



E-Commerce Platform - ShopEase

Introduction to the Case Study

ShopEase is a dynamic e-commerce platform that offers a wide variety of products, including electronics, clothing, home goods, and more. As the company continues to grow and expand its product offerings, its management recognizes the importance of leveraging data to stay competitive in the rapidly evolving online retail market.

ShopEase is looking to analyze its sales data to gain deeper insights into customer preferences, purchasing behaviors, and trends. By analyzing sales data, the company aims to improve its customer experience by offering personalized recommendations, optimizing product availability, and streamlining the purchasing process. Understanding which products are most popular, which sales channels are most effective, and how customer behavior varies across different demographics can help ShopEase make data-driven decisions that enhance customer satisfaction and retention.

Objectives

1. Show the total number of customers who signed up in each month of 2023.
2. List the top 5 products by total sales amount, including the total quantity sold for each.
3. Find the average order value for each customer who has placed more than 5 orders.
4. Get the total number of orders placed in each month of 2023, and calculate the average order value for each month.
5. Identify the product categories with the highest average rating, and list the top 3 categories.
6. Calculate the total revenue generated from each product category, and find the category with the highest revenue.
7. List the customers who have placed more than 10 orders, along with the total amount spent by each customer.
8. Find the products that have never been reviewed, and list their details.
9. Show the details of the most expensive order placed, including the customer information.
10. Get the total quantity of each product sold in the last 30 days, and identify the top 5 products by quantity sold.



Dataset Description

Column	Description
customer_id	A unique identifier assigned to each customer in the system.
first_name	The first name of the customer.
last_name	The last name of the customer.
email	The email address of the customer, used for communication and account management.
signup_date	The date when the customer registered or signed up on the platform.
order_item_id	A unique identifier for each individual product item in an order.
order_id	A unique identifier for each order placed by a customer.
product_id	A unique identifier for each product purchased or reviewed.
quantity	The number of units of a product in an order.
price	The price of a single unit of the product in the order or product catalog.
order_date	The date when the order was placed.
total_amount	The total amount for the order, typically the sum of all items' prices multiplied by quantity.
product_name	The name or description of the product.
category	The category to which the product belongs (e.g., electronics, clothing, etc.).
review_id	A unique identifier for each product review.
rating	The rating given by the customer, typically on a scale of 1 to 5.
review_date	The date when the review was posted by the customer.

Thank you

Written by

