Blinkit Power BI Dashboard Project

Project Statement

Context:

Blinkit, a quick-commerce platform, enables users to order groceries and essentials for delivery in minutes. For businesses operating at this scale, effective data management and visualization are crucial for monitoring performance, identifying trends, and optimizing operations.

Challenge:

Managing and analyzing a large volume of data related to orders, inventory, delivery times, customer feedback, and operational metrics can be overwhelming. Without a centralized dashboard, decision-making becomes inefficient, impacting overall performance and customer satisfaction.

Goals:

- 1. Develop a comprehensive dashboard to consolidate and visualize key performance indicators (KPIs) such as:
 - Number of daily/weekly/monthly orders.
 - Delivery time trends and bottlenecks.
 - Inventory status and restocking requirements.
 - Customer satisfaction ratings and feedback analysis.
 - o Revenue and profit margins.
- 2. Enable real-time updates and dynamic filtering for interactive data exploration.
- 3. Provide actionable insights to improve operational efficiency and customer experience.

Target Audience:

- Business stakeholders looking for high-level summaries of performance.
- Operations managers requiring granular data for process optimization.
- Data analysts and engineers exploring the backend data for advanced insights.

Key Features:

- 1. Intuitive charts and graphs (e.g., bar charts, line graphs, and pie charts) for quick understanding.
- 2. Drill-down capabilities for detailed data exploration.
- 3. Filters to segment data by time periods, regions, or product categories.

4. Export options to share reports with team members.

Expected Outcomes:

- A user-friendly dashboard that empowers stakeholders to make data-driven decisions.
- Increased operational efficiency through enhanced data visibility.
- A template or framework that can be adapted to similar quick-commerce businesses.

Why This Project?

The Blinkit Dashboard Project is an excellent opportunity to learn about:

- Advanced data visualization techniques using Power BI.
- Integrating real-world datasets for meaningful analysis.
- Solving business challenges through technology and analytics.

Project Components

Overview Page

1. Total Deliveries Over Time (Line Chart)

Data Shown:

• Displays the trend of total deliveries made over a specific period (daily, weekly, or monthly).

Business Implication:

- This chart helps identify peak and off-peak periods, enabling businesses to allocate resources effectively during high-demand times and optimize costs during slow periods.
- Businesses can use this data to plan marketing campaigns and promotions around high-traffic days.

2. Delivery Completion Rate (Donut Chart)

Data Shown:

• The proportion of successful deliveries versus failed or delayed ones.

Business Implication:

- A high completion rate indicates operational efficiency, while a lower rate suggests issues with delivery logistics.
- This insight helps managers address bottlenecks like delayed dispatch or incorrect delivery addresses.

3. Revenue Contribution by Regions (Bar Chart)

Data Shown:

Revenue split across different geographical areas or cities.

Business Implication:

- Identifying top-performing regions allows businesses to focus marketing and expansion efforts in areas with high demand.
- Underperforming regions can be examined for operational or logistical issues.

Customer Page

1. Customer Retention Rate (Gauge Chart)

Data Shown:

• The percentage of customers who place repeat orders within a defined time frame.

Business Implication:

- Helps assess the effectiveness of loyalty programs and customer satisfaction levels.
- Businesses can use this to design better customer engagement strategies and improve retention.

2. Top Customers by Revenue (Table)

Data Shown:

A ranked list of customers who generate the highest revenue.

Business Implication:

- Identifying valuable customers helps prioritize them for special offers, personalized services, or loyalty rewards.
- This data can also be used to target similar demographics for acquiring new customers.

3. Customer Feedback Trends (Word Cloud or Sentiment Analysis)

Data Shown:

• Common keywords or phrases from customer reviews, categorized as positive, neutral, or negative sentiment.

Business Implication:

- Allows businesses to understand customer perceptions and pinpoint areas for improvement.
- Positive feedback trends can be used in marketing materials, while negative trends indicate areas needing immediate action.

Marketing Page

1. Campaign ROI Analysis (Bar or Funnel Chart)

Data Shown:

ROI of various marketing campaigns, comparing investment and resulting revenue.

Business Implication:

- Shows which campaigns are most effective, helping to allocate future budgets wisely.
- Underperforming campaigns can be analyzed for strategy improvement.

2. Customer Acquisition by Channel (Pie Chart)

Data Shown:

 Percentage of new customers acquired through different channels (social media, email, referral, etc.).

Business Implication:

- Highlights the most effective channels for customer acquisition.
- Businesses can use this insight to focus on high-performing channels and improve less effective ones.

3. Marketing Spend by Region (Stacked Bar Chart)

Data Shown:

Marketing budget allocation across different regions.

Business Implication:

- Helps determine the effectiveness of regional marketing efforts.
- Enables adjustments to regional strategies based on return on investment (ROI).

Inventory Page

1. Stock Levels by Product Category (Bar Chart)

Data Shown:

• Current stock availability across different product categories.

Business Implication:

- Helps prevent stockouts or overstock situations, optimizing storage costs and meeting customer demand.
- Businesses can identify fast-moving and slow-moving products to adjust procurement plans.

2. Inventory Turnover Ratio (KPI Card)

Data Shown:

Measures how efficiently inventory is being sold and replaced over time.

Business Implication:

- A high turnover ratio indicates efficient inventory management, while a low ratio suggests excess stock or slow-moving items.
- Insights can drive strategies to improve stock replenishment cycles.

3. Low Stock Alerts (Heatmap or Table)

Data Shown:

• Identifies products that are nearing stock depletion levels.

Business Implication:

- Ensures timely reordering to avoid stockouts and lost sales opportunities.
- Helps prioritize restocking based on customer demand and profitability.

Sales Overview Page

1. Revenue by Product Category (Column Chart)

Data Shown:

• Total revenue generated from each product category over a defined period.

Business Implication:

• Identifies the most and least profitable product categories.

• Data can be used to optimize product pricing and promotion strategies.

2. Monthly Sales Trends (Line Chart)

Data Shown:

• Tracks sales performance over time, highlighting growth or decline in revenue.

Business Implication:

- Enables businesses to set realistic sales targets and adjust strategies to achieve them.
- Seasonal trends can guide inventory planning and marketing efforts.

3. Average Order Value (KPI Card)

Data Shown:

The average revenue generated per order.

Business Implication:

- A higher average order value (AOV) suggests customers are purchasing more per transaction.
- Businesses can use this insight to create upselling and cross-selling opportunities.