



Episode 18: Claims transformation: Unleashing the full potential of advanced analytics

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SPEAKER 1: 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.

VITTORIO MAGETTI: Hello, and welcome to Rethinking Insurance. I'm your host, Vittorio Magetti. And today, I'm delighted to introduce a very interesting interview on claims analytics. The interview is taken from our 2020 Virtual Technology Expo, and features Tom Helm, Head of Claims Consulting at Willis Towers Watson, with guest, Grace Hanson from Hiscox, and Sascha Firlé from Voidmark. Enjoy.

TOM HELMS: Hi, everybody. I'm Tom Helm, Head of Claims Consulting for Willis Towers Watson Insurance Consulting and Technology Practice. In this session, we're discussing how the use of data and claims analytics can both strengthen your core business and help to transform the outcomes.

Right now, I believe that claims operations are the foothills of the great opportunity that advanced analytics presents, and that its use within claims operations will be prolific within five years. Let's get the view of our guests on these matters.

Our first guest is Grace Hanson, Chief Claims Officer for the global specialty insurer, Hiscox. Prior to joining Hiscox, Grace led the global claims function at Allied World, and then subsequently served as Corporate Counsel, and then Chief Claims Officer at the insure tech business, Homesite's.

Grace, great to talk to you today about claims analytics, a topic I know that you're really passionate about. And claims is obviously going through a big digital transformation. So, Grace, I'm really keen to get your view on how important you believe the role of claims analytics is going to be as part of that transformation.

GRACE HANSON: Well, first, I would say, I don't think that it is a part of a transformation. I think claims analytics is literally the foundation upon which you should base a transformation in today's world. Analytics is essentially a porthole into the information about what's going on in your claims department, operationally.

But it's, even more importantly, a way to have insight into the loss experience of the company, the best data around loss experiences and claims portfolio.

TOM HELMS: So, what do you consider then going to be the key benefits, Grace, from claims analytics to that insurer?

GRACE HANSON: Well, I think, as you digitize the pieces of information that you're gathering through the claims process, you can use those pieces of information to slice and dice them for a particular business type.

So, for instance, in one of my prior companies, we focused on monoline homeowners. There was a plethora of data that we were able to extract from the estimation process, which essentially not just told you, in a high level, what kinds of homes or roofs generated the highest loss exposure, but it also told you exactly what kinds of building materials, potentially, generated a high loss ratio, what types of environments. And conversely, which ones were the less expensive.

So, you could then actually make even more pristine pricing and risk selection decisions. But again, that information is buried in the claims file. So, if we don't digitize it and capture it through analytics, it's of no value or of limited value.

TOM HELMS: So, you can see the pricing, underwriting, and actuarial teams are going to get benefit from investment in claims analytics as well?

GRACE HANSON: Yes, absolutely. And in fact, I think we have-- Historically, companies have completely underestimated and under invested in claims in general and in claims analytics. So, for me, it's a personal mission, in a sense, to wake people up to the value that's contained in this information.

And to also teach them that, yes, if you have the right tools, the right foundations, the right technology, you can harness that information effectively for all parts of your business to be more profitable, and more efficient, and more effective and impactful for the customer.

TOM HELMS: Do you have a sense, Grace, of where you think we are as an industry on the journey of using analytics?

GRACE HANSON: Not very far. I mean, I think claims analytics has tended to fall into two buckets. One I call just flat operational reporting. How many claims have you closed today, how fast, when. And then maybe the other bucket, which is a little bit more sophisticated, is where you have actuaries maybe embedded in the claims department, and they report on certain patterns.

But for instance, evolving methods of reserving now key off of certain points in time on the claims lifecycle. We now have stochastic reserving, which is pulling unstructured data elements and variables to generate more pristine observing. All of which, I think, again, originates a more sophisticated view of claims analytics.

So, if I had to say between 0 and 10, I'd put most companies below 5. Some, 1 to 2. There's a few limited companies moving above 5. But I think the industry as a whole is below 5.

TOM HELMS: Grace, I know you pay a lot of attention to what's going on outside in other industries outside of insurance. Are there particular areas or industries that you look at that you think, well, they're more advanced in the use of analytics, and that's kind of the direction of travel for claims?

GRACE HANSON: I mean, I think of two areas where I've been quite interested. One, surprisingly, might be the medical arena. So, for instance, I was in Boston for a long time. And the Harvard Medical Group went completely digital with all their medical records.

And they were able to build a number of really interesting products. One is a complete lifecycle of the patient visit, follow up, medicine, history. But then they were also able to distill that,

anonymize it, and use it for productive purposes, which patients are going to have which diseases.

There's a lot of interesting work in the medical field around invoicing, and services, and billing. All of which I think are very useful for us.

The other areas-- Of course, the obvious, the Amazon's of the world, which have learned to use customer profiling, and delivery, and digital tools to more effectively reach and service the customer. And claims has a lot to learn from them as well, which customers want which journey.

Because customers tend to want an omnichannel-type of experience. And so, understanding which customers want which part of that experience, and when-- For instance, a simple example is catastrophes, people tend to move more digitally, versus non-catastrophe, they might phone up and have a conversation.

So, you have to be able to understand the behavioral patterns of customers. And I think the retail space, the Amazon's have a lot to offer us in terms of learnings.

TOM HELMS: And do you think claims will journey down that hyper personalization kind of approach that the likes of Amazon and so on are taking to really understand what their individual customers' needs and preferences are?

GRACE HANSON: I think, eventually, for the companies where that makes sense for their business. The insurance industry-- Someone once told me there were, like, 2,500 insurance companies in America, which shocked me.

And it was because there was a lot of really small ones. And for small ones, maybe it's not important for them to do a really narrow profile.

For the medium to large ones, I think it's an imperative. You have to go along that journey, or you're not going to be competitive. Someone else is going to do that for you.

TOM HELMS: And if someone is deployed claims analytics into the function successfully, what do you see as the critical success factors that other insurers should be thinking about for deployment of claims analytics?

GRACE HANSON: Well, there's not one factor, there's probably a little bit of a jigsaw puzzle. The first is, you have to have the right talent in your department. You must invest in that talent. Because if you don't have people who know how to analyze things, they won't understand data, and they won't know what you need in order to do climate analytics.

I think, second, you need to have a data strategy. So, simple example-- Because when I say that, people are always like, oh, that's not a claims thing. The very, very simple example is-- In one of my last roles, we knew frauds could be modeled really early on.

And so we segregated our fraud data. Simple thing. We just pulled claims that had potential fraud signs aside, and we tracked them digitally in their journey. We were able to use that data to then build our internal proprietary fraud model, which we then continuously upgraded.

So, I think you need people who understand that. You need the ability to capture that. So, the systems, the technology absolutely will follow in order to allow you to do now.

TOM HELMS: Lovely. Thank you. And just-- Sorry, Grace. Do you think that the impact of COVID is going to lead to an acceleration in the digitalization of claims? And therefore, greater use of analytics?

GRACE HANSON: I think it will definitely lead to the further digitization of claims. Because I think of digital as electronic delivery, which I know we've been doing for a while. But clearly, now, we know we need to work remotely, we need things to be accessible remotely.

Whether it leads to more claims analytics, I think that's going to depend on the business and its willingness to invest in that area.

TOM HELMS: And what do you think about the impact of analytics on the role of the claims handler? What do you think the future looks like for the claims handlers as we embrace more analytics into the processing of claims?

GRACE HANSON: I would hope it would make it more fun. It seems to me, we've used our poor claims adjusters to be record keepers, data analysts, administrative assistants. I mean, they've done all-- They've done not a whole lot of the actual interesting part of adjusting claims using their judgment, negotiating, devising strategy.

My hope is, these tools, as they're embedded in the claims process, will take away the part of the job that isn't very much fun. And will allow us to use our intellect and our judgment as accordingly.

TOM HELMS: Great. Grace, just to clarify, how high up your agenda is claims analytics in your world at Hiscox in terms of on your strategic agenda?

GRACE HANSON: Well, right now-- And you know that that's a cheating question. As you know, data analytics is my number one priority. I think, as I said at the very beginning, if you don't know what's going on, if you can't share what's going on in a meaningful, robust way with underwriting, with actuarial, your company ultimately won't be successful.

It may not happen immediately, but it will absolutely happen. So, I have done everything I can to build the internal support for a data strategy and agenda. And we're moving along that journey. We've brought in really strong people in that area. And now we're building the tools and bringing in the technology to let us do more interesting and exciting things.

TOM HELMS: Grace, thank you so much for joining us on this session. Your insight is fantastic and really appreciated.

GRACE HANSON: Oh. Well, I really appreciate being asked to speak on a topic I am passionate about. So, thank you for inviting me.

TOM HELMS: Fantastic insights and thoughts from Grace. Our next guest is Sascha Firle. Sascha is the CEO for the consultancy firm, Voidmark. Prior to this, Sascha was the Advanced Analytics Director for RSA's Nordic region, where he spent over a decade leading technical teams in the delivery of advanced analytic solutions, including in the claims function.

Sascha, great that you could join us for this claims analytic session. Thank you so much. Sascha, as someone who's involved in delivering advanced analytics across the insurance value chain, I'm keen to understand how much work you think there is, and how much change there's likely to be from the work that you're doing in the actual claims function itself.

SASCHA FIRLE: So, as you know, I've been working as Director of Advanced Analytics, with several teams. And I think claims analytics is the interesting area where you really want to spend a lot of time. I mean, we have traditionally been working a lot with pricing and analytics around that.

But where you can make a big change, I think, is claims analytics. And not only in fraud, which is probably the first thing you think about. But I mean, there are a lot of different areas.

TOM HELMS: What are some of those opportunities that you think are out there then, beyond fraud? What do you see that the industry is going to be doing by leveraging-- Some of the benefits the industry is going to get by leveraging analytics within the claims function.

SASCHA FIRLE: So, I would say, there are essentially three different areas. I mean, they are around efficiency, where you try to improve the processes. And now that we have gone through

digitization-- So, we have moved from manual and analog processes to having everything database. There's a great opportunity to improve this.

The second area is, as you mentioned, fraud. And the third is probably everything that you can do on top of the data that you get out of the claims process. So, this would be improving data quality, using the features and what you can build, and modeling on top of this data to inform other areas to help other functions in an insurance company.

TOM HELMS: So, have there been some key developments in the advancements of analytics and technology in recent years, that now make it possible to make greater use of predictive analytics in claims?

SASCHA FIRLE: So, I think, in general, the area of analytics has matured so much that your models and your methods can be applied in claims. And we have learned in which areas predictions works, in which areas classifications work. And now we are at a point where you can use this in claims, with a lot of benefits as well.

TOM HELMS: And how important has it been to be able to tap into some of the unstructured data? Are you finding there's a lot of value in the unstructured data?

SASCHA FIRLE: Absolutely. But I think it's a development. So, you shouldn't start with models of work where you use all the sophisticated sources from the beginning. So, in terms of-- You have fraud models, and other models.

You should be using your basic or your standard data, and then you enrich some, and improve your models all the time in order to use this kind of data as well.

TOM HELMS: And then from a technology point of view, what in your experience is some of the key components that need to be in an insurer's technology stack in order for them to consider analytics implementations?

SASCHA FIRLE: I think the technology is where you really should try to diversify and make sure that you have different ways to deliver your models. So, on the one side, you need a standard purpose way to express models and to deliver them. But on the other hand, you need an environment to be able to train them in an efficient way.

So, I think, what has changed and what people have to have in place is the data quality, to have a good technology that allows you to have high quality data. And on the other hand, to build infrastructure that allows you to develop those, and to support and to deploy those models.

TOM HELMS: And you've been involved in deploying models so that they respond using technology in real time. How advantageous is it to have a platform where you can place models and have them interacting with some of your mainframe systems in real time? Do you think that's going to be the technology ecosystem?

SASCHA FIRLE: Again, I think you have to take this step by step. So, you want to have solutions that allow you to do both the offline modeling and offline execution. But then you want to go, in the next step, into a way to do this in real time, and also to integrate to other real time sources. So, not only to use your real time internal data, but also to have an integration.

TOM HELMS: And where do you think we are in terms of some of the machine learning capabilities that we're using? Is machine learning happening all the time? Or is machine learning being done offline to train the models, and then to bring them back online, and then regularly refresh them? Or is it an ongoing use of machine learning? Where do you think we are in that position right now?

SASCHA FIRLE: From my experience, it has been a struggle to really get the rest of the business on board. I mean, I do think we have the technology to have online improvement, online optimization of models.

There are areas where the business has accepted to implement them. In claims, I don't know if we are really there yet.

TOM HELMS: And in terms of the kind of project teams that you're putting together and so on. When you're doing and building solutions for claims, how important have you found it to have claims people in the room and form part of that project team?

SASCHA FIRLE: So, I think it's not only a question of having claims people when you form the project. Again, I think it's important that it's an iterative process. So, you want to have your claims people-- And not only your claims people, other disciplines in claims to look at the targets you're setting, the way you want to solve the problem. And to have them with you during the total project, and also in a yearly cycle. And to evaluate and to make sure that you can improve.

Again, I think it's important that you don't start with the most complicated model. You want to start this easy. And you want to have the development of a model as a part of the education as well for the rest of the business. So, you want to involve them throughout the process.

TOM HELMS: And as somebody who's led advanced analytics teams in the delivery of some of this work, what kind of skills have you found it necessary to have on your team? Is it a multidisciplinary approach that you need to have? And what are those kind of skills that you need to have at your disposal?

SASCHA FIRLE: So, in the project set up, I think it's important to have a lot of disciplines. It's not only a question of developing and supplying those models, it's also a question of, I mean, who is able to interpret the results, who is using the results and putting them into the process. And on the other hand, you also need a lot of expert input. So, you want to have experienced people that tweak your models and that improve the way you train those models.

TOM HELMS: So, do you believe that the use of analytics and the general broader digitalization of claims is going to lead to the full automation of the claims process? Do you think that's where we're heading?

SASCHA FIRLE: I think we absolutely heading to, like, a 99% of automization. It's probably not only the analytics behind it.

From my experience-- I mean, we have three different areas. We have the system automization, where you use your technology, your IT technology. You have an RPA process, where you look at how are you using robots to improve the process. And then you have the analytics, which needs to be integrated with the both of them.

Because all the three disciplines together will allow you to get to, I would say, like, 99% of optimization of the process.

TOM HELMS: OK. Wow. And from a-- You mentioned data quite a bit through the discussion that we've had. So, how important is having a good data strategy for the delivery of analytics?

SASCHA FIRLE: In early years, we have taken a lot of shortcuts to automate them to get efficiency gains. And this has led to poor data in a lot of areas. So, I think it's really important that we focus on improving data quality in claims, both investing time in getting this data, but also investing analytics to improve data quality in order to categorize data. Model based, if you don't have the categorization from a claims handler

So, I think there are a lot of different ways how you can use analytics not only to build models and to work with processes, but also to improve data quality.

TOM HELMS: That's interesting. And so, by shortcuts or efficiency, you mean there's been perhaps less data captured than there could otherwise have been? And actually, it would be

quite a good thing to invest the time for the claims handlers to be capturing that information, because it becomes an asset for the business? Is that--

SASCHA FIRLE: Yeah, that's what I mean. And I also think you don't need to capture the same data everywhere. So, you can use analytics in order to differentiate in which areas do you need to capture more data, and which areas don't you need this data.

So, you don't have to get rid of all your efficiency gains. I mean, you can very specific find the areas where you want to improve your data quality.

TOM HELMS: So, for those insurers that are starting out on this journey, how do they work out where to start? Do you have any tips for them in this regard?

SASCHA FIRLE: As I mentioned earlier, I think you want to start iteratively. So, you want to start with small solutions. You want to start with things where you are quite sure that you will get the benefits that you are expecting.

There are a lot of low hanging fruit. And in some areas, it almost seems stupid, why shouldn't you go for those. I mean, there are areas where you can identify cases that you want to work with in recovery.

And I think-- I mean, obviously, this is a typical area where you want to-- We had a lot of success when we looked at identifying events. So, what kind of claims do you want to include, or do you want to give us data to every insurer?

So, I think, a lot of cases which are limited in the questions that you ask. And don't involve too complicated models. But give quite some benefits from the beginning.

TOM HELMS: So, can you get-- Even if you haven't got all of the data across all of your data mart or your data store, can you still get going in some areas of claims analytics? Can you be working on both aspects, improving your data, whilst also get going with some of the iterative approach that you've mentioned?

SASCHA FIRLE: Yeah, absolutely. I mean, if you're looking at claims processes and you know that you could improve just a percentage somewhere, building a model for this and implementing this is going to be a huge gain on a big organization. So, if you have limited data, I mean, go for the small improvements somewhere and deploy those models.

TOM HELMS: Sascha, what about reinsurers? Do you think there's more opportunities for them to benefit from in the investment on claims analytics? And then, if so, what kind of examples would you give in that regard?

SASCHA FIRLE: I would say this is a great opportunity for reinsurers to work together with insurance companies, both in terms of what kind of features should they be looking for, and also making sure that they get more data than they did earlier.

Because, I mean, the way we communicated traditionally with the insurers was very limited, and was just specific around your contract. But there are so much richness in the data. And for reinsurance, this allows them to have a better prediction of trends and be more proactive. So, I think that's absolutely a big area of interest.

TOM HELMS: Brilliant. Sascha, thank you so much for joining us for this session. It was really appreciated. Well, thanks to our great guests for their views. Let's wrap up with the three key takeaways from this session.

Firstly, claims data and analytics can provide valuable new insights to benefit pricing, claims, underwriting, and reserving teams. Luckily, claims data and analytics can help to transform your claims processing, and deliver faster and better outcomes.

And finally, to recognize that a number of insurers are already on this journey. They're getting

early benefits from the output, and they're likely to accelerate their deployment. So you risk being left behind if claims analytics is not already on your roadmap.

VITTORIO MAGETTI: Tom, Grace, Sascha, I really appreciate the pragmatic way, but also the view that you shared in this interview on the claims management and claims analytics. Moreover, I would thank the audience for listening to the Rethinking Insurance podcast. Bye.

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