



PROJECT

P R O P O S A L

JANUARY 13

Prepared by
KERILOUS YASSER

OVERVIEW

Adventureworks_Data_Exploration dataset:

The AdventureWorks_Data_Exploration project focuses on analyzing and exploring the AdventureWorks dataset, which is a popular sample database provided by Microsoft for training purposes in SQL Server and data analysis. The dataset is modeled around a fictitious company called AdventureWorks Cycles, which sells bicycles and related products. It contains information about sales, customers, products, employees, and other aspects of the company's operations.

OBJECTIVE

DATA CLEANING: IDENTIFYING AND HANDLING MISSING VALUES OR OUTLIERS. DATA VISUALIZATION: CREATING CHARTS AND GRAPHS TO VISUALIZE TRENDS AND PATTERNS IN THE DATA. STATISTICAL ANALYSIS: PERFORMING CORRELATION ANALYSIS AND OTHER STATISTICAL METHODS TO IDENTIFY RELATIONSHIPS BETWEEN DIFFERENT VARIABLES.

DATAINFO

<CLASS 'PANDAS.CORE.FRAME.DATAFRAME'>

RANGEINDEX: 18465 ENTRIES, 0 TO 18464

DATA COLUMNS (TOTAL 25 COLUMNS):

# COLUMN	NON-NULL COUNT DTYPE
---	-----
0 ORDERDATE	18465 NON-NULL OBJECT
1 STOCKDATE	18465 NON-NULL OBJECT
2 ORDERNUMBER	18465 NON-NULL OBJECT
3 PRODUCTKEY	18465 NON-NULL INT64
4 CUSTOMERKEY	18465 NON-NULL INT64
5 TERRITORYKEY_X	18465 NON-NULL INT64
6 ORDERLINEITEM	18465 NON-NULL INT64
7 ORDERQUANTITY	18465 NON-NULL INT64
8 PRODUCTSUBCATEGORYKEY	18465 NON-NULL INT64
9 PRODUCTSKU	18465 NON-NULL OBJECT
10 PRODUCTNAME	18465 NON-NULL OBJECT
11 MODELNAME	18465 NON-NULL OBJECT
12 PRODUCTDESCRIPTION	18465 NON-NULL OBJECT
13 PRODUCTCOLOR	18465 NON-NULL OBJECT
14 PRODUCTSIZE	18465 NON-NULL OBJECT
15 PRODUCTSTYLE	18465 NON-NULL OBJECT
16 PRODUCTCOST	18465 NON-NULL FLOAT64
17 PRODUCTPRICE	18465 NON-NULL FLOAT64
18 RETURNDATE	18381 NON-NULL OBJECT
19 TERRITORYKEY_Y	20 18381 NON-NULL FLOAT64
20 RETURNQUANTITY	21 18381 NON-NULL FLOAT64
21 SALESTERRITORYKEY	18465 NON-NULL INT64
22 REGION	18465 NON-NULL OBJECT
23 COUNTRY	18465 NON-NULL OBJECT
24 CONTINENT	18465 NON-NULL OBJECT

DYPES: FLOAT64(4), INT64(7), OBJECT(14)

MEMORY USAGE: 3.5+ MB

WARDIERE INC.

NULL VALUES

ORDERDATE	0
STOCKDATE	0
ORDERNUMBER	0
PRODUCTKEY	0
CUSTOMERKEY	0
TERRITORYKEY_X	0
ORDERLINEITEM	0
ORDERQUANTITY	0
PRODUCTSUBCATEGORYKEY	0
PRODUCTSKU	0
PRODUCTNAME	0
MODELNAME	0
PRODUCTDESCRIPTION	0
PRODUCTCOLOR	0
PRODUCTSIZE	0
PRODUCTSTYLE	0
PRODUCTCOST	0
PRODUCTPRICE	0
RETURNDATE	84
TERRITORYKEY_Y	84
RETURNQUANTITY	84
SALESTERRITORYKEY	0
REGION	0
COUNTRY	0
CONTINENT	0
DTYPE: INT64	

WARDIERE INC.

SALES & RETURNS CONCLUSIONS

- **TOTAL REVENUE: 9,047,305.36\$**
- **TOTAL COST: 5,165,824.62\$**
- **NET PROFIT: 3,722,485.85\$**
- **TOTAL ORDERS: 29660**
- **TOP PROFITABLE MONTH: DECEMBER**
- **TOP PROFITABLE DAY: MONDAY**
- **TOP PROFITABLE SEASON: AUTUMN**
- **TOP PROFITABLE CONTINENT: NORTH AMERICA**
- **TOP PROFITABLE REGION: AUSTRALIA**
- **TOP PROFITABLE SUBCATEGORY: MOUNTAIN BIKES**
- **TOTAL RETURNS: 276,413.41\$**
- **TOTAL COST OF RETURNS: 159,842.60\$**
- **NET PROFIT LOST FROM RETURNS: 116,570.81\$**
- **TOTAL ORDERS: 770**