# **Business Insights**

Which KPIs would you use to measure the performance of our app?

1. Sales Metrics:

- Order Rejection Rate: Calculate the percentage of rejected orders out of total orders.

- Average Order Value (AOV): Calculate the average value of orders placed.

- Order Fulfillment Rate: Measure the percentage of orders shipped out of total orders.

2. User Engagement Metrics:

- Daily Active Users (DAU): Count of unique users interacting with the app on a daily basis.

- User Retention Rate: Percentage of users who continue to use the app over time.

3. Product Performance:

- Best-Selling Products: Identify products with the highest sales volume.

- Product Return Rate: Calculate the percentage of returned products out of total products sold.

Prepare a report regarding our growth between the 2 years. Please try to answer the following questions:

**Did our business grow?**

- Sales Matrix Analysis:

- Average order value increased from 27,583 in 2021 to 31,057 in 2022, reflecting a growth of 12.59% year-over-year.

- Conversion Rate:

- The conversion rate of products improved from 39% in 2021 to 47% in 2022, indicating an upward trend in customer engagement and purchase behavior.

- Order Rejection:

- The order rejection rate decreased from 61% in 2021 to 53% in 2022, highlighting an enhancement in the efficiency of order processing and fulfillment.

- Overall Business Growth:

- These metrics collectively demonstrate significant growth and improvement in business performance throughout 2022.

**Does our app perform better now?**

- Daily Active Users (DAU) Analysis:

- Daily active user count on our app exhibits fluctuation, with some days showing an increase and others a decrease.

- Overall trend indicates a higher number of increments compared to decrements, suggesting a positive impact on user engagement.

- The consistency of higher increments implies an encouraging trend in user activity and app usage.

- These observations suggest a favorable performance of our app in terms of daily user engagement.

Average order value increased from 27,583 in 2021 to 31,057 in 2022, reflecting a growth of 12.59% year-over-year

Note: We can also analyze:

- Bounce rate analysis: Evaluate the percentage of buyers who visit our app but do not make any purchases.

- Conversion tracking: Measure the number of buyers who visit and successfully make purchases on our app.

- Purchase journey analysis: Assess the purchasing time to gauge how easily buyers locate the products they desire.

**Did our user base grow?**

User Retention Rate

- Retention Analysis:

- Total unique user count increased from 10,867 in 2021 to 13,022 in 2022, indicating a growth in the user base.

- Retained Users:

- The number of retained users from 2021 to 2022 was 3,607, representing a retention rate of 33.19%.

- User Base Growth:

- These findings suggest a positive trend in user base expansion throughout 2022.

What are our top-selling products in each of the two years? Can you draw some insight from this?

Top selling product in 2021: Product ID 8219 (with total ordered quantity 2433)

Top selling product in 2022: Product ID 12547 (with total ordered quantity 2018)

Insights:

There is a significant difference in sales between the top product in 2021 and 2022. Product ID 2367 sold almost 500 more units than product ID 8444.

Products with IDs 8444 and 10235 have consistently been top sellers in both years.

It is difficult to draw any specific conclusions from just the top two products. However, it is possible that there were significant changes in customer preferences or marketing focus between 2021 and 2022.

Look for patterns in the data. For example, are there certain product categories that are growing faster than others?

Consider conducting market research to understand what is driving customer preferences.

Does the login frequency affect the number of orders made?

- Analysis indicates a positive correlation between login frequency and the number of orders made on our app.

- Users who log in between 450 to 1000 times tend to make purchases, suggesting an encouraging trend in user behavior.

- This finding suggests that increased login activity is associated with a higher likelihood of purchasing something from our app.

- Understanding this relationship can inform strategies to enhance user engagement and drive sales on our platform.

Looking at July 2021 data, what do you think is our biggest problem and how would you recommend fixing it?

Based on the July 2021 data, it appears that our biggest problem is the high order rejection rate, which was at 61%. This indicates inefficiencies in order processing and fulfillment, potentially leading to dissatisfied customers and lost revenue opportunities. To address this issue, I would recommend the following steps:

1. Identify Root Causes: Conduct a detailed analysis to identify the reasons behind the high order rejection rate. This may include issues with inventory management, product availability, payment processing, or shipping delays.

2. Streamline Order Processing: Implement measures to streamline the order processing workflow, such as optimizing inventory management systems, improving communication channels between departments, and enhancing coordination with suppliers and logistics partners.

3. Enhance Quality Control: Implement rigorous quality control measures to ensure the accuracy and completeness of orders before they are shipped to customers. This may involve conducting regular audits, training staff members, and implementing automated verification processes.

4. Improve Customer Communication: Enhance communication channels with customers to provide timely updates on order status, shipping delays, and any potential issues. This can help manage customer expectations and reduce dissatisfaction in case of order rejections or delays.

5. Monitor and Adjust: Continuously monitor key performance metrics related to order processing and fulfillment, such as order rejection rate, order fulfillment rate, and customer satisfaction scores. Adjust strategies and processes as needed to address any emerging issues and optimize performance over time.

6. Product Performance Analysis: In addition to monitoring the product return rate within our app, we also assess the introduction of new products onto our platform. We conduct benchmarking exercises to compare the performance of similar products available on different websites. This comprehensive approach allows us to evaluate not only the success of our product offerings but also their competitiveness in the broader market landscape.

By addressing the root causes of the high order rejection rate and implementing proactive measures to improve order processing and fulfillment efficiency, we can enhance customer satisfaction, increase revenue opportunities, and drive overall business growth.