**FINTECH ONE-ON-ONE PODCAST 383-DIMITRI DADIAMOV**

Welcome to the Fintech One-on-One Podcast, Episode No. 383. This is your host, Peter Renton, Chairman and Co-Founder of Fintech Nexus.

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Before we get started, I want to tell you about a new event we are hosting in London on October 17th and 18th called Merge, it is focused on the intersection of traditional finance and Web3. Regardless of the price of crypto tokens, the technology being developed by Web3 startups has the potential to completely transform the financial system. Our event will be bringing together leaders from Web3, fintech and traditional finance to discuss how this transformation will take place. Find out more and register at fintechnexus.com

**Peter Renton:** Today on the show, I'm delighted to welcome Dimitri Dadiamov, he is the CEO & Co-Founder of Modern Treasury. Now, Modern Treasury is a super interesting company, as they say on their website, they build products that move money so they're really all about helping companies process payments. Companies receive payments through ACH, via check, via wire and Modern Treasury helps manage that whole process.

They've become quite a force in the fintech space really gathering some big name clients along the way. We talk about what exactly they're trying to do, how it works. Dimitri takes us through a case study which was really interesting, we talk about, you know, real-time payments which is obviously in our near future, we talk about fraud prevention, their scale and much more. It was a fascinating interview, hope you enjoy the show.

Welcome to the podcast, Dimitri!

**Dimitri Dadiamov:** Thank you for having me.

**Peter:** My pleasure. So, let's get started by giving the listeners a little bit of background about yourself. You've spent quite a bit of time in fintech, why don't you give us some of the highlights of your career to date before you started Modern Treasury.

**Dimitri:** I moved from Seattle to the Bay Area for college and got involved with a number of different startups and through a journey through other sectors ended up working for Foundation Capital which was a big investor in marketplace lending and other fintech companies at that time and that led me to join LendingHome which is a mortgage company that ….I was a Product Manager running the investor side and met my Co-Founders at Modern Treasury there, they were both at LendingHome with me and

the experiences that we had there led us into some of the insights, if you will, that brought us into Modern Treasury.

**Peter:** Okay. And so, let's maybe talk about that and go into what, LendingHome is called Kiavi now, I think we should make everybody aware of that, but what was it at LendingHome and maybe just talk through the genesis of the founding story of Modern Treasury.

**Dimitri:** Going back to 2015/2016, we were building a number of different new products inside of LendingHome, now known as Kiavi as you mentioned, and I was in-charge of a product that was basically the retail investing flow for individuals to come in and buy into various loans. We jokingly kind of called it "ugly Airbnb" because it was sort of like Airbnb and you showed up and you create an account and you saw a lot of properties that had water damage or something, needed a paint job or something and that was kind of the value you were investing in is improving that housing stock for the US. Underneath it all, one of the more challenging aspects technically was the money movement component.

So, we had an integration with a bank and we had to initiate payments based on activities that were happening on the website, whether that was a deposit or a withdrawal on the investor side, a wire that was funding a loan, a ACH debit that was collecting the payment every month and then you had to split it all up and send it to the right accounts. As the scale of that started growing to be 50,000/60,000 transactions a month, the operational reconciliation, accounting, customer success, all those types of problems started appearing as well and really the aha moment for Modern Treasury came from my experience at LendingHome really just trying to solve these problems internally and thinking about companies that probably had this problem, at scale already bigger than us at that time.

And when I went to companies such as Uber and Airbnb and Angel List and Gusto and so on, instead of somebody saying oh yeah, this is a product we can use and it will just do this for you, everybody's answer was like "well, come meet our payments engineering team that is 50 or a 100 people and so a little bit of it was like we joke as "rage founding." It was like we just wanted a product and will just do this and we didn't want ourselves to have to think about it, but we certainly didn't want anybody else to think about it. So, we started kind of in our head, we started formulating like what would this product actually look like and what would it do and what are the different avenues for growth forward. In 2018, we started a company, applied to Y Combinator and been kind of at it for the past four years.

**Peter:** Yeah. You know, it's funny because you think it would have been...the product would have already existed given that payments is a pretty mature part of fintech, but obviously it hadn't. I'm curious about, you know, you talk about the 60,000 payments a month though, this is the life blood of the company, you can't screw this up, right, because if you go in and screw this up then the whole company can shut down. So, you started a company, so you got into Y Combinator, how did you get

your first sale, how did you get someone to trust you that you could actually do this as a total startup because it's not something you can just kind of do a little bit, you've got to go all in, right?

**Dimitri:** Let me go back a little bit to a comment you made about that payments is a mature problem and this critical problem exists in every company. I think that it's true, but that said, I think the Internet, for the majority of the Internet's kind of life, the web economy really was messing with industries that are primarily run on credit cards so there's been a lot of infrastructure built for credit cards. If you go back to 2005 or something, there was probably the primary over arching commercial problem with Internet was if you're Netflix, if you're Amazon, if you're Expedia, how do I accept a credit card number over a form over the web and there's a lot of companies, whether it's Braintree or Stripe or Adyen or others that have been built up around solving this problem for what we know as e-commerce today.

But, when LendingHome started in 2013, sending a wire over the Internet was actually not a solved problem because not a lot of people have had to deal with that. And so, that interconnection between.....of course, there's been a lot of sectors of the economy that have been operating on ACH and wired paper checks for decades, but that kind of potent mixture of web innovation and ACH wire check actually had been a primary motivating kind of problem in the 2000s. But in the 2010s, all of a sudden you had companies that started messing with healthcare, messing with real estate, messing with financial services, lending, investments, things like that and so to your question, it is very difficult to convince somebody that a problem as critical as this should be trusted to a startup.

When we went to Y Combinator we did not have the graph that every YC company was trying to get so when you think about the pro typical YC company that come in every week, they grow 10%, they have a graph by the end of 12 weeks so they can show investors and say, look at this, this is up and to the right and we were very consistently at zero the entire time.

**Peter:** Right.

**Dimitri:** Part of it was that we were building like this pretty deep infrastructure thing, but part of it was what you're describing which is it's actually hard to convince somebody to trust you, we would meet companies and everybody would smile and nod and kind of accept that the way they are doing it internally isn't necessarily the best way to do it, isn't necessarily the most elegant, there's still a gulf there of who's going to trust you.

**Peter:** Right.

**Dimitri:** And our first customer as a startup was a friend of mine who I knew from before, Will Young and Sana Benefits, they were starting sort of a healthcare kind of health insurance benefits company and needed this. I think when you're starting a B2B company, I think a lot of times founders and first investors and first employees get a lot of credit for what they've built, but it's really the first customer

that puts you in business and should get all the credit. It's sort of a castle in the air until you have that first customer who's actually putting, in our case, a flow of funds through the product and so we owe a big debt of gratitude to Will.

Sana's still a customer today, they are 300/400 people now, it's been super fun to watch them grow, but it takes a certain set of conditions, whether it's like trust from before, trust because they knew that we had dealt with this problem before, we'd seen it in some scale, you know, they didn't necessarily want to allocate the engineering resources to go build this. They had better things to build, most of our customers had better things to build than this, but that was our first customer, Sana Benefits.

**Peter:** Interesting, interesting. I thought you were going to say LendingHome was your first customer, but that's great. So, anyway, I'd like to sort of get a sense of...maybe you could describe the product and maybe the product suite that you have today and how it's evolved from when you first started.

**Dimitri:** The beginning of our journey was really was around this payment initiation and payment approval and payment reconciliation flow so a company that has to integrate with a bank. We do not step in the flow of funds, we're relying on every customer to go get underwritten and open an account at a bank of their choice and so what we've done is we've built a software product that connects into their bank and then allows them, exposes an API to them to go build the logic of their business on top of it.

So, just to make it a very concrete thing, if you have an investment app and you have a deposit button, behind the deposit button somebody says deposit, there might be an API call to Modern Treasury that then transforms that request, like we're going to pull $1,000 out of this account, sends that to the bank, reconciles it when the payment shows up with a monthly statement or a daily statement for the corporate account. All of a sudden, it has that new credit that appeared, that the money actually arrived, we will reconcile and match it, send a web hook or status notification back and update the app so that app can then, you know, say that the money has arrived go invest it in something. And then from there, that payment product that we have, there's other developer concerns that people have when they have to build one of these products.

One of the common ones is what our Ledgers product addresses which is oh, like now, we're moving a lot of money, how do we keep track of all this and how do we make sure we have the right, like sub-wallet accounting structure or lender or marketplace or there's different versions of this. But Ledger is just really financial accounting database and it allows people to go, not have to build that from scratch, and rely on us for being able to kind of register and look at balances, something like that. And then, the most recent product that we launched is Compliance so another common concern is the bank that a company might open an account at might say, oh, I would love for you to also do all these KYC processes that ensure for me as a bank that we're not transacting with bad actors.

And so, that kicks off a whole lot of other kind of products problem for the company to go build like the KYC flow and to be able to handle/resolve kind of fraud cases and have a case management system to be able to display, like what are the issues that pop up and so we built that as a product as well. So, today our suite is really Payments, Ledgers, and Compliance, there's new things that we're working on. A lot of our product to roadmap comes from problems our customers are seeing that we look at and say, that's pretty general, I don't know that you should be building this from scratch every time and then we turn them into products.

**Peter:** What are the primary verticals? You mentioned a healthcare or benefits company, is it primarily fintech or who are you selling to?

**Dimitri:** It's, by and large, any company that transacts over ACH/wire/check.

**Peter:** That's a lot of companies.

**Dimitri:** It's a lot of companies, it's a lot of segments so it's always a little bit hard for us to answer this question because fundamentally what we're building is truly a sort of infrastructure for running a company well, but you can think about healthcare as a big segment, you can think about real estate as a big segment, financial services, there's a lot of sub-segments within it, you know, lending, investing, invoice factoring, all of that happens over ACH or wire check.

There are other new kind of emerging markets like trucking logistics and neobanking type things and construction and travel and others so it's pretty broad, I mean, at the end of the day the problems that companies come to us with is their product needs to talk to a bank and that's where we come in. So it's a pretty broad set of industries.

**Peter:** Right. Maybe you could just take us through an example here. There was one in your website which I was reading, which I thought it was really interesting. You know, Pipe, is a pretty well known fintech company these days, fast growing they do revenue-based financing for SaaS companies, I'd love to kind of get a sense of this, these are companies that are getting in lots of payments every month, what do you do for them exactly?

**Dimitri:** So, one of my favorite things about Modern Treasury is we get to dive in and help companies build these new businesses and we always get to learn about like new business case studies, like the business school nerd in me just loves that. So, in the case of Pipe, they address the problem, that was a very real problem, so think about a switch from ...in the software world, the company started going into kind of software subscriptions as their way of monetizing. A lot of the costs for building software happens upfront so collecting over a monthly, you know, month-by-month for the 12 or 24 months creates a cash flow problem because you incur all the costs, or a lot of the costs, upfront. And so what Pipe and there's a number of other companies that have built similar products and really come in to

say hey, as a software company, wouldn't you want to collect the full 12 months revenue that somebody has just signed a contract for, and get that on day one.

Pipe has created a marketplace for this revenue-based financing problem where they allow investors to come in and basically underwrite and estimate, in their view, what the future collections are going to be. If you sign a contract for $1,000 a month you may not get $12,000 on day one, you may get $11,000 and for a lot of companies that's a good trade. So, Pipe has created a marketplace, on one side they are handling almost like capital calls and kind of investor flows of funds and distributions and on the other side they are distributing funds to companies.

So, a company comes to Pipe and Pipe builds its own workflow, its own UI for how a company might apply for this and share a contract and make a decision and then they use Modern Treasury's APIs to basically initiate the money movement, so they're saying okay, this company got approved for $10,000, we're going to send $10,000 to them. That's where they create an API call for an ACH credit or wire, they're going to put the meta data of what it is, like Company 123 and this is what, who it has been approved by, and whatever all the meta data they want to be able to capture. We send that to their bank, we reconcile and send them the status updates saying it succeeded or it failed or what have you, there's a dashboard for their customer success team to be able to look up details.

So, the company calls and says hey, the payment is $50 short or the payment didn't arrive or something like that, the service team at Pipe can actually look it up and ascertain what's going on and actually be able to respond to that and then we also push that information into whatever accounting system they want to use. So, once we have reconciled the initiation payments point which is like oh, we want to distribute these funds, there is some journal entry that you really want to be associated with that later on for your accounting, for your month close and so on. So, at the moment in which we reconcile the monthly statements of the bank to that initial API call, we can actually tag that and push that into QuickBooks or NetSuite or something like that.

**Peter:** Interesting. So then, I just want to talk about banks for a second. I mean, I'd love to know how banks sort of view all of this because there's a lot of banks partnering with fintechs these days in various different ways, what are your relationships like with banks? Are banks really a big supporter of what you guys are doing, I could see it would make their lives easier as well.

**Dimitiri:** Yeah. And so I'd like to think that they are big supporters. You know, when we started one of the focus areas for us really was the business model perspective software, this business model where you invest a lot to build the best software out there and then you try to divide it by the largest denominator basically by as many users as you can.

So, if you think about Excel, and I grew up in Redmond, Washington, both my parents were Microsoft so I grew up with the gospel of software at the dinner table, but the thing about a product like Excel, it's

really powerful that you can use it for to do list and you can use it for a really complicated macro. They're not building a product that's only for a certain segment, like they're not building Excel for like just mid-market companies or just healthcare or something like that and so I think that's actually pretty opposite to the business model of a bank, because banks are fundamentally risk management and marketing organizations.

They understand a certain segment, they know how to attract that segment and they underwrite risk to that segment and so almost definitionally, they can't divide their software investment by the largest number of customers. And so I think that there's a very synergistic amount of work that is now happening between us and the banks where we're able to invest in things and then build really products that work for crypto companies and for healthcare and for Fortune 500 and for small startups and those types of companies all might work with different banks and that's okay.

That's actually how banks, they all have their focus kind of areas and so when we work closely with banks, we align them, with like what types of customers they are going after, we try to make sure that we help them serve their customers better, we charge the companies, we don't charge the banks and so from that perspective it's really a customer's choice to work with us, but making it a very smooth and easy experience for things like embedded finance to work on your bank should be I think a priority for every bank.

It really comes down to do you have event logging for your developer web hooks, that's just so far away from what a bank portal is or should be or what they should care about, like you're really getting into these, like much more developer infrastructure concerns. So, when we work with banks, I mean, really there's a couple of areas. One is how do we make sure that we are serving the right set of clients jointly, how are we making sure that we are doing things like referrals back and forth when we see companies that we will serve well together, how do we make sure that from an implementation perspective these companies can go live quickly and can see kind of time to value, like if you, as a financial institution can say hey, we can get you up and running in a matter of days or weeks and not weeks or months. That is a huge value prop for anybody building a new product. Those are some of the conversations that we're having with banks.

**Peter:** Right. I want to talk about Silicon Valley Bank because they're an investor in your company now so clearly they believe in what you guys are doing and you also have like a partnership with them. Can you describe that a little bit?

**Dimitri:** Yeah. Silicon Valley Bank was our very first bank partner so we started when we were in YC, we started working with them back in 2018, not surprisingly. they are kind of the premier bank for startups that, going back to the how hard is this thing to sell? We had a hunch that our first customers were going to be startups so it's going to be harder for us to sell to much larger companies. So, SVB

was the first bank that we went live with Sana back in 2018, from there the relationship kind of grew and got deeper in different directions.

So, from a product perspective, there are certain product integrations that we're working on, basically how do you go live quickly, how do you get your accounts set up with different, you know, reporting or payment rails or things like that. From a go-to-market perspective, we've done joint events, we've done webinars, we've referred clients back and forth, we have some joint landing pages that's all targeted at specific types of companies. Now, latest round, SVB Capital became shareholders as well so we're very close to them.

**Peter:** Right, right. Now, you talked about ACH, and wire, and checks, I want to touch on real-time payments because, you know, it's starting to come and we've got FedNow that's on the horizon and there's other RTP-type offerings. So, I imagine you're agnostic, right, to the type of payment, but I'd love to know kind of what you're doing there.

**Dimitri:** Yeah. We've supported real-time payments, we added support to RTP I believe in 2019, so fairly early, I mean, the first RTP payment ever happened in 2017 so it was kind of a slow rollout to start with. You know, if you take a step back, the US banking system and the US payment system is really large, and really fragmented and pretty antiquated relative to some other countries and so I think there's a lot that we can learn from the experience that other countries have had and we can look at payment rails at QpiAI in India or Pix in Brazil. These are not subtle things, like when they start working they take over, you know, 20/30/40% of all payment volume pretty quickly and it makes sense they would, I mean, they're like why would you pick the thing that takes three days over the like, instant thing if they are identically easy to use.

Now they're not, in the US today, they're not that easy to use, RTP is primarily like credit only, it's not really a debit rail yet, it doesn't have full coverage across all banks so we've got some work to do as kind of the banking community before that's really something that a customer (whether corporate or consumer) can really rely on every transaction to be able to go in real-time. But, from our perspective, the way we see it is we want to support the most innovative companies, those companies are going to try to experiment and eventually use at scale these new payment rails and so we just want to be ahead of the way, with the way of empowering the companies that are doing this and there's a lot of interesting use cases. The big picture of it is that it's not quite yet ready to be fully kind of transformative to every use case over ACH or something like that, but as soon as it gets there I do think that will be like a pretty rapid switchover.

**Peter:** I've been studying Pix in Brazil pretty closely and it's just been amazing, it only launched I think 18 months ago or something, it's already a huge chunk of payments going through so whatever it is, obviously, like you will work with it, I imagine. I mean, how is it different working with real-time

payments versus ACH which we know can be reversed and has a lag time, how do you have to set things up differently?

**Dimitri:** There's a lot of organizational changes that happened. So, one of the things that we've seen that was kind of interesting, I remember back at LendingHome we had an operational process for things like ACH debits that would bounce, and because ACH is an overnight kind of batch system you can show up in the morning and see what happened overnight and handle the newly created cases that need to be handled. That doesn't work in 24/7 real-time environments, I mean, if nothing else, you have to build software to catch exceptions or to catch things that fall outside of some risk criteria or some rule that creates it, and put them into a key one kind of nod to release them until you know that somebody has looked at it.

But if that happens, you know, in the middle of the night on Friday night you're not going to have somebody who is on staff, right, to look at it within seconds or minutes so you either have to have software to create workflows and create queues out of that or you have to have software actually make the decision and build like the algorithm that makes the decision of what to do about these types of exceptions, so I think the most interesting thing about real-time payment……obviously, the actual messaging to the bank is different, but that's pretty simple. The deeper change that happens is all of a sudden you have a very different set of operational problems for these organizations to handle.

I think what will be interesting to see as well is there are certain use cases like remittances or payroll or things that fundamentally are being done, like we get paid once every two weeks and there's a lot of reasons for that, but a lot of it is just sort of the associated headache, if you will, with calculating the amounts and figuring out like how much goes to taxes and then handling the ACH and putting the money into like a payroll kind of company's controlled bank and then distributing that.

You can do all of that much more instantly if you really wanted to, with software you can pay people everyday and there are certain gig economy-type use cases where they've now gone to actually being able to distribute at the end of your shift, distributing the payments everyday, that's kind of interesting. I mean, there's a lot of companies whose business model is all around this delay in getting paid.

**Peter:** Right.

**Dimitri:** And that delay doesn't have to happen, like it's fundamentally, like I think will be better off as a society if that delay just didn't happen, so it's an artifact of software, an artifact of how the payment system works and so we go to real-time payments. I do think that we can start doing that, it's not just the payment itself, it's also the calculations and the organizational setup for how to distribute those funds.

**Peter:** Right, right. And then what about fraud, I mean, do you sort of have fraud systems internally, do you sort of help your clients kind of catch it or is that outside of what your purview is?

**Dimitri:** A little bit of both. On the one hand, we are a software product and you can run your business however you want using it so we don't impose Modern Treasury-driven fraud controls on different businesses. But our compliance product does have the ability to do transaction monitoring and to do those types of ACH fraud cases and we also have a case management system which is, just from a workflow perspective, captures all the cases that are somehow suspect and somebody can go look at them from a risk perspective.

Going maybe back a little bit to the bank side, I think one of the really interesting things that we can hopefully get to at some point is when you think about a company actually live with a bank, a lot of the underwriting and compliance conversation that happens is really about the company's KYC policies and how they're going to be able to live by those types of fraud and other concerns. What we can do is actually enforce a pre-approved compliance regime on to a company, obviously, it's the company decision to choose to do that, but we can work very closely with banks and say look, if you're using Modern Treasury and if you pick this Compliance, set of compliance kind of settings it's like pre-approved by, pick your bank.

If that bank is okay with that, you know, all of a sudden, we can collapse a lot of the initial implementations for banks that are really making it a lot harder I think to get started with fintech companies today. So, I think the really powerful thing is not just solving this kind of fraud problem inside of the company for the company's benefits, but actually transmitting that information and helping keep the banks informed of what is actually happening on the rails.

**Peter:** Right, right, makes sense. So, can you give us a sense of the scale you guys are at today, I mean, how big is the team and what number of transactions you're processing. I mean, what can you share?

**Dimitri:** We started in 2018, we are 180 people today, primarily it's product and engineering, very heavy in that because we're investing in a lot of new bank integrations, a lot of new products, and you know, our kind of North Star that we think about is really what's our volume of transactions that clients are using Modern Treasury to reconcile volume. We're doing about $5 Billion a month now in transactions now, depending on the use case that can be, like large wires, that can be $1 kind of ACH transactions, it spans the gamut, but it's over a million transactions a month now that are being managed by Modern Treasury.

**Peter:** Okay, great. So, you've got sort of a hook-in to a lot of.....like I said, there's a huge number of companies that process payments, but sounds like you're adding different functionality, what's your vision for Modern Treasury?

**Dimitri:** We want to be the best software for anybody who's building a business that connects like the web and the banking system. That sounds very broad, but really anybody who's building a web application or a mobile application and they're somehow handling funds, we want to build the best software for them, we want to build the best software for the developers inside those companies so that we can have the best documentation and APIs and the things that that part of world cares about.

But inside those organizations, one of the things that we are very conscious of is that good fences make good neighbors, like we need to make sure the finance team actually is able to oversee and feel comfortable about which banks they want to work with, what the bank of choice for them is, what the kind of risk and compliance and fraud characteristics of, you know, what the developers have built, are going to be, and then how do you actually manage that from a month flows and from a kind of ongoing reporting perspective. So, we build a lot of tools for the finance team as well as for the developer team and those, really creating some of the products that just works for both those and allows, frees the company to kind of focus on their core business which we think is very critical for them.

**Peter:** Sure.

**Dimitri:** But we don't think it's very core to the specific invasion of trying to put in the world.

**Peter:** Okay. Well, good luck, Dimitri, really appreciate your coming on the show today, fascinating story.

**Dimitri:** Thank you.

**Peter:** You know, I want to go back to something Dimitri said there that he was saying that really processing payments is not really a core piece of business for pretty much any company outside of companies like Modern Treasury. So, this really gets to the heart of the embedded finance function and that is, you're embedding financial functions that are not core to your business.

Every business has financial functions, every business processes payments, some obviously process a lot more and that is where Modern Treasury comes in, but the whole point of embedding financial services into your business is that it removes resources from these repeatable type operations and focus them on your core business. I think that's the promise of embedded finance which really I think Dimitri kind of discussed right there and gave a really good case for.

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

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