SUBSCRIPTION ENTREPRENEUR

HOSTED BY ERIC TURNNESSEN, FOUNDER OF membermouse™

Ep 129: How To Fight Churn With Data with Carl Gold of Zuora

“If you imagine like the Netflix or Hulu example, if it's $15 a month and you watch ten movies, then you're like, “Okay, I paid $1.50 a movie.” Great. There's my value for Netflix. On the other hand, if you paid $15 a month and you watched one movie, you're like, "Hey, that was a pretty expensive movie! I just paid $15 bucks and I only watched one movie." So, the metric that I'm getting at here is the cost per action. The cost per action is always a strong churn predictor. The higher the cost per action, the more churn you see.”

INTRO:

You're listening to Carl Gold, our special guest on today's episode of the podcast. Carl is the Chief Data Scientist of Zuora. If you're not familiar with Zuora, they're a software platform that helps subscription businesses manage nearly every aspect of their operations.

In many ways, Zuora is similar to MemberMouse - the company I founded 10 years ago - except instead of supporting businesses with one, ten, or one-hundred thousand members... they're supporting huge Fortune 500 companies with millions of customers around the world.

As the chief data scientist at Zuora, Carl has the unique opportunity to see the membership and subscription industry as a whole from a very high vantage point. Over the years, he's come to identify and understand major trends across the industry. But of all the things that can impact a recurring revenue business, he's zeroed in on the one major problem that plagues all membership and subscription businesses: CHURN.

In fact, Carl has become such an expert on churn that he's decided to write an entire book on the topic. In this episode, Carl & I dive deep into the topic of churn:

- What it is
- Why it's such a problem
- And how you can strategically combat the churn in your business

Carl truly has a wealth of knowledge and experience around this topic and we're grateful to have him on the show today. If you're ready to finally understand how you can decrease churn, improve member retention, and ultimately boost the profitability of your business, I highly recommend you listen to this entire episode.

And as a special bonus, Carl is offering you a discount on his upcoming book: *Fighting Churn with Data*. You can find a link to his book in the show notes of today's episode at SubscriptionEntrepreneur.com/129. But...! If you'd like a free copy of Carl's book, send an email to hello@membermouse.com. The first 5 people who respond will get a free copy, courtesy of Carl and his publisher.

Alright, enough from me! Let's get to the interview. As always, I'm your host Eric Turnnessen, and this is episode 129 of the Subscription Entrepreneur Podcast.

Eric: Hey Carl, welcome to the show.

Carl: Thanks. I'm glad to be here.

Eric: Awesome. We really appreciate you taking the time and excited to hear all the things that you're going to share with us today about churn. So,, before we get started on that deep dive, can you tell us a little bit about who you are and what you do as the Chief Data Scientist at Zuora.

Carl: Sure. Let's see, who I am. Well, I'm a guy. I live in the Bay Area…

Eric: That's the type of answer you expect from a Data Scientist. Well, what are the attributes about me? I'm a guy. I'm this tall. I live here.

Carl: Yeah. Well, let me say a little bit about what I do at Zuora and maybe a little bit about how I got here. Zuora is a SaaS platform that people use to manage subscription businesses. I think it's a lot like member mouse, except generally for much bigger companies. Usually-

Eric: Much bigger companies.

Carl: Yeah. Often public companies and multinational organizations and also some very big names and SaaS, that companies that have been in SaaS for a decade or more like that.

So, Zuora provides the platform in which they can define their product catalog and what rate plans that you build people with. And then also the actual billing and integration with your finance system. And at Zuora I actually wear a lot of different hats in my role as Chief Data Scientist.

On the one hand, I partly do products features. I participate in the creation of data science based features like machine learning, predictive algorithms. I also do a lot of analysis of Zuora as customers looking for best practices in the data and also analysis of our market sales data, stuff like that.

I've also done a lot of analysis of churn on behalf of Zuora's customers. So, Zuora has around a thousand customers at the moment and I've analyzed the churn for several dozen of them. That was done as part of an analytics offering that we have here at Zuora where you can basically get your ... you can do analytics on your data in Zuora. And as part of that offering we did the churn analysis.

Eric: Right.

Carl: So, I got to be a Data Scientist at Zuora by a kind of roundabout route. I guess. I actually have a PhD but it's in Neuroscience actually. Although I should say I was like a computer guy before doing my PhD. I was actually interested in machine learning. I won't say how long ago, but before it was cool, I was into machine learning and I did a graduate program but actually was interdisciplinary about machine learning and the brain and I ended up really focused on the Neuroscience for my PhD.

Eric: Interesting.

Carl: Yeah. Neuroscience's fascinating subject. I wish I could have stayed with it, but instead I got a job on Wall Street after I finished my PhD. And I worked as a Wall Street quant for almost a decade before making a sort of career change to be a Data Scientist. And what are the first things I did when I became a Data Scientist was I got involved in some churn analysis cases. This was before Zuora. So, even in my time before Zuora, I was getting called on to do a lot of churn analysis. And that focus continued at Zuora just because all Zuora customers, our recurring revenue or subscription based. So, they're all very concerned about churn

Eric: And all of our customers are very concerned about it as well. And so that's why this is such an amazing opportunity for me to be able to get you on the phone and ask you these questions because you basically have access to this data. And you've also had these experiences, like you said, of analyzing the 12 specific clients. And this type of data and your take aways from that data, obviously there are applicable to those businesses themselves, but it should trickle down and influence and be valuable to much smaller businesses. The kind of size that our customers are 10,000 customers, 50,000 customers, 100,000 customers. Would you agree with that?

Carl: Oh yeah, absolutely. I mean, the really thing that surprising to me about these churn analysis is how much in common all the different companies I look at, they all have so much in common despite the fact that their products are so different. And that was really what motivated me to start writing a book about churn. And it's because I saw all this commonality between very different types of businesses. And I think the people in those businesses wouldn't recognize it, if they hadn't had the experiences that I had.

Eric: Is there a specific reason churn ended up being the metric or are there other metrics that people are concerned with the clients of size working with Zuora?

Carl: Absolutely. There are other metrics. I mean, of course, maybe the most important metric is your growth in revenue.

Eric: Sure.

Carl: But growth in revenue has to be made up of, well, there's two main components. Either you can increase the number of customers you have or you can charge your existing customers more, right? There's only two ways to increase revenue. And if you want to increase the number of customers or as you have, it helps a lot if you're not losing customers all the time, which is what Churn is.

Eric: Churn is.

Carl: Yeah. And it's normal. I mean all subscription and recurring businesses are churning customers every month and every quarter. It's just a question of how much.

Eric: Right.

Carl: Because it's a straight drag on your growth. If you're growing at 10%, well if you're acquiring 10% new customers, say every quarter, but you're churning out 5% then you're only growing at 5% so it's simple arithmetic, how churn is a drag on your growth.

Eric: Got It. And this is starting to get into my next question, which is just kind of a level set. What is churn? And you just basically said part of it, but is there a little bit more when you look at churn and think about it?

Carl: Well, I mean the most basic definition is that churn is your customers quitting. And it's typically in a subscription context. So, there's an actual, cancellation of a subscription. But it's the same thing. If you have a product which is ad supported or supported by in-app purchases, you still want to keep your customers coming back and if they don't come back that you lose them. And that's what churn is at the highest level.

Now there's specific metrics around churn. One being we'll ask the standard sort of churn rate that everyone knows is what percent of your customers have quit in a given period. And people typically either measure monthly churn or annual churn.

Many businesses also instead use a revenue base churn calculation, which you can just call revenue churn, which is also the same basic idea. It's how much revenue of the customers who quit as a percent of the total and revenue churn is important when your customers pay a wide variety of prices. And by wide variety, well, Zuora is an enterprise SaaS company. So, our biggest customer pays something like a hundred times what our smallest customer is. I don't know if that's an exact number, but it's at that order.

So, it's very common for business to business products where your big customers are going to pay, a hundred x your small customers. And then it's very important to measure churn based on revenue. But that's about how you measure churn.

There's also sort of different types of churn that people recognize. The most common distinction is between a voluntary and involuntary churn. Although, personally I actually don't like the term, when people say involuntary churn. I prefer to say call it passive churn, but let me define it first.

So, involuntary or passive sort of means that, the customer failed to pay and it's usually has to do with the payment card failure, either an invalid number, expire card or unavailable balance. So, in a passive churn, the service cuts off the customer for nonpayment.

And then in a voluntary turn that's more like your classic churn where the customer calls up, says, "I'm done." Or maybe they do it on the website, they click cancel. And that's a voluntary churn. I don't like to call the involuntary churns, involuntary. I prefer the term passive because when you say involuntary churn, it's sort of implies that the customer wanted to stay, but they couldn't.

Eric: Right.

Carl: Although, but the truth is, if you think about the times when you have been an involuntary churn, which I know I have, I've been a churn on other people's service because I didn't update my card. Now it was that involuntary that I failed to update my card. No, I just couldn't be bothered. I didn't like the service and it was more convenient for me to not update my card and to actually go online and click cancel. Right.

Eric: Exactly.

Carl: So, I feel like a lot of times when people call it involuntary churn, they're trying to make it like the customer's fault. When the truth is it's for most products, it's pretty rare that a customer truly cannot pay. Now that's a true involuntary churn. If the customer really wants to stay, but they can't pay, right? I mean, if your product is nine 99 a month or $20 a month, I mean, come on. What percent do you think are truly involuntary versus they can't be bothered? Involuntary?

Eric: Well, I can remember it all of them in our business because they usually they send an email very specifically and say, "Hey, this is my situation blabity, blabity, blah my story. Can you do this for me so that I can stay out?" Right. That happens very infrequently. However, what you call passive churn happens every day, every hour, pretty much every 10 minutes, all the time. And there need to be very specific strategies to managing that so that it doesn't destroy things.

Carl: Yeah, there's very different strategies. I mean I think for most companies the passive churns are a smaller proportion of the total. But the key difference is, there's different strategies to mitigate them. So, for churn due to payment card failure, you want to just get those payments through.

The number one tactic for that is using what's called a credit card updater service, which most of the major payment gateways will provide to you. And that means that when the card goes expired or lost, this service is automatically going to give you the new card number. And that's one important way to reduce the payment failure to kind of churn.

And the other one is actually to use a retry, some kind of retry system. So, if a payment fails once, you don't just call it quits, you'll probably want to try a few more times.

Eric: Right. And this is something we have built in to MemberMouse and I'm sure Zuora has something similar, right?

Carl: Yeah, of course.

Eric: When you retry the card.

Carl: Yeah. And you can set different rules and I mean it's actually ... and Zuora is in the process of releasing like an AI based retry picker. And I'll mention that some of our competitors already have AI based retry logic. I don't know, does MemberMouse use machine learning or AI for their-

Eric: No.

Carl: Not yet. Well, we're working on it. So, you're in good company.

Eric: Yeah. The thing about AI these days is because it's such a hot thing. What does that actually mean? It's kind of like when organic became a hot thing at the markets and then everybody was saying organic, but there's organic and then there's just like, okay, I did something so that I can technically say that this is AI, but literally is it really AI or do you just have like a monkey that gets brought into the back room based on something and he does something when he gets product, right? Like it's very touch and go.

Carl: It's like an AI inflation kind of where everyone has bullshitted how much AI they use. So, now everything has to be called AI or you just sound like your sub partner. So, things that wouldn't have qualified as AI five years ago are now being called AI just because of this. It's like an arms race to talk up how much AI you use.

Eric: Now we talked a little bit about the strategies for involuntary or passive. Now what about voluntary?

Carl: So, voluntary churn it's really the focus of the book. I see it as like a larger. And in many ways a more important subject because of what I said before that if your customers are really motivated to stay on your service, then they're going to get you that new card number, right?

Eric: Sure.

Carl: It covers a lot of your payment failure related charge. But so, for voluntary churn it's actually tough. There's no one thing that you can do about voluntary churn that will just solve it because it, really has to do with the customers finding value on your product. Because if people find value, they're going to stick around for the long term. And if they're not finding value, then it's pretty hard to trick people once they're already your customer. You can use some marketing to get people to sign up, but once they actually know what your product is really like, it's harder to lie. You can't rely on marketing to make people stay once they've already seen, the real deal.

Eric: Right. And of course, your strategy in terms of how you handle voluntary churn is going to depend upon your awareness of what's driving it. And this is something we're going to talk a lot about in the rest of this conversation. Before we do that. Another basic question, why is it so critical that membership and subscription businesses develop an understanding of churn and have a strategy for it?

Carl: Well, because all services want to grow. I think that's a generally true. Even if it's a free service, you want to grow your membership base. But churn is the holes in your bucket every month you're out there trying to acquire more customers but every month some of the ones that you lost are slipping away. And it can actually be a very high number once you added up over time. Because Churn is also cumulative and many people stress that the impact of a churn today is not just the one payment that you lost this month. You've lost the entire future payment stream from that customer. So, it's just a huge drag on your growth, especially if you also consider that some of your growth is going to come from the size of your customer base just through word of mouth. And viral marketing strategies, if you're failing to build up a large customer base, it makes it harder to use those organic growth strategies. So, it's hurting you in many, many ways to lose those customers.

And the thing is many ... well it's pretty standard that new businesses, when they're just starting, don't focus on churn. You focused on acquisitions and that makes sense because you need to have some customers before you can worry about losing them. But yeah, but if you make it to a certain point, I mean, if you make it past like six months or something, you've got to start paying attention to how many are you losing and what can you do to mitigate it? Because the thing is, it's a compounding growth effect. If you can just eliminate a small percentage from each month churn, it actually has a huge impact on the long-term growth of your business because it compounds month by month, the loss or the gain.

Eric: Got It. Now let's dive deeper into this, into what you would consider the most prevalent factors involved in churn so that we can start thinking of ways we can observe this in our own businesses.

Carl: Yeah, I mean, I think it's good to actually think about your own experiences with churn on other products. I mean, the most common reason that anyone churns from a product is because they don't feel like they're getting as much value as they're paying for. And you can refer to that in different ways. I like the economic concept of utility. I don't want to get academic or anything and I don't do anything like academic in my book. But then the utility concept is just this general notion of usefulness and benefit, right? That you get from doing something.

So, the number one reason people churn is because they don't feel it's worth it. And you can observe that in your own experience with the last time you canceled, like Netflix or Hulu, you were probably thinking, "Oh my God, I haven't watched this in six weeks. It's not worth it." Right?

Eric: So, would it be too simplistic to say that it's a product issue and offering issue that you need to figure out if people are canceling based on the utility factor, the addressing of that is, okay, why are people sticking with this product or offering, how do I make it better to match?

Carl: It can be happening at different points. If you think about it in the value creation process, I mean one possibility is that customers just don't find that much value in your product. Or it could be that you've priced it at more than the customers see value. I mean, cutting prices technically a way to reduce churn, but it's not the good one, that's like a last resort.

Eric: Exactly. Yeah.

Carl: And then other things are that there might be a valuable features in your product, but it might be difficult for customers to discover them or to get a fully on board and up to speed.

Eric: Got it.

Carl: So, a big emphasis in a lot of churn reduction efforts is actually in customer education. I already said, oh, you can't just market to these people. They already know the product. Right. Well, you can educate them. Right? That's not exactly marketing. I mean it's often done by the marketing department, because they're the ones who have skill in creating effective email campaigns. But the goal is going to be to educate people about the most valuable features and make sure they're using them.

So, that's one of the ... it's a big reason for churn is if people just aren't finding a valuable part, even if it's there.

Eric: Yeah. We certainly experienced that in our business and even as a user of other people's products, I can tell when there's a company that helps me accomplish something very quickly through some sort of checklist, some sort of letting me know that I've done something taking action. This helps me on a personal basis more to stick with the product. The sooner I can accomplish something through some sort of education or them helping me to do it, the more likely I'm going to use their thing.

Carl: Yeah, and many companies will have like what they call a customer success team. Who's responsible for ... well, there's different ways to do it. I mean, one is to do onboarding with new customers. If you're monitoring the actions that customers take, they might have checklists like, "Okay, in the first month live, we want to see customers accomplish these five goals as far as using the product features." And then they reach out proactively either by email or with a call, later on.

So, definitely customer education or lack of customer education can be a big factor in churn. But something else which is really big in churn, which people I think often fail to recognize is just, it's the other alternatives that people have because subscription products nowadays, it's not like the 20th century utilities when you only had one choice, right?

Back in the day, you only have one choice for your phone service. Are you going to quit? You're going to cancel? No, you only have one choice. But for almost any subscription product nowadays you have, customers have a lot of choices in entertainment. If you're sick of Netflix, you can go to Hulu or Amazon prime or now there's going to be a Disney streaming service. Similarly, for a SaaS product like MemberMouse and like Zuora, our customers have the option of building their own.

So, for any SaaS product, that's software as a service that you sell to other software companies I should say. They can all build their own. So, they have a build versus buy decision and that and that's their alternative. And it's just true for just about every subscription product that you can name nowadays that there's another alternative that people are thinking about when they evaluate your product. And they're also thinking, okay, what's the cost of this alternative and how hard would it be for me to switch? So, that's what you call like a switching cost. And those are hard things to actually measure objectively, how hard it is to switch, how many ... I mean you should know about what alternatives do your customers have or have when you launched your business. But when you are thinking about churn, it's very important to think about where are they going, what, what's the alternative that people are choosing instead?

Eric: And I think that there is, the one final one in the factors involved in churn on the top of the list, a more basic one, right? That you have mentioned in your book and some talks you've given, just ability to pay, right?

Carl: Yeah, of course. The ability to pay is always behind everything. I mean, it's less of an issue for consumer products because consumer products are usually priced low enough. But the thing is it's also always relative to your customer's situation, right? I mean there are many people for whom $20 a month for some a streaming service might not be that much, but then there are other people who it is. And the hard thing with churn is you never really know where your customer sits. And it's the same for Zuora and MemberMouse, we don't really know if our customers, how much they can afford to pay. I mean, we're guessing.

Eric: Right.

Carl: You never really know. And it ties into the utility as well. There's often not just a question of are they able to pay it, but it's like are they willing to pay-

Eric: Willing to pay. Right.

Carl: For that level of utility in comparison to their other alternatives. So, all these things end up-

Eric: So, when you've done the analysis for the clients in terms of churn, is this ... are looking at these something that you went through for each of those individual clients and trying to figure out what these were?

Carl: Not Exactly. Actually, not all of them because I'm like I mentioned, I mean ability to pay, you never really know. Subjective utility. Also, you don't really know what people think and you don't really know about the alternatives that they have either. I mean you might a little bit, but it's also not really objective. So, actually what most churn analysis focuses on is actually the engagement of the customer with the product and specifically with different aspects of the product.

Eric: Okay.

Carl: So, the focus of the analysis is always on actual, the customer behavior that they take while they're using the product. Based on the behavior, you can see who's more or less likely to churn. And which behaviors are most significant in churn versus non-churns.

Eric: I see. Is there such a thing as average turn rate, in any given industry or across the board?

Carl: Not really. You could maybe come up with average churn rates if you look more specifically in a particular, well if you look at not only the industry but also is it a consumer product or a business product, which is a big divided and in the same industry you have both.

And the other factor is of course the maturity of the company. It's almost universally true that a young company is going to have a higher churn rate than a mature company. And there's partly just a survival factor to that, right?

Eric: Sure.

Carl: Companies with high churn rates don't live long enough to become mature. So, if you take an appeal of mature companies, they're almost all going to have lower churn rates than young new companies. But it's kind of true that if you get specific like that, and let's say we were to say look at all consumer SaaS companies that are under two years old and under 5 million in revenue, that's a probably be a pretty consistent range. Right? And then if we looked at all B to B, like if you take Zuora and you put Zuora in a cohort of other B2B SaaS companies that are more than 10 years old, we're probably all our churn rates in a certain range as well. But the most important thing is you need to know about the maturity of the company. Because it's always true that more mature companies will have lower churn.

Eric: Okay. And from your experience with the data, when you visualize that spectrum in your head from new to mature, are there any numbers that generally speaking pop up that you would ballpark expect to see for new and then to mature and then whatever's in between for what their turn rate in a healthy sense?

Carl: Yeah. I mean I usually quote churn on an annual numbers. I know many people in smaller businesses typically use monthly numbers and the surprising thing is how much churn adds up over one year. But, immature companies often have churn above 40% to 50% per year and they can still survive and thrive that for a consumer company.

So, that's like kind of like benchmark is. Yeah, I think new small company, 50% annual churn, which should not be that surprising, although there are many that are a lot better. And then for a mature company that's been around for a while, it should definitely be below 20% say most public companies that actually quote their churn rate have below 10% annual churn. If a mature company that's been around for a while has more than 20%, 25% annual churn and that's kind of a red flag, their investors are probably going to be worrying about that.

Eric: That makes sense.

Carl: So, best in class is kind of like below 10%. Worst in class, but still surviving, you're going to be up above 50% annually. And I don't think it's possible for a company to survive with more than like 75% annual churn. I don't think I've ever seen that.

Eric: Yeah, that seems impossible…

Carl: No, but you'd be surprised if you just have like, I forget the exact number, but it's something around 7% or 8% a month, we'll hit you up into those high numbers annually. So, it's a big difference between below 5% a month and both above 5% a month.

Eric: Well that's the same and that's true in terms of when you just look at the growth and the revenue of the company in subscription businesses, it's not just about month over month. It's about, okay, well what is the lifetime value of this customer? And so, the length of time people are customers dramatically changes what your revenues look like.

Carl: Yeah, absolutely. I mean, yeah, churn. I mean there's two key factors in customer lifetime value. One is how much your customers pay periodically, whether it's monthly or annually. But the other key factor in your lifetime value is the churn. How long do you expect them to last as a customer, which is exactly the flip side of churn and there's even a simple calculation you can do to go from the churn rate to the expected lifetime.

Eric: Right? In your book you have a method, if I can say that, that you teach in terms of how businesses can work with and address churn in their operations. And before we talk about that, let's go into a little bit about why it is that churn is so hard to fight?

Carl: I mean the one thing is that to really reduce churn in the long-term way. You actually have to get more value to your customers. Like I mentioned, there's a few different ways to achieve that. You could make new and better features on your product, if it's a software product new and better content, if it's some kind of, media or content driven product.

So, better product I think is actually always the best way to reduce churn. But making a better product is hard. If it were easy, everyone would have done it already.

Eric: Right.

Carl: The other hard thing with churn is that it ends up falling in between different departments. And that makes it very hard because, well I just mentioned, okay, making a better product. Whose job is that? Well your product manager or your producer, if it's content.

Eric: Right, but where do they get the information on which to determine how to make it better?

Carl: Right, exactly. Well that's one of the outcomes of the analysis process that I explained in the book. There's also these other groups, like I mentioned, the customer success and customer support representative and they're supposed to be reducing churn too. And then there's also people who are designing your pricing, who they can impact churn.

I mentioned that, you don't want to cut your price to reduce churn, but there is such a thing as getting people onto the right plan. If you have multiple plan levels and someone's selected an inappropriate plan, maybe because it's too expensive or has too many features, so you can always get people onto the right plan. And that's not the same as giving them a discount.

Eric: Right.

Carl: But so yeah, I mean it becomes hard to fight churn also because it's very hard to predict churn. Even when we do all the analysis and use a state of the art predictive algorithm, kind of getting ahead of myself here, but you'd never get great accuracy in terms of, I mean, you never can get a crystal ball that tells you who's going to churn because there's so many factors that you don't know, especially in the consumer mind, where people might decide to churn and then spend, weeks or months until they actually find time to do it. Right.

So, it's very hard to predict who's going to churn. And then once they've made up their mind that they're not getting value, it's very hard to change their minds.

Eric: Especially if they've chosen an alternative.

Carl: Yeah, exactly. Especially if they have a good alternative in mind, and they're already moving towards it. So, I always tell people there's no silver bullets with churn. Well, sometimes there are, but if there is, it means that something's wrong and someone didn't do their job. Like if there's a bug in your software then yes.

Eric: By now button wasn't working for two months, there's a silver bullet for you.

Carl: Yeah, exactly. If you find a silver bullet to reduce churn, it's a sign that someone else didn't do their job basically.

Eric: Okay. Now moving on to, you've had a lot of experience with this, you've seen a lot of the cases, so based on that you decided to write a book and in this book, you go over how you think people from a strategy perspective can address churn. So, can you give a high-level outline of what you think the best to purchase based on what you've seen?

Carl: Yeah, definitely. The most important thing, it's easy to say, harder to do. The most important thing is just to have a good set of metrics which measure the engagement and health of your customers and to make sure that those metrics are available to all the different groups in your company that are tasked with fighting churn. Because I mentioned before, one of the problems is that there's all these different groups that can impact churn. But they all work with different tools and they have different methods for doing their job.

So, it's actually a mistake to think that you can just do a predictive algorithm, right? Which is what many people like an AI, right? AI is to reduce churn. They actually don't really help that much because all these different groups, what they actually need is knowledge about the causes of churn and who's likely to churn.

And the best way to do that is to come up with a good set of customer metrics, which really capture the engagement of your customers. So, if you are a data science or a statistics person, you actually, you call this feature engineering, but it basically means finding the best measurements, the best measurements that capture what it is you're trying to learn about your customers.

So, by a measurement, I mean basically it starts out with simple metrics. Like how many times did they log in last month? Right? And that's a metric. Because the logins are the data, right? You have ... let's say you're tracking logins and they're in your database. But just tracking those things in your database doesn't tell you anything. So, you make a metric of logins per month for every customer. And what you'll find if you analyze churn is guess what people who log in more churn less, right? It's pretty obvious.

But this is just the most obvious example. And it's actually one of the worst ones because logins are a very weak metric for measuring customer engagement because it only tells you that they signed in. It doesn't tell you if they did anything of value while they were assigned to it. So, the better metrics are actually ones that measure the activities that actually produce value for the customer. And it's different for every business. How closely you can measure those moments of value creation. Because for many services, the value that you create is going to be totally subjective for the customer. Like if it's a video watching service, you can know they watched the video, but usually you're not going to know how much they liked it unless they actually like it by clicking the thumbs up, you have to rely on things like, "Oh, did they finish the video? Did they share the video? Did they recommend the video?" But those are all good metrics for say a hypothetical media company.

Eric: And in MemberMouse, basically what we do is, we look at did they actually install an activated program, did they actually configure anything like add a payment method? Did they create a product so specifically in our business that makes sense to us?

Carl: Yeah, and since MemberMouse's business is similar to Zuora is, I mean I'll tell you our most important metrics are guess what, how much money our customers are making.

Eric: Right.

Carl: Remember, MemberMouse and Zuora are a little bit unusual in that we can really measure the financial value that our users derive.

Eric: Right

Carl: So, those are actually great metrics for churn if you have them. But most businesses don't have that direct measure of value.

Eric: Sure.

Carl: But then, if you don't have anything that direct, the key is to make measurements of things that are as close as possible to the values. So, almost shouldn't even use the login example because I mean, like I said, logins are like the worst measure of engagement. It's always better to look at the activities where that occur when the customer is really successful on the service. And there you'll always see that the more of those things they do the better. Well, almost always if it's really an engaging feature.

So, the way you, analyze that, and this is the main I'm getting into, the main technique of the book is to come up with those metrics. And usually it's an actually an iterative and scientific process. That's the whole point of the book is that you're not going to come up with these great customer metrics by having like a brainstorming session. You'll sit around the table, you'll take a vote and then you'll be done. No, that's not how it works. You come up with an initial set of metrics and then you actually do these churn experiments where you look to see, okay, if I think customers creating documents on my service is good, let's say your service allows creation of documents, then you should see that people who create more documents churn less and you can measure that scientifically and then you'll know if it's true or not.

And if it's true, then that's one arrow in your quiver that you can use to figure out what's valuable and who's going to churn. If it's not true and you actually see that people creating documents has no bearing on Churn, then that actually tells you something else important. And you got to talk to your product designers, "Hey, people who do this don't seem to be getting anything out of it." And that it's a whole ‘nother conversation there. So, that's kind of like your basic churn metric. You figure out some metrics and you see, okay, do people who are getting good scores on these metrics, are they actually churning less?

Eric: So, in listening to you talk about churn, it actually becomes a lot more of an exciting thing. Because it's so easy for things just to be minimized down to a label and a metric and then it becomes kind of lifeless. It's like, "Oh, your turn is this." But basically, in what we're uncovering here and diving into is like bridging the art and science of a business. Churn can help you kind of. Yes. Because the art is all of the metrics you're measuring and how you handle that and the conversation you have interdisciplinary between the teams of the company and your customers, feed backs into literal scientific data that you can then have that iterative response to. And then over time you're improving the business. And data has to be a part of the more mature companies just because there's so many moving pieces. So, many people have to coordinate.

Carl: Yeah, absolutely. And there's also, I mean, so many opinions.

Eric: Right.

Carl: The data on churn, it's actually ... I believe better than a survey. I mean this, the thing that most product designers do is they survey their customers, they get MPS scores. The well-known problems with surveys are that only your happiest and your angriest customers will answer the survey. The great thing about these churn studies is that everyone is in the study. Every customer counts and they vote with their feet, not with their voice. You see who stays and who goes, and then you look at what they did while they were there. And this is the greatest objective source of information about the product. And so many companies don't use it. I mean, there's technical issues. I mean, I realize it's a challenge. I look at, Hey, I'm writing a whole book about how to do it. So, if it were obvious, I wouldn't have to write a book.

Eric: But even beyond the challenge of what the book talks about, which is the theory and the strategy of it, well, now you have to actually implement that. What are the tools involved in implementation? What are the custom systems to track that data? These are questions that each company's going to have to answer.

Carl: Yeah, the answers unfortunately, are not one size fits all. Like I mentioned earlier, it's amazing that the same analytic techniques that I described in the book will work for any company to come up with this great set of customer metrics that really let you see, who's getting value and from where. But what you do with that information is not one size fits all at all. It's different for every company and it depends, are you a content company or are you a SaaS company? Are you a consumer company or a B2B company and how many resources, because pretty much anything you do to try to reduce churn is going to take some kind of resources.

If you're planning new products, features, of course that takes the time and effort of the product creators. But things like customer success, that takes resources, you need to have people whose job it is to do that if you're going to do it. Or customer education, campaign emails. If they're not, those emails are not going to write themselves. So, it really takes resources. So, that's one fact ingredient in your churn mitigation strategy is what kind of resources can you bring to bear on the problem as well as the details of your industry and product and all that.

Eric: Great. And this is why what I was alluding to earlier when I said like this conversation really opens up the value and the diversity of term because it's literally these are all the things that are the challenges of growing and running a business. It's baked into their, right.

Carl: Yeah, exactly. All the problems you're already dealing with. Exactly. And the churn data is really a new window that lets you investigate those questions. Objectively, like I said, you look at how your customers have, they vote with their feet. Either they stay or they go and then you can look at what they did. And that gives you actual objective information about feature usage and value creation.

Eric: So, you mentioned earlier about, we touched on one factor of pricing and how lowering a price isn't necessarily the way to go, but I think this is a common thing. I mean it seems like an obvious thing that comes to people might know if people are canceling, oh are my prices too high? That's that seems to be the most obvious thing that jumps to mind. But in your experience, do you actually see in the data that there is a correlation between pricing and turn in? Is it what people think it is?

Carl: Yes and no. So, there is definitely a correlation. Almost every service that I look at where if you take, let's say I'm going to talk about metrics again, let me describe the metric we want first. So, before I was just talking about metrics that measure an activity. So, say, its documents created per month, right? So, if you have a metric of documents created per month and then you also know what everyone's paying per month, right? You can actually calculate a metric which is cost per document or cost per basically anything. If you imagine like the Netflix or Hulu example, when you think about if you're getting a good deal on Netflix, you think, oh, I watched 10 movies last month and I forget what Netflix is now, 15 bucks. I can't remember. Anyway. If it's $15 a month and you watch ten movies, then you're like, okay, I paid a dollar 50 a movie. Great. There's my value for Netflix.

On the other hand, if you paid $15 a month and you watched one movie, you're like, "Hey, that was a pretty expensive movie. I just paid 15 bucks and I only watched one movie." So, the metric that I'm getting at here is the cost per action. Whatever it is on your service, the cost per action is always a strong churn predictor of the higher the cost per action or whatever it is. It's a value creating action, right? The higher the cost per action, the more churn you see. Now that's the yes answered to the question. The no answer to the question is that doesn't mean that people who paid more churn more. If you have multiple plans on your product, like a good, better, best pricing strategy, you almost always see that the people on more expensive plans churn less.

So, if you simply look at what people are paying alone and your product has multiple price points, this doesn't count if there's only one price point. But if you have multiple price points, you'll almost always see that the people who pay the most turn the least. Well why? Because they're usually the ones who are also using it the most. They're the most invested and so there's like with, in data science we say a selection bias. With that just means is your most enthusiastic customers already signed up for your premier plan.

So, it makes sense that when you look at people on the premium plan, they turn the least and usually they have very good metrics on that cost per action metric. But of course, it's also true that if someone's on your premier plan and they're not using the product that much, then absolutely they're going to be your highest churn risk, because they're paying a lot but not getting a value.

So, cost is definitely important but it's cost in relation to the value that customers receive. And that's actually the one metric. If I say, if you want to remember one thing from this podcast or from my entire book, you should make a metric which divides the recurring revenue. Say if you charge monthly, divide your monthly charge by the amount of value creating activity that the customer did and that will probably be one of your most important metrics for fighting churn.

Eric: Yeah, makes a lot of sense. The hard part about that metric is what or how you identify and define the actions that people get value from and how do you track that?

Carl: Yeah, I mean it usually depends to really do this analysis generally depends on setting up some kind of data warehouse and I mean you're usually going to have to pay someone for that. Although also many of the most important metrics aren't necessarily tracked like a login or a video view or a page view. For example. I'm sure for MemberMouse also, but also for Zuora, some of our most important metrics are how many subscribers does our customer have.

Eric: Right.

Carl: And we just know that we know how many subscribers our customer habit. And that's of course one of our most important metrics, like you said-

Eric: Because that shows how they're getting value.

Carl: Yeah, exactly.

Eric: Obviously if somebody is making a 100,000 times what they're actually paying you, that's a no brainer. There's no reason to go anywhere. Going back to the pricing thing for a second, we talked through how, if you have different pricing tiers then in a lot of cases that people paying more, they churn less. But there's a lot of products where there's only one price, there's one product, there's one price. So, these people also come to churn and say, "Oh, is my price too high?" In that situation where there is only one price?

Carl: Yeah, it's actually a little dead end in the air lytic area where if everyone's paying the same price, you can't actually determine the impact or price. That said, it's pretty rare that everyone's paying exactly the same price. Usually there's some discounts so you might be able to do the analysis anyway, but if everyone's paying the same price then it just becomes a matter of, are they using the service enough. There's also, I mean if it goes outside the scope of the churn analysis, but there's also you can't drop your other sources of information. You should be analyzing your competitors in your market and using that information too.

Eric: Now, when you did your - the 12 studies on analytic studies on some of the customers or were there any findings that through those studies that surprised you or that were like, "Oh, this is really interesting," or something that was discovered in that process for you?

Carl: Well, kind of in the earlier years of doing this. I mean the whole thing we just talked about pricing. The first time I ever analyze the customer's pricing and I was like, Huh. People who pay more churning less, me and the people who were there on that team at the time, we had to think about that one because we had never really thought about it before and once we thought it through it made perfect sense and we came up with the idea of using the price per action metric. So, when we first came up with that, that was like wow, really cool. Of course, that was years ago now. More recently, I mean there are some things that a lot of people will know about, but I'll mention it one of those here.

If you do a metric for something, if your service offers downloads or reports, you can make metrics which look at how much of behavior changes in time. That's another type of metrics. Your basic metric is how many reports you run per month and then a more advanced metric is what percent has your reporting changed? Are you reporting more? Are reporting less? And also, the example, I was going to make was downloads. Is the person downloading more or less than they did, say one month ago or three months ago?

Anyway, it's often the case that spikes in downloads or reports indicate the future churn. And the reason is pretty obvious that, if someone's kind of getting their last binge in, like let's say it's Netflix, right? If someone's really bingeing on their Netflix, maybe they're trying to finish that season before they cancel.

Eric: Right.

Carl: But it can be the same on a product. Maybe like MemberMouse, I don't know. If you have like some reporting features, someone's thinking about churning, they're probably going to go, "Oh they're going to run a bunch of reports, download their data right before they turn the lights out."

Eric: Right?

Carl: So, spikes in certain types of activity are often a churn predictor. Although to me that's not the most interesting because those kinds of churn predictors, they're really important. But they're really tactical, right? That just tells you, oh this one customer is probably get a churn because they're downloading a bunch of stuff. But there's nothing really strategic in that. The ones about value creation are really the more strategic kind of metrics that's usually the most, and it's the most interesting for me. But they all have a role in fighting churn. I mean, one thing that you've probably seen over the course of this interview is you really need a multi-pronged approach, because you've got your payment-based churns, which you can reduce by retrying the card or updating the card number. Then you've got this whole spectrum of voluntary turns where you have a range of strategies, improve the product, make sure the customers know how to use the product, make sure they're on the right pricing plan. So, there's a whole spectrum of responses as well.

Eric: Yeah, it's a running a business. There's a lot to it.

Carl: Yeah.

Eric: Certainly, I appreciate you sharing all this with us. And so, we've alluded to a number of times throughout this conversation that you've written a book on this. So, can you tell us a little bit about how that came about for you?

Carl: Well I should say I'm still writing the book. I've written about half of it at this point. But the good news is my publisher, which is Manning Publications, they've been in the business something like 20- or 30-years making books on computers and technology. But so, they do electronic early release additions. So, you can now get the first two chapters of the book and the third chapter is already queued up and I don't know, it should be all up any day now. I'm waiting for that to hear from that. So, by the time if you're listening to this podcast, by the time you're listening to it, there's probably three chapters out. And then when you get the electronic conditioning, you'll get one new chapter every month. Like you can get kindle or IPA format.

Eric: Awesome.

Carl: How did I come to it? I mean, you kind of asked me that. I mean, that's a whole nother podcast about how do you become a first-time author? You have to decide to do it.

Eric: I guess it's a little broad, I guess the more question I think would be valuable for here is you probably wrote it because you saw a need, right? You had something to say and you saw a need. So, where were you seeing the biggest need? Like who's the person who could benefit most from this information?

Carl: Well, the book I should emphasize, it's basically a technical book. So, it's got programming. There's some amount of data science in it. But the person who the book is really written for is someone who's like a database administrator or someone in IT or just ... you have to know how to program, right? But let's say you know how to program, but you're not really a Data Scientist and you get called up by your company, "Hey, we got to figure out why people are churning. You help us crunch the data." Right? But you don't have any background. So, I just felt like I had made so many mistakes in the early years of doing these churn analysis. I should've mentioned, I haven't done one dozen. I've done many dozens over the years.

So, I made so many mistakes early on and the whole method of mine evolved over the years. I mean, I started out like probably most data scientists would with a very machine learning and AI oriented approach. But over the time I have talking to customers, they were like, "No, we can't use this, we need information, we need knowledge." So, I completely reoriented my approach towards knowledge, discovery and communication rather than just AI.

But I made all those mistakes over my first two to three years of doing this. And it's only in the last one to two years that I felt like, we really have a solid method down. And when I realized that, I was just like, wow, if I could've read a book about this four years ago, it would have made my life so much easier. So, I just felt like, well, no one's written that book yet. I should contribute my knowledge and hopefully other people will find it useful, if you don't know this already, there's not a lot of money in writing a programming book that the author's royalties are not really that much. So, it's really a labor of love just to get this out there.

Eric: That's great. Well I'm sure that anybody who ends up in that situation where they got that phone call is going to be very appreciative. I know that there have been many books like that for me in my programming career where you can pick up that book and benefit from some of these experience in do what in two hours, what would have taken you months.

Carl: Yeah.

Eric: Because you had those perspectives. As a final thing, you're aware that kind of our audience is probably people running subscription membership sites, smaller businesses. Do you have any final messages from them, from your experience in terms of things that maybe that they can take away from this? Also, things that maybe we didn't talk about already?

Carl: Maybe the most important messages you have to do something about churn, because-

Eric: Right.

Carl: Hoping is not a way to mitigate churn. You've got to pay attention to it. Even if you don't have the resources to do a lot. Just getting the basic knowledge in front of your team can really help you with some of the strategic decisions. Even if you don't do a really advanced analysis like I explained in the book. So, just something is better than nothing. That's the most important thing.

Eric: Exactly. And something measurable. Something that you can-

Carl: Yeah.

Eric: Put up there and as you try these experiments, determine if you're going the right direction and then adapt.

Carl: Yeah.

Eric: Because I mean I think a lot of us, myself included, we have feelings about what might change something and then we try that and then it may or may not work, but if we're not measuring it in some way, it’s kind of is a wasted opportunity. Because now what do we do after that, you try again and you're just guessing.

Carl: Yup. Doing it with the data-driven decisions. Absolutely, the right way.

Eric: Awesome. Thanks again Carl for coming on. Really appreciate you taking the time.

Carl: Yes, my pleasure. I really enjoyed talking with you.

OUTRO:

That’s a wrap for this episode of the Subscription Entrepreneur Podcast. I hope you enjoyed my conversation with Carl and are walking away with some valuable information about how you can fight the churn in your business.

You can find a full transcript, the show notes, information about Carl's book, and links to all the resources mentioned in today’s episode at SubscriptionEntrepreneur.com/129.

Many thanks to Carl for coming on the show and to you for being here and listening to this entire episode.

If you’d like to learn more from Carl, be sure to visit his site at FightChurnWithData.com.

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We'll see you next time!