EPISODE 896

[INTRODUCTION]

[00:00:00] JM: Insurance is an old business. Individuals and businesses have been buying insurance policies for decades. These insurance policies can cost hundreds, thousands or tens of thousands of dollars per year. Software is remaking the insurance industry.

One way that new software can improve the insurance industry is through better brokerage technology. Insurance involves carriers and brokers who work together on delivering insurance solutions to customers. The initiation and closing of an insurance transaction often involves lots of emails, PDF files and antiquated software systems. Technology improvements will smooth out this process and reduce manual overhead.

Another way insurance can improve, thanks to technology, is through smarter pricing. The price of an insurance policy is offered to a customer based on how risky the insurance policy is, how large the customer pool is and how much the insurance company could lose in the event that it would have to pay out an insurance policy. These risk profiles are calculated based on historical data.

Gordon Wintrob is the cofounder and CTO of Newfront Insurance. Gordon joins the show to discuss the insurance industry and how his company got started.

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[00:01:26] JM: You probably do not enjoy searching for a job. Engineers don't like sacrificing their time to do phone screens, and we don't like doing whiteboard problems and working on tedious take home projects. Everyone knows the software hiring process is not perfect. But what's the alternative? Triplebyte is the alternative.

Triplebyte is a platform for finding a great software job faster. Triplebyte works with 400+ tech companies, including Dropbox, Adobe, Coursera and Cruise Automation. Triplebyte improves the hiring process by saving you time and fast-tracking you to final interviews. At triplebyte.com/

sedaily, you can start your process by taking a quiz, and after the quiz you get interviewed by Triplebyte if you pass that quiz. If you pass that interview, you make it straight to multiple onsite interviews. If you take a job, you get an additional $1,000 signing bonus from Triplebyte because you use the link triplebyte.com/sedaily.

That $1,000 is nice, but you might be making much more since those multiple onsite interviews would put you in a great position to potentially get multiple offers, and then you could figure out what your salary actually should be. Triplebyte does not look at candidate's backgrounds, like resumes and where they've worked and where they went to school. Triplebyte only cares about whether someone can code. So I'm a huge fan of that aspect of their model. This means that they work with lots of people from nontraditional and unusual backgrounds.

To get started, just go to triplebyte.com/sedaily and take a quiz to get started. There's very little risk and you might find yourself in a great position getting multiple onsite interviews from just one quiz and a Triplebyte interview. Go to triplebyte.com/sedaily to try it out.

Thank you to Triplebyte.

[INTERVIEW CONTINUED]

[00:03:45] JM: Gordon Wintrob, welcome to Software Engineering Daily.

[00:03:48] GW: Thanks for having me, Jeff.

[00:03:50] JM: I'm looking forward to talking to you about the technology that you've built at Newfront, but in order to talk about that technology, we first need to talk about insurance. What is an insurance broker?

[00:04:05] GW: Jeff, that's a great question. Insurance is this industry that most people don't really interact with in their day-to-day, but the way I like to think about it is it's sort of like dark matter. It really touches everything around you. Every car on the road, every building you've ever walked into, every business you ever interact with, they all rely on insurance to operate. If

you think about the first transaction, the dawn of commerce, there was risk in the world, and insurance is what developed to transfer that risk to capital markets.

So the way the market has developed is that there something called an insurance brokerage, which is what connects to all of the insurance carriers. Those are the companies that actually underwrite the risk. They're the companies like AIG, the Hartford, Travelers. These are big names that you've probably heard of. The insurance brokerage is what hires insurance brokers, and these are the individual people who go out and find clients, everyone from a small startup, to a restaurant, to a public company. They all work with insurance brokers to help them buy the insurance that they need.

[00:05:10] JM: So there is an insurance broker, an insurance carrier. The insurance broker is the individual or perhaps company that helps the customer connect with an insurance carrier, and the insurance carrier is the one who actually underwrites the insurance?

[00:05:30] GW: Yeah, that's exactly right. The broker is the individual who works at the brokerage house.

[00:05:37] JM: Okay. Do these insurance brokers usually work as sole proprietors or do they join some kind of brokerage that they work with?

[00:05:47] GW: The brokers always work at a brokerage house, and the reason why is because the way that carriers have developed, they are quite antiquated. They essentially run on pen and paper and really don't have the systems to work directly with brokers, which is why, instead, they work with the brokerage house that has a long-standing relationship and deals with employing insurance brokers.

[00:06:09] JM: As you alluded to, there is a wide variety of insurance types. There's individual insurance, like my auto insurance, my life insurance, my health insurance, but there's also insurance for businesses, like construction insurance. There's real estate insurance. There's agriculture insurance. Describe some of the industrial types of insurance that most of the listeners probably are not familiar.

[00:06:38] GW: Yeah, sure thing. There is literally some kind of insurance for every risk that exists out there. If you want to take sort of a classic example, it's something called general liability, and this is the insurance that you need to buy in order to have a lease. So, every business that leases their office space buys this general liability insurance, and it's sometimes called slip and fall. The reason why is imagine you walk into a coffee shop and you slip and you hit your head. You're likely to sue that coffee shop, and the landlord wants to make sure that the coffee shop will stay in business and be able to defend itself in the lawsuit. So you buy general liability, because the insurance carrier will actually step in and defend you in that lawsuit.

[00:07:23] JM: Why did you decide to get into the insurance business?

[00:07:27] GW: It's pretty funny. It's not the kind of thing that most people are thinking about every day. My background is very much in tech. So I studied computer science at MIT and started another business that went through the Winter 14 Y Combinator batch, and that business was bought by LinkedIn.

Before all that, I actually grew up around the insurance industry. My dad was the CEO of AIG's Life & Retirement business. So I've always sort of grown up hearing about these things like underwriting and annuities just around the dinner table and I always found it to be this fascinating topic that I never quite knew how to approach until Newfront.

[00:08:07] JM: When you started considering insurance plus software as a business to get into, what were the different models within the insurance world that you considered?

[00:08:20] GW: Early on, we definitely thought about the more traditional approach in Silicon Valley to the insurance industry, and most what are called insuretech companies are trying to find ways to cut out the broker. So it's kind of the classic Silicon Valley playbook. You see an industry that has a middleman and you think, "How can we cut out or disintermediate this broker?"

Early on, we are thinking about some similar approaches to that. We are thinking about are there ways we could give away a free software product and then upsell people to buy insurance? It was really my dad who pushed us and said, "Look, brokers dominate this market.

There's a reason why 99% of commercial insurance is sold through a broker. You should spend a lot of time shadowing brokers. Just understand what is their day look like, what do they like, what do they hate?" and that was really what got us into this industry and our model with Newfront.

[00:09:15] JM: So you mentioned that there is a typical model for insurance companies or insuretech companies in Silicon Valley. I am aware of some of these insuretech companies. What were the new insurance companies that cropped up during web 2.0 or we 3.0? I guess describe the landscape of insuretech companies in a little more detail.

[00:09:42] GW: Sure. I think they sort of break down into two areas. One are sort of the Zenefits of the world, and these are the companies that initially said, "Look, we want to figure out a way to disintermediate brokers."

So, in that example, the idea was we can give away a really easy-to-use payroll software and upsell people to buy insurance without working with a broker. They just buy it directly from Zenefits. The other approach was insuretech companies that are trying to figure out how do we build software and sell it to the legacy players. We kind of took this third model of saying, "Look, we don't want to disintermediate brokers. We also don't want to build software and sell it to these legacy players. We actually want to build a full stack brokerage." So we're a technology company that actually owns and operates the insurance brokerage.

[00:10:38] JM: Right. So your company is Newfront Insurance. Describe what your company does in a little more detail.

[00:10:43] GW: Sure thing. We're building the modern insurance brokerage and we're focused on what's called commercial insurance, which is roughly half a trillion dollar market, and that's every year just in the U.S. What's interesting about how Newfront grows this rather than going to clients directly, so rather than going to a startup or a restaurant and saying, "You should come buy your commercial insurance from us," we actually go to the brokers and we convince them to leave their current brokerage house, which gives them a really crummy experience. It runs on pen and paper. Convince them to come and join Newfront. When they join Newfront, all of their

clients follow them. So our business scales by actually recruiting insurance brokers and moving their books of business to Newfront.

[00:11:27] JM: How do you integrate with brokers exactly?

[00:11:31] GW: We actually hire them. They are full-time employees, and that's the way it just works in this industry, is that the brokerage house always hires the brokers. What's interesting about the relationship is that even though they're full-time employees, they're commission only. So they only earn money when they bring in deals. So you can kind of think of them as being halfway between an employee and a customer. They're almost like a partner to the brokerage.

[00:11:56] JM: So if I'm a customer. Let's say I'm looking for agriculture insurance. I want insurance against my soybean crops. I'm going to come to Newfront. I'm going to be talking to a broker, and the broker is going to show me a catalog of insurance carriers, or how does that work?

[00:12:18] GW: So it really varies a lot client to client using the example of, say, a farmer who runs a soybean farm. It's likely that you have a long-standing relationship with a broker. So let's say you work with one of our brokers named Joe. He is out in Bakersfield. You probably have been buying insurance from Joe for over a decade, and the difference is when Joe comes and joins Newfront, suddenly, he moves a lot faster. He can offer you many more options and help you make sure that you're buying the right coverage. It's at the best price, and he's a lot more responsive as sort of other questions or issues come up with your insurance.

[00:12:56] JM: Where does the technology come in? If we use that soybean example further, what kinds of software can you offer across the experience to make it better for the broker, to make it better for the customer? What's the software stack?

[00:13:15] GW: Sure. So, what's so cool about the software that we're building is that not only does it help us create a better experience for the brokers, but at the end of the day, it lets us unlock client experiences that they can't get anywhere else.

So when I think about what we're building, the base layer is this platform for how do you describe risk in the world. All these different kinds of companies that we've mention, whether you're a soybean farmer, or a coffee shop, or a high-growth startup, you have risk, but the way that you think about it is very different.

So on top of this canonical representation, we have a few different products. There's a client-facing product that makes it really easy to apply for insurance and manager policies. There's a broker dashboard, where our brokers can understand what's happening with their book of business and what do they have to get done this week. Then the third piece is everything around our internal operations. So, the tools that our account management team uses to actually process all of these insurance transactions.

[00:14:14] JM: So is there much in the way of data that flows back into Newfront, or can you get data from third-party providers? Is there any room to like get a broad base of different insurance rates throughout the industry? I guess in trying to understand how perhaps large datasets might factor into your business.

[00:14:39] GW: Yeah, definitely. We sit in this really privileged position by being set up as a brokerage. So on one side, we have all of this information about risk flowing in from businesses. That's information like how many employees does a company have? What is their revenue look like? What is their cap table look like? We also have information on pricing from the carriers, because take the soybean farmer example, we might go to 5 or 10 different carriers to help them find the best coverage and the best price, and each one of those carriers will make a bid on the risk. So we have this information on pricing.

Then the third piece is actually information on claims, because if there is a loss – So let's say that soybean farmer, one of their tractors breaks down, or a building burns down and they make a claim. They're going to call up their insurance broker. So we have information on what sort of claims data. What do they actually need from the insurance? So you combine all three of these things to figure out, "Well, how do we appropriately price risk and make sure that you're getting exactly the coverage you need at exactly the right price?"

[00:15:42] JM: Do you have a sense for how correctly priced insurance policies are these days, or can you just tell me more about how insurance rates are priced? What the status quo is?

[00:15:59] GW: Yeah, Jeff. I love that question, because insurance is this sort of insane industry where pricing is very, very archaic. Even though there is often some sort of black box model or algorithm, a lot of it is done by gut feel. Often times, an underwriter at a carrier will be able to calculate a price based off an algorithm, but then they have a ton of wiggle room, sometimes as much as 50% to increase the price or decrease the price, depending on their sort of local knowledge about the market.

As a result, for some of our clients, we might go to five carriers and see one carrier come back at $65,000, another at 128,000, and another at 167,000, and sometimes the more expensive carriers will have reasons why they're coming in like that. But oftentimes it's sort of just gut feel or based on whatever tribal knowledge that particular underwriter is working with.

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[00:17:05] JM: Over the last few months, I've started hearing about Retool. Every business needs internal tools, but if we're being honest, I don't know of many engineers who really enjoy building internal tools. It can be hard to get engineering resources to build back-office applications, and it's definitely hard to get engineers excited about maintaining those back-office applications.

Companies like a Doordash, and Brex, and Amazon use Retool to build custom internal tools faster. The idea is that internal tools mostly look the same. They're made out of tables, and drop downs, and buttons, and text inputs. Retool gives you a drag-and-drop interface so engineers can build these internal UIs in hours, not days, and they can spend more time building features that customers will see.

Retool connects to any database and API. For example, if you want to pull in data from Postgres, you just write a SQL query. You drag a table on to the canvas. If you want to try out Retool, you can go to retool.com/sedaily. That's R-E-T-O-O-L.com/sedaily, and you can even host Retool on-premise if you want to keep it ultra-secure.

I've heard a lot of good things about Retool from engineers who I respect. So check it out at retool.com/sedaily.

[INTERVIEW CONTINUED]

[00:18:45] JM: Can you help me understand better how has this negotiation process worked in the past? So if I am a soybean farmer, I'm looking for my agriculture insurance, I go to a broker, the broker has knowledge of the different carriers, and the broker is helping me understand the options between the different carriers. Am I just can I go with the cheapest option, or are there like tradeoffs? Are there outlier events that one carrier might cover that another carrier does not cover? How is my – I promise to the listeners that we will get to software subjects eventually, but how does the relationship between the customer and the broker and the insurance carrier once the customer has been presented with these different insurance rates? Tell me how that conversation evolves and how the customer eventually selects which insurance to go with.

[00:19:44] GW: Sure. The most important thing that the broker does is they really serve as the risk manager to the business. That's why even the most sophisticated buyers, say, a general counsel, or a CFO at a large organization will rely on an insurance broker to help them make sure that they're managing their risk correctly and buying the right insurance.

Take the example of the soybean farmer. The insurance broker would first sit down with them and help them understand what are the risks in your business. Do you have an online presence? How much acreage do you have and what locations? How exposed are you to different weather incidents or fire incidents? They'll help you kind of pull together all this information and then think through, "Well, what's your risk tolerance? Maybe you want to retain some of this risk. Or maybe you want to find other ways to mitigate it?"

Only at that point do they actually help you figure out, "Okay, given all of these inputs, let's go out to the appropriate carriers and help you find the right coverage." So, at that point, you have a pretty good sense of what you actually need, and we can help negotiate with the different carriers to make sure you get exactly what you want and help you find the best price.

[00:20:53] JM: Okay. So there is like at a diagnostic process where the broker is interacting with the customer and figuring out what the risk profile is. Then it's really just a matter – It sounds like it's not a clear-cut decision. It's probably like you're shopping for a car and it's just you're never to find some perfect ideal or maybe you won't always find a perfect ideal. You're just going to find tradeoffs between these different insurance policies.

[00:21:22] GW: Right, and the way that the insurance industry has evolved to describe these different kinds of coverages is often very complicated and hard to understand, and the broker helps you cut through all of that and figure out what you actually need.

[00:21:36] JM: Just a brief anecdote. The last time I bought insurance online, it was from – I have to get insurance, a type of business media insurance, and the process I went through was baffling, because there wasn't really a login system. It was more like you had to like go through this form. You fill out a form, and that includes your email address, and then you have to make a purchase on a separate area of the site, and then they email you a PDF policy, and it was just very low-tech.

I believe this was like a multibillion-dollar insurance company. Why is the insurance industry – I mean, like if you look at banking. Banking has kind of kept up with the times, to some degree. I mean, not completely, but you can at least log in to your banking system, you can look at your transactions pretty easily. This was much more primitive. Why hasn't the insurance – Or are there insurance carriers that are more up-to-date? Why hasn't the insurance industry caught up in terms of technology?

[00:22:49] GW: Yeah, I ask that question every day. It's crazy that in every other industry, including very highly regulated industries like banking, they have gone online and figured out ways to give clients a better experience, and insurance has just remained extremely dusty and antiquated.

My best guess why it's sort of stuck in the past is these are often not only highly regulated, but also mandatory products. So you need general liability in order to sign a lease. So as long as you want to keep the lights on at your office, you need this policy, and that means that it's sort of something that you're maybe willing to put up with some pretty serious headache to get it in

place and then you often don't really think about it again until there's a problem or you need something changed.

[00:23:42] JM: I'd like to get into talking more about software, because I think we've outlined the contours of the problem set that you're going after. When you were starting Newfront and you had the idea for this, it seems like the focus was better broker experience and better customer experience. What was the initial software that you built?

[00:24:06] GW: The way I like to think about how we've built our product is sort of like peeling back layers of an onion. I like thinking about let's start with the client experience first. That's the outermost layer of how do clients actually buy insurance and manage their policies.

So the first thing that we built was actually our easy online application. So a good example of that, I mean, you gave the example of having to buy a policy online. You probably had to fill out a bunch of PDF applications that often ask a lot of duplicate questions. So one might say, "When was your company founded?" Another one will say, "Have you been in business for more than 10 years?"

So what we've done is we've gone through thousands of these insurance applications and standardized all the questions so that instead of sending a series of PDFs to our clients that ask a bunch of duplicate information, we send them a link [inaudible 00:24:59] feels a lot more like TurboTax where it asks you just the right set of questions for your business, and we can also pre-fill it with a bunch of information that's specific to that client.

[00:25:09] JM: Was there broker software that you built also? What happens when the user fills out that information?

[00:25:17] GW: Yeah. So, kind of peeling back layers of the onion, if the outer layer is how are we collecting this information from a client, we now have it in the standardized format in our database, and then our team internally needs to then pass all of that information to these insurance carriers, and none of the insurance carriers have anything like an API. So some of them might have a web portal where you can upload information in a certain format. A lot of them operate over email. So you'll send an email to a certain underwriter that has a set of

attachments. Some of them actually still require facts. So the next step after we collected this information in a structured format was building an engine that could map from our standardized format into whatever crazy format that the insurance markets require.

[00:26:03] JM: What do you mean crazy format?

[00:26:05] GW: I can't even describe to you some of these 20, 30-page long PDFs that are just filled with indecipherable text. It's these PDF formats that have built up over many years where underwriters will start asking additional questions, start saying, "Oh! The way we're collecting this information wasn't quite right. So we'll keep collecting it that way, but then we'll phrase it in a slightly different way." It's extremely onerous to fill these forms out and even to interpret what information is on some of these forms.

[00:26:36] JM: So, today, is your business mostly about building a better user experience rather than doing anything like with big data?

[00:26:49] GW: That's right. The way I like to look at is we, right now, the amount of data flowing through the brokerage wouldn't qualify for some sort of massive model you deploy in Spark. But it's extremely valuable. Every one of these transactions across our thousands of clients, we may be going out to five or six different carriers and getting all of this information about pricing. So obviously this dataset that we're building up over time has some of the most privileged information about the risk in these businesses and how the insurance markets are pricing that risk.

[00:27:22] JM: I've heard of businesses where if I want to get a mortgage, I can go to mortgageplatform.com and I'll enter my information and then they'll federate the mortgage request to a bunch of different mortgage offerors. So that has existed for a while. Are there other companies that do this kind of thing where they federate the request for insurance across different carriers? How does it traditionally work, or is that just the broker? Is that traditionally the broker like literally calling or sending an email to the insurance companies that they're federating the request to?

[00:28:06] GW: Traditionally, it's done by the broker at the brokerage house. So the way that conventional brokerages scale is by hiring an army of people and they end up really just drowning under their own weight. It becomes this really hard repetitive data entry task, and the only way that they scale is by hiring more and more. Our approach is to have technology as part of the DNA of the company so that we can scale through great software and ultimately deliver a much faster and better experience to our clients.

[00:28:37] JM: Tell me about the software that you're working on today. What parts of your stack are you will are you focused on improving.

[00:28:46] GW: We constantly have the tradeoff of these different constituents. So how are we improving things for our clients, for our brokers and for our internal operations team? Is there one particular part you want me to zoom in on?

[00:29:00] JM: Let's actually start with the operations team. What kind of software do you build for the operations team? What is insurance operations look like?

[00:29:08] GW: Sure. So that's what I mentioned about how do you translate data from our standard canonical format on to whatever format the carriers require. So there are about 3,000 carriers out there, dozens of lines of coverage, and we have to abstract away whatever format they require and make it feel like an API for us internally.

So what that looks like is a lot of very complicated matching rules about translating data from our standardized format into these different formats. Then we get information back from the carriers, it's often locked away in a PDF document. So what we've built is this NLP pipeline where you can dump in a PDF, like a quote document, and we will parse out all of the important bits of information. Things like what is the company name? What's the policy number? The premiums, the amount that the client actually has to pay, and then all the important limits and sub-limits that are specific to that quote. Using this NLP pipeline, we're able to build up this dataset over time about how all of the carriers are pricing the risk.

[00:30:16] JM: So the other areas of the company, the other areas of the technology stack that you're focused on – What were those other areas?

[00:30:23] GW: So there's clients. There're brokers and there's an internal operations.

[00:30:28] JM: Right. Okay. Go deeper on the client software. If I am buying insurance, what kinds of opportunities are there for you to make the experience better right now?

[00:30:39] GW: One of the biggest ones is the application process that I mentioned earlier. Just rather than having to fill out five or six PDFs every year that required tons of emailing back and forth and meetings with your broker, instead of just having a link that's a living document. It has all of the information about your business. You can update just the important piece of information every year. That's a huge improvement.

The other piece is giving our clients a really nice dashboard where they can see all of the policies that they have in place. They can see any quotes that were working on for new lines of coverage, and they can also deal with claims.

So in the event that something happens, a building burns down, an office is broken into. Of course you can still call your broker, but you can then see what's the status of the claim. What's happening with it? Who do I need to get in touch with? Then, ultimately, what am I going to get paid?

[00:31:34] JM: That dashboard sounds pretty useful for a particular type of customer. I'm thinking about maybe I run a set of apartment buildings in San Francisco or I run a set of candy factories in Utah. A candy factory probably has 15, 20, 100 different types of insurance. It would be pretty useful if I had a single pane of glass dashboard to see my different insurance policies. I imagine that the way that that exists today is like a CFO has like a folder with some PDFs in it for most candy conglomerates.

[00:32:21] GW: Yeah, 100%. There are still insurance carriers that are talking about going paperless. So if you have a series of PDFs, you're often ahead of the curve. So having this nice

online dashboard that's completely integrated and gives you real-time information about all of your insurance coverage, it's extremely useful.

The example of a property manager that manages a bunch of different buildings, they can see a breakdown of what policies do they have and how do these policies affect all of the different properties that they manage.

[00:32:52] JM: Is there like a process that if I am that kind of – If I'm running a bunch of apartment buildings and let's say I have this dashboard, do I do a yearly assessment of my different insurance policies and like look at different rates? How much money is there to be saved or made in insurance optimization for a business owner like that?

[00:33:16] GW: Well, if you're broker and their brokerage is doing their job correctly, hopefully a lot of that is just taking care of for you. There is often a lot of room to optimize both for a specific line of coverage and then also looking across the entire package, and that's a lot of what our job is, is to use all of these data that we're collecting the figure out what is the right set of carriers that we should be negotiating with. Are there ways we can consolidate with one carrier and get better pricing for you, or are there may be ways we could pull in some additional line of coverage that will build up kind of like a tower that will, at the end of the day, give you better coverage?

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[00:34:00] JM: Monday.com is a team management platform that brings all of your work, external tools and communications into one place making cross-team collaboration easy. You can try Monday.com and get a 14-day trial by going to Monday.com/sedaily. If you decide to become a customer, you will get 10% off by coupon code SEDAILY.

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[INTERVIEW CONTINUED]

[00:35:53] JM: So your type of business, I feel like I've seen this kind of playbook before for this kind of business where it's like an information business that has been around for a long time. When you digitize it, you have this first wave of business opportunity, which is just making things more efficient. Then after that, you have a tidal wave of opportunities, because by digitizing things, you eliminate so many unnecessary processes that the overhead for the business is just so much dramatically less than your competitors that you just tear out ahead. So, one company that comes to mind is Checker. Checker is kind of like this, because they do this background check process. They automate the background check process into an API. There's a lot of pain that they had to go through to build out that business. A lot of manual processes that they sort of had to like automate or semi-automate, and we've done a show on that that was pretty mind blowing, but it sounds like you're kind of in this first phase, and eventually you'll have the opportunity to kind of get into the data business, perhaps even get into the insurance business itself. First of all, do you agree with my framing, and I guess I'd just like to know what are the opportunities beyond. Because I know you're not going through this like pain of optimizing PDF formats for nothing.

[00:37:25] GW: Yeah, I'm happy to chat a little bit about the market landscape and how I see it evolving. I think that that is – I don't quite grok the first and second wave. I think the way that I think about it is that there's sort of a lot of initial innovation and software of building sort of purely software solutions, and I think a lot of the innovation that you're seeing today is how do we use software to transform a legacy industry that hasn't adapted a lot of technology. So, Checker is a good example, but I also looked at what Flexport does with freight forwarding. What Opendoor does with real estate, and I think insurance is in line for the same sort of innovation.

[00:38:06] JM: So when you move past the PDF automation business, what are the big opportunities that you see?

[00:38:14] GW: Where does it go? How does it evolve? I think what's so exciting about what we're doing right now is it's really taking a similar approach to a company like Netflix. Netflix initially said, "We just need a lot of distribution. We're just going to have a lot of people, a lot of eyeballs, a lot of people watching shows. Initially, it's everyone's watching the office. It's all third-party content.

Then what's so cool is that as they build out all of these distribution and are amassing all of these data, they suddenly understand, "Oh! Our customers really want political thrillers," and they can create house of cards, their own first party content. We can actually do the same thing with the insurance world. So, today, our clients are buying policies from companies like AIG or the Hartford, but long-term, we can use all the data that we're collecting on risk to offer our own white label Newfront products. So products that are custom based on the risks that we're seeing and areas where we can move faster, we can provide better pricing. We can provide coverage you can't find elsewhere. Thanks to this data.

[00:39:17] JM: Are you already doing that? Are you already getting into the insurance offering business?

[00:39:24] GW: Yes. What's cool is the first way we can do it is by just using the data that we're collecting and helping inform how we're working with the carriers. So, for example, maybe there's an opportunity to go to Travelers and say, "Hey, Travelers, we're seeing this other carrier that is coming in way, way less expensive for the same kind of coverage. Why don't you bid

across this whole portfolio where we think you can outperform?" So you can essentially use this data to bring some transparency to a market that's totally opaque and start driving efficiency for your clients right now.

[00:40:01] JM: So I'm not sure I understood that example. Are you actually underwriting the insurance in that example or are you finding a market need and finding a carrier that can satisfy that need? Help me understand.

[00:40:15] GW: Sure. In that example, rather than us doing the actual underwriting, we can just work with the existing carriers and start playing them off against each other. So going to the ones that we know are more expensive where they should be able to provide better pricing and show them the data about why they should be offering something better to a certain set of client.

[00:40:36] JM: Oh, I see. I see. So it's not necessarily about like creating a new kind of insurance. You're just saying there's opportunities in basically saying, "Hey, we're seeing enough data in soybean insurance. You should lower your rates if you want to be competitive with insurance underwriter A."

[00:40:57] GW: Exactly. That's the thing that we're doing today and that's sort of the first step. Then longer-term, it is truly to white label our own products. So maybe we see an area where payments companies takes them really long time to get directors and officers coverage. Well, we could come in with our own white label Newfront product to help them get the coverage that they need faster or at a better price.

[00:41:20] JM: What is directors and officers coverage?

[00:41:23] GW: Good question. So directors and officers coverage is something that businesses need to buy to protect the directors and officers in a business. Oftentimes, in the event of a lawsuit, unfortunately, not only will the company be named, but people will try to sue a director or an officer of the company as an individual. In this case, the business will buy this kind of insurance which is sometimes called DNO insurance to protect those people. Every venture capital financing round requires the company to buy DNO insurance.

[00:41:59] JM: Coming back to the example you gave of like let's say a client comes in. Starts talking to a broker, "Hey, I want insurance type-X," and you got out to the carriers and you're able to play the carriers off of each other, because you see all the different deals and you're able to negotiate on behalf of that customer and get them a better deal on that insurance type that they're coming through the door looking for. How do you make money off of that?

[00:42:35] GW: Yeah, happy to explain. The way that we make money is that when a client buys a policy, they're paying what's called the premium. So that's the full amount that the client has to pay. Then the carrier pays the brokerage house a percentage of that as a commission. So the commission totally depends on the carrier and the line of coverage, but it's often between 10% and 20% of the total policy premium.

[00:43:02] JM: Got it. So you would traditionally benefit from actually selling the more expensive insurance to the customer, right?

[00:43:15] GW: It might look that way, but the way that you're actually savvy and long-term greedy in this market is by offering the best coverage at the best price. Clients have lots of competitors, lots of other options they can go to and then they're not going to work with you for one second if you're gauging them on price.

[00:43:36] JM: Interesting. Yes, you just want to lockup that customer and just make sure they don't churn and they trust you long-term.

[00:43:42] GW: Right. The industry, these are really, really sticky relationships. The industry retention is about 90%. So most brokers will keep a client for a decade, and that's using pen and paper. That's not using modern SaaS tools to help you retain customers.

[00:43:58] JM: Although in some cases, the SaaS tool might actually have more churn. Because if you actually – I don't even know. This insurance policy that I got, that I can only interface through email, I was actually trying to cancel it the other day and it took me more than 30 minutes and I couldn't really figure it out. So I just like gave up. So I'm just not churning.

[00:44:18] GW: That's funny. I think if it was really affecting their bottom line, you'd probably figure out how to and then probably –

[00:44:24] JM: It's very cheap.

[00:44:25] GW: Yeah. You probably write an angry tweet or somehow find a way to show that you're upset.

[00:44:32] JM: right. So what about the insurance rate calculation business itself? Is that – Okay. I guess that would fall under the umbrella of the white label business that you might eventually get in. So if you were to enter the insurance market and you were to look for the best insurance to start offering. Well, I guess first of all, do you have any ideas for like what would be the best entry point for the white labeled Newfront insurance?

[00:44:59] GW: We see it in lots of different parts of for portfolio. To give you one specific example that I think is pretty interesting is think about how restaurants have to buy insurance. The way that most insurance carriers will price that risk is they'll look at total sales. So how much is the restaurant selling, and they'll look at the percent of the sales that's alcohol. The reason why is because if you're running a bar that's selling tequila shots. Well, then that's pretty risky, right? People are probably getting into bar fights.

The funny thing is the other kind of restaurant that looks similar, it has high sales and a large percentage of alcohol, is actually white linen restaurants. So oftentimes they are some of the clients that have the hardest time finding the best coverage at a good price, because they're getting unfairly penalized. It's not people buying tequila shots. Its people sipping on really fancy bottles of wine and then calmly walking out at the end of the night, and yet the pricing hasn't evolved to kind of give them that better treatment.

[00:46:02] JM: Have you started to chart a course for offering that kind of insurance?

[00:46:07] GW: Yeah. So we recently brought on a really key hire. His name is Mike [inaudible 00:46:10]. He's been building these sorts of programs for over 40 years in the industry. I mean, he's done it at many large national brokerages as well as large carriers.

[00:46:22] JM: How would you infuse that rate calculation process with technology? Because, I mean, that's seems like a big opportunity, right? Actually calculating rates more intelligently.

[00:46:37] GW: Yeah, that's right. That's really where all of these data comes in. The way you do it is by looking at the data you have about the risk across many different factors. For example, sales or percentage of sales that are alcohol. You look at data about pricing. So how is the market currently pricing the risk? Then you look at the claims data. So how often are these clients making claims? How severe are the claims? How much eventually gets paid out? You can combine all these things to come up with a model.

[00:47:10] JM: How has the emergence of cyber risk change the market for insurance?

[00:47:16] GW: Cyber risk is a really fascinating area. It's something that we thought about a lot when we're starting the company, is that for the past hundred years, a lot of value has been locked away in physical assets. The building and you're sitting in right now, or cars on the road. For the next hundred years, increasingly, the most valuable data out there is on computers. It's in digital formats.

So cyber insurance is a little bit like the Wild West right now. It's the insurance markets trying to figure out how can we price this risk? How likely are people to make claims and how severe are those claims? What's really tough is unlike some of the conventional risks, like a building burning down where it's a very clear outcome. The building was on fire and now it's in ashes. With digital claims, a hacker can breach your networks, steal a bunch of data and you'll never find out about it, or you'll find out about it 5 years later. So building a model that can represent that kind of risk and price it effectively is something that the insurance carriers are all trying to figure out and a lot of startups are also trying to figure out right now.

[00:48:20] JM: What do they do today? Do they just dramatically air on the side of really expensive pricing?

[00:48:28] GW: It really varies. I mean, there are datasets about breaches and losses in the event of a breach, but oftentimes they're working off of really limited data and trying to figure out what's the best way to price the risk.

[00:48:43] JM: What's an unconventional technology decision that you've made at Newfront?

[00:48:47] GW: One of the maybe surprising decisions that we made was building on top of Salesforce early on. The way that I think about what we're building is we have to make a lot of tradeoffs and decisions to actually operate this brokerage. Unlike a pure software provider, we sat right next to our users. So we're building software for brokers and account managers who are in our office every day, and you're constantly making that build versus buy decision.

So one example of something we did early on is we could have built a lot of CRM functionality into our product, but instead we decided to just use Salesforce off-the-shelf, and we constantly have to make that tradeoff, because brokers are savvy, they can look out in the world and see other technologies out there and think, "Hey, why are we not using that? Why do we need to build that in-house?" We always need to justify the product prioritization that we're going through.

[00:49:42] JM: So are you still built on Salesforce or did you move off of it?

[00:49:47] GW: So parts of the platform are still built on Salesforce. For example, a lot of the reporting around how is the business performing week over week and how are we managing certain teams. We'll push data into Salesforce, but it's not the primary data store. Our backend is node with express using a Postgres database.

[00:50:08] JM: Does regulation affect your business at all?

[00:50:10] GW: It's definitely a factor. One of the advantages though of being set up as a brokerage is that we're not subject to as much regulatory overhead as a carrier, which will have certain capital requirements and other regulations that they have to go through.

[00:50:23] JM: Are there any interesting internal tools that you've built?

[00:50:28] GW: Yeah, the example that I love pointing to is our NLP pipeline for parsing "documents". So this is normally a process that at a conventional brokerage might take a few hours, where an account manager will line up these PDF side-by-side either printed out or on their desktop and they'll just very manually copy and paste all the important pieces of information, like the premium, the limits, the sub-limits and put that off and into a Word document so that they can make a proposal to their client.

What we've built is this engine that takes in those five or six PDFs and instantly parses out the important pieces of information and shows it to that account manager in the actual proposal that they can send directly to the client. Of course, the account manager can review the proposal and make any edits. So let's say that we accidentally extracted a number, like 100 when we meant to extract a million. They can make these tweaks and then send the link right away to the that client. So we've taken something that normally takes a few hours and it runs instantly and then obviously may be takes 10 minutes for the account manager to review at Newfront.

[00:51:38] JM: You'd, like to build a business where you can have interactions between the engineering workforce and the brokers, because if you're trying to improve the experience for brokers, you want to have some direct feedback. How do you structure the organization in a way where there is consistent feedback between those brokers and the engineering team?

[00:52:06] GW: It's something that we think about a lot. One of our core values is empower people. It's really at the core of our business model and flows through to everything that we do. So we really select for engineers that are excited about collaborating closely with their users, and understanding how is the product that I'm building, how is it being used in the world? In other software companies, you might ship something and maybe you look at some analytics data or you take a survey that gives you some information. Here, we're worshiping software every day where if you ship something that has a bug, you'll see someone jump up and say, "Hey, this thing is broken!" or if you ship something, a new future for a broker, the brokers aren't in the office every day. But when they stop by, they'll walk right up to you and say, "Hey, I love this new thing. Could we maybe make this future improvement as well?"

One of the things that we've instituted is that when every engineer joins the team, during their first week, they spent a lot of time actually shadowing the insurance professionals at the company and seeing what their day-to-day is like and how they're using the software, and it really gives them this boots on the ground experience of what's it like transacting insurance and using the tools that we're building.

[00:53:14] JM: All right. To wind down, is there anything you'd like to add about the long-term vision for Newfront that we haven't covered?

[00:53:23] GW: I think the thing that I always like to point out is that there's such a trend in software right now of software eating the world and finding ways to replace and automate away people. What I love about what we're building is this a huge opportunity for human computer symbiosis. How do we use software to really empower and enable people? That's why our vision is a Newfront broker in every town in America. The software that we're building is literally the operating system of how they run their work, and that's a really exciting mission that gets us fired up every day.

[00:53:56] JM: Gordon, thanks for coming on the show. It's been really fun talking to you.

[00:53:59] GW: Thanks, Jeff.

[END OF INTERVIEW]

[00:54:04] JM: When I was in college, I was always looking for people to start side projects with. I couldn't find anybody. So, I ended up working on projects by myself. Then when I started working in the software industry, I started to look for people who I could start a business with. Once again, I couldn't find anyone. So, I started a business myself, and that's the podcast you're listening to. But since then, I've found people to work with, on my hobbies, and in my business, and working with other people is much more rewarding than working alone. That's why I started FindCollabs.

FindCollabs is a place to find collaborators and build projects. On findcollabs.com, you can create new projects or join projects that are already going. There are topic chat rooms where

you can find people who are working in areas that you're curious about, like cryptocurrencies, or React, or Kubernetes, or Vue.js, or whatever software topic you're curious about.

We now have GitHub integration. So it's easier than before to create a FindCollabs projects for your existing GitHub projects. If you've always wanted to work on side projects or you want to find collaborators for your side projects, check out FindCollabs. I'm on there every day and I'd love to see what you're building. I'd also love if you check out what I'm building. Maybe you'd be interested in working on it with me.

Thanks for listening, and I hope you check out FindCollabs.

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