

E-commerce Retail Analysis

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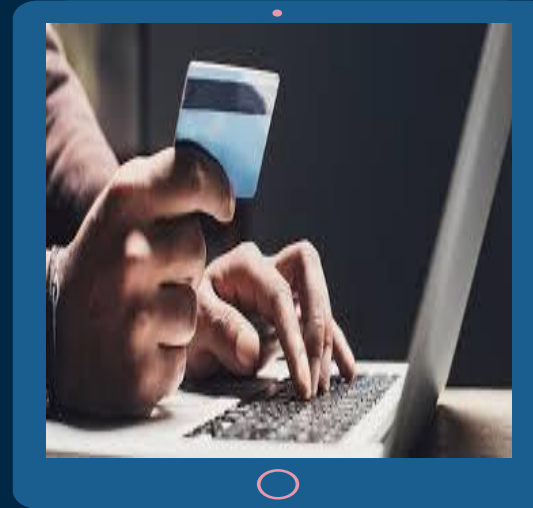
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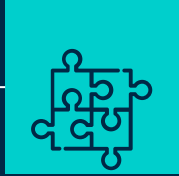


Problem Statement



Given data from an ecommerce site that operates in different countries..Which products, country, time should the e-commerce retailer focus on in a bid to improve its marketing, inventory management and yearly turnover?

OBJECTIVES OF ANALYSIS



01

POLICY FORMULATION

The analysis will enable the company in policy formulation that will enhance the business.



02

MARKETING STRATEGY

The analysis will enable the company to come up with a marketing strategy that will increase the business's returns



03

CONSUMER BEHAVIOUR PREDICTION

Prediction of consumer behaviour allows us to master the trend and cater for the customers better

OUR PROCESS

Setting business objectives
and the business success
criteria

**BUSINESS
UNDERSTANDING**

6 HRS

1 DAY

DATA

Understanding/investigating
and preparation of the
dataset

Answering questions
posed - using python

ANALYSIS

1.5 DAYS

3 HRS

**RECOMMENDATIONS
AND EVALUATION**

Giving
recommendations
based on insights
from the dataset





The dataset was
sources from
kaggle.com in a
csv format

The dataset
contained data
of an
e-commerce
company with
transactions of
purchases from
different
countries



DATA SOURCING



DATA QUALITY

We counter checked the validity of our data and all the columns were relevant for our analysis

VALIDATION

CONSISTENCY

The dataset contained duplicate values on the Customer ID and Invoice Numbers

Our data had negative values which we later categorised them as failed transactions hence were cancelled

ACCURACY

COMPLETENESS

The dataset contained numerous missing values in the customer ID column and the description column



DATA PREPARATION

SELECTION OF DATA

Used all columns and
rows



We used all of our
data for our data
analysis

DATA CLEANING

Ensured validity,
accuracy, consistency,
uniformity



Dropped null values
Set aside cancelled
transactions
Retained duplicate values
Split date time data type

CONSTRUCTION OF NEW DATA

Generated five new
columns



Total expenditure
Date, Time,
Year, month ,day
Hour, minute, second

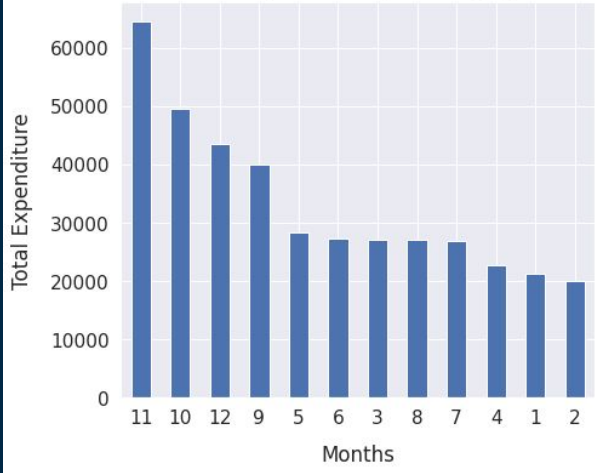
ANALYSIS

- ❖ The top three countries with cancelled transactions are UK, EIRE and France.
- ❖ The countries with the most customers is UK having 354345 and the countries with the least customers is Saudi Arabia
- ❖ The country with the highest average expenditure of consumers is Netherlands with an average of 120.798282



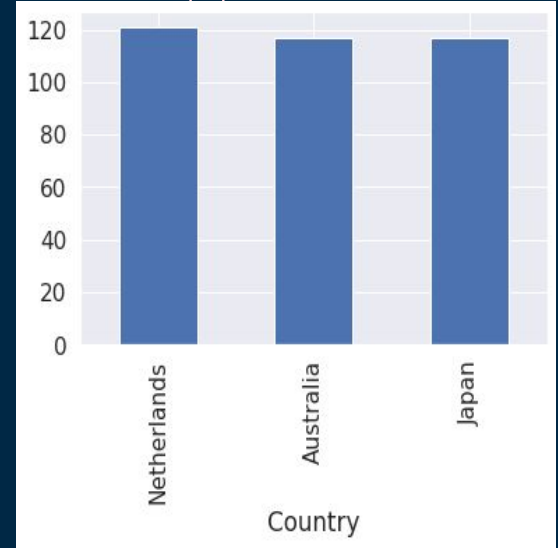
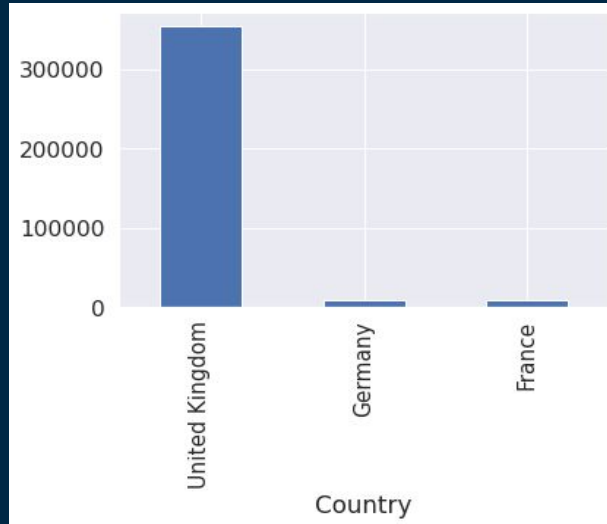
Analysis

Total Expenditure by month graph



Graph of months vs sales - highest sales are towards the end of the year with November recording the most sales

Top three countries that recorded the most sales - UK leading followed by Germany and France



Top three countries with the highest mean consumer expenditure

ANALYSIS

- ❖ The most popular product was **WHITE HANGING HEART T-LIGHT HOLDER ,POSTAGE.**
- ❖ The overall least popular product was **PINK BAROQUE FLOCK CANDLE HOLDER .**
- ❖ The products that brought the most returns overall were **PAPER CRAFT , LITTLE BIRDIE ,REGENCY CAKESTAND 3 TIER and WHITE HANGING HEART T-LIGHT HOLDER**
- ❖ The top three products that had canceled transactions were **PAPERCRAFT , LITTLE BIRDIE ,MEDIUM CERAMIC TOP STORAGE JAR and ROTATING SILVER ANGELS T-LIGHT HLDR**

ANALYSIS

- ❖ The products with the highest returns are in United Kingdom, France and Germany are **LETTER "O" BLING KEYRING , 50'S CHRISTMAS GIFT BAG LARGE and CHRISTMAS GINGHAM HEART**
- ❖ The overall least popular product was **PINK BAROQUE FLOCK CANDLE HOLDER .**
- ❖ The product with the overall least return is **PADS TO MATCH ALL CUSHIONS .**

RECOMMENDATIONS



The best time for the company to launch marketing campaigns

—SEPTEMBER



For cancelled products concentrating on product quality, costs, product description

PRODUCT ANALYSIS



For countries with most returns but little number of customers

—INCREASE
CUSTOMER BASE



For products with the least number of sales overall

—CONDUCT CUSTOMER
SURVEY



Customer feedback will lead to identification of market gaps in products

—ADOPT FEEDBACK
PLATFORMS



Most popular products purchased from all countries

—MAXIMIZE ON
SALES

The background is a dark blue field decorated with various geometric elements. There are numerous small squares in white, orange, and teal, some of which are solid and others are outlines. Thin white vertical lines of varying lengths are scattered across the composition, creating a sense of depth and movement.

ANY
QUESTIONS?

THANKS AND BYE

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