

# Customer Churn Forecast using Artificial Intelligence

## Overview:

Customer churn has created huge concerns in the highly competitive service sectors and especially in the telecomm sector. The aim of this project was to build a customer churn model using AI (Artificial Intelligence) to predict whether certain customers would leave in the future. This helped the client to retain customers for the long run which improved revenues and business continuity.

## Key Benefits (Minsky):

- User-Friendly, cloud based AI platform
- No coding skills are required for results or predictions.
- Provides you a list of dependency features that can be used to optimize your AI Models
- Ability to fine tune or optimize the models by trying different algorithms / prediction attributes
- Easy integration with other third party solutions such as TABLEAU for data visualization

## Results:

- Improved revenue growth.
- Improved Customer retention
- Reduced customer acquisition costs
- Increase in ROI
- Increased customer loyalty
- Reduction in sales & marketing costs

## Executive Summary:

The client is a large US based telecommunication company that provides mobile, voice and internet services through a nationwide network. The main challenge for them was to predict the customer churn as they were unable to retain customer for long periods which resulted in lower profits. The company was not able to identify these customers in advance and as a result they were spending a lot of funds for new customer acquisition. The aim of this project was to build a predictive AI churn model based on several factors like gender, tenure, internet service, tech support, contract, payment method etc. After a detailed evaluation of their operation data, **Ai Labs** ([www.ailabsinc.com](http://www.ailabsinc.com)) used its proprietary **Minsky** AI Engine to build an optimized model using a combination of AI algorithms and prediction attributes. Based on this historical AI model, current customer data was used to predict churn for each customer. This solution was optimized and implemented in less than a week.

## Typical Customer Churn Forecast Challenges:

- Acquiring new customer always costs heavily to the company
- Has significant impact on business as it lowers revenues and profits
- Difficult to implement customer loyalty program with constant customer churn.
- Keeping customers informed about new offerings

## Solution:

After evaluating the client's challenges, we used Minsky to accurately model historical data of past customers along with other related attributes for model creation. This process included various customer parameters like gender, tenure, bill payment options, contract period etc which helped them to better analyze and take appropriate decisions for customer retentions. Once the AI Models were generated by Minsky for the selected Algorithms and historical customer data, then predictions were generated for the current customers to predict if any particular customer is likely to leave and what appropriate measures need to be taken to retain them. Prediction data from Minsky was also integrated with 3rd Party data visualization application like Tableau.