SYRIA TEL CUSTOMER CHURN ANALYSIS

OVERVIEW

- The company management of Syria tel telecommunications company wants to know why some customers of a telecommunications company decide to stop using their products and services, which is also known as customer churn.

- Customer churn is a big problem for businesses because it means losing revenue and market share since the customers are leaving, and it costs more to acquire new customers than to retain existing ones. Therefore, it is important to identify the factors that influence customer churn and to predict which customers are likely to churn in the future.

- The management of the telecommunication company wants to know how it can stop and reduce the rate at which customers cancel using their services

DATA

- The data
  1) SyriaTel Customer Churn was collected from Kaggle it is a subsidiary of Google LLC, is an online community of data scientists and machine learning practitioners

- The data set is suitable for building a predictive model as it contains categorical and numerical features that can potentially influence customer churn

BUSINESS AND DATA UNDERSTANDING

- The business problem in this project is to predict customer churn i.e whether a customer will leave the Syria tel telecommunication company or not.
- Customer churn has a significant impact on the company's revenue and profitability
- By identifying the factors or patterns that contribute to churn , the telecommunication company needs to take proactive measures to retain its customers and improve overall customer retension
- + By analyzing the data the SyriaTel company we can gain insights to customer behaviour , identify the patterns that indicate potential churn and implement targeted strategies that will retain the customers

MODELLING

- During modelling stage I used different models to predict customer churn using the dataset

- I used three models : decision tree, random forest and logistic regression to predict customer churn analysis

EVALUATION

- This simply implies how each model performed in predicting customer churn analysis based on the provided data

- The model that performed well is the decision tree model it had an accuracy score of 91.3%, precision of 82.4% and f1 score of 82.3%

RECOMMENDATIONS

- To reduce customer churn, the business might want to lower the total day charge, which is the most important feature for predicting churn. This could mean offering more competitive pricing plans, discounts, or incentives for loyal customers.

- To reduce customer churn, the business might also want to improve customer service quality and availability, which is the second most important feature for predicting churn. This could mean hiring more staff, providing more training, resolving issues faster, or offering more channels of communication for customers.

- To reduce customer churn, the business might also want to offer more attractive international plans, which is the fourth most important feature for predicting churn. This could mean lowering the international charges, increasing the international minutes or calls, or expanding the coverage of countries or regions.

- To increase customer retention, the business might want to increase customer engagement and satisfaction with other features that have a negative correlation with churn, such as voice mail plan, number vmail messages, total night minutes, total night calls, or total night charge. This could mean promoting the benefits of voice mail services, providing more options or features for voice mail messages, or offering more incentives or rewards for using night services.

NEXT STEPS

- Monitor customer satisfaction and feedback: It is crucial for the company to continuously monitor customer satisfaction and gather feedback. This can be done through surveys, feedback forms, or social media listening. By understanding customer sentiments and addressing any issues or concerns promptly, the business can improve customer retention and reduce churn.

- Implement a proactive churn prevention strategy: Utilize the churn prediction model to identify customers at high risk of churning. By proactively reaching out to these customers with personalized retention offers, tailored communication, or loyalty programs, the business can take preventive actions to reduce churn and increase customer loyalty.

- Enhance customer service quality: As customer service quality and availability are the second most important features for predicting churn, the business should focus on improving customer service. This may involve hiring more staff, providing additional training to customer service representatives, resolving customer issues promptly, and offering multiple channels for communication to ensure a positive customer experience

THANK YOU

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