**IDEATION PHASE**

**Brainstorm & Idea Prioritization**

# Brainstorm & Idea Prioritization

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| Date | Team ID | Project Name | Maximum Marks |
| 16-06-2025 | LTVIP2025TMID48235 | The Toy Manufacturers' Data Exploration and Visualization Project | 4 Marks |

**Objective:**

Brainstorming helps the team work collaboratively to generate creative and meaningful ideas. It allows all members to explore various angles and select the most useful and feasible ones. For this project, the aim is to understand how Tableau can be used to analyze toy manufacturing industry data to uncover market trends, consumer preferences, and production patterns.

**Step 1: Team Collaboration & Problem Identification**

Our team of 4 members met to discuss how we can make sense of toy industry data using Tableau. We focused on creating interactive, insightful dashboards that can help manufacturers and stakeholders make informed decisions.

**Real-World Problems Identified:**

* Manufacturers struggle to identify seasonal trends and consumer preferences.
* Regional differences in toy popularity are not visually tracked.
* Decision-makers lack data-driven tools to optimize production and inventory.
* Consumer preferences by demographics (age, gender, location) are not analyzed well.
* The toy industry's data is underutilized due to lack of visualization.

**Selected Problem Statement:**

"Toy manufacturers and marketers lack accessible, data-driven tools to understand market trends, seasonal patterns, and consumer preferences across demographics and regions."

**Step 2: Brainstorming, Idea Listing & Grouping**

**Raw Ideas from the Team:**

* Seasonal sales trend analysis using historical data
* Demographic preference dashboards (age, gender, region)
* Sales heatmaps by region and category
* Region-based comparison of toy popularity
* Trend lines for top-selling toy types
* Interactive dashboards with filters (category, region, season)
* Product performance comparison by region
* Consumer preference evolution over years
* Visualization of holiday vs non-holiday sales
* Marketing recommendation engine using Tableau story points

**Grouped Ideas:**

* **Sales Trend & Seasonality Analysis**
* **Demographic Insights & Consumer Behavior**
* **Regional Sales Comparison**
* **Interactive Visualization & Storytelling**

**Step 3: Idea Prioritization**

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| --- | --- | --- | --- |
| **Idea** | **Impact** | **Feasibility** | **Priority** |
| Seasonal sales trend analysis | High | High | High |
| Consumer demographic preference | High | Medium | High |
| Regional performance comparison | High | High | High |
| Interactive Tableau dashboards | High | High | High |
| Historical trend lines | Medium | High | Medium |

**Final Selected Features**

**1. Seasonal Sales Trend Dashboard**

**What it does:**  
Displays toy sales across seasons and holidays, revealing demand patterns.

**How it works:**  
Line and bar charts using Tableau with date filters for different years.

**Why it matters:**  
Helps manufacturers plan production and inventory for peak seasons.

**2. Demographic Consumer Preferences**

**What it does:**  
Visualizes preferences across age, gender, and location.

**How it works:**  
Pie charts, bar graphs, and filters based on demographic data in Tableau.

**Why it matters:**  
Enables targeted product development and marketing.

**3. Regional Performance Comparison**

**What it does:**  
Compares toy performance in different geographic regions.

**How it works:**  
Heatmaps and choropleth maps showing sales volume by region.

**Why it matters:**  
Helps tailor distribution and promotion strategies by location.

**4. Interactive Dashboards & Stories**

**What it does:**  
Combines all insights into a user-friendly, interactive Tableau story.

**How it works:**  
Multiple story points with filters for toy type, season, region, and consumer group.

**Why it matters:**  
Makes the data easy to navigate for both analysts and decision-makers.

**5. Publishing & Web Integration**

**What it does:**  
Publishes dashboards for access via a public web portal.

**How it works:**  
Dashboards embedded on a simple website using Flask or Google Sites.

**Why it matters:**  
Enables easy access for stakeholders, improving transparency and strategic planning.