What is Cryptocurrency?

CyberAware Podcast: Season 2, Episode 8

Nathan: All right, everybody. Welcome back to the CyberAware Podcast. Today, we're going to be talking about cryptocurrency. My name's Nathan and I'm here joined by my cohost.

Ham: Dude, it's Ham. Welcome back. We are here in the studio, as always.

Nathan: Welcome back. All right. So today for our episode – crypto. I mean, big, big talk nowadays.

Ham: I love crypto currency. This topic is so wild.

Nathan: I agree. And again, just as a disclaimer for anyone listening right now, I'm not a financial expert.

Ham: I'm not!

Nathan: None of this is going to be any recommendations on what you should do with crypto. Nothing like that. We're just going to be taking, taking a step back and talking about it in general. We're just talking about facts right here and that's it.

Cryptocurrency – for anyone who's not familiar, it's online currency and I mean, I compare crypto to our generation's stocks.

Ham: Absolutely!

Nathan: Crypto itself has become really big in the past years from Bitcoin, which is the biggest. You got Ethereum.

Ham: Yup.

Nathan: You got some of the meme coins, I guess you could call them. Akoin.

Ham: As a connoisseur of the memes, right? Dogecoin to the moon brother.

Nathan: Dogecoin. Can you explain this "to the moon?"

Ham: To the moon? You got to shoot those stocks up, man.

Nathan: Exactly. It can be very profitable, but at the same time, it's not, it's not reliable by any means. One thing that I don't know how many people actually understand is what a coin is. What is a coin? Like a Bit – "coin."

Ham: Yeah. What is really a Bitcoin?

Nathan: It's not an actual coin. It's just these numbers, I guess is the way that I would explain it. You know, it's online currency. And you might have, you might have \$50 tied up in this and that's how much of a coin you have. Crypto, I mean, it's a big thing nowadays, but again, it's, it's kind of like our generation's stocks.

Ham: I actually saw a quick video last week about if you spent, or if you invested a thousand dollars at a Dogecoin back in 2014, you're now worth \$46,000.

Nathan: Oh yeah.

Ham: They're rolling in it. I remember years ago, back when one Bitcoin was \$3,000. And like, that's, that's a lot of money for one Bitcoin. Now it's grown exponentially.

Nathan: Now a single Bitcoin is going for tens of thousands of dollars. If you were to drop a grand on Bitcoin, you know, 10 years ago, if you would be a multi- millionaire, like beyond, by now.

Ham: Yeah.

Nathan: To the moon.

Ham: To, literally to the moon.

Nathan: I mean, it's crazy. It's a cool thing that our generation has. There's a lot of skepticism around it. Especially, you know, if I'm talking to my parents. I'm sure if you ever try to explain it to older audiences.

Ham: It's like money, but not money.

Nathan: And the thing is, is that it used to kind of be a joke, but the U.S. I, I believe actually endorses cryptocurrency. And El Salvador just made Bitcoin their official currency.

Ham: Oh! Oh my gosh.

Nathan: Yeah.

Ham: I'll get ads as I'm scrolling through videos about like, "Hey, Bitcoin. Try it out. If, you know, if you join our bank with Bitcoin, they'll send you a card and you'll have this card for all your Bitcoin." And I was like, huh.

Nathan: Talking about how you get Bitcoin, how you buy these cryptos in general. There's apps on your phones, websites, you log in, you create account. And these are actually official sites where you have to like, verify your identity because it's trading, it's dealing with money in that sort of sense. You can like connect your credit card and you might buy a certain

percentage of a coin. You know, you might spend \$50. And then again, it fluctuates, it might go up, it goes down and your \$50 might turn into \$75. It might turn into, you know, \$40.

Ham: It jumps around all the time.

Nathan: Yup. For anyone who's listening right now recently with how big crypto has gotten, I mean, billions, billions, billions of dollars all in this tied up.

Ham: So much money. I have friends that do crypto and they're really, they've been doing it for a couple of years now. I'm more in the memes. They're more into the whole thick of it, right? Like I have a buddy of mine who lives down in Florida. Y'all will understand this if you know about cryptocurrency, this man has 17 – he has 17 30 80's.

Nathan: You say 30 80. I know what you mean. Could you explain for anyone listening right now?

Ham: So the 30 80 is a computer graphics card normally used to play games. But these guys are using it to mine money.

Nathan: And on a massive scale.

Ham: On a literal massive scale and like, it would put out so much power and these people will line them up, like front to back, front to back on a special rig to just let them run and go. And they'll run it full time in a massive server.

Nathan: What are they doing when they line all those up? What is the point of them buying so many? Mining.

Ham: Yeah. Like they're just mining it.

Nathan: Taking a step back. We're talking about Bitcoin and mining coins. What does that even mean?

Ham: What does it even really mean?

Nathan: Cryptocurrency in general uses code called blockchain. And that kind of allows for direct transactions between people.

Ham: Okay.

Nathan: So miners or crypto mining, uh, they verify these kinds of transactions through encryption and then once verified, they can add these blockchain units to like a ledger and it verifies the transaction and who owns that cryptocurrency. And in turn, just how many people are mining, it turned the market for just GPU's, computer parts in general, has been flipped upside down within this past couple of years. Right now with crypto mining, it's such a big thing that people are buying in bulk. As you said, you have a buddy who bought how many?

Ham: 17.

Nathan: Yeah. There's people who are doing that. It's getting eaten up by the people who are buying 50 to a hundred and they have this whole rig where they're, you know, they're mining and making maybe a hundred or \$200 a day. Just mining all this stuff.

Ham: In, in the studio, right, we have this long table and people can have servers about as long as this table. And they're worth thousands, if not hundreds of thousands of dollars.

Nathan: And for anyone who's wondering, mining and doing this is pretty power consuming.

Ham: It's a huge task.

Nathan: Energy consuming. And I mean, it heats up very fast. Look up what a crypto mining rig would look like, and you'll kind of see what we're talking about. I mean, it's big, you got, you got these GPU's lined up in rows that are just full speed. Whirrrr!

Ham: Just going. Legit, pause this video, Google search it right now.

Nathan: It is nuts. And these people, their electric bill will be hundreds upon hundreds upon hundreds of dollars a month, just cause they have a crypto mining rig.

Ham: Yup and they are huge and they run and they burn so hot.

Nathan: Yep. And I mean going back to crypto in general, there's a lot of scams that go on with crypto. There's people who, if you're watching crypto or you're trying to get into it, or you're watching videos or something, you'll see in the comments section of videos or things like that, people are impersonating these fake investors. And people are getting scammed out of their money and you can't guarantee you're going to, you're going to get that back.

Ham: That's true.

Nathan: And you know, it just, crypto in general, remaining safe. Know what kind of cryptos you're buying. Who owns the coin? Each crypto is tied to somebody. Knowing who it is, what kind of projects they're doing.

Ham: Yeah, so true.

Nathan: Bitcoin is one of the big and well known ones, but there's other ones who might've just been thrown together last night that no one has really bought. Just know, know where your money's going.

Ham: Yeah.

Nathan: Just be smart with what you're doing. Going back on, you know, some of the dangers of cryptocurrency. We have cryptojacking and that's an attack that uses scripts to mine cryptocurrency within browsers without the user's consent.

Ham: Crypto could be taken away, almost like hijacking?

Nathan: Yup. It involves loading this cryptocurrency mining software to a victim's system. And there's no malware needed to be installed as long as the affected page executes the inbrowser mining code. So on your computer right now, if you have this kind of site open, it would be mining in the background.

Ham: Honestly, like it make, it would probably make me more aware of what websites I would go on. It would also probably explain why my computer has been probably running a little slower than normal.

Nathan: Definitely suggest running a malware scan.

Ham: Dude, Windows Defender all the way. I'm all for it. You know, run the deep scan, let it rock and roll because like, there was a moment where my games were running exceptionally low frame rate. But with these, like, systems happening in my background and totally unaware, it's against my consent? That's wild.

Nathan: Yeah. Cryptojacking, it's scary to think about. They might be burning your GPU trying to mine this stuff. It's weird. I've witnessed it before, I've seen it.

Ham: Uh, wow.

Nathan: It's kind of surprising when it happens and you're like, wow, that's, that's - I don't think you would have been seing this 10 years ago, obviously.

Ham: No, absolutely not.

Nathan: It's a newer form of just malicious things that can happen on your computer.

Ham: Holy moly. Getting cryptojacked and like having just your GPU running as hot as it can go. I turn my computer off every time I go to bed and anytime I'm away from the house.

Nathan: I mean, that's a smart thing to do.

Ham: For sure, for sure. And you know, you know what Nathan? What are some of the, like, the three takeaways we can take back from this episode?

Nathan: If you are interested in it, definitely do some research. My biggest thing that I'd say is definitely the safe practice. Watch out for scams, watch out for crypto mining, know what it is. And the biggest, biggest, biggest one is know what you're doing. What kind of coin

you're getting or buying into or investing into. It's good just to get some more information before this, cause it's a very, very unfamiliar kind of world to a lot of people.

Ham: Well, yeah, especially in like this day and age where it's so new yet it's so popular. It, it exploded. Bam, it was ready to go.

Nathan: Agreed.

Ham: One of my biggest takeaways from this episode is cryptojacking. I had no idea that even existed.

Nathan: Oh yeah. Just remain cyber aware if you're getting into crypto. Know what you're getting into. And again, thank you, Ham, for joining me on today's episode!

Ham: Dude, thank you, Nathan, for having me! It's always a pleasure.

Nathan: Same here. And I guess, thank you for joining us, and we'll pass this off to Mercy for the news.

Mercy: Hey everyone. Mercy Ayesiza here with the news, student expert on the information security team. I'll be updating you with what's going on in the cybersecurity world. Before I get into the headlines, please make sure to subscribe to our podcast.

And today's highlights are – TikTok influencer accounts targeted in fishing campaign. This phishing scam discovered by Abnormal Security tried to take over over 125 TikTok accounts with large follower bases by sending disguised spam emails that asked users for account verification. The spam emails were sent in early October and November 2021 to users across the world and consisted of two fake emails.

One notified the user to verify their account to receive a verified badge and the other informed them that they had violated the platform's copyright laws with a timeframe of 48 hours to respond. Replying to the fake emails redirected users to a WhatsApp conversation where criminals asked users for their personal information, including phone numbers and emails associated with their account. Be aware, do not give out your personal information or account information to anyone.

Our second news update today – Robinhood stolen email addresses from 7 million users put up for sale by cybercriminal. Emails stolen from the November 2021 breach of Robinhood's customer service system have been put up for sale by a cybercriminal called "pompompurin." The cybercriminal said they would sell the stolen email addresses for no less than 10,000 U.S. Dollars. The cybercriminal is withholding additional and more sensitive data from 310 customers, like stolen ID cards. The same cybercriminal claimed responsibility for hacking the FBI email server on November 13th, 2021 and sending out emails about a fake cyber attack. The FBI has since shut down the affected server in response to the attack. Our third news update today – over 300 WordPress sites hacked and asked for cryptocurrency ransom. This attack discovered in November 2021 by cybersecurity firm Sucuri was using a fake ransom attack to hack users of WordPress, a website building platform.

The users were asked to provide 0.1 Bitcoin, which is currently about 6,000 U.S. Dollars as ransom to have access to their website again. The scam also included a countdown timer to trick users to panic. To protect yourself, remember to keep strong passwords and do regular backups in case of an attack.

And that wraps up the news for this week. Thanks for listening to the CyberAware Podcast. We'll see you next time.