

Brief: Data Analytics Project for ATM Transactions

Introduction

Wisabi Bank is a leading financial institution in Nigeria, headquartered in Lagos with branches in Kano, Rivers State, Enugu, and FCT Abuja. Wisabi Bank provides a wide range of financial services to its customers, including savings accounts, current accounts, loans, and investments. As part of its commitment to improving customer experience and optimizing its operations, Wisabi Bank has engaged you as an external consultant to conduct a data analytics project to analyse its ATM transactions data.

Business Problems

Wisabi Bank wants to answer several business problem questions related to its ATM transactions data, which include:

- i. What is the average transaction amount by location and transaction type?
- ii. Which ATM location has the highest number of transactions per day, and at what time of the day do the transactions occur most frequently?
- iii. Which age group has the highest number of transactions, and which transaction type do they usually perform?
- iv. What is the trend of transaction volume and transaction amount over time, and are there any seasonal trends or patterns?
- v. What is the most common transaction type, and how does it vary by location and customer type (Wisabi customer vs. non-Wisabi customer)?
- vi. What is the average transaction amount and transaction frequency per customer by occupation and age group?
- vii. What is the percentage of transactions that are withdrawals, savings, balance enquiries, and transfers, and how does it vary by location and time of day?
- viii. What is the distribution of transaction amounts and transaction frequency, and are there any outliers?
- ix. Which ATM locations have the highest and lowest utilization rates, and what factors contribute to this utilization rate?
- x. What is the average transaction time by location, transaction type, and time of day, and how does it vary by customer type and occupation?

Scope

The data analytics project will involve analyzing the ATM transactions data, which includes the Transactions fact table, Location dimension table, Customers Dimension table, Transaction Type Dimension Table, Hour dimension table, and Calendar dimension. The analysis will involve data cleaning, data transformation, and data visualization using Excel/Power BI.

Expected Deliverables

The expected deliverables from the data analytics project are a set of reports and dashboards that provide insights and answers to the business problem questions. The reports and dashboards should be interactive and user-friendly, and should enable the Wisabi Bank team to make data-driven decisions that improve customer experience and optimize operations.

Conclusion

The data analytics project for Wisabi Bank is an important initiative that will help the bank to understand its ATM transactions data and improve its operations. The external consultant will work closely with the Wisabi Bank team to ensure that the project is successful and delivers the expected results.