In the era of Big Data, businesses must be smart about how they deploy analytics tools to derive deeply valuable insights about their customers. In this video, Knowledge@Wharton spoke with Wharton professor and analytics expert Peter Fader and Mike Nemeth, head of the insurance practice at WNS, a global business process management company, to discuss the role of analytics in the insurance industry.

An edited transcript of the conversation follows.

Knowledge@Wharton: Let’s talk about the insurance industry. First off, in what areas of customer experience will analytics have the most impact?

Mike Nemeth: Traditionally in the insurance world, you have three contacts generally with your insurance carrier. You buy a policy. You submit a claim. You renew a policy. Those are the three traditional, large, predictable touchpoints. Analytics can be extremely helpful in all three of those instances.

But I think especially in the life insurance industry, people are thinking more now in terms of predictive analytics — predicting when will you, in fact, have an interaction with your insurance carrier. You submit a claim. You renew a policy. Those are the three traditional, large, predictable touchpoints. Analytics can be extremely helpful in all three of those instances.

So in the life industry now, they’re really trying to align themselves with the events that are going to occur in their customers’ lifetimes, both to create a better customer experience — we know that you just got married, here’s what you need and we can help you with that, as an example — but also ... [to] expand the wallet share of the supplier of the insurance.

Too often producers — agents — sell the products that are easy to sell. Everybody runs around and sells a little term life insurance because that’s mandatory. Everybody needs it. So they sell that and that’s all they sell and they make a decent living so they’re not very well motivated to go back and sell the rest of the wallet, the rest of the lifetime experiences. And analytics now helps the insurance carrier know who are the good producers, which of their customers are getting good service from the company and what do they need to emphasize going forward.

Peter Fader: This is textbook customer centricity, at least the way that I defined it in my own book on customer centricity, which is if we can figure out who the right kinds of customers are — insurance companies are very good at that, they know who the good risks are, they know the ones who are going to be around for a while and pay their premiums — that opens the door and it’s what follows that really matters.

If we can figure out other ways to enhance the value of those customers, so it’s not just maintaining the premiums that we’re getting from them, it’s not just selling them some separate unrelated policy, but if we can be a true trusted advisor and find ways to give them and
recommend them to other kinds of products and services that might actually have nothing to do with insurance, but might have more to do with some of those other life events that themselves might be associated with changes in their insurance, ... then it’s going to be that much easier to extract some of that created value from them. And, by the way, to identify other future policyholders who share some of the same kinds of characteristics.

So as we move away from just selling that policy, to take in my little piece of it as a sales agent, and instead focusing on lifetime value of how much more can we ... extract from this customer, that’s real customer centricity. And here’s an industry that’s in a great position to really take advantage of it.

**Knowledge@Wharton:** Can you talk in greater detail about how insurance companies can use analytics to improve sales, retain clients, and improve their brand image?

**Nemeth:** The insurance industry is just a fertile ground for analytics. It applies to all of the facets of an insurance carrier’s business. But in particular, what we’re seeing now is not only a desire to do a better job, but a desire to measure how good a job am I in fact doing for my customers. And so analytics is being focused pretty tightly on things like customer satisfaction metrics and Net Promoter Score as ways of measuring how well they are doing. And then once they’ve measured how well they’re doing, they can then fine-tune what they’re doing to create better Net Promoter Scores, better customer satisfaction scores. So you get a closed loop effect where you’re doing analytics in front, you’re testing those analytics, you’re measuring and then you’re adjusting your behavior as you go forward.

**Fader:** Talking about the closed loop, one of the really remarkable and unique things about the insurance industry would be actuaries. That was actually my first job while I was in college. I was an actuary just measuring these risks and predicting the value of customers. So here’s an industry that already appreciates the ability to predict and profile and figure out what are the right kinds of variables, what’s the right balance between, say, demographics and other kinds of behaviors and so on.

We have an industry that already thinks in terms of risk and probabilities and differences among different kinds of customers. It may be easier said than done, but it’s a matter of taking some of the actuarial thinking and just bringing it over to the business side as well. Because it’s actually quite remarkable that a lot of the research that I do as a professor, I am literally building the same kinds of actuarial models, but instead of predicting when someone’s going to die, I’m predicting when they’re going to buy.

But it’s the same statistical assumptions, it’s the same kinds of values that go into this kind of work. So it’s actually not a tremendous leap for folks in insurance to embrace what they already have in that closed loop ecosystem and to do more with it. And we’re seeing more and more insurance companies starting to have that conversation across different parts of the company where they actually can learn and benefit from each other.

**Knowledge@Wharton:** How can insurance companies use analytics to cut costs and streamline claims processes?

**Nemeth:** This one might surprise you. It turns out that customer satisfaction with the claims process has more to do with the efficiency of the process than it does with what’s my resulting payment or how much money do I get from my claim. Because in the claims process — when it’s difficult to submit a claim, when it’s difficult to understand what your status is, what the next steps are, who’s taking care of this for me, when am I going to get my house repaired, when is my car going to be repaired — that set of interactions when they go smoothly is actually more satisfying to the claimant than how much money
did I get.

But what that really means is that insurance companies have to do a better job of triage. Just like in hospital emergency rooms, claims need to be triaged when they come in to an insurance company. Is this a simple claim that should be paid today? Is this a claim that can be investigated simply with police reports or the information that’s provided by the claimant? Or do I need to assign an adjustor? Does the adjustor have to go out and see the damage and the repair [options] or can I simply refer the customer to a repair shop and have them go ahead and get their car repaired if it was damaged in an accident? Or is it something more serious? Do I need a serious senior adjustor? Am I going to end up in litigation? Is this somehow fraudulent? Do I have to worry about a special investigation for this thing?

So knowing all those different paths that claims can take, and if you can know that at the time you take the initial claims report and put the claim on the proper path, you not only save money, but you also improve customer satisfaction. And in order to know what path to take you must have done your analytics homework to understand the characteristics of every kind of claims report that comes in the door.

**Fader:** I love Mike’s answer. I don’t like the question. Here’s the difference. The question asked about costs, but Mike’s answer was more about enhancing value. And I think that’s what we really want to focus on. I don’t mean ignore costs; that’s certainly a big piece of the equation. Companies have been pretty cognizant of costs forever. ... But it’s a little bit harder to measure, to anticipate, to really appreciate the value that we create by handling claims the right way.

So again, we do want to be efficient — don’t get me wrong — but I think there’s more needle-moving opportunity through value enhancing than there is to cost-cutting. And I think a lot of the steps and the analytics underlying those steps that Mike just spoke about, are ways to primarily enhance value, while at the same time keeping costs in check. But I think it’s very important to recognize both opportunities through analytics, and in many cases including this one, it’s more about value creation than it is about cost minimization.

**Nemeth:** Cost savings become a byproduct of good customer service. And what could possibly be a better way to do business?

**Knowledge@Wharton:** How can insurers use analytics to figure out the optimal mix of distribution channels?

**Nemeth:** This is a question that’s a little bit premature actually in the maturation of the industry. Maybe I’ll go back in time. The trend used to be that you chose a singular distribution channel. There are the well-known, very large insurance companies that we see advertised all the time who have their own company agents. You would go to one of their field offices and speak to a human being and sign up for insurance. And that was a trusted distribution channel for decades.

Then we began to see all of this disintermediation — online capabilities, being able to call a call center and speak to someone over the telephone — and those really had an impact on how people thought about distribution.

So their reaction today is, ‘I need to be everywhere.’ Everybody now wants to have their own agents, independent agents, an online presence, a call center capability. [For now,] everybody wants to be everywhere. And so a future step will be [to ask yourself], ‘Do you really want to be everywhere given the kind of customer you have and the kind of products you’re selling to your customer? What are in fact the optimal mixes of distribution channels for your particular business?’

**Fader:** I’m trying to make that future happen today, at least in my academic work, which is one way to sort this out because, yes, every company wants to be everywhere. But that’s expensive.
And so we’ve got to figure out where is it that we’re going to get the best ROI [return on investment]? And it’s not a matter of just getting more policies tomorrow, it’s a matter of creating Customer Lifetime Value (CLV).

If we can look at each agent that we have, or each office, or each channel and say, ‘What’s the CLV of the customers, of the policyholders whom we acquire through that channel or through the activities of those agents? How have they enhanced, by being a trusted advisor, the value of existing customers?’ We can use that as a gold standard metric to start to say, ‘We have this incremental dollar to spend, which kind of channel or which specific agency should we be spending it on?’

Using forward-looking metrics, which of course arises from this push towards analytics, is going to ... give us at least an objective way to figure out how we can allocate this important spending decision. And it all fits hand-in-hand with the kinds of calculations that lead to CLV. It will arise quite naturally from the other kinds of analytics activities Mike was talking about earlier.

Knowledge@Wharton: What are some best practices that companies should follow in setting up data and analytics governance programs? And how do you get company-wide support for such initiatives?

Nemeth: There are two questions there, but there’s a connection between them. One best practice is understanding that there’s a preparatory phase in aggregating, organizing, transforming data for use. But that isn’t the end game. I know Peter would agree with me that there’s probably a little too much emphasis on that preparatory step and not enough emphasis on, ‘Let’s do something with that data.’

The second best practice is incorporating domain expertise into the analytics teams. What this means in practice is having different analytics teams for different domains within a business. For example, a typical property and casualty company is going to have a personal lines business where they sell insurance to us, also a commercial lines business where they sell insurance to businesses. Those are really two different domains and require different analytics teams. That probably means you need some sort of an umbrella over those domains. But on the actual project teams, you need domain expertise because the key to having a successful analytics practice within an insurance company is really being able to generate a return on investment.

In order to generate a return on investment, you need the domain experts because they’re the people who understand what questions should be answered. I call it right-to-left thinking. ... We start with, ‘What are the answers we’re looking for?’, and then we work back through, ‘How are we going to find those answers? What data do we need? What domain expertise? What are the right analytics tools, what are the right analytics approaches, methodologies to apply to get those particular answers?’

If we get valuable answers, then we’ll generate a return on investment. If we generate a return on investment, we will then get adoption within the organization and support within the organization for what we’re doing.

Fader: Let me pick up on the last point that Mike raised. He talks about going right to left, I’m going to talk about going from top to bottom, which is getting that buy in. I like the idea of having that domain expertise, of having these local experts in each of the different product lines doing their analytics. But then you have to have this umbrella [organizational structure above] and you’re going to have this overall center of excellence that’s going to be helping to coordinate all of that.

Here’s the issue: You can’t do that from the bottom up. What happens with a lot of companies is very often it’s the marketing people who say, ‘Hey listen, we’ve got all this data and predictive analytics, we can do all of this stuff here. We can make marketing better.’ And the rest of the
organization says, ‘Ok, marketing, do whatever you want. Knock yourself out. That’s great.’ But unless you can create it truly enterprise-wide, unless it’s going to involve the people in all of the different functional areas, it’s going to have limited impact. It has to come from the top. It has to come from the C-level. It has to be C-level people not just tolerating these analytics because it’s going to keep the marketing people happy, but it has to be them embracing it.

And here’s an industry, given the actuarial heritage, that isn’t afraid of data, that understands risks and probabilities. Let’s do it from the top. Let’s have a high level analytical vision and let’s build that umbrella and let’s sow the seeds for the different domain expertise throughout the organization instead of just waiting for it and hoping that it’s going to bubble up. Mike is thinking right to left, I’m thinking from top to bottom. You get all of those directions right and good things are going to happen.