

# Reducing churn in telecom through advanced analytics

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# Reducing churn through analytics

The telecom industry continues to face growing pricing pressure worldwide. While regional differences apply, wireless penetration is reaching a saturation point across multiple markets. In addition, the longstanding ability to differentiate products and services based on handset selection and network quality is disappearing, and product lifecycles are shortening. Simultaneously, wireline businesses are facing increasing competition from cable operators and a rising risk of disruption from OTT players. All of these powerful trends are forcing telecom companies to respond through more competitive offers, bundles, and price cuts.

Given these challenging industry dynamics, managing the customer base to reduce churn should be among any senior telecom executive's highest priorities. And our work with telecom companies around the world reveals that those companies that implement a comprehensive, analytics-based approach to base management can reduce their churn by as much as 15%.

## Four Best Practices

We find that four best practices separate the companies who excel at reducing churn through analytics from the average performers:

1. *Develop a comprehensive view of the customer and link that view directly to results.* Leading operators are structured and thorough in linking and aggregating disparate data sets to develop a full view of the customer over the entire decision journey—from acquisition and onboarding to upgrade cycles and eventual disconnect, if applicable. These data sets include customer profiles as well as product, offer, usage, and rebate history, and they include data from call centers, web logs, network experience, and pricing and promotions. The data is aggregated from legacy systems across the organization. Some of these data sets, such as call-center history, can even run into the hundreds of petabytes.  
  
In addition, we find that the leaders augment their rich internal data sets with external data sets on competitive pricing and promotion, media spend, retail footprint, and other factors, and have a rigorous process for identifying new data sets and integrating them into their analytics.
2. *Use cutting-edge analytical techniques.* Cutting-edge analytics let operators apply advanced algorithms to vast troves of data without needing to program specific transformations. These algorithms can identify previously hidden variables and combinations of variables that predict customer behaviors such as churn. Companies can then analyze the reasons behind those behaviors to come up with solutions.  
  
For example, a leading operator used an analytical technique called “feature discovery” to identify over 50 variables that contributed to customer churn, as well as their relative importance. These variables included specific

thresholds, such as combinations of phone type, data usage, and call-center history that, once reached, reliably predicted customer attrition. With a list of these thresholds in hand, the company was able to hold a series of cross-functional workshops to identify root causes of customer discontent, such as issues at specific call centers and dropped calls.

3. *Break the customer base into scores of microsegments.* The full value of data analytics can only be realized when companies can personalize the treatment of a precisely targeted group of customers with the highest propensity to leave. Such a tailored approach requires a granular micro-segmentation of the customer base which is then matched to a broad, well-classified library of offers. One leading operator, for example, developed a library of over 50 offers and then set up a mechanism for rapidly launching and measuring the related campaigns. As a result, the company was able to reduced churn by 10-15% over the following 18 months.
4. *Introduce agile test-and-learn processes.* While data analytics can predict customer behavior, true value is only realized when operators are able to change that behavior. We have found that leaders in churn management are highly skilled at identifying—and quickly testing—new offers for individual microsegments. Doing so requires setting up a structured testing methodology and trying various offers for a given microsegment, such as different permutations of value, messaging, and mode of delivery. We find that industry leaders employ agile working methods that divide these tasks into short phases with frequent reassessments and adjustments to ensure the best results.

## Three Critical Steps

Developing these four best practices requires bold actions to break through traditional organizational inertia. It requires investing in a strong analytical foundation that may mean revamping the current organizational structure, processes, and performance-management systems.

To begin, we recommend setting a mandate for the role of analytics, establishing an analytics center of excellence, and moving from functional silos to cross-functional teams.

- An analytics-led approach to solving business problems requires a top team that consistently seeks facts to support each decision and demands rapid testing of new strategies—“test, measure, and test again...ad infinitum.” At one leading high-tech player, the senior team demands that data analytics support every decision. It actively tasks its line leaders with developing new use cases supported by data, and sharing the results of the pilots. This strong encouragement from the top ensures a culture that values data, analysis, agility, and rapid response—all critical factors for realizing value.
- Organizations that want to maintain competitive differentiation should establish a center of excellence for analytics that is staffed with experienced data scientists and data engineers. We recommend a “crawl, walk, run” approach to staffing such a center that is based on specific business issues such as churn reduction, cross-sell, and pricing. Often, companies can partner with external analytics providers to build, operate, and transfer the necessary capabilities.
- Finally, increasing the rate of experimentation in an organization requires making significant

changes to the operating model. We have found that instituting rapid test-and-learn processes requires truly cross-functional teams that include members of marketing, finance, operations, IT, and legal. Each team should own the results for a given group of microsegments and be empowered to identify new treatments and quickly test and scale them as appropriate.



Reducing churn is more important than ever, particularly in light of the telecom industry's growing competitive pressures. Yet many operators have not taken the steps required to build a strong analytical foundation for success—establishing a truly aspirational mandate for data-based decision-making, a well-staffed analytics organization, and strong cross-functional teams to capitalize on analytical insights. The companies that move quickly will be best positioned for success in the future. ■

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