



[music]

Mason Wilder: Hello, my name is Mason Wilder, Research Manager at the ACFE, and welcome to *Fraud Talk*, the ACFE's podcast. Today, I'm joined by Larry Nielson, a CFE and detective and also crypto consultant in the making here. Today, we're going to be talking about cryptocurrencies, digital assets and how certified fraud examiners can teach themselves a little bit about some of these emerging technology areas, and incorporate it into their investigations, and things they need to know, or resources for them to learn about the technology from somebody who has a unique perspective as a law enforcement agent that has become interested in the technologies, and is a little bit of a self-taught expert on it now. Without further ado, welcome, Larry Nielson.

Larry Nielson: Hey, Mason. Thank you for having me. I really appreciate this opportunity being here.

Mason: Yes, so for the audience I've had a few conversations with Larry previously, and I've been struck by his story that he's shared with me about just teaching himself that is enough about cryptocurrency to really be able to investigate, or use that knowledge in investigations. I thought it'd be good for him to share his experience with the audience. Larry, why don't you start off by telling us a little bit about your background?

Larry: As far as my background, I have over 15 years law enforcement experience. Over five years investigating specifically financial crimes as a detective. I am a CFE Certified Fraud Examiner. As well as a CTCE Cryptocurrency Tracing Certified Examiner certified by CipherTrace. Obviously, anything that I'm talking about in the podcast is my opinion. Even though I haven't said which law enforcement agency I work for, it's obviously not the opinion of the agency that I work for, this is all coming from me.

Mason: When did it really capture your attention from a professional interest in terms of discovering that this would be a handy thing to learn about for your role as a law enforcement agent?

Larry: I was trying to think of the exact year, but I'm going to go ahead and say maybe 2018ish. I was already a detective in financial crimes investigations at that time. I started to personally see a couple cryptocurrency related cases trickling through, and they have seemed to just ramp up since then.

Mason: What was the perspective of the law enforcement agency in those instances where cryptocurrency elements popped up in investigations?

Larry: Well, and I wouldn't say this was just the agency that I worked at, I think just in general, cryptocurrency, it just looked at like, "Hey, it's cryptocurrency, so is it unsolvable?" Because cryptocurrency was just looked at as very mysterious and

File name: Following the Breadcrumbs - Tracing Cryptocurrencies in Fraud Investigations - Larry Nielson - Mason Wilder - Fraud Talk - Episode 117.mp3



secretive and elusive. It's been thought of for the longest time as really just being associated with the Dark web, and you don't want to go there, you don't want to delve into that, and really you're not going to be able to get much information out of it, because cryptocurrency is involved.

Mason: In those first few instances where it popped up in investigations was the general response to just shrug the shoulders, and move on to more familiar aspects of the investigation?

Larry: Well, I will say that even though cryptocurrency was involved, I would still try to investigate the case to the best of my ability. However, when you get to a point where there's an unknown, and maybe the technology, the knowledge, the information just isn't available, or the knowledge isn't as widespread at the time, there's really just nowhere to go with it, so you trying the old investigative techniques and they get you to a point, but then boom you get the cryptocurrency, and it's like it vanished.

Mason: Is there anything that sticks out about one of those early cases that really made you think, "You know what? I need to learn how to trace this stuff or identify what I'm really dealing with here?"

Larry: Well, I wouldn't say it was one case, Mason. Like I said I think it's 2018ish. I'm just going to jump all the way to 2021. I started to see the amount of those cases coming in ramping up. Once I started to see that happening, I knew that I needed to learn more about this stuff, because it was not something that was going away. It was only going to be more of it coming my way.

Mason: Well, and that instinct seems to have been proven accurate at this point, because as I'm sure our listeners can attest to you, it is not going away, and 2022 looks to be another very busy year for cryptocurrencies and digital assets like NFTs, and of course, with Metaverse entering the Lexicon, and everybody talking about what the Metaverse and web 3.0 stuff is going to look like **[unintelligible 00:06:35]** just going to be a **[unintelligible 00:06:37]**. Let's go back a little bit to when you decided that this was a topic you needed to learn more about for your professional role. How did you go about teaching yourself about cryptocurrencies and Blockchain and digital assets?

Larry: It's not super complicated, I guess, and maybe this just fits how my personality works, but I began to invest in it. I just dove right in. Like I said, I consider myself techy, so I wasn't really intimidated by it, but there was a bit of a learning curve there. It's like a learn-by-doing situation. By personally opening accounts on cryptocurrency exchanges, buying cryptocurrency, sending, receiving cryptocurrency and seeing the way that it works and moves across the Blockchain, and how transactions are recorded on the Blockchain. I began to understand it better from doing that.



Mason: I'm going to take a wild guess that the first cryptocurrency acquisition you made was Bitcoin.

Larry: You know what? You would be wrong there, actually. [chuckles]

Mason: Oh, yes?

Larry: Yes.

Mason: Did you get sold on a hot new cryptocurrency by somebody?

Larry: No, you know what? I don't remember the very first one that I purchased. I think it was little not popular or successful crypto, and I don't remember 100% of what the first one was, but I really don't own a lot of Bitcoin at all which we can talk about Bitcoin more. [laughs] By the time I discovered Bitcoin, I think was a little bit more expensive than I wanted to spend on crypto.

Mason: As you were just really familiarizing yourself with the technologies and the different currencies, and exchanges and everything, were there any really big surprises for you?

Larry: One of the biggest surprises for me as I began to really get into these investigations because even in the beginning investigating cryptocurrency, even I came in with the mindset like we discussed earlier, crypto is a little bit untouchable, and it's completely anonymous. It's very difficult if not impossible to follow it and get any information.

What I learned along the way is that you cannot assume that just because a bad actor knows how to hack their way into a system, or do a SIM swap or compromise a victim's email account or access their cryptocurrency wallet or cryptocurrency exchange account, it doesn't mean that that bad actor knows how cryptocurrency really works and really moves across the Blockchain.

Again, as I started getting further into these investigations, I started to discover this, and the thing that those bad actors don't know about cryptocurrency, they leave bread crumbs for investigators like me, law enforcement investigators, or fraud examiners to follow. That leads to being able to see for yourself, as an investigator, that cryptocurrency really is not completely anonymous.

Mason: As other fraud examiners that are maybe just now finding themselves in the position you were in a few years ago where they're realizing, okay, this is starting to come up more. I really need to familiarize myself more with this. Are there any recommendations or what advice would you give yourself three years ago?

Larry: Well, again, I think that a lot of times in law enforcement investigations and probably with the fraud examiners that are strictly working as fraud examiners, any



investigations, I think we like to overcomplicate things and makes it more difficult for us going back to the basics.

I would say that they should familiarize themselves with different types of cryptocurrency wallets, get to know the top cryptocurrency exchanges, install a cryptocurrency wallet on your mobile device, or your PC, open an account at a known, trusted cryptocurrency change, purchase some cryptocurrency, and send some to your cryptocurrency wallet because you really need to get a feel for how it works and how it moves to really understand what you're looking at in these investigations. Another good thing to do is go to a site like coin market cap.com.

For example, to see the cryptocurrency prices in real-time, the rankings and learn more about the names, the symbols, because all of that's going to be useful in your investigations. You can learn about the amount in circulation, the total supply, and a lot of other things. It's really interesting and it's not just about investing in cryptocurrency. These are things that you need to know as an investigator, NFTs, you mentioned earlier, you wrote that great article about the non-fungible tokens.

They're also very important to know as the popularity has risen quite a lot in the past year alone. In 2021, I saw NFT just become way more mainstream, they're cryptocurrency-based and they're related to that, but they're a different animal in their own way. I think that you can go to a site like OpenSea. That's a good place to check those out. You can review the top collections and see how they're sold and how they're listed.

Mason: Since you've acquired this knowledge and taught yourself this familiarity with the technologies and the way transactions work. How much have you had the chance to use that in your actual law enforcement investigations?

Larry: I got to tell you that, like I said, since 2018 ish when these things first started trickling in, or at least I remember I probably saw him before that, and I didn't even really know what I was looking at. I'm just going to make this real simple and I'll tell you that last year in 2021, I don't believe a single day went by that I didn't have at least one cryptocurrency-related crime that I was investigating now. I don't mean that I got a new crime each day, but it was just, I don't think a day went by that. I wasn't at least investigating one, and most of the time I had multiple cases that I was looking at involving cryptocurrency.

Mason: Can you walk us through some of the types or give us some examples without you don't have to get too specific on details or get yourself in trouble or anything, but what are some of the investigations it that you've seen in the last year?

Larry: No, that's okay. A lot of the scams and fraud cases that you would see with regular Fiat currency, they translate right over to cryptocurrency. The bad actors are changing the media from Fiat to crypto but for example, the romance scam cases, the grandparent scam cases. Now let's say instead of they still do the Fiat currency,

File name: Following the Breadcrumbs - Tracing Cryptocurrencies in Fraud Investigations - Larry Nielson - Mason Wilder - Fraud Talk - Episode 117.mp3



but for the crypto ones instead of them calling a grandparent on the phone and saying, "Hey, we have your grandson here. He is been arrested.

You need to go wire us \$10,000 from your bank to this bank account and we'll let him go, instead of that," now they're saying, Hey, you need to go to this Bitcoin kiosk this cryptocurrency and you need to send us X amount of Bitcoin, for example. They send it to another, they give them a wallet address to send it to that's one example, and then we have the SIM swap cases where it's just a straight-up theft of someone else's cryptocurrency, again, it's traditional crimes, but a different medium.

Mason: Has there been a case where you've been able to apply some of your knowledge about either tracing transactions that led you to identify a particular suspect in a case, or determine where some illicit funds went or that helped you obtain a court order, any case?

Larry: One example is a case where the stolen cryptocurrency was traced to accounts at a known cryptocurrency exchange located outside of the United States. Subpoenas were issued. They're pretty easy to get from the state attorney's office. It's like getting a subpoena for a bank. Records were received from the exchange, but there were issues getting search and seizure warrant for the accounts on the exchange due to multiple factors. One of them being jurisdictional.

Also, it's important to note that right now like the state attorney's office who are very good at their jobs, by the way. Obviously, they still have to apply case law and court experience that is based around traditional Fiat currency crimes and which makes sense. I know that there's going to be new case law coming down the pipe, that's going to be created in regards to the emerging cryptocurrency world and related crimes.

That's one example. Another case is where I actually used the information from subpoenaed records received from another known cryptocurrency exchange where a suspect was eventually identified. What happened first was that I was able to identify an IP address from those records and then from there, I used open-source investigative tools to identify the IP provider.

Then from there, subpoena records from that provider was able to actually identify a person and an address linked to that IP address, as well as also so important identify the first cryptocurrency wallet that the stolen cryptocurrency was transferred into from the victim's account. Then after that, the cryptocurrency was transferred from that initial wallet to another wallet so that was two transfers after was stolen. Then what I was able to do was use open-source blockchain analytics and watch that wallet to see my victim's cryptocurrency sitting there and then I was able to use that the same blockchain analytics to keep an eye on it and to see when moved and where it moved.



Mason: Wow, so there's lots of different, little breadcrumbs available out there between wallet addresses and IP addresses and service providers and all little potential entry points, I guess, or road marks on the investigative path where you can gain some headway or work towards attributing that wallet or account to an actual person.

Larry: Yes, absolutely, Mason. It's really a combination of traditional investigative methods, in my opinion, plus adding in the cryptocurrency element, which has its own specifics that you need to know and be able to identify and work with, to move an investigation forward. If you're able to do that, I've had success with subpoena that I've written for records in that regard. Again, it's just about following the steps and mapping it out, and painting a clear picture.

Even some of the out of the country, cryptocurrency exchanges will still cooperate with us subpoenas for records. Most of them really don't want the criminal element operating on the platforms. Now search and seizure warrants can be a bit trickier mostly, again, from my personal experience due to jurisdiction issues, again, some of the exchanges located outside of the United States, just obviously cause a search and seizure order is a little more, they dig in a little more than just a subpoena, you're looking for so else.

The exchanges I find they're really trying to work with law enforcement, from what I've seen and making connections with federal law enforcement who, by the way, are also taking these crimes very seriously and getting an assist. There could help, as far as if it's an out-of-the-country exchange. It's still a process though to do that.

Mason: You've been incorporating your cryptocurrency knowledge into your official law enforcement investigations. I know you've also mentioned that you're expanding beyond just your official law enforcement role into a consulting arena or area there. Can you talk a little bit about what that's been like?

Larry: Like I said, we've discussed, I've just been seeing more and more cryptocurrency-related content out there. I'm involved in multiple cryptocurrency NFT metaverse related groups on social media, which there's a lot of good information out there and those arenas, believe it or not, you just have to be able to, we through the scammers. I had also made contact with individuals and families or actually rather they made contact with me either directly or indirectly who wanted to get started in cryptocurrency, NFTs or metaverse and just didn't know where to begin.

Not only was I learning about common scams and crypto-related crimes that work through the practical application and through investigations, but also by seeing people on social media discussing scams and crimes that they had fallen victims to. I started a business called FinTech Focus, Training, and Consulting, registered with State of Florida.



I help individuals, families, organizations, get started with cryptocurrency, NFTs, and metaverse in a way using the best practices and mitigating their risk exposure to fraud and scams.

I'm also currently working with a partner and actively developing training for law enforcement that may then benefit fraud examiners in reference to cryptocurrency investigations that focuses on the basic knowledge needed and easy-to-understand investigative steps to take, to start the investigations correctly and move them forward instead of just, like we said earlier, filing them in the unsolvable drawer just due to lack of training and general knowledge in the area. It's from my training and actual experience investigating these crimes and mistakes I've made there have been plenty.

Wins losses, things that I've learned. Like I said, I've already discussed with detectives in other states, talked to them about cryptocurrency-related cases that they're working on or I needed help with in their areas where they work, help to educate them a bit on the topic.

Mason: That sounds really interesting. What if there's anybody in the audience that's interested in learning more about that or your services, how could they find you and get in touch with you?

Larry: Thank you again for asking that, Mason. I really appreciate that, man. Again, my company, FinTech Focus Training & Consulting. The website is FinTech focus.io. That's F-I-N-T-E-C-H focus.io. Also, you can find us on Facebook FinTech focus TC on Facebook.

Mason: You mentioned how to start a cryptocurrency investigation off on the right foot. Can you give us a little a snippet of that, or just the quick summary of at least something not to do?

Larry: Well, I'll tell you that. Just what I'll tell you, probably one of the most important things, and it might seem obvious, but sometimes not so much. Sometimes the victims don't a hundred percent know that they need to save this information or give you this information, but you need the wallet addresses. You need the victim's wallet address. Their currency wallet address, where they sent the cryptocurrency from.

That's like the starting point. If you can, you want to get the transaction hashed as well. Sometimes they're given QR codes or whatever to scan. You really need to just one tip like for investigators. Again, it might seem obvious, but you need that wallet address. If you don't have that wallet address, then it has to be correct. It's like a copy-and-paste situation, not to try to write it down yourself. You know how long those things are. You need to make sure you have that right off the bat.

Mason: You spent a couple of years familiarizing yourself and teaching yourself a lot about cryptocurrency's digital assets and blockchain technology. You've been

File name: Following the Breadcrumbs - Tracing Cryptocurrencies in Fraud Investigations - Larry Nielson - Mason Wilder - Fraud Talk - Episode 117.mp3



applying some of this in your official law enforcement investigations, and you're getting a consulting company up and running to specialize in this. Can you talk about the biggest lessons you've learned over this year and what you are going to be keeping a close eye on going into 2022?

Larry: Going into 2022, I'm going to continue to keep a close eye on cryptocurrency NFTs and anything metaverse-related. They're at the forefront of my interest right now. I'm just continuing to learn and experience, all I can in those spaces. That's where I'm at right now. I've learned how large of an impact cryptocurrency and now again NFTs even more so, and the metaverse are going to be making on our society and how much money is flowing through all of those spaces.

Where the money flows, the bad guys go. You know what I mean? I just made that up.

[laughter]

It's for real, it's serious. That's why we need to keep a close eye on this. As I law enforcement needs to keep a close eye on this, and that's why the public needs to really be educated in and how to protect themselves. There's no hundred percent foolproof way to protect yourself. As you know, even with identity theft crimes, we can only try to mitigate our risk.

Mason: Is there any summary or big picture takeaway for fraud examiners that you can offer based on your experience, teaching yourself about cryptocurrency and applying it on the job and getting your own shop up and running?

Larry: I know we've discussed a lot. The time that you've had me on here. My biggest thing is, again, get to know the cryptocurrency exchange is get on coin market cap, get yourself a crypto wallet. Start sending and receiving some cryptocurrency yourself. It sounds so basic, but that's really the best way to really get to know how this stuff works. When you start seeing certain terminology and when you start seeing victims of crimes or investigations you're working on, you start seeing these, the things that are saying it's going to make a lot more sense to you because you've done it yourself. I would say that's a basic first step in the area.

Mason: Well, perfect. I'll be sure and keep a close eye on it and try and find other ways to tap your expertise for our membership. Thank you so much for joining us, Larry Nielson, CFE. Can you tell us the name of your company one more time?

Larry: Sure. It's FinTech focus, Training & Consulting.

Mason: Well, thank you so much, Larry, for joining us again. This has been Mason Wilder, Research Manager with the ACFE. Thank you so much for listening to *Fraud Talk*. You can find episodes of the ACFE podcast on iTunes, Spotify, or anywhere else you enjoy your podcast. Thanks for listening and take care.

File name: Following the Breadcrumbs - Tracing Cryptocurrencies in Fraud Investigations - Larry Nielson - Mason Wilder - Fraud Talk - Episode 117.mp3



[00:28:56] [END OF AUDIO]