Can blockchain tech help farmers get climate insurance?

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Abbey Compton
Marketing Lead—Insurance, Accenture

Welcome to Accenture’s Insurance News Analysis. I’m Abbey Compton here with Kenneth Saldanha, Accenture’s global lead for insurance. We’ll be talking about what’s making news around the industry. Just in time for Earth Day, the new Lemonade Crypto Client Coalition is launching a smart contract solution they say will help reach subsistence farmers who were traditionally underinsured. They also say they’re going to do this on a blockchain that’s designed to be lower cost and less resource intensive. Kenneth, do you see smart contracts and cryptocurrencies as a way insurers can help achieve sustainability targets?

Kenneth Saldanha
Global Lead—Insurance, Accenture

Yeah, Abbey, I would first separate those two things quite strongly, right, between the smart contracts versus the cryptocurrency, I’ll start with the smart contract side, which to me absolutely has the ability to deliver the kind of much, much more streamlined efficient process that we have today, particularly in something like a subsistence farming kind of crop type line of business. In fact, that’s where we saw some of the earliest innovations using smart contracts. As you can imagine, with, with a crop product or crop insurance policy, you are fundamentally insuring things like flooding or a freeze for a vineyard or a windstorm that destroys crops. So we actually saw very early on innovations where there were sensors that would test for temperature or humidity or frankly submersion. And if in fact the, the conditions are such that the, that the crops were going to be damaged, for example, literally a binary rule for a vineyard that says if temperatures drop below a certain point, then it counts as a freeze, the contract then automatically is triggered by that sensor device. And without any back and forth on a claims process, etc., the claim is closed out.
So you can certainly see where that sort of a structure would absolutely create an opportunity to go into markets that traditionally insurers haven't had an operational footprint or hadn't been able to support the operational costs to actually provide services there. The the cryptocurrency side of this is a little bit shakier to me. Certainly the ability to actually transact entirely through the distributor ledger is enabled in many ways by cryptocurrency. I will not claim to be a crypto expert at all. I don't think that it’s a necessary condition. I’m sure it probably adds a level of convenience. But I do think when you talk about the customer population like subsistence farming, my guess is they’re not going to buy policies with crypto, but they are probably going to use the notion of a smart, a smart contract could certainly bring a whole range of services to a customer segment that really hasn’t been served at all. So I think it’s a great idea. And I, and it's great to see it connected to a topic that I think has high visibility in the industry, specifically around sustainability and climate.

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**Asia: Region exposed to biggest gap in flood protection**

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**Abbey**

Well, flood insurance is in the news now that FEMA has rolled out its new model for the National Flood Insurance Program. It was also reported that globally 75 percent of flood risks remain uninsured even as flood losses increase with climate change and urbanization. Kenneth, do you think that raising premiums is, in more flood-prone areas will help reduce losses or will it inevitably lead to more underserved populations who can’t afford insurance?

**Kenneth**

Yeah, Abbey, I think we have to make a very strong distinction between raising premium on the same risk versus actually insuring risks that weren't covered before, right? So when we talk about underinsurance, traditionally, there’s more of a focus on actually not having the full level of risk coverage required. So that when in fact a loss occurs, either the even the policy limits fall well short of what it is that’s being covered. The probably the example that most people can very much relate to, we've seen this even on something as simple as personal auto where you may have a car loan on on on your car, you have a policy, but when if unfortunately, if you have a total loss situation, the Bluebook valuation of your car might be under the value of your loan. And in that situation, that's a classic underinsurance situation where the full value of the policy is not going to cover the loss that you’ve sustained. So on the property side, that’s exactly what we’re talking about. We’re talking about, you know, are there, in fact, even if you’ve played out the policy limits on your on your policy and your property policy, would that in fact cover the losses that you’re looking at facing? And I think historically in the U.S., particularly when you look at even homeowners or commercial, the property losses had been a property has been heavily underinsured for a very long time. People just underestimate the value of the contents of the house., or they put in certain exclusions on properties that simply don't cover it. So long story short, I don't think just racing premium on the existing risk has anything has any impact on, on the experienced losses and on what customers are going to actually feel coming out of this.

I do think a difficult but necessary conversation about whether in fact you’ve actually purchased the insurance and the cover you need is a really critical thing. And this is at the heart of a good agent experience, right? An agent who actually or a broker can actually structure an insurance program or your personal insurance in a way to say very, in a very balanced way, these are things you should buy to get the protection that you
are looking for and these are things you probably don’t need to, right? But the underinsurance problem in property to me is very has been historically long-standing problem for us in the industry. And it’s going to require a different conversation that isn’t just purely price-centric. It’s about the balance of what are we putting in from a risk perspective to cover, and what’s the reasonable price for that risk cover? That I think is the conversation that is becoming increasingly critical right now. As we see risk models changing, creating a need for insurers to have a different model and a risk pricing model for themselves. And we see the risk and exposure to customers increasing as the climate change changes loss patterns and creates new pools of risk that frankly aren’t in the models right now.

Abbey
Well, the Casualty Actuarial Society are looking at alternative data sources underwriters can use to help overcome historic racial disparities. They cite examples like taking into account if a property was in a red-lined area, which would have limited the owners’ access to improvement loans. Kenneth, as the industry increasingly deploys AI solutions, how do we get the data sources right and guard against coded bias in AI-led underwriting?

Kenneth
So again, Abbey, I’ll, I’ll, I’ll separate those two as very, very distinct. I think the coded bias issue is, is a huge one. Now, the good news is, as opposed to deterministic models that had been built on essentially underwriter intuition for a long time, AI actually has a better shot of not going down the path of, of simply locking in historic underwriting bias, right? So I think there’s, that’s good news. One of the things that AI has struggled with in insurance, with good reason, is that the explainability factor of why did an AI model choose a certain outcome isn’t that easy to communicate. When you have a rules-based deterministic model, you could explain why you arrive at a certain outcome; with an AI model or machine learning model, that’s not as easy, right? You can just do a statistical defense, but not a specific deterministic defense. So I think when it comes to this notion of how will AI be ethical and how would we, how will we have comfort that it doesn’t have embedded bias? I think that’s going to be a really complex issue to resolve as it runs in parallel with this explainability issue. But it’s one that we have to start to get at because it’s at, it’s core to our decisioning processes at this point to embed increasing levels of AI and ML. So we’re going to have to start having that conversation saying, you know, as we look at, as we look at the AI-ML-driven outcomes, do we think they are in fact, biased against the population?

Data, to me, very, very different, very different animal. And here I’m, I’m very bullish on what’s possible simply because AI and ML is able to ingest so much of a broader base of data information. We’re no longer constrained to an underwriter or even a underwriting model that can look at, you know, ten factors or 15 factors and we’re no longer going to have this conversation saying. Well, can I make the application form fit on one page and don’t ask more than three or four things. You can do that simply because you’re going to keep adding into, into the underwriting environment data that’s sourced internally from the application, externally from the market and every other source out there. And that I think will be a positive move for the industry because you stop essentially embedding into the conversation from the get-go, what you think other 10, 15, 20 necessary variables, which of course results in that type of data becoming increasingly mature and increasingly

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available in the industry. I think with the AI move, we are, we are going to see the ability to actually cast a much wider net and a more sort of broadly defined net because quoted as risks, the risk-decisioning based on AI is that we’re going to actually run lots of patterns against lots of more diverse and dispersed data. So I think this is a very, very good move from a data perspective because it allows us to actually truly let the models tell us how to source and what publically available plus privately delivered data ends up being relevant. I think we’re still going to have to really work through this issue of explainability. And how do we actually get comfortable that there isn’t bias in what the AI models are putting out.

Abbey

Berkshire Hathaway, which owns Geico and General Re, bought Alleghany Insurance in their biggest deal since 2016. The two companies have a lot in common, Warren Buffett even called, called it a “rare opportunity” to join forces with like-minded and highly respected investor and business leader. So Kenneth, does this merging of two conglomerates signal any broader shifts in the insurance industry?

Kenneth

I think what it signals Abbey, is that growth remains a massive challenge for the insurance industry—how to beat the GDP plus a few points growth, every carrier’s very actively trying to make sure they can drive growth. And I think what that means is inorganic growth through M&A is going to continue to be an attractive way for companies to deliver against expectations. I think, so the Alleghany deal is, as you quoted right from, is a merging of two companies that are sort of in the same sector. Maybe the, I’m sure there are synergy drivers as you look across their products and geographies, etc., but they’re fundamentally in the same sector. I think what’s going to be interesting is the M&A and the activity we’re seeing with two different kinds of companies. So, you know, as we’ve talked often about the convergence point, now we’re seeing plenty of interest from insurers buying medical companies, we’ve always seen asset management and life insurance and annuity companies doing some interesting work in retirement. I think what we’re going to certainly see, I think, a continued focus on M&A to drive inorganic growth either within the core business or I think increasingly in interesting adjacencies that will help us drive this convergence notion that brings a broader sense of protection to the customer.

Abbey

Well, the rapid switch to remote work two years ago, raised concerns about injuries from people working long hours in less-than-ergonomic spaces around the house. And now it appears work comp claims have actually remained lower than pre-pandemic levels. So Kenneth, does this change the work comp risk pool? Is it less risky to keep people working on their sofas than in their cubicles?
Kenneth
Abbey, I've always said the reason I don't work out is it's safer to sit on the couch. So I think this now proves it with data that, you know, it's probably bad for you to actually work out. You should, in fact, sit on the couch and not do anything because that's going to keep you safe. Look, I, I think how work comp loss ratios are much more driven, not by folks in cubicles and offices. While there are losses there, the bulk of work comp issues arrive from warehouses, moving around large objects, driving and delivering things, et cetera. And those levels of activity have dropped in the pandemic. So I don't think it's a surprise that work comp frequency is down simply because the pools of activity that have traditionally been where a lot more to work comp injuries occur. You think about the the back strains and sprains and the slip and fall on delivery, etc. Those things are down, right, we've seen warehouses down, supply side activity is way down, we shut down ports. And so there's none of those warehouses are working. So I don't think we're going to see, I think that trend will continue to move as expected with the level of that kind of work activity. As we are as we come back into more and more of that sort of warehouse activity, we'll see where it goes. I think we'll see the work comp frequency start to climb back up to the expected levels. I don't think it's the it's the cubicle office crew that's really been driving the work comp frequency that much.

Abbey
Well, Kenneth, it's always great to talk to you and hear your perspective on what's happening in the industry. Thanks for your time.

Kenneth
All right, thanks, Abbey. Talk to you soon.