



Welcome back to SoCap Talks, helping innovators build tomorrow, today. Now here's your hosts: Devon Kerns and Eric Sutfin.

Eric: alright welcome back to SoCap Talks. This week we are having our SoCap Spotlight and joining me today is Russell Castenaro from Wampum and we have Devon Kerns as well joining us from SoCap to talk about Bitcoin and just bit currency in general. This whole blockchain technology is something that most people aren't aware of. Uh, traditionally, we know finance. We know commerce, we know money. But this is something that a lot of people have heard about. Yet, even the basics, most people have no idea what is blockchain, they don't know the how the transaction works. Much of this is very foreign to people. So we're very blessed to be able to have Russell here to talk about one the industry as a whole the trends of where it's going and two a unique solution that you have to the marketplace, which is even now a little overdue bitcoins been around for how many years now?

Russell: since 2009

Eric: Just the end of 2017 so just really seven, eight years. And we're just starting to really look at what does this mean for the industry as a whole. So we're excited to have you on here and uh chat more about the evolution of what the commerce industry is actually doing. So Russ, would you share a little bit about your background and what brought you here today?

Russell: Sure, well, I for 13 years, I ran the company in Hawaii that did all the e-government and e-commerce and we processed a lot of payments so people paying their taxes people starting new businesses painting and you'll filings getting married ordering President Obama's birth certificate, that kind of stuff. And yeah, they really did. \*laughter\* And, and we were processing a lot of funds and uh to make long story short there um, there are enormous numbers of compliance, number of compliance issues that come up, um fraud was starting to peak, and you have all these problems as a merchant, aside from having to pay a lot, a big percentage of your of your take, you have all this compliance, and then you have the banks to contend with who are very particular about how you um will process payments electronically. And I realized back then, you know, as early as you know 2009, 2010, that if it was this hard for a company like us, that was processing by the time I left, we were processing 2.1 billion in payments a year um that for smaller, smaller players, it was a much bigger headache, and they were giving up a lot higher percentage, right. So if you've got a business that you know, makes 40% margin, then suddenly 7% of their of their money is going to pay credit cards

Eric: that's a lot.

Russell: And that's, that's, that's the difference with a profitable company, and one that just like scraping along or closing up, you know, so it's, it's about big deal, a big deal. And, and the, the, you know, to have a way of payment that's as easy as cash or easier than cash has always been something that we've wanted electronically, but we've never been able to do it, you know,





and credit cards, God bless them, they gave us the ability to do something um that would make payments and it involves a lot of credit going back and forth. But for the first time with Bitcoin, you've got a payment method that allows an individual to pay another individual or another business without having to go through any third party, anything at all goes directly to them.

Eric: So its simplicity because give well, convenience for the consumer. In the case of credit cards, the credit card is very convenient for the consumer. But for a business, it's actually quite complicated. In between, what rate are they paying? And who are they going through? And is it Keaton? It actually can quite

Russell: Yeah

Eric: be very costly, depending on all those variables.

Russell: Yeah, with very few exceptions, uh you'd, as a merchant, don't know how much you're going to pay, um as you know, so you've got a base rate, which may be like 1.8, 2.0, something like that. And then there's an additional couple of fees that go on there, that if you've got an Amex, that's a mileage card that's also tied to, you know, has a picture of your daughter on it, suddenly, you're paying 5%. And it sounds like That's ridiculous. But that's not really a ridiculous, it's not really an unrealistic thing to say, you know, but these mileage cards and benefit cards, they, they have really high rates, and as a merchant, you have to take them, you don't have any choice

Devon: you kind of shared a story before we started here where you were talking about the difference between the cash handlers and the trucks that go to pick up the cash versus how e-commerce is actually interacting before this cryptocurrency. So kind of Let's start with the basics. But I think the original version of e-commerce as soon as it became um uh something where they were transactions occurring through the internet and an online these electronic transfers of money, um start there and talk about some of the problems that are around that.

Russell: Well, boy, this you have to you have to stop me on this one \*laughter\* because

Eric: give us the spark notes version.

Russell: So you got like, you've got e-checks, which is like ACH. And that's where you give somebody your check routing number and your account number. And they do in an ACH debit. And that is a super duper insecure system. Because anyone who looks at copy of your check can get the name on the account, the the, the, the, the routing number, and the account number, right. So anybody who's ever seen you in your checks um can get that information. The I don't know if you remember the old days, you're not quite as old as I am. But people used to have their social security number and birthday and driver's license printed on their checks. Okay, so it was just, like, amazed, we lived in a strange time I'm like, I, at least I did. But, uh,



Eric: that's what I have my business on my business card \*laughter\*

Russell: here, I'd like to, I'd like to give you my identity. Can you please take that for me. But, um, but so. So from the banking standpoint, with e-checks, which are relatively inexpensive, they have very, very poor security, which is why the gateways into those systems are so protected, right, because you're passing all the information and basically in one fell swoop someone could do and an ACH debit that with empty out your account. So there's a whole bunch of weird fraud controls. And there's a whole bunch of gatekeepers involved in banking electronics.

Devon: So that that part alone is interesting, because here we are, with the cheapest way to transact between each other, yet the most insecure way to transact. So that seems like a complete, um it sounds like, like a shitty version of what we what it should be, it should be the most protected way and the cheapest way. But unfortunately, it's not the way it's set up.

Russell: Well, you know, it is based on what it's really based on is faxing. So it's based on facsimiles, that we would have a fax of a check sent over and someone could confirm it, and then the money could get sent through the federal network. And that's really it's an electronic version of faxing. That's what it comes. And that's what the banks are really super comfortable with. In fact, they're more comfortable with paper checks, than they are with electronic payments, which blew my mind but they are.

Devon: even though it's totally insecure

Russell: even though it's totally insecure both of them I mean, anybody can go order a fake check

Devon: wow

Russell: right so then you got credit cards which were great I don't know if you guys know how credit cards got created but there was this guy who took his a business he was on the business and they went to dinner and he forgot his wallet and the restaurant wouldn't basically give him credit so he had to call his wife to come bring his his his checkbook so he could write a check there and so he created Diners Club from that.

Devon: no kidding

Russell: really, really interesting and then you know, the rest is history.

Devon: wow





Russell: But But credit cards are almost worse in a lot of ways. Because just like in the banking example you give all your information right, you give your credit card account your name, the little CVV number on the back that goes through that all goes through the network um it goes at the point of sale right so if you're paying in person that gets scanned by the by the hardware or they take it down, then it goes to the visa network then it goes and any any connection in between there then it goes to your to the bank who's doing the credit card and they extend credit now you think bitcoins hard when people you've heard people talk about Bitcoin, nothing's as bizarre and contorted this credit cards, credit cards, like but people are, but there was smart nobody ever tried to describe credit cards. \*laughter\*

Devon: that's an interesting point

Russell: Like, there's like two sides of credit going and there's risk and there's fraud protection all along. And they're constantly upgrading the hardware to try and fight off these things. I don't know about you guys but I get calls all the time from Bank of America. Oh, we're gonna issue another card. Because we think there might be a problem with that batch of cards that you're with. Yeah, no, nothing to worry about. Um you know, this has a I

Eric: there's a lot of ways for people, whether it be at the ATM or whether it be in an actual transaction itself. I mean, you can put these little card readers over an ATM

Russell: Oh, yeah

Eric: over a gas station that

Russell: the spoofers

Eric: that steals all of your identity.

Russell: yeah, gas stations are the real big one right there. There they are. Not only where that's where, where people steal it. But that's also where um they test out cards to make sure so everyone has their credit card charge that goes through Florida when you've never been to Florida in the last 10 years. And you know, it's fraud. That's that's like a standard thing.

Devon: So a light bulb just went off for me where I probably would have been really leery of credit cards. If someone was trying to describe the transaction early on the same way I'm trying to learn about Bitcoin,

Russell: exactly, exactly





Devon: instead of it just being currency, I'm sitting here going, oh no you just put your card and swipe duh! And that's the way it was. That's the way it's always been. It's never really been described on the back end to me. So of course it feels

Eric: and then they give them away like candy. You go to college?

Devon: yeah

Eric: it's just Oh, yeah, no, just write your name down you get 2. You get to get 5% cash back and you get to get some airline miles. You're like Okay.

Devon: but here I've been hesitant to dive into anything having to do with cryptocurrency because I'm like, God, I don't understand it. But it is less complicated to understand than

Russell: It's much more straightforward.

Devon: wow

Russell: Unfortunately,

Devon: that's interesting

Russell: it was divided the people that made Bitcoin we're super proud that we fought solve this problem, I say, we like I did it jeez \*laughter\* um but uh you know, but that they solve this problem. And they wanted to share and they were sharing with groups of geeks, and then they started trying to explain it. And as anybody knows, when you get people trying to geek out and explain things, you know, everyone's like, Oh, okay this is cool. You know, they look away and, you know, they're not, they're not, you know, it suddenly becomes less interesting.

Eric: they call it things like the cloud. So, so simplify Bitcoin in your own words in this industry, for those that are listening to this, that really it's still an ambiguous notion and concept what is Bitcoin? How, what is the solution that this currency is providing to the marketplace?

Russell: So, so there there's a few parts of the most important part the understand is that there is a ledger called the blockchain the Bitcoin blockchain. And that's what everybody hears about and every Bitcoin that's ever been mined, every transaction that's ever happened is on that Bitcoin blockchain. And there are software that you can download to be part of, to, to basically run the system right. And um and that requires a copy of this blockchain. So there's, you know, like, I think there's, I think 45,000 different nodes running all they all have their own copy of it. And so this ledger says, Okay, this Bitcoin came into existence here, from whatever event it was, and it moved from this location to this location, to this location to this location. Now, what it doesn't have as a concept of an account.



Eric: So is this equivalent. Let me break down for the listeners and myself honestly. Is this the equivalent of allowing someone to say print their money. And just like on the newest dollar, there's a serial number yet with cash, you're not actually able to see, well, I paid you for that dinner that you spotted me on the other night. And then you went across the street to 711 and bought you know, a soda you don't get to be able to actually follow the currency in a cash transaction. Yet, in Bitcoin, what you're talking about is you get to see each piece that it touched from the printing to where it's being passed, is that correct?

Russell: Yeah. So you're, you're, you were talking about was more like credit, right? Because you have to maintain people's accounts to know who owes who, right. And with, with, with Bitcoin, you really only have value and location. So you can think of it as either um an infinite wall of cubbies, you know, there's mail cubbies again, like at work you know, you have or you can think of it as treasures as like as like Internet treasure treasure john treasure chests and, uh and basically all the addresses are public anyone can look in any address, they know how much is in it the can even see where it came from, or where where anything went. They don't know who controls it, right? Because um there's only this idea of, of, of a location and address. And then you have a secret key that unlocks that address. So if you've got that secret key, then basically the math you can do the decryption. But then you can unlock that and move it to someplace else. You have a PO box, but you don't know that PO box is associated with

Russell: right

Eric: John Doe.

Russell: Correct.

Devon: And it's a clear PO box

Russell: that you can look into

Devon: that I can look into

Russell: And you can actually look into the history and see, oh, like, oh, six months ago, this went in there, and then went out and there was some more that came in. And, you know,

Devon: but you don't know that. That's Eric's, you just know that that's the locker number

Russell: right

Devon: With that currency.





Russell: Right. And, and to make things just a little more complicated. Rarely do you reuse addresses, you'll use them for one purpose. And then once you've once you've emptied an address, typically it stays empty, you know, they the wallet so what the software like most people use software based wallet to keep track of these addresses and these passwords and all of that wallet does a wallet in the Bitcoin world doesn't hold any money hold any value, it has your addresses and your secret codes that you have have control over. And then what it'll do is it'll go and say, Oh, these are all the dresses I have. It goes to the blockchain sees how much that is, gets the value of Bitcoin, if you want us, you know, tells you how many you have in Bitcoin. Or if you want to see how much you have in US dollars like you're using a copay wallet or something like that. It goes and gets the exchange does the math and shows you how much you have, but you may have two addresses, you may have 500 addresses um that are being maintained by that wall in any given time. But it's all seamless to you as a user, right, just as seamless as a credit card is you know.

Eric: yeah. So there's a bunch of cryptocurrencies that are evolving there's Bitcoin, there's a myriad of them seemingly where people are saying I'm buying them on a sense right now. Right so I'm dollar yet we're seeing crypto at this point is north of \$17,000 per coin,

Devon: bitcoin

Eric: bit for a Bitcoin share with us kind of the different types of currencies or coins that exist out there, what what is the difference? Are they just like the euro and the American dollar? Or could you break that down for us as well?

Russell: Yeah, I think that one of the most interesting things for me about different crypto, right, is that in a currency, you have fiscal and monetary policy, right, that you can exercise. So, um you know, previous the last election, you know, you had this idea that there was there was going to be a certain way that funds were managed that we weren't going to default on on loans as a country. \*laughter\* Yeah, yeah, there were the I'm just saying that they were going to, but that we don't really know like, well, maybe when he's he said a few times, like, well, maybe we'll just default, you know, so, yeah, that's, it's kind of weird, you know, so I wanted to make that caveat. Not

Devon: In SoCap you don't have to, but maybe for the listener, I don't know but whatever

Russell: yeah know, but but so, so, you know, basically, currencies are are stay more and more stable, depending on a few things. And one of them is how reliable their history is of doing policy and monetary policy now, um so the difference between that, and cryptocurrency is it's in the code so you can't change the monetary policy there are a set number of bitcoins that is the limit and every every 10 minutes right now there's a new 12 and a half bitcoins that get Minton awarded to a minor that does a certain blocks that's how you get more Bitcoin into the into the money supply right



Devon: up to a certain threshold?

Russell: up to so and that will get cut in half at the next halving event half again and then it will stop sometime in the early 20s, it will stop and so there won't be any new bitcoins coming and that's why people say it's like a deflationary currency as opposed to, you know, you at most, most other currencies, you print more, the value of the currency relative to products goes down, because there's more in circulation, there's not necessarily more demand in the United States, we're lucky that we have a reserve currency, right, so that gives us a lot more stability. We can go around printing dollars more than say the, you know, they could with euros, or they could with the yen or, you know, some other currency certainly, like look at Zimbabwe, or Venezuela or something like that. They nobody wants their currencies, right? So they're there, they don't really have a lot that they can do with fiscal policy. So that's the biggest difference is that in a way a cryptocurrency is more reliable from a from a how it's being managed standpoint then than a normal fiat currency. That's a state sponsored currency. That makes sense.

Devon: Yeah

Eric: yeah I think what's interesting about currencies that just struck me is this concept of to what percentage or degree something like cash or digital currencies are being used. And I think you have a little bit more to say on that. But we had talked with a another client recently that was saying in India, their currency has been a massive issue because in perhaps it wasn't India minded.

Russell: They got rid of those big bills, right

Eric: okay, they got rid of the 50s and hundreds equivalently in the US because large bills were being used for things like drugs and the and the sex and trade and all of that that's going on. And thus, they just essentially eliminated them so anybody that had money under the couch or the high reserves essentially lost their net worth

Russell: and the way they did was over a very short period of time.

Eric: Yeah, they wanted to be able to track what's actually being going on that way is not underground.

Russell: Yeah, you know, one of the things I think that uh a lot of the more libertarian set and I think even I wouldn't say I'm a libertarian set, but I I agree is that banking and electronic commerce Electronic Funds has sort of, like mutated into this enforcement arm of governments, uh which, you know, I think that that it was, you know, a lot in a lot of ways it helps you know, having having national currencies really helped the development things, rather than having a separate currency in each bank, which is, you know, 150 years ago, 100 years ago, you had





that different banks, you know, having their own currencies, it was a lot more stable, but when they started um enforcing law through currency, um that made it a lot more difficult because, you know, um that's what's happening with the cannabis industry, right? That's what happens with uh you know, all sorts of different different industries and different countries um you know, maybe you're um trying to you know, talk about really important social issues and the government doesn't want to they can lock down your bank and I don't know if you've ever had like even um to have a government official closed down your bank there's at least some sort of their sort of due process do but a bank somebody you know, a regulator makes a call to a bank, they can just shut your account down with with no due process. So it's, it's a it's a kind of a scary, scary world out there, if you think about the fact that yes, our money is great, but that depends that actually depends on your country, respecting privacy and not wanting to enforce too much through through through its currency.

Devon: So what what are government's going to do now I mean, at the end of the day, if this in as this becomes more and more um predominant in our society, I can't imagine a government not wanting to control this because of exactly what you just said, they now lose that power. And fortunately for us, that would be great. Unfortunately for them, which I'm not sure they're willing to deal with um the loss of that power and the loss of that control for many different reasons, some good some bad What do you think governments are going to do about this new currency?

Russell: Well, I mean, there are there are many good things about cryptocurrencies that that people don't really talk about a lot but but that cryptocurrencies are more traceable than cash, and there is a hell of a lot more so, in any given 10 days, there is more, you know, more more US dollar based crime paid for with cash US dollars, than in the year of Bitcoin

Devon: right

Russell: right. So, it's a, you know, they can actually have a chance tracking down people who are who are using Bitcoin and other cryptocurrencies um for illegal activities. But that's still a fraction of what's being spent, I think you said, what, what is the percentage of what is still across the world done in cash, because in the US, certainly in Europe we're trending more to e-commerce in digital solutions. But I was astounded at the percentage

Russell: right

Eric: I mean trillions are still done.

Russell: So, so yeah, so so an e-marketer does annual reports of the, the retail market worldwide, and I think last year their report was was \$24 trillion market. So 24 trillion with a T dollars in the retail market, uh the amount of that that was paid for electronically was \$2 trillion. Right.





Devon: Wow.

Russell: So that's less than 10% is happening is being paid for electronically is being used with e-commerce. And it's like, as, as the American you know, especially like white male Americans earlier, we're like in the driver seat right now.

Devon: Yeah

Russell: we like to say that has got to be wrong. But um if you ever been to another country, and you've ever talked to people about getting banks even in I was in Barbados um just this summer and they have around 20% of their population has banking, they have to go through a whole process to get to get a bank and, and and um if you live in a remote area where there's no banking you don't have a bank

Eric: sure

Russell: and that's why the first really successful uh digital currencies that came have come out of Africa uh with like bit pace and stuff. And so what they'll do, I went to adopted my daughter from Swaziland and we went a couple of a couple years ago to go back to Swaziland and everything. And you could go to a person who was wearing a vest with the name of the of the, of the telephone company. And you could just go buy minutes from them. And then you could pay for everything by sending minutes via text.

Eric: minutes were

Russell: minutes were currency, right? So they'll give you you know, and it's fascinating. Now, it's a Have you guys ever been to Japan?

Eric: I have not

Russell: So in Japan, they have a thing called suica cards, their value cards there, there are FID things and you just go are there. They're Near Field Communication stuff, actually. And so you go over the, the, like in the in the terminal and the train terminal, you just put your card over it, and it detects the money and you go, and this is

Eric: it's essentially Apple Pay.

Russell: Well, far before Apple Pay. And it's and it's actually not because Apple Pay depends on some other stuff, too. It's a very low, low low security thing. But just like the text is that the text messaging SMS in minutes, but it's convenient. And there's a very low risk because you're not going to put \$10,000 on your suica card. You're not going to send 10,000 minutes, right? So if you lose, it's like losing cash, right?





Devon: yeah I've lost \$5 bill,

Russel: and you're ah damn, or that \$20 bill blew away. Well, that sucks, you know, but it's not \$3,000

Eric: yeah we've spent \$20 on a lot of stupid things \*laughter\*

Devon: we did have. Yeah, that was a campaign we were gonna do for a while and, all the dumb things you can do with 20 bucks.

Russell: Yeah, but but so. So the point for that is that there's a huge, huge need for electronic payments, because they simplify everything. And there's a and that need is not going to be served by banks. Not that there's nothing wrong with banks. Banks are great for people who can use them and who want to, but depending on banking to serve the unbanked is kind of like, um you know, depending on the foxes to take care of the chickens. It's just not, you know, it's just not gonna happen.

Devon: Yeah

Eric: I read that.

Russell: a fox should be a fox a chicken should be a chicken but you know that we have to have a way to allow the 90% of the transactions in the world to be paid for electronically.

Devon: Yeah

Russell: that doesn't require this third party relationship on both sides.

Eric: So that is exactly what you're solving with Wampum.

Russell: Right. Right. So. So we provide software called Wampum register, and it acts as essentially like a till for a business. And it allows them to accept cryptocurrency payments without having to pay exorbitant fees without having to worry about returns. It's just like getting a cash payment. If you do if people say, Oh, how do you do a refund? Well, you do a refund the same way you do a cash refund, you send them back some Bitcoin, you send them, give them some cash, it's all very, it's very straightforward. And you don't have to worry about um especially the high fees and the charge backs for if you if you happen to be in an industry that's like, uh um you know, going after tourists, or there's something that people can get from you and now and just be gone and not have any way for you to contact them again, those are typically higher businesses, from a credit card standpoint, they might pay anywhere from five to 22% interest, not interest but that's their credit card fee, that they'll they'll essentially pay and,





you know, that's crazy that there are businesses that do this, and there's no, there's no need. And at the same time, there's people who it's a small, small percentage of people, I think 30% of people in the United States are totally unbanked. And then there's about 20% more that are under banked and those are the ones that are served by going to Walmart and getting doing their e-commerce by getting buying cash cards.

Devon: yeah

Russell: right? And they're paying five bucks to reload their cash card that they're putting 50 bucks on. So you figure out whether that's fair, um and then you got people who are, you know, work come here, they work and they're trying to send money back across, you know, to wherever they're from, if they're from Mexico, or I was in I used to live in Hawaii, they're going back all over Polynesia, you know, they're sending money back there and they're paying maybe to send \$80 back they're paying 15 bucks on this side and maybe 10 bucks on the other side.

Devon: Yeah

Russell: to get 80 dollars it's crazy. It's highway robbery.

Devon: Yeah

Russell: you know, and and Bitcoin and cryptocurrencies are totally making it so that is no longer required.

Devon: interesting

Russell: And, and I think, you know, I bounced around a lot, so I didn't, I only half answered like, I think 60% of your questions.

Eric: that's our fault \*laughter\*

Russell: But like one of the things says, Why would a country ever want to embrace

Devon: right

Russell: Bitcoin? Well, because they've already lost the ability to have any monetary policy. So you look at, you know, Zimbabwe right? They're, you know, they're not, they're not making any any headway there. It's a total loss. So maybe for them, the idea of a currency that can fluctuate, 10% in the day is like a dream, because they're guaranteed to lose 20%, every time they wake up right with hyperinflation, uh you know, there you know. So it's just with Bitcoin you can take like this sort of Russell sort of, like, dystopian fantasy, right? Where you have maybe the top the bottom 10 currencies in the world are uh there you know, they realized there's





destabilize. So a few of them start saying, you know, we're going to just switch to cryptocurrency so they're going to, let's call it Bitcoin, whenever suddenly, that cryptocurrency is more widely held. And unlike, unlike like a weird asset that puts together bad assets like you know, that started the whole credit credit default swap and stuff that we went through in 2008 um when you actually improve the currency because it's more widely held and it provides some stability to an economy and that's why for a long time the in I said Zimbabwe a lot I've been in the news a lot, you could buy bitcoin, if you wanted to buy bitcoin in Zimbabwe, it was about 25% premium. So if you knew somebody in Zimbabwe, you could just send them Bitcoin, they could sell it and you could make 25% right there.

Devon: Wow.

Eric: So we've been talking about some international use and uh bitcoins and this cryptocurrency but there's a lot of practical uses for it here in Colorado, and in the United States, in general. Surely, internationally, there's a lot of benefits, but what you're talking about applies to some of these growing and emerging industries like marijuana.

Russell: Sure.

Eric: here in Colorado, we've heard of stories and have friends who literally will buy storage units and volts to put millions of dollars in there because they can't bank they can't get go to a credit union. So share with us. How does cryptocurrency provide a solution? And what is the trend to look like for uh companies in at least the marijuana space?

Russell: Well, I gotta say this you've not lived until you've seen a bricked and a bricked, what's it called pallet of cash like that seeing one in person myself was the most mind blowing experience was like wait, how much is this?

Eric: You feel like the Joker from Batman you're like \*evil laugh\*

Russell: You know of course they're these big armed guards there all around, But um, so you don't quite feel like that. \*laughter\* You know what me worry? No, but uh \*laughter\*

Devon: that's a big gun

Russell: Yeah \*laughter\* but uh, um. You know, they they desperately even you know Colorado's way ahead of the game um in the cannabis industry because at least they have banks they have some place to store their money but they don't have a way to accept their money they have they have a few options um but they require banking on both sides right

Eric: and just Oregon Trail like barter and trade he's Oh yeah, I've got 10 pounds of flour





Russell: \*laughter\* that will give you a very very loose joint \*laughter\*

Russell: But you know, there's no way for them right now. They can't take credit cards. Because um credit cards require it goes through an acquiring bank and the acquiring banks are all federally regulated. Um uh the same problem with with even with, some of them have a cashless debit cards. So you can use your debit card. Those are even that people are more more and more afraid to install those because um they're based on interpretations. And everybody's afraid of how the federal government's going to be interpreting this stuff. Um cash is okay, because cash transactions are um they're not involving a financial transaction until you do your deposit.

Devon: yeah

Russell: So what you know, that was one of the first areas that we thought go in, we show them how easy it is to accept electronic payments. And they don't have to have big guards um carrying duffel bags full of cash to make payments. You know, in Colorado, you've got people doing duffel bags full of cash to go deposit to the bank, but in California and in Oregon, and other places, you've got them every single payment they make is a drop and they have to have a guard doing. Can you imagine how expensive that is? How about you know how about, you know, your pay your pay your rent, so you got a decent sized maybe you're paying \$10,000 a month in rent, and they're gonna go drop it off 10,000 bucks

Devon: every time.

Russell: No, they won't take it because it's too big of a risk. So they'll either make you take it to their bank and the bank will charge you or you'll go and get I've heard of the heart of these guys going and getting as many um money orders as possible. Like it's 1500 dollars is like the money or the limit. So they'll they'll go and they'll try to pay their taxes every day with money orders because they can at least get money orders from you know from the from the um from the King Soopers or from the mail. You know, so they're they're being very innovative on trying to figure out ways around it. And what we want to do is give them away not only to accept payments but to make payments throughout the supply chain. So if they wanted to, you know, work with you guys they could pay you with Bitcoin, and it would be really easy it would be cheaper for you guys to just accept cryptocurrency than it would to have to worry about doing a drop and all that kind of stuff

Eric: or another vendor or whatever

Russell: yeah

Eric: but the then that brings up a point that whoever is buying said product equally needs a cryptocurrency so I think a lot of people are even stuck with Okay, I can go get a credit card.





That's pretty easy. How do I go about owning my own cryptocurrency and then do I need an app to be able to make this transaction walk someone through? Okay, say we're to go to even target to be able to wanting to buy stuff with cryptocurrency, let alone a a marijuana shop, what does that look like? How does regular Joe Schmo go and start mining we're acquiring Bitcoin to start transacting with cryptocurrency.

Russell: So um I think the first thing to remember is that um you know, the, the barrier for getting a credit card has already been been passed. But the barrier to get a credit card is actually pretty big, right? You have to at the very minimum you have to fill out a form whether it's online or in person, send it in and maybe in a couple of weeks, you'll get a credit card now if you go to a department store it's a little different because they they're funding it themselves but but in most cases you're talking about the two week process from start to finish to get a credit card ]

Devon: if you're approved

Russell: if you're if you're approved, right which goes through a bank and everything so just just to sort of remind people that you're not born with a credit card you know it doesn't go you're not like given it as soon as they spank you right \*laughter\* so you've got you've got to get that and and and to to get Bitcoin you have a much less complicated transaction now um you can go Bitcoin ATM so there's a there's a growing number of Bitcoin ATMs there's three or four different companies here in in Denver that are putting out Bitcoin ATMs all over the place so you can buy from there you can buy from a person there are websites out there like local bitcoins you can just find somebody you meet them in the coffee shop buy some Bitcoin from them still seems like sort of clandestine but but it's you know we're now like getting in people's cars that we've never met before so this is this more and more acceptable there's even like Abra and and AirTM which are other companies that will allow you to be oh excuse me to be a to be a Bitcoin to be a Bitcoin teller yourself, right? So it's pretty amazing different technology then then the the least expensive but the hardest method is to go through an exchange right and that's the way that most people start because they are thinking everything has to be done through a bank and um and they'll they'll do that so like coin base is probably the most popular, my favorite is uphold these are the the sort of consumer driven Bitcoin exchanges where um where you're not desperately doing trades and stuff like that you're just trying to to buy the buy a particular cryptocurrency at a particular you know point in time and you're just going for the current price not doing that sort of trade so there's a number of ways to get in if you're going to get it from an ATM it's instant if you're going to get it from an individual you have to schedule it but some places may have like tellers nearby like they may hang out and just have people waiting to sell you Bitcoin um right now um you can do through like if you use USAA so the you know, I guess veterans a lot of them have that they have an agreement with coin base so it'll automatically hook into your USAA account and you can have your coin base wallet automatically get funded with Bitcoin so it's happening you know, it's getting easier and easier the process like if you wanted to pull out your phone and set up a bitcoin wallet right now it would take about a minute



maybe a minute and a half if you really wanted to read everything and and then I could send you Bitcoin super fast

Eric: and essentially like a PayPal or a Venmo you just essentially need what is my account or username to be able to then make that transaction?

Russell: so um, so remember that with uh everything I have is a caveats. Like there's no simple answers. It's a with I, you know, I use Venmo and PayPal but I think they're lipstick on the pig because if you're going to pay me with Bitcoin or with with PayPal, you have to have a PayPal account, I have to have a PayPal account, you have to have a bank account or credit card, I have to have a bank account or credit card. So then to send me money, you're going to use my username and and send that through, or I'm gonna send you a request or whatever. And it's all going through this closed loop network, right? With Bitcoin. What happens is, and I've got this, this paper wallet right here, this is an example what it has is an address, this addresses a really long string that humans can't really read or determine. So there's a QR code and a wallet will show it will read this QR code very easily. And so one of the cool things is all payments in Bitcoin are a send. So you scan it with your wallet, and I'm going to send money to that address. I'm not you're the person who's receiving the funds never has any information about the sender, right? It's only Where did the address What's the address it came from? That's it. So it's a really um it's really clean, it doesn't have any fraud issues, right? Because you're always sending so you can steal Bitcoin, but you can't fraudulently pull Bitcoin

Eric: so that's how people have lost millions of dollars probably is someone do they hack it and just send it or?

Russell: most people have lost money in Bitcoin, because they've had their funds in what's called custodial wallets. So um your bank account that you have um is is a custodial situation so you don't actually have possession of any of the money the bank does. And then they you have you have basically an account that gives you withdrawal privileges, right, um so you don't control it. So if you have an account with an exchange um you're typically going to have a custodial wallet so your wallet you don't have the key you don't have a you don't have software that has the key they do and they'll send it on your behalf um I always tell people to use non custodial wallets like like copay and like airbits or they are their wallets so that the funds are all control is in your device or your computer or like this one is a paper wallet this has the this is what you'd use for the public and then under here this is my private key so this is what I'd use to move money around so you could give you can basically charge this up give it to somebody for a gift and now they have bitcoin wallet but um,

Devon: very interesting

Russell: yeah but so it so it so that's why there's like there's theft but most stuff happens at a at a custodial situation. So these whenever whenever I people trade like my ex just recently





bought a box and Bitcoin cuz she wanted to get in and I, you know, tell her Look, you got your money buy it Coinbase by an uphold. But then you move it to your copay wallet that's on your phone or on your computer, you can back it up no problems, or you can have a hardware wallet or a paper wallet that you put it on that way, nobody is going to be able to steal it from you. Or it's a much smaller target than going after the you know, \$160 million that's on that's that's epic Coinbase or that you know, they make themselves into a beautiful honey pot of money.

Eric: Sure. So this is all very fascinating What are you most excited about? You're clearly in a super knowledgeable and able to see the trend as to where it could be going. Of course it's up in the air there can be new players that come in and other solutions but in your eyes What do you see happening?

Russell: I see commerce being lubricated in a huge way. I think that I also I think is really we're in this time when you know the internet for oh you know I the internet was was new and everybody was talking about Oh, should we use gofer sure we use FTP should we use HTTP shoot. There are lots of different tools and protocols to use. That's where we are with cryptocurrency. Bitcoin is the first one and it will be it will be good for a while. It may not be the best one for e-commerce, um but I don't know the beauty of it is is that is that people have a vote in what they end up using right, for it. So what I love is that once people jump into this wallet, this electronic wallet world. Suddenly, the functionality that's in the wallet takes over a lot of things. So I tell people you have you downloaded the copay wallet. You have you have a little bank in your hands. Well, think about this. I've got friends who live in the Pacific Rim. They have bank accounts, and they have different bank they may have US dollars, they may have yen, they may have you know, different currencies, and they can move things back and forth. Well, in the United States, we're all about the US dollars. And if it doesn't, it's not in dollars. We're like, what math? But your wallet will do all that. So I'd say within five years, if I need to pay you \$5. And all I have is you know, is Neo, my wallet will automatically convert that and get that to you in a way that you can accept it.

Devon: wow

Russell: So it'll be doing all this. And there's a great company that's here uh um what's it called? Uh, great. Now I can't remember the name \*laughter\* anyway, that will automatically you'll basically give it two addresses. And it'll send money from one to it shape shift. Yeah, shape shift, and it will take your phone. So you can send from Bitcoin and I can move it to atheorium. I don't have to go through an exchange, it just automatically say, this is the address, I want the Ethereum to go to send it gives you the target address, send your Bitcoin to boom, sends it over for you.

Devon: wow that's absolutely crazy.





Russell: And your wallet will be able to do that very soon. And and that's what excites me because um the barriers the the the financial barriers across countries will for all intensive purposes go away.

Devon: Yeah.

Eric: So the power is ultimately shifting it seems like the pendulum is uh moving towards the consumer.

Russell: Um I hope so. I think I think it'll be more convenient. And I think that there's certainly some power in the consumer, um it's hard to say, Well, I think the power of shifting as to where it's shifting to, I'm not exactly sure. You know, I yeah, I think consumers main power is is their ability to buy or not to buy. And I think that that having a currency having them not have to choose between one currency or another is probably a big a big power boost for them. So hopefully, it will be more power to

Devon: I think my advice around that is to understand currencies in general. And, and get to understand this, because we, we don't learn about money at all, the idea that we're having this conversation, we're probably already way above most people, not because um we lack the ability to understand but because we just come out of the gate, and I got, I've got \$1 for the tooth fairy. But that's about it. And nobody explained to me where that dollar came from, how we really are in that dollar for the most part, most families. And there is a saying, or a theory that if you redistributed all the wealth in the world, that eventually the same .01% that control the vast majority of the wealth today will will control it again. So while this platform allows for people to maybe get a step ahead, if you don't understand it, and you don't take the time to have an education around just like anything else, and you think you're going to maximize your investment, because right now, if I jump in, and I buy, you know, a single Bitcoin, that I'm going to be rich, or whatever may be, and you're doing it for the investment purposes, without truly understanding it, without understanding our current system, and what is coming in the future of it. I think it's true that those in power and that understand and take the time to understand currency, it'll all go back to them, no matter how it changes. And so it's the powers in the education I think the more people can get educated and thank you for being here. Because this is a empowering people to do that, um it's the only time that we can stop that if we continue to be ignorant about currency across the board, no matter how it changes, the same people that have a desire to be in power and to carry wealth, they're going to know how to go do that, because they've decided good or bad to capitalize on it.

Russell: Yeah, I would say that, the that you're absolutely right, and the beautiful thing about cryptocurrency most cryptocurrencies as that they're much more transparent. So that if you have the inclination to educate yourself, you can learn and you can really understand it, whereas it's um more like current currency fiat currencies are more of the world of wizarding you





know, and the and the cryptocurrencies are more like the world of science, that you can really actually understand it.

Devon: Yeah, this is a big reset button, hopefully. But at the same time, you can fall just as far behind, because all of a sudden, a generation from now it's going to be like the credit card where I just know I'm transacting with it but I don't really have the education right behind it, to understand how to collect in in receive enough to create wealth for myself.

Eric: Yeah, I'd encourage, I think this is just a launching point for the listeners here, and the viewers to be able to dive deeper, there's a ton of resources out there, more and more people are providing information about this. So the time is now to hop in and get your feet wet. If you are a business owner, however, and you want to be able to start accepting or having this digital cash register, you have an awesome solution, tell more people more about how, as a business owner, you can be able to start using Wampum.

Russell: Sure. So we wanted it to be as simple as possible. So whether you're taking payments online, or you're doing at the point of sale, like a store, or you're doing even just make cutting invoices, and sending out bills, our software allows a supports all three of those modes, and it runs in the cloud, we actually we do it, run it as all least software. And we do that so that we can deploy it for you on your own on your own server instance, that we don't have any control over. So we don't, we can't touch the money, we don't have any control over, we don't have the keys. The way that works is it's like 200, \$250, we install the software for you on an Amazon instance that we show you how to set up and then we perform any maintenance on it. And you don't pay us again, unless you have a prepaid plan. But uh, what we typically do is the the most that will take for any transaction is 3 dollars. So if you think about if you have a business that the average bill is \$500, you're probably paying, you know, maybe 20 to \$30 for that transaction. Credit card fees, you know, it's now three bucks.

Devon: So for us it's a lifesaver. I think we definitely need to switch over here. Yeah, because I like the idea of \$3 more than 300.

Russell: And that's just, that's the top end right? gets cheaper from there.

Eric: And then from there, you as a business owner, have the ability to decide how you convert your cryptocurrency, right?

Russell: That's right. So we don't we also don't, you know, we're feet where we're a crypto only solution. So what we'll do is we'll say, Oh, well, if you need to hook up with an exchange, we can hook directly into your exchange for you and send the funds there if you want to hold so our first customer is is this coffee shop in Hawaii in Honolulu. Called Local Joe Hawaii he's just oh yeah, I really want to do this because there are all these tech guys around that wanted to pay with





Bitcoin. So, you know, literally he's made 700% because he just held on to all the Bitcoin that he got. And, and so he's you know, he's just like, Oh, my God. Russell, this is amazing.

Devon: And so not only was he saving money, but because of the fact that he's in the game early enough.

Russell: Yeah,

Devon: he's

Russell: Yeah, he made

Devon: that's like an investment for him on top of it. wow.

Russell: Right and and and so when he was the one who first told me he's like, Oh, you know, Russell, there are a lot of people that just don't want to have to buy they want to buy bitcoin wholesale. I was like, What do you mean by Bitcoin wholesale like, well, let's say only 1% of your business is ever going to consider paying in Bitcoin. But for you, let's say you're selling them something that you bought for \$50 they buy for 100, you're going to get \$100 in Bitcoin for that \$50 and you spend so you're essentially buying it wholesale and much lower rate than you would if you are going to go buy it from an exchange or somebody else so I was like that's kind of cool.

Devon: so along those lines, and before we wrap up here, you know, there's a lot of people that are hearing about Bitcoin and in their mind, their biggest reason whether they understand it or not for getting any Bitcoin is because they see the opportunity to make money um and for it to be an investment right and while I think that's smart and exciting there's a lot more reasons to get involved in this currency in the next generation of revenue other than trying to buy a bunch of Bitcoin right now so you can get rich and then when it goes away you know, I think that's probably the wrong approach approach and what what are your thoughts around that

Russell: you know, it's a hard one because the the the past results are what they are and you know, and really bitcoin's like a great example of you know, supply and demand and economics done its most pure in its purest form right people really want this for whatever reason so even though it's a no it's demand that's maybe a little fantastical you know the demand is still there um but from from an investment standpoint the fact that it is a deflationary currency so it's going to go up it's a good long term strategy right I don't have any doubt that it's going to go down again and then come up again at some point because everything does nothing can go up nonstop yeah but uh. You know, I'm not selling my bitcoins right now you know, I I do use them for for buying stuff though. It's just hard to say you know, you want to give investment advice or anything like that, but I think there are a lot of people who are saying oh, well, if you really want to invest there's there's better places to get it than Bitcoin there's better cryptocurrencies than

that, if you're interested in that, but it all comes down to like individually Why would you make any investment like if you're just like gambling you know, which a lot of it a lot of like stock trading is just gambling right, then then sure. You want to gamble on Bitcoin, go for it. You know, I think that's a good gamble. But if you're you know, I think you're always better off knowing about the what you're investing in. So if you're going to invest in Bitcoin, you owe it to yourself to look at a few of the the big you know, the best videos out there like from Andrea Santenopolis, or something that do introduction, introductions to Bitcoin and understand what you're getting into. So you're not taken by surprise, you should understand like some of them and you have to understand the math I mean that's just conceptually what it is that's going on with Bitcoin and use it, it's more important for you if you're an investor, if you're going to use it that you understand it right.

Eric: I think additionally, it's a way to diversify your assets, you can find security in a multitude of ways. And I think this is just a another avenue that allows for consumers to be able to diversify their assets.

Russell: Yeah, well, I think you're right. And that's, it's sad. I think that one of the things is driving is is a is a continued sort of um devaluation of the dollar,

Devon: right

Russell: right, the dollar people people are not holding it as high regard and because of that Bitcoin is looking like a great a great hedge against losses that you might get from keeping your money in dollars, you know that that's part at least at the psychology that's, that's causing this

Devon: so as we're um ending this from our perspective, but mostly because we've got a lot of business owners that do listen to us and and direct advice to soak up as well selfishly I'd love to know what are your words of wisdom for us as a company in terms of this new currency what what should we be doing right now?

Russell: so I think you should definitely be accepting it. You know, there's no there's no downside it's the cost is low if you're if you're if you're in a business that you're a single you know you've got like you don't have a register if you run your business out of a wallet right one bank account and there's nothing that nobody else you don't need any software but but a wallet to run it from you don't need Wampum you don't need any anything else you can do it from an open source wallet that you can get if you've got a business that has to send invoices or wants to interface with a point of sale or something like that um you can use software you know our software get in really almost no cost much less than one piece of hardware you have to buy for any anybody else and you can get into this and once you're in you'll see that it is absolutely the simplest most secure and easiest way to transfer funds from one person to another there's never been anything this easy and and you know once you realize that then you realize the what how how commerce is going to evolve in the future this is going to be the evolution it





may be you know maybe bitcoins cousin you know something like that. But maybe a theorem and maybe who knows but but getting into it now is smart and it's low risk and you know if you're if you're a business and you're afraid that volatility there are ways you can make it so there's almost no volatility right so there's lots of different approaches. If you don't have a bank you can go fund a debit card that's funded by cryptocurrency so you can do lots of different things so that you can start accepting this and benefiting from it now

Eric: wonderful. Well Russell you've absolutely been a wealth of knowledge here all puns intended here at SoCap. \*laughter\* for our viewers you are able to click the link below to be able to contact Russell at Wampum but for our listeners would you share how can they get in touch with you? How can they get more information or even get involved with Wampum?

Russell: Uh [cryptowampum.com](http://cryptowampum.com) C R Y P T O W A M P U M dot com or you can look just my my Twitter handle is Rcstag or you can look up crypto wampum or wampum online and you'll find us. LinkedIn, Facebook, all the various places but just go through there and you'll be able to contact us directly.

Eric: Wonderful well thank you for your time and

Russell: I guess I should say my phone number too should I like

\*laughter\*

Devon: probably not

Russell: 750 number just called you right now yeah I have enough robo calls anyway.

Eric: You can give the digital credit card with your social security number on it right?

Russell: Well, we can give them yeah, we give them a wallet.

Devon: there you go.

Eric: much better. Well, again, thank you for coming in and contributing to SoCap Talks, It's been an honor to have you here as a spotlight. We've got a very exciting trend here. And we're excited to see how it evolves for you and ourselves hop in at SoCap. So thank you again for joining us and we look forward to seeing where this takes all of us on this journey.

Russell: This has been a lot of fun thanks a lot for talking to you guys.

Devon: Thank you.

