

# Supertails – Data Analyst Assignment Submission

## Executive Summary

This analysis was conducted to evaluate the overall business performance of Supertails using the datasets provided as part of the assignment. The primary objective was to understand demand, operational efficiency, customer experience, and engagement with value-added services. Given that the data was already aggregated at a KPI level, the focus of the analysis was on building a clear executive dashboard supported by well-defined metrics and actionable business insights.

## Key Performance Indicators (KPIs)

- **Total Orders:** Represents the total number of completed customer orders. This metric serves as a direct indicator of demand and overall platform activity.
- **GMV (Gross Merchandise Value):** The total monetary value of all orders placed during the period. GMV reflects the revenue scale and overall business throughput.
- **AOV (Average Order Value):** Calculated as GMV divided by Total Orders. AOV provides insight into customer purchasing behavior and average basket size.
- **On-time Delivery %:** Measures the proportion of orders delivered within the promised delivery timeline. This KPI is critical for assessing logistics reliability and customer experience.
- **RTO % (Return to Origin):** Indicates the percentage of orders that were returned before successful delivery. A high RTO rate often points to operational inefficiencies or fulfillment issues.
- **Repeat Purchase %:** Reflects the proportion of customers who have placed more than one order. This metric is a strong indicator of customer retention and long-term value.
- **Average CSAT:** Represents the average customer satisfaction score obtained from support interactions, providing a direct measure of service quality.
- **Average Resolution Time:** Measures the average time taken to resolve customer support tickets. Lower resolution times generally correlate with higher customer satisfaction.
- **Vet Adoption %:** Indicates the percentage of users who engaged with veterinary consultation services, highlighting adoption of value-added offerings.
- **WhatsApp O2C Connect %:** Measures the success rate of customer connections via WhatsApp, reflecting the effectiveness of communication and outreach channels.

## Business Insights

- Demand appears healthy, as reflected by strong Total Orders and GMV, indicating consistent customer activity on the platform.
- A stable AOV suggests predictable customer spending patterns and balanced pricing strategies.
- The RTO % highlights opportunities to improve operational efficiency, particularly in order fulfillment and last-mile delivery processes.
- On-time Delivery % provides insight into the reliability of logistics operations and directly impacts customer satisfaction.
- Customer support performance, as measured by CSAT and Resolution Time, suggests areas where process improvements or automation could enhance service quality.
- WhatsApp O2C Connect % demonstrates the effectiveness of digital communication channels in engaging customers and resolving queries.
- Vet Adoption % reflects customer interest in value-added services and presents an opportunity to further drive engagement and differentiation.

## Methodology & Tools

- Python was used for data cleaning, validation, and exploratory data analysis to ensure data quality and consistency prior to KPI computation.
- PostgreSQL was leveraged to compute KPIs using SQL views, enabling reusable, transparent, and auditable metric definitions.
- Power BI was used to build an executive-level dashboard that presents KPIs in a concise and visually intuitive format.
- Given the aggregated nature of the dataset, a KPI-focused dashboard approach was selected to avoid misleading visual breakdowns and maintain analytical integrity.