Abstract

This paper analyzes outcomes from a randomized field experiment run with major telecommunications provider aimed at measuring the effect of proactive churn management among triple-play users and at determining whether using social network data may help retain them. We used state-of-the-art machine learning algorithms to develop a model to identify likely churners. We also used millions of call detailed records to identify their friends. A random subset of likely churners were selected to be contacted by the firm’s call center. We also randomly selected whether their friends would be contacted by the call center. We find that proactively listing likely churners to be contacted reduced their propensity to churn by 1.9 percentage points from a baseline of 17.2%. When their friends were also listed to be contacted the likelihood of churn reduced an additional 1.3 percentage points. We find that despite the discounts offered by the firm to retain likely churners and the false positives from our predictive model of churn, the NPV of likely churners increased 2.2% with proactive churn management. This statistic becomes 6.4% when their friends were also considered for churn management purposes. Furthermore, we provide some evidence that when likely churners obtain retention offers from the company they confer with their friends before accepting them. Our results show that managers should consider proactive churn management and that using social network data to design churn management campaigns is likely to increase retention rates.