

COC: A new metric for thinking about cancellations in SaaS business models

by Jason Cohen on August 6, 2013

Introducing COC: The true cost of cancellations in a scaling SaaS business.



"I used to have a lot of issues, but then I just cancelled my subscription."

You've probably know that high cancellations kill growth in scaling SaaS companies. You probably know the reason too: Acquiring new customers scales with Marketing and Sales, whereas cancellation scales *exponentially* with your size (hence phrases like "3% per month"). Cancellations win.

I have a better, clearer way to not only visualize but measure this financial effect, one that makes it more obvious why the "headwind to growth" is larger than you think, and a more useful way to compute its size and impact.

The cost to create a dollar of MRR (p)

What does it cost a SaaS company to add \$1 of new monthly recurring revenue?

Using the typical acronyms:

CAC (Cost to Acquire a Customer) is the total, all-in cost to get one full customer in the door—Marketing and Sales costs, plus the fully-loaded salaries of the folks in those divisions, including commissions. The simplest way to compute it is "total spend in a month" divided by "total new customers added during that month."

ARPC (Average Revenue per Customer) is the average monthly-recurring revenue you get from a customer. The simplest way to compute it in aggregate is "total recurring-revenue in a month (MRR)" divided by "total number of customers during that month (N),"

Since it costs CAC dollars to get one more customer who delivers ARPC dollars per month:

$$p = \text{"the cost to acquire one more dollar of MRR"} = \text{CAC} / \text{ARPC}$$

Payback period (p)

The weak¹ definition of "pay-back period" is "the number of months before a customer's revenue 'pays back' the cost to acquire that customer." So, if it costs \$80 to acquire a customer (CAC) whose MRR is \$10 (ARPC), then it takes 8 months (CAC / ARPC) before the customer turns profitable.

¹ The complete definition of "pay-back period" should also include gross profit margin; if you're curious, see the first half of [this article about how annual plans can transform your cash-flow](#)

You'll notice this is the same formula that we just gave for "the cost to acquire one more dollar of MRR." This is why we named the variable p. Often it's easier to think

in terms of “pay-back period,” and also easier to find benchmark data for other companies in your industry and size.

COC—the Cost of Cancellations

Let’s call c your **monthly cancellation rate**, in terms of MRR. So if 4% of your revenue cancels each month, $c = 0.04$.

Because $\text{MRR} \times c$ dollars will leave this month, you will have to replace all those dollars *just to stay level* in revenue (forget about growing!). And it costs p to replace each one of those dollars.

So, the cost, in dollars, cost to replace those cancellation dollars is:

$$\text{“cancellation replacement cost”} = p \times \text{MRR} \times c$$

We could compute the same thing as a percentage of MRR, rather than as a number of dollars. This simply means dividing by MRR. This yields our new metric: **coc** (the **Cost Of Cancellations**, pronounced *see-oh-see*)—**The percentage of our revenue we’ll have to spend this month, just to keep from shrinking:**

$$\text{COC} = p \times c$$

The surprisingly high cost of cancellation

Some examples make the utility of this metric clear:

A healthy SaaS business serving SMBs might have a cancellation rate of 3%/mo ($c = 0.03$), and a marketing pay-back period of 7 months² ($p = 7$). In this case, $\text{COC} = 0.21$, which means a whopping 21% of its revenue *every month* will be spent *just keeping revenues even*.

² For example, suppose the cost-per-click on their Google Ads is \$2, with a 1% conversion to sale, on an average sale price of \$30/mo.

That’s a tremendous percentage of revenue just to keep from shrinking! That doesn’t include cost to serve (Customer support, SaaS infrastructure, 3% in credit

card fees), that doesn’t include engineering costs, that doesn’t include sales and marketing cost to actually *grow* revenues... that’s merely to stop shrinkage.

Enterprise SaaS businesses often have lower monthly cancellations but much longer pay-back periods. 1.5% cancellation and 18 month pay-back period means a whopping 27% of revenue is spent replacing cancellations.

A no-touch SaaS business driven by word-of-mouth marketing might have lower pay-back periods due to efficient acquisition costs, but have higher cancellation rates due to the lack of human touch and poor quality “self-service” marketing channels. I know a prominent SaaS business with a pay-back period of 2 months but a cancellation rate of 5%—that’s 10% of revenue to stay even.

That’s actually pretty good, compared to the other examples! 5%/mo cancellation means 50% of their revenue cancels each year—crazy high!—but a very low cost-to-acquire means the company is still spending only 10% of revenue to stay even, and of course an additional 10% of revenue spent on marketing causes them to grow at a reasonable clip.

What definitely doesn’t work is a 5% cancellation rate with a 12-month payback period: You burn 60% of revenue to stay even, which means it’s almost impossible to grow profitably; in fact you might be shrinking.

Important COC Lesson #1: COC can be as big as other major expenses

The massive size of COC for most SaaS businesses should be a wake-up call. COC expense can often be as high as R&D or G&A, which means the business has an unprofitable business model, even once it achieves scale.

A SaaS business must work constantly to reduce COC. Because the definition is so simple, it’s obvious that reducing COC means decreasing cancellations and decreasing p , and decreasing p in turn means decreasing CAC and increasing ARPC.

This is a key insight to many SaaS operators, because **typical metrics literature focuses only on reducing cancellation rate, which is only a third of the story.** Furthermore, unless you haven't yet reached product/market fit, cancellation rate is often hard to shift compared to reducing CAC (smarter campaigns, optimized landing pages, self-serve sales/on-boarding) or increasing ARPC (using tiered features to segment customers with different budgets and requirements, *a la carte* add-ons for new products or services, price scaling with usage).

For example, my company WP Engine's cancellation rate is under 2% per month. That's low for the hosting sector. Furthermore, when we poll customers who cancel after the first 90 days, the most common reason for cancellation is "project ended." Meaning, it's not something we can affect by changing something internally.

Therefore, pay-back period is a smarter place for us to focus in terms of reducing COC. In fact our CAC is also already very low, due to tremendous word-of-mouth that our lovely customers bestow upon us. (And now you see how much we appreciate that!) But maybe we should do more to increase word-of-mouth activity while we continue to optimize our paid advertising campaigns. And what about MRR? We've started selling SSL certificates to customers who want secured sites, which results in incremental revenue (and a better customer experience, because we handle that mess for the customer, including renewing and re-installing the certificates each year).

As another example, take the company above with the 5% cancellation rate that traditional metrics literature would say creates "impossible headwinds for growth," and yet they have a better COC than a typical enterprise SaaS business, demonstrating that a very good pay-back period can overwhelm a crappy cancellation rate.

Important COC Lesson #2: Zero net churn trumps both CAC and MRR

The standard SaaS metrics literature does give an important way to combat "headwind" from cancellations: Up-selling existing customers. If you have 2%/mo cancellations, but if on average you *increase* MRR by 1%/mo with things like customers graduating to larger tiers, adding more "seats," buying add-ons, buying premium support, etc., then *effectively* you're only losing 1% of your MRR per month, not 2%.

Thus, c above is not really cancellation rate, but rather "net churn," meaning cancellation rate, plus downgrades, but minus upgrades. The strongest SaaS companies have negative net churn!

You can see the effect of approaching zero net-churn in COC: If c is 0, then COC is 0, which means "getting back to even" costs nothing at all. Phew!

Another fact pops out: In terms of "not shrinking," suddenly p —and therefore CAC and MRR—doesn't matter at all! Of course they *do* matter for healthy revenue and inexpensive growth, but at least in the "headwind" sense they fall away.

This highlights the fact that **getting to zero net churn is the strongest thing you can do** in terms of COC. And since we just talked about "cancellation rate" having a floor, that means you *must* develop paths for up-sells.

Of course negative net churn is a bonus. It sends COC negative too, which can be interpreted as adding directly to profit margin, just as a positive COC sadly takes a tremendous bite out of profit margin.

COC: A new standard SaaS metric?

Typical SaaS metrics literature characterizes it this way: "As a SaaS company scales, growth rate diminishes, but cancellation rate doesn't. That means it gets harder stay ahead of the headwinds created by cancellation. So you


need to work on getting to zero net-churn and, if you don't, you cannot build a large SaaS company, and certainly not a profitable one.”

That's true, but thinking about it in terms of COC is an easier way to understand how to define “headwinds,” exactly how big your “headwind” currently is, the true com-

ponents of “headwind,” and thus points the way to how you will reduce the headwinds besides reducing net-churn.

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