

Understanding Cancellation Patterns: A Comprehensive Analysis of Factors Impacting Cancelled Orders

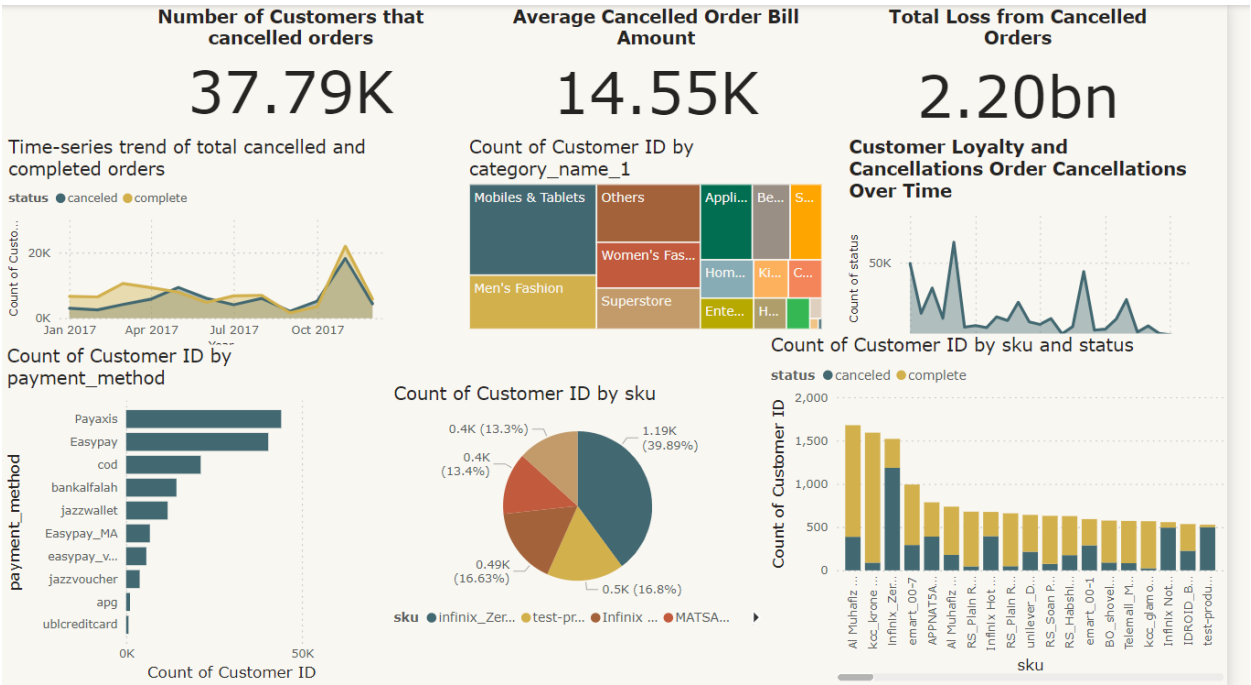
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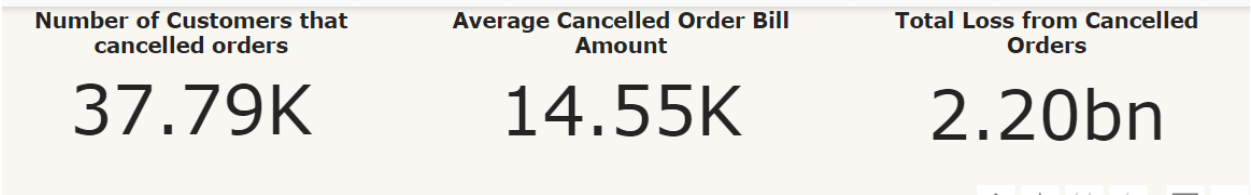
Dataset link: <https://opendata.com.pk/dataset/pakistan-largest-ecommerce-dataset>

Upon discovering a substantial number of cancelled orders and their significant financial impact of 2 billion rupees, we recognized the pressing need to delve deeper into the factors influencing these cancellations. Our focus shifted towards investigating various variables' impact, aiming to uncover insights that would guide strategic measures to reduce cancellations, improve customer experiences, and safeguard financial interests.



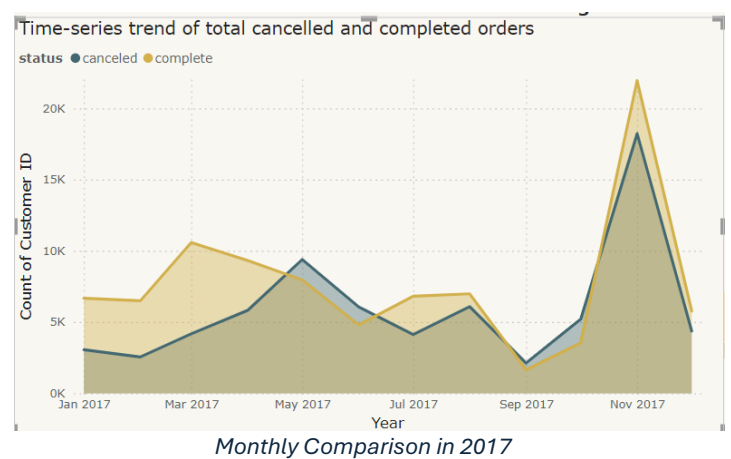
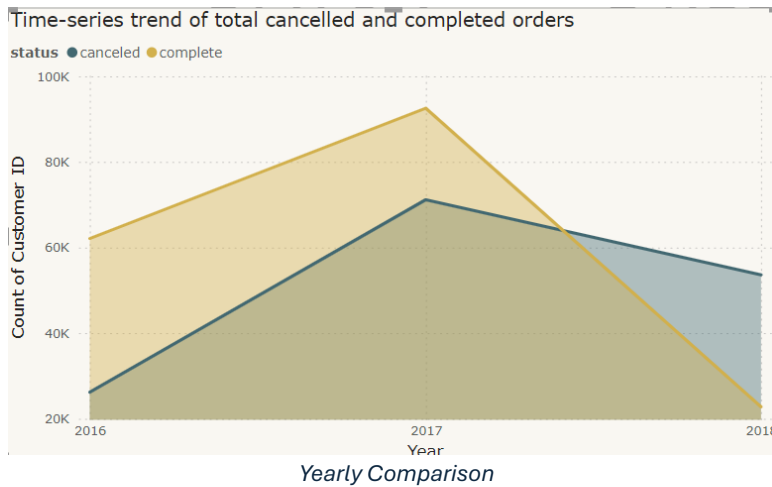
Overall Dashboard

KPIs



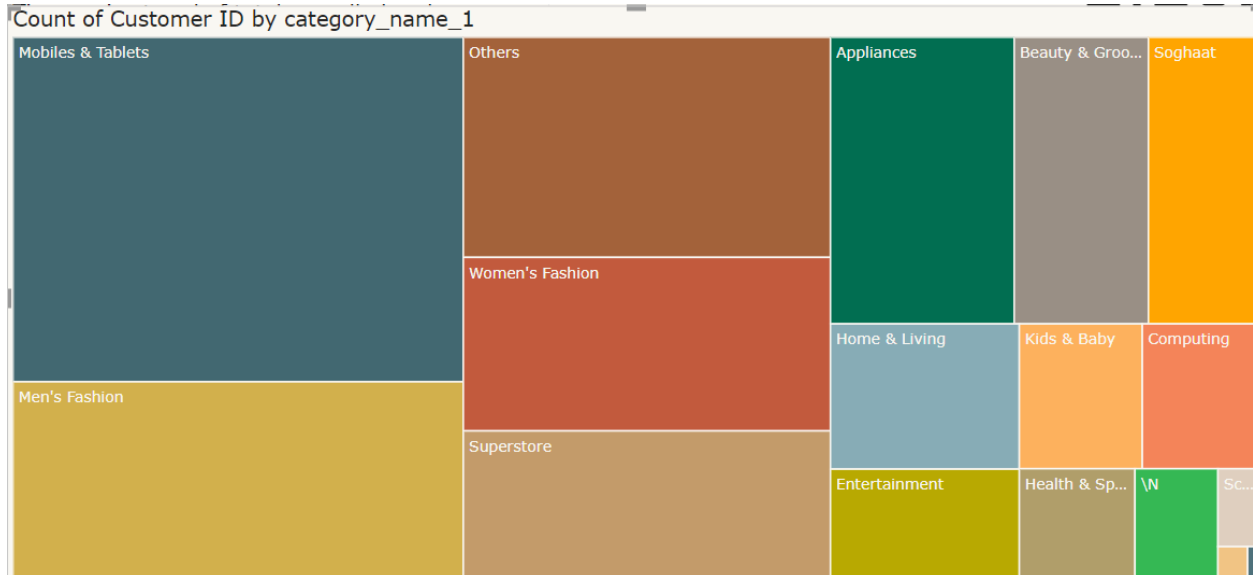
These KPIs are evidence enough to show the severity of the matter. On average, each cancelled order is costing the e-commerce company a loss of 14.5K rupees.

Time-Series Trend of Cancelled and Completed Orders



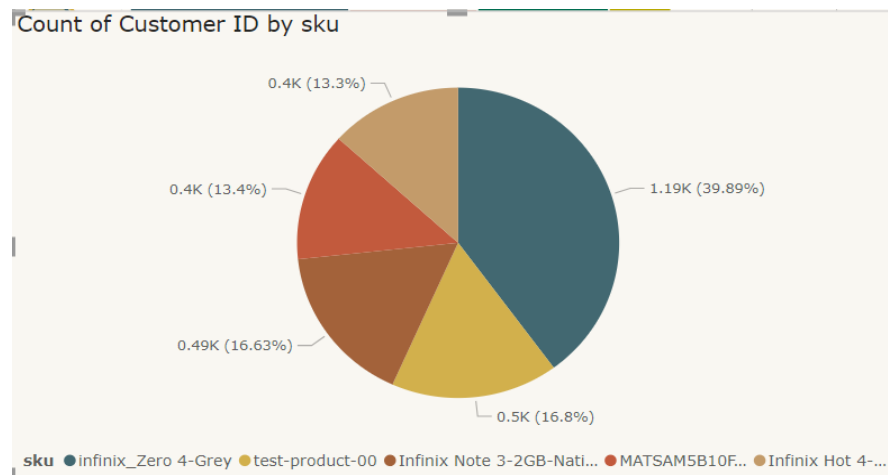
Apart from the seasonal variations such as the holiday season in Nov 2017, there is no clear overall trend. Whenever the total number of orders are high, both the number of cancelled and complete orders increase. The lack of a distinct trend suggests that the overall order patterns, including cancellations and completions, are relatively stable over time.

Categories and their respective cancelled orders



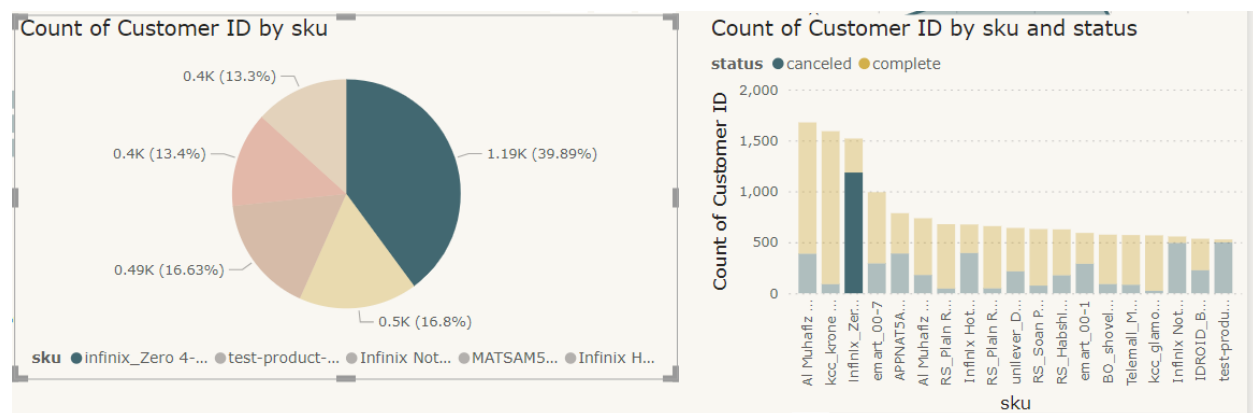
Mobile and Tablets have the most cancelled orders, with men's fashion and others following the list. The high number of cancelled orders in the mobile phones category indicates potential issues or factors specific to this product category that lead to cancellations. Further investigation into the reasons behind these cancellations, such as product quality, pricing, or customer expectations, is necessary to address these issues effectively.

Top 5 SKUs (Products) with most Cancelled Orders



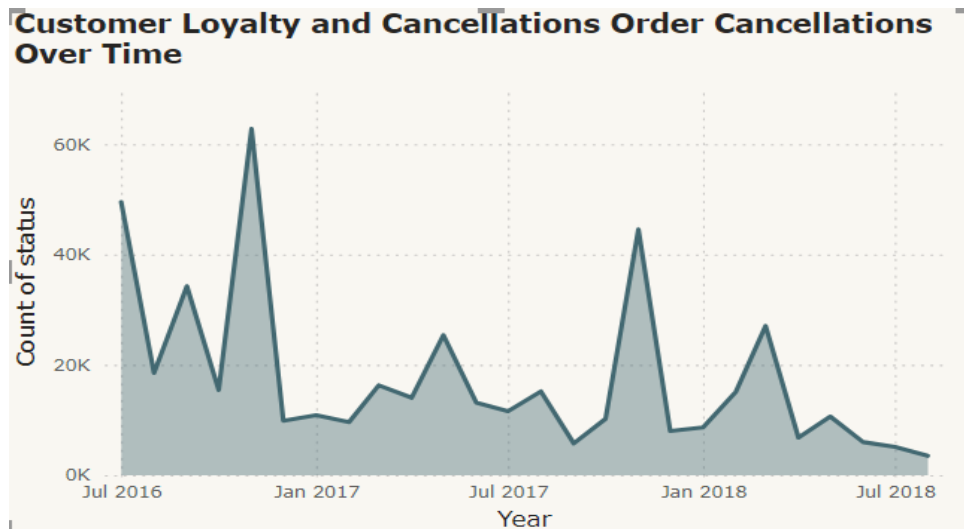
Amongst the 5 products, 3 of them are from Infinix which indicates that people are not satisfied with the product company itself. With more data regarding product reviews, further analysis could be done to find out why exactly the customers are not liking the product. Additionally, strategies such as product improvements, targeted marketing campaigns, or customer engagement initiatives can be implemented to reduce cancellations for these products.

Number of cancelled vs complete orders for each product/SKU



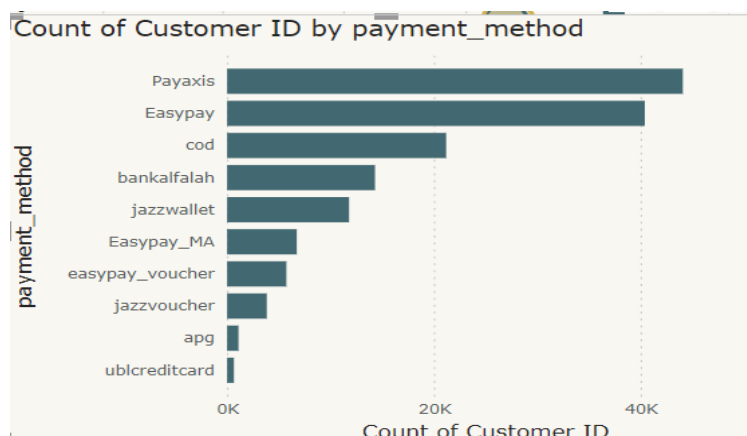
For example, the Infinix_Zero 4-Grey model showcases a substantial disparity between cancelled and completed orders, indicating that the overall high cancellation rate cannot be attributed solely to a large volume of orders in general.

Relationship between Customer Loyalty and Cancelled Orders



Again no overall relationship can be observed, customers who registered in Dec 2016 and Dec 2017 are both likely to cancel orders.

Relationship between payment method and order cancellation



People are more likely to cancel orders if they are paying online, all modes of payment except COD (Cash on Delivery) is online. This could imply that customers are not very comfortable with using online modes of payment or there are technical issues with the e-commerce website. Improving the online payment experience, addressing security concerns, and offering incentives for online purchases could help mitigate cancellation rates for online payments.

In conclusion, a holistic approach that addresses product-specific issues, payment experience challenges, and customer satisfaction factors is necessary to effectively manage and reduce cancellation rates, thereby improving overall business performance and customer retention.