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Welcome to a new episode of BFRR, Bitcoin, Fiat and Rock and Roll, the podcast that explores the intersection of traditional finance, digital assets and digital money and helps you understand how digital money and digital assets will actually evolve in the years ahead. This is part two of our series on agentic payments and digital money. The premise of the series is simple. Agentic payments is an entire ecosystem rather than a single

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topic only, so we are not doing one episode and then move on. We're doing instead one layer per episode and we're going vertical in that. Part one was the one with Sonja Davidovic from the IMF. So the shape of the phenomenon, what actually changes when software rather than a human initiates a payment. Today, we go one layer down into the specific leg, the money leg. So why stablecoins?

01:13

where that argument holds and where it breaks and another form of digital money may take over in a gigantic payments. And my guest is one of the very few people in Europe who sat on basically every side of this table, Peter Großkopf, CTO and COO at all. Unity, Peter, welcome again to BFRR. Thanks for inviting me. Great to be here again.

01:35

Indeed. Great to have you. So Peter, before I even introduce you and all Unity properly, give me a one sentence answer to the question this whole episode is about. Do agents need stable coins or is that something the stable coin industry would very much like to be true? Yes, of course. So I think there's good reasons to use stable coins in this field of agentic payments. And I hope we can discuss what those fields are.

02:04

I will definitely do so. So hold that thought because I'm really then going to deep dive into it and come back and press on it also in about 10 minutes. Yeah. Let me now give you the audience, the content on what Peter was just saying. So AllUnity is the joint venture of DWS, Flow Traders and Galaxy Digital out of Frankfurt. It holds a full bath in e-money, institutional license and issues, micro-compliance, data coins.

02:30

one in Euro and one in Swiss francs, both live today. And as I understood it, even more currencies on the way. But the reason I wanted PETA today specifically has more to do with the sequence than the current title. So PETA co-funded and was CTO of Sulawesband, building banking as a service infrastructure before that was even a category. Then CTO and managing director of Börse Stuttgart Digital Exchange, the first regulated digital asset MTF in Germany.

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then co-founder and CTO of Unstoppable Finance in Berlin, which is a self-custody wallet that got acquired by Jupiter and a project called Iron Chain, which was an honest attempt at the three things that actually stop regulated institutions from touching public blockchains, which is privacy of account data, compliance and governance. And on top of that, digital advisory board of the German finance ministry in the room for Micah, Micah level two, TFRA.

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MLR and supervisory board at 21X, the first DLT pilot regime market in Europe. So Peter, you're a bank builder, exchange builder, default builder, now stablecoin issuer, plus policy. Peter, that's so many heads. Are you happy with that introduction I gave or is there something you'd add or correct actually? Yes, the intro was pretty solid. Thanks for outlining so many of my positions before. There's one.

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difference I want to mention because I'm not at 21X anymore as a supervisory board member. So that the change in the meanwhile, and maybe also to outline I'm now with Allunity and originally we started the company to bring out in Euro stablecoin and then the meanwhile with Frank and the Swedish Krona. But while we were working on exploring different real world use cases for stablecoins.

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We wrapped our head around agentic payments and then started developing solutions in this space. therefore, thanks for inviting me to bring the practitioner perspective on agentic payments in this podcast today. Brilliant. So only one correction here. Glad that was the only one needed. And yeah, let's now really fully go into it with a little recap and bridge from the first part of our agentic payment series, episode one, the IMF episode. So anyone.

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who skipped part one and I want your reaction to it halfway then through rather than at the end, Peter, because you'll have a sharper view than me on one part of it. So IMF Sonja Davidovic, CoreView is for me the best framing out there. Achantik AI is probabilistic and adaptive. Payment and settlement systems are deterministic and require legal finality, auditability, clear accountability. So those two design logics.

05:21

sit in direct tension actually, in my opinion. Her answer was a three layer model. So layer one with intent formation orchestration. the agent reasons searches, compares, negotiates, which is messy probabilistic. Fine. And then layer two is authentication control authorization. So deterministic guardrails. Is this agent authorized?

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Is this inside the mandate, the budget, the compliance envelope? So, and then layer three settlement unchanged, final no room for probability. So stop me there. Enough talking. So Peter, you've built at layer three, your whole career exchange settlement, e-money, now a stable coin. Does that three layer split match how you actually design this at AllUnity or is it too clean? No, well, I think there's many answers on that because

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So I have the impression that the whole field of agentic payments is still forming. So of course there's quite some theory building going on just to explain what's going on and to also give answers how to structure the whole field. But at the same time, it's evolving at AI speed, how I say. So, because if we've seen whatever the, seen kind of the migration in the web from, from print to web, this was like a rather like a decade.

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of time that it took kind of so that some media exchanged and like the more digitalized ones survived. But I think in the AI age, things go much quicker. I think it's pretty much 10x the speed. So therefore I'm not working in theory, I'm working in practice. So I can imagine that also people working in theory will have somehow a hard time to really catch up with all the phenomenons that are happening today in the market and to give it some explanation.

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But yeah, so I think the three layer model that you described also pretty much matches what we see and what we think about. But also I think there might be a different view because we see the whole landscape pretty much from the products that we are building and from the demand that we are identifying. And this gives us kind of the core explanation.

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then there's of course all the things that happen kind of outside of our influence. And I think those all together then also add up to these three layers that you just described. Okay, glad to hear that the model, at least in this conversation, survives a practitioner's evaluation.

And you also see this kind of tension between the deterministic and the probabilistic word and that this tension requires some...

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balancing or mitigation to work healthily together. So for me, two things stood out from that conversation with Sonja Davidovich and Jonas, our co-host. First, I made a fairly strong claim on air. I said, agents need money that behaves like software, programmable by default, always on, always final. And that stable coins are one, if not the only form of digital money doing that today. Sonja?

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very diplomatically typical for the IMF of course, told me I was a bit, I was of course entitled to my opinion and it depends on the use case. So today I want you to defend the strong version I gave and I'm going to attack it later. And second, what stood out is, and this is the one I thought about most since then, she left an explicit question open. She asked whether the agentic mandate, so the budget of the agent, the caps for the agent, the parameters,

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In her layer two, so in the kind of the orchestration layer can be mapped onto the smart contracts underlying digital assets, whether there's real technical interoperability there. Peter, so can you put layer two in inside the money or does the mandate always end up living outside the token in a wallet, in a facilitator, in a PSP? So can you put layer two?

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between agent and deterministic payment processes into the money, into the logic of money? Well, so there's definitely ways, but I'd like to kind of zoom out a little step from here. So there's, think, one question that always comes in the room, especially in the reality that we're currently facing building products in the world of agentic payments with stablecoins as the...

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form of money that we use. There's always, especially when you talk about mandates and spending limits and authorizations. So like many of these terms have a meaning in the regulated world, right? And I have the impression that also many people in discussions and podcasts on panels are seriously using those words. with an intention, but at the same time, and so that's the reality that we're facing. at the moment also.

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talking to various regulators and explaining what's going on there. especially when looking at stable coins, stable coins have a specific regulation and already stable coins are somehow sitting with one leg in PSD, so payment service directive, and with one leg in the MECA, so in the market and crypto assets regulation. So they're already somehow both. And when you now look into the design, the technical design,

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agentic payments. The architecture to some extent is non-custodial because when using a stablecoin, there's on the one hand one wallet, like one non-custodial wallet being used to initiate the transaction and there's a non-custodial wallet receiving it. So there's always the question, so what regulations to apply here? so I must say it's not too clear. So what I'm always saying, because I think people

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recognized me as a builder and especially in the regulatory world. So most companies I built have had some licenses and so we had a lot of discussions with regulators. So I always try to build something regulated, but in this case here, there's no clear rules yet. So therefore it's a question how much we need to deal with mandates, how much technical implementations, especially also of the things that you just said in your question, we really...

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have to do in the sense of like regulatory meaning or we have to do to protect the customer no matter if regulation is a thing or not. there's two hearts in my chest here because on the one hand, course, we, especially also as a technical entrepreneur, I'm always saying, yeah, let's do everything which is possible, which is easy to use and which helps the customer.

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to circumvent certain fraud cases and whatever, AI going wild and spending all your money, for example, which we pretty much don't want. But on the other side, we really need to keep an eye on what the regulators really want us to do. So because this, especially on the long run, is the much more important question also to answer. And at the moment, there's some motivation with us on the one hand to do as little as possible because

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we don't know yet where kind of everything is going. So therefore we kind of we suggest certain implementations, we talk to the regulators, we discuss and we hope that we can also be part of forming a standard which then protects customers and practitioners in this field in the future. So Peter, I set out with a question if this layer two proposed by the IMF, which is authentication, control, authorization,

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So the deterministic guard raise for an agent, like is an agent authorized? Is any action of an agent inside the agent's mandate, the budget he has? Can this be put inside the money? And you're not saying inside or outside, you're saying it depends and let's see, right? So it depends on what the regulator is expecting.

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and what's good for the consumer. you're also saying, let's wait for the regulation before you finally decide. Maybe to answer more concretely. there's already protocols and open source technology developed in those directions. For example, AP2 protocol, which pretty much is also a standard formed around mandates and using verifiable credentials. And there's also cryptographic control.

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so that you, for example, can use an X4-2 facilitator. So that's definitely technology that we're currently looking into. yeah, there's, especially also when using stable coins and when using blockchain technology and when you kind of build something inside a smart contract, there's always the, it's always a two-sided sword because on the one hand, if you change the standard, you build the token on top of. So there...

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you might risk that you lose support with most wallet infrastructure. So therefore, it's really the question kind of what can you do, what can you implement into a smart contract? I think it makes perfectly sense where it's possible, where it doesn't change the standard, but where you lose kind of compatibility with most wallet infrastructure. So that's definitely something where you, I think, lose more than you gain. Okay, okay.

15:02

And that's really helpful. And it's a perfect segue into the core of the episode now, which is the money lack of agentic payments and in particular stable coins. So why stable coins? Let's now do the deep case for them, obviously, otherwise you wouldn't work on agentic payments and you wouldn't be here. But then potentially also an honest counter case. So maybe there are agentic payment use cases or transactions we don't need or which shouldn't use data coins. And

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What I hear the most in the space is the threshold argument. below or above which threshold for a payment it makes sense to use stablecoin. So let me do the math here a bit

in public because I think it is a bit underrated in the space. So let's take card acceptance in Europe. So interchange is kept at 0.2 % for debit, 0.3 % for credit.

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under the interchange fee regulation, but that's interchange and the merchant pays considerably more and scheme fees acquire markup gateway. A typical online merchant lands somewhere around 1.5 % plus 20 to 30 cents fixed. Now say you're willing to spend 3 % of transaction value on payment costs, which is already generous.

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With a 25 cent fixed fee or minimum economically viable ticket is about 8 euros. Below 8 euros, the payment eats the product. A stablecoin transfer now on a modern L2 or on Solana is fractions of a cent. Same 3 % budget and the minimum viable ticket drops to roughly 3 cents. So there's a two and a half orders of magnitude collapse in the

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smallest transaction that can exist and it matters because agentic commerce is natively priced below that line per article access, per crawl, per data fetch, per API request, per inference call. So your own deck, which you gladly provided, puts publisher revenue per crawl at exactly zero euros today. And the reason has, I think, less to do with unwillingness to pay.

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than with the absence of a money primitive small enough to charge with. So can you maybe give the all-unity number? What does a Euro or Unity or Swiss franc or Unity payment cost all in on the chains you're live on, including gas abstraction if the agent doesn't hold native tokens? What's the smallest payment that actually makes sense on your infrastructure today? So I think that

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Maybe also starting the question on a higher level, because I think it's always the question, what are you paying for? Yeah, so what's the use case? also in agentic payments, you define different scenarios. So there is agent to service, and so where it's pretty much about consuming an API, for example, and consuming a web service, downloading data, buying content, buying articles, and so on.

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So there's then agent to merchant. So pretty much the e-commerce use cases. And then you have agent to agent, which is, from my perspective, the extension of agent to service because over long term, you might see an agentic web where you have kind of a lot of agent to agent communication, which pretty much wraps APIs in the future and makes it much more easy to discover.

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certain data points and then also to sell those data points to other users in the web. I think those three categories exist. Each of these categories deals with different amounts of money. So starting with the middle one with agent to merchant, like a typical shopping cart. And if I have my Amazon grocery shopping agent,

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would give a mandate of whatever 100 euros. So that's a different shopping cart size compared to a real micro payments. For example, paying for an API request or paying for some content or for some data points. think in general, always distinguish that, especially when coming from commerce and looking at the market today, I definitely see still a lot of benefits for card-based payments because

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those payment infrastructures are there, they're existing, and the merchants already have the ability to accept these payments. And especially when the shopping cart is large and when physical goods are sent and they get lost, or maybe they never get sent and there are some fraudulent transactions. So this gives a lot of handle to the shop, to the user to claim money back and to really get to your right.

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If something goes wrong. So I think that's definitely the situation. When now coming to the other ones like agent to service and agent to agent, I think it looks different because as you already said in your introduction, the current payment rails are pretty expensive. Yeah. So we have minimum fees and so there's kind of a, let's say minimum size of transaction that really still makes sense to the merchant. And when now talking about stablecoin transactions.

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They're always cheap. Yeah. So, for example, in our setup, so we're using simple XO2 facilitator that we set up for Unity and there's our stable coins being used. So the only fee that is paid depends on the infrastructure below. therefore, if you choose, for example, base blockchain, you're in the subset area for transactions and that's it. And in the end, it doesn't also...

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scale with the amount, right? So either if you have a micro payment or a macro payment or like a large payment or a middle-sized payment, it's always cheap. And I think that's the difference. so when we talk to potential customers in the market, especially also in the publishing industry, we're coming to that in a bit. When we talk about microtransactions or micropayments, they always react a little bit worried, I would say.

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I think anyone always wants to have macro payments, So micro payment sounds so little and you need to have so many of them to make a profit out of it. But the cool thing about stable coins is that if you choose the right technology, the right underlying blockchain, they are always cheap and are therefore suited not only for the micro payment, so they are also suited for any size of payment.

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Peter, what you're describing, I think, is the chain lag, right? So you said the blockchain is sufficiently cheap, but what about your lag? The stablecoin issuers lag. So Mint, Redeem, the Facilitator, the Fiat Boundary. So cheap on chain doesn't help if the Euro entry and exit costs 25 basis points. Yeah.

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Also, when it comes to the end-to-end cost of stablecoins, it's always the question if you're kind of in this sandwich model, so kind of getting into stablecoins to use it for something and get out of it, of course, that's not efficient. So that maybe works for remittances, especially in international remittances, because the competition, Swift, at least still is more expensive than such a solution. But from our perspective,

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It's the question if stablecoins really circulate. And so that's the end, hope of the whole industry. So for example, also looking at the TBL numbers of the large stablecoin issuers. So the stablecoin market is growing because it's started to be used for other purposes of outside of crypto as well. So that's in the end, the end scenario that anyone is working towards that you're kind of having

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stablecoins in circulation and that they are used in different use cases. And that's also how we got into the whole agentic payment space ourselves, because we spent 95 % of our

energy in finding real world use cases for stablecoins. we try not to, or we're not focusing too much on the crypto space. We kind of look outside of the crypto space.

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So we were transactions with supermarkets and larger corporations and really exploring benefits of using stablecoins in their use cases. And I was distinguished for use case scenarios for stablecoins. So there's payments, there's remittance, there's settlement, for example, of securities, and there's treasury. And while we were exploring different use cases in those verticals,

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We stumbled over X4.2 and the ability to use stable coins in agentic payments as well. So I'm not really sure if this now becomes part of the payments vertical of the model that I just described, or if it's in the meanwhile an independent vertical to look on. Because here the interesting thing is you're dealing mostly with real world companies who sell digital goods, who sell content.

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who sell articles, who sell API-based services or data and kind of exploring with those customers to kind of also find new target groups and new revenue streams. So that was our motivation actually to look into this. But coming back to your question, of course, really having cost benefits from the stablecoin stack, definitely, so if the stablecoins are in circulation,

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And are also circulating between use cases of the four verticals that are described. think then it's pretty much the cheapest form of money. we're still discussing why stable coins, right? And currently we are in the case for stable coins. And another big argument here is programmability. So where the control actually lives, the control over the money behavior, but also the control potentially over the agent's behavior.

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Here's the version of my hot take I did during our first episode. I defend under cross-examination, it rests on where the control is, not on the speed and not on cost and on card and account raise, the spending controls live in someone's back office, like a rule book, a risk engine, a mandate table at a PSP. In a smart account, the controls travel.

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with the money so spend caps, counterparty allow list, time bounded session keys, purchase action limits are another example. So they are enforced by code verifiable by anyone. So which turns Sonja's layer two from a policy into a cryptographically enforceable constraint to me that is that is the actual argument for stable coins beyond the economics or beyond the costs.

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Now really my question to you, does Euro or Unity, so your Euro stablecoin, support the primitives that make that work at the token level? So EYP 3009 style, signed transfer authorizations and permit and paymaster sponsored gas. So the agent never has to hold ETH or Sol.

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And where that's missing, is it a technical roadmap item or a regulatory one? Because I suspect an e-money institution has a view on tokens that move without the holder broadcasting the transaction themselves. So we support this EIP standard. So also as part of our developments in the setting up the X4.2 facilitator. So from my perspective,

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As I mentioned in a previous answer as well, we definitely do everything on the technical side so that makes sense to us. As mentioned, also making use of AP2. But of course, we need to have also then the product implementations on, let's say, the other side of the table. So when moving forward, because it's not only us providing a full stack, so we're providing

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a payment stack and we're providing a discovery stack. maybe explaining a little bit how our product offering at the moment is constituted. Because at our core, as you already mentioned, we're a stablecoin company. We issue three different stablecoins, SwissRank, Euro and SwedishKrona. So this is also our core purpose. And so when looking into agent payments,

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So we identified actually four steps in the process. There's discovery, checkout, payment facilitation and payout. So those are the four steps that we define in our practical model. So the last two ones are the most easy ones. So payout is relatively easy. If a merchant receives a stablecoin payment, you need to do something with it. So you want to pay it out, for example, so you can do this with our Mint account.

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We're not only available on secondary markets with our stablecoin, we are also available for businesses on our primary market. So you can sign up, get a business mint account and you're able to mint and redeem stablecoins directly with us. Also with the advantage that no fees are applied. because simply Mika doesn't allow us to take a mint fee and a burn fee. So therefore the payout on our infrastructure is completely for free.

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So that's the one part. So now a merchant wants to sell something and needs to have an X4.02 facilitator at his or her hand. And that's also what we solve for them. So we set up an X4.02 facilitator. It's a permissioned one. So you need to be a customer with us to be able to use it. So that's a requirement from our side. Also because we want to give some quality of service.

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And also we want to know our customers who are using that infrastructure. We have also content policies, for example, so that this facilitator is not used for whatever criminal use case. So that's where we want to have control of. merchants use our payment facilitator to facilitate the payments. And now there's the important part because so who's the merchant and what is the merchant selling and how does...

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the merchant salad. how to deal with that? We're identifying or we were talking to different industries in the market and we ended up having the most intensive conversations with the publisher industry. So typical news media outlets and so on. And the second vertical is data providers. So for example, companies who are providing financial data, financial information, stock market information and so on.

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So we see kind of for the publisher vertical, the difficulty that especially many of them struggled already moving from print to web and glad we survived that after quite some fights. So now they are confronted seeing in their statistics that more than 50 % of the web traffic already is bot based and that there's more and more people using

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Claude and chat GPT for almost anything to receive information to ask for news to, yeah, in the end do things that they usually did on Google and where the media outlets have been found on Google and still were existing because they got traffic from them. So the AI



companies are in the end absorbing those traffic from the web platforms. So those are the...

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This is the pressure that the media outlets are confronted with. And what we now build is a simple discovery engine, so where you can kind of load or ingest content into a database to get like a search index. And we built an agent optimized query interface. Therefore, we call it discovery as a step. the product suite is called agentic paywall because in the end, it lets

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companies in those industries maintain two versions of their content. So there's the existing one today, which is optimized for human agents. So typical readers, how they were consuming the media over the last decade. And that there is a specialized offering for agents where the agents are routed to this second platform, which is maintained by us. And in the end, the

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product gives a discovery interface where agents can search for content for specific articles, get previews and so on. And if there's an interest to buy an article or to buy a data set or to buy a digital artifact, then you can simply mandate your agent to do that. And then the payment is handled by our facilitator and the merchant gets the money and the requested stablecoin.

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and can pay it out via the Mint account. Got it. Thank you so much, Peter. So far, we made the case for stablecoins, right? Stablecoins being the right, if not the best form of money for agentic payments. Let's now do the counter case. So let's attack our own thesis because otherwise this episode or conversation may turn into marketing only for stablecoins and agentic payments, right? And you already gave

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kind of the version of the counter argument yourself in the first part of the conversation, which are your three pillars, agent to service, agent to merchant, agent to agent. if I got you right, your position is that in agent to service where payments are micro stablecoins are unbeatable. But in

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Agent to merchant baskets are big, good, sometimes don't arrive and you need a non-final means of payment. So cards keep making a lot of sense and the acceptance stack already sits there on the merchant side. Money forms split by where they make most sense depending on the use case. So that might be a more honest answer than most stablecoin people give to me. And I want to push on this.

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counter case in three ways, which, and one is, is irreversibility of a transaction, irreversibility a feature or a fatal bug here actually? So Sonja Davidovic's whole point is that layer one is probabilistic, which means it will sometimes be wrong. An agent will sometimes be wrong. Cards have a 60 year old chargeback framework, precisely because payers make mistakes. Now the payer,

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Now in agentic payments, the payer is a language model and does final settlement really survive that? Is final settlement reversibility here a feature or a bug? Yeah, when I responded to the other question also regarding agent to merchant, I used a very important keyword and I was talking about the situation today. Yeah, today we're facing the situation that stablecoin settlements are final.

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And they're not so easy to revert. And so if you send your money away, it's very difficult to get it back. And today those problems are tackled with cards. So you have to recharge ability options and you can claim your money back when goods are not sent to you. But the same features possibly also could be implemented with a smart contract. Yeah. So you could come up with a specified.

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token standard that addresses those topics. So for example, that you are able to recharge, to have rechargeability option, of 14 days, for example, or to also implement escrow into a smart contract. think those use cases are pretty much the first ones that we've also seen when the first smart contracts came up to implement such features. So there I already.

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gave also some answers to the downside of that approach because you need to find adoption for your token standard and if you don't find the critical mass for it, it's not used and if it's not widely used, people can't use it in most of the shops. So therefore, I think today, cards have pretty much an advantage on that end, but I can really imagine that over time, especially when stablecoin payments become more frequent in those areas,

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then it's very at hand that if there's demand for such features, then there will also be a formation and the consortium to actually implement it and give it critical mass. Yeah. So we are still debating the counter case why stable coins may not at least not always be the best form of money for agentic payments. And there's a second item or argument I want to push on here.

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in this counter case. So you said reversibility features could in principle be built into a token standard. So take me deeper on that. What does it actually look like? An escrow with a dispute window, a clawback role, an arbiter address, and does an e-money institution like Allunity want to be the arbiter in any case? So because a chargeback

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is a judgment rather than a transparent. don't think Micah's redemption at par framework contemplates a judgment. 100%. And so at the moment we're offering the agentic payment services from our Imani Institute, but it makes also lot of sense to move it into a separate entity. Also once we really know how the regulatory duties

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have to be handled. And then my ultimate concern when talking about stablecoins as a means of money for gigantic payments is actually the most uncomfortable one for me, which is Euro liquidity. So the total stablecoin supply is a few hundred billion dollars and overwhelmingly dollar denominated. Euro tokens are a rounding error on that. So if an agent wants deep

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liquid 24 settlement today, it will likely use a dollar token, right? So you're now also shipping a US dollar stericoin this quarter, if I got it correctly. So is that a concession to that reality? And is this a concern for agentic payments? Well, so people who talk to me frequently know I'm always using that scheme of short, mid, long term to see

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life in different dimensions. So what you pretty much described right now, of course, is the today's situation. But also we're now coming from the first hype cycle in stablecoins. which is for me, US dollar denominated stablecoins in crypto. Yeah, so where they have been used to move funds from one overseas crypto exchange to another one. And so the first use cases were developed in the crypto industry. And now we're in the transition.

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so that we see traditional companies now also embarking with stable coins and seeing like advantages trying to use them and so on. so I personally believe, and that's also why we do at AllUnity what we do, that the more companies from the real world are going to adopt stable coins for their use cases, in remittance and payments and so on.

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then there will be a demand for their local currencies. So, and this will be Euro, this will be a Swiss franc, this will be Swedish Krona and so on. So, and for us, especially when also looking into agentic payments, this is a, in end, we're talking about real world companies here, right? And they have their real currencies that they want to accept, so they don't want to have dollars. So they don't want to have an exposure to a foreign currency.

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US dollar is also hard to predict. At least I'm not a broker. But still like the political situation in the US and like iron war influence of the oil price to the US dollar. don't know. It's very, very difficult to predict. I think a merchant in Europe or a merchant in Switzerland doesn't want to hold this foreign currency risk right. And therefore we really believe and so therefore I said...

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short mid long term perspective today. Yes, the situation is as you described, but the more we see the adoption in the real world with stable coins, the demand will rise and the markets will get more liquid. And also, especially for the merchants, so they are always able to redeem with us. So that's always possible. You always get your money back one to one without a fee. So that's a decent advantage when you

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are also onboarded with us when using the stable coins. But yeah, so we're also working on that infrastructure to be able to accept more currencies. also when there is demand, whatever, in Poland also rising merchants want to accept payments in Polish Sloty so that we're also able to deliver those needs. Yeah, totally. What you're saying is in general true. mean, things can always change and that's the, this mid...

42:00

But this short mid long-term framing or structuring of the evolution of the space is particularly true for digital money and digital assets as it's such a young industry. The fact that the first wave of stablecoin adoption was focused on US dollar stablecoins for crypto use cases doesn't mean that a second summer or second wave then

42:29

increases the demand for non-US dollars, data coins for different use cases. with that. Exactly. And also when you're building products, especially also in the startup ecosystem, there's usually two approaches. On the one hand, you solve a problem of a person or of a company today. And there's the second approach, kind of you have a vision for something which doesn't exist yet, but where you believe that it's coming and you're building towards that vision.

42:58

We somehow do both at the moment. on the one hand, as we know, agentic payments also amounts and volumes being transacted still is relatively low. Also the amount of merchants accepting the agentic payments also still is relatively low. But we really believe the more supply we can see in the market. So the more merchants are there who are able to accept. And of course we see an increasing number of users using AI for almost everything.

43:26

So we first need to create the first supply in the market and then the first demand can be created. And therefore I say, we talk to real customers in the market, brainstorm with them how agentic payments actually can create new revenue streams for them. And then we build pilot projects together with them and bring to the market. So there's the first supply. then of course, with this step, we enable more and more users than also

43:55

consuming data, consuming the content. yeah, so we worked towards that larger vision where eventually some months down the road or maybe half a year, a year down the road with the development speed of AI, we will see different rates of adoption.

44:15

So Peter, to conclude our deep case for why stable coins might be the right form of money for agentic payments, but also after our honest probing or pushing back in our counter case discussion after this discussion, what's your summary? Should stable coins always be used in agentic payments or only in specific payment use cases or in specific transactions that were triggered via agentic payments?

44:45

I think there's definitely always multiple futures that can evolve and also in different shapes and they can also, to some extent, also exist next to each other. So because I think as I described earlier, we need to create the first supply. So like more data sources, more news outlets providing data via their discovery interfaces. And of course, the users need to know about it.

45:14

And so one way we solve that is, example, we are currently working towards having more than 10 pilots live, which in the end would mean we could mimic the way we believe. Yeah. And this is our belief. There is definitely room for other beliefs as well. So for our belief, how news reading is going to look in the future. Cause we imagine that news

45:42

will be consumed via LLMs. And so you're going to have a news agent which fetches the data information which is relevant for you. And this will be topic based. This will eventually be market numbers. I don't know the current price of ducks and maybe some important stocks or some economic measures that you get from somewhere. But also you have your leading media that you consume all the time or where you maybe have

46:11

You have your subscriptions today. So I have a Handelsblatt subscription and I read it daily. So I'd like to have Handelsblatt in the future in my news digest as well. And also a person like me spends more than 100 euro per month for media subscriptions of different newspapers. I think I have four newspaper subscriptions or I'm reading really a lot of stuff over time.

46:41

And I really imagine that I'm going to map my news spending kind of monthly in the future on a daily spending. And I hope that all the relevant media to me, I can put in the list for an agent so that the agent just gets me the information, maybe looks in my calendar, oh, I have a busy day tomorrow. So it doesn't make...

47:07

much sense to have a lengthy news digest tomorrow because I might only be able to read just whatever headlines and the most important facts of the day. And then kind of I have this dynamic system where certain important information is pushed to me and I can consume it on the go. And this is kind of where we're working towards to have the first news outlets being connected to us. We provide the

47:35

discovery solution for it and the payment solution. And you could implement the first version of such a news agent pretty soon. And then we can really take it from there so that people see like, this is probably a way to consume media in the future. It will be difficult to link a wallet to your cloud account. So at the moment still, there's like more technology coming. The more demand there is, the more easy it's going to be. Eventually there will be a wallet integration.

48:05

also with Claude in the future itself. So I think this infrastructure still needs to develop and it's a little bit like if you say, hey, send me whatever I spent a coffee for you and you send me the money back with stable coin, it still feels a little bit complicated. Yeah. But the more infrastructure is created, especially when it's used by more and more people, the more easy it will get. I think so the, this is the response to your question.

48:35

I think the future will tell how much supply and how much demand an agentic payment is created. then when the demand is there, then there will be much more easy solutions to connect a payment instrument to your cloud account. I'm pretty sure there will be a card connected and there will also be a stablecoin connected. But as the stablecoin payments are much cheaper and especially also for the merchant, much more beneficial. So I...

49:03

really see a good likelihood in the future that stablecoins can become at least next to cards, also a dominant rail in the agentic payment space. Yeah, it's surprising to hear not at least pointing to or alluding to other forms of digital money like CBDCs or tokenized deposits or even cryptocurrencies like Bitcoin themselves as a form of money. So far, we've contrasted only stablecoins and

49:33

credit card payments, right? Yeah, but also for me, the term payments also is a technical term. And I think Bitcoin, maybe that's debatable, but so for me, Bitcoin was never a payment instrument. I agree. I mean, from the outside, was. mean, was, I mean, the white paper had Bitcoin in mind as a means of payment, but it didn't evolve. This use case didn't materialize. Yeah. But also from the other forms that you mentioned,

50:03

tokenized deposit also is also for me more in the store value back up bucket. Of course you can also use it to send it. But also next to deposits there always was also e-money and e-money as a account, especially also when you have account based e-money and you don't get interest on it. So it's kind of these e-money is designed as being a payment instrument. therefore I think it's not happening completely without any logic.

50:32

that stable coins now are debated in the payment, in payments use cases. Good. So Peter, I don't want to let you go without also briefly touching on all unity itself. So its role, its positioning in agentic payments architecture needed to facilitate the use cases you want to target. And to do so, you already described one of four steps in agentic payments, first of which is the discovery. So can you...

51:02

briefly walk us through all unities positioning in those four steps, discovery, checkout, payment, payout, and be pretty explicit about which of those you consider your core or unity capability in the agentic payment steps and which you don't. Yeah. So at the moment, we definitely see the situation in the market that we need to deliver all four steps because as I mentioned,

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There's not many merchants accepting agentic payments today. So therefore we really want to change it. Yeah. So therefore we talk directly to different companies, yeah, in publisher space and the data provider space, also to some e-commerce use cases as well. And really want to enable them to find verticals and find pilots where agentic payments can make sense to them and where we then can also gain experience. They can gain experience.

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and the market can be lifted up and be enabled to grow. So therefore, we then started to build this discovery and checkout solution ourselves. I described a little bit earlier. for example, news agents would be able to find content from different newspapers and media outlets, then can check them out. The payment needs to be facilitated.

52:22

on the payment facilitator. So we offer the facilitator as well and the off-ramp via the businessmen account. those are the four steps in a quick run through again. For us, the core definitely is the ones where it's dealt with money. So the payment facilitator and then offering the businessmen account for the on and off ramp of the stablecoin and for the cheap access to stablecoins in different currencies. So that's our core.

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And when talking about our core, we also have a hybrid strategy into the market. So there's the verticals where we deliver the discovery solutions with our agentic paywall, but we also have partnerships in the market. So for example, we have a partnership with Blue Rails, which is a Berlin based startup who offers a discovery solution for the hospitality industry. we, in event a couple of weeks back, we

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showcased a live hotel booking together with them. So they talked to hotels who want to save money in the future because they are pretty much dependent on the discovery platforms of the human web, so-called booking and booking.com and so on. And then in the future in the agentic web, an individual hotel also could kind of optimize their offerings in a way.

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that they're discoverable and that if, and I'm right now in my vacation in Austria, and if you're looking for a hotel in Austria, you could ask your favorite AI agent for that information. And then you could also initiate the booking and see eventually cheaper because you can straight book the merchant and you're not paying a fee for it.

54:15

So that's one use case. where we were building the backend on the payment side and they're building the discovery side. But we also had early conversations with an offering in the investment space. So where you're going to have like a discovery engine for investment products. So where to invest. You could potentially then also consume data from kind of the data providers we're currently ramping up.

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pilot partnerships where asking about market data, what stock to invest, and then in the future, the investment agent is taking that investment. So again, hybrid approach. There's the step one, step two discovery products that we serve ourselves, but we also doing partnerships with companies from other verticals where we just deliver the payment facilitator and the stable coin and the on and off ramp.

55:09

Understood. Yeah. It's so cool to see that with all Unity, we have one, not even European, but also German player actively seeking to shape a champ to commerce and not just waiting for any actor in the industry asking for a stable coin. Yeah. So really you're really



actively shaping the space. So let's maybe close with one outlook, at least looking a bit into the future. So let's take a 12 month view.

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What has to be true by this time next year for agentic stablecoin payments in Europe to be real rather than the narrative or assumptions we are talking about today? So can you give maybe one technical milestone, one regulatory milestone or a commercial milestone that has to be reached for agentic stablecoin payments to be real in one year?

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So there is multiple factors from my perspective, so that we see good progression in that field. So on the one hand, yeah, you need to have more supply in the market. So more newspapers, more data providers, more APIs, more classical web to tech companies who offer their digital services to agents explicitly and then also are able to accept their payment rails that are evolving there. So that's the one piece.

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Then of course you need to have strong stablecoin offerings and also abilities for natural persons and legal entities to get in and get out of stablecoins in a cheap way. So for example, for businesses via our businessmen account, but also to have cheap on-offerings for retail users in this space. Then the third thing that needs to happen, and I think that pretty much also maps to the first questions that you asked in the podcast.

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So that needs to be really strong infrastructure also for the consumers, this whole part. So either a retail person or also a business who runs like an agent that does some shopping purposes, for example, creating this newsletter digest that I explained, or maybe having a grocery shopping agent, or maybe even like in a industry company ordering.

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kind of high or large amounts of industrial goods for the company. And you need to have proper infrastructure for it in terms of wallet infrastructure, mandate management, spending limits, management, and so on. So because in the end, these limits, these spending limits, these mandates need to be defined by the consumer. Yeah. So even if we on the payment facilitator side and on the checkout side are able to verify those mandates, so which

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we're definitely pushing forward for, it's still a requirement that needs to be fulfilled by the consumer to set this up. And as long as this is complicated, this is very technical, this is not three clicks if you need to open a command line and whatever in your enterprise, your computer doesn't let you open the command line. So that's a problem, right? So therefore, at the moment we're still in the experimental.

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phase, kind of solving the supply side issue, making sure that on the demand side, on the consumer side, we have a proper infrastructure so that we align on standards. Yeah. So what can go wrong? What we can fix in advance. Also answer like the, or tick the regulatory boxes. So because regulation is always about customer protection. And of course we, it's a higher value that we also

59:01

fulfill with what we do. And therefore we pretty much also wrap our head around what we can do. But I think the first step needs to be done on the consumer side, setting up the right infrastructure. And as long as this is Spießrutenlauf, how the German would say, taking a lot of boxes before you can start. So this might slow down the adoption a little bit. But at least

59:31

I'm very bullish because so when I think back 12 months ago, what my assumption on AI would have been, was looking backwards relatively moderate. think I was still in this field like, yeah, computer programmers, people working as lawyers will still be needed. 12 months later, the world already looks quite different.

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And I can imagine that we're in the same situation today. So we look into our eyes and say like, okay, agentic payments, that's a very little thing. And then 12 months later and things develop at AI speed, the future might look completely different. Excellent. So many milestones to be met, not only one for agentic payment to really take off and in particular for agentic stable coin payments, right? Which is a subfield in itself.

01:00:26

To close the thread of today, really, I learned a lot of things among them is that the strongest argument for stablecoins and agentic payments is that the minimum viable transaction size collapses by two or three orders of magnitude, which is the difference between agentic commerce being possible or not. And second, what I really learned is that money will be split by use case. So there is micro,

01:00:56

agent to service. So stable coins are essentially unbeatable there. But then there are large baskets in agent to merchant, maybe where goods don't arrive and someone needs to reverse the payment. Their cards keep a real job until reversibility gets built into the token layer, which remains then open. Third, the hard part of agentic stablecoin payments is in fact

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rather legal than technical. A euro e-money token is e-money and e-money means PSD2. And PSD2 means strong customer authentication with a human in the loop and the industry is converging on authenticating the mandate rather than the transaction. And the regulation has to my understanding not caught up on that. Plus there is the travel rule, which currently has no deminus and therefore no answer for a subset.

01:01:53

payments. And then my fourth and last lesson I really took from the conversation is this pretty honest constraint you described about supply and your liquidity rather than the demand for agentic payments or the technology itself. Yeah. And maybe adding one more thing, because also what we need to keep in mind, especially when it's about

01:02:17

handling chargebacks, for example, also in the transaction. also in the stablecoin, it's final right now. We need to imagine that kind of claiming money back in the future also would be responded by AI, right? There might also be the situation that if those processes are pretty much standardized, kind of make it very easy to deal with such chargebacks, then the AI is responding on the other side as well. And in the end, at least the problem for the

01:02:46

for the consumer can be reduced a bit. Peter, thank you so much really. So you came on the show without exactly knowing which way I'd take it and you answered the hard questions head on instead of steering back to your Unity products. I really appreciate that a lot. Yeah, to our listeners, if you got something out of this, the single most useful thing you can do is...

01:03:08

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community lives on Telegram in both German and English. All the links are in the show notes. And

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