

## Episode 21: What we learned from the 2020 Life Insurance Predictive Analytics Survey

[MUSIC PLAYING]

CARRIE KELLEY: What were some of the key challenges?

ALASTAIR BLACK: In a word, data. Or in three words-- Data, data, data. A vast majority of respondents replied that data, volume, and quality was a major issue.

## [MUSIC PLAYING]

NARRATOR: You're listening to (Re)thinking 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.

## [MUSIC PLAYING]

CARRIE KELLEY: Hello, and welcome to Rethinking Insurance. I'm your host, Carrie Kelley. On today's podcast, we'll be discussing key findings from the Willis Towers Watson predictive analytics survey, which was recently completed in EMEA. We'll also be getting some insights on how these results compare to what we see in US markets. Our guests today, our predictive analytics experts, Alastair Black, a director in our London office, and Kim Steiner, a senior director out of Dallas. Welcome back, Alastair.

ALASTAIR BLACK: Hi. Good to be back.

CARRIE KELLEY: And welcome, Kim

KIM STEINER: Thanks, Carrie. Happy to be here. Thanks for having me.

CARRIE KELLEY: Now, as you may know, we like to learn a little bit more about our guests before we jump into our main topic. So, I would like to know from each of you, what someone would actually find if they Googled you, and what do you wish they would find? So, Alastair, I'll start with you. Last time I spoke with you, you told us of your lifelong dream of being a soccer announcer. Have you made any headway there, or is there anything else you wish we would find on Google?

ALASTAIR BLACK: I've done a lot of screaming at my TV whilst I'm watching matches, but I'm not sure that counts. So, I'll probably have to have another dream there. I guess my dream would be, I made a savvy investment in a tech stock 30 years ago and I'm now a multibillionaire, doing good deeds around the world.



Back down to Earth, if you Google me, if you search hard enough, you find some Willis Towers Watson articles I've written across various things around analytics, pricing, customer behavior. All of which are well worth the read, so I'd recommend that.

CARRIE KELLEY: OK. And Kim, what do people find when they Google you, and what do you wish they would find?

KIM STEINER: Well, they likely find some fascinating presentations that I've done at Society of Actuaries meetings. I wish that they would find news articles about my fantastic Olympic softball career.

CARRIE KELLEY: Well, I think you could still make it for the upcoming Summer Olympics. You just have to jump on that.

KIM STEINER: That's right. Yeah.

CARRIE KELLEY: All right. So, let's jump into talking about the predictive analytics survey. And maybe we can start with some general background on the survey that was done in the EMEA region. So, when was it completed? Generally, what kind of questions, topics were covered? And how many respondents did you get?

ALASTAIR BLACK: So, we ran the survey over 2020, and we got about 39 responses across Europe, which is a great response rate, across a range of different countries, across a range of types of insurers, large multinationals, large domestic, small and medium sized domestic insurers, life only and composites. So, a really good mix.

And the key questions were all around predictive analytics, particularly around the areas of use, what some of the drivers for the use was, what challenges people were seeing. And then some specifics around particular techniques people used, where they found challenges, what types of experience and skills they needed to fulfill those analytics goals.

CARRIE KELLEY: OK. And so, I believe one of the key takeaways from that predictive analytics survey was whether companies that had implemented predictive analytics saw value in their program. And 80% of the respondents stated that they had found value. So, this is pretty encouraging for those planning to implement, or currently implementing the analytics programs. What are the areas you typically see companies implementing analytics in?

ALASTAIR BLACK: 80% was a great statistic. We were really pleased so many people had actually already seen great value. The kind of areas insurers had seen value from the use of analytics were, in terms of products, mostly around group risk and individual risk, so protection type products, where around 30% of insurers were already seeing value, and 30% expected to see value and use it in the next couple of years.

And then interestingly, the next biggest growth area was around savings business. So, I think a lot of insurers were looking to next apply analytics to their savings business, probably particularly around retention behavior on savings business.

And then in terms of the types of areas they were using analytics-- vary little bit by the type of product. Probably the three biggest areas were firstly, pricing and customer behavior. So probably those areas where a small competitive advantage can make a big difference to an insurer.

And then the third area is probably one where there's a lot of data, a lot to get stuck into. So looking at experience analysis, particularly around things like mortality, morbidity risks. CARRIE KELLEY: And Kim, is this similar to what you see in the US?

KIM STEINER: I think the focus on experience analysis is definitely similar. One difference is that underwriting has been a key area of focus in the US in terms of where companies have been first to implement and use predictive analytics.



CARRIE KELLEY: And so, when the respondents are saying they're seeing value emerge, in what ways are they typically seeing this value?

ALASTAIR BLACK: So, the largest impacts, around 60% of respondents, were in terms of increased profitability and increased sales. So, going back to that pricing and customer behavior point, that's where the results were coming through and that increased profitability. I guess what's interesting is, there were quite low impacts in terms of the reducing expenses side, whether that's reducing overall expenses, or reducing claims expenses, or underwriting expenses. But so far, insurers haven't seen the value come through there. I think the focus has been on their top line growth area.

KIM STEINER: So, I guess I'll add that, in the US, we did get a pretty large portion of respondents that indicated they were seeing an expense savings, which is likely driven by the underwriting changes. Moving to more automated underwriting approaches decreased expenses on collecting fluids in labs, which are typically pretty expensive during the underwriting process.

ALASTAIR BLACK: Yeah. And that's definitely a difference to the typical approach in most European countries. So, that's an area where there's clearly been a difference in focus, because that's been a difference in where the value is. So, that makes a lot of sense that there's been that different focus.

CARRIE KELLEY: OK. And so, the survey also covered various drivers and challenges in adopting analytics programs. What are some of the key drivers of adopting programs? ALASTAIR BLACK: From the survey in Europe, the key drivers-- The biggest single driver, which 70% name to the driver, was inforce management. So, in particular, reducing surrenders. Managing that, keeping profitable policies on the books.

Alongside that, the next biggest driver was improving the customer experience, which I think is quite a positive sign for the industry. A key aim of analytics is improving that customer experience. And then the next level down, about half of respondents said that a driver was competitive pressures and that search for growth.

KIM STEINER: And I think the drivers are similar in the US, in that they're looking to improve the customer experience and customer engagement. They are looking to increase profitability, and they have a lot of competitive pressure on the price. So, they view analytics as one area where they can potentially increase their profitability through the use of analytics. CARRIE KELLEY: And so, what were some of the key challenges?

ALASTAIR BLACK: In a word, data. Or in three words-- Data, data, data. A vast majority of respondents replied that data, volume, and quality was a major issue. And then other large issues around data came up a lot around data capture, data warehousing, data accessibility. So, that's clearly a key challenge.

As the survey was of European insurers, GDPR regulations came up. So, these are European regulations that place restrictions on how people's personal data can be used. So, that was a key challenge within the European market.

And actually, something that was a much smaller challenge than perhaps we thought when we asked the question-- Most insurers were quite comfortable that they had the right level of expertise, that they had the right use cases, that they had the right executive understanding and buy-in. So, all the really good building blocks were there. But, yes, that data issue was far and away the biggest challenge.

KIM STEINER: It's the same in the US. Data, pretty much every aspect of data, as Alastair said, is really the issue. The availability of it. The reliability of it. The accuracy of it. Really, any aspect of data is also a challenge in the US.

ALASTAIR BLACK: So, you haven't cracked it there yet?



KIM STEINER: Not yet. Still looking.

ALASTAIR BLACK: Probably if we did the survey in 10 years time, we'd probably still get the same answer, even though we might have solved some of the data issues.

KIM STEINER: Right. It would be much improved, but it would still be the biggest issue. And life insurers have a lot of data. It's just, some of it is sitting in file cabinets, some of it's electronic and in unusable format. So, there's a lot of money being spent at life insurers trying to make use of the data that they have.

CARRIE KELLEY: Staying on the topic of challenges. Clearly, 80% of respondents seeing value is a very positive response. But what issues do you believe the 20% who haven't found value are facing? Or maybe, putting it another way, what can companies currently implementing predictive analytics programs do to help ensure that they find value in their programs?

ALASTAIR BLACK: Obviously, we talked about the data challenge. But more widely from that, I think there's sometimes a risk that companies try and solve too much. And I think of this as a big analytics problem, and almost engineered too complex a solution. Try and solve all our problems at once.

And from our experience, the more successful uses have been where insurers focus very closely on the business issue. What is the business question? What's the uncertainty? What's the decision that needs analytics to help support the decision? So, focus on that.

Keep the analytics quite close to that business question, so keep the business owners and experts heavily involved. And start fairly small. We talked about data being an issue. Look at what data you already have that's easily accessible. Start from there, show the value from there, and then expand. So, you don't have to solve everything at once. Start small and get some buy-in.

KIM STEINER: And I think from a US perspective, one of the big challenges that we've seen is really just the communication between those that have the technical skills to do the analytics, and those that have the business knowledge and that have the problems that they're looking for analytics to solve.

So sometimes, a challenge that we've seen is that the data analytics team does really cool analysis and develops really interesting models, but they don't necessarily solve a business problem, or the business doesn't really understand how it is that they can be implemented to solve their problem.

So really having good ties and communication between those two groups from the start of the project, throughout the development of the modeling, and through to implementation, is a real key to being successful in leveraging analytic solutions.

ALASTAIR BLACK: I definitely agree with that. That point about implementation is key, because you want to be able to use the result of that analysis. So, that might be a question of what's allowed by regulation, or what your IT systems let you do. But it's having an outcome that can actually be actioned and that is useful when the business owners see it. One other thought on that. We are asking questions in the survey around what types of people and types of skill sets people use for their predictive analytics programs. So the idea being, question really actuaries or data scientists as two very broad splits that the life insurers tend to use.

And we found there was definitely a progression. So, smaller companies starting out would start with actuaries, existing actuaries in the business who did some analytics on the side. And that has the benefit of being very close to the business.

As the analytics grew and as companies became larger and more developed, they'd bring in more data scientists, either with insurance background or without insurance background. And that's obviously great. They're bringing more skills into the team. But does run the risk of



people with less direct understanding of the business, particularly data scientists without that insurance background, being able to produce the answers that help the implementation points that Kim mentioned. So, there's definitely a challenge-- another challenge, if you like, to make sure, as analytics functions grow, they're still focused on the business issue.

CARRIE KELLEY: Now, most of this conversation has been in the context of companies using analytics to improve pricing, risk, or enforce management. But in the context of current product design and offerings, do you see companies thinking about how these additional analytics tools could change product designs in the future?

KIM STEINER: The one area that may be first to change is, especially in the US with a focus on underwriting, could be the way that we do risk classification. So now we have a discrete number of risk classes for most life insurance products.

So, it may be possible through the use of analytics to really have a much more customized price, and also use an algorithm per sell to come up with prices. So, that could be one design change that I could see.

I could also see, with some guarantees that are offered on some of the life and annuity products, that you can have a better understanding of how policyholder behavior might impact the cost of those guarantees. And it may cause some changes to the design of those, just as we are able to gain more insights on the drivers of policyholder behavior around those.

ALASTAIR BLACK: I think I would agree with all that, definitely. I mean, as a broader point, there's obviously increasing focus on digitalization. And analytics plays into that very well. If you are having faster and more increased touch points with your customers, you have more data on them, but also you have more opportunity to use that data to provide quicker decisions, more tailored products, more focused communications.

And I think that will really help change product design in the future, to be more reactive and more dynamic, rather than a one off policy that we sell to our customers, and come back in 10 years and speak to them again.

CARRIE KELLEY: And so, you are both leaders of our predictive analytics efforts in different regions-- Alastair in EMEA, and Kim in the US. But you would also both be familiar with surveys and emerging trends in each region. So, what are some of the most interesting differences you've noticed between survey results and trends between the two regions? Maybe starting with you Alastair.

ALASTAIR BLACK: So, I think that there's lots of similarities, to start with. I think, in both regions, there's a strong focus that there's a lot of change coming. Some insurers are embracing it now. Others, it's very much in their plans, in the very near future. I think in terms of differences, we talked a little bit about the reducing underwriting expenses are already being less of a focus in Europe. I guess the other one that stood out for me, that's a factor in the US and not in Europe, is around claims management and the focus on fraud detection, which is very much less of a focus in Europe. Perhaps for some providers, it's on their list. Although, perhaps not top of their list.

I presume that reflects a difference in insurance markets and the health care markets in the two areas. But I thought that was a really interesting area, where I suspect, in Europe, we'll be able to look at what you're doing in the US, and take some of those great ideas and apply them in Europe in a year or two. So, looking forward to that.

KIM STEINER: Yes. I guess, I agree with Alastair. In our discussions, it does feel like there are a lot of similarities in our markets, that are probably more similar than different. A couple areas where I've noticed that the UK is further along than the US, and we have learned from Alastair and his group, is in the pricing area.

So, in the US, a lot of companies are not necessarily using analytics directly for pricing, they might be using it to set assumptions for pricing. But in the UK, through conversations and



through the survey data, it's clear that it's much more common in the UK.

Additionally, it does feel like a larger variety of data is being used in the UK, such as lifestyle data, consumer buying, which may be a byproduct of the regulatory environment in the UK, as compared to the US. But that was also something that was interesting to me, as I'm sure a lot of US companies would like to use that kind of data. It just isn't something that is necessarily possible in certain applications at this point.

ALASTAIR BLACK: And that's definitely-- I mean, even within Europe, there's obviously a huge mix. And I've answered these questions for Europe as a whole. There's some areas where some markets are more advanced, and some are less. And that's interesting that that's related a little bit to regulation, a little bit to the structure of the market, a little bit to just what's always been done.

And so, some of those things can change quite quickly, and some of them are harder to change, it might take longer to change. But I think it's definitely-- It's always interesting to see what is and isn't happening in other markets, because it makes you question-- Well, could that apply in this market? If not, why not? It's always a good question to ask.

CARRIE KELLEY: Great. Well, thank you both for being on the show. Alastair, it was a pleasure having you.

ALASTAIR BLACK: Pleasure as always, Carrie. Good to speak to you again.

CARRIE KELLEY: And Kim, it was good speaking with you.

KIM STEINER: Thanks, Carrie. It was good being here with you, Alastair.

CARRIE KELLEY: And thank you, everyone, for listening to (Re)thinking Insurance.

[MUSIC PLAYING]

NARRATOR: Thank you for joining us for this Willis Towers Watson podcast, featuring the latest thinking on the intersection of people, capital and risk. For more information, visit the <a href="Insights section of willistowerswatson.com">Insights section of willistowerswatson.com</a>.

[MUSIC PLAYING]