

Openly - Former Vice President Sales | Verisk Insurance Solutions at Verisk Analytics

Interview conducted on November 07, 2022

Topics

P&C Insurance, Underwriting Models, Insurtech, Data Sources, Reinsurance, Catastrophe Modeling, Weather Data

Summary

A former Vice President Sales at Verisk Analytics provided insights to a Tegus Client on the competitive landscape of the underwriting data space, highlighting the big three incumbents, Verisk, LexisNexis, and CoreLogic, who have created traditional data elements for the P&C insurance industry. The expert also discussed the emergence of nontraditional data vendors who have come into the scene and are going after specific and narrower use cases, using new AI and machine learning techniques. The conversation also covered the modernization efforts underway to future-proof systems and allow for the integration of any data element or algorithm, as well as the challenges of alternative pricing models for startups and the importance of transparency in data provenance.

Expert Details

CRO at Earnix and Former VP of Sales at Verisk Insurance. Expert can speak to the property and casualty InsurTech space in detail.

Chief Revenue Officer at Earnix. Reporting to the Chief Executive Officer, the expert is responsible for sales and marketing strategy across the organization.

Prior to Earnix, the expert was the Vice President of Sales at Verisk Insurance, leaving in January 2021. The expert was responsible for driving growth at the company, helping Verisk reach 450M+ in annual revenue. In this role, the expert was a partner of Pie Insurance, Verisk is an industry-standard for insurance tools and data, supplying many of the traditional carriers and insurtech new entrants. The expert can speak to Pie Insurance, the niche workers' compensation insurance market, and the insurtech companies operating within. The expert can speak to opportunities for growth, risks, value proposition, and outlook of Pie Insurance and the Insurtech space.

Q: 10/17: What is your ability to speak to the competitive landscape in P&C insurtech (emphasis on homeowner's insurance), including familiarity with Openly, Branch, and Travelers?

A: I can speak to the P&C Insurtech market, and specifically address the companies listed, and others that may be of interest.

Q: 10/17: Can you share your perspective on various distribution channels (e.g., D2C, captive agents, independent agents) and the nature of the independent agent market?

A: Yes. I was an independent agent for many years and can share my views on the various distribution channels used to sell.

Q: 10/17: Can you share your perspective on underwriting quality relative to incumbent insurers (e.g., Statefarm, Allstate)?

A: I can speak to some of the perceived differences and the realities of what is really happening with underwriting quality and overall profitability of InsurTechs.

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Tegus Client

Thank you for speaking with me. I'm looking into the P&C insurance space, specifically on the insurtech side and wanted to get a better understanding of the third-party data vendors that exist, pricing models, competitive landscape in that market, just so I can better understand the various different sources that are feeding into their underwriting algorithms. And it looks like your experience was pretty spot on. So maybe what would be helpful just to get started, I know you were at Verisk for about seven years, but maybe you could just run through your background in the areas that you could speak to on the insurtech space.

Former Vice President Sales | Verisk Insurance Solutions at Verisk Analytics

Sure. So I have a little bit different background than some in this space. I was in the core insurance business for the first half of my career. So almost 15 years in just about every conceivable role you could have started as a claims guy, underwriting, pricing, finance, et cetera. So all the operational roles you would have at an insurance company or a brokerage firm. And then about halfway into my career, I did just bail out on the core insurance business and someone actually talked me, they said, "Hey, there's actually a technology side to this insurance space." And I thought with that domain expertise, I would jump into the technology side, very different, almost 20 years ago.

Core systems were really all we talked about with some, what I call now, the traditional incumbent vendors like Verisk and LexisNexis and CoreLogic, but I've now worked with a number of core system vendors, policy administration, claims administration, billing, finance and then the data and analytic vendors that have come along in the last 10 years or so.

Where it's all about contributory data sets or other new unique data sets that are now feeding into AI and machine learning algorithms and kind of revolutionizing the way that insurance is price and risk, risk assessment is done, pricing is done, workflow, et cetera. So really watched that change quite a bit in the last five or seven years, let's say, certainly, while I was at Verisk, which was about seven years. And then I've gone on from Verisk and worked with a couple of other companies that are both on the underwriting and pricing side.

So pretty varied background. Almost all P&C, not much of an expert in the life and health business, although I have dabbled in it. But on the P&C side, I'm fairly fluent in the personal lines, commercial lines, workers' comp, mostly here in the North American market, but I've also had international experience as well running teams.

Tegus Client

Got it. And you're currently at Earnix. That's more on the data analytics side for insurance and banks, somewhat similar to Verisk but probably a little bit different.

Former Vice President Sales | Verisk Insurance Solutions at Verisk Analytics

Not really. Earnix really specializes in the pricing side of things. So the target customers or potential owners or actuaries and pricing people and Earnix doesn't sell any data. Earnix's platform is all about price optimization and basically being able to do more sophisticated price analytics but the data has to come from elsewhere.

A large insurance company would use the platform, but they would have to either bring in their own data or if they had third-party data contracts, let's say, with a company like Verisk, they have to access those contracts and bring in those data elements into the platform to do their price modeling. Really, it's a platform that does price modeling, or actuarial modeling, pricing and then rating engines to translate it all into something you can actually quantify so you can issue quotes. So sophisticated platform, but there's no data selling or data aggregation going on in the next world.

Tegus Client

Got it. So maybe one place we could start is on the competitive sort of dynamics in the underwriting data space. So you mentioned sort of incumbent vendors like Verisk and LexisNexis. And then you also mentioned sort of a dichotomy between traditional and nontraditional data. So maybe we can just step back and go to a high level on those four topics. The incumbent, the new entrants and the traditional and nontraditional data

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and just get a sense of how all of those are differentiated.

Former Vice President Sales | Verisk Insurance Solutions at Verisk Analytics

Sure. So at least in my perception of this market, the incumbent data market for P&C insurance has really not changed dramatically in the last 50 years. We in the insurance business have used the same data elements to quantify and price risks like for automobile and homeowners insurance, especially and even commercial insurance, not a lot of great pages, in decades.

So the companies that got into this early like Verisk, with its ISO brand, Insurance Services Office, which was started in 1972, began to figure out a way to aggregate and have contributory data where the insurance industries basically sent them their data. They had to find a way to share data to do benchmarking and know what was going on in the industry, but they couldn't, they had to be very careful not to run a file of antitrust laws.

So when ISO was personally started in 1972 as a nonprofit rating bureau that was actually owned by the insurance industry by the companies themselves, and over time, changed from being a non-profit rating bureau to being changed before profit, then it became part of Verisk Analytics, Verisk Analytics went public. So it changed still fundamentally the same business model where they get all their data from 95% of the insurance industry.

They bring that together, they run it through a number of different comparative algorithms, and they do a lot of other things that we can talk about. But at the end of the day, the industry aggregates that data, then they get back all kinds of derivatives. They could be scores, they could be combined data elements, they could be benchmarking elements. So all of that has developed over decades with Verisk and ISO, especially on the underwriting side, kind of leading the way.

And to this day, that's \$1 billion a year worth of revenue coming into Verisk Analytics, a publicly traded company. All by subscription, pretty much a near monopoly on certain types of scores and big insurance companies pay upwards of tens of millions of dollars per year to have a relationship with Verisk and ISO. So it's not an insignificant investment on the part of the insurance companies.

So Verisk, LexisNexis and CoreLogic, I consider to be the big three incumbents that have created the traditional data elements, traditional data pieces that most of the P&C insurance industry has used to write personal lines, commercial lines and automobile, homeowners, et cetera, for all these years. And again, each one of them generates several billion dollars' worth of revenue and the P&C insurance segment has been huge customers of theirs for all these years.

Tegus Client

No, that's super helpful. Did you think about the differentiation between Verisk, LexisNexis and CoreLogic, is it just that they each have separate monopolies on different types of data elements, and therefore, they all exist in the marketplace? Or are they sort of competing on similar sets of data between them or is it a mix?

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It is a mix. There are certain data elements or let's say, scores, insurance scores, but the insurance industry loves scores. So I'll give you a very tangible example. Verisk through ISO created what was called a fire protection class code many years ago. And it ranks literally every property in the United States. It ranks elements about whether you have a fire hydrant near your house or how close you are to a fire department, what the level of service coming from that fire department is, and that generates a score of one to 10, and every single insurance company on the planet has used it to write property insurance for as long as I can remember, and I've been doing this for many years.

So that's just an example of a proprietary score that everyone wants to use but Verisk is the only one who has it, and it was created many years ago. And it's been refined a little bit, but it hasn't changed fundamentally in all that time. It just gets updated as municipalities grow and put in new services. LexisNexis flips over to them. They have something like the clue report, which is the comprehensive loss underwriting report. Again, its proprietary. It's got certain element in it that Verisk and ISO or others don't have. So everyone's got their own flavor of something proprietary that most of these insurance companies

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want to use.

And CoreLogic really focuses on property business in the real estate industry. So they've got some nuances there. They don't really do any automobile business. I would say, LexisNexis is very strong in the automobile space, CoreLogic in the property space and then Verisk sort of crosses over into multiple pieces of that.

And at the end of the day, most insurance companies, if they're a multiline insurance company, writing multiple programs like automobile homeowners, property, commercial, et cetera, they probably have relationships with all three of those vendors, buying the different data elements scores and other things that they need to write all those different programs across 50 states for all the different types of things that are out there. So no one has one monopoly over the other. They've all kind of decently coexisted and created pretty significant market share together. And then the disruption that's come along, obviously, in the last handful of years are these new, what I call, nontraditional data vendors or analytics firms who have come into the scene.

And have usually picked very narrow and specific use cases that they've gone into solve for where they can either do a better job than one of those three incumbents that I described or maybe they do it less expensively or they have found some other types of data elements to bring into rating and pricing and risk assessment models that the big three haven't considered or haven't done as well, especially if it involves new AI and machine learning techniques. So that's the big change over the last handful of years of these newer joiners who are going after really, in many cases, very specific and somewhat narrower use cases but doing a really fine job of that.

Tegus Client

Got it. About new entrants, who are some names that would come to mind off the top of your head?

Former Vice President Sales | Verisk Insurance Solutions at Verisk Analytics

Yes, I can give you quite a few. So specific people, it depends on what line of business. So this is very focused on the type of product or line of business that you're looking at. So some of the industry analysts that I work with break this out into like transportation, data providers, property data providers, commercial data providers and then sort of individual data providers, information that you can find on specific individuals.

So for instance, over the last handful of years, I've seen companies like Carpe Data, which is based out in Santa Barbara, California, become a player in this space. Specifically working with commercial insurance for the most part, business-type insurance. I've seen a company like HazardHub, which was a start-up just a handful of years ago, really decided to take on a company like Verisk and ISO and come up with a different way to aggregate property characteristics, put it all into one flat file, make it very easy to consume and have a really flat and easy pricing model, and they really started to gain quite a bit of traction, and they were acquired by Guidewire.

And if you know anything about the ecosystems that the P&C insurance will work with, they have to have a core system to run the whole business. And Guidewire is one of a handful of core system providers like Duck Creek and Majesco and Insurity. Guidewire being the biggest. And everything we're talking about today, if you can't plug it all into these core systems, it really has very little use. These things do not exist as a stand-alone or an isolated data element just for data scientists to play with.

At the end of the day, you have to be able to operationalize these data elements and these algorithms. And to do that, you've got to be able to usually via an API plug in. You have to be able to bring them into the ecosystem for both underwriting risk selection and pricing rating.

So at the end of the day, again, names you might have heard of, CLARA Analytics, Carpe Data, as I mentioned, specifically in the transportation data space, and there's an entire segment of data providers that are going to focus on telematics data, being data generated either by an app or by a vehicle itself, both for personal lines and commercial lines. You can't go anywhere without hearing about pays you drive or usage-based insurance.

So there's Cambridge Telematics, there's a handful of telematics providers have kind of gobbled each other

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up, but that telematics data space has become very interesting over the last handful of years, and it's challenged the traditional way that auto insurance has been written, and I believe it will continue to grow dramatically as more companies adopt usage-based insurance and individuals like us become more accepting of it, we'll find ultimately that people just get the data directly from the vehicles.

The sensors that are built in the vehicles now are so numerous that these vendors are starting to try to figure out how to handle that firehose of data and turn it into something meaningful that the insurance companies can use. And no one's really solved for that yet. There's a lot of people nibbling around the edges. But at the end of the day, everybody wants to have some form of a usage-based insurance program. So you'll see those vendors, there's a lot of consolidation, and you probably won't have too many of them that survive and thrive, but you'll have a few that do quite well going forward.

On the property data side, again, you had the big three that I talked about, but what's really changed dramatically over the last handful of years is the use of aerial imagery and geospatial data. So this is now satellite data, drone data, flyover data, both for risk qualifications and knowing back in the day, I'd quote your homeowners policy, I'd have to send an inspector out to your property. He'd walk around your house; he'd see if you had a trampoline for dogs or what the condition of your property was.

Now they do a lot of that just by satellite imagery. So they have huge libraries of satellite imagery where they can pull this type of data and then they can use that same data when there are claims like tornadoes, wildfires, hurricanes, and you've got some really companies that are doing quite well in that space like Betterview, CAPE Analytics, EagleView Technologies out of Washington State, Nearmap is another one that comes to mind. These are just companies that specifically focus on the geospatial property data.

And again, you can kind of see where I'm going with this. There's very specific use cases and insurance companies now have no problem contracting with five, 10, 20 of these guys if they think that they have some specific unique data elements or algorithms or things that can feed into their models that are helpful.

Tegus Client

Super helpful overview. I'm curious, if we think about the ultimate customers of this data, both the large incumbent personal lines insurers as well as some of the insurtech businesses that are a little bit newer, I guess maybe this is more to the incumbent point, but how flexible are underwriting models in some of the incumbent category in terms of their ability to digest new data sources and plug in spatial data or whatever it may be, what does that look like for them to actually ramp a new data source and make it dynamic and active in the way they underwrite policies?

Former Vice President Sales | Verisk Insurance Solutions at Verisk Analytics

It's a great question. And it's historically been one of the great limiters to being able to bring in a new data element or to do anything outside of what your core system. If you had bought a Guidewire system 10 years ago, it used basic rates and rules and rating tables, and you didn't have a lot of flexibility. If you go back to the big incumbents, the State Farms, the Allstates, the real GEICOs, they had homegrown proprietary COBOL-based systems that are very old. And they're really inflexible. They just did not allow for much else to be done.

You did see companies begin to adopt new policy systems, even for specific programs like Duck Creek or Majesco or someone else would come along and they'd say, "You know what, I want to spin up a new program like pet insurance or maybe a different type of automobile insurance like these telematics program", they would literally have to go out and buy a whole new policy system that was more modern with its architecture and kind of an API-first philosophy so they could bring in some of these new data elements.

But what's really happening is within these large incumbent insurers, if you could think about the personas that are involved in what we're talking about, there's actuaries that are doing modeling, there's pricing people and program managers or product folks who are trying to productize this.

And then there's an entire IT army of people who are saying, hey, I have to take the actuarial models, translate those into pricing models. And then I have to somehow put that into a rating engine or create the flexibility within my rating engines so that I can translate all that data you talked about into something that

can come out the tail end of this core system to be able to quote it, issue a policy, endorse it, et cetera, to handle the life of a claim and the life of the policy.

There's a lot of people have created middleware or other sort of layers that are in there doing some of these things that sit between the data elements and the scoring and the algorithms and the core systems, companies like Appian and Pegasystems and others who've tried to come in and say, "Look, I'll give you this low code, no code layer that you can play with." You could do a lot of this product development and just in data. And ultimately, we'll find a way to feed it into your more static and less flexible core system.

But what's happening now is most of the core system vendors have been struggling with it and finally modernizing their platforms, especially as they move from their older architecture and their on-premise systems to cloud-based systems, which is what the big ones like Duck Creek and Majesco and Guidewire have been focusing on really diligently over the last handful of years. They have a long way to go. Don't get me wrong.

But ultimately, as the industry moves forward, moves on to more modern architecture, and it goes from old on-prem static systems onto these more dynamic composable cloud-based systems, they will be able to take on. And now everyone's future-proofing these systems by saying, "Hey, I want to be able to bring in any data element, any algorithm, any model, any scoring element, and you've got to give me the flexibility to do that." So it's all happening right now.

I can't say anybody's done it perfectly, but there's plenty of old traditional insurance companies who are already using modern data elements and modern algorithms with their old systems. They just found a way to shoehorn those things into these core systems. But the core systems are quickly catching up.

Tegus Client

Got it. So for some of the traditional, just to clarify, it looks a little bit more like use middleware to bolt in this data into an existing, potentially more inflexible system. If you're an incumbent that has a home grow core system, is that the same sort of process and solution? Or how are some of the larger incumbents thinking about building this flexibility?

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They are doing some of the same things with middleware or middle layers, but you have large insurance companies, I'll just pick one, Nationwide, big company. You've heard of it. Nationwide might be operating six or seven different policy systems across its portfolio of products. So at the end of the day, they might have some very old legacy systems running some core products, but as they begin to modernize and move forward, some of it's by acquisition, some of it's by choice, they'll bring in a new modern core system just to stand up a new auto program, let's say, just the American Family has done this multiple times. I can go down the list.

So way back in their library of systems, there's some large incumbent insurance companies that still have green streams running COBOL mainframe type programs, but almost everybody over the last 10 years has made a concerted effort to get it off of those. They're just not sustainable. You really can't do much with them. Most of those have been relegated to becoming systems of record.

And there's a philosophy amongst a lot of the analysts and the vendors that says, even the core systems, the Guidewire, and the Duck Creek, let's say, they can try to continue to modernize and solve for all these different use cases I'm talking about. But there's a reason why, if you know anything about those vendors, they have established pretty robust marketplaces.

Guidewire, for instance, hired a senior executive from Salesforce to come over and build out a cloud-based marketplace very much like Salesforce's AppExchange, where they said, "Look, you know what, we can't solve for every problem the P&C insurance industry is trying to solve for." But if we can create a composable system in a marketplace where you can plug these things into the Guidewire core system, the Guidewire core system may ultimately become relegated to being a really good system of record.

But as long as there are 150 different vendors and solutions on the Guidewire marketplace now, if you just go and look up Marketplace Guidewire, you'll see every conceivable use case you could think of from

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underwriting to claims, to billing, to analytics. That's the direction the industry has gone in.

Again, we've gone away from these big monolithic kind of almost like Oracle PeopleSoft systems for insurance. Now we're like, you know what, we did a core system. We need a system of record. And as long as we can plug in all these other functionalities and all these other data elements, we're going to do it. And at the end of the day, that's where these large insurance companies have gone.

Most of them are many years into a multiyear journey of transforming their core systems. And while they're doing that, they're working with pretty sophisticated system integrators like EY, Deloitte, Capgemini, Accenture. Those firms are worth of millions of dollars getting spent, not the software company, the data companies. They spend money without those guys. They don't spend a ton of money compared to the amount of money they spend with the management consultants and the system integrators, building out these sophisticated ecosystems of the future.

And it's not uncommon. If you're looking at a modern insurance company, multiline, personal lines company like you talked about, and someone will share with you their IT staff, their architecture stack, it's crazy how many different elements for our solutions. I mean it's different data sources. It's unbelievable how they've managed to cobble all this stuff together. That was not the case a handful of years ago, and that's what's giving these alternative data vendors an opportunity because now they're far more capable and tolerant of bringing in those isolated data elements and models.

Tegus Client

Yes, that's super helpful. It kind of reminds me of hospitals and their electronic medical records plus 1,000-point solutions you can layer on top for different functions and just being a relatively archaic backbone of a lot of the infrastructure that they're plugging with all the different solutions. So that's interesting.

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And remember, it's a highly regulated business. It even has its own unique statutory accounting for insurance, which is very different than GAAP accounting for any other business. So there are some things that just make it harder to do. And at the end of the day, one of the reasons why some of these incumbents still do as well as they do is because they not only provide data.

But in the case of a company like Verisk and ISO, they do a lot of regulatory and compliance reporting behind the scenes. And that is the hardest part of replacing a data element, deciding, "Hey, I don't want to use Verisk or ISO anymore." It's not the fact that you can't find it an equal or better data element, it's that you've got to find someone who will provide you the data and do all the compliance and regulatory reporting that Verisk and ISO does as a part of the subscription that you get for the data.

That part is not talked about much, but it's super important because insurance companies have grown used to certain compliance and regulatory reporting being done by these data aggregators. And if you take that away, these insurance companies do not want to recreate that nor do they want to try to figure out a way to report to 50 states and hundreds if not thousands of municipalities because that's the level of granular reporting that has to get done.

And those are things that a company like Verisk and ISO has perfected over 50 years. And that's why they still have a hook with a lot of these companies, they will squawk about how much their subscriptions cost, and they don't see the value, but they're like, "You know what, how do we get off it if we can't figure out the compliance and regulatory reporting part of this?"

Tegus Client

Right. I'm also curious, as you think about some of the newer data vendors, more niche offerings focused in a particular product, is there data around the sort of improvement or how much this more niche granular data or access to spatial data, et cetera, actually improves underwriting standards in personal lines? Is there any data as far as what is the delta driven by some of these newer, more flexible or more niche data sources in actual pricing and underwriting?

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No, it is, but it's a great one because any of us in the data analytics space, when we go in and want to call on one of these companies to say, "Hey, look at our big data, look at our new model." The very first thing they're going to ask us is, what's unique about that? What kind of ROI does it provide? Operationally, you have to be able to do all the things that I described, plug it in, and not blow up your workflow. But why spend \$1 million with me on a new model or a new set of data if it's not as good or measurably better than what I already have? And that becomes the challenge.

And what I'm finding is, again, the business of doing risk selection and pricing in insurance has not fundamentally changed in almost 50 years. You would be embarrassed to know that we've used the same 10 or 12 data elements to write your automobile insurance and your homeowners insurance for almost all that time.

And you can't do much segmentation with only 10 or 12 data elements. And you're not allowed to do a lot of segmentation. Again, this is a highly regulated business. In the United States, you can't use price optimization, things that you can do in Europe and Canada. You have insurance departments like the State of California who are really consumer focused, will not allow companies to even take rate increases.

So companies have been searching for ways to, number one, be more granular and more refined in the way they look at risk, so risk selection itself and then how I can get more precise in my pricing. And that's where coming in and looking at, for instance, 20 or 30 property elements at a granular level on every single address as opposed to when I first got in the business, we were lucky to be able to generate a rate for the entire ZIP code, then it's got to a neighborhood level.

Now it gets down to every individual house. There's a company called Zesty.ai, it does wildfire modeling. Very important if you're writing homeowners or property insurance anywhere in the Western United States. And they figured out wildfire risk modeling better than anybody. They got their models approved by the insurance departments. They went to the companies, and they said, no matter what you're doing, I guarantee you have not been able to figure out wildfire risk the way we have.

And the insurance industry said, hey, you know what, you're right. We look at the house, we look at the address, we kind of win it and say, yes, in Southern California, these guys have every canyon, every wind pattern, they have climate change models built in. It is highly sophisticated. And that level of granularity allows them to bring in a level of sophistication and segmentation that never existed before.

I think, in my opinion, it's a great example of saying, well, I've always written homeowners insurance the same way, you didn't do it the same way even 10 years ago because you never had wildfire models like that. Now you do, and you haven't seen the same thing happening with flood because you watch the news like I do. You know how bad flooding has become with hurricanes and other things. And you get the same thing going on with weather analytics, there's an entire segment of companies that are looking at not just weather pattern, climate, and weather. Obviously, they are two different things, whether being very localized short-term, climate being longer term resiliency stuff.

There are lots of different companies looking at weather and climate data to be able to help underwriters to figure out, should I write business in this area? Is this a riskier area than another area? And this is, again, data that may have existed, but we could never refine it and digest it. Now we can, and we can use that data on the underwriting and pricing and claims side, highly sophisticated stuff.

So there's just another example of type of new sets of data that are being used where a handful of vendors are figuring it out and insurance companies are figuring out. Imagine the first guy that comes in and pitches a wildfire model. People think it's crude, they're like, "I've never seen this before." We have to show that it works. We have to be transparent in these models. I mean I published things on the ethical use of AI all the time in the insurance industry because it's a real challenge.

Everybody wants the sophisticated models, but it's really hard to do it transparently, and it's hard to do it ethically without creating a lot of built-in biases and other things that insurance regulators hate. So great to bring in all this data, great to bring in all these new models, great to find ways to provide insurance companies like Lemonade, who you probably heard of as they use behavioral analytics as their primary way

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of writing insurance.

Not the traditional stuff that other insurance companies do. They find ways to score your propensity to tell the truth, your propensity to care about not committing fraud. Those are things that the insurance industry never looked at before. And now those are becoming as commonplace as how old is your car and what does your driving record look like? I mean things that we've taken advantage of for decades.

Tegus Client

I see. Two follow-up questions based on that point, the first one is really just around where you think the edge is with some of these new players. You mentioned Zesty.ai with the wildfire modeling. Is it more the data sources and the access to and sort of types and quantity of data points that they're pulling? Or is it their use of artificial intelligence in their actual models that they're building and how they synthesize that data, that is sort of the edge in these businesses?

Do you have a view on the ability for insurtechs versus incumbents to leverage this type of data and actually improve their underwriting standards? I think generally, maybe just based on scale and diversification, we expect insurtechs to need a little bit of a ramp to reach incumbent standards. And obviously, there have been many cases of insurtechs writing in Florida and sort of high catastrophe areas that completely changes their underwriting or their loss ratio and to exposure. But I'm curious if you have a view on who is well positioned to actually use this technology or if it's equally useful and applicable across the board. So maybe let's start with the data sources.

Former Vice President Sales | Verisk Insurance Solutions at Verisk Analytics

There's all kinds of cool data elements that people have never accessed before. Public, private, social media scraping, you name it. And we've gone through a hype cycle of data scientists just kind of running amuck and every insurance organization out there hiring a bunch of data scientists, these guys running around, putting their arms around as much data as they could, internal and external and creating a bunch of models that no one could do anything with.

And businesses were feeding that, new startups were feeding that and feeling really good about themselves, and they forgot one huge issue that those of us who have been doing this long enough and working with these insurance companies remember, that they are the most risk-averse people in the world. That's their business, risk aversion.

If you cannot operationalize your data and your models, truly operationalize it, put it into daily use in an underwriting and pricing workflow or at a claims workflow, it is useless. It's going to be a cool science project that only actuaries and the data scientists play with because it will never get in the hands of an underwriter. They'll never get in the hands of claims, a senior claims executive, and it will never do anything to impress anyone in the C-suite.

And that happened for years. So you see a bunch of data providers and a bunch of people come along and try to create something new. And they couldn't, in my opinion, they could not operationalize it. They didn't figure out how to take it from cool science project to something an insurance company could actually use to fundamentally change the way they underwrite and price their business or handle their claims.

A handful of those companies began to really focus on that. they became use case driven. Nobody cares about your data. Nobody cares about your cool algorithm. They care about outcomes. They want to know, what's the lift to change, the benefit I'm going to see? Can I incorporate that into my workflow without completely blowing up my business? Can I do it in such a way that I don't run a file of insurance regulators? There's plenty of historical bad class action lawsuits that have been filed against the insurance company for using data improperly or using it unethically.

And everyone who's been in the business more than 10 years, remembers that and says, "Hey, I got to be really careful, how I bring in some of this." It took Lemonade three or four years to get the New York insurance department to approve their first license and program to write renters insurance in New York because the New York insurance regulators could not understand at all how Lemonade's algorithms and their rating methodologies work. So these are the types of things you have to struggle through.

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So the data is very important, the uniqueness of the data, the providence of the data, you have to be able to show where it came from. You have to be able to show that you have permitted. There's a lot of ventures out there who say, I got the data to do this, and you find out they're pirating it from somewhere else or it's coming through China, so it's very important.

You have to be able to track the providence of the data in a very granular level for cybersecurity reasons, for permissive use rights, all kinds of things. So start with the data, make sure it's legit to use, you have legit sourcing that you can use it. I hate to get technical, but in the insurance biz, there's FCRA, Fair Credit Reporting Act and non-FCRA data sets, you're going to be very careful not to combine the two, not to bring Fair Credit Reporting Act data into something where it shouldn't be.

There's a lot of models where underwriting and claims data must remain separate. So these are things you've got to really take into consideration. So you've gone from data to now you're into the models, the application of the AI machine learning models. Again, people were throwing together some great black box models a handful of years ago. The data scientists were all excited they were doing it too.

They bring this forward, and the compliance director would say, "Great, I can't use this. I can't explain it. I can't file it. I can't defend it if we get challenged on it." So again, the next evolution was figure out how to take the data, know the providence of the data, put it into the models but make sure the models are transparent and understandable and defensible. And now I'm to the third stage, which is I got timely figure out how to fully operationalize at scale in these core systems I was talking about.

Tegus Client

Yes. That definitely answers part one and interesting points around provenance and some of the regulatory components as well as the data sets. And I don't think I thought about that.

Former Vice President Sales | Verisk Insurance Solutions at Verisk Analytics

No. I would tell you, one of the challenges for any of these insurtechs, whether it's a data provider or insurtech, we start to negotiate with a large incumbent insurance company, they're going to slap a 150 page security questionnaire on top of you. And if you can't figure out how to get through it, you're not going to get anywhere near to that contract and a lot of companies fail in that because there were a couple of guys in the garage/data together, pirating it from all kinds of different sources.

And now they've got somebody saying, "Wait a minute, where did you get this data?" Like it's yours to use. So your second question around that is, is there an advantage? Or should there be an advantage with the insurtech ability? And when you say insurtechs, I assume you mean full stack insurers or those that are writing insurance. So the Lemonades, the Roots, the Hippos, those types of companies.

Tegus Client

Yes, whether they're full stack or MGA, some of the underwriters in the newer category that are marketing themselves much more tech-enabled. Do they have an outsized advantage in terms of their ability to integrate some of the newer, more mature, sophisticated data vendors?

Former Vice President Sales | Verisk Insurance Solutions at Verisk Analytics

They have pitched themselves as having an advantage. They have done a masterful job of marketing themselves as having the advantage and being more sophisticated. But at the end of the day, what they missed on is that it's still insurance. You still have to take in a dollar and pay out less than \$1 in claims. And if you can't, you don't have a viable model. And that's why Metromile blew up and Lemonade had to sell. That's why every single one, Lemonade, Root, Hippo, has taken that since they went public because they don't have profitable business models.

They might seem like they're sophisticated, they provide a better user experience. To be perfectly honest, I'm a little cynical about this. Their core systems aren't better than anybody else. Some of them have built some modern core systems, low-code, no-code systems that are a little more flexible. Typically, most of them are single-product companies.

So they've never scaled to the point where they're writing 50 different products across 50 different states. They write auto, or they write renters, or they write property. They're very narrow, pet insurance or something like that. They're very narrow in their scope. So they don't need overly sophisticated systems, but they help themselves out as being so much like Lemonade, they were so much better than everybody else because we use behavioral analytics in Metromile, we're so much better because we were pioneers in telematics.

Well, you still run a 150% loss ratio. And it costs you \$600 per customer acquired, you will never scale that model. You went public, you got stupid money front on you, and now the world is seeing your value at what you're really valued at. And that I failed to see it's going to take forever, and they still have to reach critical mass because insurance is still very much a law of large numbers business, you have to distribute risk or you're going to get hammered. You can't just go being an insurtech writing property insurance in Florida.

I think you're going to do it better than everyone else, this has been doing it down after 150 years. So I think they focused on user experience, they focused on going after probably younger millennial customers with a digital-first strategy, and all of that's great. But it's not fundamentally different than what a lot of other companies are doing or have tried to do. And I still think the incumbents have the advantage of they figured out their omnichannel distribution long ago.

So you've got captive and agent companies, independent agent companies, direct-to-consumer companies, affiliate, and group companies, you've got all different ways of distributing these products. And it's not looking at the companies that have went out and said, "Oh, we're going to be direct-to-consumer." And now they've decided, you know what, we got to go through agents because we cannot afford to scale this when it costs us \$600 to acquire each customer.

So you're seeing a return to the center where people are trying to figure it out filing, a lot of these insurtechs have finally gone out and hired Chief Insurance Officers or strategists that came from the insurance business. So it's not just a couple of more guys from an Ivy League to figure out some cool algorithms who didn't know anything about insurance, I think they're not blending the science and the business, and there's going to be a handful that come out of it, the group, who will probably do really well, but it remains to be seen whether any of them can ever get to multibillion-dollar scale.

Because that's the real challenge is no one is there. No one is even close to being there on the insurtech side yet. And to do that and do it profitably at 100% loss ratio or less, I just don't see it, not in the near future.

Tegus Client

Got it. So, the data sets and the sophisticated data sources, social data, et cetera, behavioral data, it's useful on the margins to improve outcomes, improve underwriting quality. But when it comes to insurtechs, the differential is more on underwriting sort of judiciousness and maybe choosing to underwrite policies that otherwise wouldn't make sense. The value of the data is offset by just distribution strategy and how they go about scaling their programs.

Former Vice President Sales | Verisk Insurance Solutions at Verisk Analytics

Yes and no. They've done all those things, but the entire insurance industry is running toward the holy grail of straight-through processing on the underwriting and the claims side. And to do straight-through processing to be able to issue a policy in 30 seconds and to intake a claim, score for fraud, see if it's valid, and pay a claim in 30 seconds, like limited, and that requires a lot of data behind the scenes to create a frictionless, fast experience or straight-through processing can be done.

And the entire insurance industry is trying to figure out whether issuing a policy in 60 seconds and paying a claim in 30 seconds is really worth it. Does it really matter if I'm going to do all of that and my loss ratio is going to be 150%? Because it sounds great. But at the end of the day, we all want to increase our NPS scores, we all want to have better J.D. Power customer satisfaction scores in the insurance industry, but maybe we can't get to straight processing the way we think we can. There's companies that are doing a great job of bringing this in, like Planck. They're in the commercial business, I think Israeli based.

They've gained some business data on like small businesses, especially. You give them a name and an

address. You answer a couple of questions, they can quote you, they can give you the data ahead of the background that we quote that policy very quickly. And with a pretty good level of accuracy. So you get to the idea that there's enough quality data out there to do what the industry calls data prefill. A quote for insurance in the last couple of years was horrible.

When you get online, you'd be filling out all the questions, you'd be like, I've got them on the 15th question, and then all of a sudden, you figure out they're going to just take that lead and give it to a bunch of agents anyway. The idea that you can make the buying experience faster and a better experience for people. Everyone wants to. But if I can't do it profitably, they can only do it fast. It's not necessarily a good answer because, again, it's not too similar.

Tegus Client

So when you operationalize the data through integrating the DPI call in your system, what are those prices? Are they for subscription and use its base contract? Or were you doing anything where you can only charge a customer per bound policy or for quoted policy?

Former Vice President Sales | Verisk Insurance Solutions at Verisk Analytics

Well, the main companies like Verisk charge a subscription. They have basically what they call their core line solution for underwriting and pricing, which loss costs and rules and rates that's a subscription. And it's an annual subscription, its loosely based on the size of the company. So every year, Verisk gets data from like a rating bureau like AM Best, which tells you about all the premiums that an insurance company has written.

They break it out by line of business. They have some price multipliers to it, and they send stay far with bill for millions of dollars for their annual subscription. It's typically not something they can unbundle. It's like here's a big, huge subscription, take it or leave it. And if you want to add some stuff to it, you can, but you can very rarely take anything away from it.

And the same with the claims side, if you want to participate and access the clinic search data, you're going to get a bill once a year based on the number of claims, nothing performance based this. I mean, here's your subscription. It's based on the size of company you are. So we're going to raise our prices 3% to 5% every year no matter what. And that's what Verisk does. That's why stock analysts love Verisk, or they have.

I mean they got hammered this week. They reported their earnings were down a little bit. At the end of the day, they like the fact that like 80% of Verisk' business comes from evergreen contracts at a perpetual that are subscription based. There are some license-based contracts and there are some transactional-based data elements buried in the insurance business, but the vast majority of it is subscription. A lot of these insurtech payments tried to do similar things because they knew those models were out there.

Some of the insurtechs had no choice to go with something that was a little more performance-based or a pay-as-you-grow model where it started low, and it sort of trapped up with usage. But most of these startups our SaaS companies that are trying to recognize revenue and build an ARR model, and they hate transaction business.

In the insurance industry, the procurement departments are very sophisticated now and the insurance procurement groups take price uncertainty, they're going to use a data element, are they going to buy this algorithm, data analytic, whatever it is, and incorporate into the business, they want to know precisely what it's going to cost. They hate variable price. They don't want price uncertainty. So that's one of the other reasons why a lot of customers don't like the fact that Verisk charges as a subscription the way they do, we say no what they're paying for us, there's very little variance because there's not a lot of transactional variations. It's based on where you closed the year as far as the size of the book of business you have.

Tegus Client

Got it. So maybe some of these alternative pricing models are really just for the startup and they will eventually transition into the large-subscription contracts.

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That's where it's been more tremendous. It's going to be a license per user type of thing or a subscription. And the challenge is many of these startups who are acquired, I went back to data providence and everything else. Some of these guys have models and they aggregate data where they have a hard cost. They're going out and they might have a partnership with Dun & Bradstreet or Moody's or somebody else, Equifax or Experian or one of the credit bureaus to bring in data elements to provide a derivative score as part of their product or their offering.

And so if they make a data call and it cost them money, they've got to pack that into their pricing. So it's another thing where, again, you get into data provenance, you've got to ask the question to get full disclosure on whether or not they are also partnering or buying data from somebody else that they are reselling because it's very common in this world where we're talking about for there to be hidden reseller agreements built in because someone needed to backfill some data, so they had to go to TransUnion to get it.

And they white label it, they don't disclose it. Well, what happens is that relationship with TransUnion and that vendor falls apart and you lose an important piece of the algorithm, all of a sudden, it becomes useless. So that's the other thing you have to really be careful of when you're buying into these models. It's very open. I wish I could say this was a clear thing. But the more I learn about it, the more I live in it, the more translucent and not transparent it is. You have to know what to ask and how to dig through these things when you're putting it all together.

And some of the more sophisticated Chief Data Officers and CIOs, the people that are at these big insurance companies, they've been burned a few times. Most of them are pretty smart. They're asking the right questions now. It's a matter of being in the industry adjust to this. And will they be able to provide full transparency going forward to satisfy the ever-changing and ever more stringent requirements that the insurance companies are placing on them.

Tegus Client

Yes. Well, if insurance is anything, it is definitely complicated. So this side of it is just as complicated and interesting. Do you think reinsurance partners use or the reinsurance vendors, you use all the same data sources as the underwriters?

Former Vice President Sales | Verisk Insurance Solutions at Verisk Analytics

No. One, because it's too granular. So it sounds like you know somewhat what the relationship is between the primary insurers and reinsurers is and reinsurers, you think reinsurers at the macro and insurers at the micro for a primary company like the company writing the actual policy because they have to know every single thing about someone, his home, his car, at the most granular level.

The reinsurer wants to know that I know that, and I can report on it accurately, but they look at things at a portfolio level. They look at things in the aggregate. So how many people with that name do you have in a city? How many of them are on the coast of another state? How many of them are what? So they start looking at things at a portfolio level.

The reinsurers are looking at a lot of different modeling and data now, more so than they ever did in the past. And it's very interesting. In that reinsurance world, especially catastrophe modeling, they used to call it Verisk's AIR business and RMS, you may know those competitors. There's only a handful of people that are really sophisticated in that reinsurance world.

The reinsurance world has to be remodeling and getting all that data that is changing dramatically. Because it's now got an ESG component, climate resiliency, all the weather data we talked about. So the reinsurers are looking at a whole lot of different stuff that they never looked at just a handful of years ago, and they're getting very sophisticated.

Their modeling is, I mean, it's almost crazy scientific, it's getting to the point where you need a PhD was an environmental science or something because reinsurers can't understand the climate data that they're looking at. And they have to be able to understand it, to bring it into their models to be able to price their portfolios accordingly for reinsurance, especially for catastrophe property insurers. So getting really

sophisticated.

But I would not say that the reinsurers have the ability or the desire to look at the granular level of data that the primary insurers do, but they want to be able to verify those primary insurers when they say that they have sophisticated stuff. If I'm a reinsurer, I'll look at two different companies in one state to offer reinsurance to, and they both say that they have the newest, most sophisticated way to measure flood risk, I'm going to want to dig into their models.

I'm going to know that what they're saying they can do, they can actually do. And I might find that one cannot and the other one can actually back it up with evidence. And I'm more likely to want to offer reinsurance to the one that I know has a better handle on measuring their business than the guy that doesn't. And that's the level of inspection and verification that reinsurers confidently have to do, or they'll get burned.

Tegus Client

Yes, that makes a ton of sense. Thank you. This was helpful.

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