

<none> bank\_customer\_segmentation\_analyFriday, 14 February 2025, 19:27

-- Check total records

```
SELECT COUNT(*) FROM customers;
```

-- Check if data was misplaced while exporting database from python

```
SELECT * FROM customers;
```

-- Total Number of Customers

```
SELECT COUNT(DISTINCT "Customer ID") AS Total_Customers FROM customers;
```

--Average Transaction Frequency per Month

```
SELECT AVG("Transaction Frequency (per month)") AS Avg_Transaction_Frequency FROM customers;
```

--Average Monthly Balance

```
SELECT AVG("Average Monthly Balance") AS Avg_Monthly_Balance FROM customers;
```

-- Most Preferred Channel

```
SELECT DISTINCT "Preferred Channels", COUNT(*) AS Count FROM customers GROUP BY "Preferred Channels" ORDER BY Count DESC LIMIT 1;
```

-- Preferred channels by age range

```
SELECT "Age Range", "Preferred Channels", COUNT(*) AS Count FROM customers GROUP BY "Age Range" ORDER BY Count DESC;
```

-- Preferred channels by gender

```
SELECT "Gender", "Preferred Channels", COUNT(*) AS Count FROM customers GROUP BY "Gender" ORDER BY Count DESC;
```

-- Preferred channels by region

```
SELECT "Region", "Preferred Channels", COUNT(*) AS Count FROM customers GROUP BY "Region" ORDER BY Count DESC;
```

--Account type owned by age range

```
SELECT "Age Range", "Account Type", COUNT(*) AS Count
```

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```
FROM customers
GROUP BY "Age Range"
ORDER BY Count DESC;
```

```
--Account type owned by gender
SELECT "Gender","Account Type", COUNT(*) AS Count
FROM customers
GROUP BY "Gender"
ORDER BY Count DESC;
```

```
--Account type owned by region
SELECT "Region","Account Type", COUNT(*) AS Count
FROM customers
GROUP BY "Region"
ORDER BY Count DESC;
```

```
-- Transaction frequency by age range
SELECT "Age Range", AVG("Transaction Frequency (per month)") AS
Avg_Frequency
FROM customers
GROUP BY "Age Range"
ORDER BY Avg_Frequency DESC;
```

```
-- Transaction frequency by gender
SELECT "Gender", AVG("Transaction Frequency (per month)") AS
Avg_Frequency
FROM customers
GROUP BY "Gender"
ORDER BY Avg_Frequency DESC;
```

```
-- Transaction frequency by region
SELECT "Region", AVG("Transaction Frequency (per month)") AS
Avg_Frequency
FROM customers
GROUP BY "Region"
ORDER BY Avg_Frequency DESC;
```

```
-- Value Segment by age range
SELECT "Age Range", "Value Segment"
FROM customers
GROUP BY "Age Range";
```

```
-- Value Segment by gender
SELECT "Gender", "Value Segment"
FROM customers
```

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```
GROUP BY "Gender";
```

```
-- Value Segment by region
SELECT "Region", "Value Segment"
FROM customers
GROUP BY "Region";
```

```
-- Loan status by age range
SELECT "Age Range", "Loan Status"
FROM customers
GROUP BY "Age Range";
```

```
-- Loan status by gender
SELECT "Gender", "Loan Status"
FROM customers
GROUP BY "Gender";
```

```
-- Loan status by region
SELECT "Region", "Loan Status"
FROM customers
GROUP BY "Region";
```

```
-- Check if service satisfaction (feedback score) is linked to
transaction frequency
SELECT "Service Feedback Score", AVG("Transaction Frequency (per
month)") AS Avg_Frequency
FROM customers
GROUP BY "Service Feedback Score"
ORDER BY "Service Feedback Score";
```

```
-- Rule-Based Recommendations
SELECT "Customer ID",
       "Preferred Channels",
       "Age Range",
       "Loan Status",
       "Value Segment",
       CASE
         WHEN "Preferred Channels" = 'ATM' AND "Value Segment" =
'Low Value' AND "Loan Status" = 'No Loans' THEN 'Basic Savings Account
+ ATM Fee Discounts'
         WHEN "Preferred Channels" = 'Mobile App' AND "Value
Segment" = 'High Value' THEN 'Premium Banking + Investment
Opportunities'
         WHEN "Age Range" = '26-35' AND "Loan Status" = 'Active'
THEN 'Loan Top-Up or Refinancing Offer'
```

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```
        WHEN "Region" = 'South-West' AND "Value Segment" = 'High
Value' AND "Preferred Channels" = 'Online Banking' THEN 'Wealth
Management Services'
        WHEN "Age Range" = '56-65' AND "Value Segment" = 'Low
Value' THEN 'Pension & Retirement Plans'
        ELSE 'General Banking Products'
    END AS "Recommended Product"
FROM customers;
```