Logistic Regression: Customer Churn Prediction at Sky TV using SPSS

Overview

This repository contains the detailed project on using logistic regression in SPSS to predict customer churn. The purpose of this study is to demonstrate how predictive analytics can be applied in a real-world business setting to identify and mitigate customer attrition.

Project Description

This project involved conducting a comprehensive logistic regression analysis using SPSS to predict customer churn based on a hypothetical dataset simulating customer interactions. The analysis aimed to understand the impact of various customer demographics and service satisfaction levels on their likelihood to churn.

Key Components

1. **Introduction:** The churn analysis aims to predict and understand customer attrition at Sky TV using logistic regression. The scope includes examining various customer demographics and behaviors to pinpoint churn predictors.
2. **Methodology:** SPSS tool is used for data preprocessing and manipulation. Conducting logistic regression and data analysis.
3. **Results and Findings:** The analysis reveals significant patterns and trends in the data, highlighting specific factors that influence customer decisions to leave or stay with Sky TV.
4. **Logistic Regression Analysis:** The logistic regression model, executed in SPSS, shows how different variables relate to the likelihood of churn. Key model metrics like the Nagelkerke R Square indicate the model's explanatory power.
5. **Demographic Analysis:** This part of the analysis shows that gender and age variably impact churn rates, with certain demographics exhibiting higher propensity to churn than others.

- **Recommendations:** Suggested strategies include enhancing streaming quality, investing in customer service improvements, and implementing targeted marketing campaigns to improve customer satisfaction and retention.

- **Conclusion:** The study underscores the effectiveness of predictive analytics in strategic business applications, emphasizing how logistic regression can inform better decision-making to reduce churn and boost customer loyalty at Sky TV.