Product Requirements & Specification Document

Project Name

Retail360 - Store Performance Visualizer

Description

Design and implement a Tableau dashboard to compare sales, foot traffic, and conversion rates across multiple retail stores. The dashboard will feature heatmaps and trend lines to provide actionable business insights.

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1. Objectives

- Enable stakeholders to compare key performance metrics across stores.
- Visualize trends and patterns for sales, foot traffic, and conversion rates.
- Identify high and low-performing stores using heatmaps.
- Support data-driven decision-making for business and entrepreneurship initiatives.

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2. Stakeholders

Role	Responsibility
Business Owner	Define KPIs, review insights
Data Analyst	Data preparation, validation
Developer	Tableau dashboard development
Store Manager	End-user, feedback provider

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3. Functional Requirements

ID	Requirement
FR1	Import/store-level data: sales, foot traffic, conversion rates, store info
FR2	Display interactive heatmap comparing stores by selected metric
FR3	Show trend lines for sales, foot traffic, and conversion rates over time
FR4	Allow filtering by date range, region, and store type
FR5	Enable drill-down to individual store performance details
FR6	Export dashboard views as PDF or image

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4. Non-Functional Requirements

ID	Requirement
NFR1	Dashboard loads within 5 seconds
NFR2	Responsive design for desktop and tablet
NFR3	Data refreshes daily (automated or manual)
NFR4	Adheres to company data privacy standards

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5. Data Specifications

Data Field	Type	Description
Store ID	String	Unique identifier
Store Name	String	Name of the store
Region	String	Geographic region
Date	Date	Transaction date
Sales	Decimal	Total sales amount
Foot Traffic	Integer	Number of visitors
Conversion Rate	Decimal	Sales/Foot Traffic (%)
Store Type	String	e.g., Flagship, Outlet, Mall

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6. Dashboard Specifications

Component	Description
Heatmap	Color-coded by selected metric (sales, traffic, conversion); store as unit
Trend Lines	Line charts for each metric over time; selectable by store/region
Filters	Date range, region, store type
Drill-down	Click on store to view detailed metrics and trends
Export Options	PDF, image export of current dashboard view

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7. User Stories

- **As a business owner**, I want to compare store performance so I can allocate resources effectively.
- **As a data analyst**, I want to visualize trends to identify opportunities and risks.
- **As a store manager**, I want to see my store's performance relative to others.

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8. Success Metrics

Metric	Target
Dashboard load time	≤ 5 seconds
User adoption (first 3 months)	≥ 80% of target users
Data accuracy	≥ 99%
Export feature usage	≥ 50% of sessions

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9. Technology Stack

Component	Technology
Dashboard	Tableau
Data Source	CSV, Excel, or DB
Hosting	Tableau Server/Cloud

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10. Implementation Plan

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1. Data Preparation: Clean and structure data as per specifications.
2. Tableau Development: Build dashboard components (heatmap, trend lines, filter
3. User Testing: Collect feedback from stakeholders.
4. Deployment: Publish to Tableau Server/Cloud.
5. Training & Documentation: Provide user guide and training session.
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11. Risks & Mitigations

Risk	Mitigation
Incomplete data	Validate and clean data pre-import
Performance issues	Optimize data extracts, limit visuals
User adoption	Provide training and support

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12. Out of Scope

- Real-time data streaming
- Mobile phone optimization
- Integration with external BI tools

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13. Appendix

- Sample data schema
- Tableau dashboard wireframe (to be provided separately)
