

Exploratory Data Analysis

customer segmentation

Group:individual work

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Agenda

Problem Statement

EDA

Recommendations

recommended models



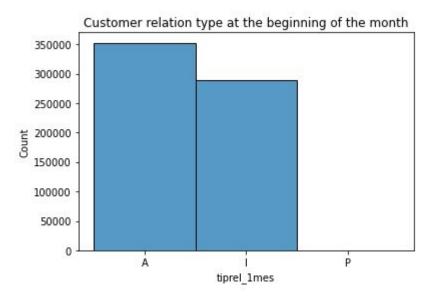
Problem Statement

Bank wants to roll out Christmas offers to their customers. They want to roll out personalized offer to particular set of customers. They don't want more than 5 group as this will be inefficient for their campaign.



EDA

Customer relation type at the beginning of the month

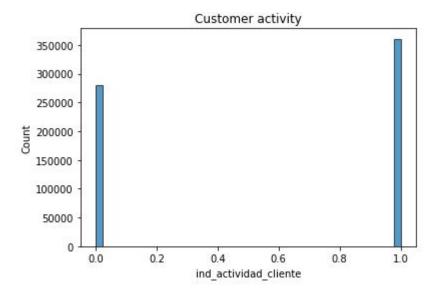


observation:

the number of active customers is 350000 but the number of the inactive customers at the beginning of the month is also high



EDACustomer activity

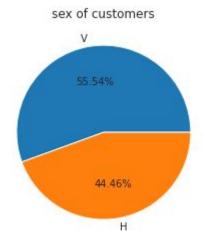


observation:

around 275000 customers are not active which should be inspected and 350000 customers are active¶



EDACustomer sex



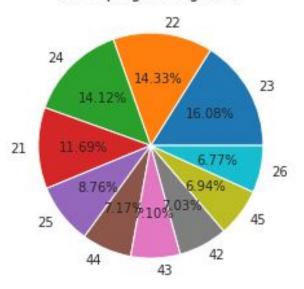
observation:

the most of users are women but the difference between man and women is just about 11%



EDAthe top age categories

the top age categories



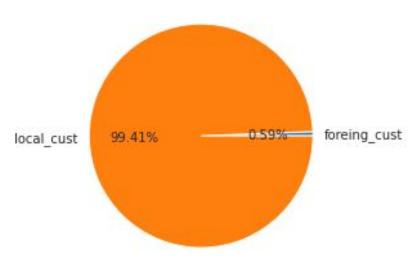
observation:

we see that the top 5 age categories range form 21 to 26 and the second top category ranges from 42 to 44 .the majority of users are young people and ad



EDAforeing customers



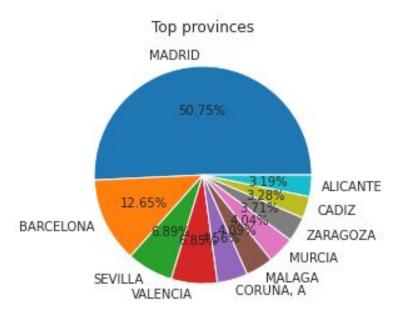


observation:

the percentage of foreing_cust is negligible compored to the local customers



EDATop provinces



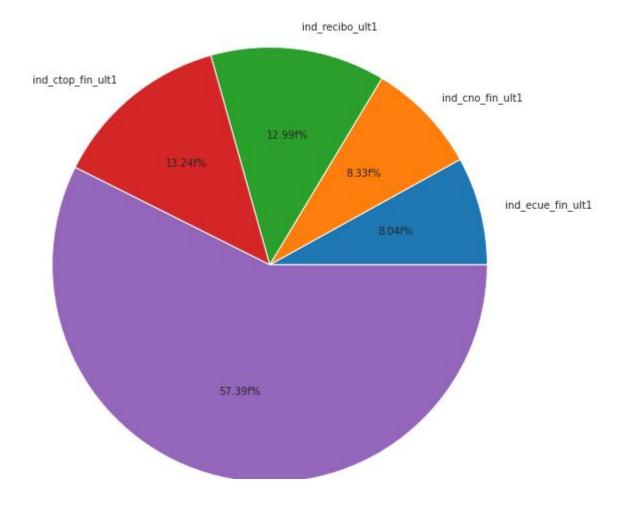
observation:

The top 10 cities are Madrid, BARCELONA, SEVILLA', 'VALENCIA, 'MALAGA', 'MURCIA', CADIZ', 'ALICANTE' ZARAGOZA', 'CADIZ'



EDATop 5 services





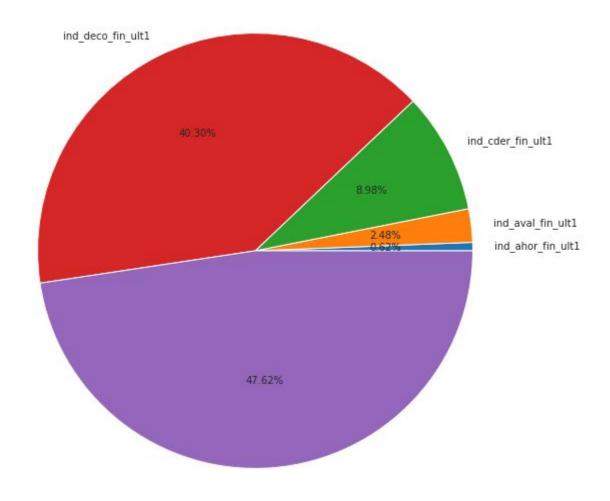
observation:

the top services are: Current Accounts, particular Account, Direct Debit, e-account, Payroll Account.



EDAThe 5 least used services





observation:

The least used services are:Saving Account,Guarantees,Derivada Account,Short-term deposits,Medium-term deposits



Final Recommendation

the most used services are the current accounts particular Account, Direct Debit, e-account, Payroll Account. so maybe we should give small offers in theses top services because they are established.

we may give more offers in the less used services to encourage users to use these services.

the majority of clients are young people and adults these give us insight about the age play an important role as feature to be based on for segmentation.

a big deal of the customers are not active in the beginning of the month, we may think about offers that make them more active at this period of time.

also a huge number of customers are not active at all the bank may call them an give them an offer to make them active again.



recommended models

k means clustering



Thank You

