Business Requirements Document (BRD)

Project: Blinkit Sales Performance Analysis – Power BI Dashboard

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1. Project Overview / Executive Summary

The Blinkit Sales Analytics Dashboard aims to provide a comprehensive analysis of Blinkit's sales performance, customer satisfaction, and inventory distribution.
Using Power BI, the project centralizes key KPIs and visual insights to help business stakeholders make data-driven decisions related to item performance, outlet efficiency, and customer ratings.

This dashboard enables business teams to identify high-performing categories, optimize inventory, and assess the impact of outlet characteristics (size, type, location, establishment year) on overall sales.

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2. Business Objectives

The main goals of the project include:

- Analyze total sales contribution across item types and fat content.
- Understand customer satisfaction using average ratings.
- Evaluate outlet performance based on size, location, and type.
- Identify trends related to outlet establishment year.
- Provide a centralized dashboard for decision-making and operational improvement.

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3. Project Scope

In-Scope:

- Sales data of Blinkit stores.
- Item-level data including type, fat content, visibility, and ratings.
- Outlet-level data including type, size, location, and establishment year.
- KPI calculation: Total Sales, Average Sales, Number of Items, Average Rating.
- Visual dashboards in Power BI.

Out-of-Scope:

- Demand forecasting.
- Real-time data integration.
- Supplier/warehouse performance analysis.
- Delivery time and order-level satisfaction metrics.

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4. Stakeholders

- **Business Managers** – to monitor overall performance.
- **Sales & Merchandising Team** – to evaluate product and category sales.
- **Operations Team** – to analyze outlet-level contributions.
- **Data Analysts** – for insights, reporting, and trend analysis.

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5. KPI Requirements

1. **Total Sales** – Total revenue generated across all items.
2. **Average Sales** – Average revenue per item.
3. **Number of Items** – Total number of unique items sold.
4. **Average Rating** – Average customer rating for sold items.

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6. Functional Requirements

Dashboard must allow analysis of:

- Sales segmentation by item type and fat content.
- Outlet performance based on tier, size, and location.
- Year-wise sales trend based on outlet establishment year.
- Product performance across categories.
- KPI visibility on top-level indicators.

Dashboard must include:

- Slicer filters:
  - **Outlet Location Type**
  - **Outlet Size**
  - **Item Type**

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7. Non-Functional Requirements

- Dashboard must load within **5–7 seconds**.
- Data refresh: **Manual or Scheduled (Daily/Weekly)**.
- Design must follow consistent color theme (Blinkit brand color).
- All charts must support user interaction (cross-filtering & highlighting).

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8. Data Requirements

Data Tables Used:

- **Sales Data:**
  - Item ID
  - Item Type
  - Fat Content
  - Item Visibility
  - Item MRP
  - Sales
  - Rating
- **Outlet Data:**
  - Outlet ID
  - Outlet Establishment Year
  - Outlet Size
  - Outlet Location Type
  - Outlet Type

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9. Chart Requirements / Visualization Requirements

1. Total Sales by Fat Content (Donut Chart)

Objective: Analyze impact of fat content (Low Fat, Regular) on total sales.
Additional KPIs: Avg Sales, No. of Items, Avg Rating.

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2. Total Sales by Item Type (Bar Chart)

Objective: Identify best-performing item categories.
Additional KPIs: Avg Sales, No. of Items, Avg Rating.

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3. Fat Content by Outlet for Total Sales (Stacked Column Chart)

Objective: Compare sales across outlets segmented by fat content.

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4. Total Sales by Outlet Establishment (Line Chart)

Objective: Analyze how outlet age influences performance.

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5. Sales by Outlet Size (Donut Chart / Pie Chart)

Objective: Analyze correlation between outlet size (Small/Medium/High) and total sales.

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6. Sales by Outlet Location (Funnel Chart)

Objective: Assess performance across Tier 1, Tier 2, Tier 3 locations.

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7. All Metrics by Outlet Type (Matrix/KPI Card)

Objective: Show Total Sales, Avg Sales, No. of Items, Avg Rating by outlet type (Grocery Store, Supermarket Type1/Type2/Type3).

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10. DAX Requirements

Base Measures:

Total Sales = SUM(Sales[Item_Outlet_Sales])

Average Sales = AVERAGE(Sales[Item_Outlet_Sales])

Number of Items = DISTINCTCOUNT(Sales[Item_Identifier])

Average Rating = AVERAGE(Sales[Rating])

Additional Measures (if needed):

Total Visibility = SUM(Sales[Item_Visibility])
Sales Trend = CALCULATE([Total Sales], ALLEXCEPT(Outlet, Outlet[Establishment Year]))

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11. Assumptions

- Data provided is accurate and complete.
- Outlet types and item types are standardized.
- No missing values in critical fields (Sales, Item Type, Outlet Type).
- Ratings are numerical and consistent across datasets.

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12. Dependencies

- Power BI Desktop
- Clean dataset (CSV/Excel)
- Required DAX calculations
- Business inputs for validation

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13. Risks & Mitigation

Risk	Impact	Mitigation
Missing data fields	Incorrect KPIs	Apply data cleaning rules
Inconsistent categories	Visualization errors	Standardize item/outlet types
Slow dashboard	Poor user experience	Optimize DAX & reduce visuals

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14. Deliverables

- Power BI Dashboard (.pbix file)
- Data Model View
- BRD Document
- Final Insights Summary
- Project Presentation (optional)

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15. Insights Generated (Example Insights)

- **Regular fat items** contribute highest to total sales (~$732K).
- **Snack Foods & Fruits/Vegetables** are top-selling categories (~$170K each).
- **Tier 3 outlets** generate the highest revenue among all locations.
- **Large outlets** contribute nearly half of total sales.
- Sales peak for outlets established around **2015–2017**, then slightly decrease.
