Annual Product Category Quality Analysis



Overview:

Business performance in eCommerce is closely related to the products available within it. Analyzing the quality of products in eCommerce can provide insights for making better business decisions. Product quality is important because it influences a company's success and helps build its reputation in the customer market. When a company can create high-quality products that continuously meet customer demands, it can result in a higher return on investment and increased revenue. In this section, we will conduct an Annual Product Category Quality Analysis by analyzing annual business metrics related to revenue and canceled orders.

Here is the summary table of total revenue, total cancel orders, top product category revenue, and top product category cancel order performance :

		total_revenue_yearly numeric	top_product_category_revenue_name character varying (50)	top_product_category_revenue numeric	total_cancel_orders_yearly bigint	top_product_category_cancel_name character varying (50)	top_product_category_cancel bigint
1	2016	46653.74	furniture_decor	6899.35	26	toys	3
2	2017	6921535.24	bed_bath_table	580949.20	265	sports_leisure	25
3	2018	8451584.77	health_beauty	866810.34	334	health_beauty	27

Annual Product Category Quality Analysis



1. Total revenue per year

Create a table that contains total company revenue information for each year

	year numeric	total_revenue numeric	
1	2016	46653.74	
2	2017	6921535.24	
3	2018	8451584.77	

2. Total cancel order per year

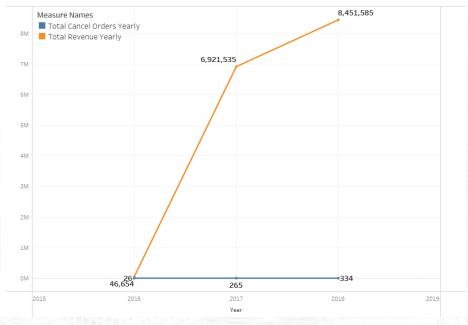
Create a table that contains information on the total number of canceled orders for each year

	year numeric	total_cancel_order bigint	
1	2016	26	
2	2017	265	
3	2018	334	

Insight:

Total Revenue & Total Canceled Orders





- Increase in revenue (significantly in 2017) typically suggests that the business is growing and attracting more new customers, leading to higher sales volumes. It could be due to various factors such as effective marketing strategies, great product quality, or increased market demand.
- Small increase in canceled orders could indicates potential issues within the business like inaccurate product descriptions, shipping delays on some products, inventory management issues on some sellers, or customer service problems in the platform.

Annual Product Category Quality Analysis



3. Top product category by revenue per year

Create a table containing the product category names that provide the highest total revenue for each year

	year numeric	product_category_name character varying (50)	total_revenue numeric
1	2016	furniture_decor	6899.35
2	2017	bed_bath_table	580949.20
3	2018	health_beauty	866810.34

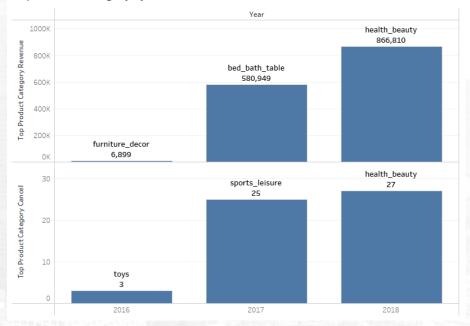
4. Top product category by cancel order per year

Create a table containing the names of the product categories that have the highest number of canceled orders for each year

	year numeric	product_category_name character varying (50)	total_cancel_order bigint
1	2016	toys	3
2	2017	sports_leisure	25
3	2018	health_beauty	27

Insight:

Top Product Category by Revenue & Canceled Orders



- The types of product categories, both for top revenue and top canceled orders, all have different types each year. This suggest an evolving in consumer preferences and market demand fluctuations which could be influenced by seasonal trends, economic factors, or other external influences. In 2018, health_beauty became the top product category by revenue and cancel order is the example of this where there could potentially an important events.
- There is also the need to analyze further related to the products canceled, to gain the reason behind it. Whether it is related to the price, supply chain and inventory management issues, or something else.