Data Analyst Project

Analysis of Sales Performance and customer retention/Churn

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Alternative Slide Access

Case study access link: CLICK HERE

OmniRetail

Case Overview

1. **Task 1:** Data cleaning
2. **Task 2:** Preparing DB
3. **Task 3:** SQL query/reporting
4. **Task 4:** PowerBI dashboard development

Analysis Framework Diagram

Stacks: SQL, PowerBI, Python

Task 1: Data cleaning/reformating and feature generation

Data cleaning/reformating

- Converted PurchaseDate to Date type, converted in the fact_order_table
- filled 100% of missing values in State column in the fact_order_table by extracting the state from the DeliveryLocation field
- Filled 70% of missing values in the LGA by extracting the LGA from the DelioveryLocation field
- Reformated other columns as specified in the assessment doc

New features, Assumptions

- PurchageTime, generated from PurchaseDate field.
- Created a measure using DAX on powerBI for **New customers**, assuming new customers are customers that made their first purchase in Jan, 2025.
- Created a measure using DAX on PowerBI for **Returning Customers**, assuming returning customers are customers that made more than 1 purchase in Jan, 2025.
- Created a measure using DAX on PowerBI for **Churned Customers**, assuming churned customers are customers that have not made a purchase in the last 3 months.

Task 1: SQL Query file

Kindly look it up in the github repo link below

Query file:

https://github.com/ngwuprince/Assessment/blob/main/SQL_Solution_File.ipynb

Task 1: PowerBI dashboard file

Download from my github repo with the link:

https://github.com/ngwuprince/Assessment/blob/main/new_assessment_solution.pbix