Mathieu (00:00.

You've been in the space for some years, I think probably longer than a lot of people that are in the digital identity or self -sovereign identity space today. So it would be interesting to hear your perspective on maybe how things have evolved over time. There's been a lot of evolution on the standards, on the technologies, on the governance frameworks, and more adoption happening of digital wallets and digital credentials and different flavors of all of these things.

It'd be interesting to hear just from your perspective how things have evolved, but also just from, I guess, everyone that was early in the space had big visions of self sovereignty and decentralization and all these things. And then kind of looking at where we're at today and where we're going at today with the adoption and with government wallets and with Apple and Google wallets and just to kind of think about how things have evolved over time, do you think we've lost a bit of that visionary stuff with where it's going?

And I know this is a big question and could basically just talk about this for a full hour, but maybe that's a good starting point to just to get a sense from your side who's been in the space so long of how things have kind of changed in your perception.

Vlad (01:16.09)

Yeah, I think this is quite a big question. And so the answer is probably going to be quite long. We don't know all of the sub questions and so on. Yeah, so I've been in, let's say introduced to the space like mid 2017. And I started working with Evernym as a product manager for enterprise products. So this is how I was hired for that.

And, and my background is product management. So I was kind of focused on, you know, building products for users and for them and are trying to actually find the or to build capabilities that, you know, answer to the some, some kind of market needs. And yeah. And when you're working with this type of technology, it's not as easy because you cannot clearly identify, you know, the market needs or you can identify the market needs, but you cannot really build something easily that it would immediately solve some pain points and so on. Or let's say the pain points are not easy to solve and so on. And there are a lot of things that need to happen in order to have a viable solution, a viable answer to that.

And if you ask me what has changed since 2017 until now, I would say a lot of things have changed, But also not much has changed at the same time. And why do I say that? Because so when you look at what has really changed, I think right now SSI is really becoming, you know, or the whole kind of decentralized identity domain is becoming almost like a mainstream digital identity technology.

Vlad (03:21.15)

So currently you don't see people discussing digital identity implementations for national scale digital identity or something similar that doesn't involve the verifiable credentials technologies and so on. So I think this is really the good thing. And now, I mean, we've always known that the whole kind of SSI community is relatively small community and you get to see and meet almost

the same people on all these different events throughout the year. But at the same time, you have also so many new people and so many new companies are now embarked on this journey. And also you see so many new faces, you know, preaching the values of SSI and decentralized identity. I think this is something that really is somehow making me proud, you know, that I used to be part of that, you know, like some time ago and the community was so much more and now that I see like completely, you know, I'd say unknown people that are kind of doing this and they're maybe doing the job maybe even better than what we were doing and so on.

Vlad (04:49.07)

So I think this is really good. Also, when you look at the technical side of what has changed, of course, we have now new credential formats, new protocols for credential exchange. You have the SD job, you know, hit the spotlight, the MDoc credential format. Of course, the open ID4VC and so on. You also have some other credential formats that are somehow losing, you know, that spotlight like Anon credits, you know, they're it's somehow losing that type of, it's not as attractive as it used to be. You have these big regulatory push or government push initiatives like eIDAS v2 in Europe, and I think there are lots of hopes for that, what's gonna happen. We have also big companies from the kind of a classic, PKI, world digital identity technology that are now in the space and that are kind of adopting the very top of the credential technology, either through acquisitions or through some kind of partnerships or also by doing some kind of in -house development and so on. So all these things are kind of quite quite positive and you see a lot of changes in that side.

And then Why I say also that not much has changed is that, you know, my own kind of personal perception from 2017 was that, you know, we at Everynym at the time, you know, we had this kind of belief or impression that, you know, two to three years from that moment from now, you know, the market is going to go up and it's going to explode. Right. And I still have the same feeling though. I still have the feeling that two or three years from now, the market is going to go up. I'm not sure if it's going to explode, but there's definitely an expectation that because of some of these initiatives like the eIDAS v2 that we actually going to see some kind of significant adoption on the market and that we're going to see some credentials in the wild being exchanged by people and so on.

Vlad (07:18.07)

So I think that part hasn't changed. Also, there is still a lot of fragmentation in the space. Before, I think, before we had several potential formats, but I think before the main kind of discussion was, hey, it should be used the W3C JSON -LD credential format. It's W3C recommendation. It's kind of our own some kind of a standard track, or you have this kind of Anon creds, which is opinionated, but it works. You know, you have kind of more or less mature implementation and so on. So there was a lot of discussions between W3C, W3C -MLD and Anon cred format. Nowadays, I think we are more or less in the same boat, but now I think the discussion is there's like SDJOT, there's DMDOC, you know, how to combine the two should we combine the two?, we also have the W3C as well, you know, and so on. So there is definitely still a lot of fragmentation. And so we are, and we have to see how, you know, some of these initiatives like eIDAS is gonna help streamline that into something that's usable, interoperable and so on.

Mathieu (08:41.10)

Do you feel like there's too much focus on government initiatives today? Like it feels like it's sucking up a lot of the, the air and the eIDAS 2 too for sure. even as you're hearing about it globally, and I've talked about it many times on, on this podcast as well, but you think there's too much focus on government wallets. Do you think we've lost a bit of the vision for self sovereignty? Cause it feels like just existing players are just going to be using this new mechanism to issue a verifiable credential or a digital credential into a government wallet or a government approved or auditor approved wallet. Like it seems sometimes like it's just a very, not a massive transformation of kind of some of the things that we imagine could be transformed. It's just new tools that will have benefits to them. But at the same time, like, Restrictions are tight, governance is tight.

So do you feel like there's too much focus on that and that maybe we've lost a bit of the larger vision of self sovereignty?

Vlad (09:53.06)

I would say yes, there's definitely a lot of focus on the government initiatives. And it seems like a lot of these other initiatives that are maybe happening in some kind of ecosystems, like, you know, there's kind of initiative from in the airline industry about seamless passenger travel and so on, that are happening at the same time or in parallel with these government initiatives. But it seems to me that there is this kind of a weight that, or waiting that once this is being approved or provided by the government, then this will actually jumpstart the whole ecosystem/adoption.

It seems to be that everyone seems to wait for this to happen so they can leverage or piggyback on those in initiatives and so on. And I don't know if this is the right thing to do or this is, I would say, some kind of justification for not seeing something tangible in the meantime. Because I don't think all the use cases do require government backed digital identity. And there are also some other use cases that don't require that.

And I'm sure that there are many use cases from kind of the private sector. They're this technology can be used to solve a real problem. Applied in a real world use case. But yeah, I'm not sure. It seems to me that the value of the main value of the technologies, then you have different types of organizations that are somehow loosely coupled, but they have some kind of interest to work together. So if you have that type of association in some kind of a sector within, or national or international, then you can clearly provide some kind of or define the values that this technology can provide can do for a specific use case.

Vlad (12:30.22)

And then, like why is this not happening? I'm not really sure. So I don't know if there are different types of associations that should be pushing for this type of agenda. And so for example, in the supply chain, like should we have some kind of association to push for traceability in the supply chains and so on, where verifiable credentials could be an answer to that.

And, and why we don't see that earlier. I'm saying like, I'm not sure. And taking that, you know, supply chain example, when you look at the, like even the, the supply chain example, or this traceability initiative that, that is being now pushed, it's also pushed by European Union. It's also pushed by the by the need to have digital product passports for batteries, the need to have visibility in the circular economy and so on. And then it's also kind of a regulatory push from some of these kind of international bodies and so on. And also, like, you know, you also mentioned about the wallets, you know, you have the government provided wallets. There's also is OEM or OS provided wallets from Apple, Google and so on. I think it's also gonna be interesting how those things will develop there and what type of wallet will actually prevail. Yeah, will actually prevail. and get really adopted. I know that European Union is like really sensitive and wants to stay in control. So that's why they are pushing for this UD wallet. And UD wallet, the good thing about the UD wallet is that, okay, you have a lot of, it's gonna be controlled, it's gonna be kind of attested by the European Union. We're gonna have a lot of use cases supported, at least the ambition is to have a lot of use cases supported by the wallet. And then on the other side, you have this massive distribution channel from Apple and Google that's already kind of there and adding additional use cases to their wallets, it's gonna be, there's clearly gonna be an advantage for those kind of big tech providers to add these additional use cases there. What's gonna prevail, who's gonna win that type of, I don't wanna say battle, but that type of competition, we are yet to see.

Mathieu (15:33.21)

It's interesting to see kind of the overlapping then that starts to happen between public sector initiatives and then just like the general web or the internet, right? Because like, at least today, like we still use usernames and passwords for most things. There's been obviously like a lot of multi-factor authentication enhancements that kind of add some security and so forth, but still usernames and passwords have a lot of security vulnerabilities, but at the same time, they're usually not centrally controlled. Like there are federated models and stuff like that, but it's somewhat distributed. And so I wonder like if everything is moving, if at least like the high integrity government issued identity documents which are coming from the rights government authorities are landing inside of the Apple wallets, Google wallets, and the government wallets. If you start to see, there starts to be more centralization in the tool that is being used for, for authentication. I wonder how adoption starts. Cause you would imagine a lot of relying parties will just start saying, Hey, like This is a cheap way for me to do an identity verification or have someone authenticate and, and log in. So it starts to... it's almost like a recentralization of things in some aspects.

Vlad (17:09.12)

I mean, yes. And I think it's also like, you know, okay, like when you look at the main use case for the OEM wallet right now, today is the payment, right? And okay, you can also store these, you know, like boarding passes and so on, but you know, you're not flying every day, but you pay like a few times a day, right?

So this is like the most common use cases that you use on a daily basis. And then when you also look at the user experience, it's like quite slick, seamless. You just do a face ID and then

tap and then there you go. Or double click or whatever. So it's so, the user experience is so optimized to get this one job done as quickly as possible and as convenient as possible. And that's why it's so successful, right? That's why it's really so successful. That's why I'm not, you know, using another type of, or most of the users are not using another type of, how to say, payment application or payment wallet because they need to open the application, they need to go in and so on, And here you don't need to do that, right? You can even pay when your phone is locked. So I'm curious to see like how, because the identity use cases, I think they're a little bit more complex and you need to also kind of provide more context or at least that was the assumption that you need to provide more context, like what you're sharing, what type of information with who and so on.

Vlad (19:10.01)

And therefore it's interesting to see how the user experience is going to be for Google and Apple and these kind of people and providers when it comes to identity use cases. And for sure, they will be seen that they will not leave that market for someone else. And we already see that they have started supporting some of the MDLs in some of the states in the US.

So we can expect to see more of that coming from these types of wallets and we can expect it. They will also not just leave the whole kind of European market, you know, just like that. So, but I'm also curious to see, what the user experience is gonna be for kind of identity related transactions and so on and see how that can put them or compare them with some of these governments providing wallets.

Mathieu (20:21.11)

It's an interesting point you made about just the complexity of that exchange or interaction. Cause you're right. If you're, if you want to share a boarding pass, it's literally just a, you pull up your boarding pass and you put it to a scanner and there, there's no, there's no business logic. There's no, there's no choice. It's just like a simple thing. And same thing. If you use tap to pay, it's kind of like you're in proximity. You're you, you trust. And it's actually incredible how much trust is built into just the pay to tap. Like no one even asks themselves then any questions there, but you're right. And in the identity use case, you wonder like when, if the intent of the relying party needs to be passed across to the holder, to the identity holder, if they need to be given choice, how that interaction does look like. Or if it's just like the majority of our interactions are still just going to be. There's not much complexity to it because you don't want to put that complexity on, on end users. And end users are just going to, you know, do a tap or do a simple scan. And it's just like a one, a one step thing. I don't know how that evolves.

Vlad (21:36.01)

Yeah, so that's something I'm really interested to see. Because over the past few years, I've been part in several POCs, pilots, seeing some kind of user testing results and so on. And everywhere you see, you see that there's a lot of context that's you actually surface to the user. You provide a lot of information. You need to somehow to convey the trust. You need somehow to put some kind of green check mark somewhere. You need to display like what is the party, where is the coming of the data, the information that you're sharing. And then if you're kind of, if

you use some of these, selective disclosures coming from multiple sources, like from multiple credentials. And you want to display all of that. Like what actually we are, how will that affect the kind of the normal, when I say the normal user, the one who is completely uninterested in the identity, in all of that, who just wants to get his stuff done.

You know, so he can, I don't know, access the bank or, you know, file the taxes or, you know, file for like a credit loan or something like that. Whoever just wants to do his own stuff, like, and then providing all of this information and all the context, like what it will actually do for, to the user and how will they actually react, you know, how much I'm actually going to like be really curious to see what would be kind of the actual success or how many people or users will drop out in the whole flow when you do something that's as complex as that.

Mathieu (23:49.13)

It also puts a lot of dependency on the wallet providers and like if the wallet providers are the mobile phone, the OEMs and they're the governments, like you're kind of, restricted to what they're able to provide to you as well, right? Like if it's just, if it's any third party building custom applications and like based on, on whatever, but in this case, we're literally just talking about which would seem to be very simple utilities, simple wallets. And I wonder if there's going to be stuff that different relying parties or like organizations or whoever wants to interact with a wallet provider would maybe be limited by what they could do because you're stuck to the government wallet.

Mathieu (24:38.20)

Maybe let's jump to products. It's funny seeing, I guess, the evolution and the products still today in the space, like when people are, organizations are building digital wallet products, either for people or for organizations or even like credential management and exchange platforms to facilitate credential management, to facilitate the issuance of credentials, to facilitate consuming credentials for, for relying parties. It all seems to be very, very technically focused and a lot of them kind of look the same with, and I think at Evernym, you probably had the first platform that, did this type of thing, but I don't know if we've seen that much advancement in that product or those visions since those Evernem products that you had built, which allowed for all these things to happen. Because the space is very technical in nature, and a lot of us are very, very involved in depth with technical stuff that maybe sometimes results into products having maybe too much of a technical lens. But what's your thinking on the evolution of that since you joined the space where we're at today and maybe where some of the opportunities are for the community?

Vlad (26:01.03)

I think your assessment is quite correct. When you look at the first and maybe some of the latest companies that are focusing on SSI technology, you're right. They are very kind of verifiable credential centric and maybe, I'll say, and there hasn't been yet, it's like a lot of advancements in the product vision. So a lot of companies are staying on that level that we are providing the ability for any type of organization entity company to kind of generate issue or to request, verifiable credentials. Maybe we also provide some kind of you know, holder/cloud wallet

capabilities for storing credentials and so on. And when you look at the many product offerings, they all seem to follow a very same or similar pattern, right? So we are all kind of building some kind of an agent or we have been built some kind of an agent that has those three main functions, either the issuer or the holder or the verifier, right? So, and I think, I'm not sure what's the reason. My assumption is that, you know, like having, working with this verifiable credential technology is kind of both as a blessing and curse. as a blessing because you understand, okay, you can apply this to so many different use cases and you can think of so many different use cases, but at the same time, it's hard for you to kind of make a bet on some particular use case or some particular vertical and then build something that's very kind of specific for that particular vertical.

And a lot of the companies that are kind of the, you know, technology providers for this technology, for the SSI and for the decentralized identity, you know, have stayed on that level for a long time, because at the same time, you're trying to be as generic as possible to answer to many different needs. And then you're unable to kind of focus on a particular use case on a particular vertical and then build something that's really kind of tailor-made for that.

And I believe that in future, the companies will have to kind of move and we'll have to make some older choices and that they will have to actually think about how to build some value added products or services that are on top of the verifiable credentials, these generic verifiable credentials. So yes, definitely this has been a very similar topic for many companies.

Mathieu (29:40.18)

Yeah, at least like some learnings. We've gone through that same process too of just having platforms that do absolutely everything that you would want to do, but it doesn't do anything particularly well, too complicated, too technical. And it's kind of been the same thing for, you said you got in the space of 2017 since then, like all of this has worked. The technology has been there. There's been advancements, but, in the technology since then and in the standard since then, but it still seems like the biggest blockers or reasons why it takes longer to push these things forward and have less to do with technology, but more to do with all the other stuff around it. one of the things that's difficult for people to just get into is the actual issuance of credentials. And so we're spending a lot of time thinking about government doing that and then just saying, well, there's going to be a supply of high integrity government issued credentials in the market. And then there should be some, well, there should be a lot of demand for that because the relying parties will be able to do some digital transformation and change the processes, cut costs, cut fraud, all of these things while ensuring they're adhering to data privacy laws.

Then, and that we've been kind of facing this in the Canadian market as we've seen credentials going to production where we've, we've seen the path of, okay, relying parties want to consume it and do what I just described, but then they want to start thinking about, Hey,how do I issue a credential? And so just thinking about how you componentize that a little bit more on its own to kind of solve that, that exact problem. That's not like a big SSI credential exchange platform. Like there's a lot more that just goes into issuing a credential. So I'd be interested from your

experience in the space and clients you've worked with and such, like, how do you look at issuing a credential? It seems like a lot more of a heavy task to do than saying, hey, I just want to consume or verify a credential.

Vlad (31:45.21)

Yes. So yeah, I think this is a, I mean, it's related to the previous question because all the use cases are so different. And because the issuing for, I don't know, for a certain credential in the airline aviation sector is so different from issuing in a, let's say health sector or supply chain, you know, for supply chain use cases and so on. I think that's why we are unable to kind, of build some kind of specific use case, or build the product offering for a certain use case. And we are, as you say, like issuing requires many different checks to be done.

And usually the actual issuing or verifying credential comes at the very end. So there's a lot of business logic that happens beforehand. Either you need to kind of verify some information, you need to check and so on, and you need to fetch some data from some kind of data store, database, and so on. And then you are, I would say, ready to issue. Then you're ready to issue. And then you also need to make sure what are the, what's the environment, what are the circumstances, are you issuing some kind of a safe, through some kind of safe channel and so on. So all these things are very different from use case to use case. And, and I do believe that, you know, the companies who are in this space, they won't be able to actually build something that really works well for a use case until they actually make a bet that they want to go for a, you know, and build some value proposition for a certain industry and stuff.

Vlad (33:56.09)

And maybe I was also thinking now it came back to me what I wanted to say earlier on, what was also difficult for the whole kind of, you know, industry and domain that we are in, is that also the, what was difficult is that also many of the industries are not, mature enough to be able to choose a specific industry. So it's not only the blame that there is on the SSI technology providers that you are unable to kind of, you know, pick one of the use cases and then build something that really works well for that use case. It's also that the market wasn't mature enough to actually accept it, right? And that's why if you're building a company, you need to make sure that you have as steady as possible income, you need to pay the salaries and so on.

So you are accepting different types of projects that can be so different between each other. And that's why you're also unable to say, OK, I'm just going to build some product that really works well for the health sector.

So it's not only what I say the blame that this was supposed to be. It's also about the state of the market and how that goes. And also what I want to add to that is why I believe that as we get closer to some kind of broader adoption that the companies that currently have this type of generic, verifiable credential, decentralized identity technology that they will actually have to build something on the top and go after a specific industry and sector is I've seen some kind of trends, not trend, but I've seen some kind of signs when you look at the government initiatives when you look at the, let's say, different large-scale pilots within the EU, you see that a lot of

these government bodies that have been tasked to actually implement the EU Wallet, a lot of them are actually deciding to at least at this stage, there are a lot of them deciding to actually explore and build these capabilities themselves.

And I see some, you know, a few examples that, you know, like a government, you know, they have their own, I've seen that example with, you know, for example, in Sweden, I've seen it with Switzerland. I've also seen it in some other places that really governments are, you know, deciding to, you know, have that, expertise, maybe just for exploration at first and so on, but I don't see governments actively seeking some kind of support from vendors to provide them the solutions, to provide them the ready to go solutions. And they're somehow deciding, okay, they will build the SDJOT credential format themselves, they will build some kind of issuer themselves and so on. So I'm not sure how that will actually evolve over time. And will those governments, when they actually start to have real production, will they need to have some kind of professional support, maintenance and so on that they may want to seek from some kind of external provider, or will they kind of continue to have those capabilities built in-house? So I'm not convinced on the long -term that this type of value offering will be enough for the long term. Or for the market.

Mathieu (38:56.00)

It's interesting. It's interesting if you contrast how they currently use vendors or suppliers for all types of existing identity cards and stuff like that, right? Like governments don't have the printing facilities in-house and that they outsource a lot of these functions. But it's interesting to see that in the, in the digital representation of these things, it seems like a lot of that infrastructure is sitting with them or they're at least making use of and contributing back and investing back into the open source so that they could then operate these things themselves. So it's a bit of a different model than I guess how they do today with physical identity cards.

Vlad (39:45.08)

Yes, exactly. Exactly. So you see that, you know, you see that is exactly what you say. Like you see that, I think I've seen it also recently from there was also kind of someone posted that, you know, one of these German bodies, you know, they're having that type of initiative. And of course, everything that's going to be built is going to be, of course, open sourced. So you know, someone will be able to kind of continue building on top of it, you know, and then, and so on. And I've seen it also in Finland and many others.

Mathieu (40:27.12)

I'm trying to remember the term, this like digital public good infrastructure or something seems to be a popular, thing that, that is growing. So it does make you wonder, like, I guess for, for organizations building, verifiable credential or digital identity products. I guess if you're talking about smaller, even smaller governments, if you go down to like the municipal level and stuff like that, maybe they don't have the the knowledge and expertise or want to kind of run and host this themselves. And maybe we'll want to buy off the shelf and maybe the same thing's true in the commercial sector. But then maybe if you look at like, you know, if you, if you start looking at the financial sector and the banks and large organizations, it'll be interesting to think if they want to

run their infrastructure themselves, like how far does the open source get and you guys at Evernym back in the day built so many foundational pieces that have continued to be built upon today. So the space wouldn't be where we are today without all the investments that you guys at Evernym had made over those years. But it'll be interesting to see how far the open source components get where it's almost like you just run a script very easily. You're running your thing versus like, Do you need to have someone operating it? Do you need to get an enterprise version of something? I don't know if there's any precedence to this and other spaces that we could maybe learn from, but I don't know how this is going to evolve.

Vlad (42:03.23)

You're right. So that's why I'm really curious to see exactly like how like if currency, you know, some of these, you know, different public sector bodies are currently deciding to build many of the things in house, which is completely fine for the current stage that they are currently in. It's, you know, development, it's still exploration, it's interop, it's...

validation of use cases and so on. So the current state there in doesn't require, as you say, operation doesn't require support, doesn't require maintenance, doesn't require SLA and so on. And then it would be interesting to see when they actually get to the stage, how will they source all these services that need to come. And you know and not just having a source code, right? So source code is one thing, but you need to run it, you need to operate it, and so on.

Mathieu (43:13.05)

And even within large governments, like if there's going to be multiple ministries that are going to be engaging in the verifiable credential exchanges in one way or another, kind of how do they get set up as well? Because I guess typically in the governments, there's like a team kind of behind the digital transformation or the advancement of the digital identity stuff, but the actual deployment of this when you start thinking about issuers and who wants to be consuming these things, even within the government is so much broader.

Vlad (43:46.22)

Yes, exactly. It usually is like that. It usually, you see that there is some kind of body that is pushing for the agenda, like the agency for digitalization or something like that. And then when it comes to the actual who is allowed to issue the government backed or government recognized digital ID, then you see, okay, maybe it's the Ministry of Interior, maybe things could be following some kind of legislation from, I don't know, ministry or whatever. And then you see it's much more complex and so on.

That is also the reason why this whole government backed digital ID is so slow to get adopted. And that's why there have been discussions, various places and so on. And still we don't have a significant adoption. And that's why there are such big and high hopes in the AI that like 2026/2027, everything's gonna change, but we are still to see if that's gonna be really the truth.

Mathieu (45:14.14)

And I wonder if we start looking at adoption curves of different other systems, whether you're looking at EDI or just how cloud infrastructure evolved over time. I think there's a lot of excitement right now, but it then comes down to, you need to then start looking at the adoption of government wallets by citizens, which is going to have its own adoption cycle. And then you need to start looking at the adoption cycle of the consumption of these things. And then the adoption cycle, the issuance of new domain specific credentials. I don't know how quick all of these things are going to move on their own. I guess the only thing that I kind of say is true is that the cloud infrastructure providers are going to continue making money with all of the all of the digitization that continues to happen.

Vlad (46:08.23)

Yeah, that's definitely the safe bet. I'm not sure how the SSI technology providers will benefit in all of that, but the cloud providers are interested in it for sure.

Mathieu (46:25.19)

Yeah, it's interesting because you've seen like strategies of organizations invest in an open source or kind of put their classic strategy of putting your arms around an open source project. And then eventually there's demand for that open source. And then the demand has been coming a lot from governments. And then governments are looking to invest and build on top of that, build their own stuff. So there's been a lot of consulting and then people getting hired because they have expertise in specific niches or standards or, or technologies and then I guess over time there's, there's been development of products and solutions on top of these things.

But, you wonder like when you kind of made reference earlier to the solution providers needing to go into specialties or into verticals at some point. I wonder when, when the time is where there'll be maybe a recommendation to startups in this spaceto, or maybe it's happened and that it should be happening today to say, hey, like, it's probably worth just going deep into a vertical right now.

What would you recommend the startup that is, cause it's probably a different recommendation today than when, Evernym started, as a business. And it was just doing a lot of proof of concepts, trying to just make the technology accessible. If, if you were hired as an advisor for a startup entering the space today, what would be maybe some recommendations you would have for them?

Vlad (47:59.04)

I mean, yeah, first, I mean, I'm generally, let's say, a product guy, so I'm focused on what's really the benefit for the user. So I was really trying today to be kind of more bold and try to actually pick one of the verticals, one of the use cases, one of the niches, and try really to build something there. And the, you know, the discussion, the value proposition doesn't have to be DADs and VCs. As you said, we are still using so much of the technical jargon. It's really still quite painful if you start most of your presentations explaining the trust triangle between the issuer hold and the verifier.

I think it's really, you know, if you're talking about trying to solve something, trying to be successful, I think we need to really go past that. And I think some of the companies, they have decided to really focus on a specific thing and either focusing on supply chains, and traceability. I think this would be kind of a step in a good direction. Of course, also there, things need to kind of align and the market needs to be also ready to accept that and so on. But yeah, I think right now the there's definitely more chances of success if we are kind of going one step above the platform, above the better financials as a service and so on, and then try to actually build some solution on top. I think that would be a, yeah, that would be a good starting point today at least.

As you said, like, you know, when we started, it was, you had to explain a lot of, you know, you had to explain the concepts and you started with the concepts and then you also provided the initial implementations and then these initial implementations, you also need to provide a lot of explanations and concepts and so on.

So it's and a lot of, let's say examples, tutorials, a lot of the learning curve for developers to actually get onto the domain and start building something useful was quite steep. And then I'm not sure if it really was needed, but maybe we were like so much, pure SSI visionary at the time and really didn't want to kind of accept the reality that, okay, the developers, they maybe want some other properties from the product than to have kind of a pure SSI or to be exposed to kind of a pure SSI vision. But that was the reality back then. And I think today it can be quite different.

Mathieu (51:36.20)

It still feels like we haven't reached the point where you just, you don't have to worry about any of the stuff. You just kind of sign up or start using a new solution and it just feels like magic compared to how you would do something today. And I think we've, we've seen that over the past year and a half with, around the year and a half with some of these AI based products, even just the, the chat based ones where it's kind of like, seems like magic compared to something that we either couldn't do before or we would do something differently. I wonder if it's just the nature of asynchronous solutions or products where there is reliance on multiple interactions with multiple parties. And you do need to get some sort of network effect for it to be meaningful. But I still don't think, unless I just haven't tried out one of these products... And again, we suffer from coming too much from the technical lens on stuff, but I would agree, all that to say, I would agree with your assessment that we're probably at a point where we don't need to sell verifiable credentials or we don't need to sell privacy or interoperability benefits. It's kind of just like, just build a product.

Vlad (52:57.04)

When we talk about what has changed, it's definitely, there's this big excitement around eIDAS initiative and of regulation being the most important export product of the EU. There is also kind of a hope that if this gets adopted in the EU and this gets successful, you know, that somehow it will spill over to different regions and then, you know, have more or less similar successes that you have like with GDPR and so on. Honestly, you know, like when I look at this whole kind of

eIDAS, I'm honestly quite supportive of the whole initiative and I'm really happy to see that it's being progressed and it's also kind of positive to see that, okay, you know, well, there's a lot of these, you know, different discussions around technology standards, you know, different types of standards and so on, but, at least there is kind of a, you know, push from the, from the regulatory side. Okay... This is going to be the technical stack and, you know, like go figure it out and, you know, make sure that it works and, you know, create some, make sure that it's interoperable and so on. So at least there is a, you know, this is really, really positive and so on.

At the same time, I'm kind of a little bit disappointed that, you know, that Anon Creds wasn't, you know, part of the discussion or it was kind of left out from, you know, from being a candidate, you know, relatively early. And also like when you hear the reasons why was that the case, you know, that some of the crypto, the Anon Creds were like too tightly coupled with the crypto. The crypto was not really, you know, it didn't have the crypto agility that you were not able to change the signature type or the key type, you know, to sign the credentials and so on. But, you know, and it's like non-unproven and not really mature enough. And now we are in a position that we are actually implementing OpenID4VC or SDJOTs kind of implementation of credential formats from draft specs. So it's even more immature.

So it's even more, how to say, we are in a position that we are kind of testing and that we will be testing this technology between users quite soon with libraries, with software that's like really, really, I would say immature and unproven testing. So that's kind of the whole irony, you know, like from all of that, but it's, you know, it's also a reality. I'm also a little bit kinda, I'm not sad, but you know, a little bit disappointed that somehow the whole in the Anon Cred community didn't recognize, and I'm fooling myself, part of that as well, that didn't recognize that there was a moment to somehow maybe improve those things a little bit earlier and maybe push this AnonCreds maybe through some kind of a standard track faster than it was.

Because You know, when you look what's happening with the SDJOTs with, with openID4VC it's happening. You know, they can go through standards track like quite quickly, you know, they can go through ISO track quite quickly if there is a will to do that. So, yeah, to me, this is kind of, you know, disappointed that we didn't manage to, to overcome that criticism and that we didn't manage to prove that there's some kind of real value in this. And of course, you know, maybe some kind of future iteration of the eIDAS, you know, we will get to that point, but right now it is what it is. But I'm still, you know, quite supportive, quite positive. I'm still, you know, happy that this is really going to be, that we are actually going to see, you know, these very powerful inventions in the wild. So all of that is quite close.

Mathieu (57:52.21)

Yeah, I think I, I commend the effort of the admin creds community and folks that have implemented that to stick behind unlinkability. I think that's a big thing that, it's actually thinking, thinking of writing up a paper on, on that just unlinkability is just a broader, broader topic. But, yeah, I go with your thoughts. And then at the same time, it's just the fact that, You know, the EU is doing something and they've decided to do it and they're putting efforts and they've made some decisions and we could talk about those decisions all day. But at the same time, the fact

that they've decided to do something and not just keep, keep waiting and thinking about different options or what they could do, I guess they need to be commended for that too. So these things will continue to evolve. And I agree with, with, with all of your points, but I guess Like you said, it's nice that we're going to start to see more verifiable credentials in the wild, which is something in 2017 when you were at Evernym, which seemed only a few years away, but we're getting there.

Mathieu (59:09.00)

Thanks, Vlad, for doing this. I really appreciate your time and the chat. It was awesome. Look forward to doing it again.

Vlad (59:18.03)

Thank you, Matthew. I really enjoyed it. Yes, let's do this again after some time. Then we'll see really if some of our predictions are really coming to life.