



CUSTOMER SEGMENTATION ANALYTICS REPORT

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METHODOLOGY

01 - DATA

The data used for analysis in this report is transaction data obtained from a very large chain of pizza stores, specifically sourced from the Pizzahut system in Vietnam. Each piece of data represents a record of individual transactions with customers, including: BillID, Channel, OrderFrom, TransactionDate, SalesAmount, CustomerID, CustomerGender, VoucherStatus, Province.

02 - TIME

"The data collection period in this report spans over 1 year, from October 1st, 2021, to January 9th, 2023.

03 - ANALYSIS METHOD

The report employs fundamental statistical techniques to illustrate findings from the data, including summation, minimum, maximum, counting, averaging, and median calculation. Furthermore, the data undergoes analysis according to the RFM model, which serves to categorize the company's clientele into distinct customer segments.

DATA MAPPING (BEFORE)

Column name	Meaning	Data type	Example
BillID	The ID of the transaction. This ID is unique in the dataset	Text	1
Channel	The method for delivering food to customers.	Text	Delivery Take away Dine in
OrderFrom	Where do customers place orders from	Text	App Call center Store Website
TransactionDate	When does the transaction take place	Date	2021-10-01

DATA MAPPING (BEFORE)

Column name	Meaning	Data type	Example
SalesAmount	The amount of money received from the transaction	Number	296891
CustomerID	ID of the customer	Text	1753863
CustomerGender	The gender of the customers	Text	Male Female Unknown
VoucherStatus	Did the customer use a voucher for their transaction?	Text	Yes No
Province	Province of each customer	Text	Ho Chi Minh City Hanoi

DATA MAPPING (AFTER)

Column name	Meaning	Data type	Example
CustomerID	ID of the customer	Text	1753863
TransactionDate	When does the transaction take place	Date	2021-10-01
datediff	The gap between the date of the latest transaction and the date of the report for each customer	Number	381
R	Recency. This is created by quantile all the value of date_diff. The value is from 1 to 4	Text	3
frequency	Total number of transactions that each customer has made	Number	1

DATA MAPPING (AFTER)

Column name	Meaning	Data type	Example
F	Frequency. This is created by quantile all the value of frequency. The value is from 1 to 4	Text	1
SalesAmount	The total amount of money for each customer	Number	411663
M	Monetary. This is created by quantile all the value of SalesAmount. The value is from 1 to 4	Text	4
RFM	RFM metric	Text	213

OVERVIEW OF ENTERPRISE



Pizza Hut is a globally renowned restaurant chain specializing in pizza and other Italian–American cuisine. Pizza Hut is celebrated for its diverse menu, which includes various styles of pizzas, pasta, wings, salads, and desserts.

What sets Pizza Hut apart is its commitment to innovation and quality. Beyond its delicious food, Pizza Hut is known for its distinctive dining experience, offering dine-in, takeout, and delivery options to customers. The company prides itself on its friendly service and inviting atmosphere, making it a popular choice for family gatherings, casual outings, and celebrations alike.

OVERVIEW OF ENTERPRISE



The data is collected from all Pizza Hut store chains in Vietnam over a period of more than 1 year, from October 1st, 2021, to January 9th, 2023. Through this data, we can classify customers into different groups, thereby devising strategies to serve them better, aiming to optimize profits and reduce necessary costs.

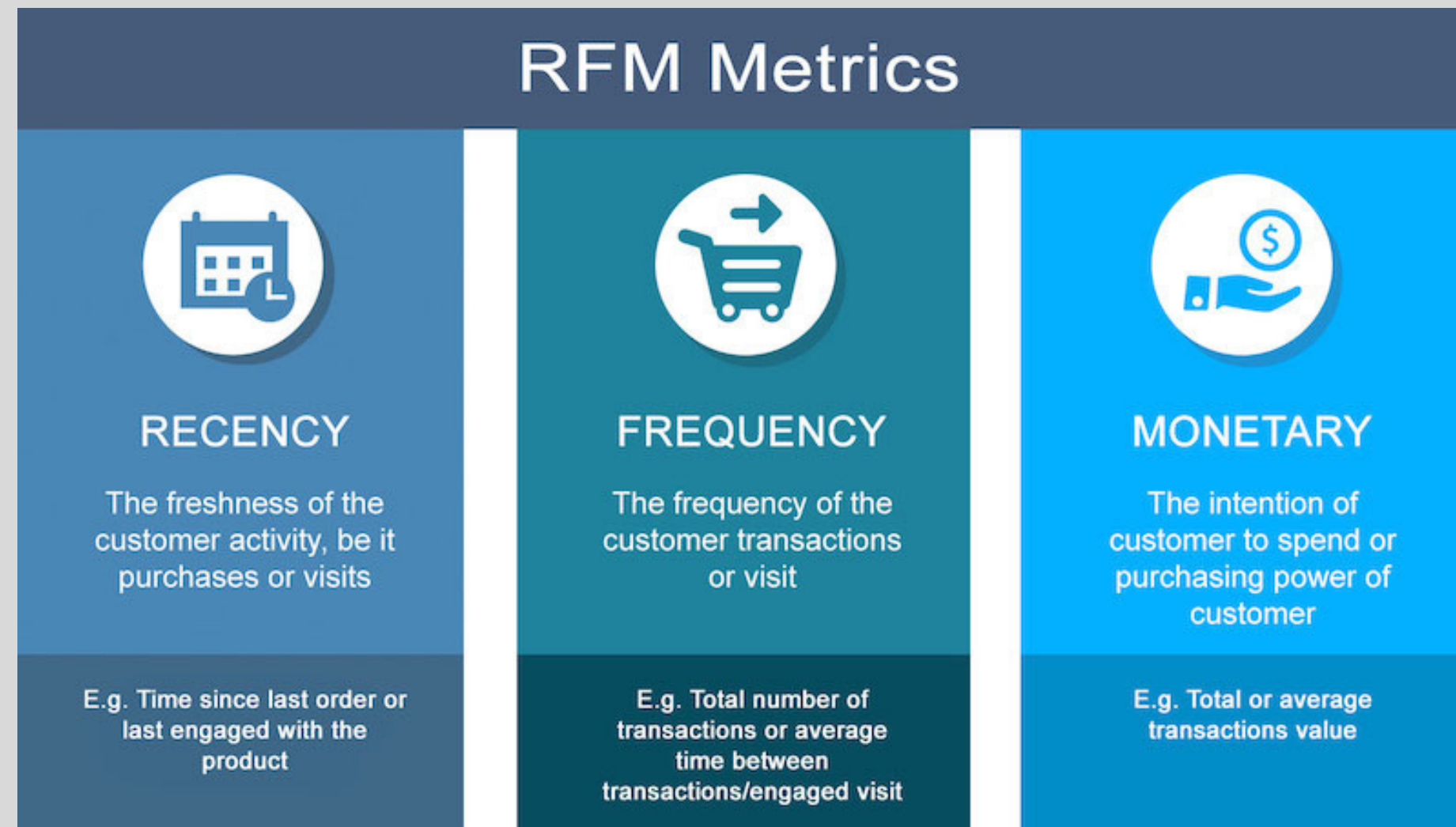
OVERVIEW OF CUSTOMER 360 AND RFM MODEL

Customer 360" refers to a business strategy and technology framework that aims to create a comprehensive, unified view of a customer by aggregating and analyzing data from various touchpoints and interactions. The goal of a Customer 360 approach is to provide businesses with a complete understanding of their customers' behaviors, preferences, and needs. By consolidating customer data, organizations can enhance customer experiences, improve customer satisfaction, and make more informed business decisions



OVERVIEW OF CUSTOMER 360 AND RFM MODEL

"RFM" stands for Recency, Frequency, and Monetary Value, and it is a method used in marketing and customer relationship management to analyze and categorize customers based on their behavior. The RFM model helps businesses identify and target specific customer segments for more effective marketing strategies.



RFM MAPPING

R	Definition
1	datediff > 336
2	datediff <= 336 and datediff > 217
3	datediff <= 217 and datediff > 101
4	datediff<=101

RFM MAPPING

F	Definition
1	frequency < 2
2	frequency >=2 and frequency <3
3	frequency >= 3 and frequency <4
4	frequency >= 4

RFM MAPPING

M	Definition
1	monetary < 201289
2	monetary > 201289 and monetary < 311816
3	monetary > 311816 and monetary < 567481
4	monetary > 567481

DATA ANALYSIS

583.64K

Count of CustomerID

During the reporting period, nearly 600,000 member customers conducted transactions at Pizza Hut system stores.

In just over a year, the total transactions across the Pizza Hut chain stores amounted to over 1 million transactions.

1.05M

Sum of frequency

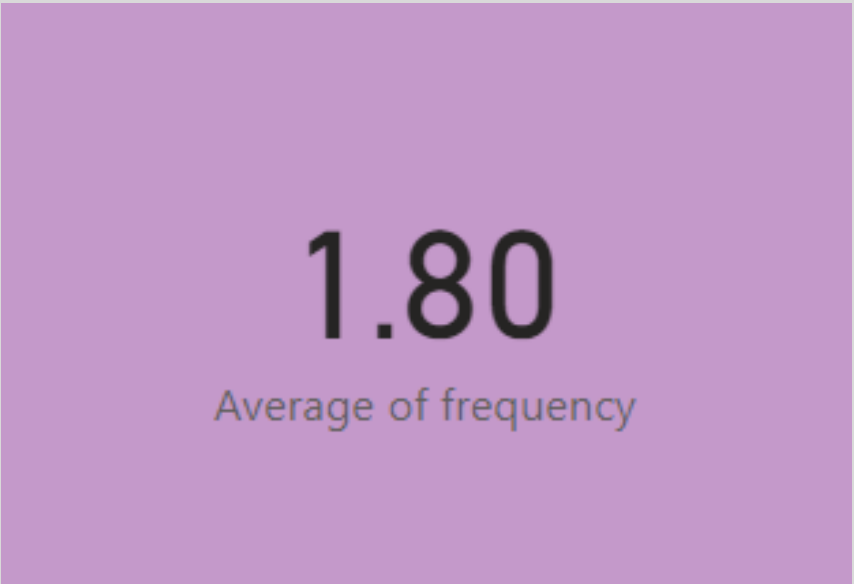
320bn

Sum of SalesAmount

Over the course of more than a year, the Pizza Hut chain of stores generated revenue of 320 billion VND.

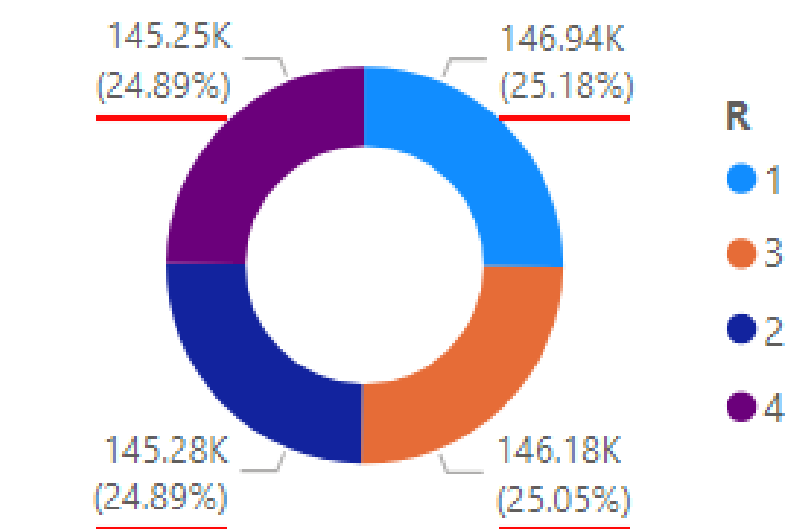
DATA ANALYSIS

On average, each Pizza Hut customer conducts 1.8 transactions in a year.



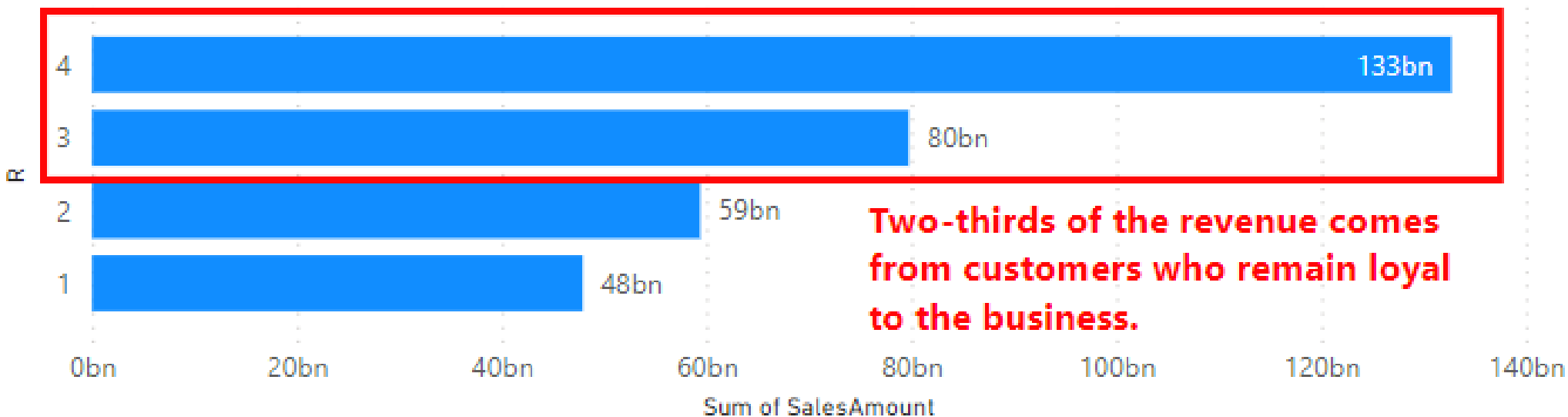
On average, for each transaction, the store will generate revenue of 548,000 VND.

Count of R by R



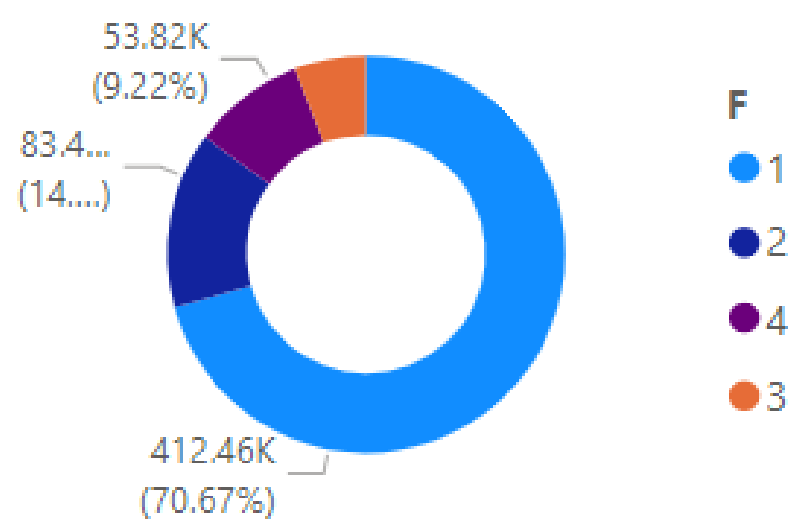
There is an even distribution among customers with R=1, R=2, R=3, and R=4 scores. This suggests that at Pizza Hut, customers with R=1 and R=2 scores tend to churn, while customers with R=3 and R=4 scores are either loyal customers or new customers. This indicates that approximately 50% of the business's customers churn within a year.

Sum of SalesAmount by R



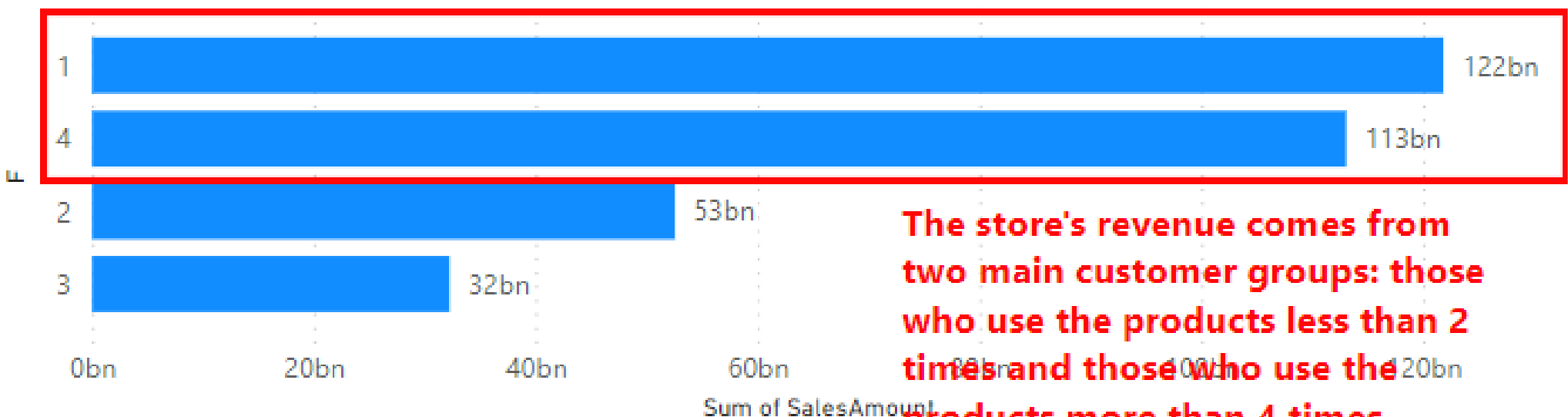
Two-thirds of the revenue comes from customers who remain loyal to the business.

Count of F by F



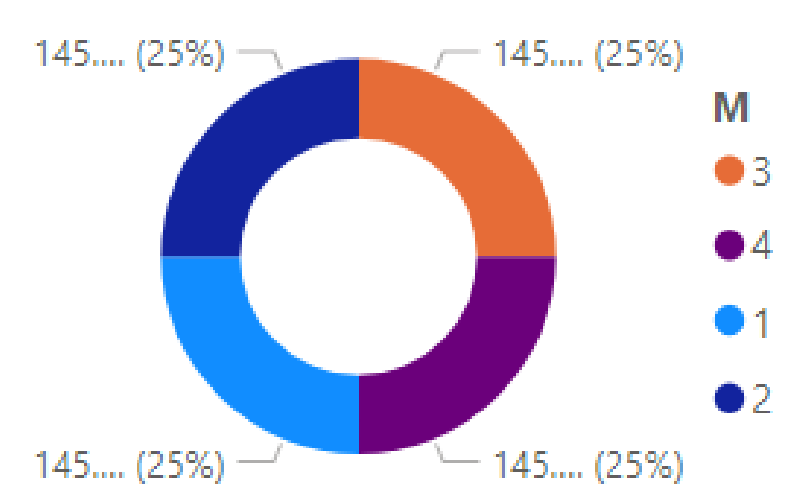
Up to over 80% of Pizza Hut's customers are those who use the products less than 3 times, while only about 15% are customers who use the products more than 4 times.

Sum of SalesAmount by F



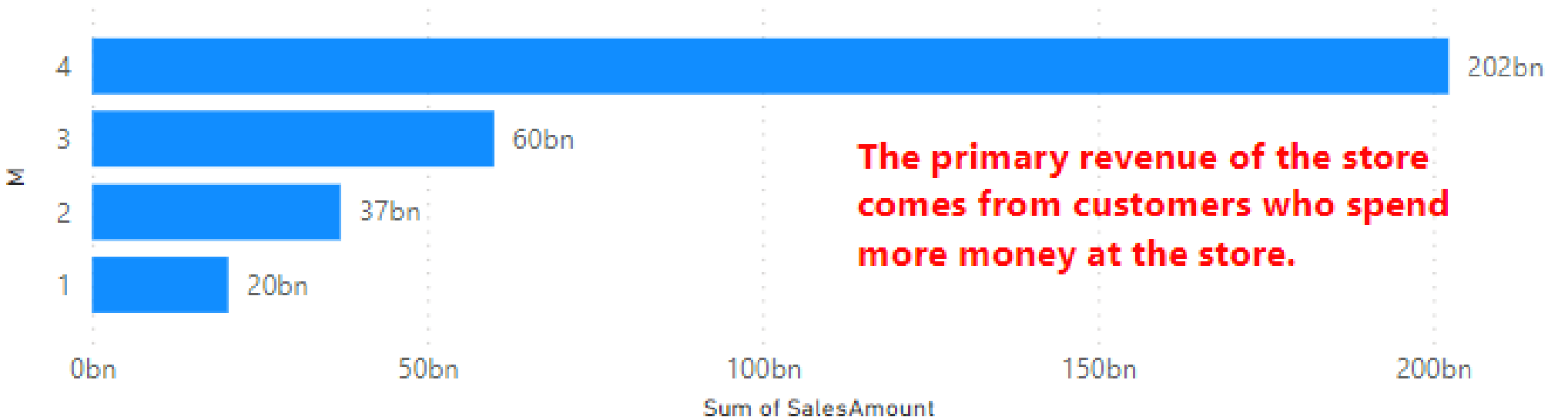
The store's revenue comes from two main customer groups: those who use the products less than 2 times and those who use the products more than 4 times.

Count of M by M



There is an even distribution among Pizza Hut customers regarding the total amount they have spent at the store.

Sum of SalesAmount by M



The primary revenue of the store comes from customers who spend more money at the store.

SUMMARY



Within the past year, the Pizza Hut chain has served nearly 600,000 customers and generated revenue of 320 billion VND. On average, each customer made 1.8 transactions, resulting in approximately 550,000 VND per transaction for the store.

However, there is a concerning trend: within the customer base of the business, half of the total customers churned within the past year (as indicated by the Recency score). Though their individual revenue contributions might not be significant, this still reflects that the policies for serving new customers and retaining existing ones may not be as effective as desired.

Among the entire customer base, only about 15% are loyal and frequent customers (as indicated by the Frequency score). However, these 15% contribute significantly to the company's revenue, accounting for over 1/3 of the store's total revenue. The majority of the remaining revenue is contributed by customers with an F score of 1, including those who churned and newly acquired customers.

DATA ANALYSIS

64
Count of RFM

After combining the three indices R, F, M, we have a total of 64 RFM groups

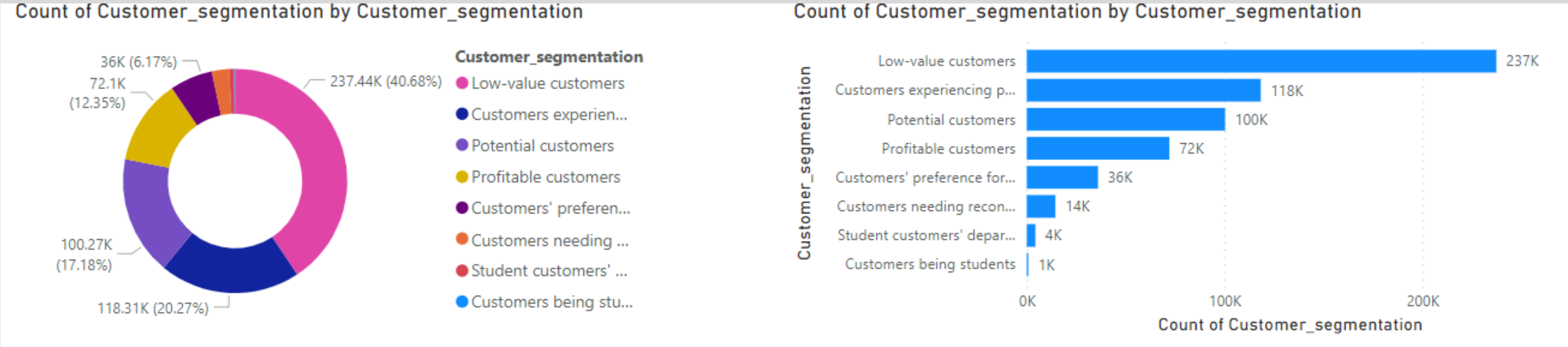
112	46780
111	43642
211	39335
212	38682
113	34685
311	33581
444	33410
312	31397
213	27871
411	26540
313	24428
412	21707
413	18477
344	13266
324	12465
424	12387
434	12013
323	10668
423	9741
334	9545
223	9291
224	9169
214	6792
314	6462
114	6442
414	5641
234	5578
123	5406
124	5337
244	4776
422	2008
134	1834
322	1767

Customer Segmentation	Definition	RFM
Low-value customers	This group consists of customers who only tried the product once and did not return. They spend little, and they have churned from the store.	111, 112, 211, 212, 113,213, 114
"Student" customers' departure from the store	This group comprises customers who used the product many times but spent relatively little each time. They are customers who have churned from the business.	222, 122, 221, 121, 242, 131, 241, 142, 141, 132, 231, 232
Customers experiencing product trials	This group comprises customers who are currently using the business's product, but they use it infrequently and spend little. However, they are a variable because they could potentially become valuable customers for the business or not. Therefore, they need to be nurtured to become valuable customers.	311, 312, 411, 412, 422, 322, 421, 321

Customer Segmentation	Definition	RFM
Potential customers	This group consists of customers who are currently using the store's product, spending a lot, but with relatively low usage frequency. They represent a highly promising customer segment that could contribute significantly to the business. Therefore, the business needs to nurture them to foster long-term loyalty.	313, 413, 324, 424, 323, 423, 314, 414
Profitable customers	This group consists of customers who are actively using the business's product, with a high frequency of usage and significant spending. They are the customers that the business should allocate resources to focus on retaining long-term, as they are the most valuable customer segment for the business.	444, 344, 434, 334, 443, 343, 433, 333
Customer needing reconnection	This group comprises customers who have used the product extensively in the past, with frequent usage and significant spending. However, for some reason, they have decided to churn from the business. These customers were once highly valuable to the business.	234, 244, 134, 233, 144, 133, 143, 243

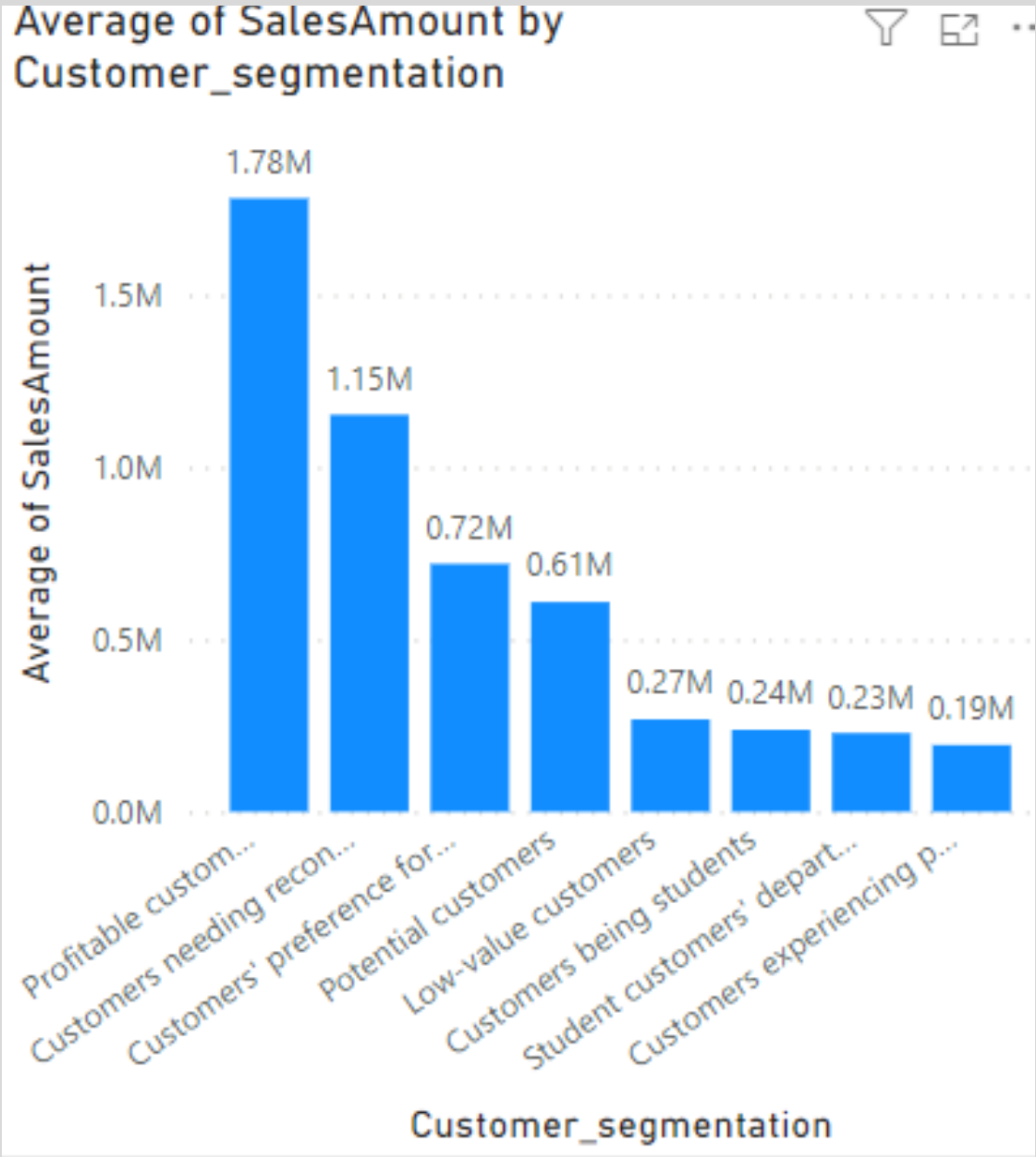
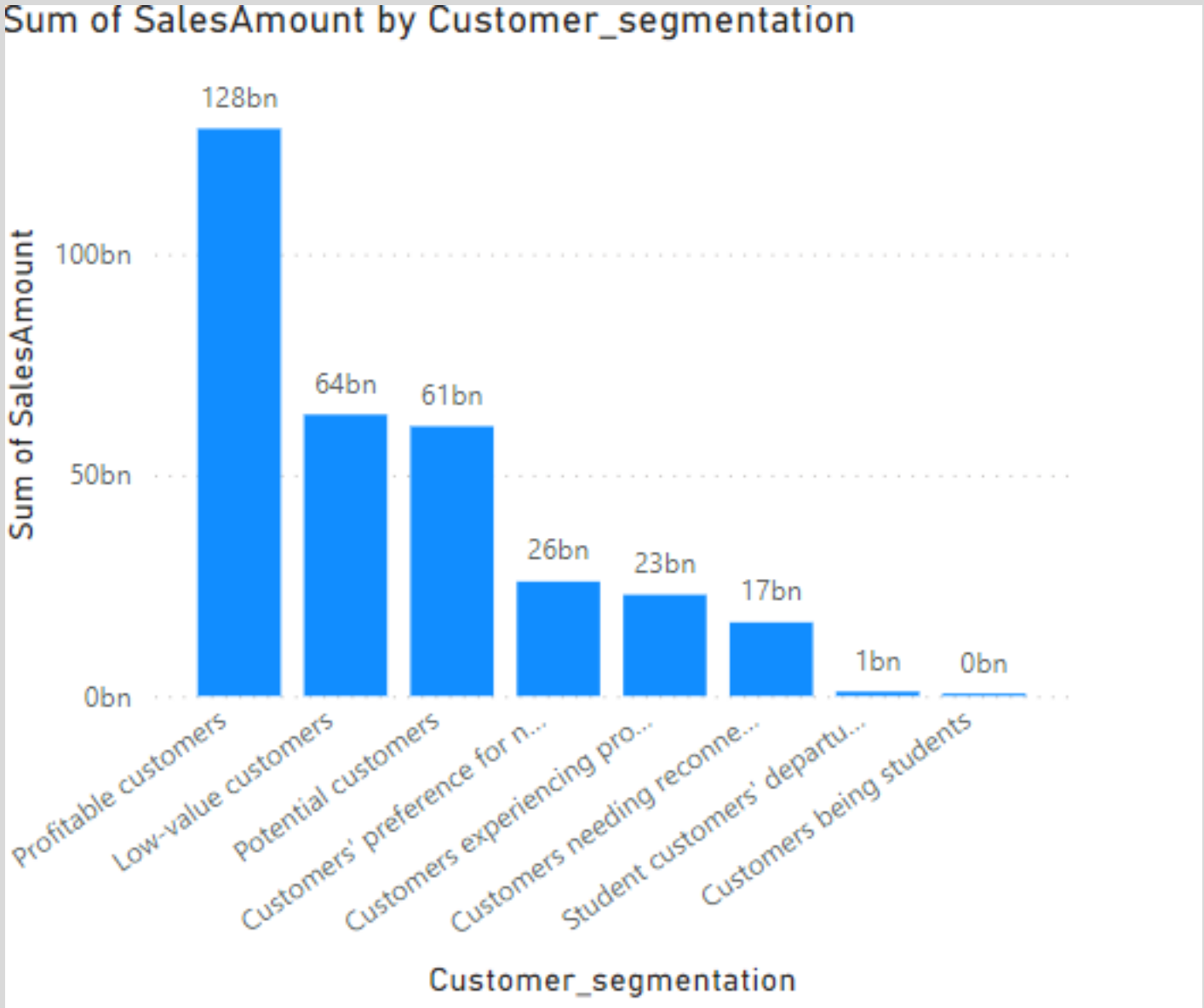
Customer Segmentation	Definition	RFM
Customers being "students"	This group consists of customers who are still using the product, with high usage but very low spending. This is often characteristic of customers who are students. For this customer group, the store should allocate resources to nurture them with incentives until they enter the workforce, where they are likely to have higher spending capabilities.	342, 442, 431, 441, 341, 331, 332, 432
Customers' preference for novel experiences	This group consists of customers who have spent relatively much on the business in the past. However, they have very few and infrequent product usage instances at the store. They have churned from the business. This group of customers simply wanted to experience the product out of curiosity. Once their curiosity was satisfied, they decided to leave the business.	224, 223, 123, 124, 214

DATA ANALYSIS



Among the total number of customers in the Pizza Hut chain stores, over 40% are low-value customers, while nearly 50% are retained, specifically, about 12% are profitable customers, 17% are potential customers, and 20.27% are customers experiencing product trials.

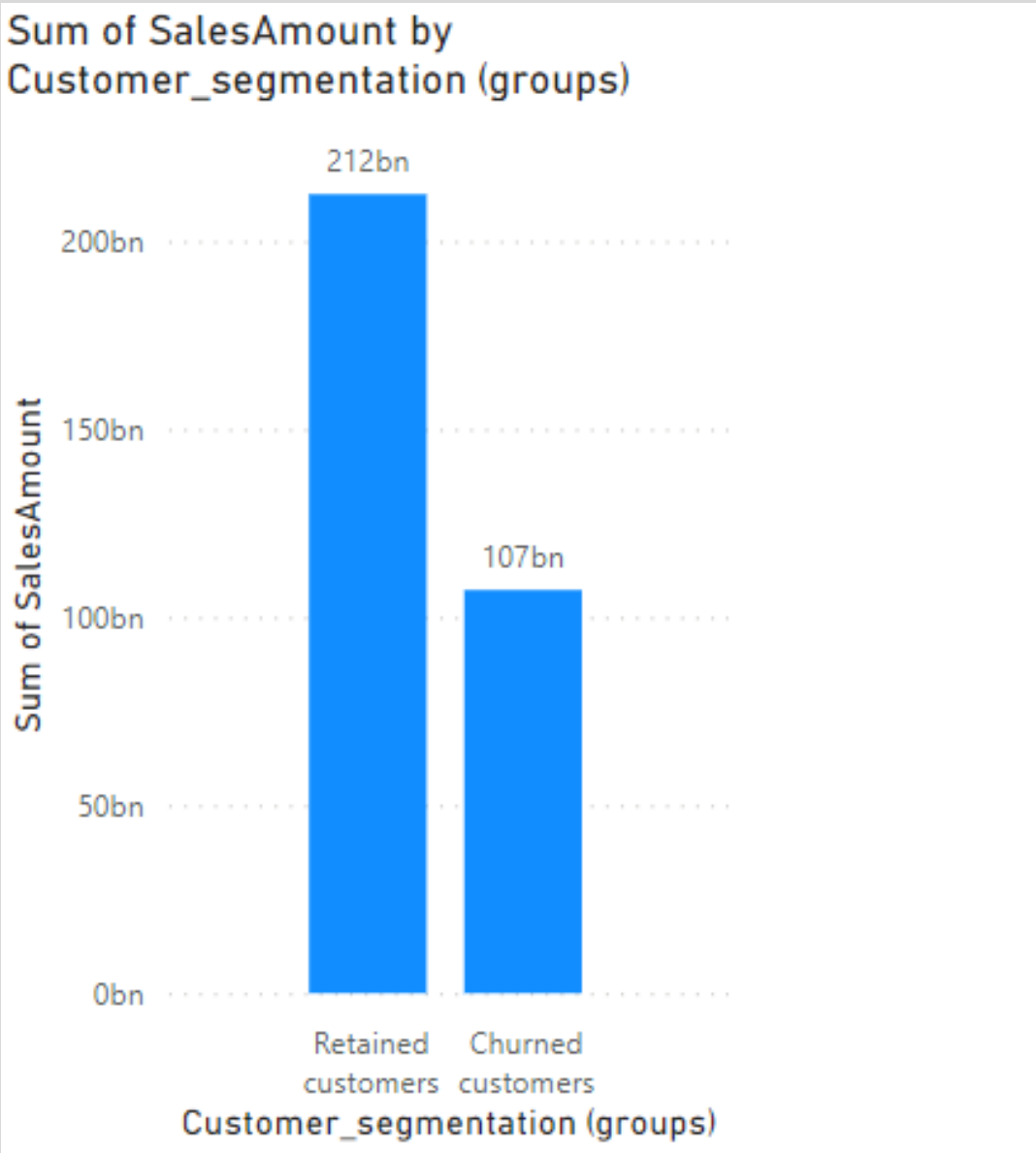
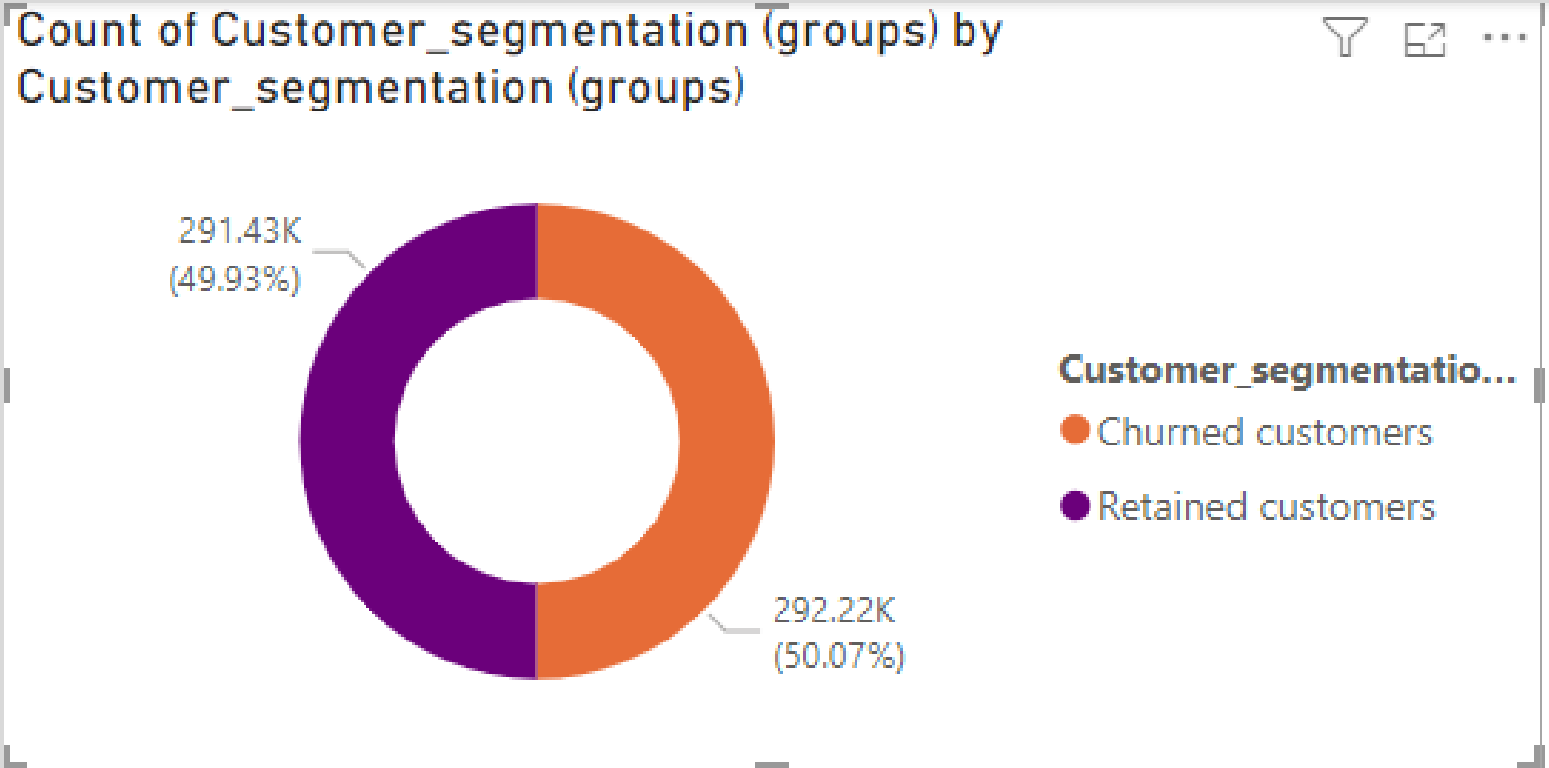
DATA ANALYSIS



Profitable customers are the group that contributes the most to the business's revenue, despite their low numbers. Following them are the groups of low-value customers, potential customers, customers who prefer novel experiences, and customers experiencing product trials.

The customer status	Definition	Customer segmentation
Churned customers	The category of customers who have departed from the business.	Low-value customers "Student" customers' departure from the store Customers needing reconnection Customers' preference for novel experiences
Retained customers	The group of customers who still continue to use the products of the store.	Customers experiencing product trials Potential customers Profitable customers Customers being "students"

DATA ANALYSIS



Among the total registered customers of the business, there are approximately 50% who have churned from the business and 50% who remain loyal to the business. The churn rate is at 50%. Meanwhile, the revenue generated from the customers who are still engaging with the store accounts for two-thirds of the total store revenue.

SUMMARY



In general, Pizza Hut has achieved certain successes during its one-year operational cycle. However, there are still lingering issues that need to be addressed.

Positive aspects:

- Within 1 year of operation, achieving revenue of nearly 320 billion VND, which is a relatively large figure.
- The company has implemented a strategy to care for its key customers relatively well, specifically focusing on the profitable customers group. Although this group accounts for only around 10%, their revenue constitutes nearly 1/3 of the total revenue of the store chain.
- Furthermore, the store has been very successful in attracting new customers, particularly in two customer groups: customers experiencing product trials and potential customers. These two groups comprise nearly 40% of the total customer base of the business. The revenue generated by these two customer groups also accounts for nearly 1/3 of the total revenue of the entire store chain. This indicates that Pizza Hut is effectively optimizing its revenue and cost strategies.

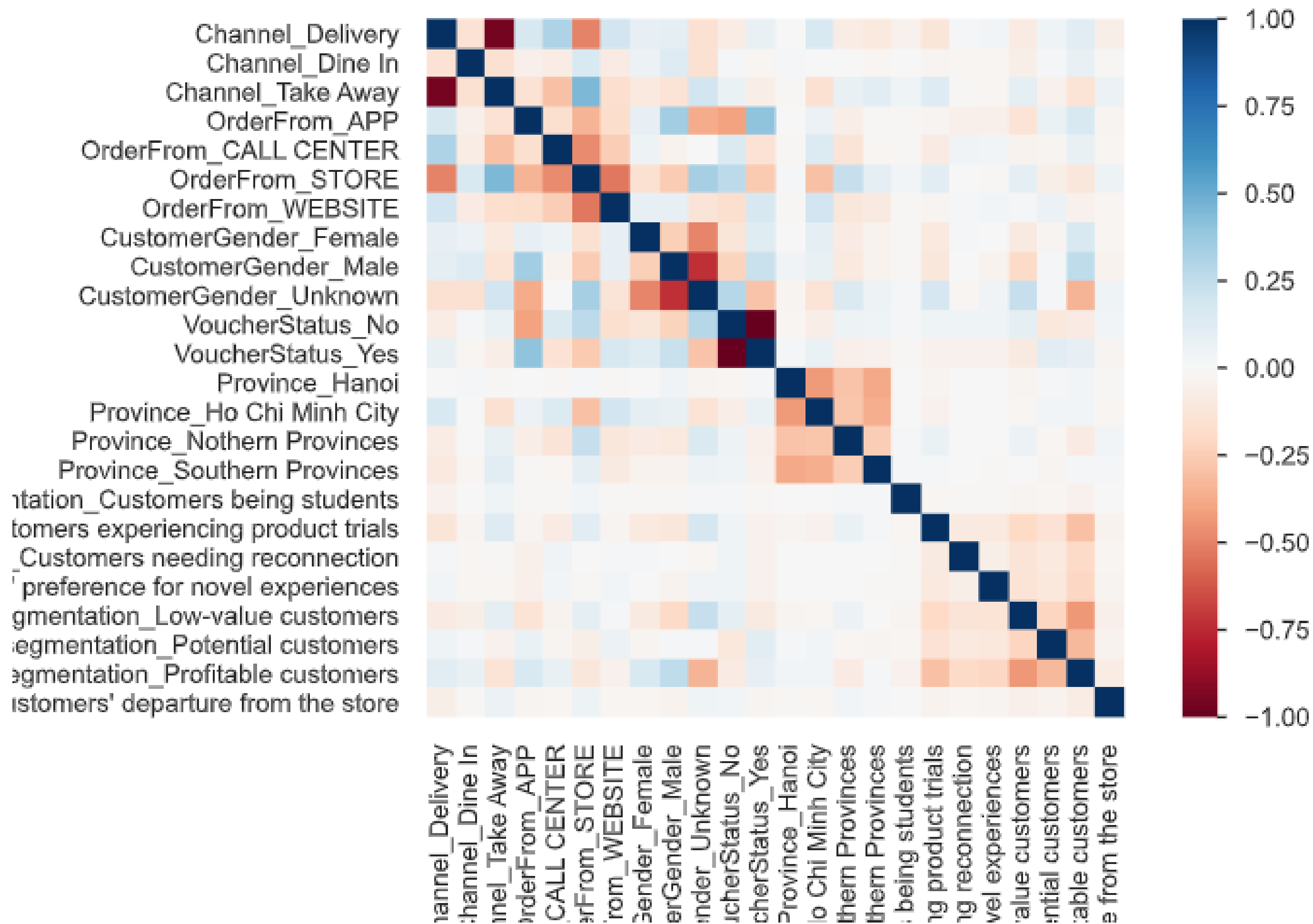
SUMMARY



Negative aspects:

- Only 50% of the company's customers are truly actively engaged with the business, meaning that 50% of the store's customers have churned, with a churn rate of 50%. This is a significant figure and will have long-term detrimental effects on the store because, as we know, the cost of acquiring new customers is always much higher than retaining existing ones. This indicates that the business is not doing well in retaining the customers they have acquired. This represents a significant waste.

40% of the customers are low-value customers, characterized by their single-use, low spending, and churn behavior. This indicates that out of 100% of its customers, the business has lost 40% of them, for which they have incurred significant acquisition costs.



The customer status	Portrait
Low-value customers	This customer group tends to opt for take-away food and ordering in-store, with no inclination to share personal information such as gender. Additionally, they do not utilize vouchers.
Potential customers	This customer group doesn't exhibit a clear trend in terms of where they eat or place orders. However, objectively speaking, they prefer food delivery service, and orders are typically placed through apps and websites. Additionally, they tend to use vouchers for purchases.
Profitable customers	The characteristic of this customer group is that they do not favor the take-away method; instead, food is typically ordered through apps or by directly calling the hotline. They are usually willing to disclose personal information such as gender, and they frequently use vouchers.
Customers' departure from the store	This is a customer group whose characteristics cannot be easily identified because the traces they leave behind typically do not exhibit a specific trend.

The customer status	Portrait
Customers' preference for novel experiences	This is a customer group whose characteristics cannot be easily identified because the traces they leave behind typically do not exhibit a specific trend.
Customers needing reconnection	This is a customer group without a specific characteristic. It is only known that they are individuals who do not prefer ordering food through apps, and they tend not to use vouchers.
Customers experiencing product trials	This is a customer group that dislikes using delivery services. They prefer ordering at the counter. They tend to be reserved about disclosing personal information. Additionally, they enjoy using vouchers.
Customers being "students"	This is a customer group whose characteristics cannot be easily identified because the traces they leave behind typically do not exhibit a specific trend.

OPINION OF THE REPORT AUTHOR

Overall, Pizza Hut chain stores have achieved significant economic success over the past year, as evidenced by reaching 320 billion VND in revenue in just 1 year. The business has been highly successful in establishing close relationships with customer groups that truly benefit the business, following the 80:20 principle, particularly applied to the profitable customers group. Additionally, up until the date of this report, the company has successfully attracted many new customers, with these new customer groups accounting for 40% of the total customer base, including potential customers and customers experiencing product trials. Furthermore, these two groups also contribute to one-third of the total revenue of the entire store chain.

However, on the negative side, it is evident that the Pizza Hut chain stores still have not excelled in nurturing and establishing strong relationships to retain the newly attracted customers. This is a regrettable aspect because it is well-known that the cost of acquiring a new customer is often much higher than the cost of retaining one. While the company has performed well in acquiring new customers, their efforts in retaining these customers have often been inadequate. The churn rate reaches 50%, with the low-value customers group alone accounting for nearly 40%.

OPINION OF THE REPORT AUTHOR

At this point, Pizza Hut chain stores need to review their customer policies and allocate resources sensibly to each customer group. Specifically, for loyal customers who frequently use their products, Pizza Hut is already performing well, so they can maintain their current policies. However, for newly acquired customer groups, they need to adapt their policies, recognizing the specific needs of each group and addressing those needs. Regarding the customer groups that have churned from the business, they need to identify which groups are worth re-establishing relationships with due to the economic benefits they bring.

RECOMMENDATION FROM REPORT AUTHOR



Customer Segmentation	Solution plan
Low-value customers	Not allocating resources to this customer group and accepting the loss of this customer group.
Customers' preference for novel experiences	When there are new products, promote them to this customer group and consider offering vouchers if available. However, do not allocate too many resources to this group.
Potential Customers	Allocate a significant amount of resources to encourage these customers to remain loyal to the business and utilize more services. Actively roll out promotional programs for this customer group. Vouchers may include free shipping or discounts on food purchases at the store, accessible through ordering via the app or website.
Profitable customers	The business needs to allocate a significant amount of resources to retain this customer group as they are particularly crucial to the store. There should be dedicated programs for this customer group, and only this group should have priority in terms of reservations, pricing, ordering preferences, and personalized celebrations of important occasions. Personalization can be emphasized through order accounts via apps and websites. There should be plenty of incentives for this customer group

Customer Segmentation	Solution plan
Customers' departure from the store	Not allocating resources to this customer group and accepting the loss of this customer group.
Customers needing reconnection	Allocate resources, but not excessively, to reinitiate relationships with customers in this group. This can be done by sending them special offers to encourage their return to the store. Avoid using vouchers for these customer groups; instead, create special programs such as offering half-price discounts or personalized initiatives to attract them back to the business.
Customers experiencing product trials	We need to focus resources neither too much nor too little to stimulate and establish consumption habits for this customer group. Create discount programs for orders at the counter and provide plenty of consumer vouchers for this customer group.
Customers being "students"	Nurture this customer group and acknowledge that they may not bring in significant profits in the near future, but they will be a loyal and profitable customer group in the long run. For these groups, offer special pricing programs and set age limits for customers entitled to these privileges. Accept nurturing them and anticipate reaping the rewards in the future.