

Business Requirements Document (BRD)

Project Title: Superstore Sales Data Analysis with Tableau

1. INTRODUCTION:

The Superstore Sales Data Analysis project aims to leverage the provided dataset to gain insights into sales trends, product performance, geographical patterns, and consumer behavior. By utilizing Tableau, this project will facilitate advanced data visualizations and analytics, enabling better decision-making and strategy formulation.

2. BUSINESS OBJECTIVES:

- Gain actionable insights from sales data to enhance Marketing and Sales strategies.
- Identify top-performing products, categories, and regions to optimize inventory and distribution.
- Analyze customer segmentation to tailor marketing campaigns and improve customer retention.
- Perform data transformations and manipulations to support effective decision-making.
- Provide a foundation for learning and experimentation with Python libraries (Matplotlib, Seaborn, Numpy) for data analysis.

3. SCOPE:

The project will cover the following aspects:

- Data cleaning and preprocessing to ensure accuracy and consistency.
- Exploratory data analysis to understand the overall trends and patterns.
- Creation of interactive and informative visualizations using Tableau.
- In-depth analysis of product categories, geographical regions, and consumer segments.
- Documentation of findings and actionable recommendations for improving business strategies.

4. STAKEHOLDERS:

- Data Analysts: Responsible for data exploration, cleaning, and analysis.
- Marketing Team: Will benefit from insights for refining marketing strategies.
- Sales Team: Will utilize findings to optimize sales efforts and product offerings.
- Management: Will use insights to make informed decisions for business growth.

5. DATA SOURCES:

The project will utilize the provided Superstore sales dataset containing information about product sales, categories, geography, and consumer behavior.

6. FUNCTIONAL REQUIREMENTS:

- Import and preprocess the Superstore dataset using Python libraries (Numpy, Pandas).
- Perform exploratory data analysis to uncover trends, patterns, and outliers.
- Use Matplotlib and Seaborn for initial data visualizations.
- Develop a Tableau dashboard integrating multiple visualizations:
 - Sales trends over time, by product, category, and region.
 - Geographical distribution of sales.
 - Customer segmentation analysis.
 - Profitability analysis.
- Implement interactive filters and parameters to allow users to customize views.
- Document data transformation processes and analysis steps.
- Provide insights and recommendations based on the analysis.

7. NON-FUNCTIONAL REQUIREMENTS:

- User-friendly Tableau dashboard with intuitive navigation.
- Responsive design to ensure usability on different devices.
- Data security and privacy measures to protect sensitive information.
- Efficient performance for seamless data exploration and visualization.

8. PROJECT DELIVERABLES:

- Cleaned and preprocessed dataset.
- Exploratory data analysis report.
- Tableau dashboard with interactive visualizations.
- Documentation of data transformation processes and Tableau analysis.

9. TIMELINE:

The project is estimated to be completed within [X] weeks, including the following key milestones:

- Data preprocessing and exploratory analysis: [Week X - Week Y]
- Matplotlib and Seaborn visualizations: [Week Y - Week Z]

- Tableau dashboard development: [Week Z - Week W]
- Documentation and finalization: [Week W - Week V]

10. BUDGET:

The project budget includes resources for data analysts, Tableau licenses, and any additional tools or training required.

11. RISKS AND MITIGATION:

- Data inconsistencies or missing values could impact the accuracy of insights. Mitigation: Implement thorough data validation and cleaning processes.
- Lack of Tableau expertise among team members. Mitigation: Provide training or seek external consultation if necessary.
- Technical issues with Tableau dashboard performance. Mitigation: Perform regular testing and optimization.

12. APPROVAL:

This Business Requirements Document is to be reviewed and approved by [Name/Role] before proceeding with the project.

By implementing this Superstore Sales Data Analysis project using Tableau, the organization aims to enhance its decision-making processes, refine marketing and sales strategies, and ultimately drive business growth.