

# How to Find Your Most Valuable Customers

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*Leading companies have always understood the importance of delighting their customers. But not all customers are of equal value, and businesses can do better by focusing on those who offer the most profitable future. To do so, companies first need to know who they are.*

*To identify them, Wharton marketing professor Peter Fader has developed a metric called Customer Lifetime Value (CLV), which projects what people will likely spend with a company in the future based on past buying trends. He has teamed up with Wharton alumni and others to co-found [Zodiac](#), a New York startup whose platform, based on CLV, is to help businesses find their most valuable customers.*

*Fader and Zodiac CEO Artem Mariychin, one of his former students at Wharton, talked about their startup and the application of CLV on the Knowledge@Wharton Show on [Wharton Business Radio](#), which airs on SiriusXM Channel 111.*

*An edited transcript of the conversation follows.*

**Knowledge@Wharton:** Let's go back and start with your work and how this led to Zodiac.

**Peter Fader:** It's an interesting story. So as I celebrate year 30 on the faculty here, I've spent about half that time — well, I've spent all that time building mathematical models to predict different things about consumer behavior. But I spent about half that time on this notion of customer lifetime value. Can we look at what a customer has done in the past and make a pretty accurate projection of what they are likely to do in the future?

And it's not only coming up with a single number, it's breaking it down into how long will this customer maintain the relationship with us? How many more transactions will they have? What will be the size of those transactions? So it takes in a number of different predictive elements that, when you combine them all together, gives you CLV [Customer Lifetime Value].

I've been doing this with — not just me and my co-authors and my students — but lots of other people around the world, developing these models, and they're really accurate and they're really diagnostic, and they're really actual, and they're really good. I've been going to

companies and saying, “Here is a cool new thing that can really help you run your business better,” and a lot of companies, especially retailers, have been saying, “Ah, we’re busy. We can’t deal with all of that math stuff, we’re trying to sell things here.”

And so I’ve been trying to find different ways to get retailers, not only to pay attention to this stuff, but to embrace it. One strategy was a book that I’ve written, I’ve spoken about in this studio many times, on customer-centricity. Let’s try to motivate retailers, or the companies, gaming companies, pharmaceutical firms, telecommunications firms, by thinking about this big, broad strategy of putting the right customers at the center of everything that we do. And that’s great, and that’s been good, and it’s been getting some companies to pay attention.

But part of it is to make these models really, really accessible. Let’s build a platform where it makes it super easy to run these models, super clear to see what it all means, super fun to actually take action on the basis of the models, and for companies just to get smarter and make more money.

“Can we look at what a customer has done in the past and make a pretty accurate projection of what they are likely to do in the future?”—Peter Fader

That’s what led to Zodiac. It was a matter of pulling together not just Artem but actually two other alums as well. It’s a great team of folks, all of whom went here, but have different skills. And to figure out ways to commercialize this stuff, spread the gospel about it, and not only have a start-up that can maybe make some money, but really to me, equally important, as an amped megaphone to get the word out about these models, and the strategic practices that arise from them.

**Knowledge@Wharton:** Artem, what was your experience in terms of taking what you learned here at Wharton, and then being part of that group to build out what Zodiac has become?

**Artem Mariychin:** I was always interested in, how can I understand the cash flow and the future performance of the business? And the fundamental question for a lot of companies, those that actually deal with customers is, what is an individual customer worth? The opportunity at Zodiac to develop a model and to commercialize it where companies can for the first time understand, ‘what is the value of each consumer and how can you change your business strategies and operations to take advantage of that,’ is incredibly powerful.

All of us on the team, with Pete, other alumni, the co-founding team, ... really believe in that notion of customer-centricity and that what we’re bringing to market at Zodiac can dramatically improve how companies interact with their customers and the value their customers are receiving from their actions with businesses.

**Knowledge@Wharton:** It looks like from the website that you are doing that. There are several retailers that are involved in this. American Apparel, Dress Barn I see are part of this.

**Fader:** There’s lots of other companies that see this idea of customer valuation, and again the

strategies associated with it, as the secret sauce that's going to differentiate them from everybody else. So there's a bunch of other firms we're working with that are choosing not to be identified, but it's just really gratifying to see that they are not just getting these numbers and plugging it in, but they're really thinking big and broadly about how they can do a lot of things differently, not just the marketing operations.

**Knowledge@Wharton:** A lot of these companies have had this information available to them. And they just didn't take the time to look at that data, and look at this as a way to be able to understand their business and the consumer?

**Mariychin:** Prior to the last couple of years, the technological infrastructure, the data ... and skill sets in the market were just broadly not available to a lot of companies to understand individual behavior.... The idea of a persona or an average customer was the typical way that marketers would think about their customer base. But now with advancements in technology, with modeling, with more available [data and] skill sets, they are able to understand and predict future behavior at more granular levels, and it's a dramatic shift that's happening. It started in a lot of e-commerce businesses but now is spreading to bricks-and-mortar more traditional industries as well.

**Fader:** It's more than just the marketing, folks, it's not just a shiny object for them. You think about Artem's background and pretty much everyone on the team with the exception of me, these are folks coming from private equity and from hedge funds. These are financial people, so it's not just marketing people just trying to make a lot of noise, it's folks who really understand value, it's folks who really want to be held accountable for dollars and cents. What we've seen [to be of] great success would be with those kinds of firms — with private equity firms who are contemplating acquiring a company.

So let's use this bottom-up approach to understand what those customers are worth. Or for firms that they already own part of their portfolio, let's use CLV as a way to be able to compare our different portfolio companies to each other, to help those companies run more effectively. It's been interesting to see other disciplines embracing these ideas, and I think that's just great for the organization as a whole.

**Knowledge@Wharton:** So it's also understanding the successes and failures, especially if you're involved with a couple of companies, and being able to maybe tweak one or the other to make the one that maybe is not as successful to match what the other one had done.

**Fader:** Let's look at a private equity firm or a venture capital firm. When they have this portfolio, very often the companies we are working with are non-comparable: "We're selling different stuff, you can't compare us to them!" But CLV is this gold standard metric. We don't really care what we're selling or how we're selling it, but let's just stack up the future value of these customers next to each other, it's dollars versus dollars, everyone understands that.

"The fundamental question for a lot of companies ... is what is an individual customer worth?"—Artem Mariychin

**Knowledge@Wharton:** For the companies themselves, what is the process that they go through when they are involved with Zodiac? What is it that they have to invest, and how are they gaining this information about CLV?

**Mariychin:** We'll take in their historical transactions — so we'll learn which customers transacted and when they did. And we will provide a number to them: the lifetime value for what each customer is expected to spend in the future, when they are going to come back, how much they will spend. And we will provide that on an ongoing basis via a software platform which allows them to visualize all of this information on their customers.

Then take action, identify which of the customers are increasing in value, what type of purchases are they making, which of the customers are decreasing, what is the value of the customer base over time, and all of that information is available in their existing databases and also in the platform that we make available.

**Knowledge@Wharton:** I guess there is a life expectancy to the consumer with a particular business. That life expectancy is part of the formula?

**Mariychin:** Yes, that's correct. And even more to that, as companies launch new products or try new strategies, they can measure the impact on their life expectancy. So you're launching a new product line and increasing the life expectancy of the customers, increasing their lifetime value. So it's a way to evaluate all of these product strategies, new business lines, new service offerings, everything of that nature, which is what makes it powerful because it is not a static number, but it's something that changes as the business changes.

**Fader:** One of the issues is that [people] have these ... stylized notions about how people behave — we have stereotypes basically. And we're trying to get past that, we're trying to say, 'just give us the data, just give us the facts, just give us the transaction logs.' Let's not embellish it, for the moment let's not even worry about social media, and let's not worry about who is near whom in the social network, just show us who has been doing what and let's project that out. And the patterns are remarkably robust.

Yes, it can be the case that dramatic things happen in the market, and all of a sudden your customers become more, or less, valuable, but those kinds of things are surprisingly rare. What we see at the heart of these models, at the heart of all of my research, is that there is these vast differences among our customers. We've got good customers, we had lousy customers, and the differences across our customers are much greater than the differences we see over time within a customer.

So let's not try to overcomplicate it, let's come up with the simplest possible model, it's going to tell a reasonable story but it's going to let us project pretty far out, in a pretty robust manner. And again ... let's keep it simple because our eyes are on the long run forecast. And if we make that the goal, we can do it very, very well.

**Knowledge@Wharton:** On your website, you listed a number of retailers but also a fitness company. Isn't it different what the fitness company is looking for, and what the actual retailer is

looking for?

“What we’re bringing to market at Zodiac can dramatically improve how companies interact with their customers.”—Artem Mariychin

**Mariychin:** That’s a great question. It’s actually remarkable that the patterns that Pete just described in terms of how consumers behave are very similar across business types, and actually we think of the world really in two types. There’s transactional businesses and there’s description businesses, and for most transactional businesses and even whether it’s a business-to-consumer or business-to-business, that type of relationship of how customers behave is remarkably similar.

So for the fitness companies, the patterns there are generally identical to what we see in retail. It’s the same thing that we see in travel and entertainment, in hospitality, in pharmacies and generally pharmaceuticals. So the patterns of the human behavior really are quite robust, which is remarkable when we continue to look at more and more data sets, and work with more companies.

**Fader:** And it’s so sad that every company thinks, well they’re different, that we just have to be different because of the nature of our product, the nature of our relationship, the nature of our marketing. And all I want to do is encourage companies to start with these basic models. Again, models that we have been putting out there for years and years and years, just to say, well maybe you are different but how will we even know if you are different unless we have this kind of standard baseline to compare you against?

So let’s try this baseline model, and then let’s see if there are differences, and how much of them are inherent to the company, how much of them might be due to seasonality or market activity, or competition. And like I said before, what you’ll find is there is not really a lot there, that even if we try to bring some of that stuff in, it’s going to help the models fit a little bit better, it’s going to capture some of the little wiggles and jiggles and peaks and valleys and the curves, but it’s not necessarily going to help the forecasts any better. And this enterprise, and I would like to believe management practices, should be all about making decisions for the future, not for the past.

**Knowledge@Wharton:** Artem, are you already hearing back from some of the companies that you worked with, that they have made adjustments to their business operation or their marketing?

**Mariychin:** We are, and it’s actually across a variety of these cases. When we start working with a company, oftentimes they have one idea in mind. It may be on the retention or the loyalty side, they’ll think, ‘okay well how can I choose which customers to interact with, through direct mail or email targeting?’ And using our platform, we will determine that these customers are the ones that they really want to focus on, and these other customers might have already turned from the brand, and interacting with them is a negative ROI proposition.

So they'll start ... doing more predicted targeting. And then the acquisition marketers will see this data and they will understand that ... it turns out there are really great customers with these attributes, so how can we start acquiring more of them? Whether it's through social advertising or through paid search or some other characteristics.

And then we've seen examples in the finance side, so an entirely different department then will start using these models to understand, 'what are these sales expectations from the customers, and how can we think about budgeting and forecasting?' So we've seen this spread throughout the organization, as there's more and more buy-in for these numbers, and it's been powerful to see as companies are starting to see results, and then make more decisions based on them.

"With advancements in technology, with modeling, with more available [data and] skill sets, they are able to understand and predict future behavior at more granular levels."—Artem Mariychin

**Fader:** We're seeing so many of these use cases, some of which we did anticipate in advance, but others that are quite surprising that we're in the process of writing up what we call the CLV playbook. Once you have these numbers — getting the numbers is pretty easy, we've done the math on that and we have this automated platform that's just going to give you the numbers — here's the 50 fun things to do with them once you have them, and Artem has just described a few of them.

The real key to us is to try to find use cases that really do span the organization. So let's use it as a way not only for acquisition and retention, but let's use it as a way to judge and incent our sales people, and let's use it for overall corporate valuation, and to judge how well the supply chain folks are working.

As we've said before with respect to private equity firms wanting to be able to compare all of their portfolio companies, within an organization wouldn't it be great if we can use CLV as the gold standard metric that we can judge lots of different activities that we're doing?

**Knowledge@Wharton:** How quickly are they understanding that this is an important component to being a successful business?

**Fader:** I've seen more happen in basically the year since we incorporated this company than in, say, the 14 years before that. The idea that there is an enterprise out there doing this legitimizes it, so it's not just some whacko academic talking about some ivory tower kind of thing.

Having a platform that's going to just make these numbers so apparent, and then surrounding it with all of these different use cases that we have been referring to, again not only legitimizes it but I want it to get to the point where companies not only believe in this, but it's like fun. Like, let's think of more things we can do with it. It becomes almost a self-fulfilling prophecy.

Once they buy in, they're going to find even more use cases, applications, ways to talk about it. So it's been great having both the firm and this army of great people to work with within the company to achieve much more than just, as a simple academic, I could ever do.

"CLV [Customer Lifetime Value] is this gold standard metric."—Peter Fader

**Knowledge@Wharton:** Artem, is that part of your day? You're thinking about all of these new uses for a lot of this data that's being brought together by these companies?

**Mariychin:** We definitely are. We've mentioned that a lot of our team comes at it from the financial perspective of, if you had the value of each customer, that's really the most important metric for a company, to really understand what each individual is worth.

And how can a company use that information to align various departments — marketing, finance, operations, customer service, sales and executive compensation, investor communication — all of those use cases really stem from this one number.

Many on our team come with a finance background, marketing background, operations background, and spend time thinking, 'okay, now that this data exists, and many of these companies have not had access to it before, what can they do with it?' And as Pete mentioned, we keep coming up with more and more use cases and companies, with new ideas, and it is really remarkable to see ... those ideas spread, and companies start to increasingly believe in these models, and the results that they are seeing.

**Knowledge@Wharton:** In the end, to a degree, this ends up being corporate lifetime value, because obviously one leads to the other.

**Fader:** Absolutely right. That has been always one of the textbook examples, one of the motivations for customer lifetime value is, 'hey if you add all this stuff up that's the value of the company.' But it's always been just an abstract notion until now.

And again, when we can do this stuff at real scale, not just for little tiny slices of a few customers but for the entire customer base, and when we can bring to the party folks who have been doing this kind of thing that is valuation, but rarely using the customer-level data, it's just a delicious combination.

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