

IoT Players 'Greasing the Skids' to Boost Growth of Sensor Tech

Carrier Management

By Susanne Sclafane

Sensor technology is no longer an *emerging* technology in commercial property/casualty insurance. It has *emerged*—and is rapidly growing, according to executives who bring the Internet of Things technology applications to carriers and their customers.

Still, the issue of figuring out who pays for the technology– carrier or commercial insured–is one hurdle that potential users are still working through, Alex Schwarzkopf, chief executive officer and founder of Pillar Technologies, said during the InsurTech Spring Conference 2021, co-hosted by <u>InsurTech</u> <u>NY</u> and <u>InsurTech Hartford</u> in early March.

"It's a dance," said Schwarzkopf of Pillar, an InsurTech that collects data from sensors monitoring environmental conditions at construction sites and completed properties. "We're definitely sitting there asking, 'How do we grease the skids?'" he said, going on to explain to panel moderator Charlie Sidoti how he talks through the value of IoT with both sides to smooth the relationships when the payment

Executive Summary:

"2021 is a year where we don't refer to IoT as this emerging technology for insurance. It's just a technology that's a part of insurance," Gordon Hui, an executive of Munich Re's Hartford Steam Boiler, told a virtual audience at a spring InsurTech conference. Hui and other participants in the IoT space discuss the benefits of sensor technology and the hurdles they're overcoming to strategically position their firms to take advantage of explosive growth in the space. questions are on the table.

Schwarzkopf said there are three different ways his company has gone to market, with varying degrees of success. The least successful involved "just having it pushed down" from a carrier partner to an insured, with carriers telling policyholders they had to install Pillar sensors to monitor conditions like leaks, humidity and temperature changes.

A second model is one "where the carrier is actually fronting the cost entirely," he said, noting that a carrier might pay the entire technology cost as a strategic play or competitive advantage in the market. "In some cases, they're retaining their large strategic accounts because they're actually providing more value-add than just the coverage and the policy. So, it's being used as a business driver," he said.

But the InsurTech founder said the most successful payment model combines the two approaches-and that one is definitely catching on. "It's because what's happening so far as I can see it is that we're aligning those interests on both sides. So, the general contractor or the owner in some cases says, 'Yes, I will pay. I will commit. I will physically put skin in the game, but the carrier needs to match that. We really need to create a partnership.' And it doesn't necessarily have to be [a] premium reduction or credit. We've seen deductible modifications" also, he said. Schwarzkopf gave the example of a water leak loss that would fall within deductibles that are north of \$250,000 to \$500,000 per occurrence in some cases-amounts "far and beyond what you'd pay for our technology that can mitigate and manage that."

"So, you have to sit there and say, 'Is the juice worth the squeeze? If we have a loss, we're out of pocket this much money, which is sometimes five- or 10X what it's going to cost us to deploy a technology solution," he said, explaining the client side of the value equation.

On the carrier side, mitigating the loss to under \$200,000 or preventing it completely, "which happens in some cases," means there is no claim hitting the carrier's books. "It literally never happened," which brings incredible value to the carrier, he said during the session which was actually titled "The Value Levers of IoT."

Carriers and policyholders are seeing the value, he asserted. "Not to be overly aggressive with this analogy, but I don't know if you have been following bitcoin and the cryptocurrency market and how that's just been going bananas over the last couple years. If I were to make a oneto-one comparison, I believe that we are just in the beginning stages of the exponential growth curve in IoT," he told the virtual conference attendees. "I used to actually go to jobsite trailers and tell people about sensors. We're talking older folks-older than myself, certainly been around the block. They'd look at me skeptically and [ask], 'Are you serious?" Now, the response is, "We could use it this, this and this way," he reported.

Schwarzkopf made his remarks after Gordon Hui, VP, IoT Marketing and Product Management at Hartford Steam Boiler, predicted that "2021 is a year where we don't refer to IoT as this emerging technology for insurance."

"It's just a technology that's a part of insurance," said Hui, explaining that Hartford Steam Boiler is a unit of Munich Re that provides IoT solutions to other insurers, risk pools and the like.

"There will always be certain parts of the industry that'll move a little more slowly and will be laggards, but I really believe that this is the year where the companies that are on the front end, and the leading majority, are going to fully adopt—build it into their products and services and move things forward," he said.

Providing his own then-vs.now description, Hui recalled that as recently as four years ago, he would "literally put down a sensor [and] make water run through it" during his presentations. "Then the little alert went off to prove to people how an IoT solution would work."

"People were so mystified by just the idea of sensor technology and alerts," he said.

"I don't do that anymore," Hui said. "That's four years, and Moore's law is happening. Who knows where it'll be in two years? But that's the world that I see, and I'm very optimistic about it."

Schwarzkopf added, "We're just at the bottom of the curve, [and] people are calling us now instead of doing outreach." Directing his comments to anyone who might be thinking about getting involved or about becoming a part of the IoT ecosystem and making sensors part of their business models, he said: "I'd do it now, to be honest, because you'll reap the most rewards."

"Whoever moves this direction the fastest is going to have the most market share when you get there. You've got to start now to position yourself accordingly on the chessboard in order to take advantage of that exponential growth."

"I would encourage folks to really start to think about how to make this a part of their core business," Schwarzkopf said.

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From his vantage point dealing with contractors and property

owners, Schwarzkopf sees the delivery of sensor and IoT technology with insurance programs "honestly starting to become an expectation." Essentially, they're asking insurers, "What else are you going to do for me?"

"We're actually seeing clients leave longer-term relationships because there's a more attractive deal that contains technology and insights and awareness," he said.

Hui said that the value of IoT technology to HSB's insurance carrier customers, who in turn provide it to policyholders that include restaurants, schools, churches, apartments and condos, and retail stores, materializes in three areas: through loss prevention, general risk management and customer intimacy.

Explaining loss prevention and risk management, he said that beyond improving carrier loss ratios by leveraging remote monitoring and timely notification to prevent damage losses that otherwise could run into the tens, hundreds or even millions of dollars, insurers can enable predictive maintenance for policyholders—helping their clients manage their buildings and equipment more proactively.

Moving on to the last value driver, he noted that insurers often don't even have customer email addresses. And "the only time you're going to talk to them is at renewal if there's not a claim. None of those are really great. So, the idea that you have a digital touchpoint, a different level of engagement, a different lever of value in customer intimacy is huge," he said.

Looking ahead, Hui and Schwarzkopf see IoT technology becoming the focal point of new product and coverage development initiatives.

"Where we're headed is a world where, realistically, not just IoT but emerging technology will ripple from insurance coverage. If you buy a business owners policy, it will come with a technology kit by default. And if you don't take advantage of that technology, you'll be in various ways adversely selected. Your premium might be higher because [underwriters] can't focus as clearly on you. Your deductible might not be as great. Your limit might be lower," Hui said.

In essence, the insurance world is moving away from, 'Hey, you're being judged by an actuarial table.' It's more about, 'Who are you?' The actuarial table won't mean very much because I'll know your exact risk, and insurance can be really more N=1. IoT is really IoB," he said, using the acronym for Internet of Behaviors. "I think that's where it's all headed."

Hui agreed with Schwarzkopf that there are still hurdles being worked out as carriers and startups like five-year-old Pillar strategize their technology business models. "Often when we talk to startups, the startups assume the insurers are going to pay; the insurers [say], 'I don't want to pay for the technology if I don't have to.'

"So, is the policyholder going to pay?" Hui asked.

"There's going to be a lot of work that needs to happen on business models," he said, referring to the model he often sees, where the policyholder has already paid for insurance. "There's a principal-agent problem because why should I as the policyholder install a piece of sensor technology or any type of equipment really. I already paid for insurance. You're going to take my claim. I'm going to pay a small deductible, and you're going to take my claim. So, what's my motivation and incentive to install the hardware?"

Property, Liability, Workers Comp and More: Next Stop Embedded Insurance

While carriers wrestle with these problems, Schwarzkopf sees one group of innovators moving ahead full steam. "In the last year, I've had several startup MGAs reach out to me and say, 'Hey, we actually want to build our insurance products around the assumption of technology as a core driver in loss reduction.' That is a radical shift," he said, recalling the days when proptech and construction tech were unknown and when construction project owners said he was crazy to suggest that sensors would ever be all over their sites. "It is happening. That's the market shift we're seeing," he asserted.

Separately, at last month's CB Insights Tech Market virtual event, "Digitizing P&C Insurance," Mo Tooker, executive vice president and head of middle and large commercial at The Hartford, envisioned the increased use of IoT for commercial liability and workers compensation lines. Reporting that water sensors in buildings are now fairly common, he asked, "How could sensors help vou with foot traffic in a real estate risk in the middle-market space? If you can really start to get real-time information, either from a wearable for workers comp or [on] foot traffic for GL, does that lead to this usage-based insurance that we're seeing in many of the ridesharing companies-where [policyholders] are really paying based on other variables than just revenue or payroll?"

"I think that's still on the horizon, [and] I think that's coming quick," Tooker said.

During the CB Insights event, Schwarzkopf of Pillar, Craig Foster, CEO of LeakBot, and Roel Peeters, CEO and co-founder of Roost, described how each of their companies deliver property risk management services with sensors.

Schwarzkopf described his company's sensor devices to track water leaks, including a non-invasive flow meter that fits onto the top of a pipe, water pucks that can also detect temperature and humidity changes in mechanical, electrical and elevator rooms of project sites and in units of finished multifamily residential properties, as well as a smart pod that tracks eight environmental metrics during project construction.

Pillar's alert system takes data from such devices and passes it to a mobile application, he said, later demonstrating a dashboard that captures the locations of sensors on a floor plan view of a property, with different colors indicating the status of the sensor (online, offline, information or actionable), and allows viewers to drill down into historical data for specific environmental metrics at a given location.

Foster said LeakBot's system was specifically designed for homeowners insurance companies and that his company had "cracked the code on the cost-benefit equation." Specifically, he described a system that is cheap enough for insurance partners to offer free to policyholders, who receive a single sensor unit that clips onto the main water pipe in their homes, which connects to Wi-Fi to detect leaks early-"before they manifest as insurance claims." Policyholders of insurers that partner with LeakBot also receive free repair visits in the event of a leak.

Roost is a "telematics platform exclusively focused on the home and SMB market," Peeters said, also describing a B2B2C business model that means bringing the sensors that detect water leaks and freezing temperatures to customers via relationships with insurance carrier partners. He focused his remarks on the simplicity of his company's solution—a plug-in smart base that is "literally as simple as plugging in a toaster" for the customer to install along with sensors placed throughout the home where leaks can occur.

"The No. 1 question we get in our customer support is, 'How do I download a mobile app?' and not far behind [is], 'What is my Wi-Fi password?" Peeters said, stressing the need for a system that is simply connected thought a cellular network to Roost's cloud within seconds of a customer opening the box containing the equipment. Adding a few more sensors to windows and doors turns Roost's leak and freeze monitoring system into a theft security system, he said.

Like Schwarzkopf and Hui, Peeters also spoke about the benefits of real-time sensor data taking insurers from being "reactionary indemnification organization[s]" to claims prevention. And he expressed Schwarzkopf's idea about expanded policyholder expectations using the term "Amazonification." Explaining the term he coined, he said that "Amazon is setting a new standard of how we expect our vendors and our partners to operate with our customers," suggesting that IoT can help "a very high-friction insurance industry...become relevant on a day-to-day basis [in] policyholders' lives."

CB Insights Principal Mike Fitzgerald introduced the three demos with an overview of IoT funding levels and with his own observations about Amazon–specifically about the retail giant's <u>December 2020</u> <u>announcement about a push it</u>. <u>made into the manufacturing</u> "We are just in the beginning stages of the exponential growth curve in IoT...Whoever moves this direction the fastest is going to have the most market share when you get there. You've got to start now to position yourself on the chessboard in order to take advantage of that exponential growth."

> Alex Schwarzkopf, Pillar Technologies

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sector with a suite of sensor devices coupled with industrial analytics. "Basically, they have a program now where they are going to provide devices, which are part of machines, that link all of those machines together to report out on possible machine failures," he said, highlighting his view that IoT is playing a big role in embedded insurance.

"Embedded insurance means insurance that is part of the product being sold," Fitzgerald said. According to Amazon, the sensors and machine learning services it's rolling out are designed to "help industrial and manufacturing customers embed intelligence in their production processes in order to improve operational efficiency, quality control, security and workplace safety."

"For customers who do not have an existing sensor network, Amazon Monitron offers an end-to-end machine monitoring system comprised of sensors, a gateway and a machine learning service to detect anomalies and predict when industrial equipment will require maintenance... For customers that have existing sensors but don't want to build machine learning models, Amazon Lookout for Equipment provides a way to send their sensor data to AWS to build models for them and return predictions to detect abnormal equipment behavior."

Essentially, Amazon is embedding risk management-"allowing risk management to take place through these sensors and not through a separate product," Fitzgerald said, advising insurers and InsurTechs to be mindful of what other nontraditional competitors are doing in the IoT space. Fitzgerald mined the CB Insights database to search through the investments that the corporate venture capital arms of industrial firms Siemens, ABB and GE are making. Reading from the description of one sample investment-a provider of IoT devices to monitor downtime from data breaches-he underscored the idea that the interest in tools providing embedded risk management services is quickly developing outside the insurance industry. 🖾



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