

Cross Selling Recommendation for XYZ Credit Union

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1 Background

XYZ credit union in Latin America is performing very well in selling the Banking products (eg: Credit card, deposit account, retirement account, safe deposit box, etc) and is planning to boost cross selling of their banking Products.

2 Objective

To provide actionable insights to help XYZ Credit Union to help them in cross selling their products.

3 Methodology

The analysis has been divided into four parts:

- Data Understanding
- Analyzing metrics related to different banking products
- Understanding popular products based on age group and segments of customers
- Recommendations for cross selling based on product popularity with age group and segment of customers.

4 Data Description

- 50 Features(including 2 derived features)
- Total data points :13,647,309
- Outliers are present in age feature and is removed as age is not generally above 115

- Income groups are segmented based on a standard binning [25000, 80000, 200000] for [Low, Medium, High] income group.

5 Discussion

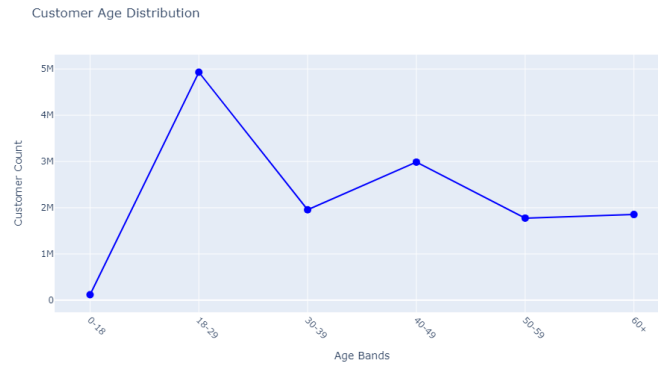


Figure 1: Customer Age Distribution

It can be observed that highest number of customers are of the age group 18-29 years followed by 40-49 years.

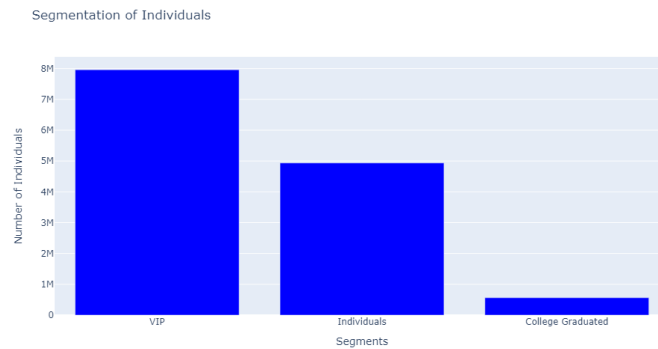


Figure 2: Customer Segment Distribution

It can be observed that highest number of customers are of the segment VIP.

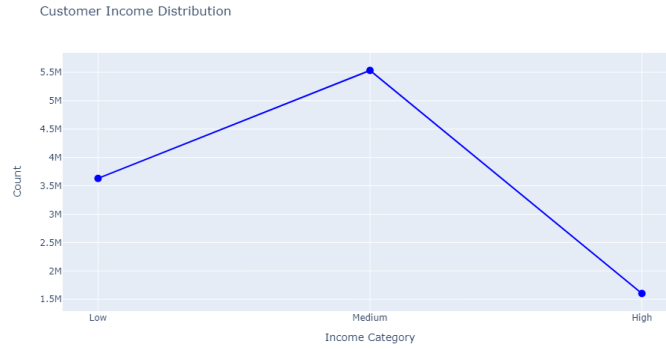


Figure 3: Customer Income Distribution

It can be observed that highest number of customers are from the mid-income range.

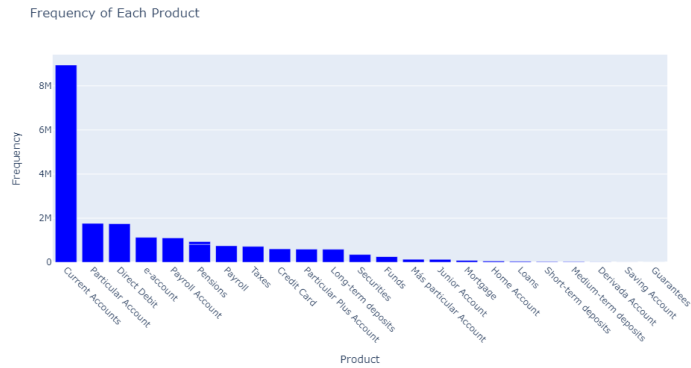


Figure 4: Product Distribution

It can be observed that the most popular products are Current Account, Particular Account, Debit Account, e Account and Payroll Account. The least popular accounts are Guarantees, Saving Account, Derivada Account, Medium Term Deposit and Short Term Deposit. The popular products can be considered for cross selling. Also the least popular products could be advertised so that the customers are aware of those products as well.

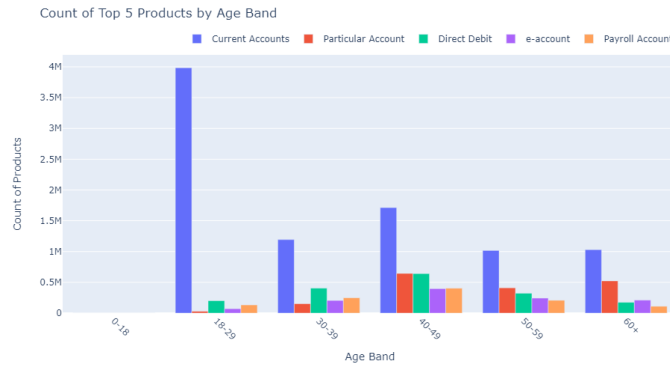


Figure 5: Top 5 Product Distribution based on Age

The XYZ Credit Union could recommend Direct Debit beside their Current Accounts for the customer age band 18-39 years. Similarly, Particular account are in demand for age group of 49+ years and could be recommended to this age group beside Current Accounts.

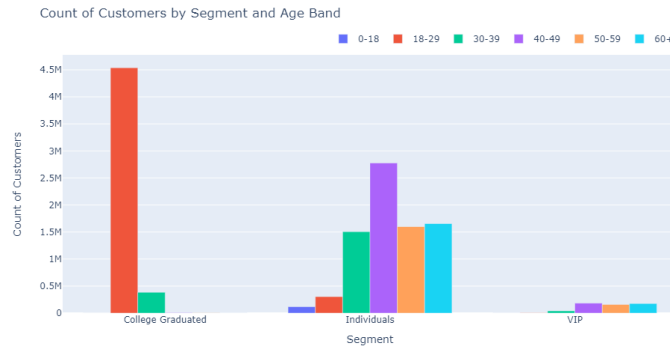


Figure 6: Age - Segment Distribution

The college graduate segment consists of age band 18-29 years mostly. The direct debit, as we saw in 5, could be recommended to College Graduates to increase cross selling.

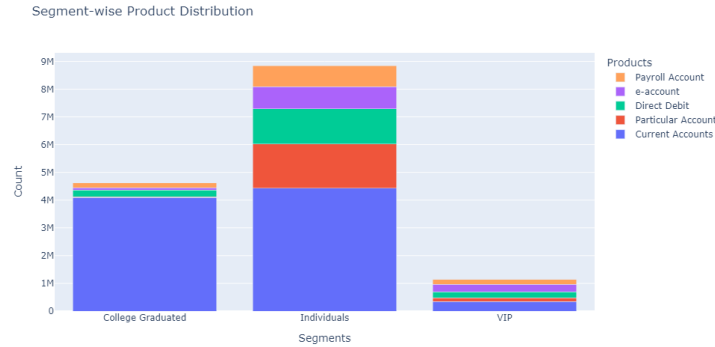


Figure 7: Product - Segment Distribution

The VIP segment consists of a mix of different products. The firm should target the ‘College Graduates’ and ‘Individual’ segments, as they are mostly concentrated on a single product ie. Current Account. Therefore the College Graduate and Individual segment should be targeted for cross selling.

6 Recommendations

- **Product Popularity:** The most popular product is ‘Current Account’. The other most popular products are Direct Debit, Particular Account, e account and Payroll account. These products can be combined for cross selling and offered to the customers as they are in demand.
- **Customer Reach :** XYZ Credit Union has more ‘VIP’ and ‘Individual’ customers of age 40-49 Years . The XYZ Credit Union should target these customers for cross selling. Among all segments ‘Current account’ is the most popular product followed by Direct Debit. Therefore, there is a scope to cross sell Direct Debit along with Current Account
- **Age wise Reach :** Overall, the firm has more customers in the age band 18-29 years irrespective of segments. The XYZ Credit Union could recommend Direct Debit for the customer age band 18-39 years. Similarly, Particular account are in demand for age group of 49+ years and could be recommended to this age group beside Current Accounts.
- **Segment wise Reach :** The VIP segment consists of a mix of different products. The firm should target the ‘College Graduates’ and ‘Individual’ segments, as they are mostly concentrated on a single product ie. Current Account.