Exploratory Data Analysis Recommendation

Data Analyst: Cross-selling recommendation

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Agenda

Executive Summary

Problem Statement

Approach

EDA

EDA Summary

Recommendations

Data Glacier

Your Deep Learning Partner

Executive Summary

1. Business Objectives:

- ABC analytics help XYZ Credit Union to solve the problem is an existing customer not buying more than 1 product which means the bank is not performing well in cross-selling

- ABC company produced a framework that will be utilizing a machine learning algorithm in the core to increase cross-selling.

Approach

2. Information the Stakeholders are seeking:

- How does XYZ credit union sell more than 1 product for new customers and be able to sell their other offerings to an existing customer?
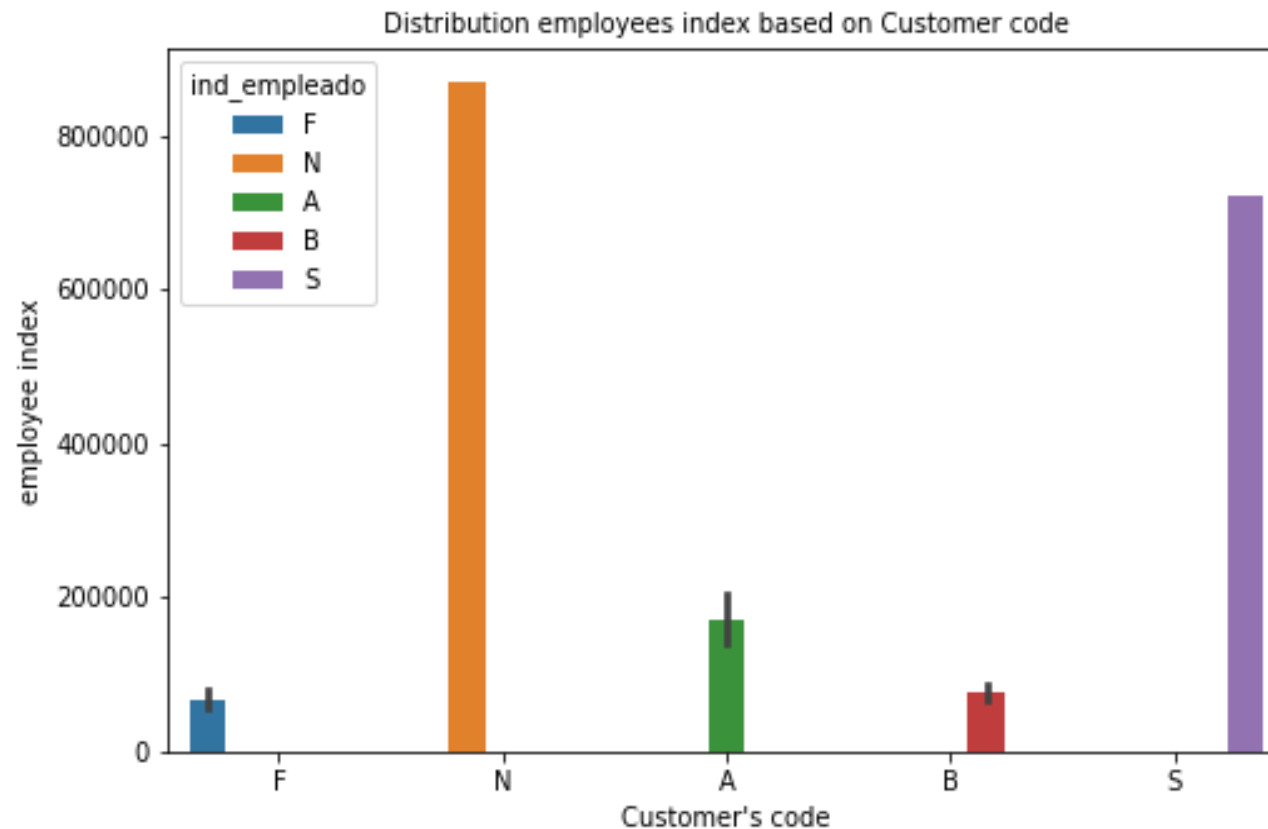

3. The type of analysis:

- Cross-selling analysis

4. The deliverables:

- Provide a machine learning algorithm for XYZ credit union on how to sell more than 1 product to new customers and be able to sell their other offerings to an existing customer.

- Create a dashboard that should capture the type of customer their count, segment-wise (VIP, student, etc.) customer average age, and other KPIs which gives better business insight in taking a decision

EDA - What's the employee index?

Distribution employees index based on Customer code

Based on visualization, the (N) not employee is the highest one, (S) in the second, (A) active in the third, (B) ex-employed in the fourth, and (F) filial in the last
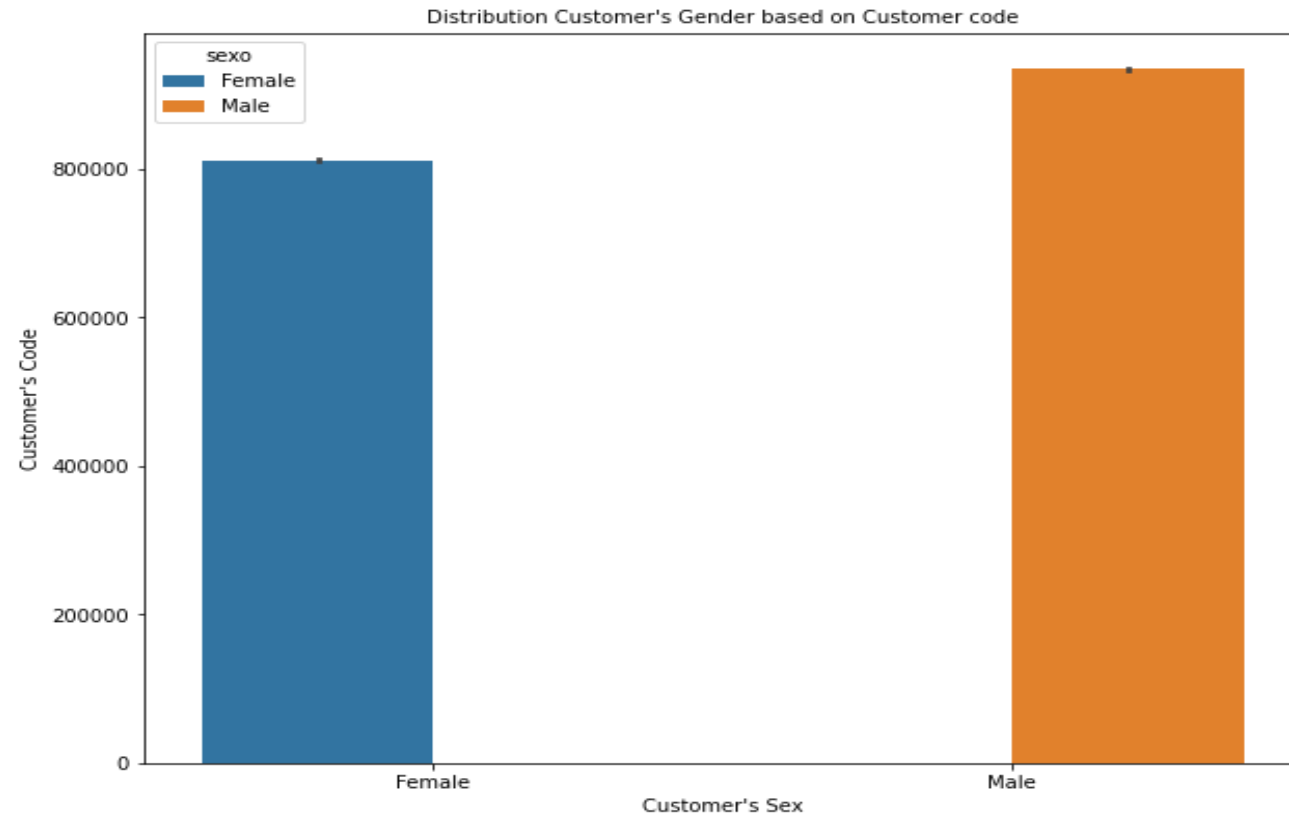
EDA Recommendations

1. What's the employee index?

Based on visualization, the (N) not employee is the highest one, (S) in the second, (A) active in the third, (B) ex-employed in the fourth, and (F) filial in the last.

So, I recommend increasing the number of active employees to be able selling-cross

EDA - What's the gender of most Clients?

Distribution Customer's Gender based on Customer code
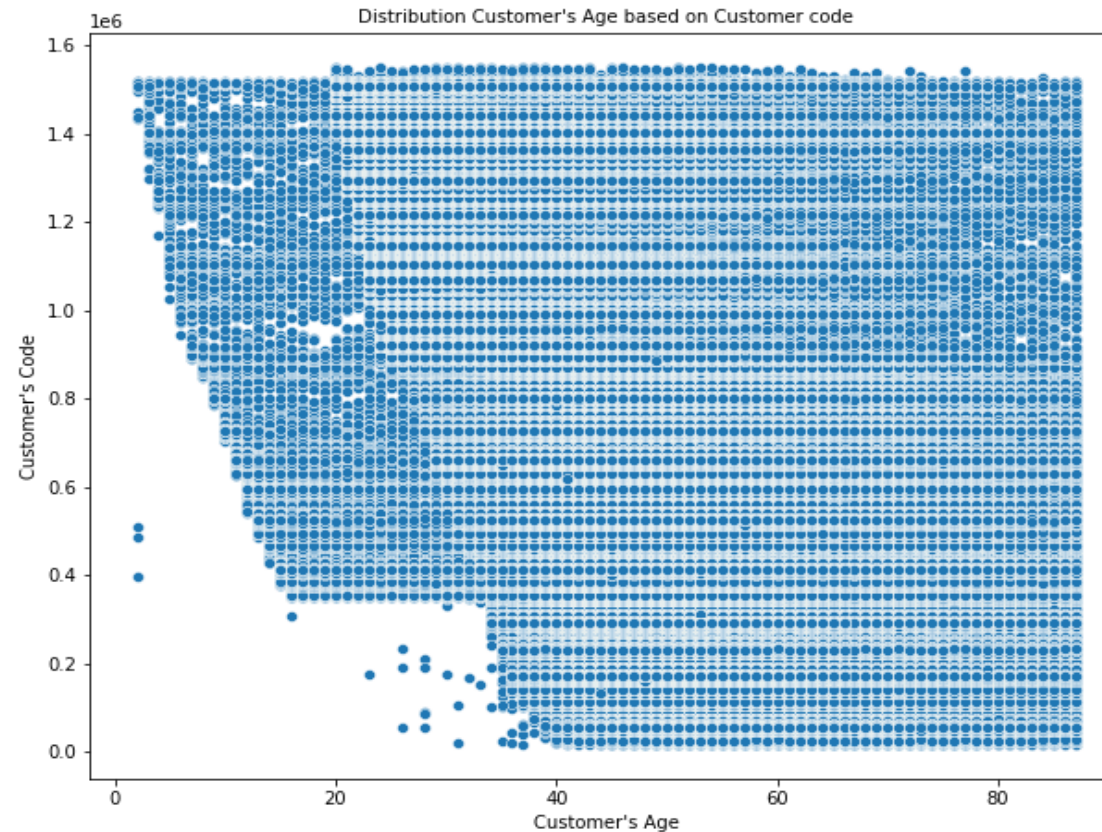
Based on visualization, Male Customers are higher than Female Customers based on Customer code

EDA Recommendations

2. What's the gender of most Clients?

- Based on visualization, Male Customers are higher than Female Customers based on Customer code.

- So, I recommend increasing the number of female Clients to be equal to male selling-cross.
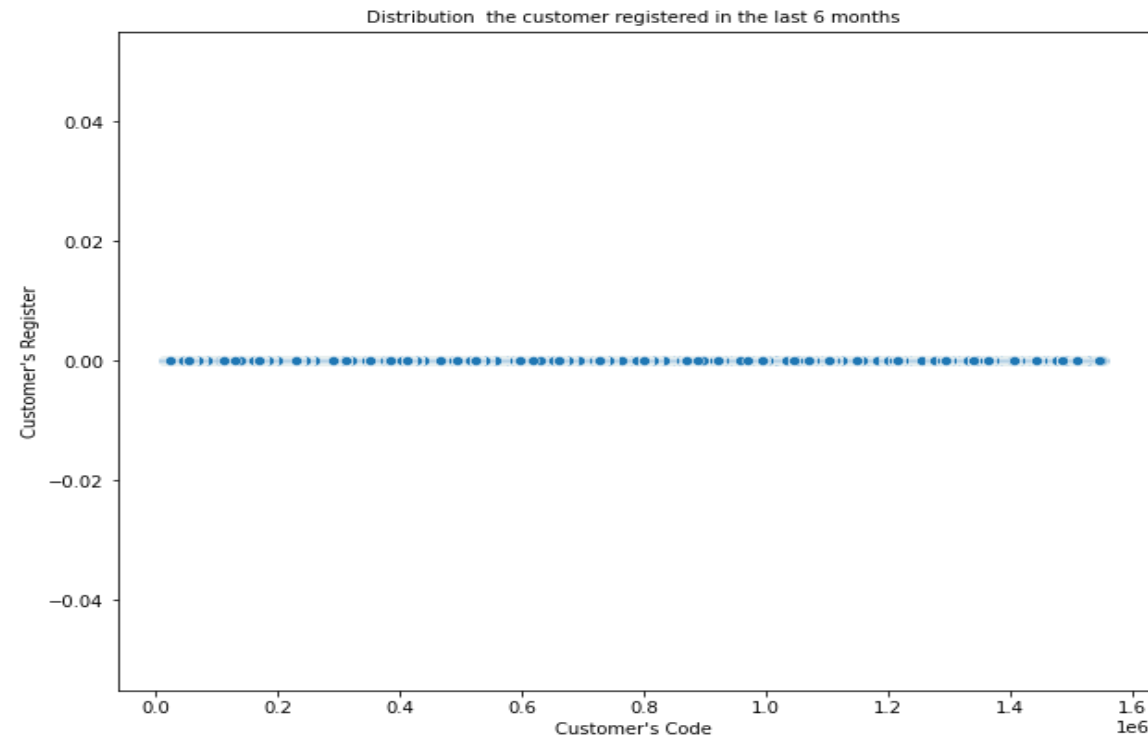
EDA - 3. What's the age of most Clients?

Distribution Customer's Age based on Customer code

Based on visualization, customers aged between 10 - 90

EDA Recommendations

3. What's the age of most Clients?

• Based on visualization, customers aged between 10 - 90

• So, I recommend focusing on customers these aged between 20 – 60.

EDA- How many customers registered in the last 6 months?

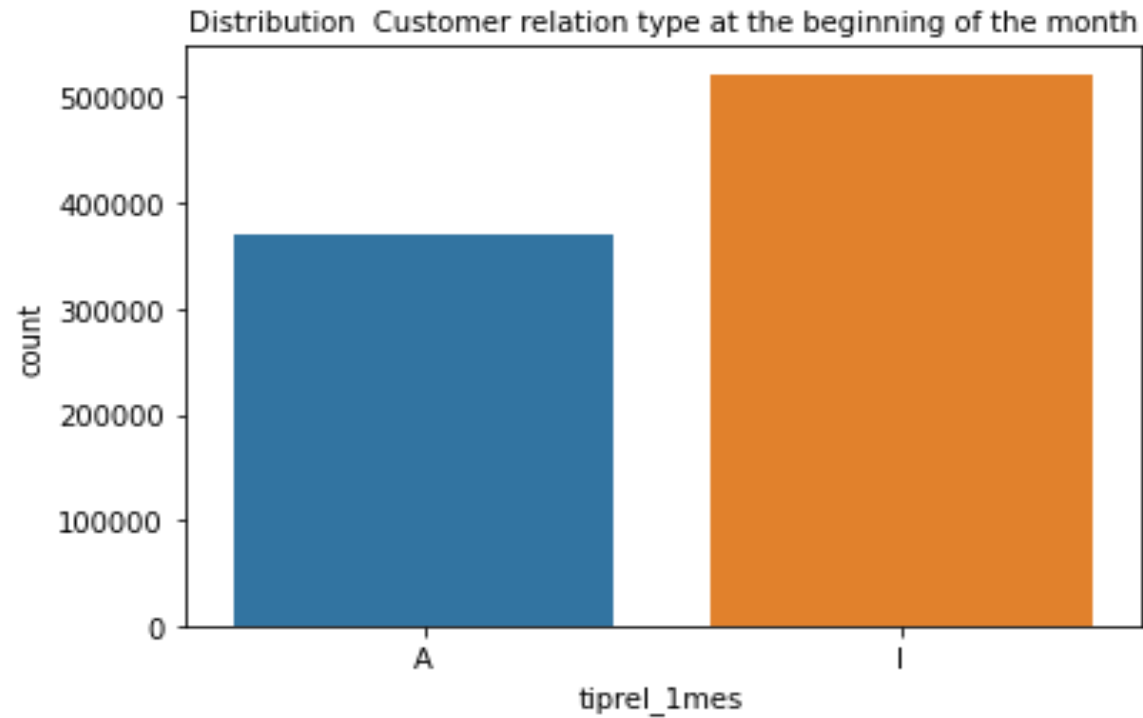Distribution the customer registered in the last 6 months

Based on visualization, No one from customers register in the last 6 months

EDA Recommendations

4. How many customers registered in the last 6 months?

- Based on visualization, No one from customers register in the last 6 months

- So, I recommend the bank make package offers for new clients to selling more than one prodect.

EDA – What is more customer activity or inactivity?

Distribution Customer relation type at the beginning of the month

Based on visualization,
I (inactive) Customer relation type at the beginning of the month was higher than A (active)
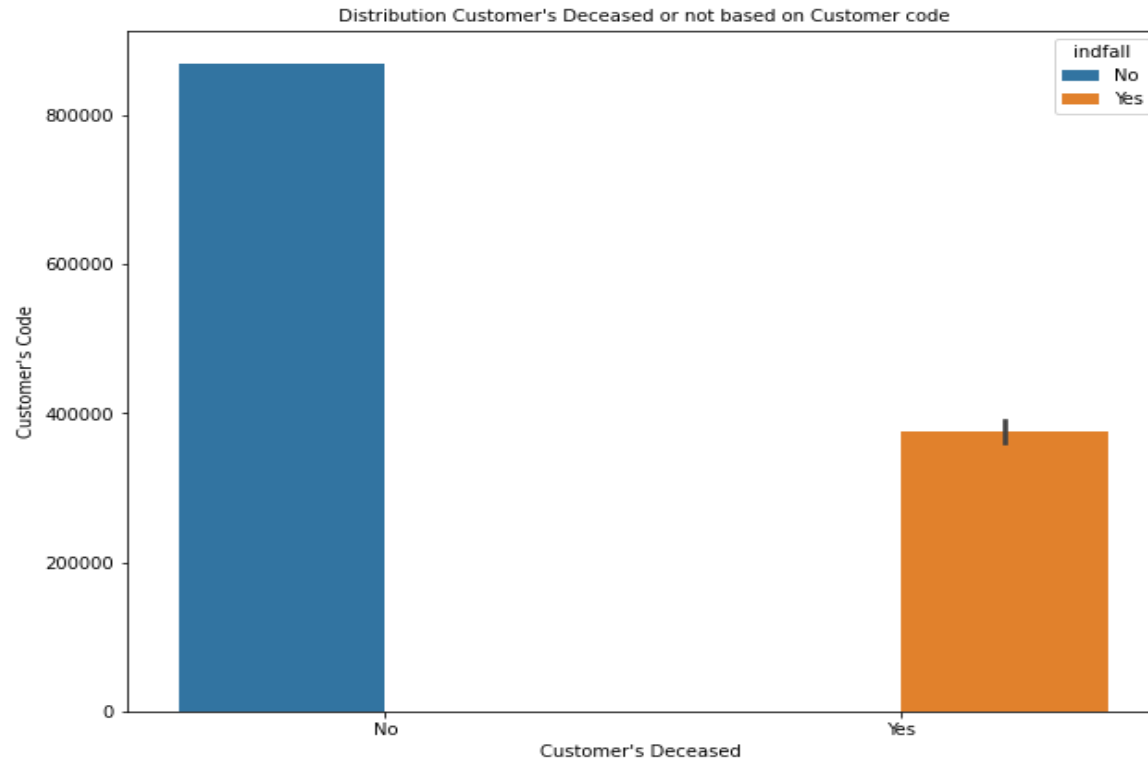
EDA Recommendations

5. What's more about customer activity or inactivity?

• Based on visualization,

I (inactive) Customer relation type at the beginning of the month was higher than A (active)

• So, I recommend increasing active clients by making study about how make the client active.

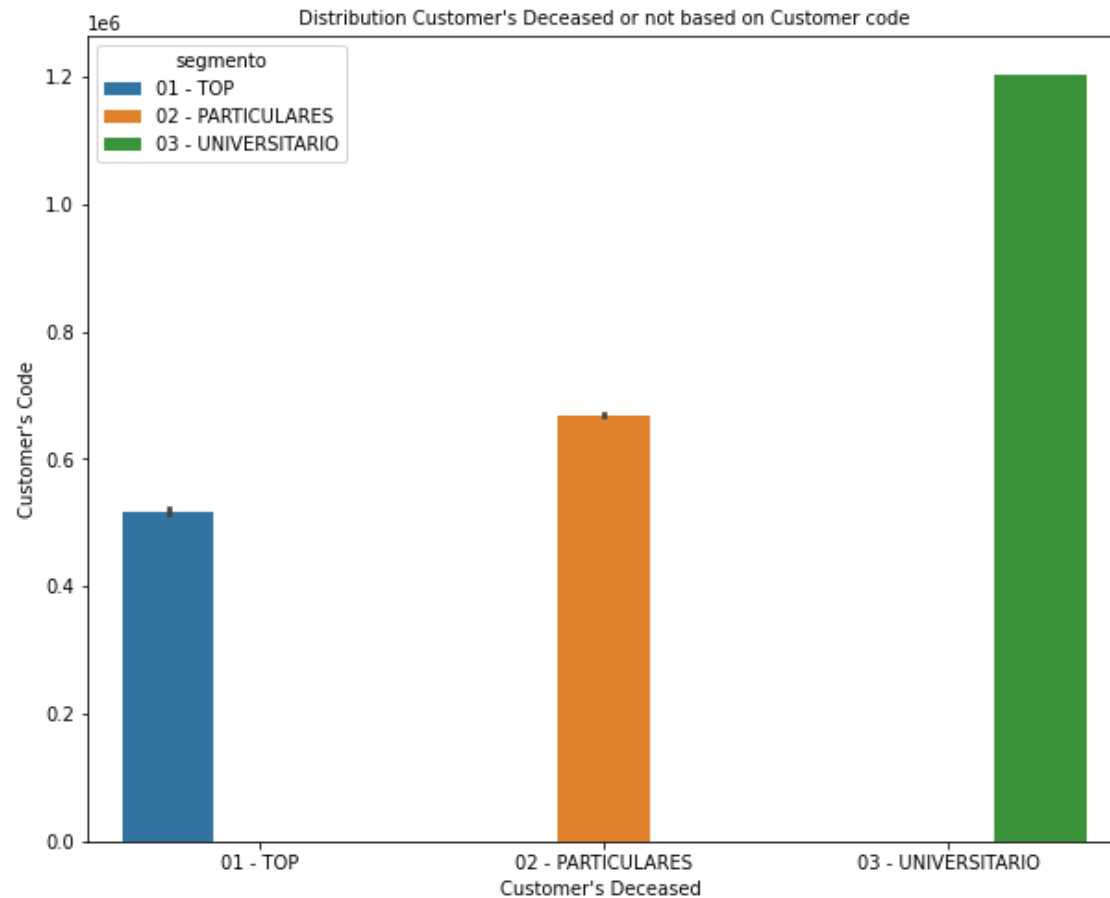# EDA – what's the higher of alive customers or not?

Based on visualization,
Count of Customers alive is higher than Customers who died

EDA Recommendations

6. what's the higher of alive customers or not?

- Based on visualization, Count of Customers alive is higher than Customers who died.

- So, I recommend updating the dataset by deleting the dead customer and contacting families of customers for potential Clients.

EDA - What's the customer segment?

Distribution Customer's Deceased or not based on Customer code

Based on visualization,
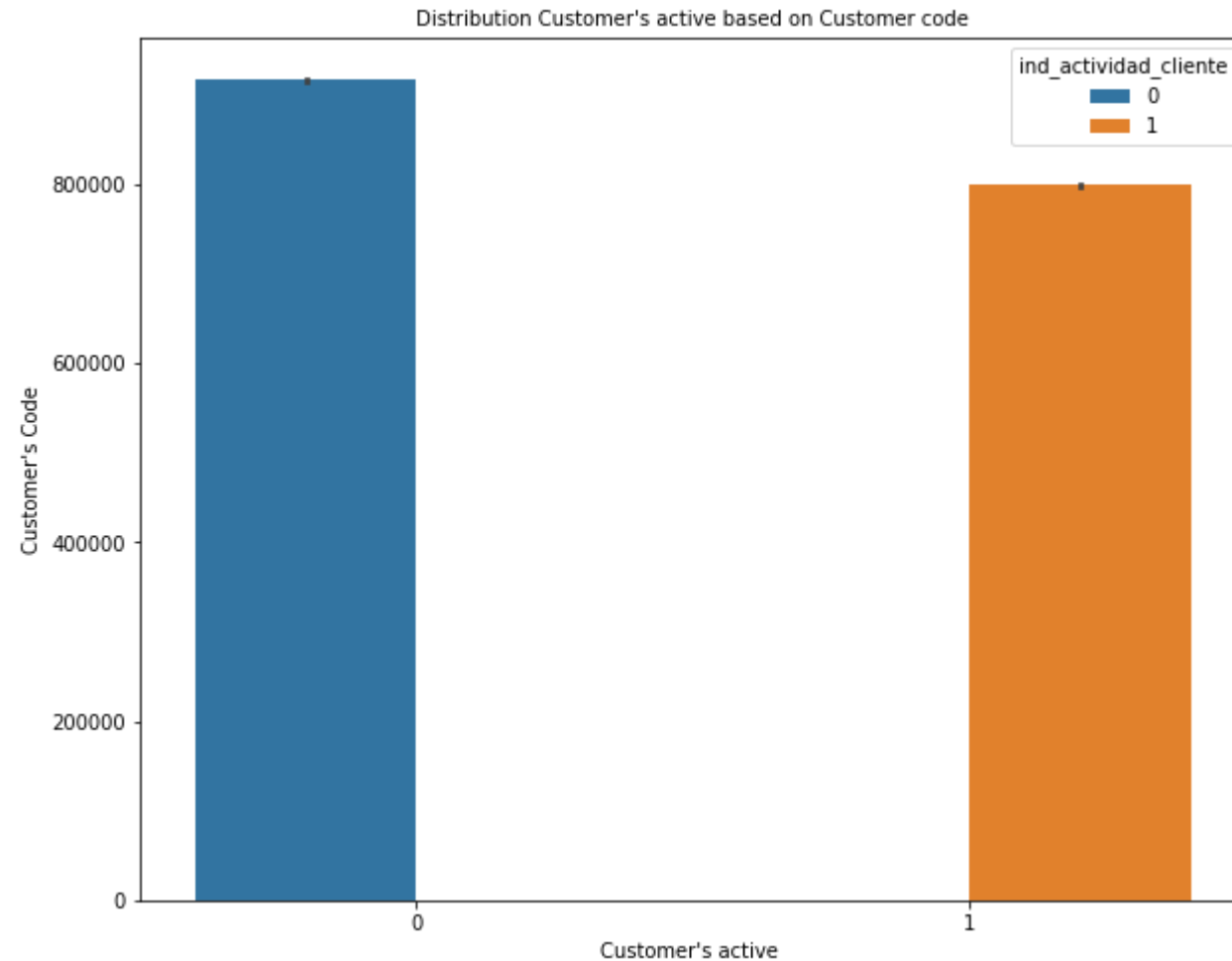the customer segment is divided into 3 types
- first, Universitario
- Second, Particulars
- Third, Top

EDA Recommendations

7. What's the customer segment?

- Based on visualization, the customer segment is divided into 3 types.
- first, Universitario
- - Second, Particulars
- Third, Top

- So, I recommend focusing on segments (University, Particulars) and increasing the segment (Top).

EDA – what's the higher active or inactive?

Distribution Customer's active based on Customer code

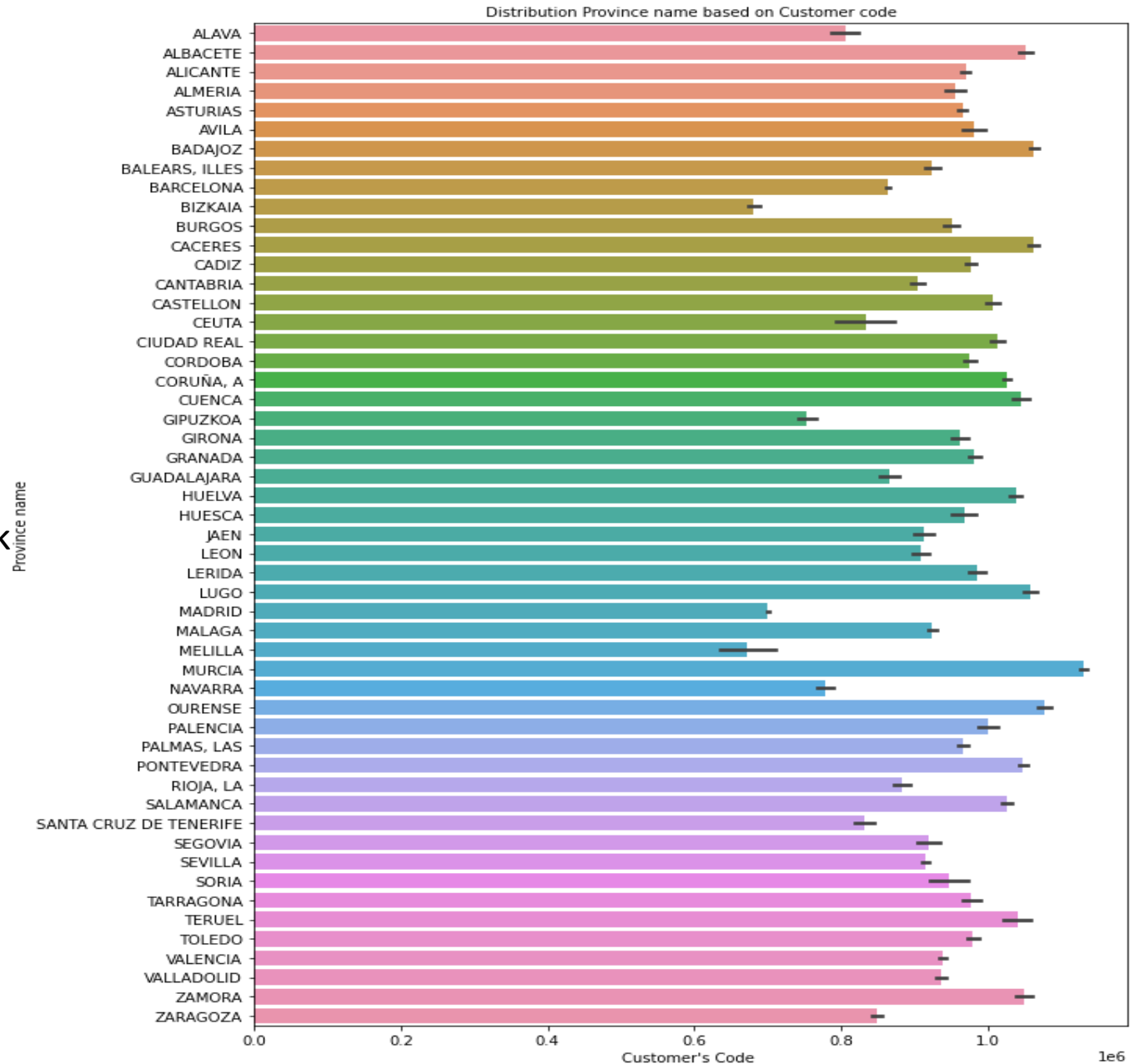Based on visualization, the Inactive customer are higher than Active

EDA Recommendations

8. what's the higher active or inactive?

- Based on visualization, the Inactive customers are higher than Active

- So, I recommend focusing on Inactive customers by contact with them and making plans how increasing the number of active customers.

EDA – What's the Province name for the Customer's Bank?

Based on visualization,
Show the Province name for the Customer's Bank
The pink lines show the higher the blue lines.

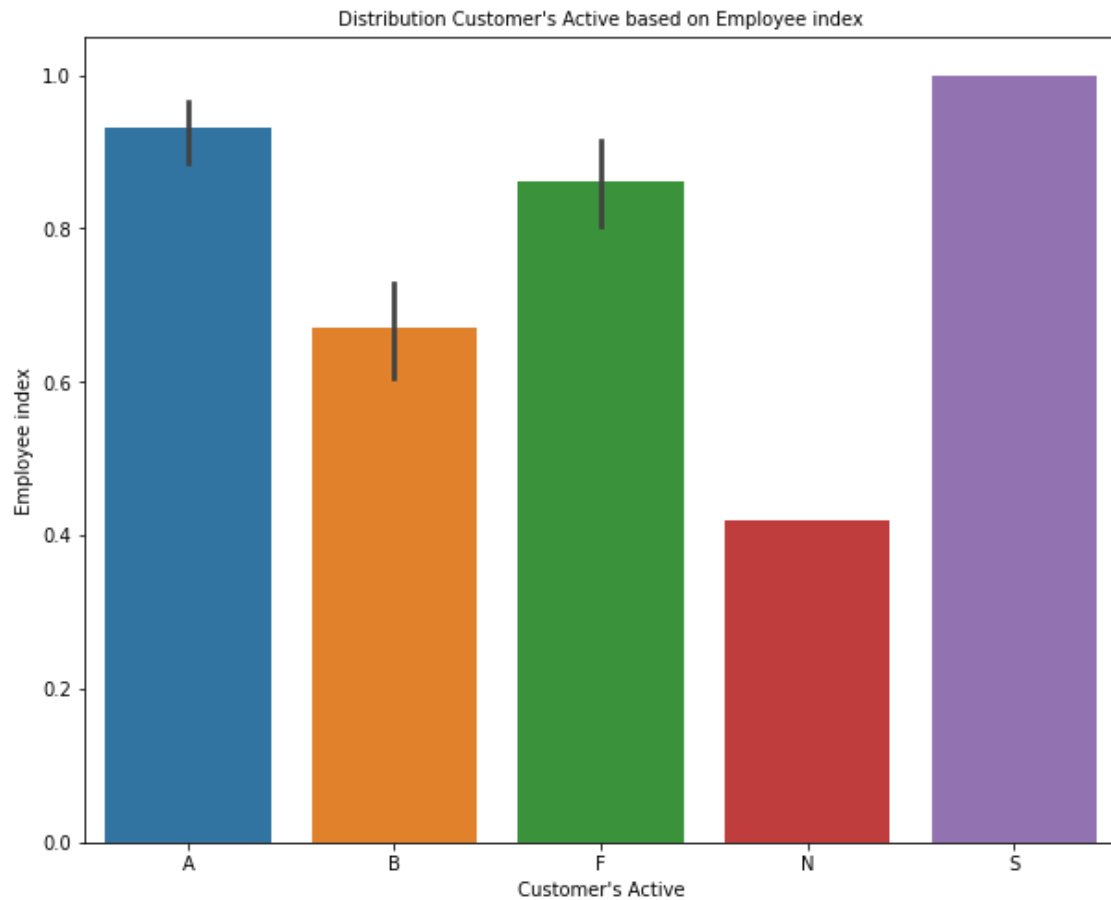Distribution Province name based on Customer code

EDA Recommendations

9.   What's the Province name for the Customer's Bank?

- Based on visualization, Show the Province name for the Customer's Bank

- So, I recommend focusing on customers who are in provinces that show in pink lines and increasing the number of customers in other provinces.

EDA

Distribution Customer's Active based on Employee index

Based on visualization, Customer's Active divided into 5 types
1. S the highest
2. A (active) the Second
3. F (filial) the third
4. B (ex-employed) the fourth
5. N (not employee) the last

EDA Recommendations

10. What are the types of customers active?

- Based on visualization, Customer's Active divided into 5 types
1. S the highest
2. A (active) the Second
3. F (filial) the third
4. B (ex-employed) the fourth
5. N (not employee) the last

- So, I recommend focusing how increasing the active types.

Thank You