PODCAST TRANSCRIPTION SESSION NO. 239–FREDDY KELLY

Welcome to the Lend Academy Podcast, Episode No. 239, this is your host, Peter Renton, Founder of Lend Academy and Co-Founder of the LendIt Fintech Conference.

(music)

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 City. 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 to register.

Peter Renton: Today on the show, I'm delighted to welcome Freddy Kelly, he is the CEO and Founder of Credit Kudos. Now, Credit Kudos is a really interesting company, they are what we would call an alternative credit bureau, or as they say in the UK a credit reference agency. They're using the power of open banking to be able to bring more people into the credit system, more people in expanding the credit box for a lot of lenders because they're not really focused on credit history like the traditional bureaus. They are using the power of open banking to be able to connect. People can connect their banking information so they can get an accurate credit assessment on a much broader cross section of people.

So, we talk about exactly how they do that, we talk about the different data points they're using, you know, the type of lenders they're going after and who are using their product today, and we talk about just some of the attitudes towards open banking and the success rates that they're getting. We talk about some of the new interesting relationships they have set up and their plans for expansion beyond the UK, and much more. It was a fascinating interview, I hope you enjoy the show.

Welcome to the podcast, Freddy!

Freddy Kelly: Thank you very much for having me.

Peter: My pleasure. So, I'd like to get this thing started by giving the listeners a little bit of background. You know, you've had an interesting career with.....you know, you've been doing Credit Kudos for a few years now, but tell us what you did before you started Credit Kudos.

Freddy: So, I'm a software engineer by training, I guess, so I studied computer science in the UK. I moved to the West Coast of America after graduating and went to work in sort of fast growing tech startups, so I started working for a business called BitNami back in 2013 when they were going through, or just finishing up with Y Combinator and that company was building sort of deployment systems for big cloud platforms like Amazon and Google so I spent a couple of years doing that.

I then landed in my first ...what I now know as fintech gig at a business called TXN which was an analytics startup that was looking at the problem of understanding consumer spending behavior through the lens of their bank transactions and trying to re-purpose the information, if you like, for big retailers so they could understand what their customers were likely to do next. So, that was where I was ready to cut my teeth with fintech and this transactional data.

I then got the opportunity to join a program called Entrepreneur First in London which is a pre-seed startup accelerator, so I sort of jumped on a plane and came back to London. And it was about that time that I suddenly realized that ....rather painfully, I guess, that I didn't have a complete credit history and it was through having to provide bank statements in printed form to my landlord to prove that I was able to pay the rent that I sort of hit on this problem and having had this experience using transaction data in a much more automated way. The idea for Credit Kudos was really born in bringing those things together and trying to make a much more effective, accurate credit reference agency which is what our business is all about.

Peter: Okay. So, then let's just dig into that. Maybe when you got started, you said a few years back now but, what was the original mission and has that mission remained the same today?

Freddy: Yes, so we want to make credit more fair and accessible for everyone, but, particularly, with a focus on those that are excluded from financial services. So there are about 5.8 million people in the UK that are excluded from mainstream credit and depending on what your definition is, that that number changes.

But, essentially, the way we look at it as a lot of people currently get rejected for loans, or credit cards, or whatever else because their credit history doesn't portray them in a fair and accurate way, and, indeed, they may not get rejected, but they end up paying a much higher price and higher interest rate. And if we can build a product that perfectly predicts risk, that was the dream, then those people shouldn't end up paying. So, what we're trying to do is get as close to possible to perfect by using this new source of data to serve every customer, particularly those that are financially excluded, so that's pretty our mission.

Peter: Okay. So, then what is the kind of data that you're actually.....can you just maybe dig into that a little bit about what data you use, specifically, that is different from the main credit bureaus.

Freddy: Yeah. So, a traditional credit bureau is anyone, which one you look at, will use effectively your past boring performance as the primary indicator of your credit risk. So, if you never borrowed money before then you don't really have a credit score. It's not like you sort of have it to lose, you have to gain it, in the first place, by taking out credit cards, things like that, so if you never used a credit card, or a loan then you maybe don't have a credit history.

There are also different examples where people having impaired, or non-existing credit cards where they really should be able to access credit. What we do instead of looking at that are source of input, we look at open banking data, or PSD2 data, so what that is, basically, a new mechanism that gives consumers the ability to securely share data with a third party such as

ourselves through an API, so a programmatic interface. We get, effectively, the bank transaction data for over an extended period of time, so typically two years, and we use that data to score the consumer and provide a decision and that score is derived from historic information we've seen from other customers.

So, our model looks at, essentially, the bank transaction data, or open banking data of customers and then how these customers went on to behave. So, did they repay back their loan, or now, looks at those data points at an enormous scale and then using that inference that we've built up, we can then predict for a new customer that's sharing their data with us whether they're going to repay, and it means that we're scoring them based on their real financial behavior, and not just necessarily their past credit performances in a much more forward looking prediction.

Peter: Right, got it. So then, did you start the company.....I mean, obviously, open banking has been in place now in the UK for a couple of years, did you start the company knowing that open banking was coming and you thought this would be a good way to kind of have these data available to you?

Freddy: Yes, we did. So, open banking is a very seed of an idea that was actually in existence before what we now term to be open banking limited in the regulatory framework. So, that was a project by the Open Data Institute, the ODI, that was partly sponsored by Barclays, I believe, that was looking at this idea that data could be open and what about banking data being part of that.

At the same time, in fact, a little bit before the European regulator was introducing Payment Services Directive 2 or PSD2 which was a sort of much more high level overview directive that looked over some parts of the ecosystem, but within that was this scope that banks should be able to provide access to these data through some interface.

And so, it was on the horizon, but it wasn't until the CMA ordered that, the Competition Markets Authority here in the UK, we already put the accelerator in the development of these API's and that, as you say, in the last couple of years has seen those come to fruition.

Peter: Right, right, okay. So then, I'll just step back a second and tell us how it works, I mean, do you operate in the same way that a normal, you know, credit bureau, credit reporting agency would operate and maybe you could explain the business model and how it works for both the business that you're serving and then the individuals.

Freddy: Definitely. So, we're regulated in the same way as the traditional credit reference agency, but the model we've adapted is very different. So, what would happen ordinarily is you would apply maybe on the website of a lender and they would take your identifying attributes, so your name, address, date of birth and they would search in the background for a matching record with one of the three major credit reference agencies, or at least three major credit reference agencies in the UK that would return whatever information that they have on you which might be nothing.

With our system, the customer is presented a consent window in the application journey so a little bit like buying something with PayPal, or using a Stripe type check. We embed our process into the loan application journey and the consumer is given the option to use open banking to fulfill that application.

The way that works is, say you bank with Barclays Bank, you would say, okay, I click on Barclays and then we take you through a normal Barclays online banking log-in process, or if you're on your mobile, it's the mobile app authentication and past that process will involve using how much data you want to share, over what period of time, and consenting to that. It's very similar to the process that you might run through with Google, or Facebook when you're sharing your data on a third party service.

Once we've got that data, we process that and build our report which is then provided to the lender through API, or basically through a programmatic connection. The consumer can then, if they so desire, they can sever that linking preventing some access in that data and they can do that from our interface, or they can do that from their own bank, so it provides a much higher level of transparency for the consumer in a process that they're normally, in some cases, completely oblivious to, or at best they don't really understand how it works.

Peter: Okay. So then, I'm curious about how you interface with the existing credit reference agencies because, I imagine, when a person is going through a loan application this lender is also going to be pinging the traditional agencies. Is it sort of a .....does it work where if there's no record there, they go to Credit Kudos and go through a system there, how does it interface? I imagine it varies from lender to lender. What's the typical way that it works?

Freddy: It does vary. Most lenders will use more than one credit reference agency anyway, irrespective of whether they use our product and they will combine the different sources to come to their ultimate decision. And so, we're no different in that sense. We'll provide an input to their decision and then they have their basic score card which is this set of business rules that ultimately comes up to the yes, or no decision. We are better at serving customers that are typically missed by credit bureaus, so you're right there, sort of a waterfall there, you know, bureau number one, or bureau number two doesn't give a response, we can provide an answer where they're unable to.

But also, for an increasing number of customers that they use us to fulfill their regulatory obligations to understand the affordability of the credit. So, because we're looking at live income and expenditure data for that individual, we can much better understand their ability to repay which is, of course, crucial in the way that the overall decision is made and it's something that our regulators at the FCA has put a lot of onus on firms to better understand.

Historically, they were able to sort of use statistical data to try and understand it.....sort of a high level, whether someone could afford something, we're now seeing the regulator push more and more for those lenders to use actual validated data, short of getting the customer to kind of send in pay slips and bank statements because, obviously, a huge source of friction and pain for both

parties. We can automate that and provide that solution for the lender, so it tends to be across the board with all types of customers for various different use cases and different profiles.

Peter: Right, right, okay. So, I know you've been coming to our LendIt events for a while now, so are you mainly focused on the alternative lending space? Do you have traditional lenders you're working with? Maybe give us a sense of the cross section of lenders that you work with today.

Freddy: Absolutely. So, we work with all types, I mean, as I kind of alluded before, if you can build something that really works for the most hard to reach customer profiles, you genuinely end up with a better outcome for everyone and we've certainly found that. So, we work with anything from small to medium-sized credit unions and alternative community finance providers right through to major credit card vendors, loans providers, motor finance and then up to more prime products and mortgages, secured loans and tier one banks and mainstream banks, and then a little bit as well in product advice and debt advice and things like that.

So, the whole spectrum of the market which is hugely encouraging for us because, you know, we're effectively the fourth credit bureau in the UK and we're really providing different products than what's been on the market, historically.

Peter: Sure. So, I'm curious about the consumers, I mean, because there's been a lot of talk about open banking in the UK and hasn't had the level of traction, I think, that people were hoping. Do you find consumers that are being presented with your consent journey.....is there much reluctance there, do you find people are now much more open to open banking, shall we say.

Freddy: Definitely. There's this kind of .....I think it's a little bit of misinformation because I think from a perspective of a lot of the sort of skeptics in the industry, they were expecting this moment where everyone kind of talks about open banking and it's really cool and everyone can't wait to use it. I don't think that moment is going to happen in the same way that no one talks about faster payment, or batch payments, you know, there are a number of users, but it's not what people are talking about, their services, what's interesting, the functionality of it, the how.

We've seen for the consumer groups that we're looking at really good conversion rates, so anything from sort of 80/90%, the top end of people consenting to share date. We, actually, recently conducted some reschedule on our partners quality credit services, we looked at consumers' attitude to adapting open banking in the context of receiving credit and we found that in the 18 to 35 sector, around 75% of those that were asked were willing to share data.

It really comes down to value exchange that you give them, so if you can save the customer using this process, we'll be able to respond to your application in seconds rather than days, or we'll be able to give you a higher likelihood of being accepted, or a lower interest rate than those types of value exchange. Consumers are really willing to share data and ultimately, this is data that in many sense is already being shared and this is just giving them control over that sharing which is, I think, empowering.

Peter: Yeah, that makes sense, that makes sense. So then, I'm curious about the....like how are you taking these data and maybe you could tell us, are you using Artificial Intelligence, machine learning in this, I mean, how you're approaching, how you're sort of building your models that provide a score back to the lenders. What's your approach to the data analytics there?

Freddy: Yeah. So, I'm always wary talking about AI and machine learning because they come.... kind of buzz words that are often misplaced. I think the thing that's really interesting with any type of lending decision, regardless of what data is going into it, is it's a problem of patent recognition, right. What do I know from the customers I have seen before that typically meant that they went on to repay, or not repay.

And so, there's some really simple things like knowing that, you know, if a customer defaulted a lot of times before, it's probably likely that they might do that again and that is a really simple sort of knockout rule, but there are more nuanced complex behaviors that can be detected in much larger data sets that are also highly correlated to outcome. And the way that we get to those behaviors and understand them is using supervised machine learning, machine learning meaning pattern recognition and supervised meaning that we know what the outcome is that we want to get to, so the outcome for us is should we lend, yes or no.

The way we train those models is based on historical data so that bit I alluded to before is having a database that essentially says, this was Customer A's bank transaction data before the point that they applied for the loan and then this is how they went on to repay that loan. Did they repay on time, did they repay the full amount, so on and so forth and by replicating those sort of layers of data at scale, you can build a model that basically given any new input like bank transaction data can sort of compare that to the universe of other customers that have previously been through that process and then use that to predict whether that customer falls into the yes, or no in terms of whether they're going to repay.

So that in kind of really simple terms is how we look at it and I guess we're doing it on thousands of dimensions because we have thousands of transactions for each customer. But, if we were to do it on....if we take a really simple example on two dimensions, we might have, and this is one from my university days so apologies if it sounds kind of silly, but you might have, you know, and X and Y axis with height and weight of a group of people and your problem might be to understand whether they play rugby, or a ballet dancer and you're typically going to end up with loads of process in the top left and bottom right and then your machine learning process is basically just drawing a circle around each of those and knowing that when you get a new observation which group it fits into.

So, if you can imagine that taking place on a thousand dimensions, or more, that's essentially the process that we're applying and it's by having good training data that you get good accuracy.

Peter: Right, because, I imagine, the data is being.....you're learning about all the transactions, right, so you're sort of, you know, taking in the bank account data and being able to sort of....I

imagine, you've got...every single person's going to have dozens, or possibly hundreds of data points there by looking at that data. So, I imagine....I mean, once you get the model going well, you can get a very accurate model because each person has such rich data when you're looking at their transaction data, right?

Freddy: Absolutely, absolutely. I mean, it's a much stronger signal. You know, what we are comparing to is quite a blunt instrument when we think about traditional credit data because it's either there, or it's not and you don't even know if someone's bad, you don't know if they're good. If you see what I mean, we only really record the customers that don't repay, or they do repay, but we don't record, you know, setting money aside and saving, we don't record their financial health, we don't record their financial trajectory and money management capability over each month is good, or their ability to withstand some kind of financial shock is there.

All of those things are captured by the data that we're looking at and even more so and what we're able to do is predict things like the liquidity of a bank account so the likelihood of that account is going to stay in a positive balance over a certain period of time and that would capture up to the second the behavior of that customer.

Whereas, someone who's maybe just had a sudden run of negative transactions would normally not have that data reflected on a traditional credit file, we can immediately see that and show that and capture that behavior and similarly on the output angle, we can show that a customer who maybe has poor perceived traditional credit history is actually on an upward trajectory, they're making sensible financial decisions that are pushing them up.

We can also demonstrate that ability, so for some of our clients we've been able to find this kind of false negatives, so people they were rejecting, they could have been lending to and allow them to lend to those. For them, it's a massive financial gain in terms of their revenue and their ability to lend more accurately.

Peter: Sure, that makes sense. So, which brings me to another point that I just thought of. In the US, cash flow data, bank account data is really becoming a must have for all the lenders. I mean, some of the traditional credit bureaus are creating products that will allow this kind of thing. I'm curious about....in the UK, because, I mean, your focus is on the underserved, but to me it sort of begs the question, why is it just that, why isn't it for the already well served because these information, bank account data, as you just pointed out, is richer than just getting the borrower's previous credit data that is there. You say in your website, better credit for all, but then you kind of talk about the underserved, isn't this really a bigger play than that?

Freddy: Absolutely, yeah. I apologize if I didn't make that clear. I think for us, solving the problem for the underserved allows us to be better across the board. So, when I think about it, and I sort of imagine a spectrum of risk from super prime to sub-prime, there are many, you'll find it there...pockets of risk across that spectrum that are currently mis-served and that can be right at the top as it can be at the bottom and using our data to enrich those decisions is valuable at all these points.

You know, we do a lot of work in mortgage lending, for example, where understanding the financial ability and affordability of the customers is a huge pain point and it's definitely not an underserved segment, but it's still an area which there's massive improvement to be made on the risk capability of those decisions. So, definitely, we're providing for all, sort of focused view on the underserved is that if we can get it right, what we would argue is that hardest segment to reach then we can get it right for everyone.

Peter: Right, yeah, that makes sense. Okay so, last year at LendIt Fintech Europe, you introduced a new credit score, or new liquidity score, why don't you explain a little bit about that and how that's different.

Freddy: Absolutely. So, liquidity is effectively the availability of funds in an account, or a number of accounts, for a consumer in any period of time and it's one of the hardest things to understand from traditional credit reference agency data. So, the moment some of the banks share sort of high level balance data with each of the credit bureaus and that data effectively shows that kind of monthly closing balance, but it doesn't show how that balance was reached over the month and how that data sort of trends, and so the most simple approximation....you can understand if you were to sort of look at your own P&L over a month, you'd see a line going from payday down to the end of the month, hopefully, and there'd be some kind of trajectory there.

What we're doing with the liquidity score over a month, 60 days/two months, three months is to basically predict where that direction of travel is going so that we can understand in a future looking sense where the customer's likely to be and whether they're likely to stay positive, and that's, obviously, hugely important to understand whether a customer can afford credit. So, rather than just taking a static snapshot of the customer and saying, well, they've got money in their account, so they afford this loan, we're actually going to look at that and see.

Well, maybe they've got money in their account, but we know that there's a recurring bill that's about to go out, so that won't be there for much longer and if you're going to lend them X amount, their repayment's going to be Y, therefore, they're going to need this much. So, can they afford that and is it going to fit, so it's a much, much sort of higher fidelity measure of their affordability and it's a predictive forward looking measure.

Peter: Okay, that sounds cool, that's excellent. So, another thing I saw and this was announced a couple of months ago, late last year, you had a … I saw this thing about ClearScore which provides, you know, free credit scores, I think, to....maybe you can tell me exactly what they do, but they've partnered with you guys to serve underserved borrowers. So, tell us a little bit about that relationship.

Freddy: Yes. In the UK, a vast amount of credit is intermediated in some ways so people will typically go on price comparison services, or they'll search through different products to find the right solutions for them. ClearScore is one of the largest businesses in that space, they have 8 million customers in the UK, I believe, and they provide free access to the consumers' credit score and so they're in some snap fact credit score.

One of the challenges they have is, obviously, for a lot of the customer profiles we just talked about, they can't necessarily match the consumers to the right products, or even be able to find the right products for the individual and also when they're sort of providing recommendations and coaching and allowing to understand how to improve their financial situation. A lot of these recommendations, if they're based on traditional credit data, aren't as bespoke, or prescribed as perhaps they could be.

And so, our collaboration with ClearScore is aiming to tackle those challenges, so first and foremost, can we embed this new source of data into the decision making process for the lenders that work with ClearScore so ClearScore is the broker, can we help them use that information to make more prescribed offers to their respective customers, and can we also use that information to help those customers coach, or understand their financial situation and move towards better financial resilience and better financial outcomes. So, it's hugely exciting because it's one of the largest sort of credit marketplaces in the UK.

Peter: Right, right, okay. So then, I'm wondering about.....you know, when you're going out and trying to sell this to lenders, I imagine, you're obviously a lot smaller than the major credit bureaus, you're still a startup, I guess, but is the biggest sort of thing that you're trying to overcome is the fact that it's a lot of work. I just want to just get a sense....to me, as you're talking, I mean, this is a no brainer, I feel like for every lender to have, but, I take it, you don't have every lender in the UK yet, so what is sort of the friction there that stops people form jumping on board?

Freddy: We're certainly working on it. I think the challenge there is quite interesting because, you're right, it is a no brainer for most, and we certainly get that response with almost every lender we speak to. The challenges are in terms of how you embed what is a completely new data source to many, how you get that data embedded into the existing decision process in a way that meets their regulatory obligations, meets their compliance obligations in the way that they're comfortable with and, obviously, with open banking data because it's hinged on consumer consent.

There's no sort of big historic data set that lenders have access to that they can kind of run some retrospective analysis on in the way that they would with traditional credit data before implementing some policy changes. And so, we have to invent a new process to actually integrate these data into a lending decision and get those benefits we've been talking to and that's really where our business comes in and how we help the companies we work with.

So, we already have huge amount of expertise and huge amount of data that allows us to provide this modeling service, allows these scoring services sort of out of the box, but then we also have a huge amount of expertise in how integrate these into existing models, how we provide that into a lending decision.

We also have lending management software that allows people to interpret these data into cases and things like that. So, the challenge is kind of how you.....and I guess this isn't unique to us, this is kind of universal with financial services, how you sort of get through the inertia barrier and get these stuff integrated and start to kind of.....as many venture capitalists say, sort of take a wedge and then expand it. That's really the approach we've taken, we've seen many of our customers in terms of where they were a year ago over a thousand percent growth of customers they're putting through open banking as a source of risk.

Peter: Right, right, got it, okay. So then, did you find.....I imagine it's easier, like the fintech lenders are a bit more nimble, the peer-to-peer lenders, the online lenders, they're a bit more nimble, I imagine, than traditional banks. Are they an easier sell than, I imagine, going to a traditional bank?

Freddy: Yeah, I think that's fair to say. I mean, some of our earliest clients went alternative finance and peer-to-peer lending, but, increasingly over time, that has changed. I think one of the really interesting things to see is because open banking has kind of eroded some of the walled garden of transaction data that banks have been sitting on for all this time, they've all realized that, you know, sitting still is not a strategy and they're trying to understand how they could...you know, if HSBC is having to give these data away, how does it also benefit from the stature and input when one of their competitor's customers are switching to them and that means we're now seeing a tier of banks really move quickly and trying to build out new lending products using this information. We're working with five, or six of the tier one banks in the UK to do that.

Peter: Right, right, okay. We're almost out of time, but a couple of more questions before I go. Do you have any plans to expand beyond the UK. I know, with Brexit now, it's going to be more challenging, I guess, to go over to Continental Europe, what are your expansion plans for international?

Freddy: Yeah, we're definitely doing so. So, we recently launched in the Republic of Ireland, we're working in about five, or six geographies across Europe at the moment on implementation. The challenge there is although PSD2, which is that piece of regulation I mentioned before, is in effect, we're sort of seeing this kind of slow adoption process that arguably we saw kind of a year and a half ago kick off in the UK, and so there is a sort of various degrees of readiness across Europe, but our ultimate goal is to build that level of inter-operability because what's really nice about these data set is it's universal.

So, you know, a customer from France can come to the UK and apply with the same data, will get the same result and there's a proper sort of “passport-ability” around the data. And so, that's definitely something we're eyeing in the next year, year and a half, or so as APIs become market ready.

Peter: Sure. So, what's on tap for this year, what's next for Credit Kudos?

Freddy: So, we're expanding pretty rapidly and so a lot of that is going into engineering. So, we're really seeing a range of new features that allow more decision making to be done in-house using this data set. We were recently awarded a number of prize grants from the Treasury in the UK and the grant body, Nesta, and they were looking at how new data, or new technology can be used to deliver better decision making for alternative finance providers. Also, through that work, we've built a whole range of new different scoring capabilities and new product features that we're rolling out and we're now scaling those up for newer and bigger lending applications.

We're also looking at the intermediary market, so that piece I mentioned in relation to ClearScore earlier, I think, is a massive area of grace in the next year for open banking. And our consumers, generally, like to shop around and if they can use their data on a neural platform to be able to shop around across the maximum amounts of lenders in the market then they're going to get best possible outcomes and I think that's a pretty nice opportunity to flip the model and allow lenders to bid for the consumers' business based on the ability to assess that consumer's holistic data and open banking being a big part of that. So, we're building a lot of pipe work that's going to enable that in the next six months. So, lots of big things plus the expansion, plus new geographies, so we're very busy.

Peter: Interesting. Well, you're certainly doing some great work there, Freddy, I wish you the best of luck and thanks for coming on the show.

Freddy: Thank you for having me.

Peter: Okay, see you.

You know, sometimes I'm a little bit envious of the UK for their open banking initiatives they have where banks have been made to connect, to make available their data through APIs, through third parties. We certainly don't have that here, but we are sieving some of these angles, anyway, here in the US. I think the power of cash flow underwriting, the power of banking data, I think, has been proven here and I would say, it's now the norm and I think it's going to become that way in the UK as well because it just simply is a much more accurate way, as Freddy said, to underwrite borrowers.

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

Today’s episode was 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 City. 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 to register.

(closing music)