence and yearly trends.

The core idea of the project is to convert historical manufacturing data into an interactive visual format that users can explore easily. Instead of scanning rows and columns of numbers, users can view the data through maps, bar charts, and trend lines that visually represent the distribution of toy manufacturers. Tableau dashboards are designed to allow filtering by year and state, making the analysis flexible and user-driven.

A key feature of this project is the use of Tableau's Story functionality. Rather than presenting disconnected dashboards, the project organizes insights into a structured narrative. Each story point focuses on a specific aspect of the data, such as regional concentration, changes over time, or comparative analysis between states. This approach ensures that users not only see the data but also understand the context behind it.

The project is hosted on Tableau Public, making it easily accessible through a web browser without requiring any special software installation. This increases its usability for students, faculty members, and professionals who want to explore the data or learn data visualization techniques.

## 1.2 Purpose

The primary purpose of this project is to analyze and visually represent toy manufacturer data in a way that is simple, engaging, and meaningful. The project aims to help users understand how toy manufacturing is distributed across the United States and how this distribution has changed over time.

Another important objective is to demonstrate the practical use of Tableau as a business intelligence tool. Through this project, users can see how Tableau can be applied to real-world datasets to create interactive dashboards and data stories. This is especially useful for students and beginners who are learning data visualization concepts.

## 2. IDEATION PHASE

The ideation phase is one of the most important stages in any project because it lays the foundation for the entire solution. During this phase, the main problem is clearly identified, user needs are understood, and possible solutions are explored. For the **ToyCraft Tales** project, the ideation phase focused on understanding the challenges involved in analyzing toy manufacturer data and identifying the best way to present this information in a meaningful and user-friendly manner.

The dataset used in this project contains historical information about toy manufacturers across U.S. states from 2005 to 2016. Although the data is well-structured, it becomes difficult to gain insights when viewed only in spreadsheet or tabular form. Numbers alone do not clearly show trends, regional differences, or changes over time. This realization led to the idea of using data visualization as the core approach for the project.

Another key aspect considered during ideation was the target audience. The project is intended for students, business analysts, and non-technical users who want to understand manufacturing trends without dealing with complex calculations or coding. Therefore, the solution needed to be simple, interactive, and visually appealing. Tableau was identified as the most suitable tool because it allows easy creation of dashboards, maps, and story-based visualizations.

The ideation process involved brainstorming different visualization ideas, identifying user expectations, and aligning them with project goals. Emphasis was placed on clarity, ease of use, and storytelling. Instead of creating isolated charts, the idea was to build a visual narrative that guides users through the data and helps them understand the insights step by step.

### 2.1 Problem Statement

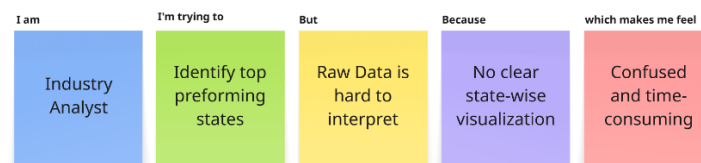
The toy manufacturing dataset provides valuable information about the presence of manufacturers across various U.S. states over multiple years. However, when this data is presented in raw form, it becomes difficult to interpret and analyze effectively. Users often struggle to identify patterns, compare regions, or understand how the industry has evolved over time by simply viewing tables or static charts.

The main problem addressed by this project is the lack of an interactive and visual system that can transform raw toy manufacturer data into meaningful insights. There is a need for a solution that allows users to explore the data dynamically, identify trends easily, and gain a clear understanding of state-wise and year-wise variations.

Additionally, many users who need such insights do not have strong technical or analytical backgrounds. Therefore, the solution must be intuitive and should not require advanced skills or programming knowledge. The challenge is to design a system that balances simplicity with depth, allowing both beginners and experienced users to benefit from the analysis.

This project aims to solve these challenges by using Tableau to create interactive dashboards and a story-based visualization that clearly presents toy manufacturer data in an understandable and engaging manner.

### Difficulty in Identifying Top Performing States



*Figure 1: Problem Statement Cases*

## 2.2 Empathy Map Canvas

The empathy map was created to better understand the needs, thoughts, and challenges of the intended users. This step helped in designing a solution that is user-centric rather than tool-centric.

### Users:

The primary users include students, business analysts, educators, and data visualization learners.

### What users think:

Users often think about questions such as:

- Which states have the highest number of toy manufacturers?
- How has the toy manufacturing industry changed over the years?
- Are there regional patterns or trends visible in the data?

### What users feel:

- Confused when working with large datasets
- Overwhelmed by raw numbers and spreadsheets
- Curious to explore insights visually

### What users say:

- “The data is available, but it is hard to understand.”
- “A visual view would make this much easier.”

### What users need:

- Interactive dashboards
- Clear maps and charts
- Simple filters and navigation

By understanding these aspects, the project was designed to focus on clarity, simplicity, and user engagement.

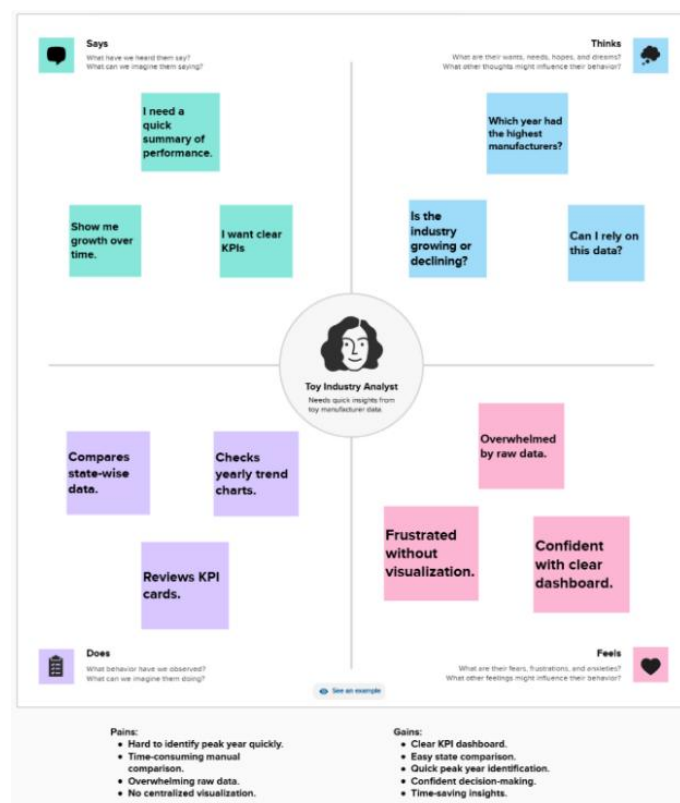


Figure 2: Empathy Maps for the ToyCraft Tales users

## 2.3 Brainstorming

Brainstorming was carried out to explore multiple ways of presenting the toy manufacturer data effectively. Various visualization options were considered, including bar charts, line graphs, heat maps, and geographical maps. Each option was evaluated based on how well it could represent trends and comparisons.

One of the key ideas that emerged during brainstorming was the use of geographical maps to show state-wise distribution. Maps provide an intuitive understanding of regional patterns and help users quickly identify areas with higher or lower concentrations of manufacturers. Another idea was to include time-based charts to show how the industry evolved from 2005 to 2016.

The team also explored the concept of storytelling through data. Instead of presenting all visuals at once, the idea was to guide users through a sequence of insights using Tableau Story Points. This approach allows users to follow a logical flow, making the analysis more engaging and easier to understand.

After evaluating all ideas, the final decision was to combine interactive dashboards with a story-based presentation. This ensures that users can both explore the data freely and follow a structured narrative. The brainstorming phase played a crucial role in shaping the overall direction of the project and ensuring that the final solution meets user needs effectively.

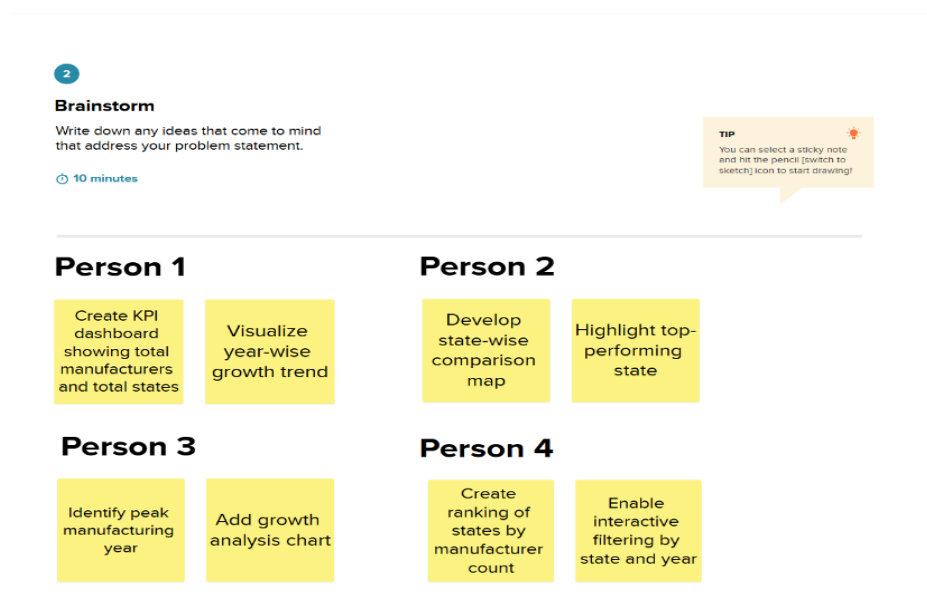


Figure 3: Brainstorming for ToyCraft Tales



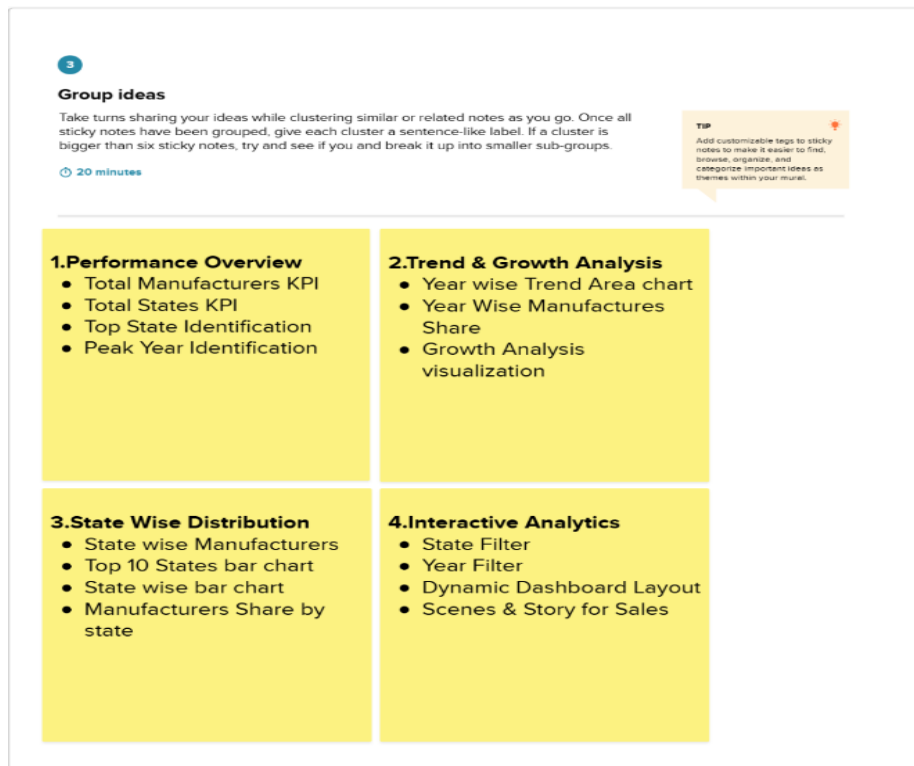


Figure 4: Group Ideas for the Problem Statement

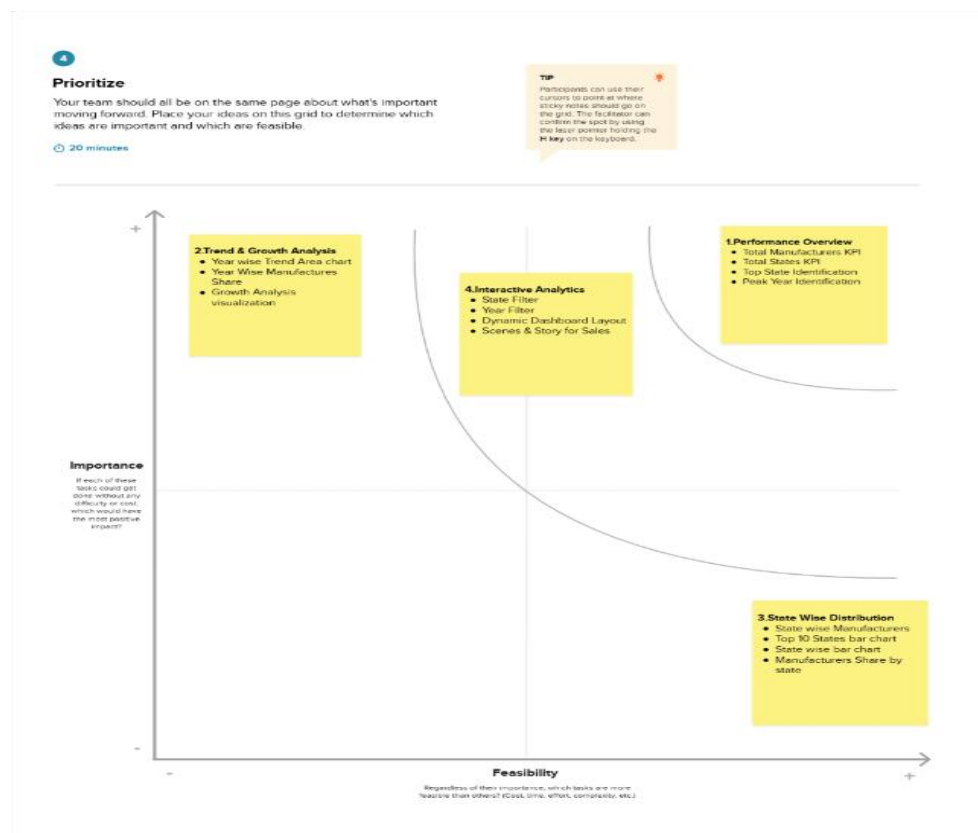


Figure 5: Prioritize of the Group Ideas based on Project

### 3. REQUIREMENT ANALYSIS

Requirement analysis is a crucial phase in the project development process because it defines what the system should do and how it should perform. In this phase, the needs of the users are carefully studied and translated into clear functional and non-functional requirements. For the **ToyCraft Tales** project, requirement analysis focused on understanding how users interact with data visualization systems and what features are necessary to make the analysis of toy manufacturer data effective and meaningful.

The dataset used in this project contains historical information about toy manufacturers across different U.S. states over a span of several years. While the data itself is structured, the challenge lies in presenting it in a way that is easy to explore and interpret. Users should be able to view state-wise distributions, analyze changes over time, and compare regions without facing technical complexity. Therefore, the requirements were designed to ensure simplicity, interactivity, and clarity.

Another important consideration during requirement analysis was accessibility. Since the project is hosted on Tableau Public, users should be able to access the visualizations using a web browser without installing any additional software. This requirement makes the project more practical for academic and general use.

#### 3.1 Customer Journey Map

The customer journey map outlines the step-by-step experience of a user interacting with the ToyCraft Tales project. It helps identify how users move through the system and what they expect at each stage.

1. The user opens the Tableau Public link of the project.
2. The user lands on the main Tableau Story interface.
3. The user reads the story introduction to understand the context.
4. The user interacts with dashboards by selecting filters such as year or state.
5. The user observes patterns, trends, and comparisons in the visuals.
6. The user navigates through different story points for deeper insights.
7. The user gains understanding and completes the analysis.

This journey ensures that users can smoothly explore the data without confusion or unnecessary steps.

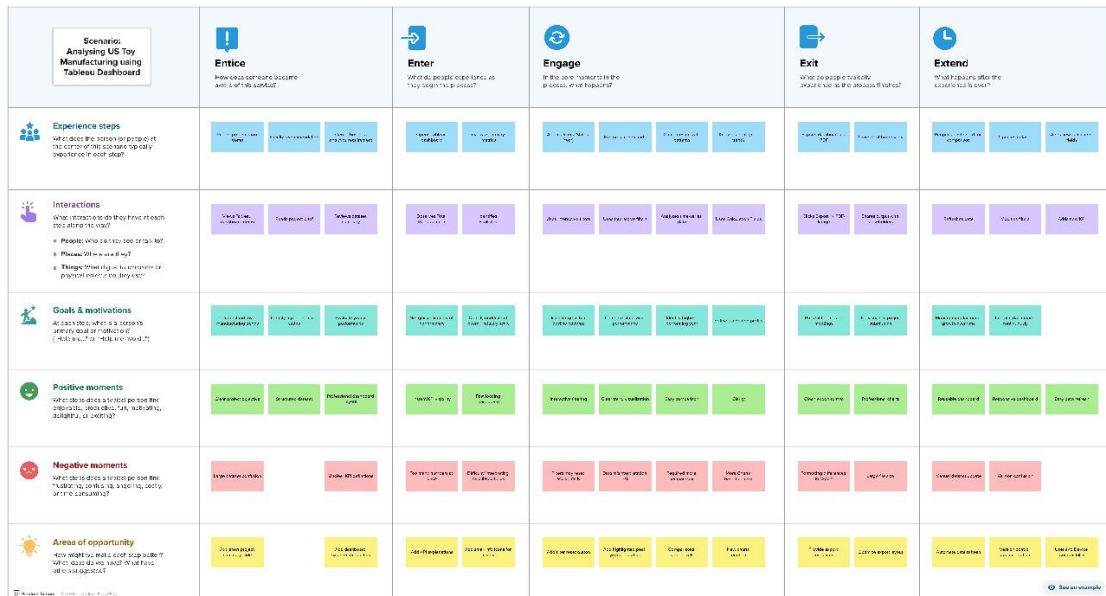


Figure 6: Customer Journey Maps with 5E's

## 3.2 Solution Requirement

### Functional Requirements

Functional requirements describe what the system should do. For this project, the key functional requirements include:

- The system should load and process the toy manufacturer dataset correctly.
- The system should display state-wise and year-wise visualizations.
- The system should provide interactive filters for better exploration.
- The system should allow users to navigate through story points easily.

### Non-Functional Requirements

Non-functional requirements focus on system quality and performance:

- Dashboards should load quickly without delays.
- Visuals should be clear and easy to understand.
- The system should be user-friendly and intuitive.

- The project should be accessible through a web browser.

These requirements ensure a smooth and satisfying user experience.

### 3.3 Data Flow Diagram

The data flow diagram explains how data moves through the system from source to output. Although no complex backend processing is involved, understanding data flow is important for clarity.

1. Data is collected from the Kaggle dataset.
2. The dataset is cleaned and prepared for visualization.
3. Data is imported into Tableau.
4. Tableau processes the data to create dashboards.
5. Dashboards are organized into a Tableau Story.
6. The final output is presented to the user interactively.

This simple data flow ensures accuracy and transparency in the visualization process.

### 3.4 Technology Stack

The technology stack defines the tools and platforms used in the project.

- **Data Source:** Kaggle dataset (toy manufacturers in U.S. states)
- **Visualization Tool:** Tableau Public
- **Data Format:** Hyper file
- **Platform:** Web-based visualization

Tableau was chosen because it supports interactive dashboards, geographical mapping, and storytelling features, making it ideal for this project.

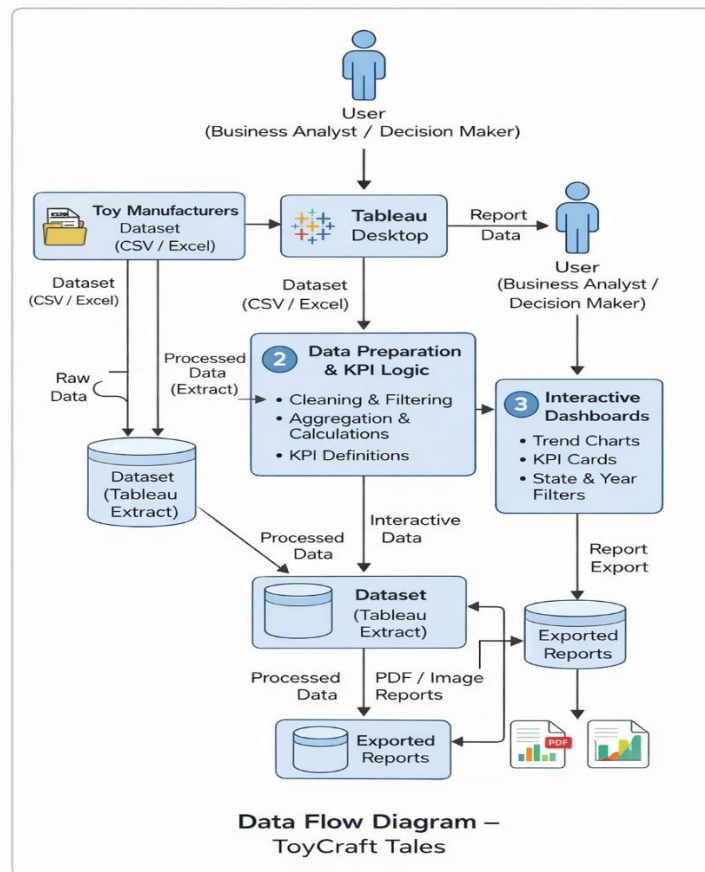


Figure 7: Technology Stack for ToyCraft Tales

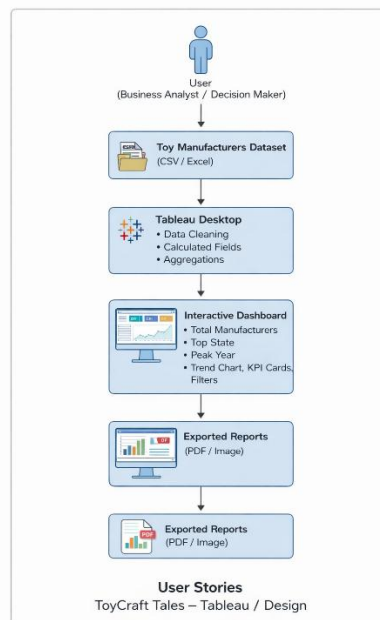


Figure 8: Example for Technological Stack flow

## 4. PROJECT DESIGN

The project design phase focuses on converting the identified requirements into a structured and practical solution. In this phase, the overall approach, structure, and working of the system are clearly defined. For the **ToyCraft Tales** project, the design was centered around creating an interactive and visually engaging Tableau solution that allows users to explore toy manufacturer data easily and effectively.

The design philosophy of this project emphasizes simplicity, clarity, and user engagement. Instead of overwhelming users with too many visuals or complex layouts, the dashboards were designed to present insights in a clean and organized manner. Each visualization serves a specific purpose and contributes to the overall understanding of the data. The use of Tableau Story Points helps in guiding users through the analysis in a logical sequence.

Another key design consideration was interactivity. The project was designed to allow users to control what they want to see by applying filters and navigating through different views. This ensures that users can explore the data at their own pace while still benefiting from the guided narrative provided by the story format.

### 4.1 Problem Solution Fit

The problem identified in earlier phases was the difficulty in understanding raw toy manufacturer data presented in tabular form. The project design directly addresses this problem by transforming the dataset into interactive visualizations that highlight patterns and trends clearly.

The use of geographical maps fits well with the requirement to analyze state-wise distribution of toy manufacturers. Maps provide an intuitive understanding of regional concentration and make it easier to compare different states visually. Similarly, time-based charts help users observe changes and trends over the years.

By combining dashboards with storytelling, the solution ensures that both exploratory and guided analysis are supported. This strong alignment between the problem and the solution confirms that the design is well-suited to meet user needs.

## 4.2 Proposed Solution

The proposed solution is an interactive Tableau Story that presents toy manufacturer data across U.S. states from 2005 to 2016. The solution consists of multiple dashboards, each focusing on a specific aspect of the dataset, such as state-wise distribution or year-wise trends.

Users can interact with the dashboards using filters to select specific years or states. This allows them to customize their analysis and focus on areas of interest. The story format ensures that insights are presented in a structured manner, making it easier for users to follow the analysis.

The solution does not require any programming or coding knowledge from the user side. Since it is hosted on Tableau Public, users can access it through a web browser, making it suitable for academic demonstrations and learning purposes.

## 4.3 Solution Architecture

The solution architecture defines how different components of the project work together. Although the system is simple, having a clear architecture helps in understanding the workflow.

1. Data is sourced from the Kaggle dataset.
2. The dataset is cleaned and prepared for visualization.
3. Data is imported into Tableau Public.
4. Dashboards are created using charts, maps, and filters.
5. Dashboards are combined into a Tableau Story.
6. The final story is published and accessed by users online.

This architecture ensures a smooth flow from raw data to meaningful visual insights. The design supports scalability, allowing additional data or dashboards to be added in the future.

# ToyCraft Tales – Tableau Dashboard

Solution Architecture for US Toy Manufacturers

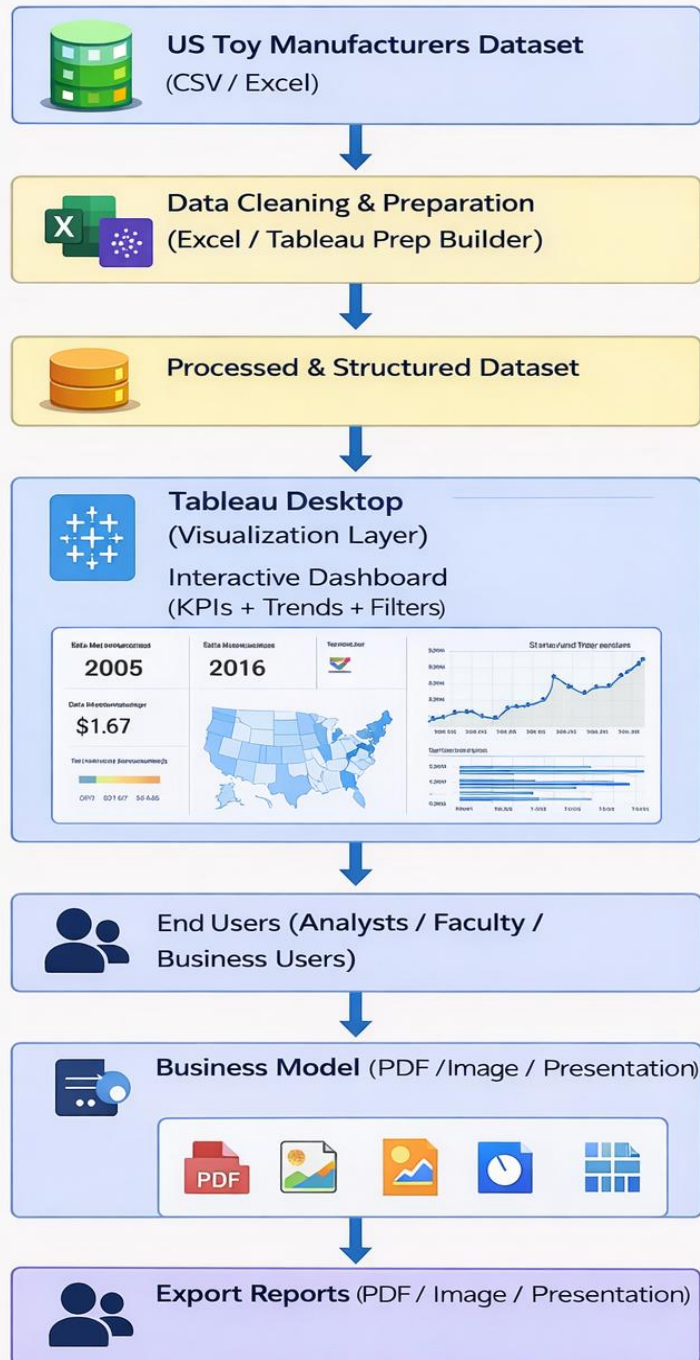


Figure 9: Solution Architecture for US Toy Manufacturers



## 5. PROJECT PLANNING & SCHEDULING

Project planning and scheduling are essential to ensure that the project is developed in a structured and organized manner. A well-defined workflow helps in breaking down the project into manageable stages and ensures that each activity is completed in the correct sequence. For the **ToyCraft Tales** project, the planning was done strictly according to the assigned workflow provided, ensuring academic alignment and smooth execution.

The project workflow consists of the following stages:

1. Data Collection & Extraction from Database
2. Data Preparation
3. Dashboard Development
4. Story Creation
5. Performance Testing
6. Web Integration

Each stage was planned carefully with clear objectives and timelines. This structured approach helped in avoiding confusion, reducing rework, and maintaining consistency throughout the project lifecycle. The planning phase also ensured that sufficient time was allocated to testing and refinement, which is crucial for a visualization-based project.

### 5.1 Project Planning

#### Data Collection & Extraction from Database

The first stage of the project involved collecting the dataset from a reliable source. The toy manufacturer dataset was obtained from Kaggle, which acts as the primary database for this project. During this stage, the dataset structure, file format, and data range were examined. The data was extracted in a format compatible with Tableau to ensure smooth integration in later stages.

This step was important to ensure that the dataset contained all required attributes and covered the intended time period from 2005 to 2016. Any irrelevant or unused columns were identified during this phase.

## **Data Preparation**

In the data preparation stage, the extracted dataset was cleaned and organized for visualization. This included checking for missing values, correcting inconsistencies, and ensuring uniform formatting. Data preparation is a critical step because the quality of visualizations directly depends on the quality of data.

The dataset was structured in a way that supports state-wise and year-wise analysis. Proper data preparation helped in avoiding errors during dashboard creation and improved the overall accuracy of insights.

## **Dashboard Development**

After data preparation, the next stage involved creating dashboards using Tableau. Different visualization components such as maps, charts, and graphs were designed to represent toy manufacturer data clearly. Interactive elements like filters were added to allow users to explore the data dynamically.

The dashboards were designed with simplicity and readability in mind. Special attention was given to layout, color usage, and labeling to ensure a clean and professional appearance.

## **Story Creation**

Once the dashboards were finalized, they were combined into a Tableau Story. The story format was used to present insights in a structured and sequential manner. Each story point focused on a specific insight, guiding users through the analysis step by step.

This stage helped in transforming individual dashboards into a meaningful narrative, making the project more engaging and easier to understand.

## Performance Testing

Performance testing was conducted to ensure that dashboards load quickly and respond smoothly to user interactions. Filters, navigation, and transitions between story points were tested to identify any delays or issues.

This stage ensured that the project performs well on different systems and provides a smooth user experience without lag or errors.

## Web Integration

The final stage involved publishing the Tableau Story to Tableau Public. Web integration allows users to access the project through a browser without installing any software. This step makes the project easily accessible for evaluation, demonstration, and learning purposes.

## Project Schedule

Phase	Activity
Week 1	Data collection and extraction
Week 2	Data preparation
Week 3	Dashboard development
Week 4	Story creation
Week 5	Performance testing and web integration

This schedule ensured timely completion of the project while maintaining quality and alignment with the assigned workflow.

## 6. FUNCTIONAL AND PERFORMANCE TESTING

Functional and performance testing are essential to ensure that the project works as expected and delivers a smooth user experience. In the **ToyCraft Tales** project, testing was carried out after completing dashboard and story development. The main goal of this phase was to verify that all features function correctly and that the Tableau visualizations perform efficiently when accessed through the web.

Since this project is based on data visualization rather than traditional software development, testing focused more on user interaction, data accuracy, responsiveness, and visual clarity. Both functional testing and performance testing were conducted systematically to ensure that the final output meets academic and usability standards.

### 6.1 Functional Testing

Functional testing verifies whether each feature of the project works according to the specified requirements. In this project, functional testing focused on checking the correctness of dashboards, filters, story navigation, and data representation.

The dataset was first verified to ensure that it was correctly loaded into Tableau. Each dashboard was checked to confirm that it displays accurate values based on the selected filters. State-wise and year-wise data were cross-verified to ensure consistency with the original dataset.

Interactive elements such as filters and tooltips were tested to confirm that they respond correctly to user actions. When users select a specific year or state, the dashboards update instantly without errors. Story navigation was also tested to ensure that users can move smoothly between different story points without confusion.

Additionally, visual components such as charts, maps, legends, and labels were reviewed for clarity and correctness. Functional testing ensured that the project behaves exactly as intended and provides reliable insights to users.

## 6.2 Performance Testing

Performance testing focuses on evaluating how efficiently the project runs under normal usage conditions. For the **ToyCraft Tales** project, performance testing was conducted to ensure fast loading times, smooth interactions, and stable performance on different systems.

Dashboards were tested for loading speed when opened through Tableau Public. The response time of filters and transitions between story points was observed to ensure there were no noticeable delays. Special attention was given to map-based visualizations, as they can be performance-intensive.

The project was also tested on different devices and screen sizes to ensure consistent behavior. Performance testing confirmed that the visualizations load correctly on standard web browsers without requiring high system specifications.

Overall, the project demonstrated stable and efficient performance, providing a seamless experience for users exploring the data.

### Testing Summary

Test Type	Description	Result
Data Accuracy Test	Verified data consistency	Passed
Filter Functionality	Tested interactive filters	Passed
Story Navigation	Checked smooth transitions	Passed
Load Time	Evaluated dashboard loading speed	Passed
Web Access	Tested online accessibility	Passed

## 7. RESULTS

The results section presents the final outcomes of the **ToyCraft Tales** project after successful completion of data visualization, story creation, and testing. This section highlights what was achieved through the project and how the visualizations helped in understanding toy manufacturer data across U.S. states. The results demonstrate the effectiveness of using Tableau as a data visualization and storytelling tool.

After implementing the dashboards and story points, the project successfully transformed raw toy manufacturer data into meaningful visual insights. Users are able to explore state-wise and year-wise distributions easily through interactive charts and maps. The visual format made it much simpler to identify patterns that are not obvious when viewing the data in spreadsheet form.

One of the key outcomes of the project is the clear representation of geographical distribution. The map-based visualizations provide immediate insight into which states have higher concentrations of toy manufacturers. Users can observe regional clusters and compare states visually without needing to analyze numerical tables. This significantly improves data understanding and engagement.

### 7.1 Key Insights Obtained

Through the visual analysis, several important insights were observed. Some states consistently show a higher presence of toy manufacturers over multiple years, indicating established manufacturing hubs. Other states show gradual changes, reflecting growth or decline in manufacturing activity over time.

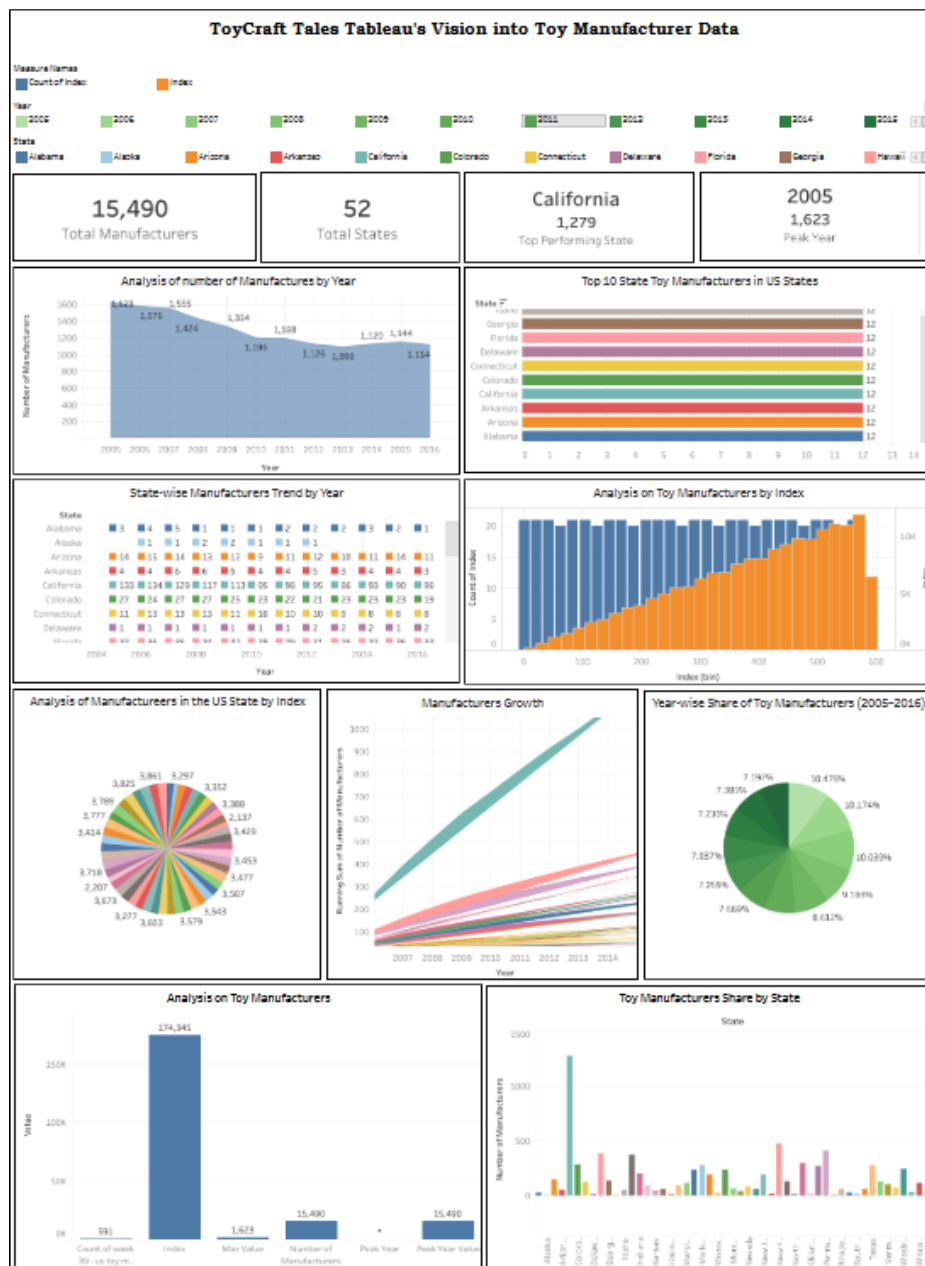
Year-wise analysis reveals how the toy manufacturing industry evolved between 2005 and 2016. Users can observe trends such as periods of stability or gradual shifts in manufacturer distribution. These trends help in understanding the long-term behavior of the industry.

The use of filters allows users to focus on specific years or regions, making the analysis flexible and user-driven. This interactivity enhances the overall value of the project and allows users to explore the data from different perspectives.

## 7.2 Output Screenshots

The final output of the project consists of multiple dashboards combined into a Tableau Story. The outputs include:

- State-wise toy manufacturer distribution maps
- Year-wise trend charts
- Interactive dashboards with filters



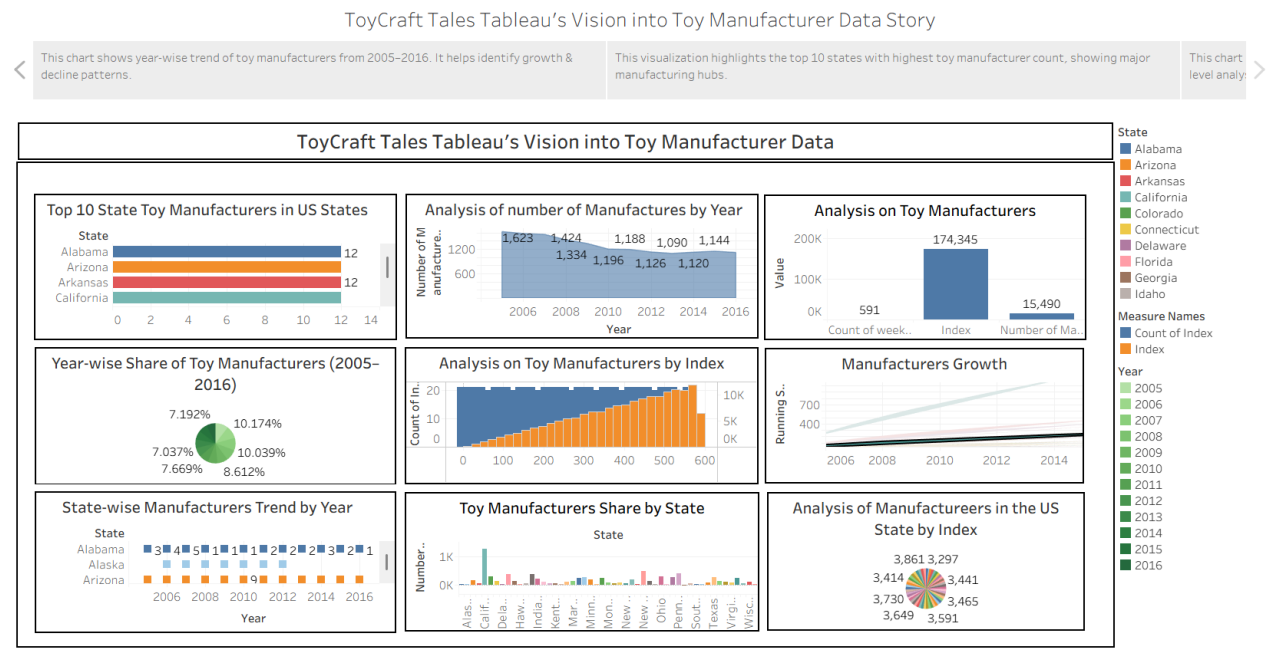


Figure 11: Interactive Tableau Story showing analysis of toy manufacturers in US states

These outputs visually communicate complex information in a simple and understandable format. The screenshots clearly demonstrate how the dashboards and stories work together to deliver insights.

### 7.3 User Experience and Impact

The project provides a smooth and engaging user experience. Users can navigate through the story points easily and interact with dashboards without facing technical difficulties. The clean layout, clear labels, and intuitive design contribute to a positive user experience.

From an academic perspective, the project demonstrates the practical application of data visualization concepts. It serves as a useful example for students learning Tableau and business intelligence tools. From a practical standpoint, the project can assist analysts and decision-makers in understanding manufacturing trends and regional distribution.

Overall, the results confirm that the project successfully meets its objectives by delivering clear, interactive, and meaningful visual insights.



## 8. ADVANTAGES & DISADVANTAGES

Every project has its strengths as well as certain limitations. Identifying both advantages and disadvantages helps in understanding the overall value of the project and the areas where improvements can be made.

### Advantages

One of the major advantages of the **ToyCraft Tales** project is its ability to transform complex and large datasets into easy-to-understand visual insights. By using Tableau, raw toy manufacturer data is presented through maps, charts, and dashboards, making it accessible even to non-technical users.

Another important advantage is interactivity. Users can apply filters, explore different years, and focus on specific states. This flexibility allows users to perform customized analysis without modifying the dataset or writing any code.

The use of Tableau Story Points is also a strong advantage. Instead of presenting disconnected dashboards, the project guides users through a logical sequence of insights. This storytelling approach improves understanding and keeps users engaged throughout the analysis.

Additionally, the project is web-based and hosted on Tableau Public, making it easily accessible. Users can view the project through a web browser without installing any additional software.

### Disadvantages

Despite its strengths, the project has a few limitations. One of the main disadvantages is its dependency on historical data. The dataset used in this project covers the period from 2005 to 2016, which means the insights may not reflect current industry conditions.

Another limitation is the dependency on the quality of the dataset. Any inaccuracies or missing values in the original data can affect the accuracy of the visualizations. Since the project does not generate new data, it relies completely on the dataset source.

The project also requires basic familiarity with Tableau for modification or extension. While viewing the project is simple, making changes or adding new dashboards requires Tableau knowledge.

## 9. CONCLUSION

The **ToyCraft Tales – Tableau’s Vision into Toy Manufacturer Data** project successfully demonstrates how data visualization can transform raw datasets into meaningful and actionable insights. By using Tableau as the primary visualization tool, the project effectively analyzes toy manufacturer data across U.S. states over a span of several years and presents it in a clear and interactive format.

One of the key outcomes of this project is the improved understanding of geographical and temporal patterns within the toy manufacturing industry. Through interactive dashboards and story points, users can easily observe how manufacturers are distributed across states and how these patterns evolve over time. This approach eliminates the complexity associated with traditional spreadsheet-based analysis and replaces it with visual clarity.

The project also highlights the importance of storytelling in data analysis. Rather than displaying isolated visuals, the use of Tableau Stories allows insights to be presented in a structured and engaging manner. This makes the analysis easier to follow and more impactful for users with different levels of technical knowledge.

Overall, the project meets its objectives by providing a user-friendly, visually appealing, and informative data visualization solution. It serves as a strong example of how business intelligence tools can be applied in real-world scenarios to support learning, analysis, and decision-making.

## 10. FUTURE SCOPE

Although the **ToyCraft Tales** project delivers meaningful insights, there is significant scope for future enhancement and expansion. One possible improvement is the inclusion of more recent data. Extending the dataset beyond 2016 would allow users to analyze current trends and gain up-to-date insights into the toy manufacturing industry.

Another future enhancement could involve integrating additional attributes such as production volume, revenue, or employment data. Including such metrics would provide a more comprehensive understanding of the industry and support deeper business analysis.

Predictive analytics can also be explored in future versions of the project. By applying forecasting techniques, the project could estimate future trends in toy manufacturing and support strategic planning.

Additionally, the project could be extended into a full-scale business intelligence solution by integrating it with live databases or enterprise systems. This would enable real-time analysis and make the project more suitable for professional and organizational use.

## 11. APPENDIX

The appendix section provides supporting information and references related to the **ToyCraft Tales** project. It serves as a reference point for users who wish to explore the dataset, project implementation, or demo in more detail.

### Dataset Link

<https://www.kaggle.com/datasets/thedevastator/toy-manufacturers-in-us-states>

### Project Story Link

[https://public.tableau.com/app/profile/eswar.sai.sunkara/viz/ToyCraft\\_Tales\\_Story/ToyCraftTalesTableausVisionintoToyManufacturerDataStory](https://public.tableau.com/app/profile/eswar.sai.sunkara/viz/ToyCraft_Tales_Story/ToyCraftTalesTableausVisionintoToyManufacturerDataStory)

### Project Story Link

[https://public.tableau.com/app/profile/eswar.sai.sunkara/viz/ToyCraft\\_Tales\\_Dashboard/ToyCraftTalesTableausVisionintoToyManufacturerData?publish=yes](https://public.tableau.com/app/profile/eswar.sai.sunkara/viz/ToyCraft_Tales_Dashboard/ToyCraftTalesTableausVisionintoToyManufacturerData?publish=yes)

### Github Link

[https://github.com/Eswarsaisunkara/ToyCraft\\_Tales\\_Project\\_SmartInternz.git](https://github.com/Eswarsaisunkara/ToyCraft_Tales_Project_SmartInternz.git)

### Source Code

This project is developed using Tableau Public and involves traditional programming or source code files. All visualizations are created using Tableau's drag-and-drop interface and the website is built using Flask and deployed.

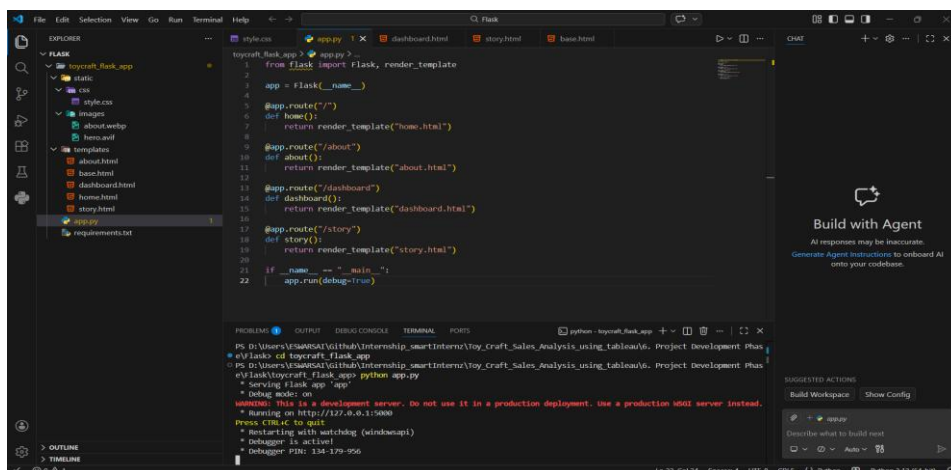


Figure 12: Source Code with Project Development

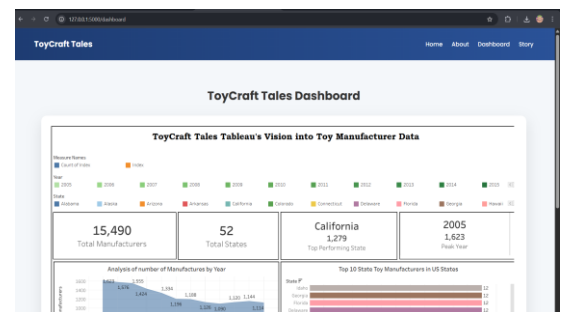
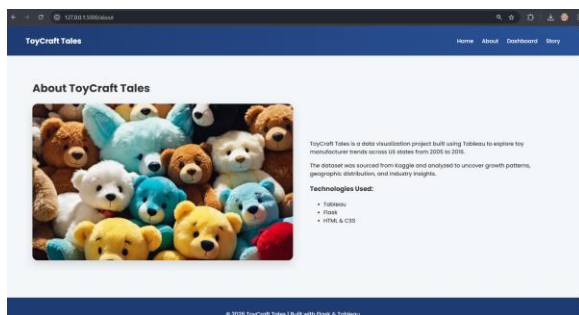
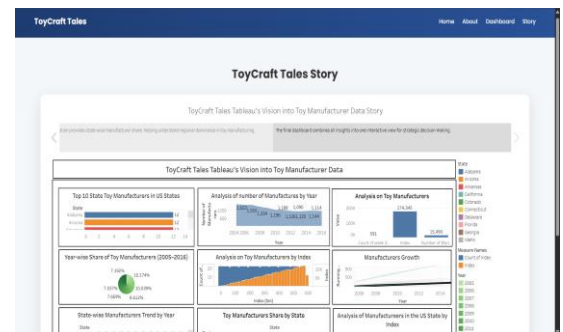
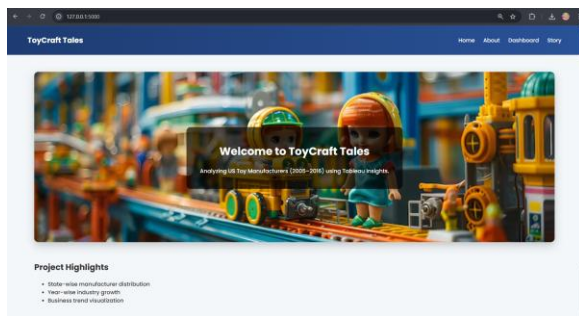


Figure 12: Flask Website for ToyCraft Tales Project

## Tools Used

- Tableau Public
- Kaggle Dataset
- Web Browser
- Flask Framework

