



Pete Christiansen: Good morning and welcome to Citi FinTech 11, day three. This session we're going to be diving into AI in machine learning, as it relates to lending technology, and I'm really pleased to be hosting Pagaya Technologies. We have Gal Krubiner, CEO and co-founder, as well as Michael Kurlander, CFO of Pagaya.

Pete Christiansen: Gentlemen, welcome to Citi FinTech 11. Great to have you.

Pete Christiansen: Gal, maybe why don't we kick off for those who are a bit less familiar with Pagaya, high level overview of the company, perhaps, give us a sense of what's been going on the last couple of months. That'd be great.

Gal Krubiner: Definitely. So, Pete, thank you so much for having us today. We're definitely excited to share our story with the great team at Citi and the audience around us. So thank you so much for the opportunity. Pagaya started in 2016, as a founder-led company by myself, Avital Pardo, and Yahav Yulzari, three founders from Israel, which today we have 500 employees across two locations, both in Israel, which is the tech headquarters, and in the U.S., which is the business headquarters. We recently announced going to be public company via spec, the merger with EJFA of eight and a half billion dollar valuation, which we are very excited about taking the Pagaya capabilities to the next level and to the financial industry in the U.S.

Gal Krubiner: When you think about Pagaya, I think the way to describe it is really very strong AI capabilities that we thought and asked ourselves how we're making that available for the broader financial services. And what we thought, and the way we went about it is actually taking that very strong capabilities and packing that in a network, which we call the network AI to enable every lender and every bank in the U.S. to become a very sophisticated AI lender to be able to increase its ability to provide credit to their customers and to their loyal customers that are very loyal to their brand.

Gal Krubiner: So we have managed to do that in many markets, starting from the person alone, and then moving to the OTA loans, the POS market credit card, and really doing that across markets in order to enable our partners, to be able to provide higher amount of credit to their consumers.

Gal Krubiner: And when we think about it, we feel that this is the definition of FinTech 2.0. While FinTech 1.0 was super successful and still successful today in being able to

take the relationship between the consumer to the lender to a different place, between the financial needs of the consumer to the way lenders are interacting like that, and we are enabling that backbone of the revolution and trying to bring more to both the partner and the consumer.

Pete Christiansen: Gotcha. That's helpful, but maybe the level set a bit. It sounds like you're helping to help solve a lot of pain points with your underlying clients and their existing technology when it comes to credit decisioning, so on and so forth, but what do you see as Pagaya's mission? What is the problem that you're looking to solve more broadly?

Gal Krubiner: Sure. So, the problem we are trying to solve is really to be able to ask the question, what was the things that created the lagging capabilities and the ability for credit worthy to be able to consume the financial services that they would like. And what we figured as a shell before about the differentiation between FinTech 1.0 to 2.0, the many great, amazing companies, such as [SoFi] solved very well the ability to be able to provide that interaction and the ability to take that credit throughout the internet. So that was really a big revolution that happened in the last 10 years. And although started last year, still continuing to happen today, and you see that in many places. You see that in a firm of the world, you see that in upstart, there's so many great companies that completely renovated the way you can get access to credit.

Gal Krubiner: Part of the thing that still stayed behind, which were not going through the same level of revolution was the underwriting systems. It was the legacy systems that all these different lenders in the U.S. are using in order to provide that credit. Still, as you can imagine, by the banks and others stayed something that was designed in the seventies, eighties and even a bit later. And we thought that when we are solving that backbone of the ability to assess pricing of risk and to be able to proliferate it and not just keeping it for ourself, but being able to enable every bank to be able to do that when it's looking on its own customers, the revolution is going to be the magnitude of that. It's not going just to be the interaction that we are having with the consumers, but the full interactions of all the consumers with all the lenders. And that's the pain point we're solving. We're solving for that lack of sophistication on the underwriting and legacy systems to be able to take our network, our AI through our network, to be enabling every partner in the ecosystem.

Pete Christiansen: Now that's helpful. I definitely want to dig into your AI capabilities, but first, before we go there, maybe it'd be helpful if you could just explain who is the user? How does this work? Maybe walk me through what the process is for a consumer as they're applying for a loan.

Gal Krubiner: Sure. So let's start to describe the ecosystem per se. So the ecosystem, as we look on it, is always starting from the consumer. The consumer is going to different brands to different lenders, to different service providers, to ask for a credit. Now that lenders are actually connected to Pagaya with a simple API in

the back. And when every consumer is coming to consume their credit, we are getting the application through that API with all the data of that person. And we have the ability to crack it and to be able to exactly precisely be able to predict who should get how much credit and to be able to be more inclusive, more welcoming, to more set of populations that the back in the days without it underwriting system was not being able to be done.

Gal Krubiner: So we are taking that consumer. We are providing him that financing, and the backbone of that, we are delivering that financial product to an institutional client. This institutional client that is looking to deploy the actual capital is enjoying from the ability to deploy very big sums of capital. And in the same time, having that very seamlessly access to the consumer while the consumers are staying customers of the different lender. So we created a completely seamless experience that's solving for two sides, both for the institutional clients, but most importantly, for the consumers to be able to increase or to meet their demand while nothing is changing. The consumer is staying in the final world. The institutional client is staying in his financial world, but all of that, through technology, through the AI network, is creating a seamless experience to be able to do that. And as you can imagine that create us agnostic to market because for us, the ability to do the same in person alone in [inaudible] alone, in POS, et cetera, is almost the same. So the same knowledge and capabilities are being developed across, and that's one of the reasons why Pagaya saw such a tremendous amount of growth in the last few years and potentially in the future.

Pete Christiansen: That certainly makes a lot of sense. It sounds like you're introducing our lot of workflow, a lot of automation kind of functionality to your banking clients, asset managers, so on and so forth. But I want to get a little bit more into how Pagaya thinks about it's areas where it differentiates. I would assume that's more on the credit decisioning side of things. Maybe it would be helpful to explain to investors, is this a FICO plus model? Is this your own alternative variables? What really drives Pagaya's competitive moat here when it comes to AI and credit decision in generally?

Gal Krubiner: Yes. Yes. That's a great question. The answer in these areas are coming into two parts. The first part is the data, and the second part is the human capital. These are the two different, very big differentiator that Pagaya has in order to be able to deliver what is looking to do in the world.

Gal Krubiner: So if you think about it, Pagaya is not an engineer-based organization. We have more researchers and data scientists and AI specialists than almost most of the companies in the world. We have over 170 people that are working in R&D and most of them are focusing on AI and creation of modeling.

Gal Krubiner: So the combination of that unique talent that we have both in U.S. and in Israel and the ability to observe endless amount of data from different channels, from different connectivity with the partners is enabling us to take that ability to the next level, and to be able to create a better modeling, what you describe as FICO

plus, I will call it the FICO plus plus plus. So it's a completely different set of discussion.

Gal Krubiner: Think about the fact that you can have millions of millions of different samples to be able to determine the risk of a person rather than few dozens of them. So we are taking really into consideration terabytes of terabytes of data when our models is running through that. And obviously that is being run to our business model of the ability to connect all of them and to be able to provide that credit and to take a fee in the middle as the orchestrator of all of that.

Pete Christiansen: Hmm. Interesting. Well maybe we can take the next question. We can go into how the AI infrastructure is built and that perfectly makes sense that the data and the human capital side of things, maybe we could talk a little bit about what kind of data are you using? Is this consumer-provided data? Are you getting it from third parties? Is it real time to what's giving in the market, the capital markets. And then on the human capital side, from the infrastructure point of view, I'd imagine there's so many different modeling techniques, training data that needs to be back tested and optimized, not only for credit decisioning, but for optimizing yield, target portfolio, all that stuff. Can you walk us through some of the infrastructure that your AI platform is today and maybe perhaps where you think it's going?

Gal Krubiner: Sure. So, the infrastructure of AI, let's take a step back.

Pete Christiansen: Okay.

Gal Krubiner: Before we're talking about the AI and the ability to run these models, we're talking about the connectivity. The connectivity in the world where we are operated, which are lenders across the U.S., you can imagine there was the less time that connectivity has created many, many years ago. So the first step you need to do is to be able to create a network that is connecting all these lenders and delivering all these information to the LOS system of all the lenders, to the ability to do the reporting, to be able to consume all the data, to provide back all the answers, a lot of build, which is effectively creating an API of that ability to transfer the data between the different lenders and ours. And we designed it as one expect to be designed in 2021, which is the state of the art, simple to integrate, easy to access, real time decision modeling throughout the different lenders, and we're talking about many of them.

Gal Krubiner: And when you have that basis of very strong infrastructure that is providing in real time the full ability to monitor all the pricing, all the activations, so many different power models, you can take that to the next level and develop around it the infrastructure for the modeling, for the AI, for asking the question of which type of model you need to do? Which type of model you need to create a technique for? What are the back testing board inside? What are the things you to production?

Gal Krubiner: There are many worlds that are getting opened when you are taking the real world and you digitalized it. So I would say that the AI infrastructure is built from two parts. The first one is the digitalization of the world taking many different types of transactions and moving them to the digital world, which back in the days were in papers.

Pete Christiansen: Right.

Gal Krubiner: And the other piece is now that we have all these infrastructure and the data is starting to be collected and the mode is so big, how do you take all of that, which is the credit bureau and the understanding of credit, to be able to assess and to create a better models out of it.

Gal Krubiner: And in order to answer your question of the future, I think most of it is that we are going to be moved to bigger part of the ecosystem and the economy to be able to be digitalized, because that's clearly the way to unlock the AI power. The willingness that we see of banks, and we see many banks are calling us and having a discussion with us, to move to the next level of LOS system, to connect that next level of technology, is the driver of the ability to create these unique capabilities and advantage both for the lenders, the consumers and us. So I would assume more and more of that will happen because people start to see the value.

Pete Christiansen: So who are the originators that you're targeting to partner with? What type of partners are you targeting? And it sounds like this operating system that you're offering, it's also, I guess, customizable for the end user itself. Maybe you could discuss how flexible it is for the originator in their own credit decisioning practices.

Gal Krubiner: Sure. So from a partner's perspective, we are really working with almost all of them. So it can be auto lenders, indirect auto lenders. It can be refinancing lenders. It can be personal loans, which are over the web. It can be hard money lending. There are many different types, can be banks, small banks, medium size bank, big banks. So you have a cross different ways, different partners to work with. And as you said, is very personalized to the specific situation of the different lenders, where the interesting part is how you create a seamless experience for them. And most of the integration is to make sure nothing on their flow is going to change.

Gal Krubiner: So they're doing their same practices, the same policies, the same systems. Well, we're just injecting the AI. Think about that as the Intel chips in the Dell computers. So we are bringing the Intel chips to the different lenders in the U.S.-

Pete Christiansen: Pagaya inside.

Gal Krubiner: ... 100 percent. And that type of integration is to be personalized, to make sure it's as seamless as possible. So for us, that's the most important piece. And that's what the team is working day in, day out to be able to deliver that unique capability in a seamless way to be able to go after that. So that will be, I guess, the lender descriptions and the connectivity and understanding of the fact that technology is very much about the adaptation and the seamless experience in these big banks, which sometimes takes them time to be able to integrate it.

Pete Christiansen: Now, that's super helpful, very interesting. Maybe my next question I can ask Michael here, obviously the guy sells this operating system, but how does your balance sheet figure into this? And how do you think about adopting versus asset light, maybe a more asset intensive balance sheet, and maybe you can also talk about how pre-funding works.

Michael Kurland...: Sure. Yeah, sure. Happy to, and look, it's a real positive differentiator for us. So first let me just explain what it means to be balance sheet light, which we are. Investors in our vehicles entrust us with their capital upfront. And that means that's before any loans are sourced. That is a really important factor that allows us to use our AI technology to select those select loans without having to do the traditional model of warehousing and putting them on our balance sheet.

Michael Kurland...: And as Gal described, the process of loan selection is 100% automated. And so that allows for a very efficient and balance sheet light model, from a Pagaya perspective. And ultimately it really, it speaks to the flywheel that we've created. The strength of our AI drives that investor demand and that trust in us to entrust with their capital to select loans. And then by doing that, that ultimately allows us to grow our network with our partners without utilizing the Pagaya balance sheet. And that's what we mean by a balance sheet light model.

Pete Christiansen: Right. So I just want to understand this a bit more. So your third party lending network submits indications, for allocation, I guess, for a certain amount of capital, the AI system with their target yields, risk loss, all that, then the AI system, takes that into fact to start issuing in during the approval process, they use those inputs. Is that how we should think about it?

Michael Kurland...: Exactly. We're matching ultimately the lending partner with the asset investor. And we're doing that utilizing the AI technology of Pagaya. And the capital, when we say prefunded, what we mean by that as the capital is provided upfront. So we start with cash originally, and then we used that to deploy loans, and that allows that seamless transaction, that a hundred percent automated transaction, to occur as the loans are originated.

Pete Christiansen: That's super helpful. Thank you for that added info. Michael, can we also talk about the growth and the trajectory of the business? Obviously we're in a very benign environment for consumer lending, which is certainly rising tides lifting all boats kind of scenario. How should we think about Pagaya's growth trajectory

within that framework, and maybe I'll take it to the next level, little off script here, but how would Pagaya's model, I think stand up, you think, in a more normalized credit environment?

Michael Kurland...: Sure. So I'll address both parts. I mean, first off, just to talk about our growth, the key to our growth is our network volume. That is our driving indicator, the amount of volume that's coming through the Pagaya network. And it's been really exciting to watch our growth over the last couple of years. We doubled our network volume last year. This year we're on pace to triple. So our growth is actually accelerating and that translates as of the second quarter to an annualized network volume of just under \$5 billion, \$4.7 billion across our products.

Michael Kurland...: Ultimately that network growth drives revenues and our revenues are regrowing at a similar pace. We annualized through second quarter at \$381 million for 2021. And similarly that's up over 300% this year.

Michael Kurland...: Now through that we've really benefited from product diversification. So as Gal described, we're in multiple different products and continuing to grow our product base, and so we benefit from diversification. And to me, the exciting part is we're really just getting started. Our ability to scale our technology is enabling us to rapidly grow new partners and also enter into new markets.

Michael Kurland...: So our growth has been significant, but we really feel like the future is very bright in terms of growth trajectory ahead of us.

Michael Kurland...: Now, in terms of your second question, different environments, our balance sheet light and pre-funding model is actually very strong in the sense of we are able to operate through multiple different environments. Think of us like an index in that we are really an index on a very, very large total adjustable market. And so as those markets grow and shrink, we are actually set up very well as an index to be able to navigate through ups and downs because of the strength of our AI, the relative performance of the AI, and ultimately the strength of our network, both on the partner side, as well as on the investor side.

Pete Christiansen: I would imagine as you're adding more of these banking partners, which also sounds like that's a huge component of the growth, not just the underlying macro environment, but also yourself adding partners, but you're creating a bit of a network effect. I got to use Pagaya because everyone's using Pagaya.

Michael Kurland...: That's exactly right.

Pete Christiansen: Okay. You're seeing that dynamic.

Michael Kurland...: That's exactly right.

Pete Christiansen: That's interesting. Great.

Gal Krubiner: I just want to call out that we need to separate the gross opportunity that Mike spoke about to the growth that we have already seen, which is like, the banks is the next frontier for us.

Pete Christiansen: Oh, okay. Well, you know, then I think it makes sense to hit into this area Gal. Maybe, how do you think about the business next two years, maybe next five years as well? What's the strategic roadmap? How do you think about scaling Pagaya further?

Gal Krubiner: And I think that's definitely coming to the point I just made, which is what we are starting to see, and we believe that is going to become the common ground, is for more traditional player that are dominated in the market to be willing and looking to adopt new technologies.

Gal Krubiner: So if you ask me in five years, most of the banks in the U.S. are going to utilize that capabilities and technologies to be able to do that. And what is obvious today is that the collaboration between FinTech and banks are real. They are really looking to leverage the capabilities the tech company has in order to deliver their mission, which is to serve the customer base at the very best.

Gal Krubiner: So if you think about how we going to look, what the world is going to look like in five years, it's going to be much more collaborated between tech companies or FinTech companies and traditional strong, big banks to be able to deliver the mission of the banks to be able to serve the immense amount of consumers that they have. And that's what I call the first trajectory of growth for Pagaya in the next few years.

Gal Krubiner: The second piece is the expansion of the different markets. So if you think about it, there's so many markets and areas. Well, if you had the utilization of the markets into a one centralized place, through a network of AI, the ability to make a better decisioning models, the ability to take that to the next level, is going to bring efficiency to the world that we have never experienced before. We saw that in credit, person alone is by far the most dominant place that it happened. And we see now the migration into different other financial industries, but the actual truth is that it's not going to stop only in financial industries. It's going to be in every place where there are many transactions like insurance, like housing. So many places that eventually Pagaya will be able to help the consumer through different ways, through different partners, to be able to get to a better outcomes for everyone.

Gal Krubiner: So that's for me, the next five years of the business that Pagaya is going to have.

Pete Christiansen: That sounds super interesting because I know that the U.S. Congress is starting to, the joint finance committee is certainly looking at AI. And the main argument is that it's really improving inclusion generally across the financial system. And these FinTechs are delivering upon that versus traditional scoring models,

traditional loan distribution models, and it's really coming together, marketplace and decisioning all in one. You said you're partnering a lot with traditional banks and you're enabling them, do you see opportunities for this industry to consolidate at all?

Gal Krubiner: I think what we have consolidation to some extent, but I think more interesting, we are going to have the ability for different type of banks to be able to approach the best technologies that are out there. Think about the [inaudible] levels of the world, which is part of SoFi, that being able to deliver that technology across, think about Pagaya AI enabling parts, there are so many best in class technologies that are going to be the day to day part of banking across the world.

Pete Christiansen: So you're leveling the playing field and you know you're competitive bank if you've got Pagaya inside.

Gal Krubiner: Yeah.

Pete Christiansen: That super helpful. How should we think about expansion into other verticals? I mean you're pretty wide so far, unsecured personal loans, auto, point of sale. How do you think about taking your technology to other credit categories or even different areas of the credit spectrum in terms of prime versus non prime? How do you think about product extension and market expansion for [crosstalk]?

Gal Krubiner: I think that's one of the things that Pagaya has the most amount of knowledge in, incubating your products, delivering on them. Only five years, we manage to get into some level of scale into three markets and few others in a bit lower level of scale.

Gal Krubiner: I think the big question is going to be the ability to continue to do that innovation throughout the different yields. And I have a very strong confident that our ability to spot opportunities and to be able to deliver the same repeatable process of research learning and then delivering and production is going to be continued in the next few years.

Gal Krubiner: And for us, there are really endless amount of markets. We can go after a mortgage and others. So it's really a question of execution and focus and what are the next things we're going to do after. And we have a lot on the plate to deliver, and we are very excited about it.

Pete Christiansen: Oh, that's great. Well, this was a super interesting conversation. Really excited to hear how the Pagaya story evolves from here. We'll surely be paying attention, but thank you so much to both you gentlemen, Gal Krubiner, Michael Kurlander, Pagaya Technologies. Thank you so much [crosstalk].

Michael Kurland...: Thank you.

Pete Christiansen: Thank you guys.