

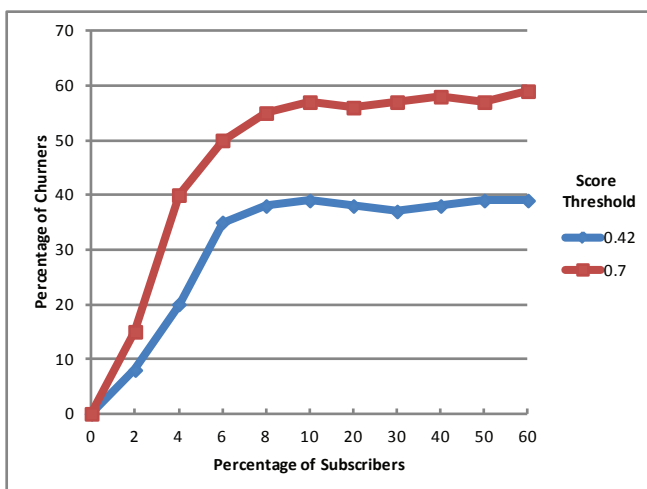
In today's extremely competitive business environment, many telecommunications carriers are measuring their success by the size and growth of their profit margins. As a result, carriers are under intense pressure to reduce or eliminate the major threats to these margins that arise from revenue leakage, inaccurate intercarrier billing, fraud, and churn. As mobile penetration has increased over the years, the focus of marketing at many carriers has shifted from customer acquisition to customer retention. Studies have found that it is much more cost efficient to retain an existing customer than to acquire a new one. Therefore, in order to maintain profitability, carriers must identify ways to control customer churn.

Social Network Analytics have emerged as a key paradigm in modern sociology, technology, and information sciences. The paradigm stems from the view that the attributes of an individual in a network are less important than their ties with other individuals in the network. Through the exploration of this theory, ATS has examined the communication patterns of millions of customers with an eye towards the impact a customer who has churned can have on their social network.

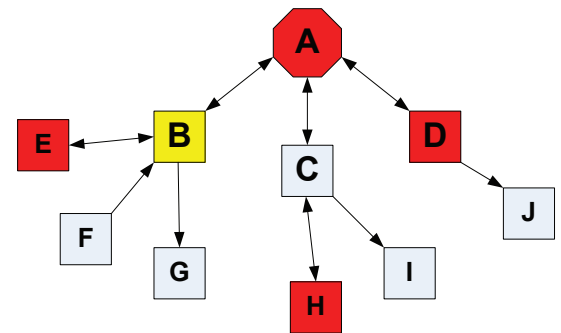
Extensive research and studies have confirmed that a customer who has churned can have a tremendous impact on the probability that another customer within their social network will churn. In an effort to combat this issue and reduce customer churn, ATS has developed a software module to calculate the propensity for a given customer to churn based primarily on the analysis of their social network. The module uses a proprietary algorithm to assign a score to each customer that represents the propensity for that customer to churn within the next 30-60 days. The churn score ranges from 0 to 1 with a higher score indicating higher propensity to churn.

Average churn rates among North American carriers typically range anywhere from 2-9%. One of ATS' current customers has an average churn rate of 4%. Given this, if the carrier were to randomly select a subset of customers, the chance that a customer in that group is going to churn would be 4%. However, using ATS' churn prediction module, the carrier has been able to specifically target the subset of customers that are at higher risk of churning. The average churn rate of customers selected by the module has ranged from 30-40%, which is up to 10 times better than random selection. Since the carrier began using the module, marketing efforts have been targeted at those who are at a higher risk of churning. The results of the effort have produced a significant decrease in the carrier's annual churn rate as well as an increase in overall profit margins.

The illustration below is an example of a lift curve quantifying the accuracy of the prediction algorithm. The lift curve indicates the fraction of all churners that can be retained if a certain fraction of all subscribers were contacted. By adjusting the score threshold, the carrier can greatly increase the accuracy of the results.



The illustration below is an example of the social network of Customer "A" who has recently churned. A social network analysis shows that 3 other customers within their social circle ("D", "E", "H") have since churned. ATS churn prediction module has identified customer "B" as being at high risk of churning in the next 30-60 days.



The ability to identify customers that are at an increased risk of churn provides tremendous benefits to the marketing department. Directly targeting customers likely to churn helps marketers spend 'smarter' and ultimately reduce the overall company churn rate. For example, let's say a carrier spends \$1M dollars on a TV campaign that targets 250k customers (\$4 per customer). The average churn rate among those customers will likely mimic the carrier's overall average churn rate. However, if the carrier targets the 50k customers that are at a higher risk of churn, they could spend up to \$20 per customer and have a better chance at saving the customer as well as having an immediate positive impact on the overall company churn percentage.

For additional information on ATS' churn prediction module, please visit our website at www.atso.com or contact one of our sales representatives by calling 973-696-0990 ext. 126.

ATS is currently offering a limited quantity of free trials for the churn prediction module. Please contact us for details.