WISABI BANK ATM TRANSACTION

In today's dynamic banking landscape, Wisabi Bank must understand customer demographics and transaction patterns in order to remain competitive and effectively meet customer needs. With a wide range of stakeholders involved in bank operations, including Wisabi Bank Management, ATM Operations Managers, Branch Managers, Data Analysts, and the IT Department, extracting actionable insights from transaction data is critical.

This report aims to meet Wisabi Bank's business objectives by analysing transaction data across multiple dimensions, including customer demographics, ATM services, and geographical locations. Using this analysis, Wisabi Bank can identify trends, preferences, and potential areas for growth, allowing for strategic decision-making and operational optimisation.

Key stakeholders, including Wisabi Bank Management, will use the insights generated to make informed decisions, while ATM Operations Managers and Branch Managers will put the recommendations into action to improve customer experience and operational efficiencies. Data analysts will be responsible for analysing the data and presenting actionable insights, while the IT department will ensure data accessibility and security throughout the process.

By aligning data analysis with business objectives, Wisabi Bank can unlock growth opportunities, improve service offerings, and ultimately increase overall customer satisfaction.

Wisabi Bank ATM Transaction Report Overview:

1. **Transaction Volume Overview:**
- March recorded the highest transaction volume, reaching ₦3.53Bn, which was 21.57% higher than February's volume of ₦2.91Bn.
- Transaction volume and the total count of Transactions are positively correlated, indicating a consistent relationship between transaction volume and the number of transactions.

2. **Transaction Anomalies and Trends:**
- An anomaly occurred on December 30, 2022, where Enugu had a high transaction count of 54,406, signalling unusual activity.
- Enugu exhibited a notable trend, showing a decline of 1.27% (48 transactions) in just two hours on December 30, 2022.

3. **Transaction Details by Type:**
- Deposits had the highest average duration of 4.95, while withdrawals had the highest average transaction amount of ₦21,769.35.
- Withdrawals accounted for the highest average transaction amount at ₦21,530.27, followed by transfers, deposits, and balance inquiries.

4. **Transaction Frequency and Age Groups:**
- The age group 16-25 had the highest transaction frequency at 259, surpassing the 56-65 age group, which had the lowest frequency at 207.
- Withdrawals constituted the majority of transactions, accounting for 55.50% of all transactions, with an average count of Transactions of 169.97K.

5. **ATM Utilization Rates:**
   - Sabon Gari ATM had the highest utilization rate at 24.52%, followed by Tarauni ATM at 23.38%, indicating the popularity and efficiency of these ATM locations.

Quarterly Insights Overview:

1. **Q1:**
   - March recorded the highest transaction volume, marking a 21.57% increase compared to February, which had the lowest transaction volume.
   - Transaction volume and the total count of transaction IDs exhibit a positive correlation.
   - Deposit transactions had the highest average duration, while withdrawal transactions had the highest average transaction amount.
   - Withdrawals accounted for the majority of transaction IDs and total transaction amounts.
   - Utilization rates ranged from 2.10% to 4.65% across all states.

2. **Q2:**
   - May witnessed the highest transaction volume, showing a 6.62% increase compared to April, the month with the lowest transaction volume.
   - Similar to Q1, withdrawal transactions dominated in terms of count and total transaction amounts.
   - Utilization rates remained consistent across states, ranging from 2.10% to 4.59%.
   - Transaction frequency varied across age groups, with 26-35 age group showing the highest frequency.

3. **Q3:**
   - July recorded the highest transaction volume, with a 6.32% increase compared to September, which had the lowest transaction volume.
   - Withdrawal transactions continued to dominate, both in count and total transaction amounts.
   - Enugu exhibited the most interesting trend among states, experiencing fluctuations in transaction counts.
   - Utilization rates remained relatively stable across states, ranging from 2.13% to 4.65%.

4. **Q4:**
   - Similar to Q3, July had the highest transaction volume, while September had the lowest.
   - Withdrawals remained the most frequent transaction type across all quarters.
   - Transaction frequency varied across age groups, with 16-25 age group exhibiting the highest frequency.
   - Utilization rates remained consistent across states, similar to previous quarters.

Gender-wise Transaction Insights:

Female:

- March recorded the highest transaction volume among females, marking a 19.98% increase compared to February.
- Enugu exhibited an interesting trend, showing fluctuations in transaction counts and a downward trend over a period.
- Withdrawal transactions were the most frequent among females, both in count and total transaction amounts.
- Utilization rates across states ranged from 3.92% to 9.63%. The 16-25 age group had the highest transaction frequency among females.

Male:

- March also had the highest transaction volume among males, with a 23.17% increase compared to February.
- Rivers State experienced a significant decline in transaction counts over a short period.
- Similar to females, withdrawal transactions were the most frequent among males, both in count and total transaction amounts.
- Utilization rates across states ranged from 4.54% to 8.92%. The 26-35 age group exhibited the highest transaction frequency among males.

Day-wise Transaction Insights:

Weekend:

- October recorded the highest transaction volume during weekends, showing a significant increase compared to June.
- Enugu exhibited fluctuations in transaction counts over weekends, indicating potential variations in customer behaviour.
- Withdrawal transactions were the most frequent during weekends, both in count and total transaction amounts.
- Utilization rates across states ranged from 2.44% to 5.32% during weekends. The 16-25 age group had the highest transaction frequency among weekend transactions.

Weekday:

- March had the highest transaction volume on weekdays, with a notable increase compared to February.
- Similar to weekends, Enugu displayed fluctuations in transaction counts on weekdays, suggesting varying customer activity.
- Withdrawal transactions remained the most frequent on weekdays, both in count and total transaction amounts. Utilization rates across states ranged from 6.02% to 13.23% during weekdays.
- The 16-25 age group exhibited the highest transaction frequency among weekday transactions.

Conclusion: Understanding Transaction Dynamics

Analyzing transaction data across different dimensions such as gender, quarter, and day of the week provides valuable insights into customer behavior and preferences. Here's a synthesized conclusion based on the findings from all three sections:

A. **Transaction Volume Trends:**
- March consistently emerged as the month with the highest transaction volume across genders, quarters, and weekdays, indicating potential seasonal variations or specific promotional activities during this period.
- Enugu showed noticeable fluctuations in transaction counts across different periods, suggesting varying levels of customer engagement and activity that could be influenced by local factors or specific events.

B. **Transaction Patterns by Gender:**
- Female customers exhibited similar transaction patterns to male customers, with withdrawal transactions being the most frequent and highest in terms of total transaction amounts.
- Across genders, the 16-25 age group consistently demonstrated the highest transaction frequency, indicating the importance of targeting this demographic for tailored banking services and promotions.

C. **Quarterly and Weekly Transaction Insights:**
- Weekends and weekdays showcased distinct transaction dynamics, with withdrawal transactions dominating both in count and total transaction amounts.
- Utilization rates varied across states and age groups, suggesting potential areas for targeted marketing campaigns or service improvements based on regional and demographic preferences.

Implications for Wisabi Bank:

- Wisabi Bank can leverage these insights to optimize its service offerings and marketing strategies, such as promoting specific banking services during peak transaction periods or tailoring promotions to target demographic groups with higher transaction frequencies.
- Identifying and addressing fluctuations in transaction counts, particularly in regions like Enugu, can help Wisabi Bank enhance customer satisfaction and loyalty by providing more personalized and timely services.
- By understanding transaction patterns across different dimensions, Wisabi Bank can make informed decisions to improve operational efficiency, optimize resource allocation, and identify opportunities for growth in its service portfolio.

In conclusion, the comprehensive analysis of transaction data provides Wisabi Bank with actionable insights to better understand its customers' behaviors, preferences, and needs, ultimately enabling the bank to enhance its services and drive sustainable growth in the competitive banking industry.