## **Purpose**

This executive brief is going to look into the findings and analysis that was interpreted from our team's individual use of the e-commerce dataset provided through BigQuery. This will outline key findings and strategic recommendations to improve operations and efficiency of shipping, customer retention, and marketing for profitable categories.

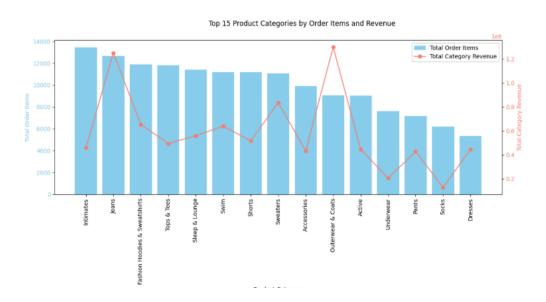
### **Background**

BigQuery and SQL code were used to identify several trends and challenges impacting efficiency and profitability within the business:

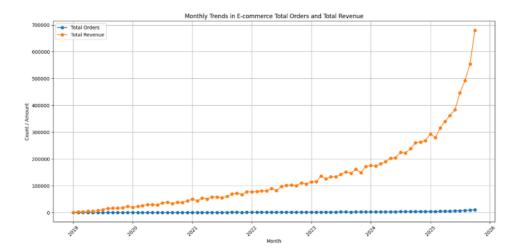
- Category performance variation
- Increasing trend in orders and value
- Customer retention

# **Key Findings**

 Popularity and profitability vary significantly across product categories, indicating different market dynamics for each.



2. The e-commerce business shows a general upward trend in both order volume and revenue over the observed period, with some monthly fluctuations.



3. Returning users have significantly higher purchase frequency than new users, highlighting the importance of retaining existing customers for sustained growth

### **Strategic Recommendations**

- Develop and implement programs or initiatives aimed at encouraging repeat purchases from new customers and enhancing the loyalty of returning users. This could include loyalty programs, personalized offers, or improved customer service.
- Given the upward trend in orders and value over time, continue to monitor these trends
  and optimize inventory levels and marketing efforts to capitalize on growth period,
  especially leading up to holiday.
- 3. Launch a loyalty rewards program that offers exclusive discounts, early access to new products, or print for repeat purchases to incentivize returning customers. Use past purchase data to recommend products and send targeting offers to customers.

#### **Expected Outcomes**

• Improved customer retention and repeat purchases

- Increase repeat purchase rate by 15-20% over the next two quarters through loyalty initiatives and targeted offers
- Optimized inventory and sales performance
  - Achieve better stock balance by using trend monitoring to forecast demand during high-traffic periods (e.g., holiday seasons)
- Actionable insights for continuous growth
  - Use ongoing trend analysis to refine marketing campaigns and inventory planning, ensuring sustained profitability and scalability

#### Conclusion

Through data-driven insights drawn through BigQuery and SQL, this analysis highlights key opportunities for the e-commerce business to enhance customer loyalty, optimize inventory management, and strengthen marketing effectiveness. Implementing the strategies recommended above, such as loyalty programs, targeting promotions, and demand forecasting, we will be able to improve operational efficiency and position the business for sustainable growth. Continuous monitoring of performance trends and customer behavior will ensure the company remains adaptable, competitive, and responsive to the market and its changes.