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***The Consumer Finance Podcast: Exploring AI's Potential in Financial Services***  
**With John Sun of SpringLabs**

**Host: Chris Willis**

**Guests: Mark Furletti and John Sun**

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**Chris Willis:**

Welcome to [The Consumer Finance Podcast](#). I'm Chris Willis, the Co-Leader of Troutman Pepper's consumer Financial Services Regulatory Practice. Today we're going to be talking about some unique possibilities for the use of AI and financial services with a special guest.

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Now, as I said, today we're going to be talking about some exciting new possibilities for the use of artificial intelligence in the financial services industry, and I'm joined by two guests today. First, I've got my partner, who's the other co-leader of our Consumer Financial Services Regulatory Practice, Mark Furletti, who I've been practicing with for many years and I'm very appreciative of. But we also have a special guest. We have John Sun, who's the CEO and co-founder of SpringLabs.

John has been involved in the FinTech industry his entire career and has a very deep appreciation for the needs of financial services companies, and the possibilities for implementing artificial intelligence in their operation. So, John, thanks for joining us on the podcast for today.

**John Sun:**

Well, great to see you guys, Chris and Mark, and thank you guys for having me today.

**Chris Willis:**

Well, I'm really excited about this conversation. Although we've done a number of podcasts on this feed about AI, if it's the first time a listener is tuning in, can you just give us a high-level sense of what AI is and what the two basic types of it are? Because I think that'll help frame our discussion.

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**John Sun:**

Yes, absolutely. The word AI definitely gets thrown around a lot these days. I'm sure you guys have kind of heard it repeatedly the last few months here. Broadly, AI is just when we program machines to learn things that usually require some level of human judgment for stuff that's too complicated to be described in simple instructions. The two main types of AI that you see out there are what we call traditional machine learning models, and then the more recent generative, pre-trained models like GPT.

If I were to kind of look at the two types of AI, machine learning models primarily focused on recognizing patterns and making predictions. For example, looking at a set of data and trying to figure out whether incoming loan application might be fraudulent by looking at patterns that make it similar or dissimilar to previously known fraud, or predicting whether a loan might default by looking at patterns of past payments and making a prediction about the future.

Now, Generative AI, much newer, is really about creating new content based on the patterns that it's learned. But that's really only stretching the surface of the new capabilities that Generative AI is bringing. What's really powerful about them is that they're pre-trained with vast amounts of language data or visual data or what have you, to the point that, for example, a large language model can almost understand human language semantics. You can use these models to solve problems that involve language much easier than traditional machine-learning models.

So, that's really the part of these generative models that's overlooked. GPT, for instance, stands for Generative Pre-Trained Transformer. Everyone focuses on the generative part. Not enough people focus on the pre-trained part of that.

**Chris Willis:**

That's a great overview and background, John. Thank you for that. So, Mark, let me turn to you for a minute. At a high level, what potential uses are you seeing for AI now and in the near future in the consumer financial services industry, our industry?

**Mark Furletti:**

Sure, thanks, Chris. Well, first, I think we have seen already its adoption as John defined it, to include machine learning. We see clients adopting credit underwriting models that incorporate machine learning and that are adaptive. So, without having to kind of rejigger the model or deploy a new model, it would adapt itself based on, let's say, increases in credit risk or something, or a change in the predictiveness of a variable. That's, I think, one of the uses that's kind of somewhat common or more clients are experimenting with.

I think in the future, clients have an interest in using chatbots that would interact with consumers and perform customer service and reducing the cost of having a human customer service representative involved in a call, whether that be like an inbound call related to collections or taking a payment, or also kind of chatting through a website or a portal. I think there's also a use for it in monitoring for fraud. We have some clients that I think are experimenting for that and trying to predict the likelihood of fraud, maybe even looking at how fast a consumer is going through a credit application as an indicator of whether or not it's a human or it's a bad guy or something like that.

I guess a final use, and this is where I think today's discussion will be interesting, is in an area that some people call RegTech. So, how you can use AI to basically meet various regulatory compliance and reporting functions that you might have. This term has been around for a while, but I think we're finally seeing clients kind of adopt AI in this area to help them with compliance. I think that could include complaint monitoring, which we'll talk about more, as well as perhaps looking at disputes under the Fair Credit Reporting Act or disputes under the Fair Credit Billing Act to name a few.

**Chris Willis:**

Let's pick up on the thread of complaint management. Let me stay with you, Mark, just for a second. I think it'd be great for you to set the stage for this by sharing with the audience what regulatory expectations from the CFPB, the federal banking regulators, really any regulator are with respect to complaint handling and complaint management. It's always been important to them, but give some detail on that, because I think that'll serve as a good introduction to our discussion.

**Mark Furletti:**

Sure. So, look, complaints we often say are the smoke to a regulatory fire. So, you can use them to see and to kind of foresee problems that may become serious down the line. The CFPB expects that entities have a consumer complaint management program, and that would include having channels through which they can receive complaints, and that could be via emails. It could be through a portal. It could be through calls. Any number of ways the consumers can post complaints.

Then the institution ideally would receive the complaint, know it's a complaint, being able to categorize it as a complaint, and then be able to analyze it and understand maybe what triggered it and then resolve it by responding to it at the consumer level. I think the consumer-level piece is somewhat, it's not that straightforward. You have to read the complaint and understand what went wrong. But what I think is more interesting about complaints is not any one individual complaint or how you respond to that particular complaint, it's very important. But what are those complaints when you start looking at a high volume of them telling you about maybe a problem that you have in, maybe you had a problem in a periodic statement, and that's causing complaints. Maybe you have something in the onboarding process or the customer flow where consumers applying for a product, whether it be a deposit product or a credit product or whatever, and the consumer didn't understand something. As a result of that misunderstanding, they are later calling it and complaining.

So, I think it's that use that is probably, clients are able to then detect these problems. All of a sudden, if you're monitoring your complaints and you see that all of a sudden today, you had a hundred people complain about a particular thing. If you're in tune with those complaints, you can say, "Oh, look, that's due to this thing that went wrong before. We didn't know about that before. Now, we know about it. Let's address it. Let's remediate it. And let's prevent it from happening again, but also address it with the folks who are impacted by it."

I think this is a really useful area for complaints and I think this is where AI technology could make complaints more useful or easier to process or use.

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**Chris Willis:**

Yes. So, John, I think that's a natural segue to talk to you. Obviously, you had a reason for founding SpringLabs, and I know it relates to what we're talking about here. I think it's a great example for our listeners about how AI can help with some of the more important regulatory tasks within a financial services company. So, can you talk to me about what was your vision for SpringLabs in terms of a product that would allow clients to meet the kind of expectations on complaints that Mark was just talking about?

**John Sun:**

Yes, absolutely. I think, Mark, a lot of what you kind of described as the expectations of regulators like the CFPB for complaint handling, squarely line up with also challenges for a lot of financial institutions. I mean, if I'm hearing you kind of correctly, this idea of being omnichannel, having multiple ways of customers being able to address the issue or complaint with the company handling large amounts of volume, making sure that your agents and your employees are accurately capturing and accurately classifying these complaints, and then using that data to detect issues more quickly. Those are really, again, the same issues that's come up over and over again as we're working with clients and cognitive clients and a lot of our product design around using Generative AI for complaints handling is really modeled off of kind of what our clients are telling us.

So, if I were to think through for a typical financial institution, along these four areas, what's going on today versus what capabilities Generative AI products, like our AI complaints product could provide. The omnichannel piece certainly is kind of a challenge today. A lot of folks are only taking complaints and registering them through our two channels just because they don't have the capability to analyze written complaints and email complaints and chat complaints and call complaints and complaints posted on Yelp and Google reviews and in all of these various channels.

It's not feasible for a lot of institutions to step to be able to address all of these channels. I think that's kind of where AI comes in and is able to kind of, again, really take an omnichannel approach to complaints monitoring is able to aggregate and then analyze the complaints coming from multiple directions, from multiple channels. Which leads to the next point that there's a lot of volume of complaints and I think it's only getting larger, and I think omnichannel makes it grow larger. It takes a certain amount of dedication to pick up the phone and call. It's a lot less time-consuming to go on Yelp and post a negative complaint kind of about a particular company.

So, the volume of complaints is naturally going to grow. And we're already seeing institutions, large and small, from our customer base have trouble kind of analyzing every single complaint that's coming in. They're having to randomly sample complaints. And obviously, I think the risk with that is you miss something that's important. Next, you kind of have this issue in classification. A lot of the folks that you have handling direct customer communications are great at their job at handling customer contact and making sure the customer is kind of happy, but they're not trained compliance professionals.

So, to train them to recognize some of the issues inherent in some of these complaints, statutory obligations, for instance, or any sort of regulatory risks is difficult and their accuracy

rate is naturally low. That's where we had, as a part of building the SpringLabs' ankle product got an anonymized, depersonalized data from over 100 different FinTechs to improve the accuracy to a point where it's much better than a human customer service agent will be able to do.

Then, to the last point of detecting issues more quickly, detecting issues is all about knowing what folks are complaining about. That means categorizing the incoming complaints with a level of granularity. The challenge with the existing human processes is that the more granular you ask the human first point of contact agents to classify, the less accurate it is. So, you kind of have this trade-off.

As an example, if I ask the customer service agent to tell me which one of these five categories of complaint falls into, they'd be really good at it. If I told the human customer service agent which one of 50 categories this complaint falls into, they'd be really bad at it. So, I think the challenge is five categories. I don't actually know what's going wrong. It's kind of like payment issue. Well, there's like 60 different kinds of payment issues. What's actually broken in the system, 50 different categories, 100 different categories, you're going to get to the root of the problem much more quickly theoretically. But with the existing human processes, you're getting a lot of errors in the accuracies and it's really diluting the value of that data

I think that's kind of where our product position is, is to be able to help financial institutions as our clients solve a lot to use kind of verticals that you described, Mark.

**Chris Willis:**

John, let's keep going on that theme. There was widespread adoption of machine learning correlational models in the financial services industry because that technology is very well suited to predicting sort of a binary outcome. Will the account go delinquent or won't? Is it fraud or isn't it? What is it about complaint management that makes it a good use for a generative pre-trained type of AI solution?

**John Sun:**

Yes. I think AI adoption today, it's all about augmenting human capabilities and doing the boring work so that humans focus on the stuff that only they can do. Specifically, again, some of the new capabilities to share the pre-trained models bring is the ability to understand language semantics. So, there's no machine learning, we kind of do it too. It's just much more inaccurate. It takes a lot more work to get a spot up to the point that you can use it on language related tasks. Whereas a lot of the more recent innovative kind of LLM models could do that a lot of the times with some degree of accuracy out of the box.

If you look at a typical complaint workflow, a lot of it is unstructured data. It's a phone call or an email or like a chat log. It's language-based. It's all language data, right? It's all like conversational data that somebody has to go through and normally a compliance analyst sits here and like reads this conversation thread of like six emails back and forth and tries to figure out what's going on. It's kind of like manual rote labor that if we were to try to get rid of the rote manual labor piece of it, there's still stuff that kind of human judgment would have to kind of step in. I think that's where AI models are really excelling is that, again, along these dimensions,

solving problems that are of high quantity that you need to do consistently and accurately that involves kind of language and that are like rote kind of manual labor tasks.

**Chris Willis:**

That sounds really tantalizing, John, to think about having not just greater accuracy but greater speed in sort of detecting trends and complaints, because I'm sure Mark has had this experience too. But I definitely have of clients who had a sudden wave of complaints about something that mushroomed into a really big problem before the complaint report came out the next month, so to speak. About that time, there were 10,000 customers complaining, and then when the CFPB did a supervisory exam, it got headed off into enforcement because it was impacting such a large number of people. So, like, the value of it to me is not just in accuracy and time savings, but also speed, which I think could be critical if you have something blow up, and that happens sometimes in our industry.

But let's talk about how we would operationalize this. If I had an AI product that's going to assist me in analyzing my complaints and categorizing them and giving me the trends on them, how would I fit it into an existing complaint management process? Let's say I have an old-fashioned, human-based one where humans are doing everything. They're answering the complaints, they're categorizing them, they're investigating them, and then they're preparing the reports on the trends, et cetera. Where would an AI product fit into that workflow most effectively?

**John Sun:**

Yes, that's a great question. I think there's a couple of places that an AI product could kind of fit in. If you think about the typical complaint workflow, I think there are two main groups that touch a complaint in its lifecycle. There's kind of your first-line customer service agents, and there's your second-line compliance analysts that are essentially doing escalations and doing remediations on some of the higher severity complaints.

The main challenge is that I think a lot of our client's financial institutions are facing is on the first line, really what they're afraid of is under capture and over capture. Which is under capture is something that comes in, just presents a lot of regulatory risk. It's a complaint, customer service agent looks at it. It's like, "That's not a complaint." So, second line never sees that because it never got passed the second line. The other issue being over-capture, something that's not a complaint or not a high-severity issue that doesn't need to get escalated. Customer service agent didn't quite understand it properly, escalates it. Now, it creates a lot of work for second line.

So, depending on which one of these two problems you're trying to solve, there's a couple of different ways to integrate AI solutions into your workflow. So, you're trying to solve for the efficiency and speed issue that you were just describing, Chris. You could do a second-line integration of AI complaint handling process like ours where we would sit after the customer service escalation, right before that complaint gets to second line. We essentially ingest all the agent notes and agent remediation reports and all the things that otherwise would have gone directly to a compliance analyst, and we will label it and analyze it and then strip out anything that's kind of low severity to create less work or second-line compliance analysts.

And we, again, do a lot of that manual rote work off the top of like our writing remediation summaries, creating kind of bullet list of points that the customer was making, and basically try to automate away 60% of the work, all of the second line compliance analysts so that they can focus on really core stuff. Like understanding root causes, and identifying patterns using the tools that are provided through the system, and working with product teams and working with operations teams to improve processes so that lots of these types of complaints pop up in the future.

Now, if you're concerned about under-capture, which one of the biggest things we hear from compliance groups is, we don't know what we don't know. We don't see what we don't see. So, under-capture is actually kind of a scary event. You don't know if there's hanging or risk regulatory risk out there if those complaints never get escalated. So, in that case, we would reduce that under-capture risk, integrate into the first line where essentially data is coming directly to us in parallel to customer service. We're seeing kind of all the emails after it's been anonymized and desensitized.

We're seeing all the chat logs. We're seeing kind of all the call transcripts, again, after it's been kind of anonymized and desensitized. The AI model or the AI agent is essentially in parallel with the first line customer service agent, going to analyze these incoming conversations and really differentiate between what's a complaint, what's a dispute, versus what's just negative feedback or unhappy customer, or what's it inquiry. In that way, we kind of reduce this under-capture issue by making sure we flag anything that's important. And also, we would, at the same time, reduce this over capture issue to make sure the right tasks or the right actions arrive at your second-line compliance.

**Chris Willis:**

Got it. Again, that all sounds very, very tantalizing, as I said, as a way forward for financial services. But now, John, I want to ask you to take off your present-day hat and let's open up your crystal ball and put your conical wizard hat on. Because I'd love to hear from you, someone who's at the forefront of the use of AI and financial services companies. What do you think some of the new frontiers will be if we look ahead 5 or 10 years? What are other business problems in our industry that you think AI could be successfully applied to?

**John Sun:**

Yes, that's really tough. I mean, I think that the pace of growth is so quick here that it's almost hard to predict what's going to happen next year or two years from now versus kind of five years from now. But I mean, I think if you follow current trend forward and you extrapolated for it, I think you are going to see more kind of AI native decision making versus these models are actually making kind of a small subset of decisions. I think the challenges that arise with that is model governance. Obviously, how do you make sure that these decisions are made in a way that's acceptable to the current regulatory structure. Really, we ran into kind of a lot of these same issues when machine learning models kind of first came onto the scene.

My previous startups, my previous employer, if you will, was one of the pioneers in kind of using machine learning for automated underwriting. I remember at the beginning of that process, there was a lot of regulator skepticism around, how do we know that this is making decisions in accordance with kind of fair lending regulations, and there's no disparate impact or any

unknown or known biases. Now, jump forward 10 years where we are today, a lot of those issues, although they haven't been solved, there's a structure in the process in place for handling them.

I think we're kind of at the first inning of Generative AI from kind of a decision-making kind of perspective. I would wager there's going to be more and more activity towards developing these models to be able to get further into furthering to the decision-making side of the stack. But in parallel, we're going to need advancements in the governance structure and the oversight structure for these models, so that that process becomes more palatable to our regulators and industry.

**Chris Willis:**

Yes, that certainly makes sense. And of course, as this technology evolves, you know we're going to be talking about it here on *The Consumer Finance Podcast*. And, John, hopefully you'll come back again sometime to let us know how everything is going.

**John Sun:**

Absolutely. Thank you so much, Chris and Mark, for having us. I really enjoyed the conversation. Look forward to being back.

**Chris Willis:**

Well, we enjoyed it too, and thank you very much for being here today, and thanks Mark for also being on today's episode. Of course, thank you to our audience for listening in today as well.

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