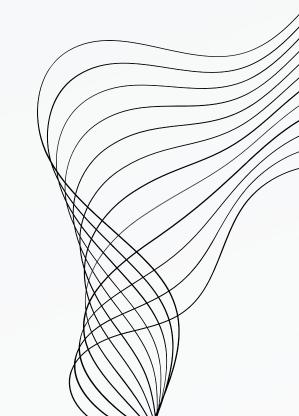


# TELECOM INDUSTRY



### OUR TEAM

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### BUSINESS PROBLEM OVERVIEW

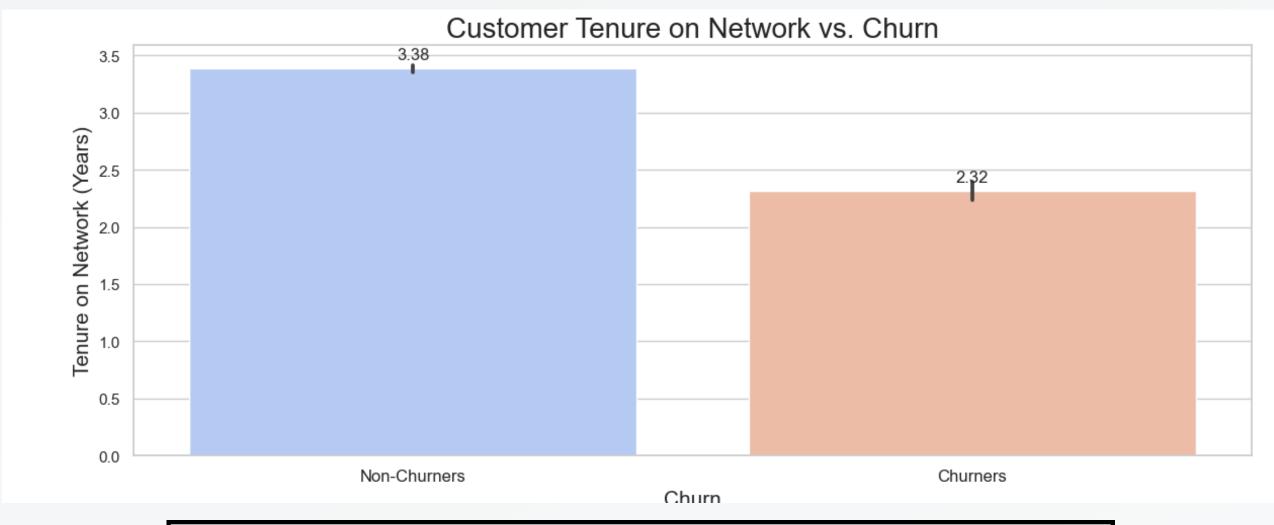
In the telecom industry, customers are able to choose from multiple service providers and actively switch from one operator to another. In this highly competitive market, the telecommunications industry experiences an average of 15–25% annual churn rate. Given the fact that it costs 5–10 times more to acquire a new customer than to retain an existing one, customer retention has now become even more important than customer acquisition.

For many incumbent operators, retaining high profitable customers is the number one business goal.

To reduce customer churn, telecom companies need to predict which customers are at high risk of churn.

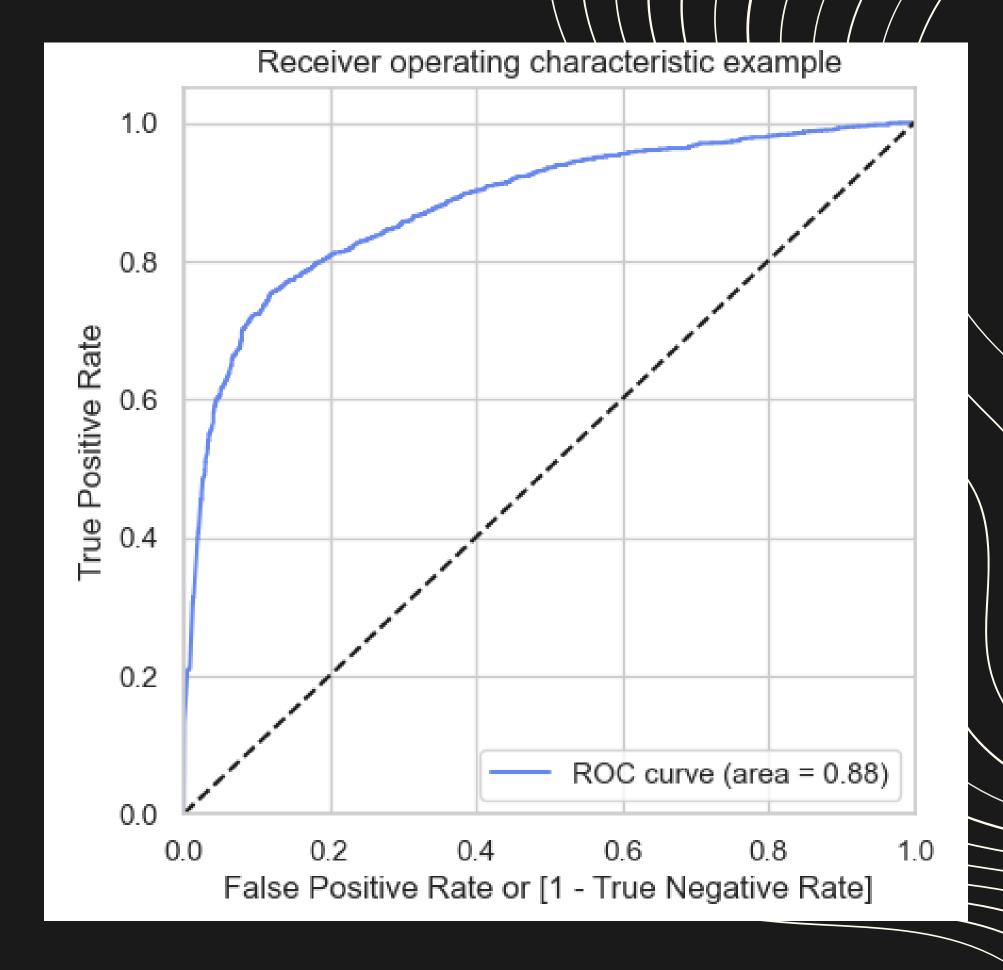
In this project, you will analyse customer-level data of a leading telecom firm, build predictive models to identify customers at high risk of churn and identify the main indicators of churn.



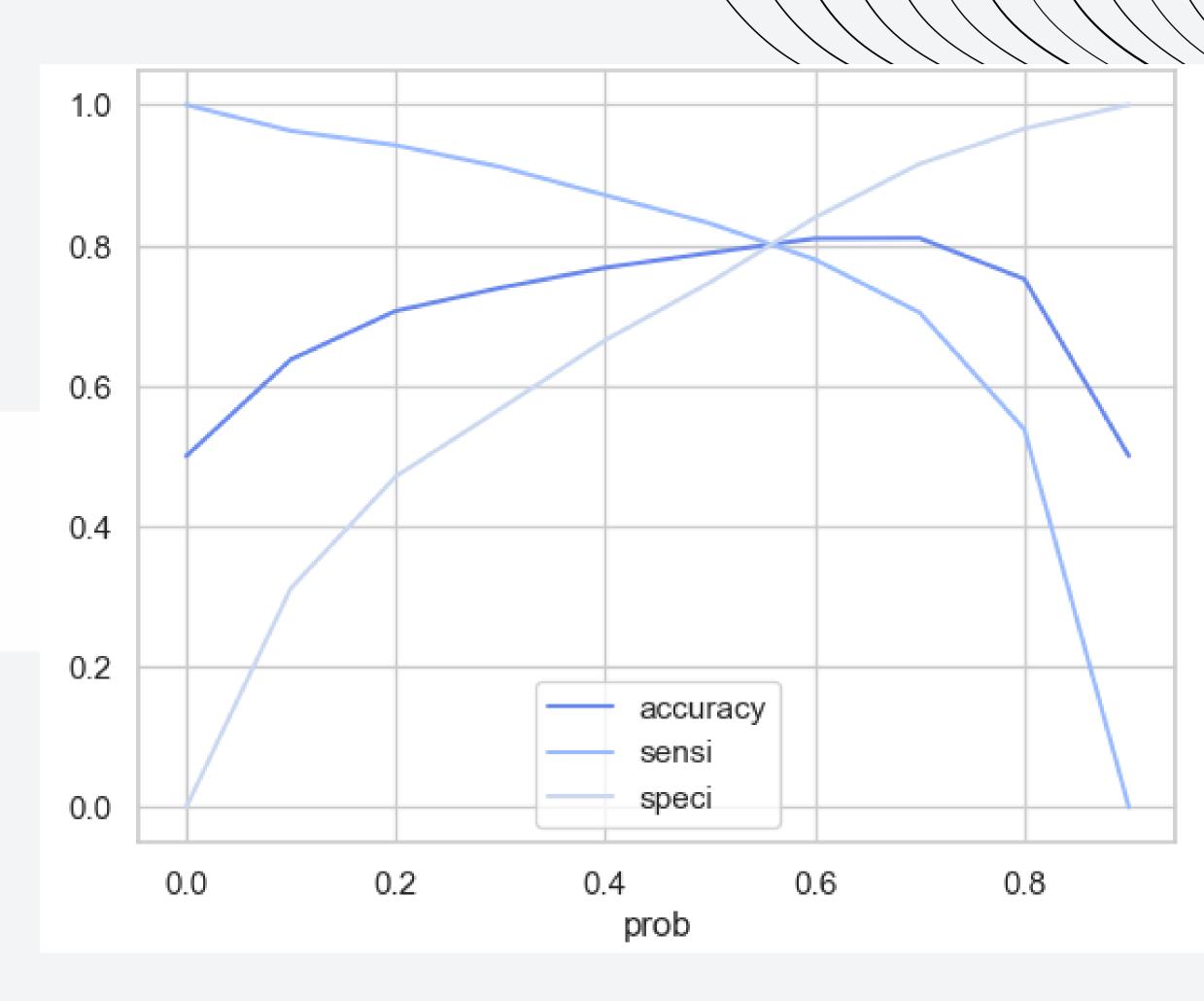


- We can deduce that customers who are likely to churn or leave have a shorter average tenure of approximately 2.3 years with the network provider.
- Conversely, non-churners are those who have maintained a longer relationship with the network provider, averaging around 3.3 years compared to the churners.

# RECEIVER OPERATING CHARACTERISTIC EXAMPLE



# ACCURACY, SENSITIVITY AND SPECIFICITY FOR VARIOUS PROBABILITIES.



## IMPORTANT PREDICTORS

There are a total of 8 important predictors, out of which 7 of them include 8th month (action month). All the 8 variables have negative coefficients, that means, the variables are inversely correlated with the churn probablity For example, if the minutes of incoming voice calls is less in the 8th month comparitively to other months then the probability of the customer churning is high.

	coefficient
predictors	
total_ic_mou_8	-18.749971
spl_ic_mou_8	-6.085383
total_rech_num_8	-5.514453
last_day_rch_amt_8	-4.338163
total_rech_data_8	-6.503322
vol_2g_mb_8	-5.021455
monthly_2g_8	-5.667279
aug_vbc_3g	-4.600100

#### RECOMMENDED STRATEGIES TO MANAGE CUTSOMER CHURN

#### CHURN INDICATORS

- 1. Diminishing Incoming Voice Calls, especially in August.
- 2. Decrease in Total Recharge and Data Usage in the 8th month.
- 3. Decline in 2G Internet Consumption.
- 4. Volume-Based Usage of 3G Network drops in August.

#### RECOMMENDED STRATEGIES

- 1. Offer Attractive Discounts on Calls.
- Engage Customers with Targeted Campaigns.
- 3. Provide Discounted Roaming Rates.
- 4. Focus on Delivering Excellent Service Quality.

#### CONCLUSION

- Implementing targeted strategies based on churn indicators can reduce customer attrition.
- Personalized incentives, discounts, and exceptional services enhance customer retention.
- These strategies foster sustainable growth and increased customer loyalty.

