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The Data-Driven Marketer's Guide to

Predicting Churn

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The Importance of Predicting Customer Churn

Customer churn can manifest in different ways for different businesses, but it can be generally defined as what happens when a customer unsubscribes from your service, ceases to purchase from you, or simply stops engaging with your brand. Customers leave for a variety of reasons, and it's an inevitable part of doing business.

5x

How much more it costs to acquire a new customer than to keep an existing one.

Still, too many companies fail to properly address customer churn, instead focusing on acquiring new customers in order to grow the business. To

us at Retention Science, that methodology is fundamentally flawed -- like trying to fix a leaky bucket just by pouring faster. By focusing on acquisition alone, you end up neglecting existing customers until they get fed up and leave. It's a vicious cycle that many merchants don't even realize they're trapped in.

And it's a cycle worth breaking: not only is it counterintuitive, it's also costly. Research shows that it costs five times as much to acquire a new customer than to keep an existing one. What's more, when nurtured correctly, existing customers are more likely to keep purchasing and become brand loyalists. Brand-loyal customers tell their friends about your company, are more likely to try new products, and are less likely to be scared away by a price increase.

These reasons just scratch the surface of why customer retention is so crucial to your company's bottom line. As this guide will explain, smart marketers realize that preventing customer churn is an important component to successful retention; smarter marketers know that predicting customer churn is even more crucial. Predicting customer churn not only gives you a chance to win them back, it helps you understand how and precisely when to do it.

What This Guide is For

Making Customer Churn Prevention a Priority

Most marketers know it's important to keep an eye on customer churn, but not all realize that keeping customers from churning is directly linked to a company's profitability. Brands, especially those in a mature market, need to be acutely aware of when their customers are about to churn and try to win them back before they do. Customers now have lots of options; unless you're first to the market, there's a chance they'll never come back.

What You'll Find in This Guide

Knowing your customer churn rate and churn causes are crucial to the bottom line of any business. However, using that information to predict and prevent customer churn is what will set your company apart.

This guide will provide marketers with tips and information on how to calculate churn rate, what the numbers mean, and how they can be applied to marketing. We'll also cover how data science can help you predict -- and prevent -- customer churn.

Understanding Why Customers Churn

Before you focus on making customers stay, it's important to understand why they leave in the first place. As mentioned previously, customers leave for a variety of reasons, many of which that vary by business model or industry vertical. Still, the vast majority of customers leave for similar, fundamental reasons. We've listed the top six below:

1. Poor Customer Service

Of customers who decide to leave a company, 70% of them do so because of poor service[1]. This number should come as a wake up call to any company that doesn't think customer service should be a top priority.

How to prevent it:

Good customer service starts when you treat every customer as an individual. This means personalizing and tailoring the messaging and content that you send out to customers. When customers feel the company really cares about their wants and needs, they are likely to return the favor.

2. Not Enough Value

With so many options on the market for customers to choose from, value is one of the key differentiating factors for your brand, and also one of the key factors that cause customers to churn. When customers don't feel they're getting value from your brand, they're quick to try one of the many other options at their disposal.

How to prevent it:

You don't have to drastically change your features or services to add value; you just need to understand what each customer considers valuable. For example, one customer may find free shipping valuable while another may respond better to discount coupons. Customizing your approach to what each individual customer finds valuable increases engagement and reduces churn.

3. Poor-Quality Communications

Gone are the days of batch and blast emails. By sending out impersonal and general emails and communications, companies are losing their customers. Customers find these types of communications annoying and irrelevant and are likely to unsubscribe from your emails -- or worse, your product or service.

How to prevent it:

As mentioned above, you need to add value to your communications in order to stop customers from churning. This means giving your messages a purpose, making them relevant, and ensuring that they engage your customers in conversations, rather than just talking at them.

Understanding Why Customers Churn

4. No Brand Loyalty

If customers aren't loyal to your brand, they will easily leave at the opportunity to try another product at a lower price or with a fancier widget. When price becomes the deciding factor among brands, it becomes nearly impossible to prevent customers from churning.

How to prevent it:

This may be one of the hardest factors to prevent as it requires building brand loyalty, which takes a lot of time and effort. However, if done effectively, brand-loyal customers are one of a company's most valuable assets as they aren't likely to churn when new competitors enter the marketplace or prices go up.

5. Unmet Expectations

When a customer feels that you let them down by not delivering on a promise, they're quick to head for the door. These customers are also quick to let their disappointment be known to anyone who will listen. Not living up to your customers' expectations will be detrimental to your retention efforts.

How to prevent it:

The old saying rings true here: underpromise and overdeliver. Customers are delighted when companies exceed their expectations and share these experiences with their friends. You'll find, however, it is sometimes impossible to deliver on a promise. In that case, beware of churn reason #1 (poor customer service) and be sure to go above and beyond with your customer service.

6. Expired Credit Cards

Unlike most of the other reasons for customer churn, expired credit cards is surprisingly common, but easily fixable. Many customers, especially subscription customers, set up their credit cards for payments and forget about them, not thinking to update the information when their card expires. This means companies may be losing customers who are still interested in their products because of an easily fixable issue.

How to prevent it:

Make sure you have the right measures in place to ensure customers know when their credit cards on file are about to expire. This can be as simple as a triggered email that goes out reminding customers to update their information. It's also a good idea to have a system in place that tracks failed payments and notifies your customers when payments don't go through so they can quickly address the issue.

Part 1:

Calculating Customer Churn

One good way to understand the impact churn has on your business is to calculate your customer churn rate. A simple formula to calculate churn rate is:

$$\frac{\text{Number of Customers Lost}}{\text{Initial Number of Customers}} = \text{Churn Rate}$$

By dividing the number of customers lost in a period of time by the number of customers at the beginning of the time period, you arrive with a percentage. This simple percentage provides a good snapshot of your business for that certain time range.

Churn rate can then be used to calculate:

1. Number of customers lost
2. Value of recurring business lost
3. Percentage of recurring revenue lost

For example, if you want to measure the churn rate for your 500,000 customer business and you know that 15,000 customers left in the month of July, your churn rate would be calculated as:

$$\frac{15{,}000}{500{,}000} = 3\%$$

At first glance, a 3% monthly churn rate may not be cause enough for concern. You may find that your churn rate often fluctuates month to month, or even by campaign. However, if your churn continues to be 3% every month, assuming your acquisition rate stays the same, then your churn rate is 36% a year, or 180,000 customers lost. That's a significant amount of customers leaving your business, which translates into a significant amount of revenue lost.

The calculation described in this example can be used as a starting point to measure your customer churn. It's a good way to understand the concept of churn rate, and the kind of impact it can have on your business. However, it's an extremely simplistic formula; to measure churn more accurately for your business, there are many other factors to take into consideration.

One is how to define customer churn in the first place, which differs across businesses and situations. Subscription businesses that don't allow pausing service is easy to define -- it's when customers unsubscribe. But for other eCommerce businesses, churn has a more vague definition of someone who stops purchasing, and so must be identified through other means. It may involve defining churners statically based on their previous transactional history: someone who has a pattern of buying a few times every two months might be considered churned after 6 months of no activity. But this is just one definition, and it takes work and a lot of data crunching to figure out the rest.

Simply put, calculating accurate churn rate is difficult: it involves a lot of different formulas, information, and to be honest, a bit of guesswork. There is a more precise, accurate way to produce this information, however. The answer, as you may have guessed, lies in data science and machine learning.

Part 2:

Customer Churn & the Data-Driven Marketer

For the data-driven marketer, it's now even easier to understand customer churn in ways that were simply not possible before. The same impact customer data has on figuring out what kind of email marketing messaging will resonate with clients can be used to understand exactly how and why -- and now, when -- customers churn.

It's no longer contested that machines are better at crunching numbers and probabilities than we are. Even more significant is that now machine learning algorithms and modeling translate into computer programs that can adapt to the information being processed. By using models that take into consideration recency, frequency, and monetary values of customers who have purchased before, not only can these models calculate customer churn, they can take it a step further and predict.

Machine Learning helps pick up patterns of purchasing behavior by sifting through enormous amounts of data and identifying common attributes of customer behavior. This translates into being able to identify what kinds of customer action most often leads to churn, even if that action is something small or not easily measurable.

The significance of predicting customer churn is not just the data provided, though that in itself is pretty remarkable. The true importance lies in what marketers can then do with that information, which is to use it to better understand your customers, and market to them according to where they are in the customer lifecycle. It turns something that is informational or analytical -- the percentage of monthly, quarterly, or yearly churn -- and takes it a step further to make it actionable.

Identifying which customers are at risk of churning helps you know when you need to send them an offer to win them back. Predicting when they are most likely to churn gets you the information you need to get the timing of that offer just right. Which all amounts to some serious next-level marketing.

Part 3:

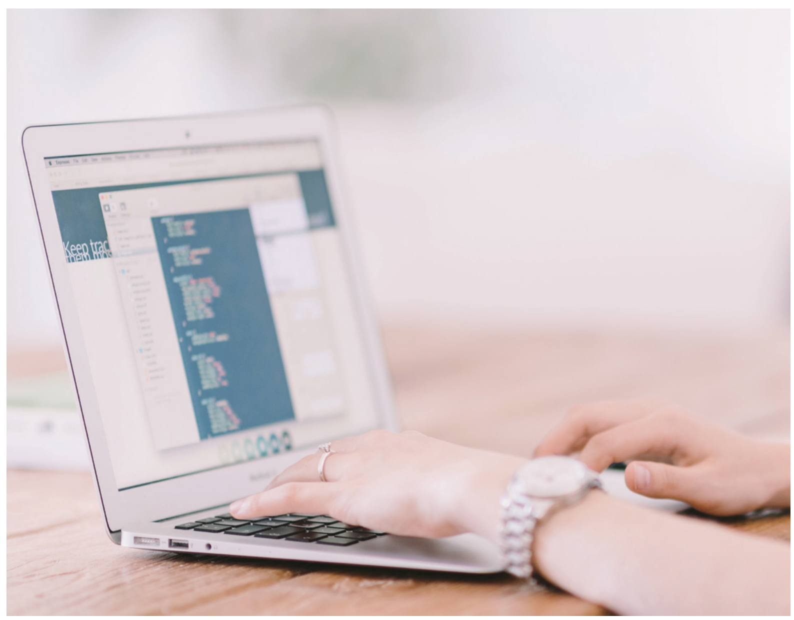
Predicting Customer Churn

Churn is an important metric to measure for all businesses, but predicting churn is even more impactful. Predicting how likely a customer is to churn and when they will churn allows marketers to preemptively engage with relevant offers, bringing lost customers back into the purchasing cycle.

However, people stop being customers for any number of reasons, which makes predicting this value extremely difficult .

This is where data science and machine learning come in to help make predictions. Machine learning helps identify obvious and unobvious attributes of customer behavior that influence purchasing.

At its core, machine learning is the science of creating computer programs that adapt themselves to the problem at hand. For instance, machine learning could be used to identify potential VIP customers or churning customers based on attributes such as website and purchase behavior.



While there are a lot of models that go into machine learning, two helpful metrics for marketers to understand churn prediction are Churn Time and Churn Score.

Churn Time

Churn Time is a metric that predicts the number of days from the current date that a given customer will likely stop purchasing. The model considers signup date, date of purchase(s), date of engagement(s), and other time- and date-based attributes to estimate the lifetime of a customer.

This metric is important because it estimates how much time is left until a given customer will stop making purchases. When combining business-specific knowledge about churn definitions with this model, marketers can get a better understanding of the customer lifetime length on an individual level. Other more simplistic methods will look at the average lifetime span of an entire customer base, which results in inaccurate predictions due to continually changing market conditions.

Pro Tip:

When looking for a data science solution, make sure the basics are covered: Look for a platform that contains classic RFM (Recency, Frequency, Monetary value) models, linear and nonlinear machine learning classifiers, and knowledge-based models that take clues from business specific information.

Churn Score

Churn Score is a metric that predicts the churn state of a given customer. It takes into account demographic information, purchase history, website and email activity, along with Churn Time, to estimate whether a customer is at risk to churn or not.

This metric is important because it gives a marketer the signal that this is a customer who needs to be engaged immediately in order to prevent them from churning. Marketers can then specifically target this 'Churned Segment' with a win-back campaign or other engagement tools. Understanding the Churn Score of each segment can also be a useful way to figure out how to allocate marketing efforts and determine which campaigns achieve higher ROI.

Part 4:

Preventing Customer Churn

Customers churn for a variety of reasons. Sometimes, no matter how a customer is engaged or what offer is presented, they will never buy from your brand again. This is a universal fact of doing business. However, there are strategies a business can adopt to reduce churn, and tactics they can execute to win back certain groups of customers.

Win-Back Campaigns

A win-back campaign is a series of marketing messages with the core function of bringing a lapsed customer back into the purchasing cycle. Great win-back campaigns often have two components: messaging that addresses the reason for a lapse, and an enticing offer, such as a discount on a future purchase or a free month if dealing with a subscriber.

Customers usually don't churn out of the blue. They often provide multiple hints, such as visiting a specific F.A.Q. section, a support page, unsubscribing from email newsletters and promotions, and countless other examples. The goal of a win-back campaign is to first determine why a customer is churning. One simple and effective way to do so is providing an exit survey when customers unsubscribe to emails or services.

Case Study:

Dollar Shave Club

Dollar Shave Club, a subscription-based men's shaving and personal grooming brand, was growing at an incredible rate thanks to superb brand marketing and an innovative business model. However, they soon realized that while signups were skyrocketing, so was the number of unsubscribes.

To figure out why customers were churning, the marketing team at DSC created an exit survey for unsubscribing customers. With the gathered information, they altered their win-back campaign messaging and offers to reflect the exact reason a customer was leaving. This allowed them to address their customers' concerns and greatly increased the rate they recovered lost customers.

These tailored win-back emails generated some impressive numbers:

60%
reduction in churn rate

7x
increase in conversion rates

79%
increase in open rates

Thinking Long Term

Oftentimes, preventing churn simply requires a brand to stay top-of-mind to the customer. This requires personalized engagement that goes beyond offering discounts or occasional emails, to developing content, blogs, and research that align with and demonstrate your core brand values. Many eCommerce companies have found that their best engagement and retention tool is their curated blog. Others find that social media engagement is key to prolonging the conversation with customers. Whatever it is, companies must look beyond email engagement and think long term on how to best keep customers interested.

Conclusion

Customer churn is an important metric on its own, but being able to predict customer churn provides true value for marketers. Knowing which customers are likely to churn and when they're most likely to do so helps marketers react more quickly when trying to retain them.

However, it's important to realize that the best way to address customer churn is to actively work on preventing it, not just sending a win-back offer at the most opportune moment. Ultimately, customer churn rate is a quantitative metric that happens for qualitative reasons. Although machine learning and data science can use other quantifiers to act as signals for these qualitative reasons (purchasing behavior, email/onsite activity), the root of the problem lies in things that are difficult to define.

This underscores the importance of understanding your customers, understanding the common reasons they churn, and being proactive in preventing it from happening. Predictive models and algorithms are great at identifying patterns, but it's the marketer's job to understand what those patterns mean for your business in the long run.

In the end, eliminating or diminishing churn boils down to whether your customers are happy. Are you doing all you can to keep them that way?