MAINTAINING CIRCULATION VOLUME THROUGH CHURN RISK REDUCTION

February 2018

Authors:
Luke Boutwell, Ph.D., Senior Analyst and Angad Minhas, Senior Analyst

Print publications across the industry are experiencing declining circulation volumes. The two main strategies organizations focus on to bolster the circulation volume is either acquisition or retention. Creative marketing and pricing strategies can mitigate revenue losses associated with declining circulation volume, but the underlying trend remains – churn rates are high. At Mather Economics, we specialize in implementing pricing strategies that preserve subscription volume, and regularly measure the impact of price changes on subscriber behavior, including stops. From our research and reporting, one thing is clear – most stops are not directly related to prices. Of course, the price of the product does influence a subscriber's behavior, but the statistical signals connecting prices with churn are often small and sometimes counterintuitive.

Stop behavior is difficult to predict because it is influenced by many factors, some of which change over time or are difficult to measure. Churn rates, on the other hand, are more easily projected, as they tend to be persistent over time and vary predictably by segment. Imagine that we are meteorologists in Copenhagen, where it consistently rains 50% of all days. If we predict that Copenhagen will have 180-185 rainy days next year, we would probably be correct. However, if we cannot predict which days will be rainy next week, our predictions are of little practical use. Fortunately for the Danes, meteorologists use advanced statistical methods based on data to more accurately predict daily weather as conditions change over time.

Armed with enough experience and statistics on churn rates, simple programs can be created that can reduce churn by targeting segments that are known to have high churn, but these will be unable to identify individual subscribers who will stop. However, like meteorologists, we have advanced statistical methods and troves of data with which to make predictions about which subscribers exhibit the highest probability of stopping. Reducing stop risk among high risk subscribers is where churn can be reduced most efficiently.

Our research confirms many of the notions that are considered common knowledge in the print newspaper business – that tenured customers are less likely to stop their subscription than new

Components Analyzed to Estimate Churn Risk

Subscriber Characteristics	Frequency of Delivery Tenure Rate Term Length Automatic Payment Status Subscription Source/Channel Digital Access
Behavioral Factors	Complaint Rate Complaint Type Complaints Relative to Zip-code Average Deviations from Complaint Tendency Timing of Payments Deviations from Payment Tendency Enrollment in Automatic Payment Upgrade/Downgrade of Subscription Digital Engagement Most Visited Online Section Opt-in data (Newsletters, Puzzles, etc.)
Demographics	Age Income Education Geographic Region
Market: Characteristics	Recent Subscription Starts Recent Subscription Stops Recent Complaint Volume Price Changes

Table 1

mather:

starts, for example. Axioms such as these often serve as the basis for churn reduction strategies because they allow for the targeting of specific segments that are known to have higher average stop rates, and this targeting is an improvement over traditional, one-size-fits-all approaches to churn reduction. However, customer churn is a product of many varied, related, and idiosyncratic factors that change over time.

The variety and relatedness of factors

of dozens of factors in this manner quickly becomes prohibitively complicated. Factors that we find are important for explaining stop behavior are shown in Table 1.

Another complication is that many measurable factors that influence churn change over time, and the influence of those factors varies between subscribers. What does a single complaint tell us about a subscriber's probability of stopping? It depends on the complainant's

ing that risk. Our research suggests that reducing overall churn is best achieved by focusing on reducing the stop probability of the highest-risk subscribers. To identify these high-risk subscribers, we classify subscribers by "churn score", an index from 1-100, with subscribers scoring 100 having the highest estimated churn risk. Predictions are tracked over time. Figure 1 shows realized stop rates for several markets by churn score. As is the objective, subscribers who were assigned high churn scores (i.e. were predicted to have the highest probability of stopping) six (6) weeks prior to expiration exhibit higher stop rates measured at the end of their subscriptions. Figure 1 also demonstrates that the high-churn subscribers are those for whom churn risk can be reduced the most.

Stop Rate and Retention Improvement by Churn Score

Figure 1. Aggregated results across multiple touchpoints across a single major metropolitan market.

that influence churn presents a challenge for building a targeted churn reduction strategy. Suppose, using the example above, we know the stop rates of subscribers by five (5) categories of tenure, allowing us to target segments with the highest stop rates. Suppose we also have data on stop rates for four (4) delivery frequencies and four (4) payment categories, which we want to utilize to develop a churn reduction campaign. These three factors combine to yield 80 candidate segments for us to target, many of which will have very similar stop rates. Who is most appropriate to target, and why? One can see how attempting to account for and measure the impact

characteristics, the type of complaint made, when and from where the complaint was made, and how that complaint compares to complaint tendencies over their subscription history. Fortunately, we can employ technology and data analytics to help us parse the influence of individual factors over time and estimate churn risk dynamically as data change. Further, this can be achieved at the subscriber level, allowing for the estimation of a churn probability for each customer.

Great – problem solved! Actually, knowing the distribution of churn risk among subscribers is only part of the solution. There still exists the challenge of reduc-

There are several approaches to reducing churn risk. The most successful churn reduction campaigns are those that utilize low-cost, high-impact touchpoints to communicate the value of the product. There are a suite of options that meet these standards, each with their own costs and benefits. Table 2 shows some of those options.

Depending on your market and the strategy you deploy, acquiring a subscriber can be anywhere from two to twenty times more expensive than retaining one. Organizations should instead focus on retaining their current subscriber base by targeting and reaching out to the customers most susceptible to churn. The logic behind this is simple: A current subscriber has already shown their willingness to pay and their preference for the product. Why not try to keep an already paying customer instead of pursuing leads with zero data on their product or price-point preference? Retention is more cost-effective because retained customers tend to buy more product over-time and show a higher willingness to pay for that product. Figure 2 shows the average weekly rate difference between new start subscribers and

Options for Churn Reduction Touchpoints

Touchpoint	Description	Advantages	Disadvantages
Value Letter	Includes a message that highlights the value of the product to the customer. Examples of topics include recent awards, coverage of locally important issues, and exclusive stories.	Low cost; simple to change and implement; lasting impact	Quality of images and wording requires creativity and effort
Greeting Card	Brief, friendly message stating that the customer's business is appreciated. Often includes contact information for customer service	Low cost; simple to change and implement	Can seem generic or impersonal
Email	The value letter and greeting card can be adapted for email.	Low cost immediate; can offer direct link to renewal page; simple to change and implement	High probability that the message will not be seen; not all accounts have associated email addresses
Merchandise	Branded item of value, usually for everyday use, mailed to the customer. Examples include phone chargers, coffee mugs, and umbrellas	The incentive serves as a regular reminder of the brand (and of a requirement to pay for the product); has value for branding/marketing	higher-cost; value depends on the utility of the item to the customer
Monetary Incentive	The incentive is typically a gift card, but can include vouchers or credits to local events such as sporting events or concerts	Directly incentivizes renewal; many readily-available options; can be branded or bundled as a promotion	High-cost; produces short-term motivation to renew; often low-impact

Table 2

churn stop save subscribers. Retained subscribers add more value than newly acquired subscribers because they can be included in the pool of candidates for price increases immediately, thereby increasing future revenue.

The effectiveness of churn reduction campaigns is also more easily measured than acquisition campaigns. Reporting on acquisition strategy can be tricky. Because you are pursuing customer leads without knowing their price-point or product preference, reporting relies heavily on assumptions. That is not the case with retention. With the Mather churn program, we can develop an A/B test with a proper control group, and track reductions in stop rates in real-time. This gives us the ability to adapt our process and plan our strategy on a market-by-market and case-by-case basis using the results. We are also able to take into account the cost of the retention strategy and properly report on the resulting revenue from the stop saves.
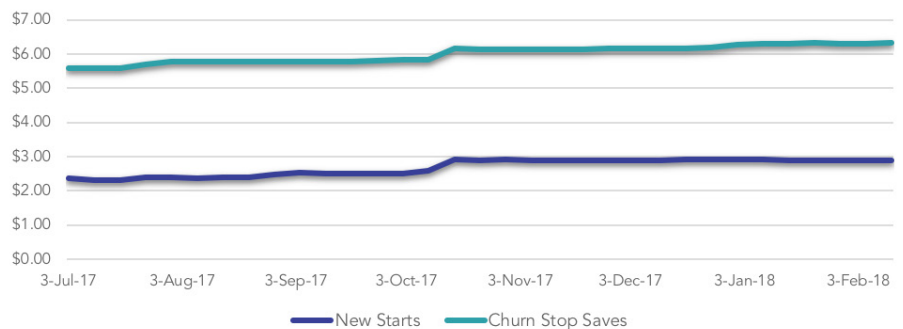

Figure 2. Average weekly rates of new starts vs. churn stop save subscribers across a single major metropolitan market

The bottom line: Retention is the most cost-effective way to maintain circulation volume and improve on stop saves. The Mather churn program is a great service to help organizations plan, target, and execute strategies on their most valuable and at-risk subscribers. The statistical foundation of the Mather churn reduction process is robust enough to capture the different factors that drive churn, and by using data insights, Mather can help maintain circulation volume by targeting existing subscribers on the basis of their individual churn risk.

mather: