Customer
REPORT

Presented by
HUONG NGUYEN

Table of
CONTENTS

Introduction

In today's data-driven landscape, businesses must go beyond simply collecting information, they need to understand what that data reveals about their customers. With customers interacting across multiple channels and touchpoints, gaining a unified, meaningful view of each individual has become a strategic necessity.

This is where Customer 360 comes in. By consolidating data from various sources, including purchase history, engagement behavior, and customer lifecycle stages, Customer 360 enables organizations to form a complete picture of their audience. This holistic view not only supports more personalized customer experiences but also empowers teams to make smarter, data-informed decisions.

To take this a step further, customer segmentation plays a critical role in turning raw data into actionable insights. In this report, we apply the RFM model (Recency, Frequency, Monetary) as a core framework for segmentation. This model evaluates customers based on:
- **R (Recency):** The last time the customer used the service.
- **F (Frequency):** The frequency with which the customer uses the service.
- **M (Monetary):** The revenue generated from the service.

By scoring each dimension on a scale from 1 to 4 (where 1 is the lowest and 4 is the highest), businesses can effectively cluster customers into segments that reflect their value and engagement level.

Through this approach, we aim to uncover behavioral patterns that inform targeted strategies, drive retention, and ultimately enhance overall customer lifetime value.

Overview

Customer 360

Customer 360 offers a unified and in-depth view of customer data by bringing together all relevant information about each customer. This includes not only demographic details but also insights into their interactions, relationships, and lifecycle stages with the company.

By consolidating this data, businesses can create rich, complete customer profiles, enabling a better understanding of how different operations affect customer experiences.

The benefits of Customer 360 extend far beyond data consolidation, offering tangible value across multiple business functions:

- **Gain a comprehensive view of customers**

  The shared Customer 360 view allows departments within the business to easily access customer information. This facilitates the creation of perfect business strategies that ensure trustworthy relationships with customers.
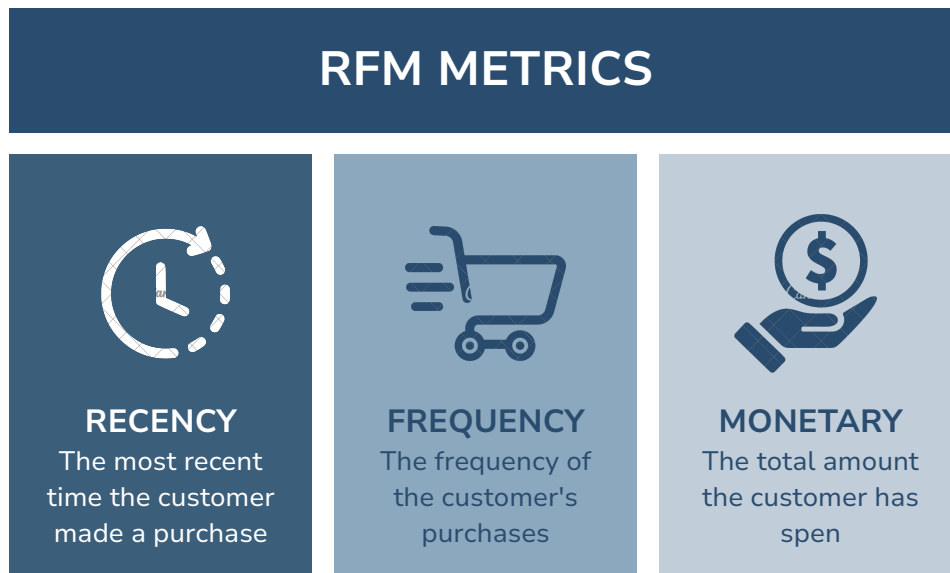
- **Improved operational efficiency**

  By consolidating customer data onto a unified platform, departments can access information more quickly and conveniently. This centralized access fosters better cross-functional collaboration, especially when the data is stored on a cloud-based system.

- **Enhanced customer engagement**

  With complete and well-structured data, teams such as marketing can clearly segment customers using defined criteria. This enables the creation of personalized experiences tailored to distinct customer groups, strengthening engagement across the customer journey.

RFM Model

RFM is a customer segmentation model grounded in the philosophy of Customer 360. It utilizes historical transaction data between the customer and the business, which is collected and analyzed based on three key factors: Recency, Frequency, and Monetary value.

RFM METRICS

RECENCY	**FREQUENCY**	**MONETARY**
The most recent time the customer made a purchase	The frequency of the customer's purchases	The total amount the customer has spen

Recency, Frequency, and Monetary are three essential factors in quantifying customer behavior and measuring their level of interaction with a business. Among these, Frequency and Monetary directly influence the customer's lifetime value, while Recency plays a critical role in determining the likelihood of customer retention.

Benefits of RFM Model:

- **Improved Customer Segmentation**

   By segmenting customers based on purchasing patterns, the RFM model helps businesses identify high-value groups and launch targeted campaigns that boost conversion rates and ROI.

- **Increased Customer Retention**

   By understanding which customers are at risk, businesses can take proactive steps to retain them, reducing churn and increasing customer lifetime value.

- **Improved Customer Experience**

   Personalized offers and messaging lead to higher satisfaction and stronger customer loyalty.

BCG Matrix

The BCG Matrix (Boston Consulting Group Matrix) is a strategic analysis tool used to assess the market growth rate and market share of products or product lines. This evaluation supports business decision-making regarding whether to invest in, maintain, divest, or discontinue certain offerings.

RELATIVE MARKET SHARE

MARKET GROWTH RATE

? Question mark	★ Star
✕ Pet	$ Cash cow

In a customer-centric application, the BCG Matrix can be adapted to classify customers into four Strategic Business Unit (SBU) categories:

- **Star (VIP Customers):** These are the most profitable customers, characterized by high spending, frequent transactions, and recent engagement with the business.

- **Question Mark (Potential Customers):** This group spends significantly and has made recent purchases, but their usage frequency remains inconsistent.

- **Cash Cow (General Customers):** This group has relatively low spending and purchase frequency, but they use the service regularly and have made recent purchases.

- **Pet (Secondary Customers):** This group has low spending and brings the least profit to the business, with infrequent service usage and the last use being relatively long ago.

Data Description

Dataset Description

The data was collected from June 1, 2022, to August 31, 2022, comprising 114,082 customers.

Customer_Transaction table

Column name	Data type	Meaning
ID	Bigint	Unique transaction code
CustomerID	Varchar	Customer code
Purchase_Date	Datetime	Date of transaction
GMV	Bigint	Total value of transaction

	123 ID	A-Z CustomerID	⏲ Purchase_Date	123 GMV
1	0	1327813	2022-06-01 00:00:00.000	95,000
2	1	1157830	2022-06-01 00:00:00.000	75,000
3	2	873915	2022-07-01 00:00:00.000	95,000
4	3	3505071	2022-07-01 00:00:00.000	90,000
5	4	2930918	2022-07-01 00:00:00.000	109,091

Customer_Registered table

Column name	Data type	Meaning
ID	Bigint	Unique customer code
Contract	Varchar	Contract code
LocationID	Int	Location code
BranchCode	Tinyint	Branch Code
Status	Tinyint	Status of contract
created_date	Datetime	Registration Date
stopdate	Datetime	Cancellation Date

	123 ID	ABC Contract	123 LocationID	123 BranchCode	123 Status	ABC created_date	ABC stopdate
1	0	SGDN00215	8	1	0	2011-11-25 10:48:13.860000	2012-01-05 10:02:10.000
2	1	SGDN00214	8	1	0	2012-06-14 18:55:25.517000	[NULL]
3	2	SGD374348	8	1	0	2012-11-01 18:59:04.603000	[NULL]
4	3	SGD022064	8	1	2	2011-06-22 14:54:30.997000	2013-05-29 13:57:51.000
5	4	SGD041015	8	5	2	2011-12-17 12:58:58.460000	2014-11-11 09:40:39.460

Data Preparation

The data was processed and analyzed using SQL Server. The data preparation process involved the following steps:

1. Filter active customers: JOIN Customer_Transaction and Customer_Registered tables, with the condition that Stop_Date is NULL.
2. Calculate Recency = The report date - The most recent service usage date (assuming the report date is 01/09/2022).
3. Calculate Frequency = Total number of transactions.
4. Calculate Monetary = Total transaction value.
5. Score RFM using IQR Method: Divide the Recency, Frequency, and Monetary values into four equal quartiles using the NTILE window function. A scoring table was generated to classify customers into different segments for further analysis, where the larger the label, the better the value (Label = 4 is best).

| Score IQR	1	2	3	4
Recency (days)	≥92	62 – 91	32 – 61	1 – 31
Frequency (times)	1	2	3	4
Monetary (thousand)	<75	75 – 85	85 – 105	≥105

From the computed R-F-M scores, 37 unique combinations were formed and grouped into four customer segments: VIP, Potential, General, and Secondary.

- VIP Customers: 334, 444, 344, 434
- Potential Customers: 324, 233, 234, 323, 224, 244, 333, 433, 343, 443
- General Customers: 222, 341, 214, 332, 342, 231, 442, 331, 441, 223, 322, 213, 242, 432, 232, 241
- Secondary Customers: 111, 221, 113, 123, 112, 121, 122

Data Analysis

Analyzing By RFM Groups

Overall, the RFM groups exhibit relatively balanced customer distributions, yet they vary significantly in terms of behavioral characteristics. Notably, the 444 group - representing customers with high spending, frequent transactions, and recent activity - has the largest number of customers, totaling over 14k.
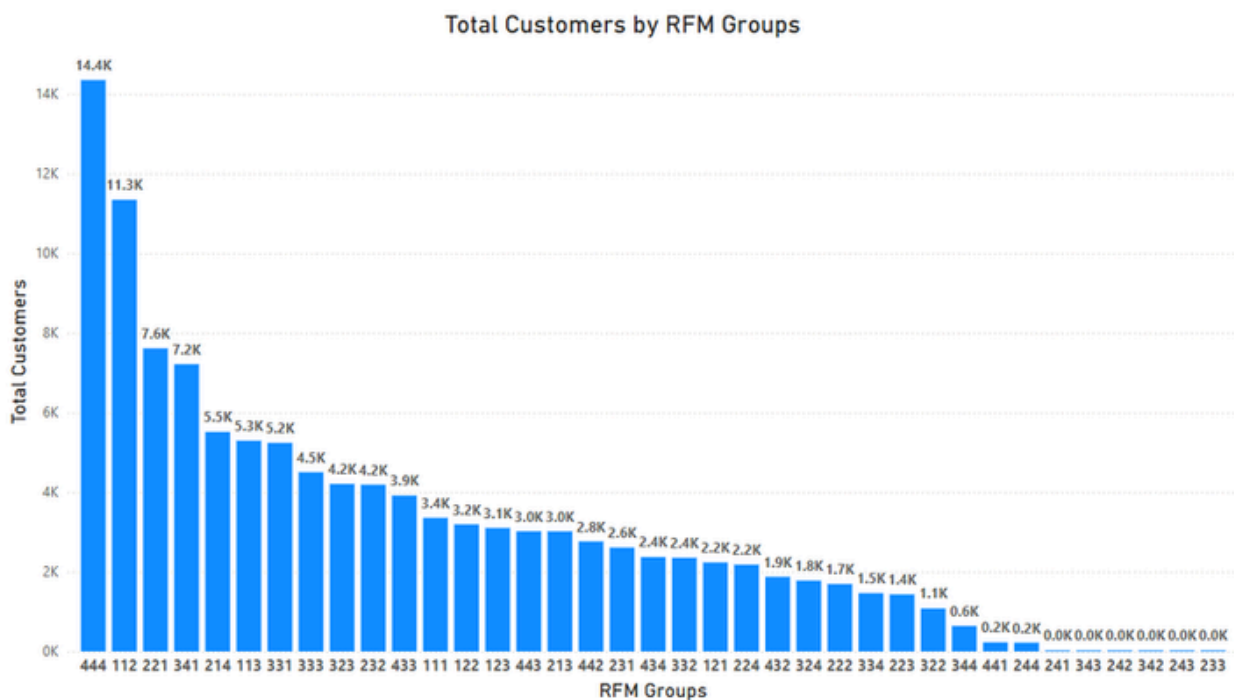
In addition, there are two notable groups, 112 and 221, despite their low spending and long periods of inactivity, account for a large number of customers, with approximately 11.3k and 7.6k respectively.

Building on this graph, customers accounting for a high percentage of the total tend to exhibit very frequent purchases and relatively recent service usage. As a result, they contribute significantly to overall revenue.

In contrast, customer groups representing a smaller proportion generally show lower purchase frequency. Although some of them have used the service recently, their spending remains limited, and their impact on revenue is comparatively minimal.

Approximately 60% of customers come from one-third of the RFM groups.

RFM	Total Customers	Cumulative Sum	Ratio
444	14352	14352	12.58%
112	11343	25695	22.52%
221	7614	33309	29.20%
341	7216	40525	35.52%
214	5513	46038	40.36%
113	5293	51331	45.00%
331	5238	56569	49.59%
333	4501	61070	53.53%
323	4208	65278	57.22%
232	4188	69466	60.89%
Total	**114081**	**114081**	**100.00%**

The customer count across the top 10 RFM groups is highly diverse, with spending levels ranging from low to high. Notably, most customers in these groups have used the service recently, not too far from the report date (01/09/2022), and generally exhibit a moderate to high monetary value.

More than 30% of the revenue comes from customers in just three RFM groups (444, 112, 214), with spending levels that are generally moderate to high.

RFM	Revenue	Cumulative Revenue	Ratio
444	2,439,603,175	2,439,603,175	21.93%
112	866,056,634	3,305,659,809	29.72%
214	643,618,024	3,949,277,833	35.50%
221	540,972,971	4,490,250,804	40.36%
341	512,021,141	5,002,271,945	44.97%
113	469,112,000	5,471,383,945	49.18%
333	440,174,595	5,911,558,540	53.14%
323	411,854,518	6,323,413,058	56.84%
433	376,515,912	6,699,928,970	60.23%
331	367,694,620	7,067,623,590	63.53%
Total	**11,124,261,198**	**11,124,261,198**	**100.00%**

Among the three groups, group 444 contributes nearly 21.93% of the total revenue due to its customers' high spending and frequent service usage. In addition, the revenue from group 112, despite customers having used the service a long time ago, is relatively substantial.

Notably, Group 214 ranks in the top 5 for customer count but also appears in the top 3 for revenue, due to high spending. However, due to infrequent purchases, its overall revenue potential hasn't been fully realized. Therefore, this group presents an opportunity for deeper analysis and targeted strategy development.

Analyzing By Segments

**General Customers contribute the most to total revenue, with over 29.41% (around 3.2 billion).**
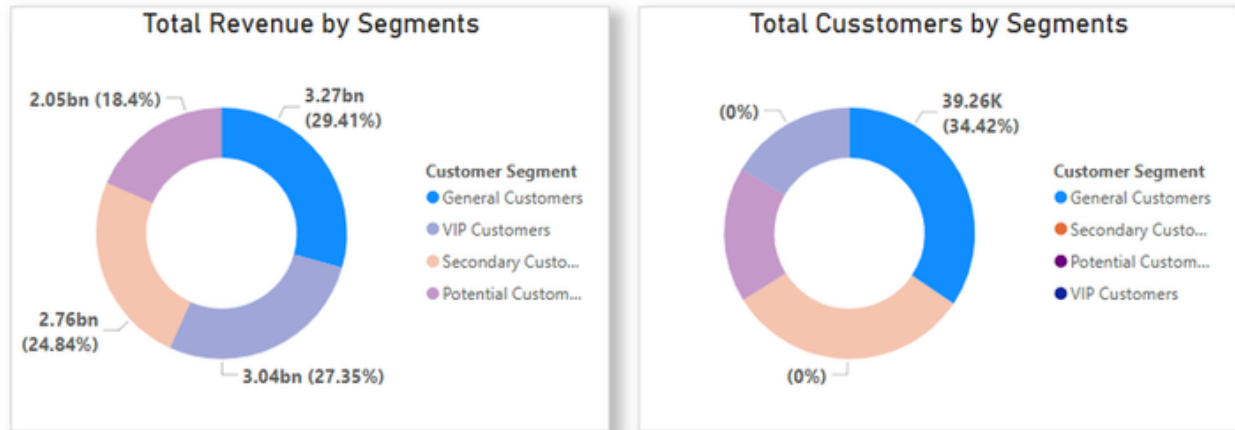
This group ranks first in both customer count and revenue contribution. They tend to purchase frequently, with their last transaction occurring within 1–2 months, but their order values are relatively low. This suggests that while these customers have high purchasing needs, they are price-sensitive.

Key question: How can we encourage this group to spend more?

Recommendation: Offer combo deals, "buy 2 get 1" promotions, send reminders about upcoming sales, and organize shelves with commonly paired products to stimulate additional purchases.

VIP Customers have the second-highest revenue contribution, approximately 5 billion.
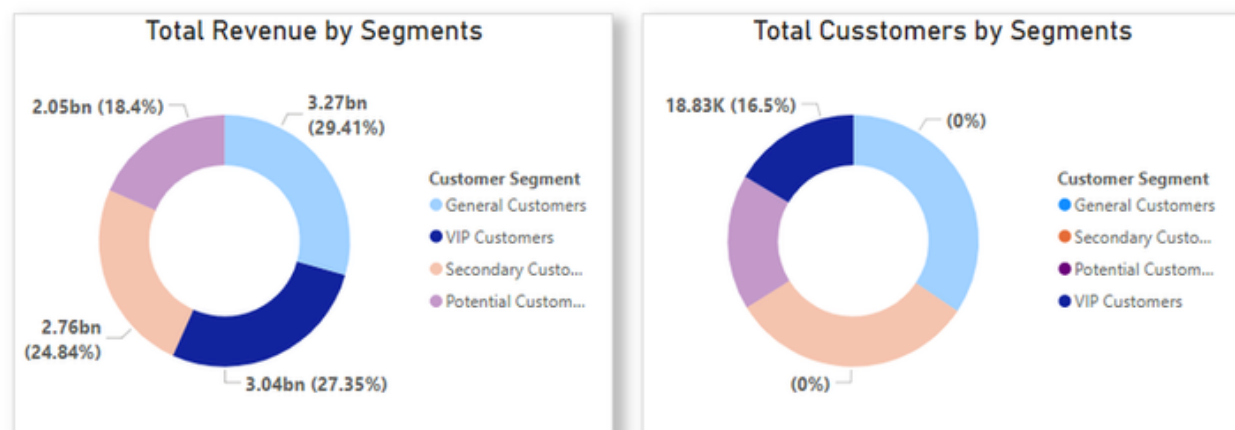
Although this group accounts for only 16.5% of the total customers, it contributes over 27% of total revenue, due to frequent purchases and high spending per transaction.

Key question: How can we maintain strong relationships with this customer group while also encouraging higher order values?

Recommendation: Introduce special promotions, discounts, or exclusive services with unique benefits tailored specifically for VIP customers. Additionally, send personalized notifications about new products based on their purchase history.

**Secondary Customers have the third-highest revenue contribution, approximately 2.7 billion.**
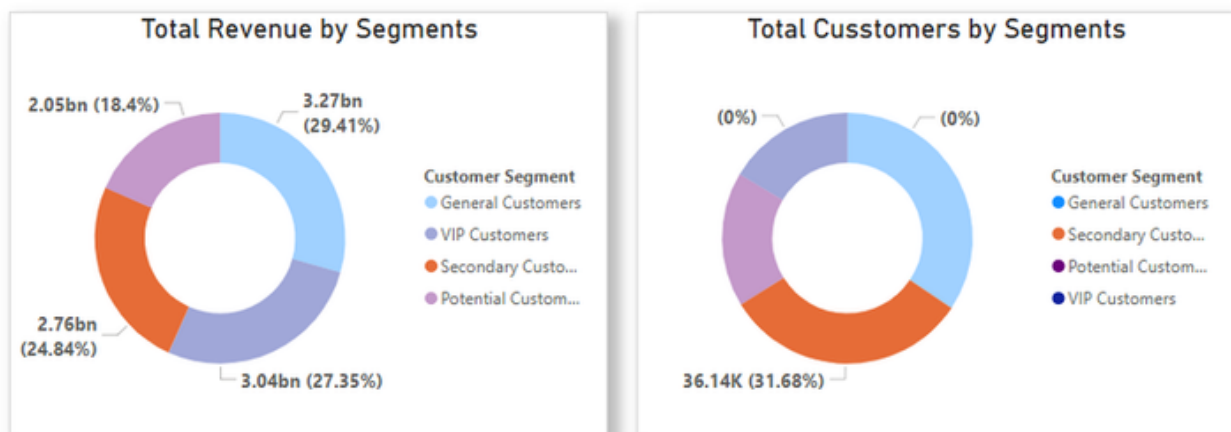
This group consists of customers who made purchases a long time ago, with spending ranging from low to moderate. If they completely stop buying, we risk losing over 2.7 billion in revenue from this customer segment in the near future.

Key question: How can we encourage customers to return and make purchases?

Recommendation: Rebuild the relationship with these customers through emails, phone calls, thank-you notes, or by offering exclusive deals and promotions tailored specifically for them, in order to motivate their return.

Potential Customers contribute approximately 2 billion in revenue.
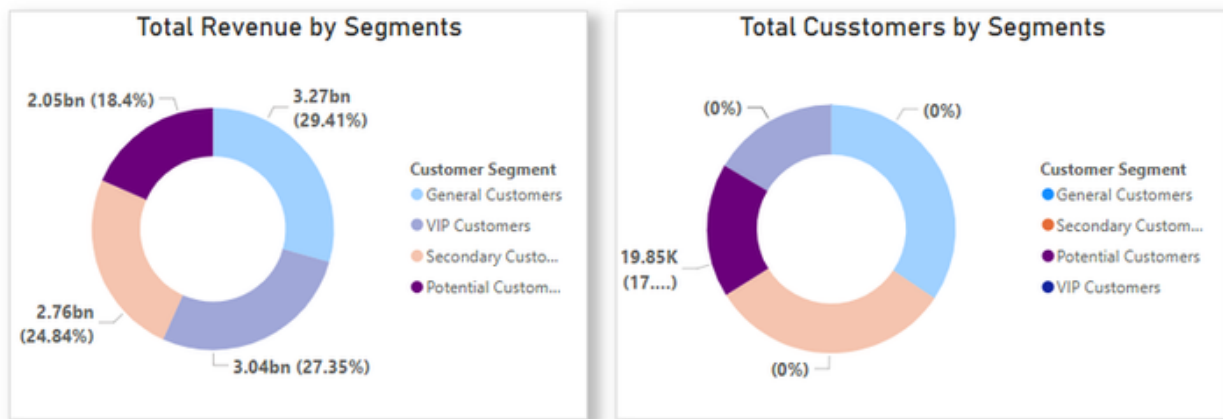
This is a group of customers who make frequent purchases with moderate to high order values.

Key question: How can we encourage this group to become VIPs?

Recommendation: Implement a tiered reward system based on spending milestones, offer early access to promotions or exclusive product launches, and personalize communications based on their purchase history.

Conclusion

The RFM analysis highlights General Customers and Secondary Customers as key targets for growth. These two segments make up the largest customer base but contribute less revenue than expected, signaling untapped potential.

Notably, RFM groups 214, 223, 213, 113, and 123 show high spending capacity but low purchase frequency. Targeting these customers with reactivation campaigns, personalized offers, and bundling strategies can significantly increase engagement and revenue.

Focusing efforts on these under-engaged yet valuable groups offers a clear path to improving customer lifetime value and overall business performance.