# **Brief: Data Analytics Project for Wisabi Bank**

## Introduction

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

## Business Problems

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

1. What is the average transaction amount by location and transaction type?
2. Which ATM location has the highest number of transactions per day, and at what time of the day do the transactions occur most frequently?
3. Which age group has the highest number of transactions, and which transaction type do they usually perform?
4. What is the trend of transactions volume and transaction amount over time, and are there any seasonal trends or patterns?
5. What is the most common transaction type, and how does it vary by location and customer type (Wisabi customers vs non-Wisabi customers)?
6. What is the average transaction amount and transaction frequently per customer by occupation and age group?
   1. Age Group: 0-15, 16-25, 26-35, 36-45, 46-55, 56-65, >65, Other.
7. What is the percentage of transaction that are withdrawals, savings, balances enquiries, and transfers, and how does it vary by location and time of the day?
8. What is the distribution of transaction amounts and transactions frequency, and are there any outliers?
9. Which ATM locations have the highest and slowest utilization rates, and what factors contribute to this utilization rate?
10. 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 transaction data, which includes the Transactions fact table, Location dimension table, Customer dimension table, Transaction Type dimension table, Hour dimension table, and Calendar dimension table. The analysis will involve data cleaning, data transaction, 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 WB team to ensure that the project is successful and delivers the expected results.

INSIGHTS:

* Kano has the highest utilization rate (18.6%) while Federal Capital Territory (FCT) has the lowest rate (8.5%).
* Customers tend to do transactions most between 3:00PM – 6:00PM, besides March is the busiest season for both Transaction Count and Transaction Amount
* The most used transaction type is Withdrawal.
* Customers between 15-25 years old have the highest Average Transaction Frequency which is 260.
* Interestingly, customers above 66 years old have higher Average Transaction Frequency than group 46-55 and 56-65.
* On average, while the transaction duration is comparatively similar, all Transaction Type in Kano took more time when compared to other states, especially Withdrawals transactions.
* On average, Withdrawals have the highest transaction amount duration across al states, next is Transfer, with Deposits have the lowest.
* Within all the Age group, Withdrawals is the most Transaction Type, follow by Transfer, while the least is Balance Inquiry.
* It is surprise that Students have the highest Transaction Amount with particularly high Average Frequency.

RECOMMENDATIONS:

Services in areas with less Utilization by people for Students should be increased as the low utilization might be due to less service available or due to poor ATM machine.

Services can also be increased in areas with more Students and other Occupations with high Utilization rate to decrease wait time due to high utilization during peak times and more people can take benefit of the service at that time.