



Episode 15: Analytics applications for commercial underwriting

TASHA PETTET: We don't have to build sort of complex predictive models in order to get value from analytics. Actually providing simple, clear insights for underwriters to help them make better informed decisions is well within commercial lines insurer's capabilities.

NARRATOR: You're listening to Rethinking Insurance, a podcast series from Willis Towers Watson, where we discuss the issues facing P&C, life, and composite insurers around the globe, as well as exploring the latest tools, techniques, and innovations that will help you to rethink insurance.

JARRETT CABELL: Hello and welcome to Rethinking Insurance. I'm your host, Jarrett Cabell.

So today I'm delighted to be joined by my guest Dave Ovenden and Tasha Pettet. Dave currently leads Willis Towers Watson's pricing, product claims, and underwriting practice within Willis Towers Watson's insurance consulting and technology division.

Tasha is a director in commercial lines, pricing, and underwriting automation, leading our Radar Workbench product at Willis Towers Watson. She specializes in commercial lines, underwriting, and portfolio management, specifically focused on how clients can improve underwriting performance by digitally enabling the underwriting process and adapting analytics. So, of course, good afternoon, Dave and Tasha.

DAVE OVENDEN: Afternoon, Jarrett.

TASHA PETTET: Hi, Jarrett.

JARRETT CABELL: So, of course, the commercial lines insurance environment is often served by fragmented processes, driven by legacy systems, and faces operational challenges that make deployment difficult and often interrupt the opportunity to take advantage of meaningful data. Experts within the insurance value chain operate in separate functionally focused environments to make data sharing problematic, and leave the business open to inefficiency, error, and inconsistency.

And, Dave and Tash, I know you both have extensive experience working and providing solutions in this space, and I'm very excited to be speaking with you today about all of this. But before we dive into that discussion, I did want to find out a little bit more about both of you when we put you into the

Google machine here. So, if I first Google you, Dave, I see a variety of things. So I see, of course, OK, a number of entries related to you as an insurance thought leader. OK, so I see a member of the Australian country music trio Bullamakanka. I see an English abstract artist living in Germany. So we kind of run the gamut here. I guess what would you like to come up when one Googles Dave Ovenden.

DAVE OVENDEN: I do quite like the fact that I come up under insurance, which is a little sad. I used to be-- I still do cycle, but when I was younger, I was very much more competitive, and, yeah, there's a couple there's of YouTube clips where I actually made the made the local news. So, yeah, if you dig deep enough, you'll find me in YouTube, and unfortunately in lycra.

JARRETT CABELL: Very nice, OK. Yeah, didn't dig deep enough to get that one. That's great. I guess next, Tasha, if I Google you, I see, of course, you're a director with Willis Towers Watson and the other insurance related entries. I see a doctor at the University of Chicago Medicine. I see a triathlete. Again, kind of a wide range. I guess what would you really like Google to reveal about you?

TASHA PETTET: Definitely not that I'm a doctor, because I've got no medical training.

JARRETT CABELL: That's not you? OK.

TASHA PETTET: No, that's not me. I'd like to be the triathlete. I'm not the triathlete. But, yeah, I think a bit like Dave, really. Please don't Google me too deeply. I was very into my fitness a few years ago. I actually used to be a competitive body builder. And, yeah, I've done lots of great challenges for charity, normally involving hill climbing and hiking up mountains. So, if I wanted to be remembered somewhere on Google, it would be for climbing Everest. Unfortunately, I never got to the top. I've only got to base camp. But, yeah, that would be my main ambition.

JARRETT CABELL: So, I guess, yeah, we can dive in here. So the use of analytics to support case underwriting, it's not as advanced as the use of analytics in other areas of insurers' businesses, such as pricing. I guess why is that and what are the implications for insurers? I guess we'll start with you, Dave.

DAVE OVENDEN: Thanks, Jarrett. I think you touched on some of this in your intro. The commercial environment is often deeply fragmented, so there's often more than one policy admin system. There'll be some broker management systems. There'll be spreadsheets for pricing. There'll be pricing tools, as well as databases and data lakes. All of those elements require a lot of digging, so at the moment the underwriter is faced with a myriad of sources of data and a myriad of systems. So bringing all that together so there's a contextually rich support for their decisions at the time they're trying to make a complex judgment about a given risk, is really quite challenging and very difficult for an insurer to do. But the benefits are significant.

JARRETT CABELL: Good. Tasha, did you have anything to add on?

TASHA PETTET: Yeah, just to sort of add to Dave's point, really, it causes some of these fragmented processes and different places for data storage. I think often one of the reasons that we come across that the insurers have not really embraced analytics previously is this general perception that actually in commercial insurance, there isn't an awful lot of homogeneous exposures for them to analyze.

And I think we've found lots of examples where that's not the case, where we've worked with clients in the past, and actually there can be a lot of trends and patterns in your commercial data - but not

having a single view of that data or perhaps not having the right tools to help you manipulate the data to unlock the right insights for your underwriters, or perhaps understand the value of external data. If you haven't got those right tools for manipulations, then I think that's what's caused insurers a lot of problems, significant problems, in the past.

And one point to make around data and analytics is I think often it was seen in the realm of perhaps it was quite complex. The realm for data scientists and analysts. Maybe that it wasn't for underwriters. But we don't have to be able to have build complex predictive models in order to get value from analytics. Actually providing simple, clear insights for underwriters to help them make better informed decisions is well within sort of commercial lines insurers' capabilities.

DAVE OVENDEN: My light bulb moment in this area was when I was working in Canada, and an actuary that I was working with for the first time actually-- this was about 15-- more than that. 14, 15 years ago. This particular actuary came over to me and said, look, Dave, do you realize that if one of your small business customers doesn't have a claim in three years, there's a better than 50% likelihood that they'll never have a claim.

And that rule of thumb existed in all of the analytics. It existed in the data set. But because she'd brought it to life with a simple rule of thumb, it made it very executable in terms of underwriting decision support. So one of the challenges the insurers face is taking that analytics and making it accessible to underwriters who work in a fast paced environment.

Maybe surfacing some of that as rules of thumb rather than, as Tash says, predictive models. I think the other operational challenge around some of this is that not every company has a view of what an underwriting process is. So, there might be a big workflow process that contains all of the policy administration and issuing documents and issuing quotes and logging quotes and things. But there's a bit in that process that says, do underwriting.

And actually, if you can get a simple process around the act of doing underwriting, then you can provide decision support and analytical insight at each of the phases of that underwriting process. So, we talk about a simple process that says, if you're going to underwrite any risk, whether it's complex or relatively simple, you need to understand it. You need to understand the risk and its context. You have to make a decision as to whether or not you want to do it, and how you want to do it. So, do you want to do it with an underwriter or can you automate it? And then there's the two things that I believe come together, which is pricing and setting the terms and conditions. So the terms and conditions must be linked to the pricing, because if you change the wording then clearly pricing should change, once you've created some deals, and those deals involve the terms and the pricing, you present those deals to either the client or the intermediary, and then often you'll negotiate. So you've got that process. If you've got something like that your underwriters understand, then it's really easy or easier to support each of those phases with analytics that inject into those components of the underwriting process.

TASHA PETTET: And, Jarrett, I think you asked around what are the implications for insurers perhaps who are not embracing analytics, and I'd encourage everyone to look at their position and think very strongly about what their ambitions are, because we're seeing a huge amount of interest in the market in this area currently, and there's been a real shift change in terms of people's perceived value of what analytics can bring to the underwriting process.

And I think we will start to see issues in the near future with keeping up with a hugely competitive environment in insurance, with so many people starting to embrace analytics. And an environment where employees are happy and fulfilled and learning and development and quite engaged.

JARRETT CABELL: That's definitely great. Thanks. Thanks, Tash. And I guess the idea that so many insurers lack that data driven strategy for underwriting, should that be concerning for them? I guess especially when you consider what a key role having the processes, data, management reporting

driven from it has played in keeping insurers' businesses resilient and even growing during the terrible uncertainty of the last year. Given how rapidly the market is evolving, I guess what do you think the process for case underwriting should look like and what role does the data play in that?

DAVE OVENDEN: Go on, Tasha.

JARRETT CABELL: Or whoever wants to jump in. Tasha.

TASHA PETTET: Yeah, I'll just go quickly. I think one of the areas that I find most exciting about analytics and the impact it can have to underwriters' understanding of their portfolio is this idea that actually I can use analytics to help me understand what my expected performance of individual risks is likely to be.

So I can start to make better informed decisions with the knowledge that if I make a certain decision on acceptance or a particular term or condition or maybe a discount that I'm applying, some kind of commercial adjustment I'm making, understanding the impact that that's going to have to me personally, as an underwriter, in terms of my personal performance objectives that I have, and also the portfolio that I'm contributing to, that's really valuable insight that I can use to make better decisions going forward. I think our particular role is full of volatility and uncertainty. It's kind of the nature of what we do. So relieving some of that, eliminating some of that for me, giving me a bit more certainty around projected performance, I find that a bit of a game changer.

DAVE OVENDEN: I think there's a couple of areas in this space. So, some of the technologies involved in delivering that sort of combined contextual analytics to an underwriter at the point of decision making can also help the rest of the business communicate with that underwriter. So, you've got this situation where in order to actively manage the portfolio, you want to define small segments of the existing business that you are going to execute given strategies against. So you want to cut the business up maybe into deciles or maybe into a range of performance segments, but then you need to communicate to the underwriter what it is that you expect them to do for all of those individual units of risk. So if you have a renewal strategy for the portfolio that has 25 segments in it, communicating 25 different actions to an underwriter is, well, I often liken it to you're asking them to pat their head, rub their stomach, jump up and down, and sing the national anthem all at once. It's a really difficult challenge.

So if you can bring that analytics inside their decision platform, what you can do is you can tell them, ah, I can see you're underwriting this case. This case falls into this category of action, and therefore the target for you, personally, on this case, is X. And as Tash says, and overall you are outperforming or underperforming, so it'd be good if you've got some leeway or you haven't. So that communication between the-- targets between the portfolio strategy and the case underwriter, is really critical, because that's the way to achieve-- because it's all about the-- it's not a game of yards, it's a game of inches. Every case, getting the best outcome on every case, will mean you get the very best performance at the overall business level. The other area where in that process I outlined is at the negotiate end. So, when you're negotiating with an agent or a broker or even the client directly, having that contextual insight so that you can be confident in your negotiations. So, you can say, you know what, actually, I'm asking-- I don't know. I'm asking £10,000 or \$10,000, and I know that the last 20 risks that I wrote that looked like this, that had similar exposure measures to this or similar size and similar exposure, I achieved that \$10,000 or that 10,000 pounds.

And as the result, because I can see that I've achieved it elsewhere in the market through other underwriters, because I've got this aggregated view, I'm very much more confident when I'm negotiating, because I'm not on the back foot against a well-informed agent or broker. And I can give

confidence to the client that that is the right price. That is the price that the market is able to take for that sort of exposure. So, all the way along that process, there's ways to inject decision support so that the underwriter can be confident for negotiation, can be confident for setting the right price. There's also stuff in there around operational analytics, because I think if you remember, I was talking about making that underwriting decision. So, you say, do I want to underwrite this risk? And if yes, how is it going to get underwritten? So, you can use analytics at that point to get a very much richer automated profile. So, your underwriters are not inexpensive. They are scarce and valuable. So you want them using the very-- you want to spend them on the very best-- the things to get the best value. So if you could automate a renewal, for example, then, one, it might get you a better outcome, and B-- two, sorry. B. Two, what it might do is it might give you the-- it will give you some space for that underwriter to do some more complex quotes and more complex renewals.

Typically those models around what can be automated versus what can't be automated are quite simple. They're normally something around size, and size is a poor proxy for complexity. So there's often a size thing. There's a dimension around loss ratio. And there might be a dimension about distribution. But imagine if you added five extra analytics dimensions to that footprint. All of a sudden, you can start choosing what risks to do by some sort of process within the trade. By geography, by relative rate strength. So how is it priced compared to its peers, not just compared to technical pricing? You can start looking at a richer source of decision matrix, I suppose. And therefore, you can actually automate more, safely, and create some time and space for your underwriters to really apply themselves to the complex risks.

JARRETT CABELL: No, that's great. That's great, Dave. Tasha, do you have anything else to add to that?

TASHA PETTET: Only to just make the point again-- Dave's done a really good job of this already, but analytics actually has a part to play at every stage of the underwriting process. So if you think about a straightforward underwriting process, at every stage that the underwriter is making a decision, there is an opportunity there to inject some analytical decision support, whether that's a submission stage, helping them with understanding prioritization, perhaps surfacing them some information to say whether or not a submission takes precedence over another, to help them sort of triage their day, all the way through to, as Dave mentioned, that negotiation decision support to get the best possible outcome with the agent or the broker.

JARRETT CABELL: I guess, yeah, another good question, of course businesses have been through so much disruption in the last year or so, and have survived and thrived for so long. Why should they potentially embrace further disruption to introduce new processes and the consequent investment in the right infrastructure and technology to gather, manipulate, and interrogate the right data? Why should they do it and will they really see any benefit? Or is this only really something for the largest global entities?

TASHA PETTET: Yeah, so that's a—

DAVE OVENDEN: Shall I do this one, Tash? I'll start on this one. I actually think your reference to the last year or so is really interesting because what has COVID done? Well, clearly it's been damaging to the health and the economies of the whole world, but from a narrow insurance perspective, particularly a commercial insurance perspective, it's broken the link between traditional exposure measures and inherent risk.

So, if you think of a public house or a restaurant or a bar, they may well have been closed, or they'll have seen huge reductions in their turnover. And if their traditional measure of exposure was turnover, and you apply a price to turnover to get the insurance premium, and turnover no longer reflects the actual risk because clearly, if they've not traded at all, you can't charge them zero

premium because there is still the risk that the building could burn, they could be sued for people tripping over in the car park, it's still a viable entity from a risk perspective.

So why would you do it now? Well, one of the reasons is to understand what you need to charge your clients in a post COVID world. So, having that insight is very relevant right now, just simply by dint of where we are. But beyond that, I think to Tasha's earlier point, on the personal lines side, over a couple of decades now, we've sort of witnessed an analytical arms race. And whilst you don't do exactly the same stuff in personal and commercial because personal lines have relatively simple products, relatively simple exposure, and as a result lots of data, whereas in commercial you've got complex products, complex exposure, relatively simple pricing, and scarce data. So, you are going to do things differently. But the components of a thinking, the things that you do in personal lines do carry over, even if you don't do them in the same way. So, I believe and I've witnessed, in fact-- it's not a belief. We see it. More and more insurers are investing more and more time, energy, and money in their infrastructure around supporting their decision making at the front line, because the insurer's end result, its final result is the sum of all those individual decisions that are made. And that's why it's a critical component, whether you're big or small.

JARRETT CABELL: And, Tasha, did you have anything to add there?

TASHA PETTET: Yeah, all I would say is to your point around the disruption pace, and I appreciate it's been a hugely disrupting year for everybody, the last 12 to 14 months. But change doesn't have to be disruptive, and actually, incorporating analytics into your business, it doesn't have to be a massive transformation project. There are huge benefits for doing big transformation projects, but actually, just making some incremental changes, starting off really, really small, laying some good foundations for the future. Like what we would probably think is actually essential foundations for the future. Dave's quite right. The market's changing. Our exposures are changing. COVID's been a really good example of why we have to change as an industry in order to continue to thrive in a new market. So, I'd encourage people to think small, think incremental. This is a journey. Think about how you can lay some good foundations for the future.

JARRETT CABELL: Great point, great point, Tasha. Great point. This has definitely been a fascinating discussion thus far, and there's clearly a lot insurers should be thinking about and taking away from this discussion from this podcast. If you were going to give listeners just one piece of advice, one clear action that they should take away after listening to this to work on tomorrow, what would it be I guess I'll start with you, Tasha.

TASHA PETTET: Yeah, I'd probably go back to the small changes. The things that are easy to implement. If we're looking at data and analytics that we can use in the underwriting process, I would personally probably start with prioritization. That, how do I help my underwriters to become more effective and more efficient?

And a really good way to do that is to help them with that prioritization of all of these really important missions that are coming thick and fast. Giving them an indication as to how important that submission is based on, actually, the impact it's going to have to their performance and the portfolio performance and having that as a priority indicator. I think that's really helpful, if you try to remove some of the noise that they have. And that's a small thing that you can do relatively quickly but has the potential to actually have a big impact on the operational efficiency, but obviously on the people as well.

JARRETT CABELL: Good point. Definitely. Dave, your thoughts?

DAVE OVENDEN: Yeah, it's funny, actually. One of the most sought-after assets that I have is 10 things not to do. It's the pitfalls, the traps that people are going to fall into. So, one of the popular exhibits that we have is that if you turn some of those what not to do on their head, it's get a grip on your data assets early. So, lots of people have a line or think about data strategy as what IT am I going to store my data on? And data strategy has a strong IT element to it. We advocate having a strong content dimension to your data strategy. So what do I need to make-- what data do I need to make really good decisions? Do I have it in my inventory? Is it of good enough quality? Can I access it? And create a really strong foundational data asset that levers the most out of the data you can get your hands on today. So whatever it is, get the best out of the data you've got today, but also think about how you're going to improve that data asset over time. So we often talk about doing three sorts of things, because this stuff's transformational, and if you're spending all your time doing really dull but very, very important data foundational work, it doesn't help your people feel like they're valuable and feel like they're achieving something. It is really valuable, and it really is foundational, and it is transformational, but it's also not very exciting in some respects.

So we often talk about do that foundational work, sort your core current data asset out, think about your future data assets and how you're going to either buy them or collect them or just liberate them from the bowels of your data. But also thinking about doing some-- I dread to use this, but some sexy stuff. So have a look at some unstructured data and look at how to gain insight from your survey reports using some machine learning or something. So it's more cutting edge.

You've got to do your foundational stuff, and it's critical, but if you just do that, it might not attract talent, it might not allow you to retain talent. So you have to do a mix of interesting, as I say, sexy stuff. And there's plenty of areas where you can-- and you can talk to the market about that stuff and enhance your reputation by doing those as well. So my thing is get your data asset right and do a mix of projects within your big or slightly bigger program.

JARRETT CABELL: Yeah, sounds great, Dave. Thank you, and thank you so much, Dave and Tasha for your time. I think this was a very engaging discussion, and thank you, everyone, for joining this episode, and we look forward to you listening to us again on Rethinking Insurance.

DAVE OVENDEN: Thanks, Jarrett.

TASHA PETTET: Thanks, Jarrett.

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