



## **PODCAST TRANSCRIPTION SESSION NO. 208 - MELISSA KOIDE**

Welcome to the Lend Academy Podcast, Episode No. 208, this is your host, Peter Renton, Founder of Lend Academy and Co-Founder of the LendIt Fintech Conference.

Today's episode is sponsored by LendIt Fintech USA, the world's largest fintech event dedicated to lending and digital banking. It's happening on May 13th and 14th, 2020, at the Javits Center in New York. Lending and banking are converging and LendIt Fintech immerses you in the most important trends of the day. Meet the people who matter, learn from the experts and get business done, LendIt Fintech, lending and banking connected. Go to [lendit.com/usa](http://lendit.com/usa) to register.

**Peter Renton:** Today on the show, I am delighted to welcome Melissa Koide, she is the CEO and Founder of FinRegLab. Now FinRegLab are a fascinating new organization, they are actually an independent non-profit innovation center and what that means is they're analyzing, doing research on different topics and they're taking that research and they're trying to help inform public policy and really help drive the financial sector forward.

Their first big project was around cash flow data used in underwriting and I wanted to get Melissa on the show because they've just released their report, as you're listening to this, and wanted to talk about what they found out. Firstly, what the questions they were asking, what they were looking for, what they actually found out and so we go into that in some depth. It was a fascinating interview, I hope you enjoy the show.

Welcome to the podcast, Melissa!

**Melissa Koide:** Hi, Peter, it's great to be with you.

**Peter:** Okay, so I'd like to get this thing started by giving the listeners a little bit of background about yourself so maybe you can tell us what you've done in your career before FinRegLab.

**Melissa:** Sure, happy to do that. As I thought about the question, Peter, it's like, gosh, I feel like I'm kind of boring, but maybe not (Peter laughs).

**Peter:** I don't think so.

**Melissa:** Well, I basically have set up FinRegLab which is a non-profit research organization that was founded on the premise that independent rigorous research is really a primary ingredient in helping to develop market norms and policy solutions that are ultimately what I think we're all after, right, which is enabling safe, certain innovation in financial services and I know that's a priority for policy makers as well as the market more broadly.

But, I think, one of the sort of notable things about me and what I've done is this, if you will, policy entrepreneur is I definitely became an entrepreneur at the age of 47 which is apparently the average age of female entrepreneurs (Peter laughs) and I decided to establish FinRegLab



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after a number of tours, if you will, inside federal government and inside policy making halls, particularly of the US Treasury Department. I led the Office of Consumer Policy for four and a half years at the US Treasury in the Obama administration and part of my team's responsibility, which actually you know well, Peter, and you came in and met with me, at least once.....

**Peter:** Yeah.

**Melissa:** ...was really trying to develop the administration's understanding of the real opportunities and benefits, as well as the risks of using data in the financial system and new types of data in the financial system and really understanding the opportunities and risks of new technology in the financial system. And what does this mean for consumers and what does it mean for retail financial services and small businesses and what's the implication for making sure that people are protected in our financial system and these new interests into the financial system really are still maintaining safety and soundness of our overall financial system.

So, we heard from hundreds of people. I, my team, the Treasury Secretary, my colleagues or cause, the regulatory community, hundreds of people with lots of very thoughtful points of view, but all coming in the door really with an agenda which, if you will, an advocacy point of view. What we didn't have was any independent resource that, frankly, wasn't coming in the door with an advocacy agenda, but, instead, just coming in the door and saying, you know what, you have these particular policy questions or regulatory questions when it comes to using a certain type of data for a certain type of financial product or financial service and here's what, empirically, that information will tell you.

So, it was the lack of that type of independent research that was apparent to me and, frankly, I think it's quite apparent to regulators, legislators. So, that lack of that role was the kernel of an idea that I had while sitting at Treasury that when my time was over that I would try to, you know, suss out see if I could setup an organization that could go out and try to do some of that much needed research.

**Peter:** Okay, so then you obviously left Treasury when the new administration came in. How did you actually go about it like, I mean, who did you reach out to? I guess like who were the supporters, who were the people that are sort of working with FinRegLab to make it a reality?

**Melissa:** Yeah, that's a fair question. Well, the first thing I did was, frankly, while no longer a government employee, I made the rounds to sit down with the folks and the regulatory agencies and, in particular, the parts of the regulatory agencies, both federal but also state, consumer protection as well as the prudentials, to really start to create a set of..... basically a list of questions that would help to inform the research agenda for this research organization.

At the same time, I knew how important it was to really structure FinRegLab as this honest broker, meaning an entity that really could engage industry because, ultimately, to do research of the type that we're doing, we have to have the trust of industry and importantly, we also obviously have to have the trust of the policy maker community and that meant that it was standing up this organization as a not-for-profit organization and also raising money from the



philanthropic community, from philanthropists who really also understand the need for this type of sophisticated research and evaluation.

So, we felt really fortunate, the Omidyar Network, they are now...they've renamed themselves Flourish, the Financial Services Division, came in in a really thoughtful way and I think really wanted to continue to support, if you will, entrepreneurs of the type that I was setting out to be, policy entrepreneurs, who were trying to think about how do we leverage the data and technology for good. So, they have come in, they basically said to me, you know, we believe in your mission, show us you can do it, show us that you can engage industry and get the regulators to the table and we've been able to do that, so it's been a real "win win."

**Peter:** Okay, so then you got set up and, you know, I imagine, many, maybe dozens of topics that you could choose to really dive into as your first research project, so I'm curious about why you decided to choose cash flow data in underwriting as the first sort of deep dive research topic.

**Melissa:** So, our true north, while mapping the organization, our true north is around financial health and financial inclusion and I think we all realize that access to affordable credit plays a really central role in helping consumers, but also small businesses in improving their financial health, managing short term financial gaps, unexpected expenses for small businesses, really enabling the small businesses to manage revenue gaps, but also build and grow.

But yet we do have millions of people across the country who lack access to affordable credit. We have over 15 million sole proprietors who you know, at some point in time, are going to need to be able to access affordable credit and so really honing in on where data could be advantageous for helping to evaluate some of these individuals as well as small businesses felt like a really meaningful opportunity to help sort of evolve our small business credit market for consumers and small businesses.

**Peter:** Did you have specific goals with the project, things that you really wanted to find out?

**Melissa:** Absolutely, we have up to 26 million Americans who are considered no file, right, they lack any traditional credit history to be evaluated under traditional means of credit underwriting. We also have another 90 million Americans in this country and there's the CFPB data research who are considered to not have a sufficient traditional credit history.

So, right there, we're looking at, you know, 40 to 50 million people in the US who, if we have other means and if data would provide other means for evaluating them, could potentially be provided access to affordable credit. So, it was with input from the regulators, it was with engagement from a number of the fintechs in the market that we decided to really hone in on this question of how might this new type of data, and it's actually not all that new, it's transaction activity data, how might information that you can glean from a bank account of a consumer or small business, how might that data help lenders evaluate credit risk of people who otherwise might be turned down or might be priced differently than they would have otherwise been evaluated under traditional means.



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This was an area that was a priority for the regulators, in fact, one of the regulators of the Federal Reserve Board has talked about the potential value of cash flow data in underwriting and so that's how we decided to hone in on this first research evaluation.

**Peter:** Right, right. So, I imagine, you need to gather data yourself from lenders so can you share like some of the companies that you went out to that provided data for this research.

**Melissa:** Absolutely, yeah, we are so pleased to have engaged six lenders who have shared information and data with us to do this independent evaluation. The companies who came to the table with us are companies that you probably have had on your podcast before, Peter, Petal is one the companies.

On the consumer side, we engaged Petal, Brigit, LendUp and Oportun and these are all really dedicated companies to serving market segments who are, generally, more non-traditional. In some cases, these are lenders who were serving Latino Hispanic populations and other cases either lenders who are really going after the thin file/no file population.

In the case of Brigit, they are offering an overdraft alternative, but each of these four companies in the consumer market are leveraging cash flow data to do an evaluation and make decisions about extending credit to those consumers.

We also wanted to evaluate cash flow variables and metrics in the small business context and so there we engaged the companies Kabbage and Accion and they're serving very different small business populations. That's actually, we think, quite helpful, I mean, it made the research a little more complicated looking at each of these companies and doing firm by firm evaluations of their cash flow data and metrics.

But on the other hand, the findings become all that more powerful because what you see then are consistent results across each of these different companies that are using these cash flow metrics. It's telling you something, I think, really about the uniqueness and the power of the cash flow data in the credit evaluation.

**Peter:** Right, right, Okay, so then you got all this data in and you analyzed it, what did you find out?

**Melissa:** So, we wanted to evaluate across three questions, questions that, I think, we all realize are important for the market as well as for policy. We wanted to evaluate for just the first base question, is this data predictive or not. We also wanted to evaluate, is the data enabling these lenders to serve populations who otherwise might have been turned down under traditional credit evaluation.

And then from a very policy specific, but market important question, we wanted to evaluate fair lending implications of the use of this data. Each of these, we think, are pretty foundational. We, over the course of basically nine months, we brought in the data from each of the companies and I'm happy to share with you, Peter, and your listeners that our analysis definitively



confirmed that these different types of cash flow data and metrics that these different companies are using to underwrite unsecured consumer and small business credit are actually being used. And we found in our independent evaluation compelling evidence indicating that the cash flow variables and scores are predictive of credit risk and loan performance across these heterogeneous sets of providers, the different populations they're serving and the products that we studied.

Standing alone, this is, I think, really a couple of really important things and you're going to see a lot of these in detail in the report itself, but, standing alone, the cash flow metrics generally performed as well as traditional credit scores so we were comparing them against FICO and other traditional credit-based scores. That finding suggests that the cash flow variables and scores can provide meaningful predictive power among populations and products that are similar to the products and the populations we evaluated in this research.

But another really important insight that we gained on the predictiveness question, our analysis also indicated that these cash flow data and the metrics provided different insights into the credit risk than what the FICO-based more traditional credit risk metrics would show you. And so when you get a chance to read through the report, we actually have a number of hit maps that are broken up which is done by participant and you will see the level of granularity that the cash flow is able to offer in terms of measuring or assessing credit risk which is actually different than what you can see according to the different FICO bands.

So I think that's really, really kind of an important outcome or learning from the research that we've done.

**Peter:** And so what about the question about serving new populations, did you find that that was also able to be done?

**Melissa:** We did. This was actually one of the harder questions that we found. A harder question to evaluate from a quantitative assessment just simply because you have differences in things like how do you define income, but we, definitely, found evidence that participants in the study are serving borrowers who may have historically faced constraints in their ability to access credit.

We, basically, came up with our own method for evaluating whether or not the populations who were being studied were located in predominantly minority communities and we looked at and evaluated according to whether or not the populations were in minority communities or were 50% minority communities, 80% minority communities and you will see in the research there are definitely populations in these different demographic neighborhoods that are being served by these providers.

So, I think the other thing to keep in mind, two of the companies in the research are themselves CDFIs or community development financial institutions and that's designated by the US Treasury Department to be serving low and moderate income communities and populations. So



just by their mere designation as a CDFI we have strong confidence that they are serving underserved communities and populations.

**Peter:** Right, right. So you didn't see disparate impacts that came out of this?

**Melissa:** So, great question. So, we were able to do a component of a disparate impact evaluation with four of the six companies who participated and what we found is that the degree to which the cash flow data was predictive of credit risk, meaning, how independent are these variables in assessing credit risk within sub-population groups or different demographic groups that those cash flow variables are independently evaluating risk.

And so, that's a really important aspect of a disparate impact valuation and so we're quite excited and quite pleased to find that rather than acting as a proxy for race or ethnicity or gender, the cash flow variables and the scores that these companies are using were providing independent, predictive value across our groups and so that's a really encouraging finding.

Now we have to offer the caveats in a company who is evaluating themselves for fair lending questions and companies know they need to be doing this if they're in the lending space. You know, we'll go through a range of evaluative questions that they'll be asking themselves, but this is, I think, one of the sort of core questions that are used in any disparate impact evaluation.

It was really encouraging to see that we were finding these variables and, again, these are inflow/outflow transactions, inflow/outflow indicators, indicators of monthly cushion, economic cushion. These variables that we evaluated are not proxying for protected classes.

**Peter:** Okay, so the report...and we're recording this, I know, a week before the report comes out, but by the time this publishes it'll have been out a few days and we'll certainly link to the report in the show notes. So the report's coming out, what do you want to do with this report now? How do you think this research should impact public policy, for example.

**Melissa:** Absolutely, that is the right question. So, make that up a little bit, part of the ambition of FinRegLab is to ask and refine in a timely fashion to some of these pressing opportunities for using technology and data and to be this, as you heard me say, this honest broker that is able to bring all the stakeholders to the table, both to look and learn, as we undertake this research endeavors. But there's another really important piece of the work that we do and that is to put together, it's a very non-sexy term, but, basically, policy working groups to come together reflecting the different important voices in any policy evolution.

So, clearly, market actors from the incumbent banks, to the fintechs, to the data aggregators, to the important voices of the consumers and the consumers' perspectives so consumer advocates who are part of these conversations to, ultimately, look at what is existing law and what do the existing rules that exist that are relevant for a particular new use of data, what do they say about the existing use of data, where they're stymieing the potential value of the use of data and what are the potential ways in which policy and regulation, and eventually potentially



laws, could evolve so that we are seeing the safe use of the data being brought into the financial system, and in this case, cash flow data being used in underwriting.

And so, over the past year, we held three policy working group sessions and we had the regulators sitting at the table with us as we, week-by-week, over two and a two and a half month-period, evaluated and considered what are the fair lending implications, what are the fair lending legal implications, what are the policy implications.

Another working group was very focused on the data flow and what do existing laws of Fair Credit Reporting Act, the Gramm-Leach-Bliley Act, what do they say, where do they stymie the potential value and flow of data in these ways and then important question around...from the various roots of consumers-centric perspective, how does the consumer understand the use of the data, how do they give meaningful consent. If there is an adverse action notice required, how is that information conveyed to the consumer in a way that will be meaningful and potentially even actionable by the consumer.

So, this research has learned from, but also helped to inform what FinRegLab will produce in September which is a policy report that really evaluates existing laws that are in place right now and tease out different considerations to potential evolution of both our regulations and our policies in light of what this type of research shows us. And so, my hope is that this is something that will be widely read and considered by policy makers and the regulators as they themselves are having to think about these questions of alternative data.

I mean, your listeners probably are very familiar with the fact that the GAO has asked the regulators to express an opinion about alternative data and what that may mean. Next week, we're going to have a congressional hearing that's focused on alternative data and so we think we're hitting a really important moment in the policy evolution process where we're bringing facts to the table that get us beyond the different points of view in advocating of the different points of view.

**Peter:** Right, so I'm curious that....there are a couple of extra questions here to follow-up with that. As you were talking, I was wondering about privacy, it's such a huge topic and I'm sure the legislators are going to be, you know, concerned about any negative impacts there because you're diving into someone's bank account for cash flow data that's certainly.....maybe we just start with that, maybe you could comment on privacy implications here.

**Melissa:** Yeah, we are absolutely thinking about and writing about the privacy implications. For one, just starting with the basic premise that we're talking about new data being used in underwriting, what is the understanding the consumers need to have in order to give meaningful consent to this type of information to be shared. That's just sort of the first place to start.

Part of the work that we're doing and that will come out in the September report is also about what do existing privacy protections say about this new type of data and how it's being, with consumer consent, flowing from, you know, one bank account to a lender. The Gramm-Leach-Bliley Act speaks to this very specifically. I think there's also a little bit of a risk that many of us in



financial services, I think, are becoming acutely aware of which is how are we as a sector and how are we as policy makers and researchers really thinking through and helping to articulate where and how we define policy protections as it relates to the use of data in financial services and thinking about that carefully and to some extent separately from the bigger consumer data privacy efforts that are underway that we know. California Data Privacy is obviously one moving piece of policy that will have implications that some of these bigger consumer data privacy laws may have bearing on the use of data in the financial sector.

So, I think, there is a lot more work for those of us in financial services to do to make sure that we are able to articulate where data and even new data in the use of underwriting, identity, fraud mitigation, where these new type of data can really be advantageous for protecting consumers, protecting our financial system, also making it very transparent for consumers about the data that would be used, but making sure that we're not in a way that ultimately harms the value of the data getting caught up in these broader consumer data privacy movements.

**Peter:** Right, right, okay. So then what about....did you notice in your findings, are there any negatives for this, I mean, we touched on privacy obviously, but is there anything else that you discovered that may negatively impact the consumer because of this new way of using data?

**Melissa:** There wasn't anything in the research, frankly, that raised red flags for us. I think stepping back from the empirical work that we've done, I think we are all aware that we've got to really start to sort out and understand some of these expectations around privacy and how the financial sector is doing it right.

I do think that there are big questions that we've got to think about in terms of, you know, how are we allowing this sort of innovative use of data that many lenders, many fintech lenders, in particular, are employing in terms of creating their own metrics and which particular types of transaction data that they, you know, can put together that is very much sort of proprietary in their own secret sauce.

How are we allowing for that level of innovation and flexibility to continue to thrive while also counterbalancing that with, you know, it's cash flow data and our research suggests that it can be so effective at serving so many millions of people, how do we balance the need for allowing for innovation with the potential around standardization. You know, UltraFICO, you and I have talked about this, Peter, is in many ways quite exciting, but it is definitely starting to create new norms and new standards in terms of the type of data that might be used.

So, I think it is an important question for the financial sector to figure out how do we sort of allow for the proprietary innovative approaches that industry may be taking that ultimately are allowing and enabling them to serve populations who may be harder to serve, but yet realizing there is real value in standards and norms and regulatory-recognized approaches to the data use. So, those are some of the questions that we will all be grappling with over the next half decade.

**Peter:** Right, right, for sure. So we're almost out of time, but before I let you go I'd like to sort of turn the page and maybe you can give us some sense...you know, you're putting this cash flow



data work to bed, obviously you've got the policy report coming up, but what are you working on? What's going to be the next project for FinRegLab

**Melissa:** We actually very intentionally decided to start with data and evaluate data, new types of data and underwriting under more traditional methods for evaluating. So, we retained Cross River Associates, many of your readers will know them well and probably have engaged them in order to do the evaluation of the cash flow data. If you think about our next areas of research, you know, we do continue to think about a lot of the questions that we, frankly, weren't able to get after in this first go looking at cash flow. Price is important evaluating cash flow in a down cycle would be very important for policy makers and industry overall.

So, those are potential areas that we continue in the evaluation of the data. We are, though, quite interested in building some similar work, meaning, convening stakeholders to look at some of the questions that are arising in terms of the machine learning algorithms and techniques in evaluating data and underwriting. I think there's a lot of potential, many of us are increasingly realizing how these machine learning techniques can improve in terms of accuracy, but yet we also have really important questions around, you know, how are risks related to bias being managed in these algorithms.

You know, explainability continues to be an important piece of this and so we are beginning to think about building out some work in that particular area, the techniques and the algorithms as opposed to just working with the data.

**Peter:** Right, right.

**Melissa:** But I would love to hear from your listeners once they've had the chance to hear this podcast where they think we should be spending our time and our resources.

**Peter:** Okay, we will challenge the listeners to give some feedback there. Anyway, we're out of time, I really appreciate you coming on the show today, Melissa.

**Melissa:** Thank you, Peter, it's really nice to talk to you and I appreciate your giving me the chance to share what we've done.

**Peter:** Okay.

**Melissa:** And our report will be out next Tuesday so that is July 23rd, so, hopefully, we'll post with you all and get it out there.

**Peter:** Yeah, as I said, we'll be having a link to it and this will actually be published after, obviously, the report comes out. Anyway, thanks again, Melissa, see you.

**Melissa:** Thank you, take care. Bye.

**Peter:** So I think it's really important that the industry has an organization like FinRegLab that can do this independent work. I mean, cash flow data used in underwriting, there are many



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companies that are doing it, they have been doing it even for some time, but there has not been this independent analysis of this new, relatively new technique in underwriting. I think what lawmakers and legislators in Washington want to see, they want to see independent research, they don't want to see a company coming and saying this is good, or even a trade organization coming and saying this is good because they all have ulterior motives.

What they want is empirical evidence, independent research and that's what FinRegLab is able to provide. I'm very much looking forward to their next project and you heard the challenge to the listeners, if you have some ideas, please go to [lendacademy.com](http://lendacademy.com), go to the blog post for this podcast and put a comment in to say what you're interested in FinRegLab studying.

Anyway on that note, I will sign off. I very much appreciate you listening and I'll catch you next time. Bye.

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