Application Track: Customer Churn Analysis

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## **2. Application description** :- Customer retention is an essential component of every subscription-based service's business plan. This application will forecast customer retention rate as well as collect and analyze data on customer behavior to determine which attributes and their combinations are typical of customers who are about to leave.

**3. Project idea :-** Problem description : Typically, companies place a larger emphasis on client acquisition than on customer retention. However, acquiring a new client might be five times more expensive than retaining an old one. According to study conducted by Bain & Company, a 5% improvement in client retention may raise profitability by 25% to 95%.

**4. Proposed Solution :**-

* We will simulate churn in the telecom business model, which allows consumers to have numerous services under a single master agreement. The information includes the characteristics of cleansed customer activity plus a churn label indicating whether or not a customer has churned.
* Using multiple multi-classification algorithms that provide correct classifications of the dataset and employing the recognized pattern from the data to choose the optimal course of action for each existing consumer in the dataset set. Typically, there is not a single cause for client churn, but rather a series of events that culminate in some way.

**5. References:-**

* <https://www.researchgate.net/profile/Oezer-Celik-2/publication/337103029_Comparing_to_Techniques_Used_in_Customer_Churn_Analysis/links/5dc52a29a6fdcc2d2ffc1a24/Comparing-to-Techniques-Used-in-Customer-Churn-Analysis.pdf>
* <https://ieeexplore.ieee.org/abstract/document/7359318>