Green Blockchain: What are they? And how can they change the future of cryptocurrency? | Uma Hagenguth & Douglas Horn

[00:00:00] Guest Intro -Uma Hagenguth & Douglas Horn

Darin: Hey everybody, welcome to show. This is the Darin Olien show. How you doing? What's going on? What's happening in your life? Are you creating the life that you want or reacting to it? There's a little bit of reaction that's going to happen in this day and age, but we take the opportunity to cultivate the life that we want and seeing the things that don't work inherently and inevitably create change. And change is absolutely what's required when things don't work. And I am happy to bring on two people that are changing things. Uma and Douglas Horn, Uma was on episode 191 where we talked about blockchain, we talked about Appics, we talked about this web three, right? This new ways that were using the ethos of, you know, we saw a Bitcoin, we hear about this blockchain stuff, how do we use it? What do we do with it? We got into it. Douglas Horn jumps on, he created the good block, the founder of Telos blockchain, where he minimizes the use of high amounts of energy for blockchain, which is huge, right? Environmentally more in line because it is data driven. You have to hold data in different places around the globe in order to store this data of blockchain. So, we get into all of these little nuances. Listen, if your new to blockchain, which I am by the way, this is good for you, then you start to understand how powerful blockchain is. You will start to understand this terminology that both Uma and Doug and now myself get into; to understand why we are using it, the importance that it is having in this day and age, to have transparency, to have truth, to have transactions that are not manipulated. Yeah, of course currency is an important aspect of this, but there's many more uses to this web three, there's many more uses to blockchain.

Darin: And again, if you haven't jumped on Appics, it's a free app where you have an account and you are literally by just posting, just like on Instagram, you are posting content, you are posting stories, you start liking other people's stuff. Guess what? With no fees, no hidden mumbo jumbo, just by your time that you are putting on a platform, your mining currency. So Appics was created so that you can gain the value of the time that you are spending. And Appics and the coin or the blockchain behind it is awarding you that time. Please sign up right now. I get nothing for this other than telling you about it and then follow me just by that action you will be mining currency. That's right, by posting some pictures of your dogs, your cats, your lovers, whatever. You will be mining currency; I am telling you Appics.com is real. I have known these people for a long time. And please then check out Doug Horn and how this blockchain has created, He's doing some incredible stuff with the Telos blockchain. So, sit back, relax, learn something today and take some action in an area that you may not know about but you can learn. The world is moving. It's best to be knowledgeable of it. So, enjoy this next conversation with Uma and Douglas.

[00:03:55] Podcast Intro

Darin: You are listening to The Darin Olien Show. I am Darin, and it is my life's mission to find and share healthy and sustainable ways of living. In this podcast, I talk to inspiring

people and professionals from around the world to uncover ways that we, as humans can improve our lifestyles, strengthen our mindsets and take better care of this beautiful planet we call home. If you are looking for motivation to take the next steps towards a happier, healthier life then you are in the right place. And I am stoked that you are here. So, let's do this. This is my show, The Darin Olien Show.

[00:04:39] Interview Commences

Darin: Welcome back again and Douglas, nice to meet you. I am stoked to jump in here. All things blockchain, what that represents, what the challenges are, what the good of what you have created are the merging of both your technology with Appics and what we can actually actualize with what we all perceive, what we want blockchain to be. And obviously it can go sideways and there's some challenges within the industry and there's people within human nature that will take advantage of these things. So, all that to say, thanks for jumping on here and having this conversation.

[00:05:27] Blockchain, Metaverse & the evolution of technology

Uma: Thank you so much Darin and of course Douglas who's gotten us involved with this incredible technology. And I just wanted to, before we start with questions going back and forth, I just wanted to say and sort of go back to like from So, last time when we had a conversation about Appics and the So, things that we build on blockchain. And after that conversation I just sort of sat and I realized, I was like, wow, I feel like there were so many buzzwords and it's still so complicated to like fully understand or even to communicate what we are doing here. And so, I just wanted to start off by saying that the space right now that we are in, and there's all these buzzwords now, right? Web three, metaverse, NFTs, like maybe you have heard about it, maybe you haven't. Like there's people out there, believe it or not, that haven't heard of any of these terms and we are so used to it now because it's our industry. If you are in another industry, I am sure you will, you are using buzzwords and things that other people aren't familiar with or that maybe your so, friends or your mom doesn't understand. And so, we are in this space blockchain technology web three where now also s NFTs have so, come into and really, it's just about the next level of evolution of technologies. Like before there was radio, there was the internet. And if you go back to look at videos of how the internet was explained back in, you know, the beginnings and back in the early days or even social media, like what a crazy concept or even before that the telephone that you can communicate with people over a distance, like it was mind blowing in the beginning and it was so difficult to comprehend. And even with the internet today, I mean we use it on a daily basis, but I am sure most people don't really know how it works or could even explain to somebody how does the internet really work? Like you use it, you Google and you use social media, but how does it really work? So, with blockchain, the things we are talking about today, I think it's important that you understand that you don't need to understand everything. The nitty gritty of like how does the technology work? The important thing is we are building stuff on it to make it more accessible so that people can get involved in benefit from it. Because if you would've known what the internet would've become today and you knew about that in like 1991, that I am sure you would've made different choices and bought certain domains early on. Or same with social media, you would've started a YouTube channel if you would've known what it would become. And so, with blockchain and

the things that we are building, it's the same thing. We are now in an era where we are still in the early stages, believe it or not. And to get involved with it, to educate yourself now means that you have a huge upside and opportunity in a couple of years from today. So that's just all I wanted to say to give a little bit of an intro.

Darin: It's super important because the challenge for, let's call it regular people and I am certainly a regular person's, not my industry, but I get it and I get it from the aspect of, and I think it's important, this discussion this way Uma and Douglas in the sense that we are going to get through some of these terms. I am going to ask you these questions, we are going to get through some of that just off of what you just said, Uma, I kind of want to say what then without understanding any of these terms, what is the result? So, like the internet, infinite amount of data and research and we can use it just like electricity. No one literally understands this exchange of electrons. They just know that they turn on a light and the light shows up. So maybe the closest person to understanding electricity was Tesla and there's a power that we can barely understand. So, my question then is what is it giving us and what is the void potentially that it's servicing as that end result and I would love to hear maybe Douglas like from that perspective, not the technical stuff yet, but what is the void that it's giving us and potentially as a society and a space that it has filled.

[00:09:30] Eliminating the middleman with Blockchain

Douglas: I think that's a great question and thanks for having me. I really excited to be on the show. I would say that the void that it's filling is the ability for us to work together with other people. That includes trade, that includes paying things, that includes making decisions together without having to have somebody else in the middle controlling that, whether that be a government or whether that be a big company like Facebook or Twitter or whether that be anyone else, the opportunities to work person to person, those always have been limited by the tools we have available. You can't really ever have a direct democracy because it gets bogged down. You can't have a worldwide global marketplace because there are people who are in the middle of that and want to stay in the middle of that and control things like monetary policies and things like that. And this is our opportunity to repower the individual and to be protected against things like everybody knowing your data, everybody knowing everything you are doing, people being able to control your data. It's not perfect but I think that's one of the big things that we gain and how it's expressed is in a lot of little things and we will be more as it goes along. In the same way that the internet started out, like we thought we were just going to be using copy serve groups and email and they exploded into being able to order anything and have Amazon delivered in a day or being able to keep ongoing conversations with people around the world in an instant like we are doing right now. All these and many, many, many other things. Being able to track our health and all of those things are amazing. But they also mean that right now what went with that with the internet is that if the big company that you are using has a policy or doesn't like what you say or whatever, they can cut you off and all those users you have gained so they can de platform you. Or if a company like looks at all your data and does some analysis and can figure out a lot more about you, then you might want them to. All of those things are negatives that went with the internet explosion even with all the positives. And one of the things this does is it shifts the script a little bit and makes it so that it's human beings and individuals are in a more powerful position than the intermediaries, the governments and big

companies and corporations were in the internet age. So, I think it fixes a lot of what it does is it expands on what's happened with the internet and fixes it. And really puts people in charge of their own selves and money. Of course, with every positive there's a negative. And one of the negatives currently has been that when you are totally in charge and there's no bank or whatever to fall back on, then your mistakes can be bigger and that's what people lose, their keys get hacked and all these things. So, what we are trying to do at this phase of web three blockchain technology is to make it a little easier for people to sign on, make it not so intimidating, perhaps add a few guardrails without adding the intermediaries that were needed before. So, I think that's where we are at and the benefits for people are that they can have even more of these astounding possibilities of the internet without having to rely on Twitter or their governments or Facebook or any of the other big companies as much.

Darin: Yeah, so there's a huge opportunity for exchange and services essentially, right? So, like let's maybe just circle around currency for a second. Currency, I think that with the end in mind of what you just described, I don't know anyone on the planet other than the people who want to control those said people, I don't know anyone on the planet that wouldn't want more security functionality, trade possibility, service possibility, but control and protection of their own currencies. So, from that perspective, again we can open up a huge Pandora's box on the negative sides of the fiat currency. Especially now once we released that gold standard, there was no grounding principle to the just incessant printing of money,

Douglas: Just making up numbers currently and sometimes taking them away, right? So, a couple years ago took away the usage of their two most frequently used bills and that's denomination. So, there was a cash-based society and the government decided they wanted to make it a digital based society. And so, they just made a policy change that changed everything about how people could use cash. I mean it's not just all the obvious things about cash, it's the fact that they can take it away and that's not how any of us want to be. There's also things like in Africa, if you make a payment between two African nations like a phone payment, something really basic, it still takes three months to clear even if no one contests it. When I learned that from a friend in Africa, it blew me away. Those are things we can fix really quickly as soon as more people get their hands on money that they have, that the rules are very clear on compared to just constantly printing money like US dollars in the last two years

Uma: I started with Bitcoin being like the first idea that was the start of it, all right, Bitcoin if people have heard about it but really what was Bitcoin about? It was about a new form of payment system that allows people to transact freely without the need for a bank. So, all of a sudden it opens up a door for people that before weren't able to transact.

Douglas: And there's even Bitcoin ATMs, I really look forward to the day that's coming quickly where you don't have to go back to fiat currency. I have actually been living on crypto where the majority of my assets were in crypto. I earned my living in crypto and then as needed changed it back into fiat at the last stage so that I could pay my bills. And I have been doing that for years and it's great and you really get frustrated with the current process or the old process quite often if you are like me. But more and more I am able to pay employees, I am able to buy equipment, I am able to do things that I need to do increasingly in just cryptocurrencies. So, at my hope and my vision is that in time and that maybe not that

much time we will be possible to do all your transactions, your utility company will come back and say, oh yeah, we take crypto or telos or Bitcoin or a range of currencies and you can pay that instantly. That will be great and as that's not that far off, we've come so far in the last 10 years that the next five years is going to be just revolutionary.

[00:16:04] Cryptocurrency as the second market

Uma: Exactly. Just to that point because I think it's so important to understand, especially during a, what we call bear market right now, right? Where like prices are down and there isn't a lot of hiva people are like, oh is crypto debt or this and that. It's important to go back to like the fundamentals of why we are in the space, which is the blockchain in and of itself. And I listened to this like years ago when like first was learning more about blockchain and how it was explained and it's really that cryptocurrency is just the secondary market. The first market is the blockchain in and of itself and actually the cryptocurrency is just a result of the blockchain network. So, you have the blockchain network which is like at 3.0 or whatever you want to call it, like this new network that is global. It is decentralized meaning that it's peer to peer just between people without the need for an intermediary. And in the beginning how it would work when it still does with proof of work you have mining machines, they basically secure the network, they solve different mathematical problems and essentially just make sure that every transaction that goes through is valid and for doing and for performing that work. They just like people if they perform work, you get your paycheck at the end of the month. These mining machines for doing the work, they get rewarded in form of cryptocurrency. So that's the payout that happens with bitcoin and other cryptocurrencies. So, the blockchain, the value of that, just the value of the network that comes first and the cryptocurrencies is just like a byproduct. And that's important to understand because then it's not so much about the price anymore because if the technology is that revolutionary and mass adoption is inevitable, like it will happen because I mean we see it already, countries are adopting it and you know big cooperations are building with it and it's just an alternative system to give people more power and freedom like that is mind blowing. And if you believe in the technology then you know that the value of cryptocurrencies is also going to go up over time no matter the price fluctuations. So that's I think a key point and then maybe just to circle it back to telos and different blockchains out there because yeah Bitcoin came out and why not use that one network but there are certain issues with that network proof of work where you have mining machines, one of them is it uses up a lot of electricity. I am sure if you care about the environment then you are also not a big fan of like oh you know, why do we need to do this? And yes, it's good maybe for our society but it has this big downside of using up electricity. So, there's now different systems in place that Douglas can also talk more about like delegated proof of stake and other mechanisms that allow you to still have that validation and have this decentralized global network use this technology but in a more environmentally friendly way.

Darin: So, a couple things you said, just to reiterate, which is great distinction because the blockchain then represents this way of doing things and crypto is one service to that blockchain and that's where all these other things like NFTs and metaverse or also other services laid on top of this blockchain. Is that correct?

Uma: Absolutely. There's different utilities like with the internet, like Appics, what we are doing right with reward based social media platform is on the blockchain like for being active there you get rewarded form of crypto and that is an application. We have the marketplaces, we have defi, decentralized finance, so also a big application, a big sector that is being revolutionized but it's always about the underlying technology is the blockchain in all of those cases.

Douglas: Yeah, and sometimes the blockchain is just recording information. Currency is basically just information how much I have, how much you have, I send some to you, now you have that and I don't have it anymore. It's very simple. I don't think we need to go get into the buzz words of proof of work or delegated proof of stake. I think that the advantages that anyone was talking about and I was hinting at before are once you have this network which includes cryptocurrencies, you could do all the other things like you can immutably permanently notarized for anybody to check that I was the first one to publish this picture or this article or this whatever. And anybody else who comes in and yeah, says, oh no I made this. I can verify it in a way that couldn't be faked. Put a clearest timestamp on exactly what I did and when I did it. And that's great for writers and authors, there's a lot of theft of these ideas that actually have value. If you are a writer, that article you wrote is something that should be earning you some money, not just the company in the middle. That's another thing about getting rid of the companies in the middle. If I took a great picture or made and posted it on something like Instagram, Instagram gets all the benefits from that and they can de platform me if they want whatever. If I do that on Appics, those are shared, most of the benefits go to the person who posted, the people who commented, the people who basically gave value to that piece of media. And so, we might not think about that in a purely currency way. If I am a game maker and I make a great game or I contribute to a game, you know there's like games are becoming more and more complex and you have seen people who do mods, they make their own sort of world within a game engine. And right now, those people don't get paid because all those revenues go back to the game publisher. But what if they could, and with these types of things you could make a game world or a game extension and when people go in there and do things, there are micro payments. If you are making payments and you are making them super-fast and inexpensive or effectively free, then you could do all kinds of small payments for all kinds of interesting things that you could never monetize before because the cost of making that payment was more than the payment was worth. So, one of the things that Uma was talking about was the advances from Bitcoin that now you know many years later are available in the third generation blockchains like Telos. And one of those things is that it's much faster and another is that it's much cheaper to do these transactions.

Douglas: So, Bitcoin enabled us to create these transactions that could go anywhere at any time and never be clawed back like bank transactions or credit card transactions, right? Had a lot of advantages. I don't have to, there's no intermediary, I can send something to you or Uma and it's done and at the end of the month I can't say, oh somebody can test to this and so I am, I am taking it back, sorry. So that's important for anybody who uses those things professionally, right? It's a big problem for merchants of any kind so solves those problems. But it does have a big energy impact which I don't think it destroys the environment as much

because the regular economy has a huge energy impact. All those Brinks trucks driving around money and having to those who run on (inaudible 22:48) and gold is terribly toxic and they pretend that there's not an already an economic and ecological cost built into the current system. So that whole thing is a real red herring that the current economic players have thrown up that totally bypassed the fact that their industries are far, far more energy intensive and could be replaced and a much better system could come in that would be less energy intensive. It's just that right now both systems have to run. When Bitcoin and crypto replace most of the functions of the old fiat currency economy and they will then those can go away and it will be actually be net less energy intensive. But for right now there's a new generation of blockchains. If you think of Bitcoin as a first generation, it started at all, it uses proof of work, you can always send every 10 minutes but there's a limited capacity and things get clogged and you have to pay pretty fair amount to get your transaction included and it doesn't do any kind of smart contract things really or very limited.

Douglas: Then there's second generation which would be something like Ethereum and a lot of the first smart contract platforms that add that functionality and then you get to the third generation which is telos and some blockchains like it and there suddenly you have on Telos every transaction is a half second instead of with Bitcoin we are doing six transactions per minute. You are doing 120 transactions per minute. So, you are not really waiting, it feels instant and the cost can be zero, you can stake a small amount for your usage or you work with apps that do that and that stake of Telos token which powers a network is not consumed, you reserve network usage and if you have that then your transactions don't cost anything. So then suddenly you can send something that's an incredibly small amount of money, a millionth or a 10000000th of a Bitcoin or let's say a 10000th of a cent without cost. You can't do that in the other systems because it would cost you 12 cents or $12 or whatever to send that tiny amount. But now on Telos you can send these amounts for nothing, doesn't cost anything and therefore it allows you to do a lot of other things. It really unlocks micropayments. And so, one of the reasons that's been hard to say oh well we are going to pay users for their content on Instagram or whatever is that each individual payment would be so small that it's not worth the payment costs. Now that we take the payment costs away and make it instant. You can do all kinds of things that aggregate a little bit some money here and there, but in the end the value comes back to the users instead of just the platform. So, I think that's a big benefit for people.

Darin: Yeah, it's a big benefit. So, let's unpack the green eco side of it a little more. Cause obviously I am in this space, Uma knows me and some of the connections I have and some of the things I am involved in or energy efficiencies, like that's just common sense across every industry. I think what you brought up is absolutely necessary because we all want to put ourselves on this. Even the electric car, you pull that string long enough actually doesn't make sense from a long-term perspective. You have got mining issues of precious metals; you have got most of the power that's charging the cars from coal here in California like people live in this a bit of delusion. And so, I think what you said is necessary and at the same time every industry should be looking for efficiencies, should be looking for common sense energy solutions. And I am not going to sit here and be the drum of superiority of like all of these things, but we need to work together as industries and everything else too. So

that said, how does Telos minimize that energy usage compared to these first and second generations?

[00:26:43] Why Telos is the greenest Blockchain?

Douglas: That's a great question. So, Telos is measured as the greenest blockchain in existence of any of the major blockchains. And the way we did that is we went to all the validators and took a poll and said, what machines are you running? What model is that? How much electricity is that currently using? Where is your energy sourced from so we know whether it's hydroelectric or nuclear or coal or whatever. And we had 40% of our validators respond in some way and 25% responded in full. We did this just about a year ago and so we are due for another one. But like instead of just saying we are green, we went and really calculated that. And by the way those, that's a really high, most things get weigh lower response level. So, people are very engaged who are running the technology and we calculated it and we have a chart, but it's basically in terms of total and in terms of per transaction, telos is the lowest energy cost. And the way we do that is we don't use proof of work, we don't have computers all over the world doing very energy intensive calculations to try to solve the proof of work problem for that block, which actually has nothing to do with what's recorded on the chain, it's just the system that keeps everybody honest. We have a different system whereby people who own Telos and stake it, as I mentioned earlier for their usage needs can also vote for who's running the network and the people running the network instead of having to have their own computers running it like where you are running on a laptop or even a raspberry pie. Literally a little single board computer like you do for many of these older generations. We run them on high end infrastructure in data centers and with great connectivity. So that's one of where one of the advantages comes from and we monitor that and we don't expect everybody to do that, but so that everybody who is in the economy can help vote for who they want and who is running it. So that's a different approach and again, I am trying not to get to down in the weeds, but basically our energy usage is just much lower because we are not having people all over the world trying to solve some problem or use a lot of energy for calculations that only one of those at any given time, at any given block will go into the system. So, we use less energy by far and we use what we do, we use much more efficiently and it gives much more power. I think that this power, this ecological piece about Bitcoin is just that the existing economic infrastructure is using because they don't have anything else negative to say about it. It is clearly going to replace theirs. It's better, it's more efficient, it's better for everyone, but they are entrenched and so they want to say something and there's not really much they can say. So, they throw this energy thing at it and they keep saying it and saying it and amplifying that message. But absolutely it's important that we fix this big problem that we have impending on the whole planet and we already feeling the effects of it, of climate change and global warming and all these things. But you know, another way that Telos is helping and blockchain and cryptocurrencies and whatnot are all helping that is and Telos especially. One of the things that does is it allows people to do work together more efficiently and many Daps, meaning groups which are just groups.

Douglas: It's kind of like a co-op. People talk about decentralized apps or Dows and you kind of think of them like very technically enabled co-op. It basically where everybody works together and has a say and enjoys the benefits, these basically digital co-ops called Dows.

They allow people to work together in a way where you don't have to feel like somebody's going to take control of it unnecessarily where you can see and where your contributions are going. If you are turning that into your life, you can be paid by these dows. And so, these things are great for, you know, green reef regenerative finance type projects that's a huge benefit. We are on Telos right now; we have Dows that are buying NFTs that represent real land in Peru right now. This is going to go worldwide where also we are going to project in Ghana that's very similar. So, you can buy land that land is currently arid land that doesn't have anything on it and it's being reclaimed and reinforced and also some of it's being used for agriculture to help feed the now; local people. So, it's better in many, many ways. If we could get these things going all over the world, it would be a great benefit, right? So, people can grow more of the food that they eat closer to where they are. They don't have to transport it. They can have this land people around the world who think it's important can buy these NFTs and share in some of the economic revenue from that land ongoing. I bought one of those NFTs that represent land in Peru. I wouldn't do that as anybody, but I would want to go and look at it and make sure that this is fair and that I am not going to get ripped off. But the rules of the smart contracts take the humans out of most of those decisions. And so, I know that I can trust the computer code that I am going to get paid my share and these projects are going to do what they say they are going to do. And so, it allows me or anybody you know, far away from Peru to take part in these things. And if I believe in reforestation and local agriculture and the value of those things, I can take part in that digital co-op that Dow and be involved. The ability to make groups, make it easier for groups to work together in a fair way where you don't have to worry about what the rules are or how they are going to be done or how the governance is done, that is a huge advance that's never existed before. And those types of things, the power, the positive power of those projects, allowing people to work together for regenerative farming, regenerative finance, that's far more powerful if you use properly than any of these energy uses. It's massive net benefit once people really start using these things. So, I really believe in it.

[00:35:06] Interview continued

Darin: So, from people getting all this exposure of up and down, it's not real and all of that stuff and maybe a caveat to that is because I am also learn every time, I have these discussions and one is that, oh kind of light bulb that went off around blockchain is that, oh no, the value is recording someone's work. So, any work that someone does with the blockchain, it's like any employer, it's like any kind of thing. It's like, oh you are getting paid per hour, you are getting for the work that you do, then you get a FI currency. But blockchain is kind of like a cleaner version of that. So, what you are doing, you are essentially creating value however that value is exchanged. That to me was just like think the light bulb went off when you were discussing that. So that alone, however the transactions are, the value is recorded.

[00:36:02] How green blockchains create value?

Douglas: Think about the value creation on Appics versus Instagram. So, on Instagram they go out and get value from all the ads and the placements and everything that happens, right? And that all just goes back to the platform that's why it's such a company that makes lots of money I assume, but the value is created by the users, it's created by the app as well.

But the real value is put in there by the users in very small units of value creation, liking something, making a great comment, putting something up, sharing something. All those things are very tiny units of value creation. And traditionally people said, well you know, how can we account for all that value creation? You want us to share 0.0001 penny for somebody clicking like? I mean we can't do that. But now you can. The people who create that value in whatever way, there's lots of ways that value is created on the internet and the people who create that value can share in that. That's a change. I mean Uma, you can talk about well that more about how that works exactly on Appics because it's revolutionary. I love it, I am a user and I use it more than any other social media platform. I just love it.

Uma: Yes, and I mean Darin and I, we did a full episode on it. So, where I go into details about it, but what I can say, because while you were talking about it in my head also what just sort of, you know, went off was I was thinking that really it just opens up the space like social media or in general, like it opens up the space for more people to participate and get their value whatever they put into the system to get a return for that. Because before, like you said, you spent microseconds here and there and you do these things and you don't even think about it. It's like you use them for free because you want to connect with your friends. You don't really think about that there's the value behind that and just because it's micro transactions or micro pieces of value, why shouldn't I still get something from that? Because I am a participant in the system. And so, with blockchain through the technology, we are just able to create a system where we've returned the value that in the first place got generated by the users back to them and give them something in return for their activities, for their interactions. And so, on Appics the way we do it is using the Telos blockchain and I like how we before talked about, you know how it's the fastest and it's cheap, it's free, basically it's free to make transaction, which is important because imagine if on social media, like you said Instagram, you couldn't do it because if for one like that you placed there goes like couple of cents to the post. It's like the processing, the payment would be more expensive than payment itself versus on Telos it's free than even 0.001 cent through the power of my vote can go to that post. But now because we have something like the stake weighted system, meaning the more stake you have, the more you have accumulated of the native currency of the platform, the higher the value of your vote. So, it's a system that allows people to vote on content to participate in a community and decide what's valuable and then distribute that among the community, among the creator as well as the voters. And that never before was possible, right? There is not a social media platform right now out there where you get rewarded just for being a supporter. It's like yes, you can get rewarded as a content creator if you make those brand deals and then you sell the attention of your audience to the advertisers. But there's no direct way, no instant way and so on Appics it's direct, it's instant, and the community. So, the voters, the people who comment, we also regard that as value. And so, there's a return of value for those people as well.

Douglas: They get a return of value and they also have a say in how things are run. So, if the platform is making big changes and needs to make some decisions, not like do we buy pens? Not day to day decisions, but the bigger decisions can be voted by the users and the users who have more, are more Appics or more Telos. It works very similarly. They are the ones who have put more into the system either by doing the work and then earning the Telos. I have been paid almost entirely in Telos for the past three and a half years since the

network launched, so I have a fair amount. Or because they just bought in and they say, hey, we believe in this, this is going to do great. We are going to buy in because we think once this catches on and people really understand what's happening, then Appics or Telos or whatever that group and program may be, we think it's going to go up. That's what a lot of people are, are betting and I think they are wise to do that. But those people are the people who have like have a lot writing on the system or the people who have input in a lot into the system or both because often investors become users and users become investors because, they are so psyched about what's happening on Appics or Telos or whatever. Those people get to just make the big decisions. And really, it's these Dows, these digital co-ops are run by their members instead of run by some small number of founders or shareholders or whatever. And I think that's really exciting and capturing all that value, sharing it and sharing the important decisions around what's going to be done with it and how the platforms are going to grow in the future. That again, something that never happens or never has happened before, it's a complete change and it's a change towards putting the individuals in power, letting them share revenue for the value that they help create and letting them make decisions based on how much they have put into this system, whether it be by buying tokens or working for them or whatever.

Darin: That's where the super exciting thing and people listening, you don't have to understand the whole thing, but just the basic concepts of your value of what you are putting in, you are getting valued right away.

Douglas: It's going back to you instead of going to this corporation, right? It's like the Superman three thing or office space thing. You know where they say, oh well we are just going to, all these rounding errors, we are just going to take those and put them in account and suddenly it's a huge account. The other apps and whatnot are saying, hey, well the amount of value created is so small that any individual amount can't be tracked and you couldn't pay for it, so therefore we are going to keep it out all and then the amount is like hundreds of millions of dollars that you go. Well couldn't you think of some way to share that? Uma and I were at a conference a few months ago in Austin, Texas, the Consensus conference and somebody who was newer to Appics asked why would people post all this stuff there? It doesn't make any sense. And then the answer is, well how much does Instagram pay you to post because we think it's zero. It's like, oh, okay, got it. It's a very simple thing. If I put a lot of value in, I get some of that or all of that or most of that back. Oh, like it's just like blew their mind. Like they couldn't even think of that as, not that Uma hadn't said it several times already, but it just, it's such a revolutionary concept. We are so built to be the product for all these apps that the idea that we aren't going to be the product and we are going to be the people who benefit from it financially is no one can really get that model on the first time they hear it. Oh, I could be paid for that. I could be paid for liking something, even if a small amount. Wow, like it takes a while for that to sink in for people. And then once it does then it's like, oh yeah, okay, well now it's just a question of how long it takes for other people to get what I just got.

Uma: I just want to say that because like yes, you are getting paid, but I think what's even more powerful is that you are not just getting paid in your fiat currency that you can then spend because like that would be all right. You know, you get something, you can spend it, but you are getting paid where then you can make the choice to actually hold it. And as you

hold it, you participate and you are part, just like you were holding shares of a company then that has the potential to go up in value. If you are holding tokens of a platform more, you just come in and you know you are early on, you believe in something, you have the ability to actually turn that even into more, which is like, that is so powerful in and of itself because in any other system you can't do that. But because with cryptos you are able to create a community and involve people and you can share that token and depending on, you know, that it's utility and more people joining the system, if you are early, there's a huge potential for the tokens that you hold. It's like you investing something, you invest your time, you invest your energy, you invest your creativity for doing these actions, interactions, and in return you get an investment, it's such a unique system. When I first learned about it in 2016, it blew my mind and I have been, you know, full time ever since when I first discovered that there's this technology out there that does it and we can now use it. My team and I were like, we have to create just an app that is super simple to use, you know, that is, yes, from a user experience right now, similar to Instagram because we said we are going to add this whole layer of like blockchain and you have your wallet and instead of liking stuff, you vote on it. So, there's tweaks that people have to get used to in new form of social media. So, we wanted to keep the design and user experience similar to what they are already familiar with. And now, yeah, we are finally live on the app and Google playstore, which makes it so easy for people to just go and like type in Appics, download the app and it's absolutely free to participate. So, the barrier to entry is so low now where you don't even have to think about it. Like if you are on Instagram or if you are on any social platform, you can just share it on Appics, try it out, give it a try. And that's really what it's all about. That we have applications just like the internet, complicated technology, but now you have like Google and you have Amazon, you have social platforms that make it easy to use. And so, with blockchain, right, Appics is an application where we want people that don't want to think about the technology or don't want to understand it to still be able to benefit from it. So that's really what it's about.

Douglas: And by the way, you can turn it into Fiat Cash or other current cryptocurrencies if you want. It's your choice and you can also say, okay, well other people are, for whatever reason, they want some cash right now for this or that, that they have earned. So, they are selling so other people can buy in, which is effectively saying, I got on this later, but I really believe in it or I want to amplify my voice. I want people to see what, make sure they see because I have what I am doing, so I am going to buy some. Basically, it is saying, Oh I wish I had gotten into this earlier so I am going to buy it now. Selling it is like, well I have made some, but I also have other needs. Telos is the underlying blockchain that basically powers this app. It's a network versus a platform, a platform is something that a lot of things use, but they don't interact. But a network which Telos is, is something where there are a lot of different apps or users or whatnot and they interact with each other and through that interaction it gets even more valuable. So, there's many, many apps on Telos. Appics is probably the very best one right now, and number one in my heart for sure, but there's others as well. And once you start using one Telos app, you might use others and you might want to move your influence as which is expressed in these tokens from one to another. And back again, you are empowered to do that. There's no real cost to do that and it can be done instantly, so why not? So, things like the Appics token represent your equity, so to speak, in what you have put into the Appics system. And Appics itself uses some Telos to operate at stakes that Telos and as others you come in, they have to buy and stake that Telos to cover

their users. And so that's what gives Telos tokens value. And you may want to change between Telos and Appics or some other token that of some other app because you want to engage really heavily in that app. So, it's a big economy and you can do whatever you want with the tokens you earn or buy and people do, right? There's a huge defi economy of decentralized finance where people can essentially do stock markety type things without having at stock market between them. And it's really exciting as well. So, this is a huge ecosystem that Appics is a part of on Telos, but it's much bigger. And because it's bigger, it means that there's more and more things that you can do and with what you earn on Appics and it just benefits everyone. And the people who are using these other apps can go and take that and use that to increase their investment or involvement in Appics as well. Your choices are yours as individuals. So, Telos does have an EVM, people who are into blockchains, it means Ethereum virtual machine, Ethereum network itself is an evm. Telos has the fastest EVM in existence as well and one of the cheapest. There are some small costs to using that, but the most important thing without getting into it is it expands silos to a much, much bigger user base of people who are used to the EVM way of doing things through things like meta mask, it said slightly different tool set and people will just feel more comfortable with it because they have learned this using Ethereum and now they can use the exact same tools. So, it massively opens up the user base for Telos and again, Telos is the fastest and it also solves some other problems like front running and whatnot. So, there's a lot of really great reasons for people to move from these other platforms and use Telos or not necessarily stop using those, but I will use Telos as well.

Douglas: And so, it expands that for Appics and their users, especially in the decentralized finance backend. So, Telos, we say we are carbon neutral, we are actually probably carbon negative and our goal is to be carbon negative because we carbon neutral's not really enough because not everybody's carbon neutral and we've gone really far, like we need to start sucking some carbon out of the atmosphere, not just put less in. And also, I think that people make accounting mistakes and how much carbon they are creating, they forget this or that or whatever, and those net out to be putting out more carbon than people think they are. So, I actually think it's important to be So, carbon negative and that's where we are driving Telos right now. I think it probably actually is, but that's what our goal's going to be for that small amount of energy relative to other systems that we do use and the CO2 we do produce, we buy carbon offsets through various means and also carbon offsets are being recorded or going to be recorded on Telos. It's a great platform for that because that's something where very small payments happening very quickly all around the world in massive numbers people can earn for what they do for carbon sequestration or not producing it. There are platforms where you, if you run a solar panel and you could be earning some carbon credits for that, that's where we are going and we already are talking to a number of leading groups and doing these projects. That's not a project that is immediately on Telos, but I think you'll see that shortly. I think the people who are interested in things like Appics are probably also many of them are interested in the environment and interested in taking part in these things and just bringing all these aspects of life where they are creating a little bit of value and working with other people, bringing them together in a big network where the value grows. So, I think that's what we are trying to do, Telos are simple as an acorn and it's because we are very aligned with regenerating the earth and the idea of small

things growing into very big things. It's a very important concept for us. We really believe in it.

Darin: That's awesome. Even with technology, if we follow the rules of nature, then that's pleomorphic benefits rather than taking away so like regeneration in every step of the way and being transparent with all of that stuff. And that's why on the one hand I am so attracted to blockchain and Appics and now Telos because there is ways to do life better. We can't pretend we are going back to the Paleolithic era.

[00:51:49] Technology as a means of regeneration

Douglas: You couldn't have 8 billion people in the Paleolithic area. The technology has allowed us to expand people who have fantasies about the things they don't like about the modern system cease to exist are not being realistic about how much they depend on technology. But the great thing is technology, while it's been used over the last couple hundred years to increasingly harm the planet, it could just as easily be used to improve these situations. Every person comes with a mouth, but they also come with a brain and hopefully two hands. So, we can do a lot of things if we put ourselves together. It's never been in people's interest before. It's never, you know, in the end people go, Yeah, I want to do this. I really deep down really want to do these things, but I also got to feed my family and life's hard and I got to put most of my effort into things that make, that make money and that keep my family going. And now it's like, okay, well let's do things that are regenerative and keep your family going that way because you earn doing these things for the time you put in. But the net effect is improvement in the planet because the web three blockchain technology is at the base of it. A way to bring people together, let them work together as they haven't before, and let them share the value that they create from that work. That means that we can point that in all kinds of things. It can be to an app, it can be to social media, but it can also be to projects that are helping the planet and doing like these reforestation project in Peru for example. And they are not mutually exclusive. You can be part of that, you can share pictures of things that are happening in your regenerative project on Appics.

Douglas: You will find new people to be excited and maybe join, you will earn the value create. You know, if you post a really popular picture, that value comes back to you. Then there's a million more ways that these things can interact with each other and just strengthen each other and make it more valuable for people to do these things so they can spend their time doing things they really want to do. Like if they really want to plant trees, they can do that or if they can't plant trees because they are not in the right place or for whatever reason they want to support things they do and financially they can do that. Like the ability to bring people together where location doesn't matter. National laws generally don't matter. All of these things where you take all the people say no and all the reasons you can't work together on things and you say no to the people saying no and you do these projects and can benefit from them financially as well as just in a safer planet that allows new groups to come together and do these things. I am very hopeful actually that this is the technology that ultimately allows people to work together to do projects that were very hard or possible under the old system because they were sort of, they had to be voluntary through like all volunteerism. And it's very hard to spend all your time volunteering unless you are already financially secure. Appics is really a standout, but there are also many other groups around

the world with great ideas that are now enabled by the speed and low cost and high capacity of Telos. We are really excited that more and more are coming to Telos they strengthen the ecosystem that Appics is in and vice versa. And a lot of those things are projects that are a way for us to attack this problem of getting up every day and knowing that we are polluting and making the world worse and already feeling the effects and feeling like there's not that many things we can do about it. A lot of these projects are the projects that make you go, oh, okay, wow, we can fix this and let's get started.

Darin: Yeah, yeah, there's a lot of insecurity for sure, but we will put all the links I want to make sure that people get familiar with Telos. We will put that and I want everyone on here for free sign up for Appics right now, A P P I C S.com. Literally, it's free. It's on the app store. The great thing is we all love trackers and when you see your own wallet increasing just by posting a picture and liking stuff, so it is pretty amazing. You are just like, well, there it is. I am being valued for my time. I am being valued for the thing I am doing. But hopefully people walk away with some base knowledge and at the end of the day, you can get involved, you can get an Appics account and start mining. If you have never had any currency, you can literally start mining currency, just by your actions. If you want to learn more about a green, clean, honest app and Telos, then just look up and start dabbling and getting involved because it's all about the sovereignty. So anyway, thank you both for your work and your diligence, Uma, your friendship, and now your new friendship, Douglas, grateful for both of you. Let's let a rip and change the world. We don't need other people; we just need to come together.

Uma: That was so beautifully said, I will leave it at that. So much love for you and your community. Thank you for having us on.

Douglas: Thanks very much. Really appreciate it, and I am excited to start a dialogue with more people who are interested in this and want to be part of it.

[00:56:49] Podcast Outro

Darin: Thanks for tuning in to this episode of the Darin Olien Show. I hope you took something valuable away from this conversation that will help improve your life in some way. If you would like to learn more about my incredible guest, you can find all of their information in the show notes on my website. If you enjoyed this episode or even you didn't like it, please rate this podcast, the team and I value your feedback so we can continue to give you the most value possible. We want you to get the most out of every podcast. So please rate, subscribe, share - anything you feel called to do. I truly appreciate it and I love and value your support. So, thank you and I will meet you in the next episode.