

mollie

Acquisition Channels and Payments Analysis

The analytics challenge results for the provided mock-up data



1. Acquisition Channels

2.

3.

1.1.

The impact

In the data provided, we have information about two acquisition channels, the overall impact of which is not equal.

	Channel 1	Channel 2
Customers	2%	98%
Transactions	38%	62%
Commissions	40%	60%

1.2.

Consistency of payment inflows

The channel's first customer segment includes a smaller portion of users who haven't made any payments, and it also has significantly fewer users with at least one month without payments.

	Channel 1	Channel 2
No payments	1.84%	2.25%
Irregular	6%	24%

1.3.

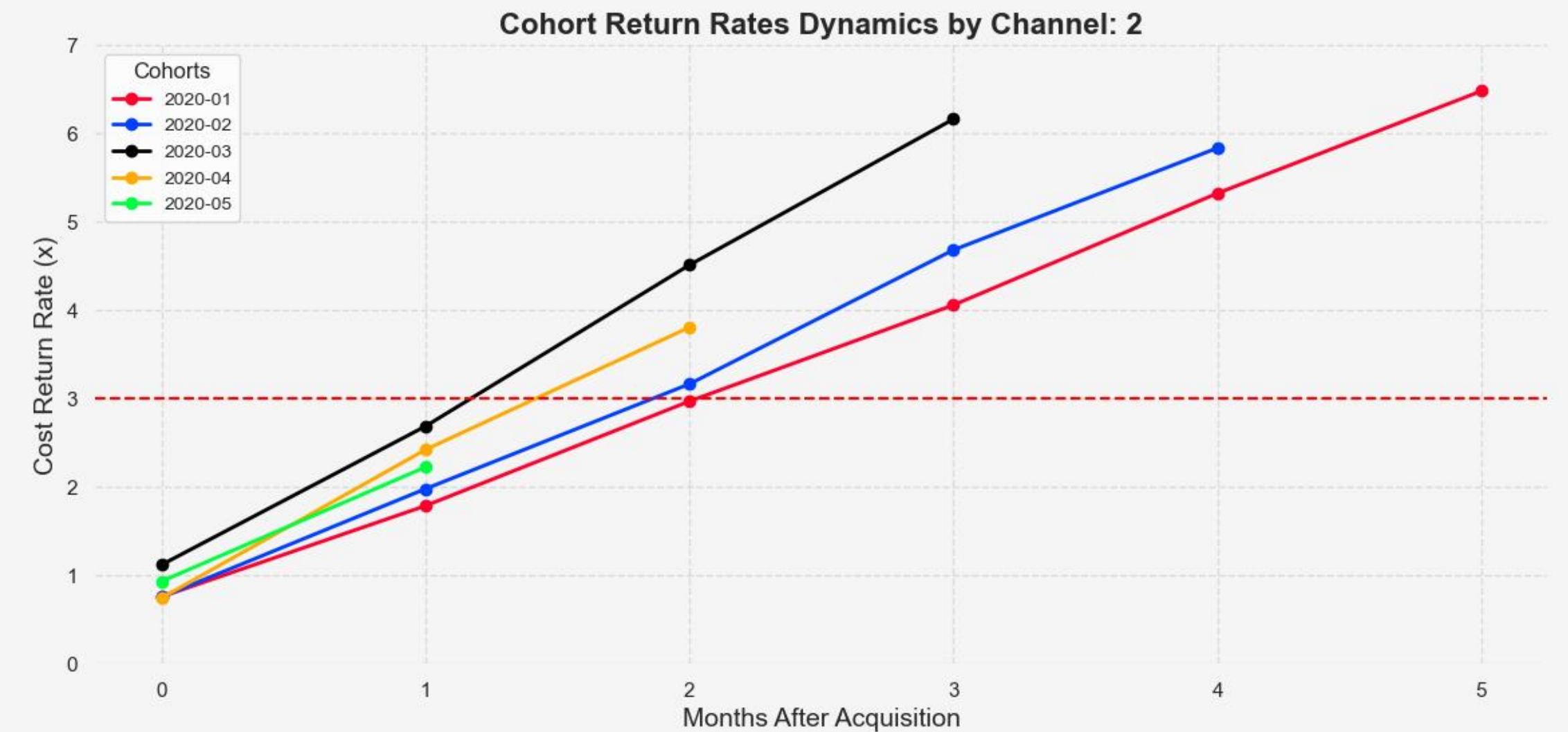
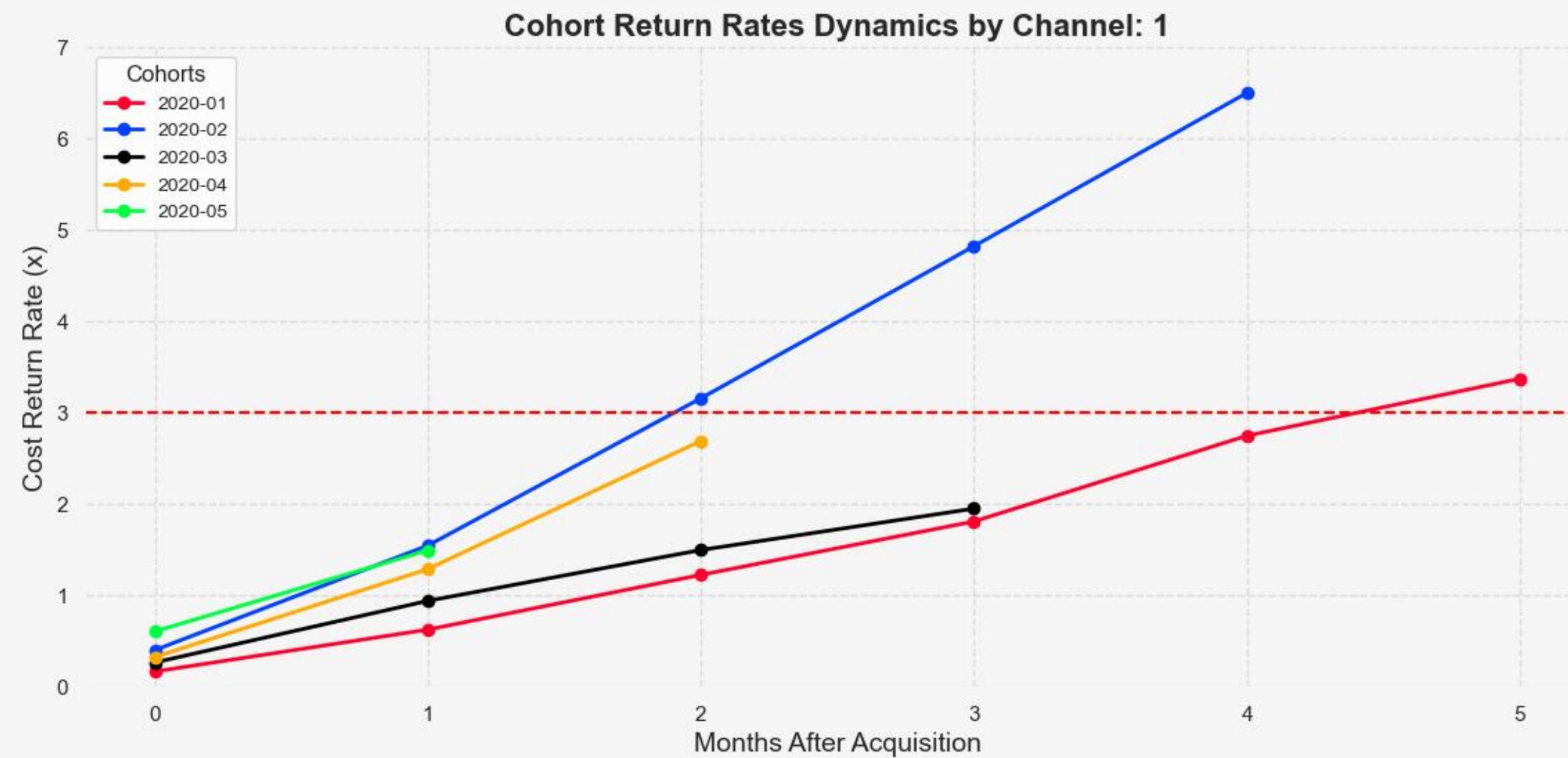
Costs

While channel 1 seems to bring more stable and profitable customers, we should mind the costs. The current cost of these users makes it much less efficient compared to the audience from channel 2.

	Channel 1	Channel 2	Ch. 1 uplift
Acquisition cost per €1 of volume	€0.36	€0.24	+50%
per Transaction	€0.159	€0.096	+66%
per Customer	€368	€6	+6033%

1.4.

Return on investment



If we divide users into cohorts based on their acquisition month, and then analyze how quickly their commissions cover the acquisition cost, we will observe that the speed of payback and the increase in average transaction volume and commission are insufficient to offset the difference in acquisition cost per customer.

The key point to highlight is when a customer's commissions cover the acquisition cost three times.

1.5.

Conclusion

Channel 1 brings in an audience with great potential

Despite the audience's high quality, the cost of acquiring it is significant and may not be the most efficient investment

**Assess the methods of audience acquisition and value.
Potential optimizations could be made for this channel.**

1. Acquisition Channels

2. Payment Methods

3.

2.1.

The role

The role of payment methods varies significantly in determining the final result

Methods	% transactions	% commissions
#3	77%	54%
#11	6%	31%
#17	16%	14%
#19	1%	1%

2.2.

Rate types

Most of the revenue comes from a fixed-rate commission, but for the payment method with ID 11, the ratio is different. It's the only method with a non-zero variable rate.

	Fixed rate comm.	Variable rate comm.
All methods	72%	28%
#11	11%	89%

2.3.

High transaction volume

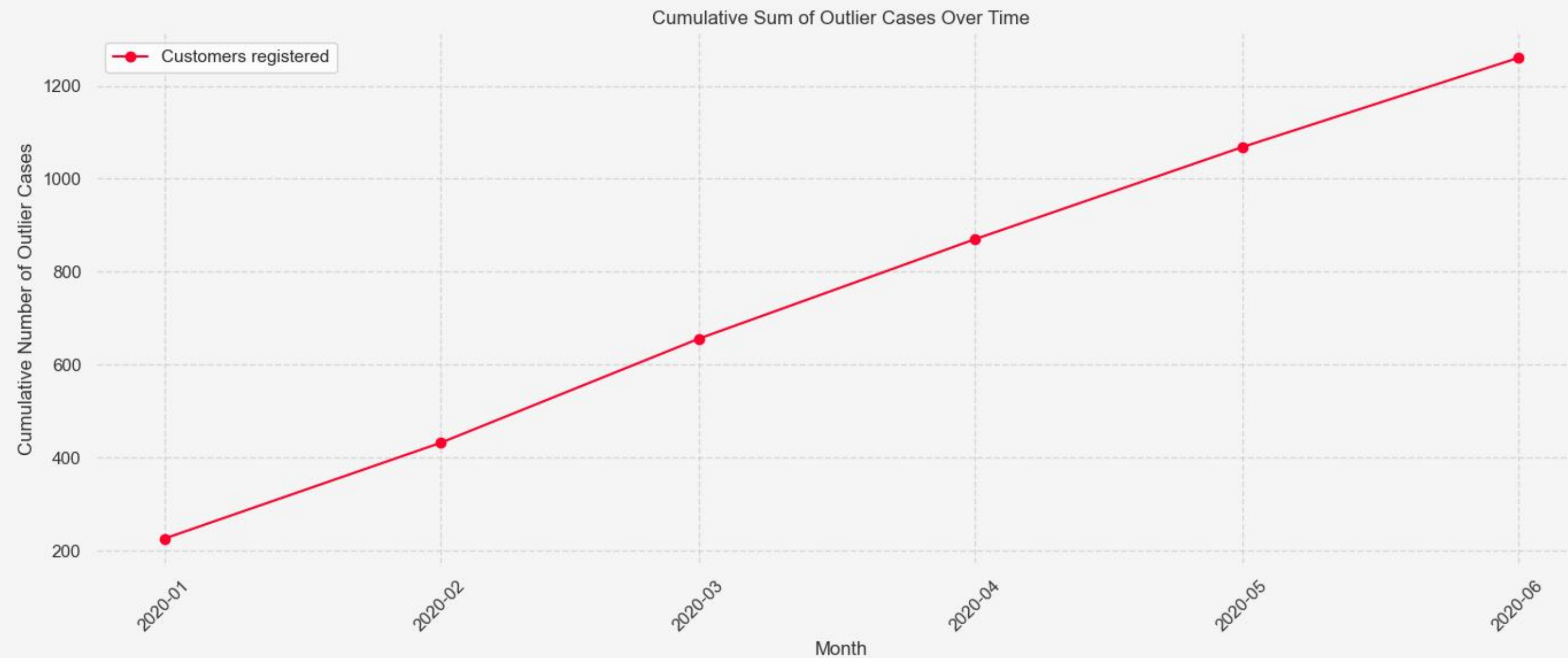
If we look at the median payment volume per customer, identify the outliers*, and analyze how these outliers use different payment methods, we'll find that many of them are also using other payment methods actively.

* Those above 1.5IQR, which affects 12.5% of customers. Outlier median volume per transaction is €260 or more.

Payment method	% of transactions	% of commissions volume
#3	84%	19%
#11	10%	79%
#17	<5%	<2%
#19	<2%	<1%

2.4.

Dynamics



The number of such cases continues to grow. Meanwhile, we don't provide enough flexibility in our tariffs to treat these cases fairly compared to other types of customers, which have a large number of small-volume transactions, and we apply a fixed rate to these large payments as well, even though the margin of these businesses and the overall income might differ significantly due to their nature.

2.5.

Conclusion

We have a significant number of clients whose average transaction size and frequency deviate markedly from those of our core client base

However, we apply the same tariffs to these particular cases, which lowers our income and creates unfair conditions

Consider the possibility of introducing more flexible tariff conditions that use a variable rate when certain conditions regarding the payment amount are met.

1. Acquisition Channels

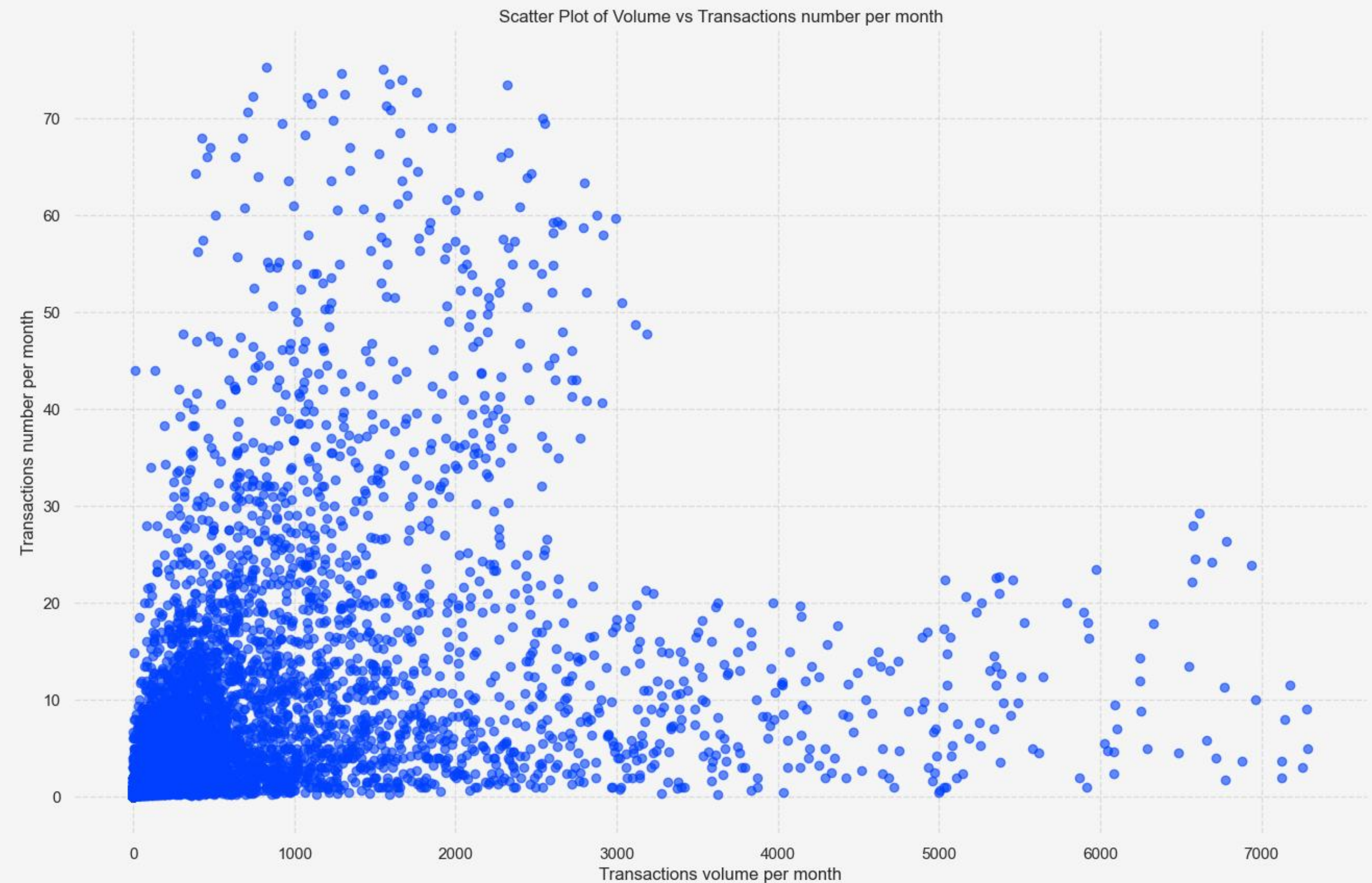
2. Payment Methods

3. Custom Clustering

3.1.

Variance of values

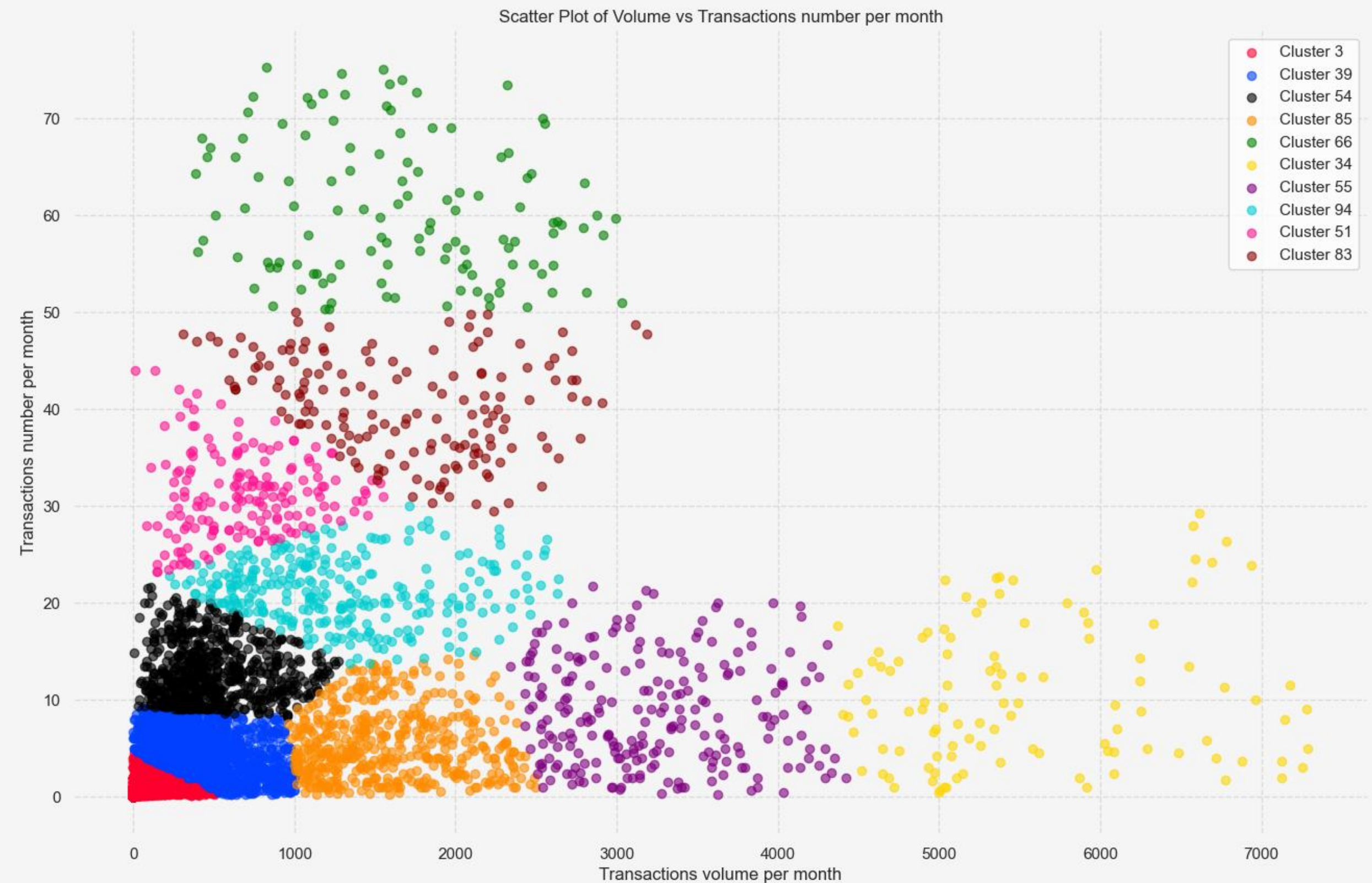
In the event of implementing flexible tariff conditions based on the number and size of transactions, we will inevitably face difficulties in determining threshold values, as the variance for such clients is quite significant and complicates data grouping.



3.2.

Clustering solution

For initial clustering, to quickly categorize customers before deeper analysis and optimization of pricing structures and conditions, we can utilize basic machine learning techniques. The KMeans algorithm handles the provided variance quite well.



mollie

Thank you!

This task was quite interesting, although the volume, composition, and level of detail in the data do not allow for further verification of the provided hypotheses. I hope they prove to be applicable in your practice.