



Project Title

Heritage Treasures: An In-depth Analysis of UNESCO World Heritage Sites in Tableau

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1. INTRODUCTION

1.1 Project Overview

UNESCO World Heritage Sites are recognized for their cultural, historical, scientific, or natural significance. This project provides a visual, interactive exploration of these global treasures using Tableau. It highlights the distribution, categorization, and conservation status of these sites, helping users to understand and appreciate heritage from a data-driven perspective.

1.2 Objective

To analyze and visualize global UNESCO World Heritage data through Tableau, aiming to uncover insights about regional representation, endangered sites, and temporal trends using interactive dashboards.

2. CONCEPTUALIZATION PHASE

2.1 Problem Definition

Heritage data is often available in static formats, limiting deep exploration and comparative analysis. This project addresses the lack of intuitive visualization tools for understanding the geographic and historical significance of UNESCO World Heritage Sites.

2.2 Empathy Mapping for Stakeholders

Target Users: Historians, Educators, Conservationists, Tourists, Students

Think & Feel: Curiosity about heritage, concern for conservation

Hear: News about site threats, cultural festivals, preservation efforts

See: Global heritage diversity and threats

Say & Do: Advocate protection, engage in research or travel planning

Pain Points: Inaccessibility of data, lack of interactive tools

Desired Gains: Awareness, informed decisions, educational insights

2.3 Idea Generation

- Region-wise analysis of heritage sites
- Visualization of site types (Cultural, Natural, Mixed)
- Identification of endangered sites
- Year-wise growth trend of site inscriptions
- Interactive dashboards with filters and map views

3. DATA & REQUIREMENT ANALYSIS

3.1 User Journey for Exploration

- Awareness: Users learn about the visual heritage tool
- Interaction: Users explore dashboards and filter data
- Insight Discovery: Users analyze patterns and conservation status
- Engagement: Users share insights or use them for education and planning

3.2 Functional Requirements

- Import UNESCO heritage dataset
- Preprocess data by category, region, danger status, year
- Create interactive Tableau dashboards with filters and tooltips
- Publish visuals to Tableau Public

3.3 Non-Functional Requirements

- Clean, modern user interface
- Mobile and desktop responsive design
- Fast loading and accurate filter behavior

3.4 Data Flow

UNESCO Dataset → Cleaning & Categorization → Visualization in Tableau → Interactive Exploration by Users

3.5 Tools and Technologies

- Data Cleaning: Excel / Python
- Visualization: Tableau / Tableau Public
- Presentation (Optional): HTML, Bootstrap for web embedding

4. PROJECT STRUCTURE AND VISUAL DESIGN

4.1 Relevance of the Solution

This project makes global heritage data more accessible, engaging, and educational through interactive dashboards that promote exploration and awareness.

4.2 Proposed Visualization Approach

- Map-based visualizations of site locations

- Pie charts for site-type distributions
- Line graphs showing yearly additions
- Storyboards linking different visual insights

4.3 Visual Architecture Workflow

- Load dataset from official sources
- Clean and categorize data
- Design visuals in Tableau
- Publish to Tableau Public and optionally embed

5. PLANNING AND TIMELINE

Stage	Duration
Data Understanding & Planning	Week 1
Data Cleaning & Structuring	Week 2
Chart Creation in Tableau	Weeks 3–4
Dashboard & Story Design	Week 5
Testing & Refinement	Week 6
Final Submission & Reporting	Week 7

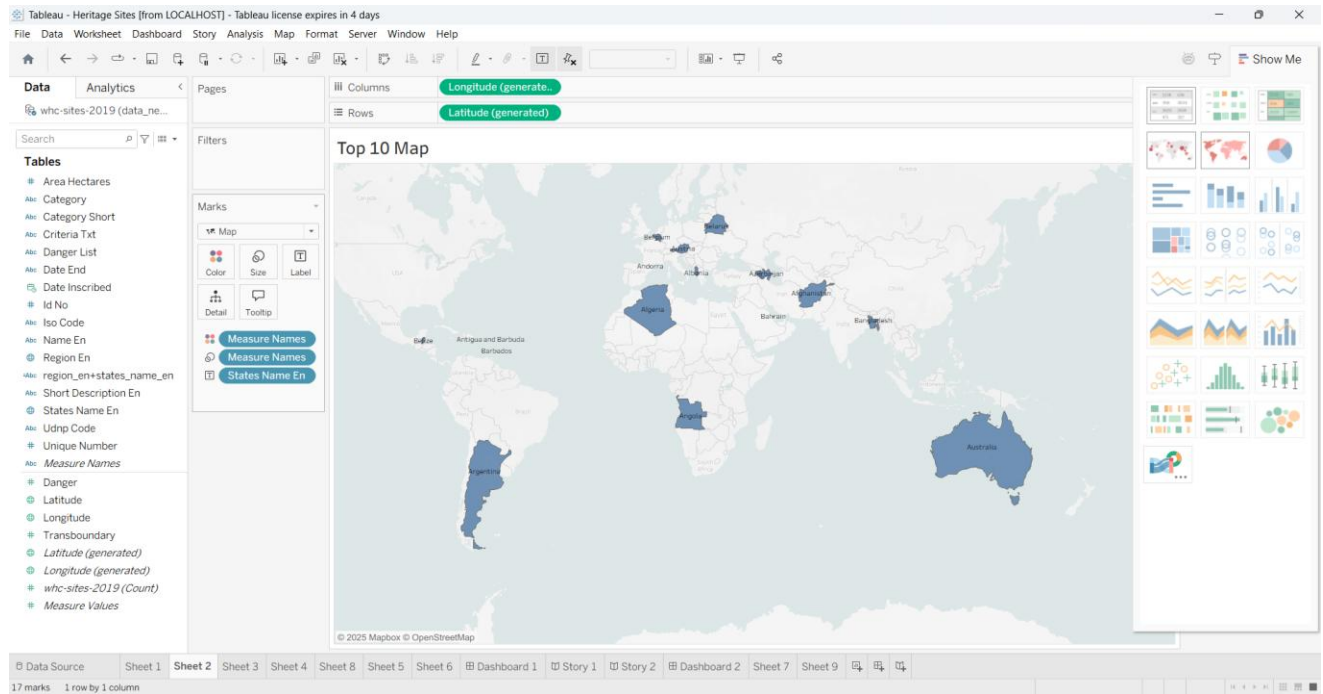
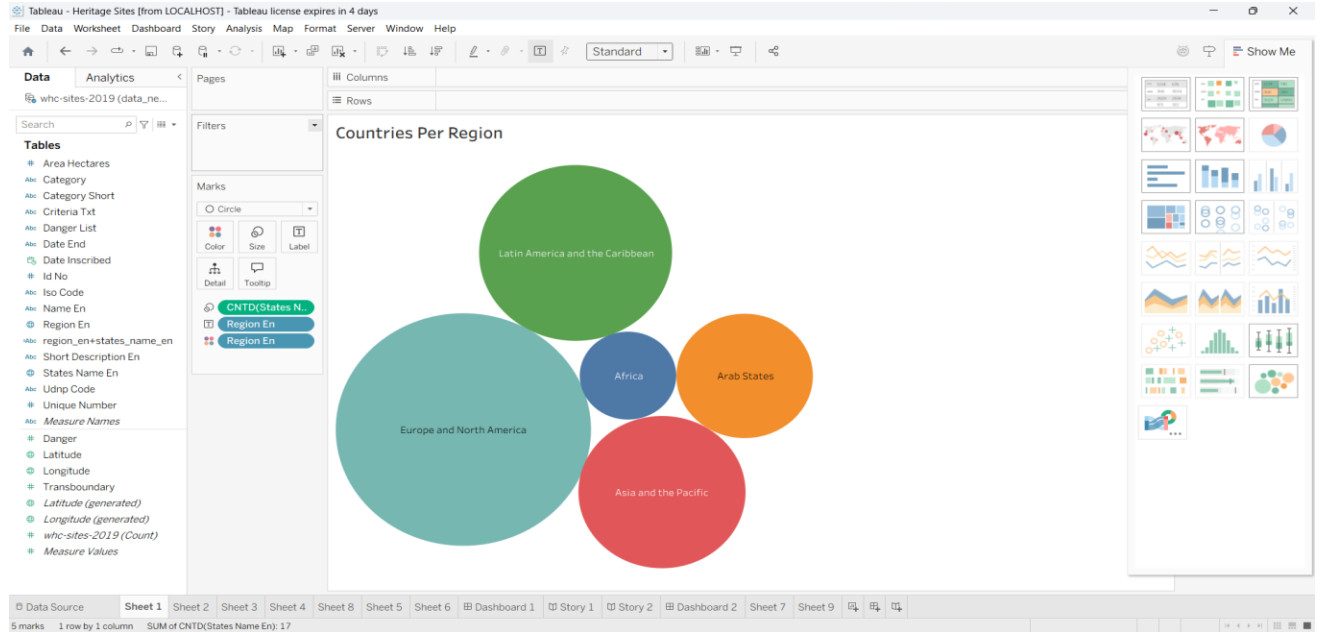
6. DASHBOARD TESTING AND EVALUATION

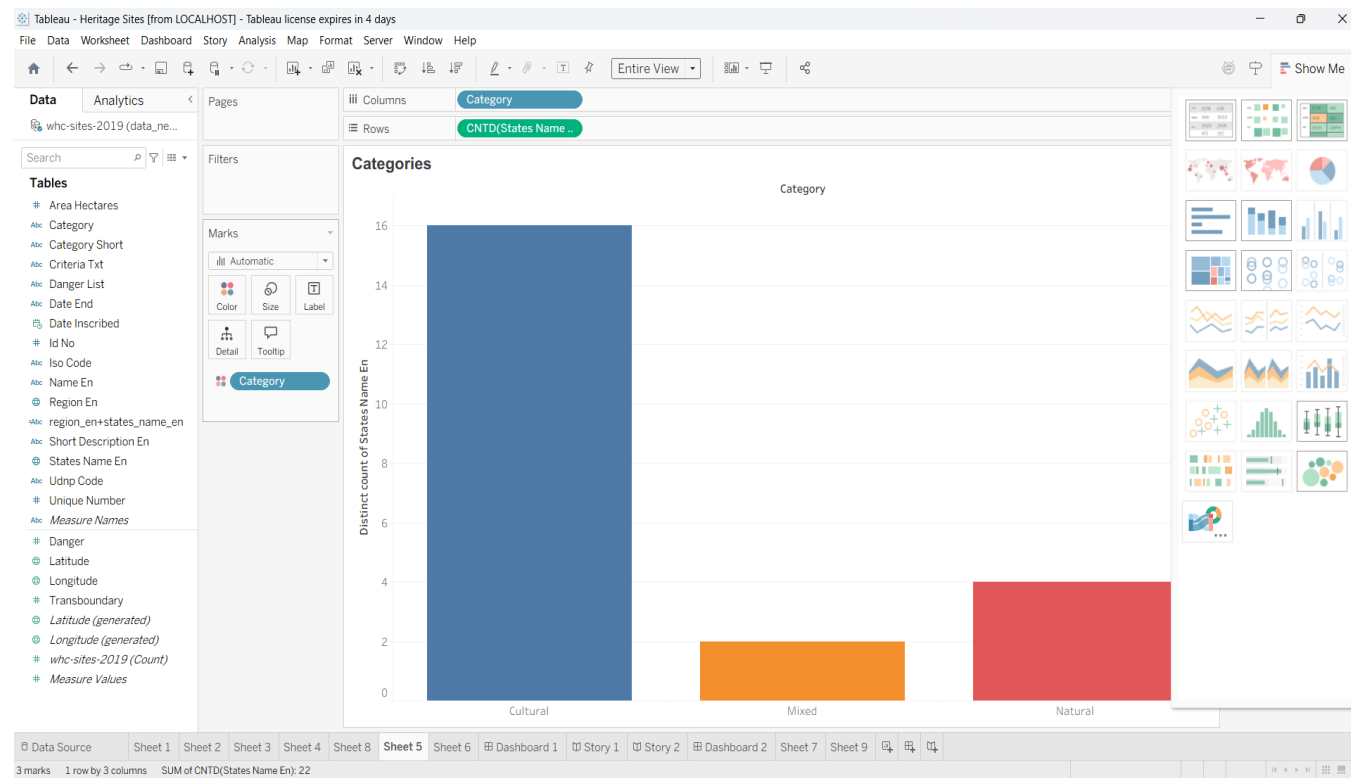
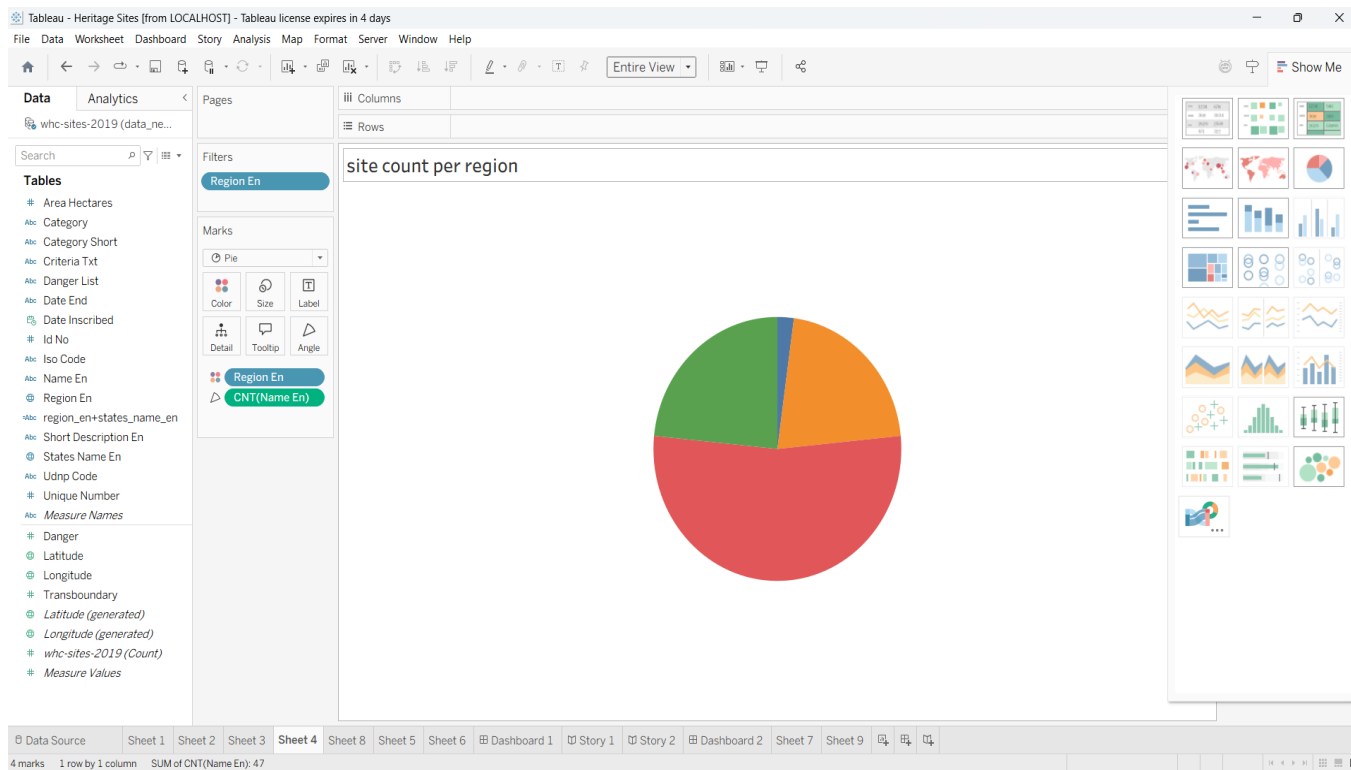
6.1 Performance and Quality Testing

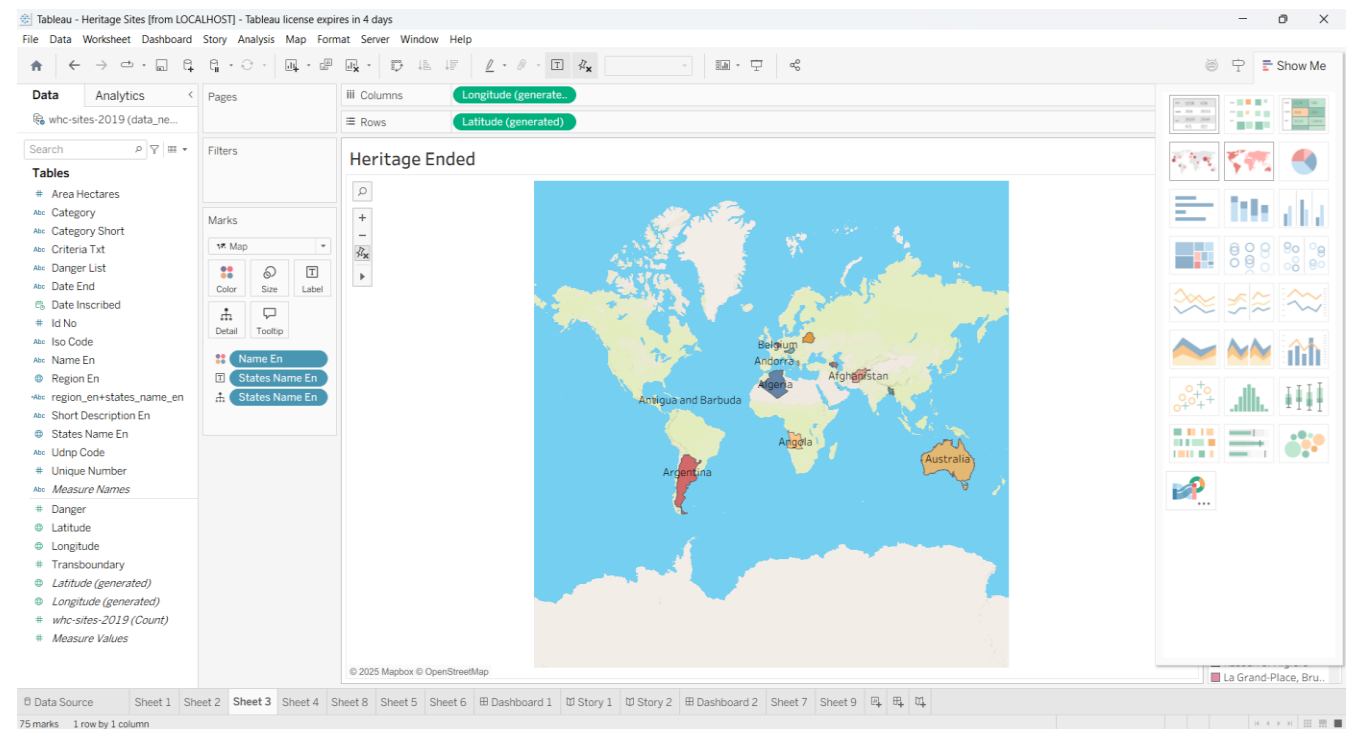
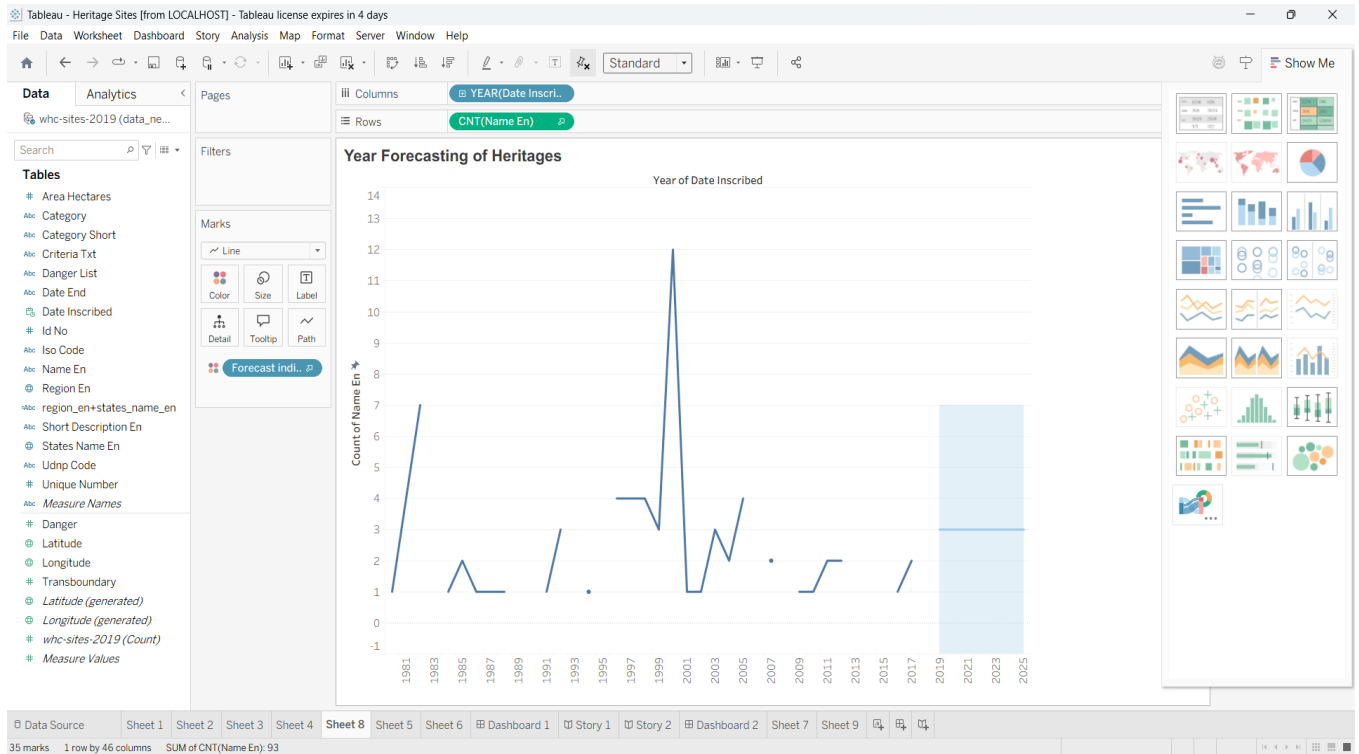
- Verified dashboard loads quickly on both desktop and mobile
- Checked all charts and filters for accurate rendering
- Ensured danger status and site types display correctly
- Confirmed story transitions are smooth

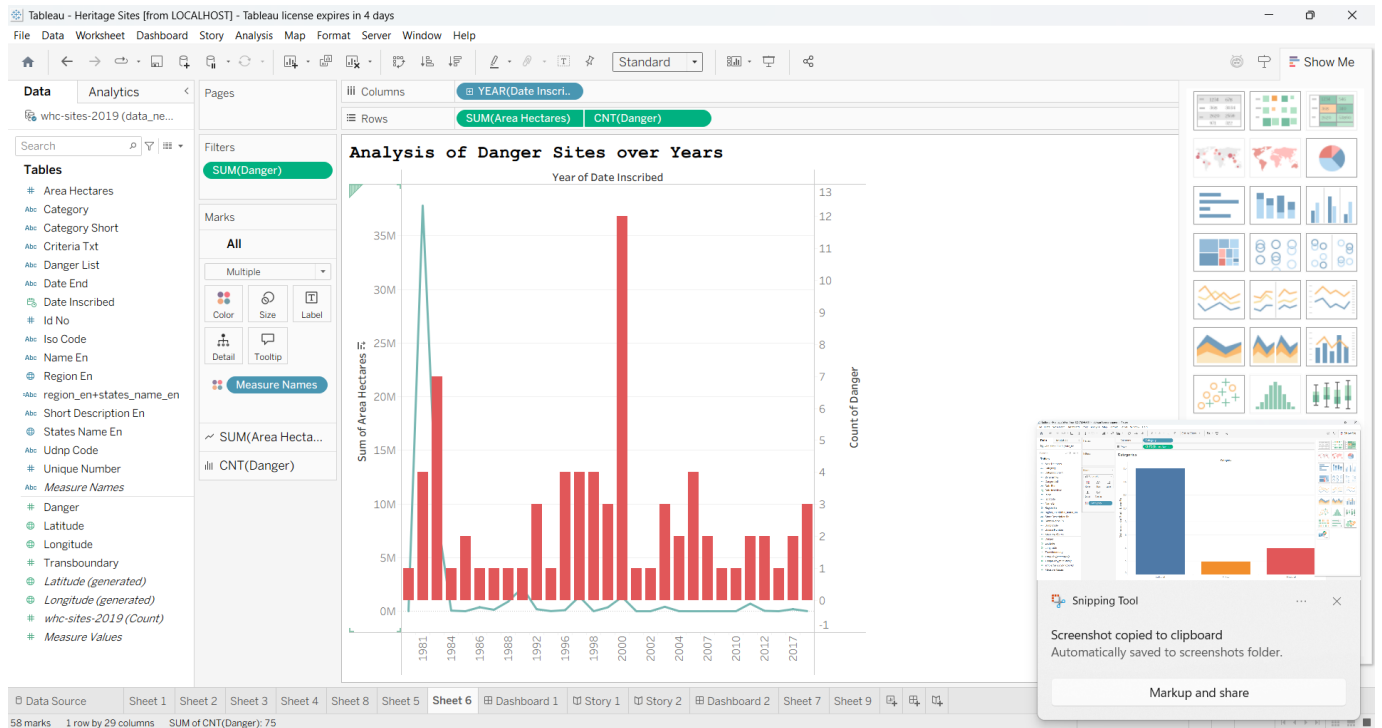
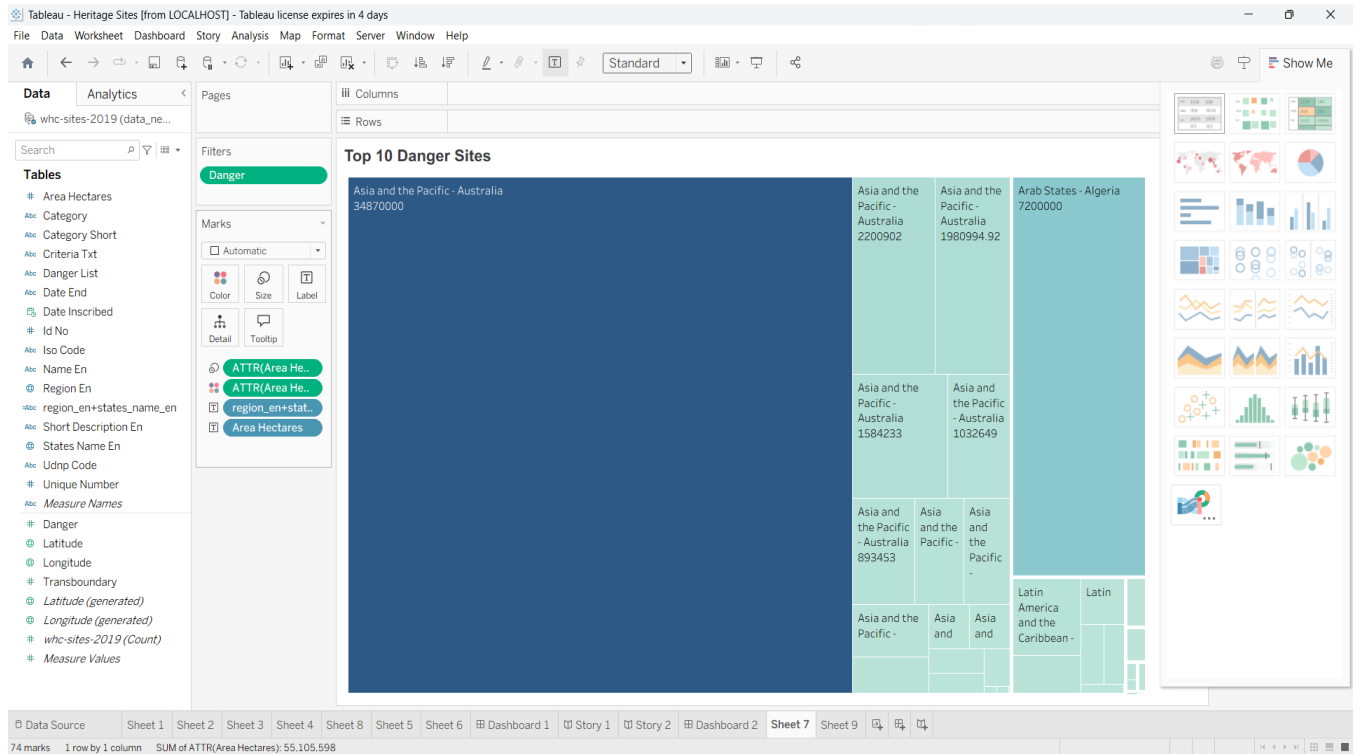
7. VISUAL OUTPUTS

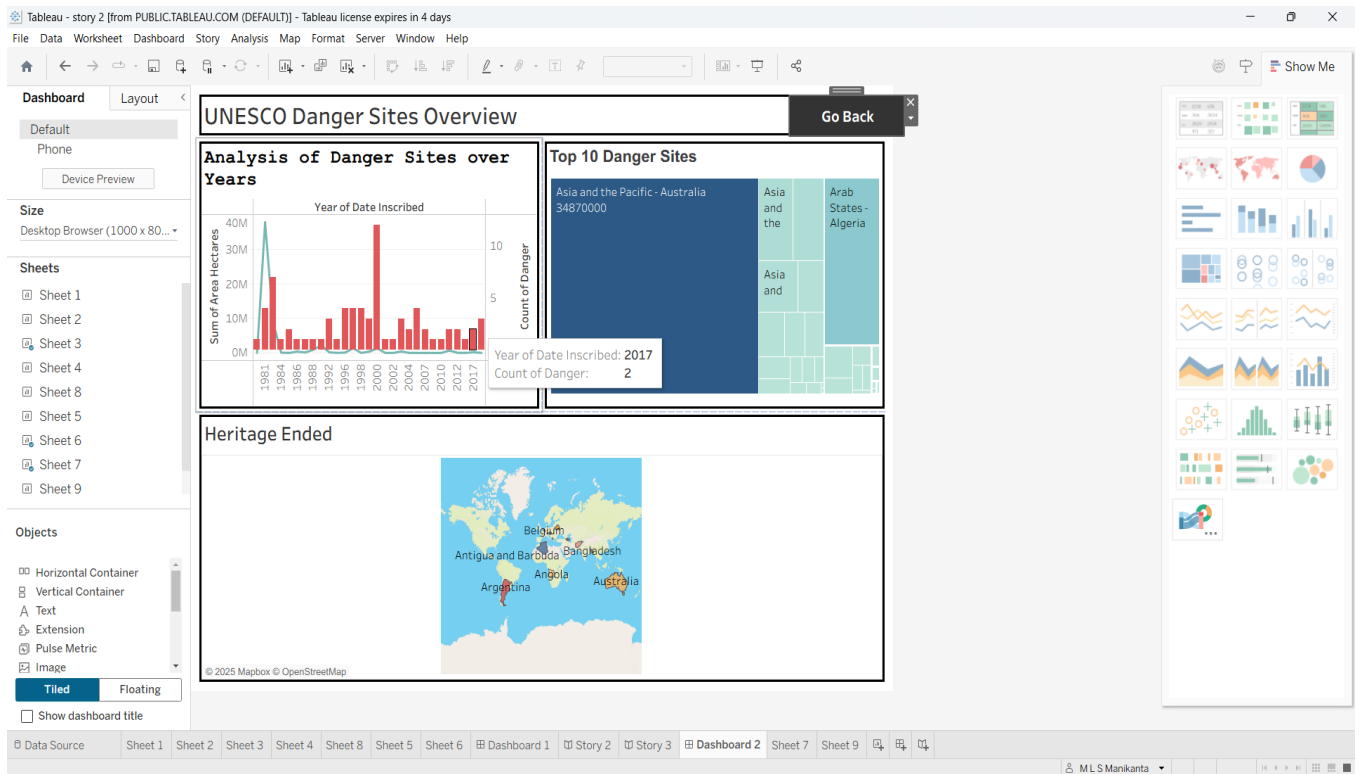
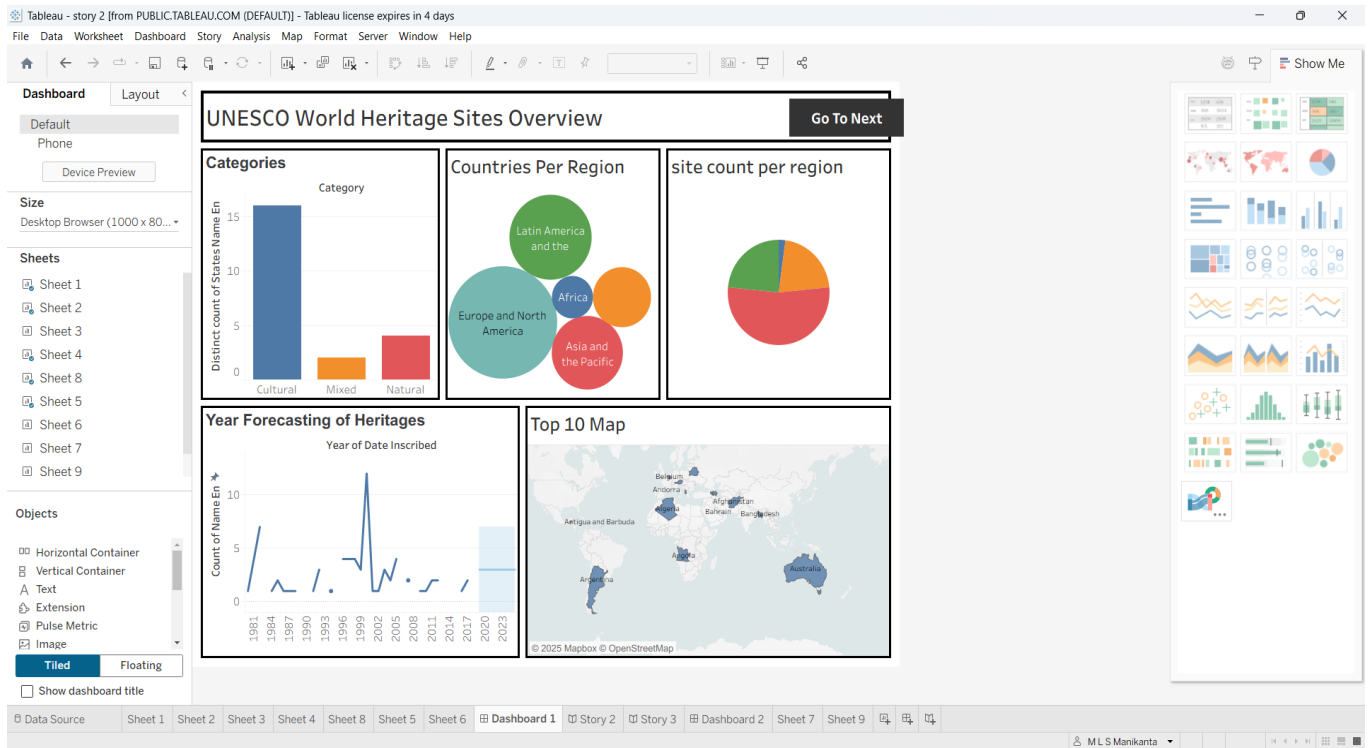
7.1 Output Screenshots











8. BENEFITS AND LIMITATIONS

Advantages

- Easy, intuitive access to complex global heritage data
- Enhances learning and awareness about global heritage
- Supports cultural education, research, and policy discussions

Limitations

- Limited to available public data from UNESCO
- Real-time updates are not automated
- Potential subjectivity in site categorization

9. CONCLUSION

The project successfully visualizes UNESCO heritage site data in an engaging way. Through Tableau, users can now interact with and analyze key insights such as distribution, status, and types of heritage across time and geography. This contributes to better education and awareness of cultural conservation efforts.

10. FUTURE ENHANCEMENTS

- Add comparison with tourism statistics or conservation funding
- Use predictive analysis to highlight future endangered sites
- Integrate multilingual support for broader accessibility
- Enable live API connectivity for dynamic updates

11. APPENDIX

Dataset Source:

<https://docs.google.com/presentation/d/1rnT7Oa6UM5JscRvsdBpghYe8odM38DKC/edit?usp=drivesdk&ouid=101893586292338131859&rtpof=true&sd=true>

Dashboard 1 Link:

https://public.tableau.com/app/profile/m.l.s.manikanta/viz/Dashboard1_17516217482610/Dashboard1?publish=yes

Dashboard 1 Link:

https://public.tableau.com/app/profile/m.l.s.manikanta/viz/Dashboard2_17516217808860/Dashboard2?publish=yes

Storyboard 1 Link:

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Storyboard 2 Link:

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