The Hidden Cost of the American Dream: A Deep Dive into Childcare Economics

DSC 640 - Data Presentation & Visualization

Milestone 2: Medium Mock-ups and Narratives

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1. Interactive Data Dashboard

Mock-up Description

The interactive dashboard will be built using Python Plotly/Dash and will consist of three main components:

- 1. Geographic Cost Map
- 2. Interactive choropleth map showing childcare costs across states
- 3. Hover functionality to display detailed state statistics
- 4. Color gradient indicating cost intensity
- 5. Toggle between urban and rural views
- 6. Time Series Analysis
- 7. Interactive line chart showing cost trends (2015-2023)
- 8. Multiple state selection capability
- 9. Adjustable time range

10. Cost increase percentage calculator

11. Urban-Rural Comparison

- 12. Side-by-side bar charts comparing urban and rural costs
- 13. Sortable by cost difference or alphabetically
- 14. Percentage difference calculator
- 15. State-specific detailed breakdowns

Target Audience & Plan

Primary Audience: Policymakers and government officials - Dashboard designed for data-driven decision making - Emphasis on clear data visualization with detailed tooltips - Export functionality for reports and presentations - Mobile-responsive design for on-the-go access

2. Social Media Video Series

Storyboard Outline

Video 1: "The Childcare Crisis in 60 Seconds" 1. Opening shot: Animated title with striking statistic 2. Map visualization showing cost spread across states 3. Calculator showing monthly childcare cost vs. median income 4. Comparison with other major expenses (mortgage, college) 5. Call to action with policy implications

Video 2: "Urban vs Rural: The Childcare Divide" 1. Split-screen comparison of urban/rural costs 2. Animated graphs showing cost differences 3. Real family examples and scenarios 4. Solutions and community initiatives 5. Social media sharing prompts

Video 3: "The Rising Cost of Care" 1. Time-lapse of cost increases (2015-2023) 2. Inflation comparison 3. Impact on family budgets 4. Future projections 5. Policy recommendation summary

Target Audience & Plan

Primary Audience: Young parents and digital-native policymakers - Short, engaging format optimized for TikTok/Instagram - Data visualization with emotional storytelling - Clear call-to-action in each video - Shareable infographic summaries

3. Infographic Series

Design Concepts

Infographic 1: "State of Childcare in America" - Central map showing stateby-state comparison - Key statistics in eye-catching bubbles - Cost breakdown by age group - Policy success stories - QR code linking to interactive dashboard

Infographic 2: "The Urban-Rural Childcare Divide" - Split design comparing urban and rural areas - Cost comparison charts - Accessibility metrics - Transportation factors - Community impact stories

Infographic 3: "The Cost Crisis Timeline" - Historical trend visualization - Major policy changes marked - Cost increase milestones - Future projections - Solution roadmap

Target Audience & Plan

Primary Audience: Community stakeholders and general public - Clean, professional design with consistent branding - Emphasis on key statistics and takeaways - Optimized for both digital sharing and print - Clear source citations and methodology notes

Implementation Notes

- 1. Technical Requirements
- 2. Python (Plotly, Dash) for interactive dashboard

- 3. Adobe Creative Suite for infographics
- 4. Video editing software for social media content
- 5. Mobile-first testing approach
- 6. Data Integration
- 7. National Database of Childcare Prices as primary source
- 8. Census data for demographic context
- 9. Local economic indicators
- 10. Policy database integration
- 11. Distribution Strategy
- 12. Dashboard hosted on secure server
- 13. Social media content optimized for each platform
- 14. Infographics in both digital and print formats
- 15. Cross-platform promotion plan

Next Steps

- 1. Begin dashboard development with Plotly/Dash
- 2. Create detailed storyboards for video series
- 3. Design initial infographic templates
- 4. Develop content calendar for release
- 5. Plan user testing and feedback collection

Generated Visualizations

Interactive Dashboard Mock-ups

The following visualizations demonstrate the planned components of our interactive dashboard:

Social Media Video Storyboard Visuals

Sample frames from our planned social media video series:

Social Media Visual 1 Social Media Visual 2

Infographic Series Mock-ups

Initial designs for our infographic series:

Infographic 1 Infographic 2