TELECOM CLIENT

REPORT AND ANALYSIS

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Dear **Client**,

Thank you for trusting Mr. Sobremisana as your data analytics provider. This E-report is designed to guide you through the results of the analysis. The outline of the E-report includes:

- Descriptive statistics and discussion of main parameters of client base
- Workflow customer segmentation
- Segmentation profiles of different client clusters
- Additional descriptive statistics of other parameters of the total client base.

I offer a one-month backup period for the data associated with this E-report. Please make sure to create local backups during this time. If you have any questions, do not hesitate to contact me. I will be happy to assist you.

Sincerely yours,

Gilbert S. Sobremisana
Scientist

The client provided 1,000 individual data about their customer base. This information includes the region of the customers, tenure of the plan in months, age of the customer base, income in USD, educational background, employment years, retirement status, and gender. Among these, I have found that:

Location

- The customer base is equally distributed among all three regions (Region 1, 2, 3), each making up 33% of the total customer base.

Tenureship

- An average customer has a tenure plan of 35.5 months (± 21.35).
- The maximum tenure of customers is 72 months, while the minimum tenure is 1 month.
- Typically, customers' tenure is 71 months.

Gender

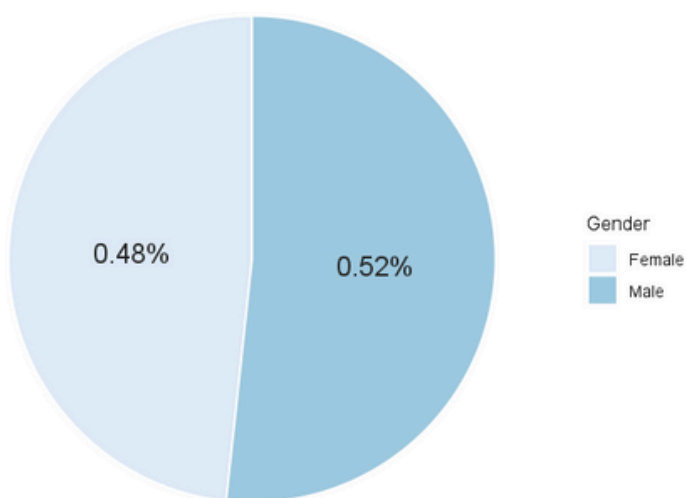- The customer base is equally made up of male and female.

Marital status

- marital status is almost equally distributed (single: 50.4%, married: 49.45%)
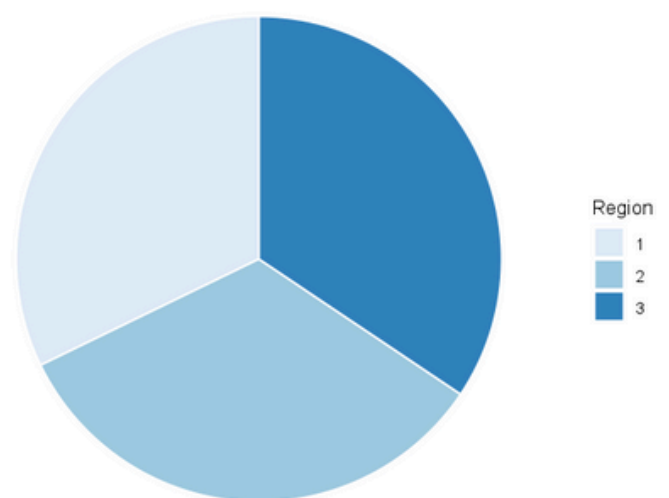
Retirement Status

- Most of the customers are still working (95.2%)

Gender Distribution

0.48%   0.52%

Gender
Female
Male

Source: Telecom Company Data

Region Distribution

Region
1
2
3

Source: Telecom Company Data

Employment years

- *The customer base, on average, is employed for 10.3 (± 10.08) years*
- *10.5% of the customer base is unemployed*
- *The longest employment years in the customer base is 47 years*

Age

- The highest customer base of the company is 33–38 years old, which makes up 18.2% of the total customers
- On average, the customers' age is 41 years old. The youngest customers are 18 years old and the oldest are 77 years old.
- 9.6% are young adults (18-25), 26.97% are adults, (26-35), 48.15% are middle-aged (36-55), and 15.08% are retiring age (56 or older).

Age Distribution of Customers
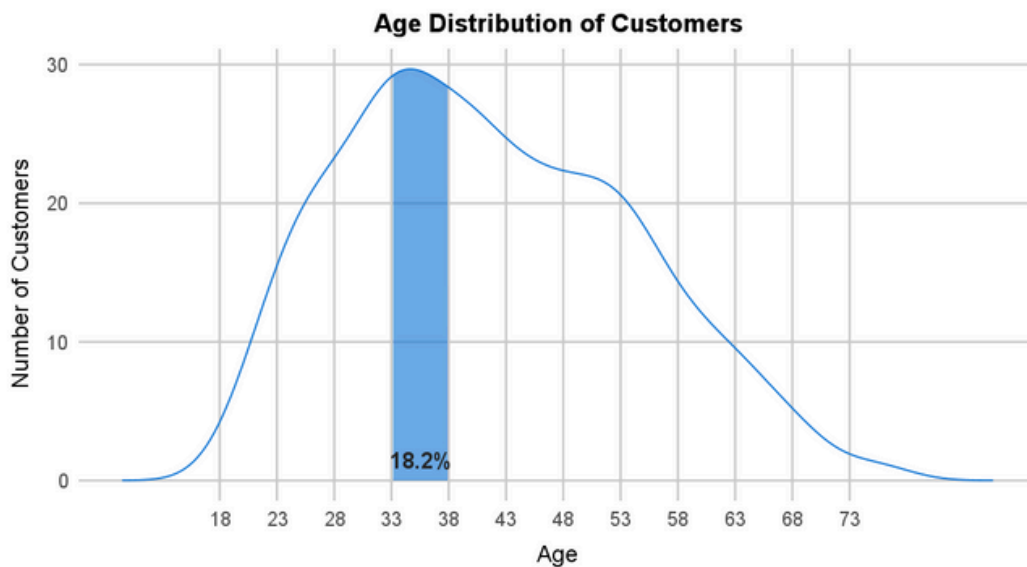
Source: Telecom Company Data

Income

- An average customer earns 77K (± 107.08) USD a year.
- 33.16% are low-income earners (34,400 USD), 47.75% are middle-income (34,400–103,200 USD), and 18% are high-income earners (103,200 USD and above)
- The lowest income earner is 9K USD, while the highest is 1.6M USD

Education background

- An average customer has a tenure plan of 35.5 months ± 21.35.
- The maximum tenure of customers is 72 months, while the minimum tenure is 1 month.

Income Distribution
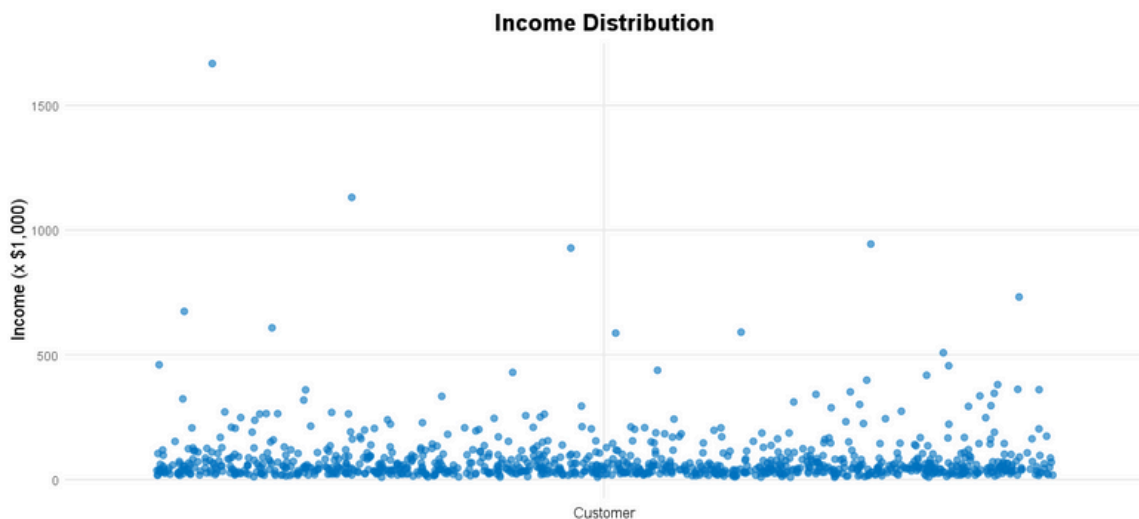
Source: Telecom Company Data

Clustering

- The k-means algorithm was used to determine the 4 different segmentations of the customer base as requested
- Parameters of age, income, education background, employment years, plan duration, and marital status were used to build the model. The score of the model is 0.24.
- The majority of the clients (99.5%) come from clusters 1, 2, and 3.

Clusters of Telecom Clients
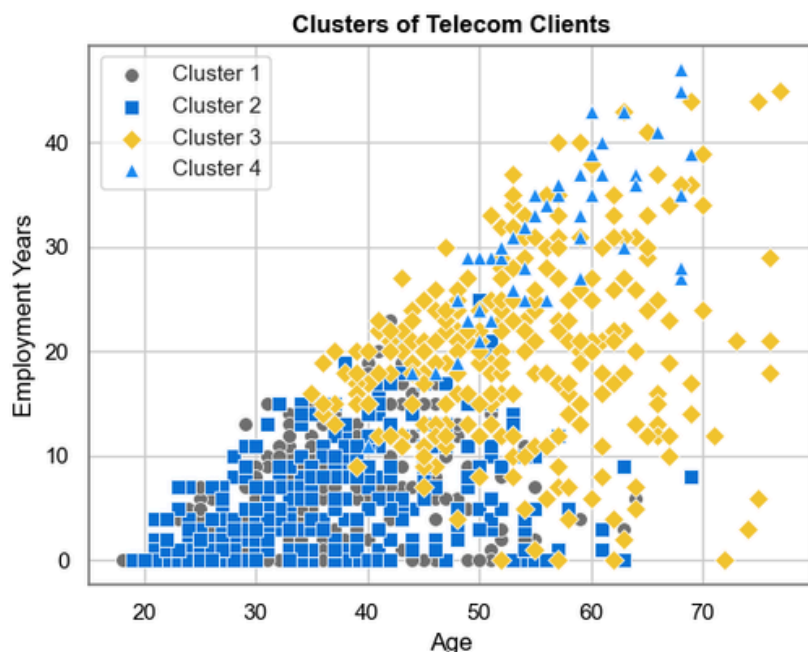
Customer Cluster Distribution
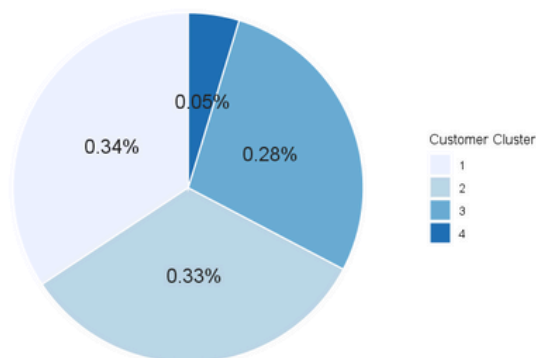
Source: Telecom Company Data

- The high-earning clients are clustered in Cluster 4, while those in Cluster 2 are low-earner clients.
- Clusters 3 and 4 are the oldest client bases, while clusters 1-2 are the youngest. These are further distinguished by the income of each cluster
- The profile of each cluster is shown below:

Average Income by Customer Cluster
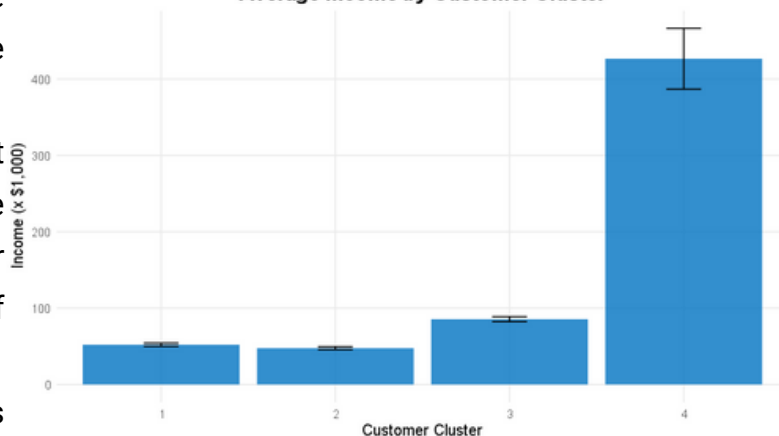
Source: Telecom Company Data

Client	Age	Income ($)	Education	Location	Employed (years)	Marital Status	Plan (months)
Cluster 1	18-36	51k to 85K	Masters	Mainly Region 2	0 to 6	Mainly Single	21 to 30 (or less)
Cluster 2	18-36	50K below	Masters	Mainly Region 1	0 to 6	Mainly Married	31 to 55
Cluster 3	37-54	85K to 426K	Secondary	Mainly Region 2	7 to 20	Mainly Married	50 above
Cluster 4	55 above	427K Above	Tertiary	Mainly Region 3	21 to 31 (and above)	Mainly Single	50 above

Correlation

- Employment years and age highly dictate (employment: positive correlation of 0.52, age: positive correlation of .49) the length of plan or service a customer would avail of. Longer employment years and older customers tend to be more loyal.
- Education has a negative correlation with plan duration, with higher educational background tend to stay shorter with plan duration (negative correlation of -0.109)
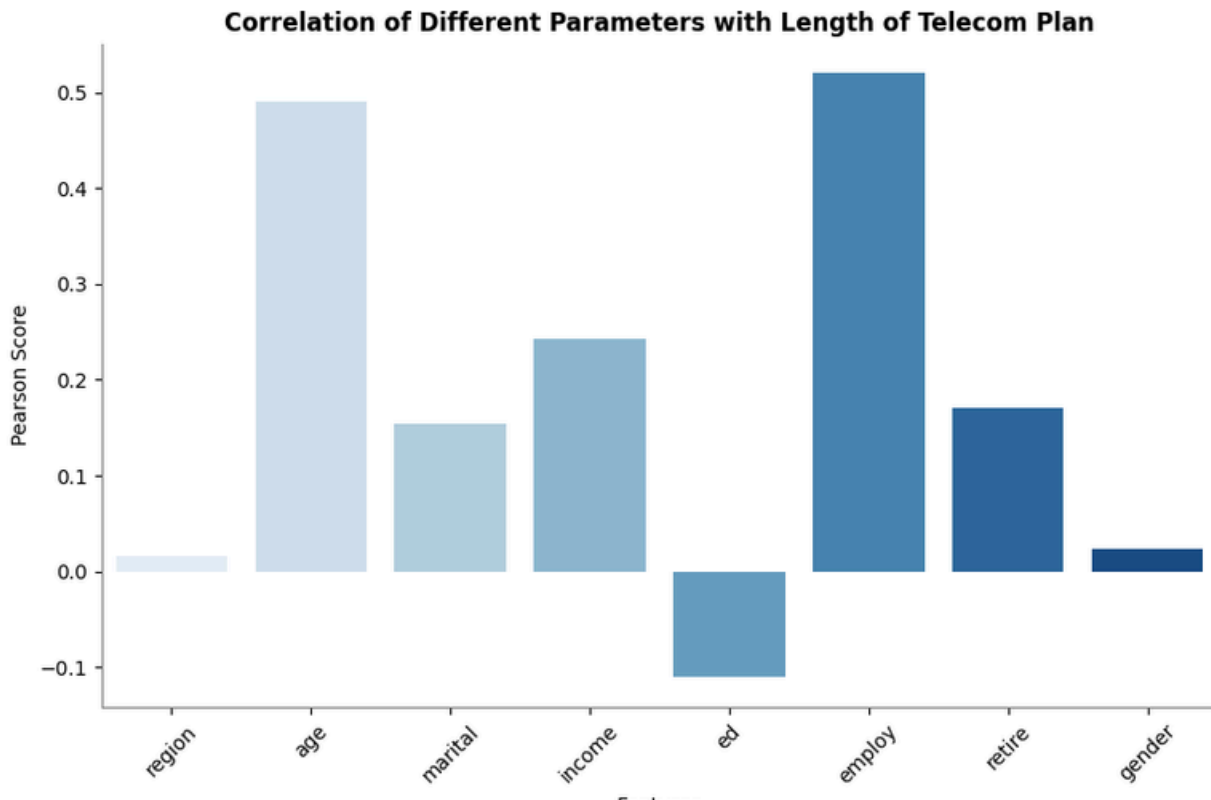
Recommendations:

- *Younger Clusters (1 and 2)*: Focus on flexible, innovative, and cost-effective plans. Use digital marketing and social media for engagement.
- *Older Clusters (3 and 4)*: Highlight reliability and quality of service. Offer loyalty programs and long-term benefits.
- *Loyalty Programs*: Target customers with longer employment and older age groups for longer tenures. Personalize retention for higher-educated customers with shorter plan durations.
- *Customized Plans cater to specific needs, such as* premium services for high-income earners in Cluster 4. Introduce budget-friendly plans for lower-income clusters.
- *Income-Based Offers*: Offer tiered plans: bundled services for middle- and high-income earners, and affordable plans for low-income earners.
- *Employment and Retirement Services*: Offer services for professional needs, like enhanced connectivity for remote work. Develop retirement plans for older customers to maintain loyalty.