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Marketing Analytics Concepts

1. What is Marketing Analytics ?

It refers to the process of measuring, managing and analyzing marketing performance to maximize its effectiveness and optimize return on investment (ROI)

2. Tools used in industry for Marketing Analytics

1. Excel
2. SQL
3. Python
4. Power BI
5. AWS
6. Snowflake

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3. Types of data analysis

1. Descriptive -> What has happened
2. Diagnostic -> Why it happened
3. Predictive -> What's likely to happen
4. Prescriptive -> What to do next

4. Scope of Marketing Analytics

1. Customer Analytics
2. Campaign Analytics
3. Sales Analytics
4. Digital Analytics
5. Market Segmentation
6. Brand Analytics
7. Predictive Analytics
8. Pricing and ROI Analytics
9. Competitor Analysis

5. Types of Marketing Data

1. Internal Data
2. External Data
3. Structured Data
4. Semi-Structured Data
5. Unstructured Data

6. What is IDE ?

Its known as Integrated Development Environment.
It is an enviroment which we use to write code

7. Types of Database

1. SQL
2. NoSQL

8. Types of SQL used a lot in industry

1. MySQL
2. PostgreSQL

9. What is Variable in Python ?

It is container for storing data values

10. What are libraries in Python ?

A collection of files (called modules) that contain fucntions that can be used while coding

11. What is case-sensitivity in Python ?

Python is a case-sensitive language. This means that identifiers (like variable names, function names, and keywords) and string comparisons distinguish between uppercase and lowercase letters.

12. What are missing values ?

It is the absence of data for one or more variables in certain observations

13. Which value should be inserted in place of emply cells where the column has numerical data without outliers ?

Mean value should be inserted

14. Which value should be inserted in place of empty cells where the column has numerical data with Outliers ?

Median value should be inserted

15. Which value should be inserted in place of empty cells where the column has Categorical data with numeric encoding ?

Mode value should be inserted

16. Which inbuilt function we use to display the result ?

We use print() function

17. How to print the results stored in respective variables ?

We use print(variable_name) to print the result

18. How to print the results stored in respective variables with a full statement ?

We use print("Our Description", variable_name)

19. Which visualization helps us in identifying outliers ?

Box Plot Visualization

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20. Which library is used to create dataframes in python and how do we import it ?

pandas library
import pandas as pd

21. Which library is used to do complex numerical calulations and how to import it ?

numpy library
import numpy as np

22. Which libraries are used for data visualization in Python and how to import it ?

matplotlib library and seaborn library
import matplotlib.pyplot as plt
import seaborn as sns

23. How to insert the comment in the python code and show with example ?

Comments are inserted by using #
This is an example of comment

24. How to calculate Customer Lifetime Value ?

CLV = Average Purchase Value × Purchase Frequency × customer lifespan in years

25. How to calculate Return on Marketing Investment ?

ROMI = (Revenue Attributed to marketing - Marketing Cost) / Marketing Cost × 100

26. How to Calculate Net Promoter Score

NPS = (Promoter - Detractors) / Total Respondents × 100

27. How to calculate customer churn rate ?

Churn Rate = Customer lost during period / Total customer at start of period × 100