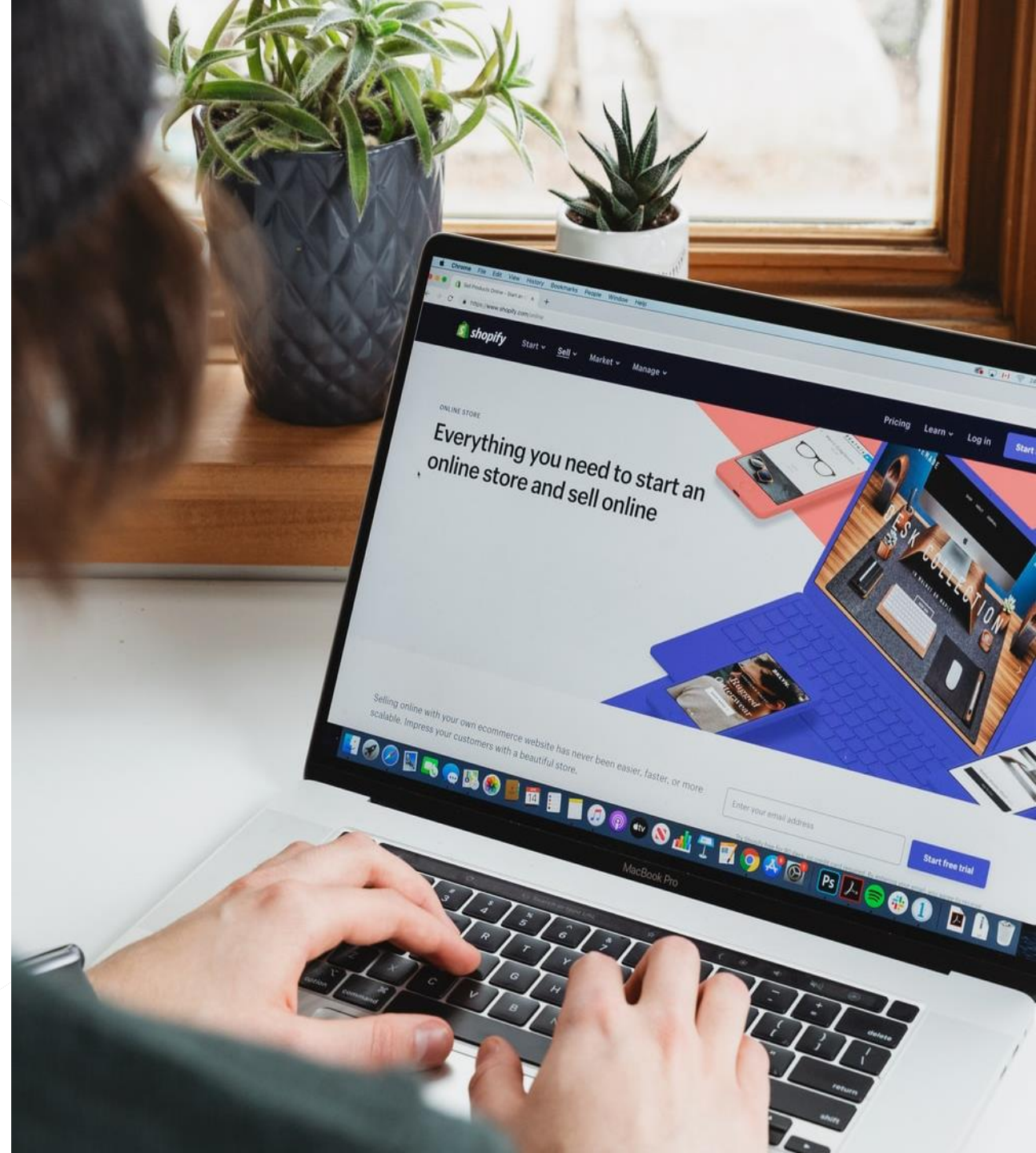




Digital Marketing Project

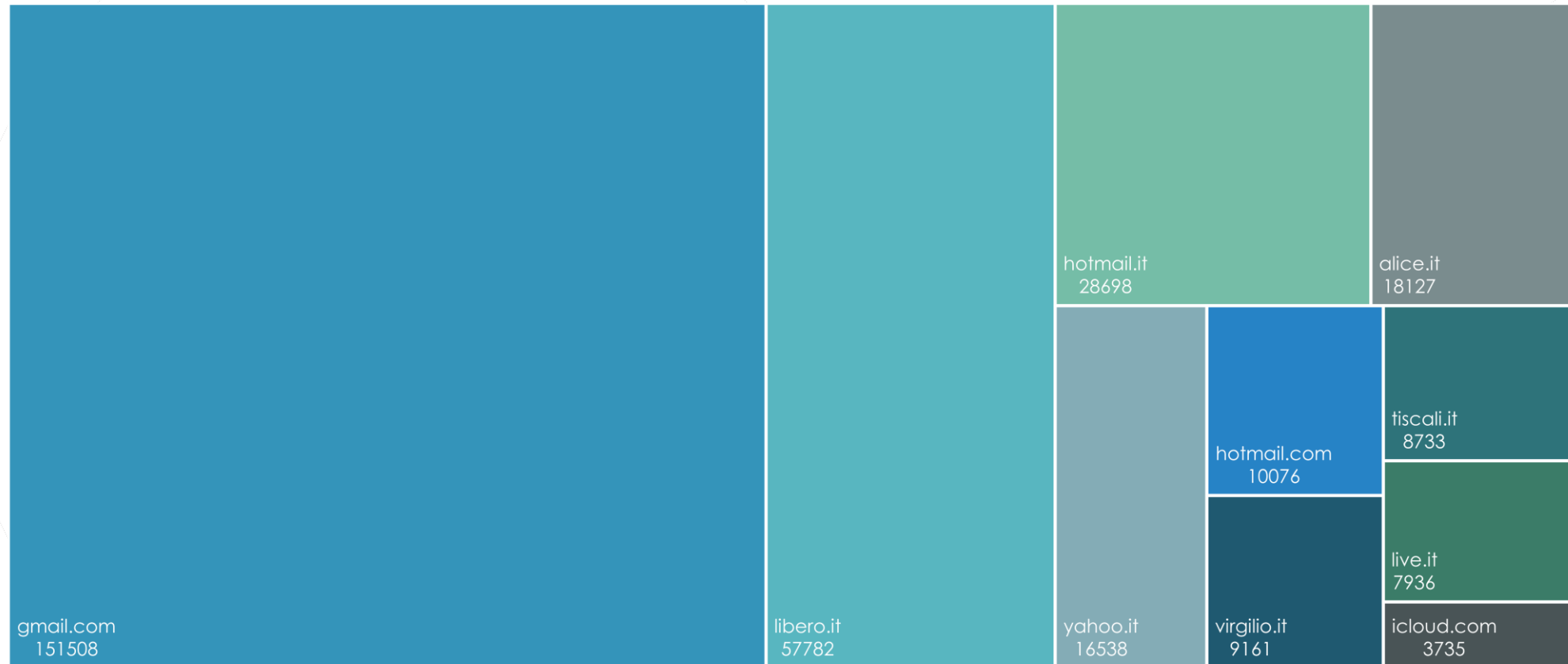
Testa Luca 816000

The goal of the churn model is to assign each customer their probability of leaving the agency, in order to implement specific corrective marketing actions aimed at retaining the highest value customers.



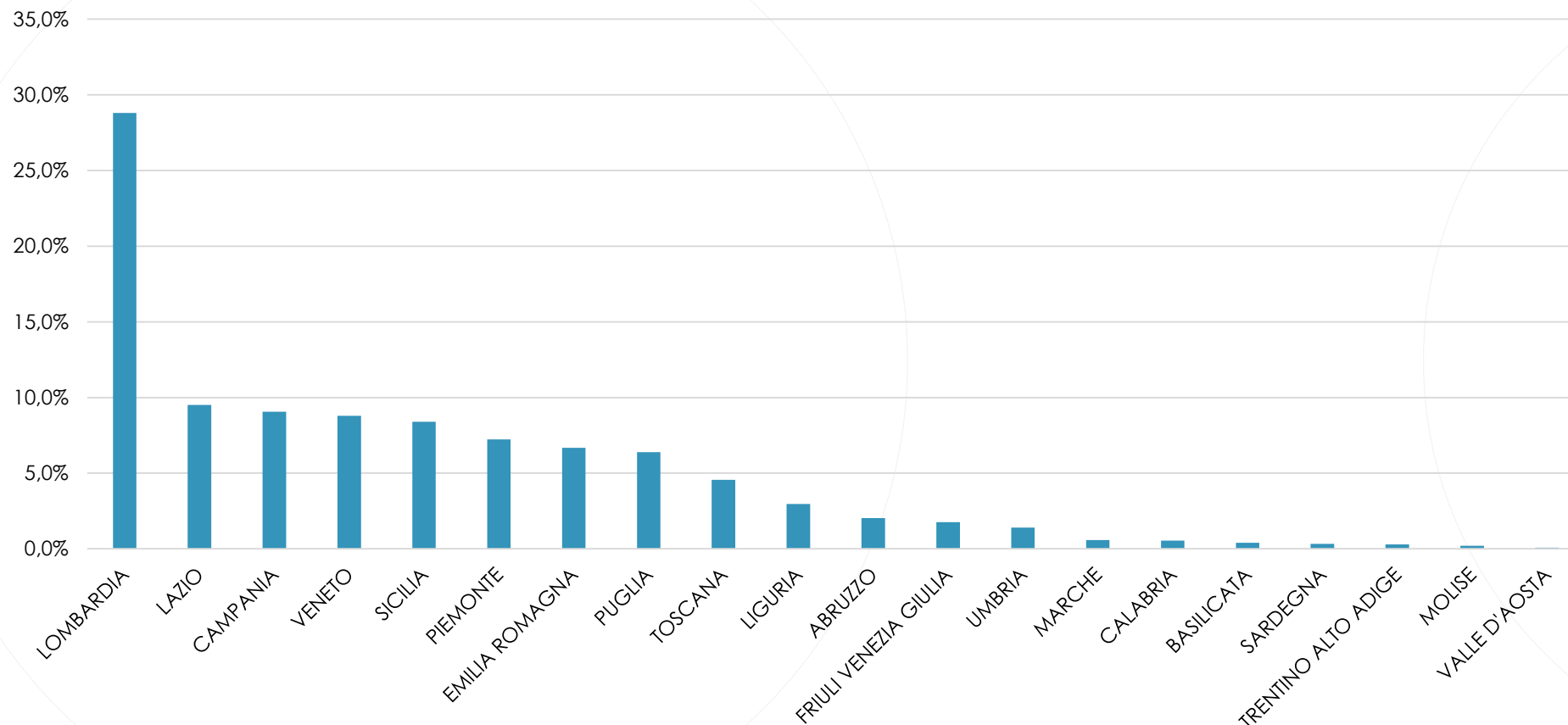
DESCRIPTIVE ANALYSIS

TOP TEN PROVIDER

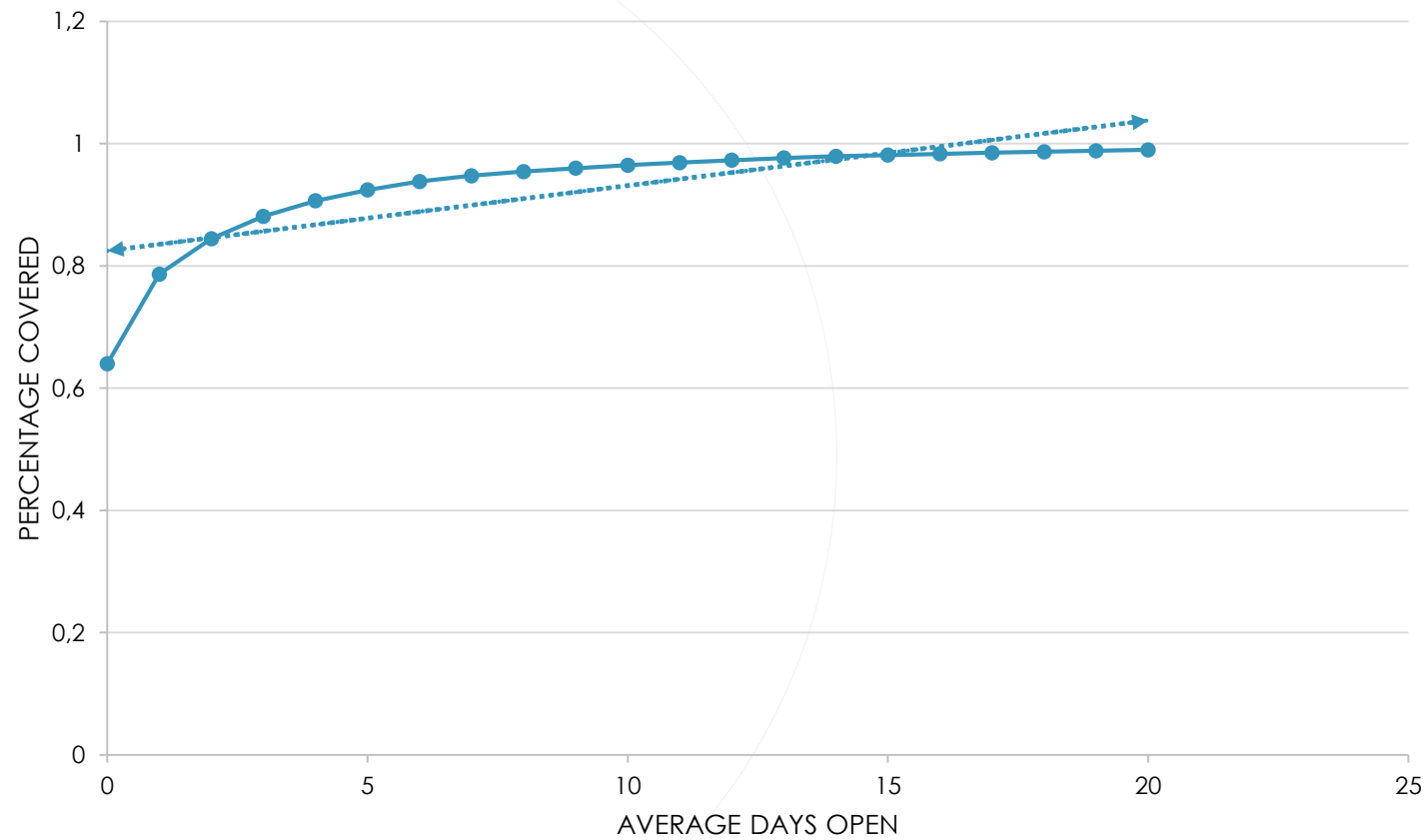


DESCRIPTIVE ANALYSIS

PERCENTAGE OF CLIENTS PER REGION

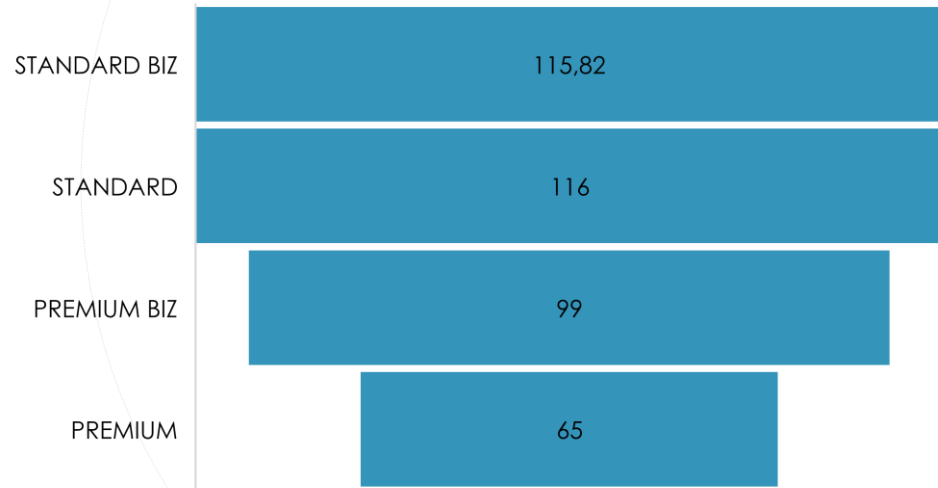


DESCRIPTIVE ANALYSIS

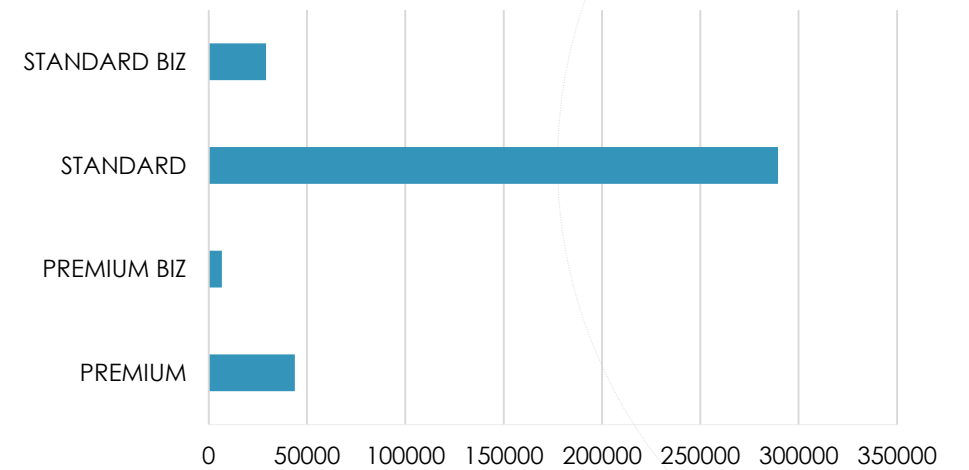


DESCRIPTIVE ANALYSIS

MEAN DAY ACTIVE

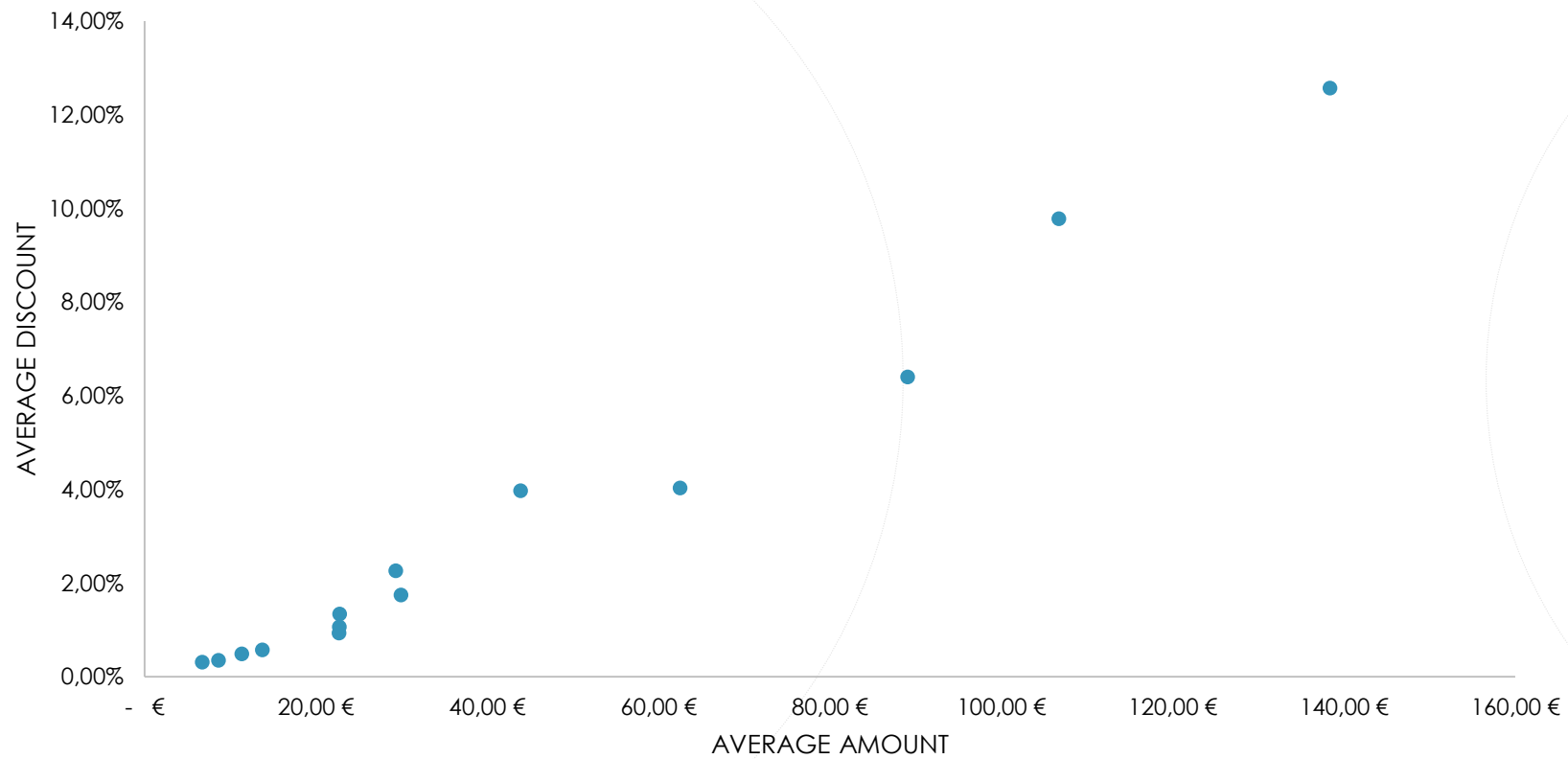


0 DAY ACTIVE

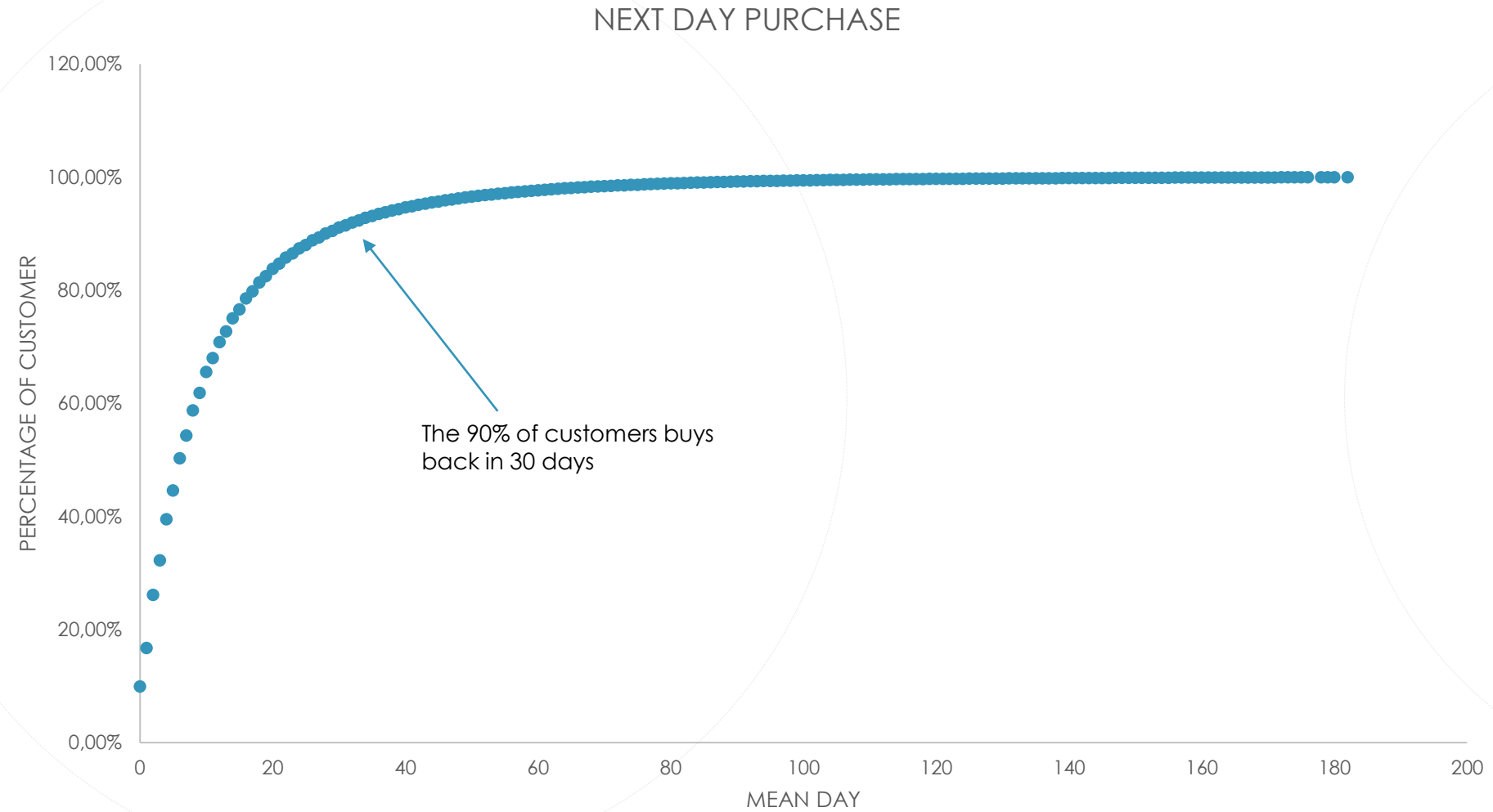


DESCRIPTIVE ANALYSIS

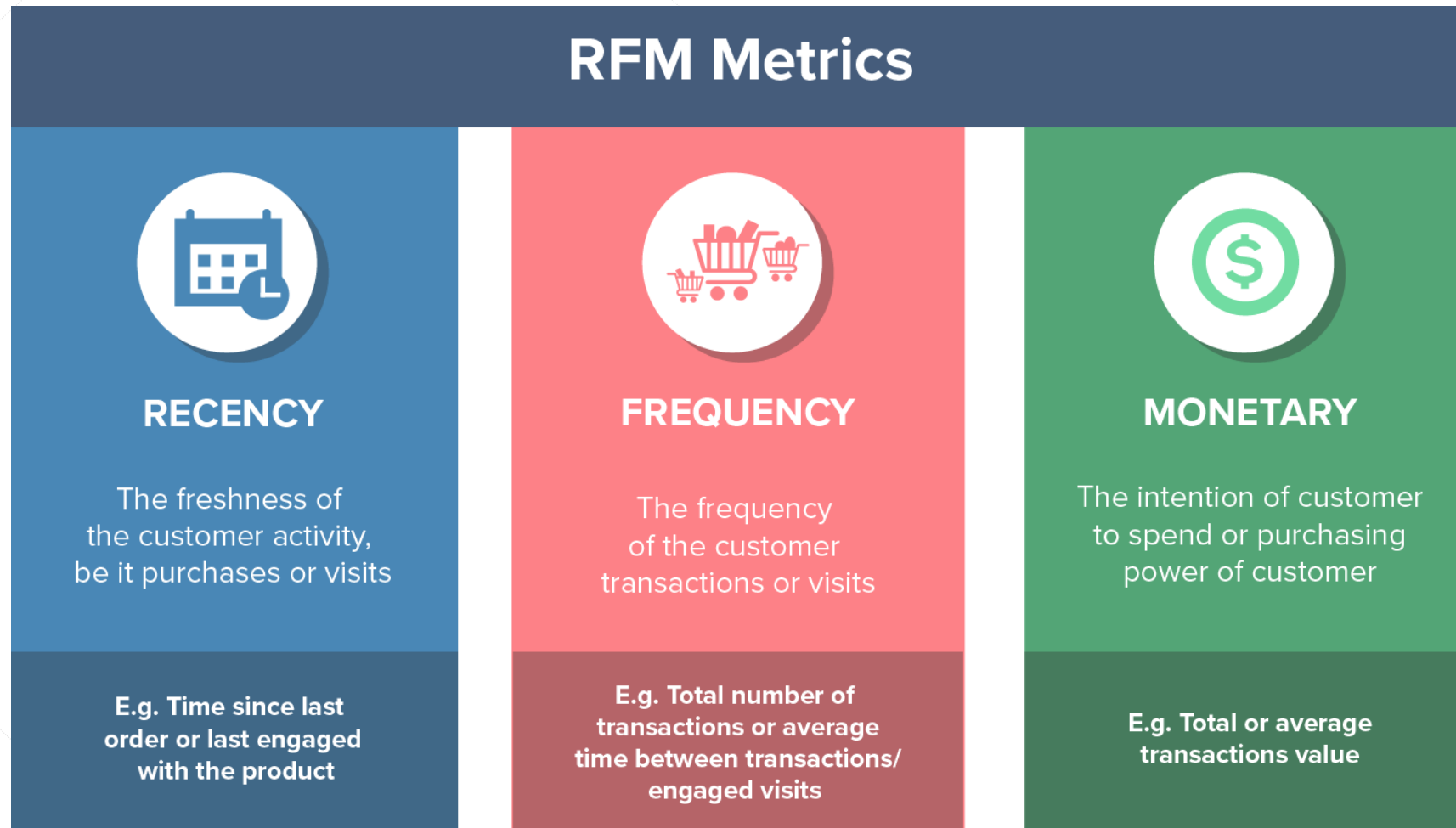
PER DEPARTMENT



DESCRIPTIVE ANALYSIS

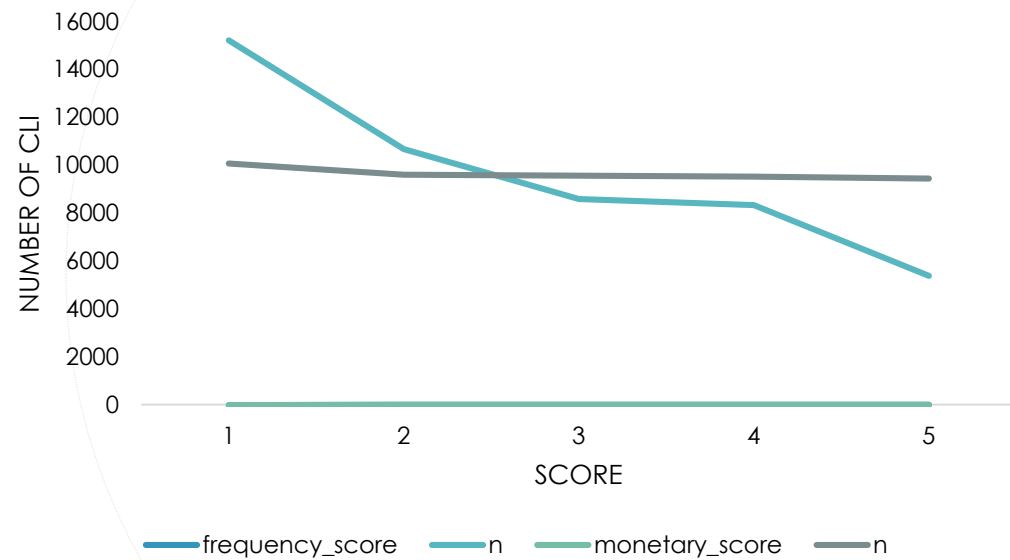


RFM MODEL

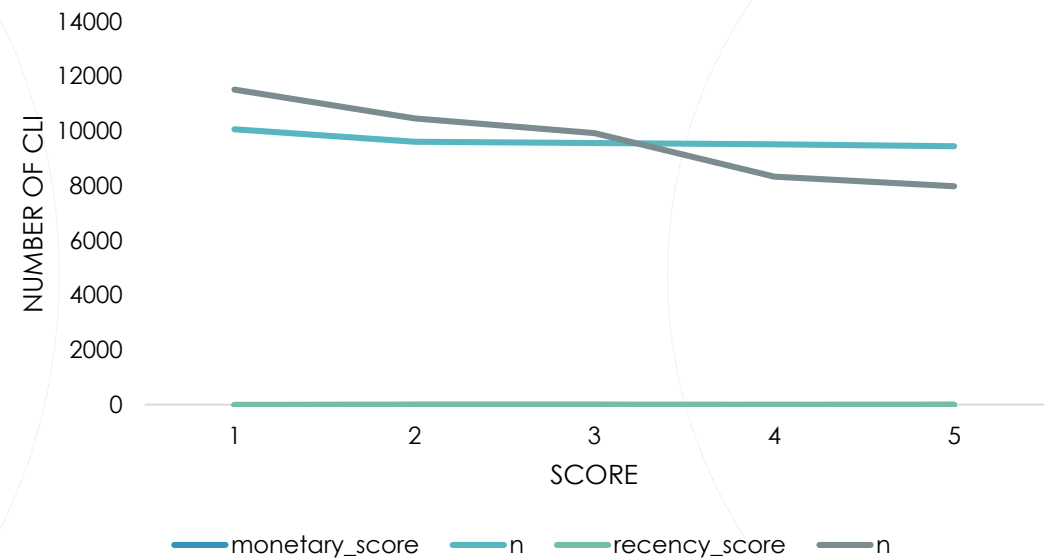


RFM MODEL

FREQUENCY VS MONETARY

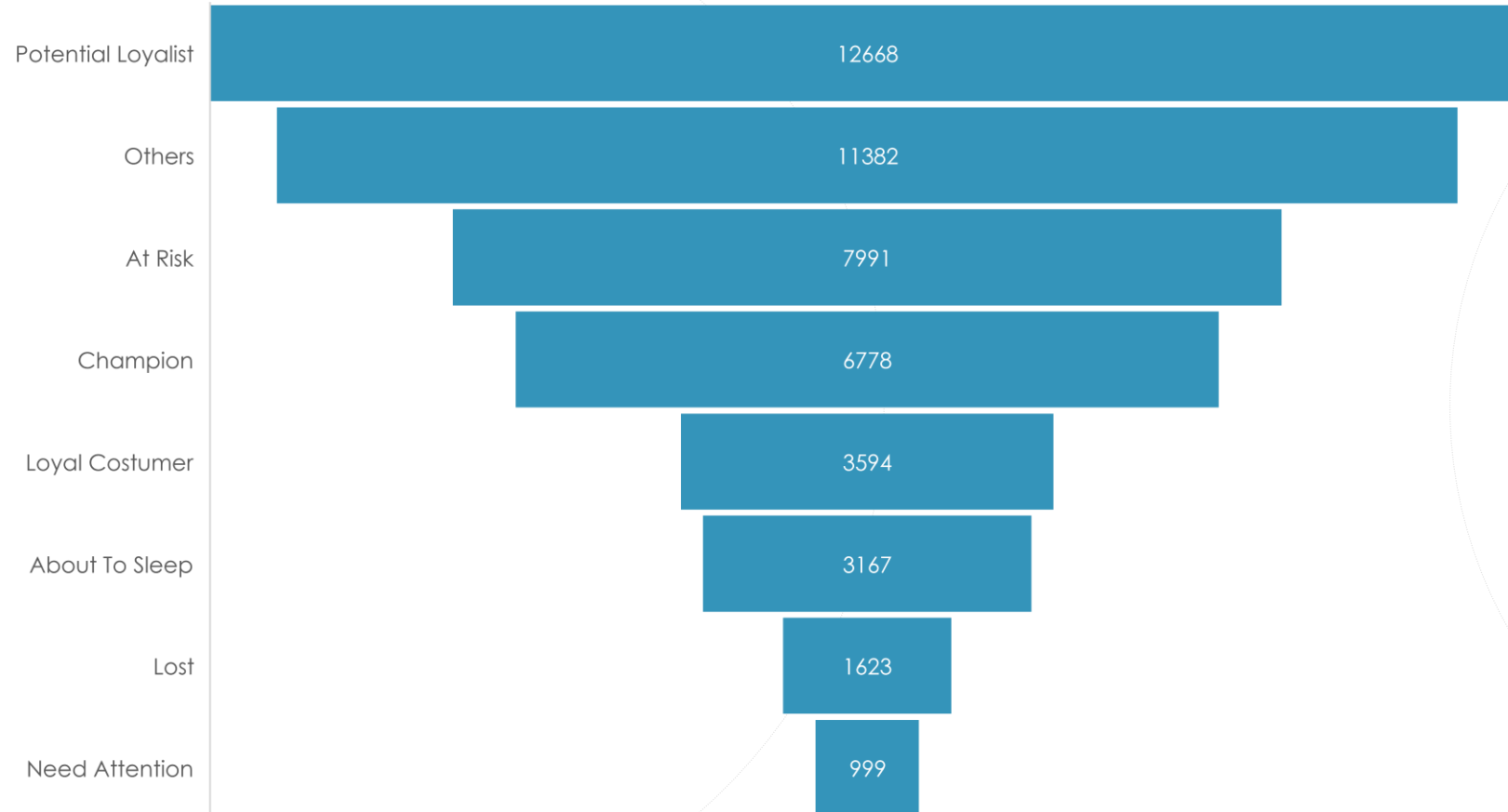


RECENCY VS MONETARY



RFM MODEL

CUSTOMER SEGMENTATION

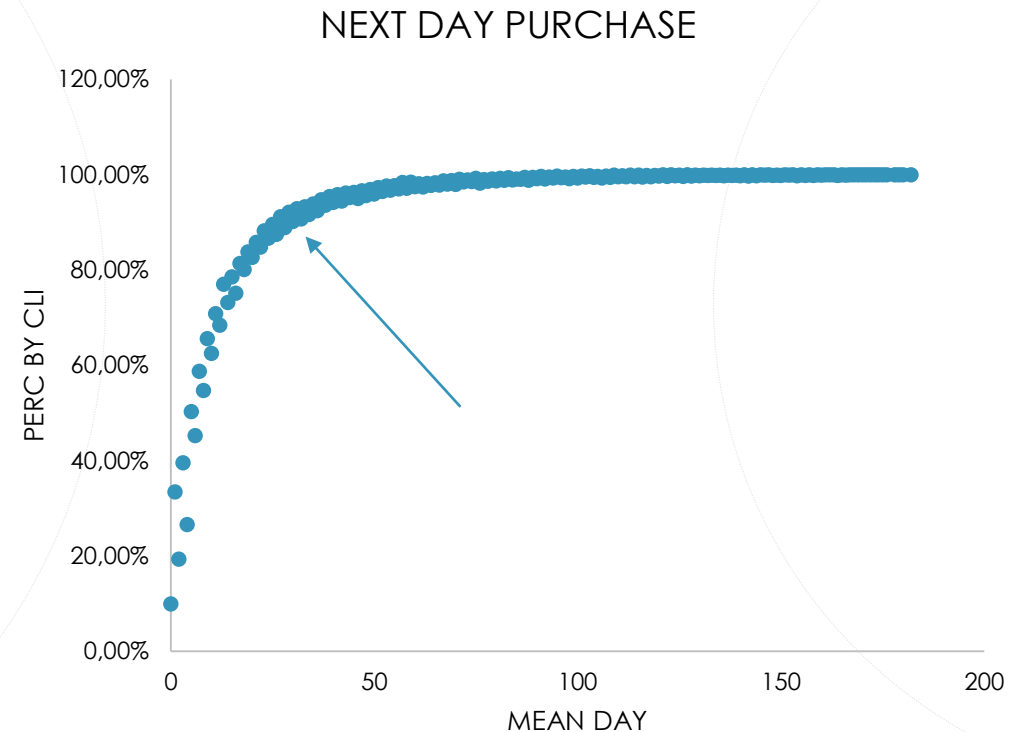


CHURN MODEL

According to the RFM model, all those who had not bought back in the previous 30 days could be designated as "Churner".

As variables it was decided to select :

- RFM value
- CAP
- TYP_CLI_ACCOUNT
- REGION
- N_CAMP



CHURN MODEL

Decision Tree: 75,15% Accuracy

	Actual	
Predicted	TRUE	FALSE
TRUE	5519	1417
FALSE	2665	6827

Random Forest: 75,04% Accuracy

	Actual	
Predicted	TRUE	FALSE
TRUE	7626	3283
FALSE	2126	8868

GLM: 33,19% Accuracy

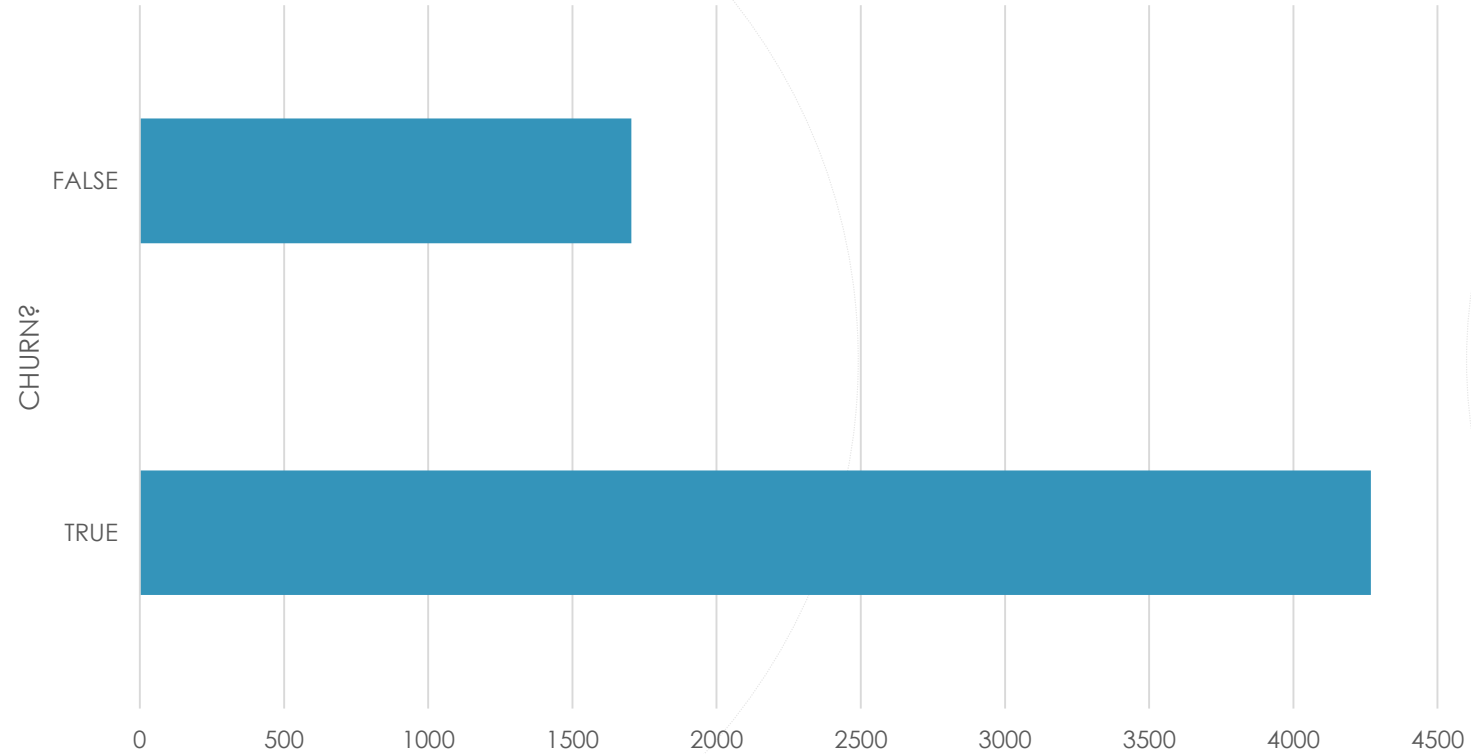
	Actual	
Predicted	TRUE	FALSE
TRUE	876	3667
FALSE	7308	4577

BOOSTED: 75,56% Accuracy

	Actual	
Predicted	TRUE	FALSE
TRUE	5665	1496
FALSE	2519	6748

CHURN MODEL

Prediction With Boosted Classification Tree



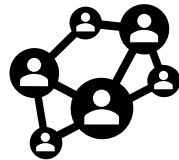
FINAL REVIEW



As expected, initial analyzes showed that most users come from Lombardy and use a 'gmail' account. 90% of them buy back within the first 30 days.



Through the RFM model we have been able to divide the customers into 8 categories, in order to suggest the company to focus its efforts above all on those who are the "Champion" customers, they have the maximum frequency, monetary value and recency.



The classifier Boosted Gradient Tree can predict, with an accuracy of 75.5%, whether a customer, who has repurchased in the last month, could turn out a churner or not. Thanks to this, we can maximize the company's efforts on customers who are loyal to our brand.