ECB in its Final Stage of Investigation Phase of Digital Euro

The European Central Bank (ECB) is working on a digital euro to prepare for a future where cash is out of favor and the private sector competes with central banks for the control of money. Indeed, on April 24, the ECB published the third progress report on the digital euro, as well as the findings of focus groups. This stated that the euro's digital version would only be available to consumers and subject to a maximum holding limit, which has yet to be determined but has been said to be around EUR 3,000.

CRYPTOCURRENCY

New Ethereum Standard Promises Better User Experience
Ethereum recently introduced a new standard called EC-4337 that supercharges user accounts into programmable and customizable accounts based on smart contracts.

LEGAL

Crypto Scammers Used Google Ads to Steal Over $4 Million
Scammers have managed to steal over $4 million worth of crypto from around 3'000 victims through deceitful websites marketed via Google search ads.

INTERNATIONAL

New Bitcoin Mining Chip Prototype Introduced
On April 28, a financial technology firm named Block has introduced a prototype design of its new five-nanometre Bitcoin mining chip.

CONSENSUS FAIR

Reflect, Reimagine, and Rebuild at: Consensus 2023

Consensus, the annual crypto and blockchain conference hosted by Coindesk, is one of the largest, longest-running, and most important congresses for innovations in the digital economy. It brought together once again investors, policymakers, brands, developers, and others to discuss the latest blockchain issues and featured a range of exhibitions and programming on several stages.

Consensus Fair 2023 by CoinDesk.

CRYPTOCURRENCY

NFT Market Faces Persisting Imbalance as there Are More Sellers Than Buyers

Wagner, Cendrine

Recent data has shown that the non-fungible token (NFT) market is currently suffering from an oversupply of sellers, while demand remains low. According to the analytics platform NFTGo, the number of purchasers was 7'907 compared to 8'641 vendors attempting to sell their NFTs. This trend has continued throughout April, and there has not been a single day when the number of sellers has not exceeded the total number of buyers.

Just slightly surpassing the lowest recorded date of June 18, 2022, with 5'343 buyers, the NFT market faced its second-lowest point in the past twelve months with merely 5'893 buyers.

The recent decline in the trading volume of NFTs has been attributed to the collapse of Silicon Valley banks, which has prompted concern among traders and investors. After the collapse, the trading volume decreased from $74 million to $36 million on March 12, resulting in a reduction of 27.9% in the number of daily sales.

However, the downfall in the market did not prevent traders from achieving high margins by selling their NFTs this April. One of the most remarkable sales this month is the one of the NFT collection "Mineablepunks." As the name suggests, the collection consists of minable "100% on chain punks"-characters with individual features. The collection achieved a 24-hour sales volume of 3'277 ETH, which is approximately equal to CHF 5'405 million. Another mentionable sale is that of the collection "Azuki," which has a limited run of 10'000 anime NFTs. In 24 hours, the collection achieved a sales volume of 2'025 ETH, reaching CHF 3'340 million.

The imbalance of the current NFT market may be a cause for concern for those planning to sell their NFTs in the near future. However, it is essential to note that the NFT market remains relatively young and is thus prone to volatility. Despite this, the persistent selling pressure may prompt sellers to reconsider their pricing strategy or consider retaining their NFTs for an extended period.

The NFT market faced its second-lowest point in the past twelve months.

"Robinhood Connect" to enable crypto trading directly from wallet

Dang, Nadia

On April 27, a popular financial services company called Robinhood announced its new "Robinhood Connect" service,which operates with Web3 projects. This update enables users to access their funds and credentials through decentralized finance protocols without opening the Robinhood app or website. Customers can now trade cryptocurrency directly from their wallets without third-party. providers. As of now, this service is only available in MyDoge, Giddy, and Slingshot ecosystems, However, the company will work with more providers in the future to expand the service for its customers. Similar services like the Robinhood Connect already exist, two examples are Coinbase Pay and MoonPay.

In a company blog post, the general manager of Robinhood Crypto, Johann Kerbrat, stated, "Crypto and Web3 have the potential to change the future of the financial system for the better, but we recognize there are still significant hurdles preventing broader adoption." He believes that these technologies can potentially improve financial systems. However, many challenges need to be addressed first. These challenges might be technical issues, security problems, or regulatory concerns. In addition, Kerbrat aims to increase the number of cryptocurrency users through the development of this service. The firm hopes that their new "Robinhood Connect" will be a reliable and easy-to-use crypto on-ramp for their customers with low costs.

Besides the Robinhood Connect Update, the company has introduced other updates to its app which integrates a "stop order" or "stop limit order" features for users. According to Robinhood, the company has approximately 23 million users and $74.7 billion in assets under custody.

Over 300 Crypto-Related Jobs from Deloitte Posted on LinkedIn

Dang, Nadia

On April 26, 2023, Coingraph stated that Deloitte is actively looking for cryptocurrency experts to work for them. Deloitte is one of the big four accounting companies focusing on audit, consulting, financial advisory, risk advisory, tax and legal services. Over 300 vacant positions were posted on LinkedIn last week. According to a search in the United States on LinkedIn, these crypto-related jobs include Blockchain & Digital Assets Manager, Tax Manager, and Blockchain & Cryptocurrency Manager. These available positions had a short description on the LinkedIn post. The responsibilities for these jobs included, for example, financial statement audit, or internal controls specific to blockchain and digital assets, and many more. In short, Deloitte is searching for applicants with experience in the audit, consulting,

tax & legal fields and knowledge about blockchain and how the system works.

The reason behind these job postings was due to Deloitte's interest in crypto in general and Web3, a blockchain-based system of the internet. Last February, it was reported that Deloitte had partnered up with Vatom, a Web3 platform, in order to work together on

Deloitte is looking for crypto experts on LinkedIn.

virtual reality projects. According to LinkedIn, there were many applications for these crypto-related jobs from different locations. The number of applications is said to be over one thousand as of now. In comparison to the other companies of the big four such as EY, KPMG and PWC, there were no crypto-related jobs to be found on LinkedIn when a similar search was made.

Polygon Integrates PoS Bridge for zkEVM, Enhancing Ethereum's Scalability and Security

Pontiggia, Céline

On April 26, Polygon, an Ethereum layer-2 scaling solution, announced the integration of a proof-of-stake (PoS) bridge for its zero-knowledge Ethereum Virtual Machine (zkEVM). This integration aims to offer improved finality compared to the existing Polygon bridge.

Ethereum Virtual Machine (EVM) is the computing environment of the Ethereum blockchain, often referred to as „the global supercomputer." It serves as a decentralized virtual computer where smart contracts and decentralized applications (dApps) interact. The EVM has been a core protocol feature that has solidified Ethereum's position in the blockchain ecosystem.

The zkEVM, on the other hand, is an EVM-compatible rollup secured by zero-knowledge proofs (ZKPs). Zero-Knowledge Rollups (zk-Rollups) utilize ZKPs, cryptographic proofs that verify the accuracy of transaction data within a rollup. The zkEVM's ZKP enhances privacy and security by verifying transactions without disclosing the details of each transaction (that
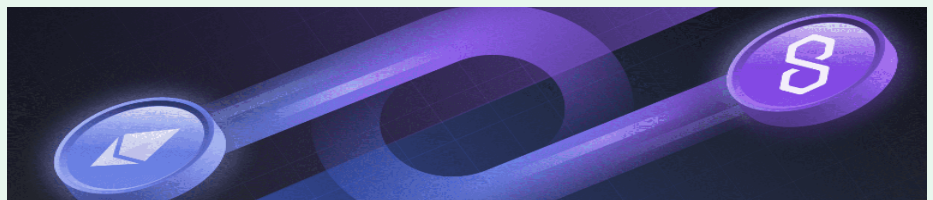
Ethereum Virtual Machine is „the global supercomputer" of Ethereum blockchain.

is why it is called "zero-knowledge"), providing a trustless environment.

One of the challenges Ethereum has faced is high transaction fees and confirmation delays. The zkEVM implementation addresses these concerns, enabling users to claim funds on the Ethereum mainnet within 30-60 seconds, without the need for mapping tokens before bridging. This streamlined process enhances the user experience compared to other chains. The Polygon Bridge for zkEVM features a visual progress bar, a transaction panel with color-coded completion status, a time estimate for pending transactions, and a filter. According to Polygon's developers, bridges utilizing zero-knowledge technology offer superior functionality as they are entirely based on smart contracts.

Polygon's zero-knowledge Ethereum Virtual Machine (zkEVM) mainnet beta was launched in March as an open-source, permissionless, and public platform. It enables secure and private data verification for decentralized applications in a cost-effective way Additionally, Polygon is actively exploring other aspects of zero-knowledge technology, such as introducing a Decentralized Identity Solution based on zero-knowledge proofs to empower developers in building self-sovereign and private identity solutions.

By integrating a proof-of-stake bridge for zkEVM, Polygon aims to enhance Ethereum's scalability and security while preserving the core functions and features of its virtual machine.

A Step towards Mass Adoption? New Ethereum Standard ERC-4337 Promises Better User Experience for Wallets

Triet, Robin

Ethereum recently introduced a new standard called EC-4337 that supercharges user accounts into programmable and customizable accounts based on smart contracts. The new standard is seen as a big step towards mass adoption in the world of Web3 as it can potentially increase the user-friendliness of user accounts and wallets, respectively. The key features of these new smart accounts are that private keys can be retrieved if lost, and no login is needed for every transaction. We provide you with an introduction based on online research and through the interview with David Dornseifer, a senior blockchain architect at Amazon Web Services (AWS), we deep dive into account abstraction and identify the benefits, challenges and potential of this new trend .

Status Quo

Today, there are two different types of accounts on Ethereum, externally owned accounts (EOA) and contract accounts. Regular user accounts created on Ethereum fall under the category of externally owned accounts (EOA). These EAOs use traditional key pairs to trigger transactions or sign messages, whereas smart contract accounts do not use a single private key to verify transactions. Instead, the account completes transactions that are predefined as smart contracts that were confirmed by the account holder. The most popular wallets, such as Metamask, are simple EAOs where the holder of the single private key (rightfully or not) has complete control of the account. The private key in EAO is considered a single point of failure, as only the private key stands between you and your funds being lost. With centralized banks, it is easy to regain control of your bank account whether you lose your card or you are hacked, but with EAO, once the private key is stolen by a bot or lost, there is no way to regain control over your account.

Account Abstraction

Account abstraction is a new paradigm that unifies smart contract accounts and EAOs to make blockchain

Smart contract accounts could soon take over traditional wallet accounts.

accounts more programmable and customizable. The idea of signing every transaction is replaced by abstracting the verification away from the EAO account to be integrated into programmable smart contracts. On Ethereum, there are two options for doing this. The first is to upgrade EOAs so that they can be controlled by smart contracts. The second route involves updating smart contracts so they can initiate transactions. Regardless of the route, the outcome is access to Ethereum via smart contracts, which unlocks many benefits such as: defining your own flexible security rules, recovering your account if you lose the keys, sharing your account security across trusted devices or individuals, paying someone else's gas, or have someone else pay yours, batch transactions together and more opportunities for DApps and wallet developers to innovate on user experiences.

Let us start with the Interview, welcome David Dornseifer.
Let us dive right into it. How would you characterize the current account system and the most used EOAs?

Alright, at this point just one disclaimer: I am not talking on the behalf of AWS in this regard and stating my own opinion. With that being said - what is this EOA that is always showing up? EOA is an abbreviation for externally owned accounts. Externally owned accounts or smart contract accounts are the only implementation that is available right now or the default implementation for Blockchain networks like Ethereum. The characteristics of EOA's are that you have a static signer associated with an account. So between the signer, which is always a private key, and an account there is a hard one to one mapping.

There are a few benefits associated with that, but also a few drawbacks. The main drawbacks occur on the UX side and it concerns the managing of your own private key because if lost, the negative consequence is that there is no easy way for key recovery. To manage your private key is quite challenging even for people that work in technology, because private keys need to be stored in a secure way and you need to make sure they can be recovered. This is the main negative aspect of EOAs. Up until today, there is no easy way for the recovery of a lost account. If you are losing your private key or if an attacker gets the private key, you cannot easily recover from it and everybody who owns this private key has full control over your account. That is because there is no separation between authorization and authentication.

To be fair, there are also some good things about the EOA system. If think about your MetaMask account in your browser for example, and you want to do Ethereum or any other EVM compatible chain like an L2, you just switch the network and basically the address stays the same and that is definitely one of the positive effects in terms of UX. You have the same network address between different networks and also the same address between different networks. And if you're then using like Etherscan, you're typing in your address, for example, to check the latest transactions, Etherscan will already tell you that this network address was found in this L2 or that L2, which is quite beneficial.

How do you manage your keys, is it decentralized, do you use a centralized platform, or do you put them somewhere physically?

That is actually a very good question. I use different solutions. Mainly I'm using EOAs. However, I have hardware security modules as well to store my keys. I'm using different accounts for different keys with different devices. More secure devices have the ability to get access to the accounts that have more funds associated. I am using the standard EOA keys as probably everybody who has been in the crypto space for quite some time. But I am actually leveraging different accounts to mitigate the risk of losing one single private key. Unfortunately, this practice requires a little bit of knowledge and usually also experience, because if you are moving funds between different accounts, mistakes happen - even to the best. If you are moving something from one account to another account, and there is a typo in the address, you risk losing your funds.

I'm aware of the negative UX consequences of this and I also understand that one of the core concerns about EOAs is that it prevents onboarding on of non-crypto savvy or non-technical users. Users that have never already been exposed to MetaMask or other blockchain accounts, and then you're telling them "Ok, now please create your MetaMask account, write your seat phrase, store your QR code somewhere print this and print that". That's not necessarily the right technique to onboard the next million users. Users coming from the traditional world like web 2.0. They want a social login including something like an e-mail address and a password. They do not want to be confronted with the concept of private keys and see something like an address and they do not want to manage gas for transactions. These things prevent an easy onboarding of new users and new non-crypto users, which is another big drawback of the current EOA system.

Where do you see account abstraction improving this current system that we have?

Account abstraction, particularly the Ethereum improvement proposal 4337 that was discussed and got a lot of attention the last few months, is a concept of enabling meta transactions that do not require a hard fork of the Ethereum layer. Therefore, there is no change required on the protocol layer of Ethereum, which is very important. It describes a way of how transactions can be handled in in forms of so-called smart contracts. And given that everything is a smart contract, basically things become customizable. This core of customizability can lead to severe UX improvements.

To think about it: an account that is being onboarded and you have your mobile phone associated with it and you can just trigger a transaction on your mobile phone which then triggers a transaction in the blockchain layer is already something that is way more familiar to the majority of the users these days then using like a standard wallet like Meta Mask, right?

The term account abstraction might be a little bit misleading; it is just a name. But in general, what it does is we are abstracting from this EOA. We are abstracting from hard dependencies, away from this dependency of the signature mechanism that is being used and we are turning everything into a smart contract and that allows customization. That is where the majority of UX improvements would come from.

How would that then look like for the end customer, who writes the smart contracts?

Well, I mean there will also be different scenarios. With account abstraction we are not just introducing the mechanism of using smart contracts, we are introducing new mechanisms in terms of gas payments. Because smart contracts that are being executed still require gas and technically the end user always has to pay for it. Unfortunately, now it gets a little bit more technical before you can actually fund or create your smart contract you would need to prefund your account. You need to have Ether so that the smart contract account can be instantiated and persist. Now with account abstraction there is the concept of paymaster, which is considered one of the most beneficial features of this new concept.

You are asking how that would look like for the normal user. I will give you an example here. Imagine you have a traditional company, or a bank and they decide to introduce and design crypto wallets to all of their bank customers. Now, usually that would be quite expensive because the bank customer, would need to have some sort of key mechanism in a central or decentralized key management. With account abstraction, you can basically go ahead, you can precalculate these types of addresses. There is a way to determine like deterministically determine the address of as my contract. So you know already, even without creating that wallet, what address the particular user will have. Now, the first time the user then really transacts on that smart contract, the bank, for example, where there is a component, a bundler, and a paymaster, they would say look, this is one of my customers. I'm paying the gas fee for them. So that that is basically one of the beauties. There are different third parties that can potentially take over gas payments. Which is already a drastic UX improvement as the end user is not required to prefund the account to then send Ether to another account or address so that the contract can be instantiated.

Now what actually happens is; the way how such smart contracts can be set up is that the user basically just logs in for example with the social login like Facebook or Google or would actually just use your standard company authentication, but that way you can actually encode certain things. Any identity management system could be used to grant you access to the smart contract and this smart contract would be able to match your identity to the wallet behind it. Basically, the user logs on in the standard way with the chosen identity management system. Then the user would be able to gain access to the smart contract and the user would not even be aware that there is a blockchain wallet associated with it. And the wallet just gets instantiated the first time the user really interacts with it. So again, if you have a bank, the bank starts by creating a wallet address and says OK look, I have certain shares of fractionalized NFT's for you that I want to share or the user just bought it. As long as you're not transferring them out or anything, no costs will be there, right? And this costs transferals to the outside out would then be covered by the bank.

All these things that we are worrying about today like gas payments and authentication can be abstracted away on a higher level. And that is basically the beauty of account abstraction.

You have mentioned banks and Facebook and all these institutions. And I think in the in the blockchain community there is always shivers when banks are being mentioned. Can account abstraction function without a centralized institution?

Potentially yes. I understand banks in the blockchain context is not a very good example because no one really likes them, and Bitcoin was created basically to empower the people. I understand, but also one of the main concerns is really the onboarding of new users and offering easy access. I mean, there could be a bank. It could also be a retail store, it could be another example it it's an easy way to onboard or to turn, for example, loyalty points programs like coop's for example in Switzerland. With the Coop card, you can just create a wallet in the background without even recognizing it. And the key or in that case the card would actually be the access. So Long story short, it is really about giving users an easy way to authenticate which can be a username and password to a wallet.

The central entity is not required. Technically you can have it without. However, if you want to enable some sort of social recovery. That central entity could help you with that. If have my loyalty point system. I'm collecting my loyalty points and I lost my access because I basically lost the application on my phone, or I got a new phone. You could go to this particular entity and say look, this is me, this was my account, and they would be able to recover your account. To be more specific, there is not a hard dependency on the centralized entity. Social recovery is also possible for example, just by attaching the guardians to your smart contract wallet or to your smart contract account. And these guardians would basically be like additional keys. Guardians are public key addresses that you have registered on your account for them you basically define a business rule saying -if the majority of my guardians approve on updating the owner, then update owner. That way you could actually also have like social

recovery, like in a fully decentralized way, without requiring a central entity.

That is really up to how you design these particular things, but what I have observed with certain account abstraction wallets is usually that companies and also wallet providers, would offer a "centralized service" or trusted entity for account recovery. These wallet providers would say that, so you can have guardians for example your wife, a friend and this company, and two out of three would need to approve. One thing to keep in mind in a fully decentralized system is that, that account recovery would be possible, but then there is other question like do you benefit of paymaster and is there someone that would potentially pay the gas fees for you.

Long story short, as you as you noticed, I can go on and talk about different configuration settings for quite some time. There is no limit when we are talking about smart contracts, everything is definable in software. And we have the opportunity of someone else paying for the execution. So again, there is not necessarily a limit to what you can do in terms of custom business rules in a smart contract and also in terms of recovery and account update.

Even multisig is possible, where different signatures are required to authenticate the transaction. For example, if a transaction exceeds a certain amount, that is programmable as well. Something that was previously just possible with safe smart contract wallets that can be introduced with account abstraction and this smart contract wallets now as well.

As you see there are a lot of opportunities to customize and to build what I think is what account abstraction comes down. It is all about understanding what the user needs and how to make it as seamless as possible for the users because we are aiming for the onboarding of new non-technical users to the blockchain.

Apart from the potential dependency on centralized institutions, do you see other challenges for these smart contract wallets?

Yes. We talked about the negative effects of EOAs and how they are negative in terms of user operations and hand-

ling. For smart contract wallets and account abstraction the basic biggest risk I would say is the smart contract itself.

Smart contracts are written in coding languages like solidity and these codes need to be audited, but nevertheless it is still a software that you're running. And we know, like everybody who has been involved in writing software, you can never prove that a system is 100% bug free. We have already had that a few times with some different multisig wallets or other smart contract wallets on Ethereum. There is a certain risk associated with that. The more complex the rules of your software are and the more customized they are, the harder it is to audit, and the harder it is to ensure that it really does exactly 100% what it is supposed to do.

There's the also challenge of running updates on this type of smart contracts.

And then again, account abstraction is basically a way to provide better user experience for an end user or retail user. And still, every smart contract account requires private keys to be stored somewhere, because you have to prove your identity. The private key can just be stored inside your smartphone or can be a wallet like an application, and you would never see it, but it can also be something more advanced where you still have the challenge of private key management. This challenge would probably not be on the retail user side. It would probably be more on the side of social recovery or the on the side of bigger institutions, that have one key to control your account for recovery purposes. In general, yes, but contracts are not easy, and the account abstraction process is quite complicated. A lot of components still need to be developed as we are in an early phase, and we will learn to then improve the software. In this stage security is still a risk.

One last comment, regarding cryptographic primitives. The used elliptic curve digital signature algorithms (ECDSA) do usually not break. Usually what you find is that in smart contract account that has already been audited like 50 times, it is way more likely that you have in bug in the software then in the cryptographic primitive or a bug in the EVM. That is something that we

will face, and we will potentially also see issues there. But we have to learn to mitigate these things and to come up with solid patterns and audited smart contracts to work around that.

These challenges all seem to be challenges that typically projects are facing in the beginning. Do you think there is a real potential for account abstraction and who are its competitors? For example, Uniswap just came out with the Uniswap Wallet app. Would you consider that competition?

It's. I mean, I think I think I would not call it competitors. There are different providers, that provide different type of wallets. There is already another company called Magic Link which basically provides a lot of end user wallets with social logins. And I would not say that this is competition. There is definitely still room for EOA's and other concepts out there. The EIP 4337 is just a high-level proposal and idea of how you can improve UX. It does not necessarily mean that you must do it exactly in that way.

And talking about different layer tows.   They have account obstruction already implemented in a protocol, which is not the case for Ethereum. Therefore, I think there is still room for these things to be evaluated in parallel.

The general principle of account abstraction is that it introduces important things to build a better UX, like the paymaster. If the aim is to create a huge user base for example create 10,000 wallets for all your users and drop an NFT then these things are not necessarily required. In the end it really depends on the requirements are and how the retail user interacts with it. And I think account abstraction products are very specific in in this regard. But still there is a good likelihood, I would say that eventually most of the current wallet providers will migrate or will adopt an account obstruction like standard. I can see EOAs like MetaMask for example are technically already compatible for account abstraction.

When I hear user experience and the mass adoption in these times I think about apps, do you think there we will see more of those or is there another concept that providers are working for?

If you were to ask me, one of the main goals of account abstraction is to not expose anything cryptography related to the end user. Or at least in a default setting, you can still always do private key export. If you want to, and you want to move your private key away, but in a default setting these type of things should never ever be exposed to the standard user.

Yes, I mean you're you mentioned the app. I think smartphone apps will basically become a standard to interact with these types of accounts, particularly given that smartphones also have secure enclaves which cannot be used today. Because of the signature problem, because smartphones like IOS, they support ECDSA as well. But these are not supported by the current EOA if you will. The current way how it is implemented is not supported because the cryptographic curves differ. You will have apps, but the question is: How will the apps interact with each other? In terms of app development, you have deep linking of apps. That could potentially lead you to have your wallet app on your phone and other apps that want to make use of your wallet can link with that particular app on the phone basis. We already have that concept today in mobile app development with deep linking where you have apps opening other apps for different purposes. And that can potentially be one of these things that will drive the crypto adoption. You can make it accessible to an entire newly new ecosystem.

Although there is risk associated with deep linking, for example if you have bank account on your mobile phone and you open a shady page that is asking for access to your bank account, you would not like that. The beauty of the account abstraction part now is that you can set rules and say ok, I trust this app, but I don't want this particular app being able to make transactions larger than amount X. You can encode that in the smart contract and ultimately limit the access. That is the beauty. You can set business rules and set conditions how certain keys can interact with the account, which limits the tech and the risk.

So basically, what we talked initially about how authentication and authori-

zation in EOAs is one. You authenticate yourself with the private key, and you can prove who you are because you have the private key. The private key grants you full access to the account, which is bad. With the account abstraction you have the possibility of different keys being able to access your smart contract wallet. These keys can also have different authorizations associated. For example, a key from your smartphone could be allowed to trigger transactions over 100 USD. Your browser key can trigger transactions up to 500 USD and your hardware security module would get full access. In the same way you can think about other ecosystems, that interact with the wallet. For example, a gaming app which is a very popular example with so-called session keys, where you have a blockchain game that needs to make regular calls to your smart contract. That blockchain game could be authorized automatically to interact with your wallet, but just for microtransactions during the next 30 minutes.

And that is one of the great potential improvements in terms of UX, because if you look at your current situation. If it is on your phone, or if it is on your browser with for example MetaMask - every time someone wants to interact with your wallet, there is a pop up and you must approve. These touching points would be reduced and that is something that I can see. So yes, there will be apps and potentially there will be deep linking but we will see.

What stage of development are we in currently?

As for now we are still in a very early stage. The main purpose of this EIP is to go out and test different concepts. You have a hypothesis, build it, test it, and see if it works.

The main purpose of it is to enable account abstraction without having a hard fork on the protocol layer. We have a separate layer now with bundlers. We did not touch that yet. They have stayed like in a technology scheme. There is like a separate layer now with bundling and other things, but eventually it will all be written in one transaction on the blockchain. But we do not have a hard fork, so there is a lot of customization and testing potential, which I think is great . We tal-

ked about a lot of things, maybe one of these things that I mentioned will turn out to be an anti-pattern and we realize, oh, that is actually really not a good idea. Since that, everything is becoming a smart contract, we can now test and run different business logics. I think everybody agrees that account abstraction will lead to UX improvements and that this has the potential to onboard the next-I don't know how many million users.

We are thinking in millions, I love it!

I mean like there are many, many, many humans on the world. We have to test hypothesis and see how people react to it. But yeah, given the potential UX improvements, I think that it is making onboarding and interaction with blockchain errors way easier. Which is good because I think a lot of errors these days happen because people send funds to the wrong address and do not understand what their contract is doing, people are being rug pulled and with account abstraction you are adding more control over these transactions. It opens the opportunity to do threat monitoring, anomaly detection, you name it. There are a lot of things that you can do.

And I am actually quite excited for that.

So are we. As we are about to wrap up would you like to add anything?

Umm, no, I think we discuss basically everything. No, I am good.

Perfect. Then just a fun question for last. What do you think was first the egg or the chicken?

Ohh obviously the chicken. It's like the same as; Why did the chicken cross the road, right? Where you can usually come up with different types of answers to it, also very sophisticated ones. There are some quite interesting answers to this as well. I think Albert Einstein even contributed with an answer.

Ohh I'll definitely have a look into it. Thank you for this Interview David Dornseifer.
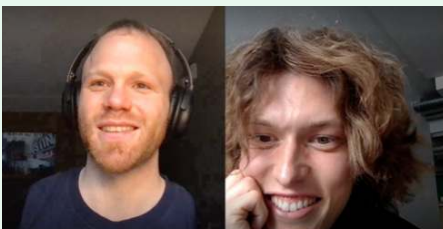
The Curious Timing of Bitcoin's Record-Breaking Day and a Major Bank Buyout

Pontiggia, Céline

Coinciding Events and Financial Crisis

On Sunday, May 30th, the Bitcoin network hit a new all-time high for the number of daily transactions processed. Coincidentally, on the same day, the US government worked with two major banks to engineer the latest financial rescue plan. Meanwhile, JPMorgan Chase acquired First Republic after the distressed bank's assets were seized by regulators, becoming the second-largest bank failure in US history. These events are not correlated but their timing suggests something about the future of the crypto industry and Bitcoin's role in an increasingly dysfunctional economy. While regulators and legislators are working to lessen crypto's inroads into the wider economy, the private banking sector is showing itself to be unable to manage itself.

Banking Sector Challenges and First Republic Acquisition

First Republic was taken over by the Federal Deposit Insurance Corporation (FDIC) to prevent a possible bank run as well as further contagion and a drawdown of the insurance fund's reserves. The federal banking watchdog immediately sold "all of First Republic's deposits and substantially all of its assets" to JPMorgan Chase, the largest US bank, which was also provided $50 billion in financing to complete the deal. This is the third major bank to fail in 2023 and the second-biggest bank failure in US history. The crypto industry is part of a wider political realignment towards populism. Many people see the First Republic bailout as another example of profits being privatized while losses are socialized. In trying to prevent a massive drawdown on FDIC reserves, political operators have essentially said that all US banks are too big to fail.

Bitcoin as an Alternative Monetary System

Bitcoin has emerged as an alternative monetary system, which many think could eventually serve as a legitimate global reserve currency like the US dollar is today. The system is attractive to some because it follows prewritten rules, including a fixed monetary issu-

The Bitcoin network hit a new all-time high.

ance schedule set by social consensus. The timing of the Bitcoin blockchain's latest milestone is purely incidental. Bitcoin transactions have been trending up since the launch of Bitcoin Ordinals, which enabled the network to support non-fungible tokens (NFT). Bitcoin is an open-source network – meaning people are free to use the technology as they please. If Bitcoin has a role to play in the future global economy, it's only because people are free to use it how they want.

JPMorgan's Journey into Decentralized Finance

JPMorgan is pushing forward with its efforts to tokenize traditional financial assets, despite the market downturn in 2020 and the regulatory crackdown on cryptocurrencies in the US. The bank has already processed nearly $700 billion in short-term loans on its digital asset and tokenization platform, Onyx, with more to come. The head of Onyx, Tyrone Lobban, believes tokenization is a „killer app for traditional finance,", especially for private markets like credit, equity, and real estate, which are much less liquid than public markets. While Lobban admits that recent setbacks may delay the platform's progress, he believes they are minor in the long run.

JPMorgan's Onyx is an authorized version of the Ethereum blockchain used by banking partners for transactions in the repo market, where institutions can borrow assets for short-term financing needs. Several banks, including Goldman Sachs, BNP Paribas, and DBS Bank, have already joined the platform, and others are considering signing up. JPMorgan also launched its own centralized digital token, JPM Coin, in 2019, and is one of the few banks actively exploring the potential of blockchain and digital assets in traditional finance.

LEGAL

Crypto Scammers Used Google Ads to Steal Over $4 Million

Wagner, Cendrine

Scammers have managed to steal over $4 million worth of crypto from around 3'000 victims through deceitful websites marketed via Google search ads. The investigation was conducted by ScamSniffer, which identified numerous cases of users falling for the phishing scam in the last few weeks by clicking on fraudulent ads that led them to malicious websites. Once forwarded to one of these websites, the users were asked to enter their login signature information, thus compromising their wallet addresses, leading to substantial financial losses.

The investigation concluded that the victims on Google used specific keywords, leading users to malicious ads at the forefront of search results. As these websites were promoted on Google, most users clicked on the first available option, unaware of their consequences.

An analysis of these keywords revealed that scammers were targeting specific companies such as Lido, Zapper, Defillama, Stargate, Radiant, and Orbiter Finance. One should be aware of the following malicious ads associated with each keyword:
· Lido: lido.is
· Zapper: webapp-zapper.com, appfi-zapper.com
· Defillama: defeillama- / deflllama.com
· Stargate: stargate-finances.online
· Radiant: adiantcapital.info
· Orbiter Finance: orbitered.finance

How did these ads bypass Google Ads' review process?

Fraudulent websites have used a parameter called "gclid," which allowed scammers to avoid Google Ads' review process safely. Google Ads uses the parameter to track clicks and display different websites based on popularity. Some websites use anti-debugging measures, which redirected Google's cybersecurity team to a regular webpage while normal users were forwarded to the malicious website. This tactic enabled websites to go around some of Google's ad machine reviews, enabling scams.

What improvements does Google Ads need?

To prevent future scams of this sort, Scam Sniffer recommends a Web3-focused malicious website detection engine and continuous monitoring of landing pages of ad placements to identify bugs and deception through parameters.

Which precautions can users take?

To conclude, users must be vigilant and take precautions to protect their cryptocurrency. This can be accomplished by avoiding clicking on suspicious links, ensuring up-to-date antivirus software on all devices, using two-factor authentication, and using a well-secured crypto wallet.

White House Pushes for Punitive Tax on Crypto Mining

Prétat, Grégoire

According to a post published online on May 2, the Council of Economic Advisers (CEA) at the White House has proposed a punitive tax on crypto mining operations due to the negative impact they have on society. The post argues in favor of a 30% tax on mining companies' energy costs, which is an uncommon industry-specific penalty that may jeopardize the profitability of these businesses. This move is being considered by U.S. President, Joe Biden.

The proposal was first sought in a recent federal budget proposal and could generate up to $3.5 billion in revenue over the next 10 years. The Council of Economic Advisers (CEA) contends that crypto mining firms do not pay for the full cost they impose on others, including local environmental pollution and higher energy prices. While other energy-intensive industries wouldn't be similarly taxed, the CEA argues that „crypto mining does not generate the local and national economic benefits typically associated with businesses

Hacked crypto accounts sold on the darknet for only $30

Dang, Nadia

On May 2, 2023, it was reported that cybercriminals have been selling hacked and verified crypto accounts on the darknet with low prices, according to the research paper "The Dark Web Price Index," published on April 24. the hacked accounts were sold for only $30 per piece by cybercriminals who illegally accessed these financial accounts. Furthermore, there were some accounts to be found on the darknet, such as Binance for $410, Crypto.com for $300, and Coinbase for $250. According to the data from last year, the prices for the same financial profiles were increasing significantly.

Miklos Zoltan, a Privacy Affair security researcher, highlighted the importance of keeping personal information safe. He stated, "If someone gets their hands on your financial details or social media credentials, the prices mentioned above are basically what it's worth to them." Nowadays, there is a growing number of hacked crypto accounts, leading to security issues in the industry. There are many victims of cyberattacks who went to court to get their stolen data back.

What is the darknet?

A darknet is a communication system that allows for anonymous internet browsing.The main characteristic of the darknet is its independence from the normal internet which means that the darknet can be opened without the ordinary World Wide Web. Furthermore, the darknet is a system that contains a software system and protocols which enables anonymity when browsing the web. Because of its unregulated system, the darknet is seen as dangerous since it allows hackers and cybercriminals to trade illegal content.

using similar amounts of electricity." Congressional Republicans have resisted efforts from regulators and the administration to penalize the crypto sector, so the Republican-controlled House of Representatives may not be likely to embrace taxes that punish the industry.

How will Pending UK Regulation Change Crypto Market Compared to EU?

Pontiggia, Céline

The European Union (EU) and the United Kingdom (UK) are both working on their regulatory frameworks for cryptocurrencies. The EU is speeding ahead with the recently approved Markets in Crypto-Assets (MICA) regulation, while the UK is looking to develop its own rules to ensure consumer protection, promote innovation and prevent financial crime. The UK has already taken steps to regulate cryptocurrencies before leaving the EU but has yet to submit a full proposal. The Financial Services and Markets Bill (FSMB) is expected to become law this spring, introducing new powers for HM Treasury (HMT) to bring crypto assets within the UK's financial services domain. The UK Treasury wants to make the country a crypto hub and restore confidence after the difficult 2022 year. Andrew Griffith, Minister for the City of London and Economic Secretary to the Treasury, said in a recent interview that he expects the UK's regulatory framework for cryptocurrencies to begin within the next 12 months and that he expects "comprehensive" rules to apply then in the EU. The UK government is committed to an effective legal framework and is willing to develop it in a timely manner. It could choose to be more friendly towards the crypto industry to promote innovation and attract investment (for example, by adopting a more flexible licensing and regula-tion approach or by offering tax incentives to crypto companies) or stricter in areas such as Anti-Money Laundering (AML) and Counter-Terrorist Financing (CTF). Ian Taylor, the head of CryptoUK, has stated that the proposed MiCA bill puts pressure on the UK and US to create a regulatory framework for the cryptocurrency industry. He believes that global minimum regulatory standards, such as those proposed by MiCA, are crucial for the industry. Regulators are expected to balance innovation and protection of the public, and the UK will develop its own crypto infrastructure according to its industry and economy needs, as it is not part of the EU.

ECB in its Final Stage of Investigation Phase of Digital Euro

Prétat, Grégoire

The European Central Bank (ECB) is working on a digital euro to prepare for a future where cash is out of favor and the private sector competes with central banks for the control of money. Indeed, on April 24, the ECB published the third progress report on the digital euro, as well as the findings of focus groups. This stated that the euro's digital version would only be available to consumers and subject to a maximum holding limit, which has yet to be determined but has been said to be around EUR 3,000.

ECB is working on a digital euro.

Eurozone's citizens who do not have an account intended for cryptocurrencies could also have access to this new form of cash if they have an account with an eurozone-based payment services provider, such as a bank or a digital wallet operator. On the other hand, businesses and governments will be free to accept digital euros, but not to spare them. Non-euro area residents might also have access if they held an account with a euro-area-based payment services provider. In further releases, non-European consumers could one day potentially be able to exchange their digital euros for foreign currencies if other central banks launch their own digital money, but it will also depend on accessibility rules that need to be set out in the legislative framework for this new European digital currency. The Governing Council also proposes that a digital euro could be made available to euro area residents via existing banking apps, or an app provided by the Eurosystem. Banks distributing the digital euro would be required to provide a set of mandatory core services to end-users and could offer additional services. These could include conditional payments or the ability to split person-to-person payments among multiple parties.

The findings of focus groups, that the ECB also released on April 24, emphasize the results of a study on people's views on a potential digital wallet. The study, which used focus groups and in-depth interviews conducted in all euro area countries from December 2022 to January 2023, found that most participants were interested in trying some of the digital wallet features presented. Key features considered essential for a digital wallet included person-to-person money transfers, offline payments,

budget management tools, and conditional payments. The findings will inform the design of a possible digital euro. The ECB plans to decide on the project's future in the autumn.

ECB Executive Board member Fabio Panetta has said that political opposition could still create problems for the central bank from issuing a digital euro, despite previous statements that a decision on the matter would be made later this year. Panetta suggested that a political decision would be needed to issue a CBDC and that the ECB could not proceed independently if such a decision was not made. He also urged lawmakers to pass laws making the digital euro legal tender and noted that the ECB was considering how to grant access to around 5% of the population who do not have or want a bank account.

The potential benefits

This digital euro could bring significant efficiencies to the financial world: enabling low-cost, instant peer-to-peer transfers and asset trades using smart contracts. It can also help those who are unbanked to gain easier and safer access to money through mobile devices and can integrate with tax collection regimes to improve monetary policy flow. The efficiencies of blockchain are already being realized in the cryptocurrency world, with lower costs, removal of barriers to entry, and the ability to automate processes without intermediaries. However, the launch of the European CBDC will require oversight to fight financial crime while maintaining user confidence in the privacy of transactions.

The same level of privacy as cash?

According to Fabio Panetta, a digital euro will aim to complement cash and replicate its best features but may not offer the same level of privacy. Speaking before the European Parliament's Committee on Economic and Monetary Affairs, Panetta said the digital euro would be risk-free, accessible, and easy to use. He added that maximum privacy levels would be guaranteed but conceded that it would not be the same as cash. Panetta also raised the possibility that some small digital euro transactions could be made anonymously. The ECB has yet to decide on whether the digital euro would exist in centralized or decentralized technology.

Where does Switzerland stand with CBDCs? Thomas Moser, alternate Member of the SNB gives his insights

Triet, Robin

Digitalization has led the initiative of Central Bank Digital Currency (CBDC) to gain popularity. To stay on track with digitalization and the technologies that gained momentum in the last few years, the SNB conducts regular investigations. Back in 2019, the SNB made its first statement regarding Central Bank Digital Currency (CBDC). Together with SIX and the Bank for International Settlement (BIS), the SNB published a multiphase investigation on the settlement of tokenized assets in central bank money in 2021. The investigation, called "Project Helvetia", explored how central banks could offer settlement in central bank money with more tokenized financial assets based on distributed ledger technology (DLT), focusing on operational, legal and policy questions. With "Project Jura" the trio investigated cross-border settlement using CBCD. To find out what the future of money might look like, the crypto valley journal interviewed Thomas Moser, alternate Member of the SNB Governing Board.

Digitalization is already well developed in the financial industry, especially in payment transactions. In recent years the development has accelerated, leading to a transition period, that is associated with risk because infrastructure and regulations are lagging, and consequences are unforeseeable. Currently, the SNB is focusing on being at the forefront when it comes to digital transaction technology, such as cashless payment. When it comes to distributed ledger technology (DLT), Moser sees an efficiency gain and more automation. DLT consolidates several platforms that are currently being used separately including the trading platform, clearing platform to settle transactions, the platform that transfers the assets and the platform that transfers the money. Although DLT is very interesting, Bitcoin and other cryptocurrencies are poorly suited as a means of payment due to their high volatility and thus are not seen as a challenge for central banks. Stablecoins could take over the function of money, however, as they are built on central

bank money, they hardly pose any new challenges apart from regulatory issues.

Not the same, but similarly to stablecoins, CBDCs are digital, government-issued currencies that are not pegged to a physical component. CBDCs are comparable to stablecoins because they are stabilized cryptocurrencies pegged to another currency, in this case fiat money. Unlike cryptocurrencies which are decentralized, CBDCs are issued and operated by the state. At present, around 90 countries are exploring CBDCs. The European Central Bank is currently in the final stage of investigating a digital euro. You can find an overview of the digital euro in this newsletter.

Challenges

With CBDCs, issuers are confronted with three challenges on a technical level: ensuring security, scalability, and adequate privacy protection. With the tourbillon project, the SNB and BIS are currently testing cyber resilience, scalability, and privacy in a CBCD prototype. Further, non-technical problems include regulatory insecurities and questions regarding governance for the operation of these infrastructures.

Another big concern is that CBDC could directly compete with commercial banks' book money leading them to lose their customer base and funds on a large scale. The more the design of the CBDCs resembles the functionality of commercial bank deposits, the greater the risk of banks consequently failing. The design of CBDC is significant when talking about the impact. For example, the so-called wholesale wCBDC would not be accessible to the public and is intended only for financial institutions. With CBDCs. the impact would be immediate, but it would allow the current financial system to use blockchain in a secure way.

CBDCs have a big opportunity to reach unbanked individuals and thus help support financial inclusion. It is also dependent on the design, but increased financial inclusion could be achieved by

Thomas Moser talks about the future of SNB.

allowing for non-bank payment service providers, offering a robust and low-cost public sector technological basis with new interfaces, education, and by fostering interoperability domestically and across borders. Moser points out the importance that all members of society must have access to money and secure payment options. However, it does not have to be with a CBDC system, and it depends on the design as well. To ensure financial inclusion, the SNB will continue to offer cash in the future, as it is an ideal offline and backup solution.

Outlook in the future

When asked about the position of the SNB on CBCD issues and the developments, Moser confirms that the SNB is currently not planning to issue retail CBCD (rCBDC) to the public. However, they are open for wCBDC, as they are already experimenting with CBDC that is only available for approved financial institutions that e.g., hold accounts with the SNB. The goal is to launch real wCBDC on a regulated blockchain-based exchange called SDX for selected transactions this year. The technical feasibility was shown with the project "Helvetia and Jura".

Decentralized finance works without any financial intermediaries. That would also include the SNB. Many would consider that a threat to central banks. Moser recognizes the innovation power of DeFi and the increased efficiency it could bring to the financial market, hence the many research projects to stay up to date. Nonetheless, Moser points out that experience showed that the majority of consumers enjoy working with intermediaries as they offer valuable and personal services. Furthermore, the example of stablecoins shows that the price stability of the traditional banking system is also appreciated by the blockchain community. DeFin is innovative and brings additional competitive pressure to the traditional financial system.

To conclude, the interview highlighted advancements made with quantum computers, that could be used for malicious attacks on the traditional financial sector. The SNB is addressing this challenge in the Tourbillon project. The proposed CBDC would withstand attacks from quantum computers. The project and its code are set to be published at the end of this year.

INTERNATIONAL

Franklin Templeton Bets Big on Ethereum by Putting Fund on Polygon

Prétat, Grégoire

On April 26, Asset Manager Franklin Templeton announced that its OnChain U.S. Government Money Fund (FOBXX) is now supported on the Polygon blockchain. The fund is specialized in the tokenization of U.S. government securities, cash, and repurchase agreements and with this move, it aims to increase compatibility with the digital ecosystem.

With over $270 million in assets under management, FOBXX is the first U.S.-registered fund to use a blockchain for transactions and share ownership recording. Head of Digital Assets at Franklin Templeton Roger Bayston said: "Extending the reach of the Franklin OnChain U.S. Government Money Fund to Polygon enables the Fund to be further compatible with the rest of the digital ecosystem, specifically through an Ethereum-based blockchain." In-

vestors can buy shares of FOBXX and hold them in digital wallets via the Benji Investments mobile app. Franklin Templeton has long been involved in crypto: Two years ago it announced a digital asset venture fund, and in 2019 it started digitizing shares for a money market fund on Stellar's blockchain .

Money market funds are increasingly interested in blockchain technology

As a reminder, money market funds are mutual funds with investments in highly liquid securities and with short-term investment strategies. In addition, these funds aim to provide investors with low-risk options. This does not really fit with a crypto investment, which has high volatility and really pays off in the long run. However, with the recent market volatility and the US banking crisis turning global, in-

vestors have turned to money market funds to hedge their investment risks.

Moreover, with the rise in the number of institutional investors willing to invest in digital assets, traditional finance players (TradFi) are seizing this opportunity to merge the two worlds. As a result, they no longer hesitate to go through these funds via blockchain technology.

Thus, just like Franklin Templeton, many other funds will be more interested in blockchain technology in the days to come. For example, this is also the case with Ondo Finance, which just recently stated that it is studying an alternative solution in the form of a stablecoin anchored to the U.S. dollar and backed by money market funds traded on traditional platforms.

Long Awaited Sui Network's mainnet launch

Arnold, Luna

On May 3, a layer 1 blockchain and smart contract platform called the Sui Network launched its mainnet after much anticipation from the crypto community. The platform is designed to increase Web3 adoption with fast speeds and high scalability, boasting a $2 billion valuation and more than 200 projects in its directory. Sui relies on delegated proof-of-stake, allowing SUI network users to elect and vote for delegates to confirm the next block, unlike Bitcoin or Ethereum blockchains that run on proof-of-work and proof-of-stake consensus mechanisms. Sui is also built on Move, a Rust-based programming language designed at Meta, formerly known as Facebook.

Despite the high expectations and $300 million raised in 2022 to support the development of the Sui ecosystem, the mainnet launch faced some challenges. While the platform promised fast transaction speeds, speeds averaged around four transactions per second (4tps) minutes after the launch, gradually increasing throughout the day and hovering around 18tps six hours after the launch. In comparison, Aptos, a rival blockchain, is pushing out at speeds of 9tps. The decentralization front has also proved to be a challenge, with more than 2'100 nodes operating across 43 countries, but primarily concentrated in Germany and the U.S.

However, despite these challenges, major cryptocurrency exchanges around the world have launched trading of the Sui (SUI) token, enabling investors to buy and sell the new SUI token. Crypto exchange Binance, for instance, debuted SUI trading immediately after the mainnet launch, allowing users to trade between SUI and cryptocurrencies like Bitcoin, Tether, and BNB, as well as exchange SUI against euros and Turkish liras.

New Bitcoin Mining Chip Prototype Introduced

Dang, Nadia

On April 28, a financial technology firm named Block has introduced a prototype design of its new five-nanometre Bitcoin mining chip. This chip is planned to make Bitcoin mining accessible and easier to use for more people and is seen as an important step to reach a more decentralized process in bitcoin technology. Furthermore, the company intends to make the Bitcoin mining technology an open source, meaning that the chip design of the mining technology will be made available for everyone to use and change. This should be achieved through selling the ASICs chip to make the whole mining system more efficient. ASIC stands for "application-specific integrated circuit," which is a technological device mostly used for mining Bitcoins. The reason behind this innovation is because only a few companies have power over the Bitcoin mining industry. They control the majority of the market, which might lead to disadvantages for the Bitcoin miners and the whole network. For that reason, Block aims for more decentralization through the development of the mining rigs.

The company, owned by former Twitter CEO Jack Dorsey, stated in a blog post that producing such a Bitcoin Chip (ASIC) is not easy and comes with obstacles because of some financial and technological issues.

According to Block, the firm has bought a large amount of ASIC chips from Intel, a popular US technology company. Furthermore, the firm reported that the components from Intel will help them to develop their future 3nm chip with even more enhancement saying, "We can now focus our design team exclusively on cutting edge three nanometer ASIC development." The reduction of the chip size can decrease the heat and improve the efficiency of the rig. As of now, there are no companies that made their chip designs open source. Moreover, most of the ASICs are currently running on 5nm chips.

China's digital yuan to be used for government wages

Prétat, Grégoire

On April 23, the financial authorities of Changshu announced that public sector employees in the Chinese city will start receiving their salaries in central bank digital currency at the end of May, as the deployment of financial technology in China continues at a steady pace.

This marks the largest rollout of the currency in China to date, as government employees, as well as those working at state-owned companies, schools, hospitals, libraries, research institutes, and media organizations will be affected. The city, with a population of 1.7 million, has been experimenting with the digital yuan since last year. For example, they have already used it to pay transit subsidies for some government employees. The digital yuan operates online and utilizes blockchain technology, making transactions recorded and traceable in a digital ledger. While China is already moving towards a cashless society, electronic transactions primarily occur on privately-owned apps such as Alipay and WeChat Pay.

The world's second largest economy has been trialing the digital yuan in Chinese cities since 2020, as it prepares for a national rollout that could put China ahead of Europe and the United States in the global race to develop a state-backed digital currency, which is also known as the central bank digital currency (CBDC).

Chinese government employees will receive their salary in CBDC.

Months-long refusal of energy to the crypto-currency sector in Canada

Arnold, Luna

The Canadian province of New Brunswick has decided to stop servicing new, large-scale industrial customers due to concerns about the cryptocurrency sector's high consumption of electricity. According to a recent report by CBC, the power company N.B. Power has started rejecting energy requests from crypto miners already since 2022 because of the risk that the amount of electricity used by the cryptocurrency sector may surpass the capacity of the utility. The government has ordered a review to evaluate the sector's impact on the electricity supply, but N.B. Power refused to share the report. The decision to freeze new customers came just months after Taal Distributed Information Technologies Inc. announced plans to establish a 50-megawatt bitcoin mining operation in Grand Falls, which would have joined an existing 70-megawatt bitcoin mine in the same area. The combined annual electricity consumption of these two mines exceeds what could be produced by the small modular nuclear reactor being designed by ARC Clean Energy Canada of Saint John.

The pause by N.B. Power is a result of several interconnected challenges that the utility is facing with its long-term ability to generate electricity. It must stop burning coal at Belledune by 2030 under federal climate rules, is having problems running the Point Lepreau nuclear-generating station, and must decide soon whether to spend $3 billion to refurbish the Mactaquac hydro dam. The utility has been exploring other energy sources for Belledune but so far has not decided, and converting the plant could be costly. The province faced a record peak demand on February 4 that left it on the verge of bein unable to supply existing customers.

Some U.S. electrical utilities supplying crypto mines have been forced to pass on higher costs of generation to other customers and, in some cases, have had to generate more electricity from greenhouse-gas emitting sources. Meanwhile, bitcoin mines act as a decentralized banking network, constantly recording worldwide transactions and earning bitcoin as a reward. The more computers a company operates to tally transactions, the more currency it will earn, but adding computers requires larger amounts of electricity.

Crypto miners still require large amounts of electricity.

Regulating Crypto Assets Without Global Consensus Will Not Be Effective: FM

Prétat, Grégoire

Underlining that global consensus is necessary for the regulation of crypto before India makes any move on it, Finance Minister Nirmala Sitharaman on Sunday, April 23, said a global template may have to be created.

Union Finance Minister Nirmala Sitharaman has highlighted the importance of a global consensus on regulating crypto assets before India takes any action. She stated that a collaborative effort is necessary to create a global template for regulation, as no single country can effectively control digital assets due to their technology-driven nature. However, Sitharaman clarified that this does not imply controlling distributed ledger technology and its potential benefits. The G20, which India currently presides over, has kept the issue on its agenda for this year, and reports from the IMF and the Financial Stability Board (FSB) will be discussed in July when finance ministers and central bank governors meet under the G20. The FSB's report will focus on financial stability. Sitharaman made these remarks in response to a question on regulating digital assets during the First G20 Finance Ministers and Central Bank Governors Meeting held in Bengaluru in February.

Coinbase International Exchange will soon be launched

Dang, Nadia

On May 2, 2023, the largest US cryptocurrency exchange Coinbase has announced the launch of the Coinbase International Exchange. With the launch of the exchange, institutional clients will have more opportunities to invest in digital assets such as Bitcoin or Ethereum perpetual futures soon. This type of transaction differs from traditional futures as it allows traders to hold their positions as long as they want, without an expiration date. The company reported that the exchange will be resolved in USD Coin (USDC) and focuses on security features such as 24/7 management, dynamic margin requirements and certain compliance standards. Coinbase additionally reported, "The Coinbase International Exchange is an expansion, bringing the safest, most trusted name in crypto to the global market."

100% Made in Italy Guarantee

Pontiggia, Céline

The „100% Made in Italy" label is renowned for representing exceptional quality and craftsmanship in Italian products like Parmigiano Reggiano and Barolo wines. However, counterfeiting and misleading claims of Italian origin have caused significant harm to the economy and the reputation of genuine Italian goods worldwide. This is a widespread challenge faced by luxury and artisanal brands globally, and existing solutions have proven inadequate.

In the digital age, blockchain technology has emerged as a powerful tool to enhance product quality and safety. On April, 27, a groundbreaking project called „operation transparency" was introduced by five major dairies of the Tuscan Pecorino Consortium, accounting for approximately 25% of the market. This experimental project, certified by the control body Dqa (Department of Agri-food Quality), utilizes a traceability system accessible even to small producers. A portable device called BluDev, developed by Farzati Tech, is attached to

the product and employs artificial intelligence and near-infrared spectrometry (NIR) to create a digital „bio fingerprint." This technology enables the product's entire journey from origin to distribution to be tracked and stored as a „food passport." The DQA plans to incorporate this innovative solution into the control plan for Pecorino Toscano, with potential applications in other food sectors as well. This „talking label" allows consumers to access comprehensive information about the product's history through their smartphones, combating issues like „Italian sounding" that are increasingly prevalent in the agri-food industry.

Moreover, blockchain technology has previously been utilized to verify the authenticity of Italian products. In a partnership between the DFINITY Foundation and FEDERITALY, blockchain technology was leveraged to provide secure and transparent verification for Italian brands, combating counterfeiting and

safeguarding the „100% Made in Italy" label. Through FEDERITALY's rigorous certification process, products meeting the criteria receive a digital certificate stored as a non-fungible token on the Internet Computer (ICP) blockchain. The ICP blockchain offers scalability, user-friendliness, cost-effectiveness, and environmental sustainability. Consumers can easily verify the authenticity of a product by scanning the QR code and accessing the corresponding certificate. This solution ensures transparency, security, and immutability, instilling trust in Italian products and protecting the economy. For companies, the certificate symbolizes pride and quality, showcasing their commitment to using genuine Italian raw materials and manufacturing processes. This sets them apart from competitors offering counterfeit alternatives. The decentralized website hosted on the ICP blockchain provides an immersive user experience, while the sustainable and efficient

Blockchain technology utilized to verify the authenticity of Italian products.

nature of ICP makes it an ideal choice for this solution. This partnership exemplifies the seamless integration of tradition and innovation, offering a scalable framework for authentication across various industries. The initiative not only addresses real-life challenges but also brings blockchain technology to the forefront, providing end-users with practical and hands-on blockchain experience, even if they may not be aware of it.

CONSENSUS FAIR

Reflect, Reimagine, and Rebuild at: Consensus 2023

Arnold, Luna

Consensus, the annual crypto and blockchain conference hosted by Coindesk, is one of the largest, longest-running, and most important congresses for innovations in the digital economy. It brought together once again investors, policymakers, brands, developers, and others to discuss the latest blockchain issues.

This year's fair took place between the 26th to 28th of April in Austin, Texas, and attracted over 15,000 attendees, 220 sponsors, and 410 speakers despite recent regulatory struggles around cryptocurrency adoption in the United States. The event featured a range of exhibitions and programming across several stages; for example, the Mainstage hosted keynotes and insights on various topics, such as digital privacy and the future of Web3. Another stage showcased breaking news and developments in the crypto and blockchain space. Developers were offered to discuss the latest developments in the crypto economy, grant programs, and funding opportunities at the "Protocol Village." Other smaller stages, such as the "Hash Stage," featured programming from AMA sessions to company announcements, while the "Metaverse and

Gaming Stage" explored the use of future digital environments and experiences. Furthermore, blockchain networks such as Ripple and Algorand hosted side events during Consensus, providing attendees with a deeper understanding of specific blockchain offerings and an opportunity to network with like-minded individuals. These events were also beneficial to non-Consensus attendees who wished to learn about the latest developments in this industry.

The turnout at Consensus 2023 demonstrated that U.S.-based companies and international organizations are still very much interested in implementing Web3 technology into their business models.

Businesses Discussions about Web3 Startups and Strategies

Next to matters about financing and investing in Decentralized Finance (DeFi), Coindesk also put a lot of effort into topics around NFTs, the metaverse, brand building, or, in short, The Web3. Google, Robinhood, Mastercard, Coinbase, and other large organizations were present at the conference, discussing their Web3 strategies. „At the end of last year, Google Cloud announced

Blockchain Node Engine, which allows users and developers to run an Ethereum node without having to manage or support it themselves," said Head of Web3 at Google Cloud James Tromans about the recent initiatives they announced. They also stated that Google Cloud had expanded support for the Blockchain Node Engine to Polygon proof-of-stake, additionally to Ethereum. Tromans added that Google Cloud acknowledged Polygon's approach in the zero-knowledge space and that Polygon will benefit from Cloud's infrastructure and developer tools. But not only Polygon but Google Cloud's startup program will also support companies to onboard that are planning to build on Web3 with their products.

A Swiss-based nonprofit organization called NEAR Foundation announced its new project called Horizons, which is partnered with Pantera, Dragonfly, Hashed, Decasonic, and others. Horizons will allow anyone with the idea for a startup to essentially crowdfund funding and business advice from experts, meaning it can be described as a startup accelerator. The system uses a "reputation graph.", a two-way marketplace, which allows startups to

The crypto & Web3 community gathered once again for Consensus Fair.

rate the level of received support from their advisers and advisers to rate the founding team, according to Horizon co-creator Laura Cunningham. Upon its launch, the marketplace will feature a comprehensive range of resources, including more than 15 service providers, 40 mentors, and over 300 backers, available to NEAR ecosystem founders.

Policy Summit

The convention saw a great deal of attention paid to policy issues in the crypto industry, including the first-ever Policy Summit on the "Unlock Stage", a full day of conferences evolving the world's regulatory landscape. Amidst the thousands of attendees, the week was punctuated by several Congressional hearings, work from the European Union, and further activity from regulators.

The CoinDesk editorial team reflected on Twitter on the key takeaways from the event, which also included some inputs about the lack of regulations. Coindesk's Deputy editor-in-chief Nick Baker noted the striking degree of optimism surrounding crypto, despite a regulatory landscape that may appear nega-

tive. Ben Schiller, head of Consensus Magazine, was moved by the concerns of Kate Brady, head of communications for Web3 at PepsiCo, who highlighted the challenges that a lack of regulatory clarity poses for companies like hers. This showed that the regulatory conversation affects all of corporate America, even a mainstream American brand like PepsiCo. Meanwhile, CoinDesk's managing editor for global policy and regulation, Nikhilesh De, emphasized that the regulatory landscape is always changing and evolving, even as attendees gathered for the conference. While there may be no immediate resolution to the ongoing regulatory conversations in the US, there are signs of progress.

Despite the lack of clarity and the challenges this poses for the industry's innovation and competitiveness, the crypto community remains optimistic about the future. While other regions like Europe and Asia have more established regulatory frameworks, the US is slowly taking steps forward, and attendees at Consensus 2023 remain committed to the possibilities of the crypto sector.

Mastercard Unveils New Blockchain Standards at Consensus 2023

Wagner, Cendrine

Raj Dhamodharan, head of crypto at Mastercard, appeared at Consensus 2023 to discuss a new set of guidelines launched by the payments giant. In the presentation, he introduced the Mastercard Crypto Credential, which includes a set of standardized principles and infrastructure for authenticating transactions between consumers and businesses on blockchain networks. The Mastercard Crypto Credential is designed to provide a solid foundation for financial institutions, governments, brands, and participants in the crypto space. Its primary goal is to ensure that individuals operating in Web3 environments adhere to pre-defined standards that align with their desired activities.

"We've done this for years in payments – pioneering innovation in identity verification and global standards. We look forward to bringing decades of experience to this space to enhance trust and work with the broader industry and governments to enable further innovation."

Lirium, Bit2Me, Mercado Bitcoin, and Uphold are the first partners to join forces with Mastercard in an exciting venture. Their first project is to facilitate transfers between corridors connecting the United States to Latin America and the Caribbean. In addition, Mastercard has formed strategic alliances with prominent public blockchain network organizations, namely Aptos Labs, Ava Labs, Polygon, and the Solana Foundation. These partnerships aim to enable the integration of the Mastercard Crypto Credential into the application developer ecosystems associated with these organizations. Through the collaboration, Mastercard and its partners will work together to enhance verification processes in various domains such as NFTs, ticketing, enterprise solutions, and other payment systems.

<div style="background:green;color:white;text-align:center">CRYPTO MARKET</div>

Crypto Market Analysis

Prétat, Grégoire

	Price	30d change	Trading Volume 24h	Marketcap	Market Share
Bitcoin	$ 27'615.80	- 0.96%	$ 16'296 Mio.	$ 534'719 Mio.	46.8917%
Etherum	$ 1'843.27	+ 0.57%	$ 7'875 Mio.	$ 221'871 Mio.	19.4479%
Tether	$ 1.00	- 0.00%	$ 27'430 Mio.	$ 82'341 Mio.	7.2308%
BNB	$ 31414	+ 1.20%	$ 509 Mio.	$ 48'979 Mio.	4.2974%
USD Coin	$ 1.00	+ 0.01%	$ 3'661 Mio.	$ 30'239 Mio.	2.6543%
Chainlink	$ 6.57	- 7.40%	$ 187 Mio.	$ 3'395 Mio.	0.2978%
UMA	$ 3.09	+ 49.56%	$ 110 Mio.	$ 219 Mio.	0.0194%
Band Protocol	$ 1.45	- 19.80%	$ 9 Mio.	$ 182 Mio.	0.0159%
iExec RLC	$ 1.63	- 1.16%	$ 19 Mio.	$ 132 Mio.	0.0115%

Current top Cryptocurrency and Oracles Tokens by Market Capitalisation.

INTERNAL

Goodbye To The Ambitious Sarah Ion!

Pontiggia, Céline; Wagner, Cendrine

Hello Sarah and welcome to the SCL internal interview. Tell us a little about yourself.

Hi! Thank you for the opportunity. My name is Sarah Ion. I'm Swiss but I also have Romanian origins. I'm 23 years old and I'm a Master's student, with major in banking and finance and minor in marketing. In my free time and when the weather permits, I really enjoy going motorbiking.

Describe yourself in 3 words.

I would say altruistic, ambitious, and empathetic.

Describe your Publication group in 3 words.

I would say creative, professional and funny.

So, did you enjoy working with them, even if it was just for a few months?

Yes, absolutely.

We know that you joined the project when it was still BCP. What motivated you to join the project BCP and now SCL?

I wanted to do a different type of thesis actually, where I can learn something practical and useful for my future career instead of just doing some research and writing a very long piece.

We mentioned you were part of the transition from BCP to SCL. How was that experience for you? Did you have the possibility to contribute to the creation of the new student project?

First, I have to admit that it felt like a roller coaster as there were many, many uncertainties. But I would say that all this was useful for me as I had the opportunity to learn how to be flexible and work in unstable conditions. As well as they really gave me the possibility to express my opinion, implement my ideas and really be proactive. They were actually listening to us (students) and to me.

That's a cool point of view. Were you stressed out at any moment or afraid that it would turn out for the worse? How were your feelings during this time?

I was for sure a little stressed. Especially because in the publication team we had the merging of other teams, so I was responsible for more new people. I didn't know where we would end up in the end. But generally, no, I wasn't afraid that the project would eventually stop, because there were so many people involved and also Adi was taking care of it. So no, I wasn't afraid of that.

How do you see blockchain technology impacting the world in the future?

I think that blockchain will have an enormous impact in the future. For example, let's think about the World Bank that is facing a big crisis at this moment, blockchain could be a solution. Hopefully, it would be a solution.

Would you like to work in that sector in the future or you still don't know yet?

Yes, I would like to work in the banking sector. Also, because my major is in banking and finance. But I know the difficult situation banks are facing right now. So, we'll see. If blockchain technology will be implemented in banks, I would surely think about it.

What was the most interesting or unique aspect of writing your master's thesis with SCL?

I think that the most unique aspect of this kind of thesis is the opportunity to work in groups, which can be a sneak peek of what the real world in terms of working actually is.

Were there any notable successes or achievements during the project that you are particularly proud of?

Yes! One example is that before joining the project I didn't know that I would be capable of leading a team and even if I'm not perfect right now, I think that I achieved being a leader and being a source of inspiration and motivation to the team. I have personally developed.

We know you were the leader of the publication team. Can you maybe describe the goals and objectives of this team?

Sure, we have 3 sub-teams: website, social media and video and visuals. Everyone works towards spreading the blockchain and SCL project knowledge in an understandable and cool way.
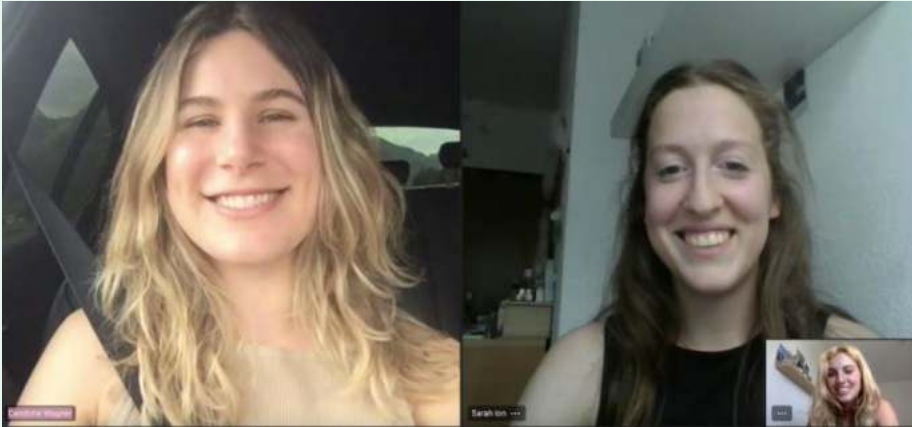
Both for companies who might need our research and for common people who would like to know more about the topic. At the same time, we want to let students know there is an opportunity to join the SCL project and write the thesis with us.

Did you face any challenges during the SCL project? How did you overcome them?

Zero. No, just kidding. Yes, I definitely did. One of the biggest challenges for me was to coordinate so many people as we are a big group, like 13 people. It was actually hard to smoothly communicate and coordinate between the different teams and make sure that everyone knew what to do. Especially because every sub-team has a clear strategy for themselves.

Did you use it to organize meetings altogether?

I tried to have a meeting with the whole publication team, but it was impossible. So, I managed to have meetings with the sub-teams leaders and the personal assistants and they, in turn, will have their weekly meetings. So, they were updating me on everything.

What is the general mood or energy of the publication team?

It's actually hard to describe it in general. I would say like funny and entertaining but also professional mood. As the Publication team, we need to attract as much interest and interaction as possible. So, the mood needs to be funny and entertaining, but at the same time we need to remain professional and this is what you can also perceive in our team.

There are also different dynamics amongst the sub-teams, since they handle very different things. So, for example, website and video and visuals teams are smaller, there are only 3 people in each

one. The social media one, I think they're having actually fun. The most professional one is maybe the website one. So the relationships change in every group.

Are there any team members you feel you have particularly strong working or also personal relationships with?

Of course. I mean, I think it's impossible not to bond with someone or share some common interests when you're working so closely. If I have to mention some names, I will probably say my personal assistants: Luna and Patrizia. But yeah, it's not that the others are not kind people or I don't like them, I just related more with them.

We completely understand it. You also trust Patrizia since you let her have the publication lead role. How does that make you feel?

I don't know. It was actually kind of sad to leave my position to someone else because I was really enjoying it at the end: being a leader, having responsibilities, and having people listening to me,... It was really starting to work well, but I fully trust Patrizia and the rest of my team also and I'm sure that they will continue working and achieving the goals and going also beyond them.

What did you gain from this project, from this experience? From what you said, we imagine personal relationships and more confidence in your leadership skills, right? Something else?

I also gained a lot of knowledge of the blockchain world. I developed leadership skills and some other skills-for example, I learned how to use Adobe Illustrator, which I'm very proud of. And lastly, I also gained some friends.

What's the best advice that you have received from, let's say SCL member or someone else in your life?

So, um, it's not advice, but the most special thing I received was the trust I was given leading the team.

Do you have any advice for the remaining SCL members?

Always set some goals and try to go beyond them. Do not settle.

Very ambitious! Do you want to share any last words, comments, or good-byes?

Yeah, well. If I can, maybe, thank Adi for the trust that has been given and the opportunity. I wish great success to the publication team and the SCL project. And thank also to all the students I had the chance to meet.

Thank you Sarah for your precious insights and your time. We wish you the best!

Congratulations To Our New Manager Tui Huakanomm!

Pontiggia, Céline

Last week, Tui has been promoted to be the first female SCL manager ! She is now in charge of leading the Market Analysis topic team. We are confident that Tui will bring a wealth of knowledge and expertise to the role and that, under her guidance, the team will continue to thrive. We are excited to see her lead the team and inspire others. Congratulations Tui, on this well-deserved appointment.

Trivia Night Triumph: First SCL Social Event Success

Are there any team-building activities or events that you would like to suggest or see implemented? Let Céline or Cendrine know!

SCL-Crossword

Dang, Nadia

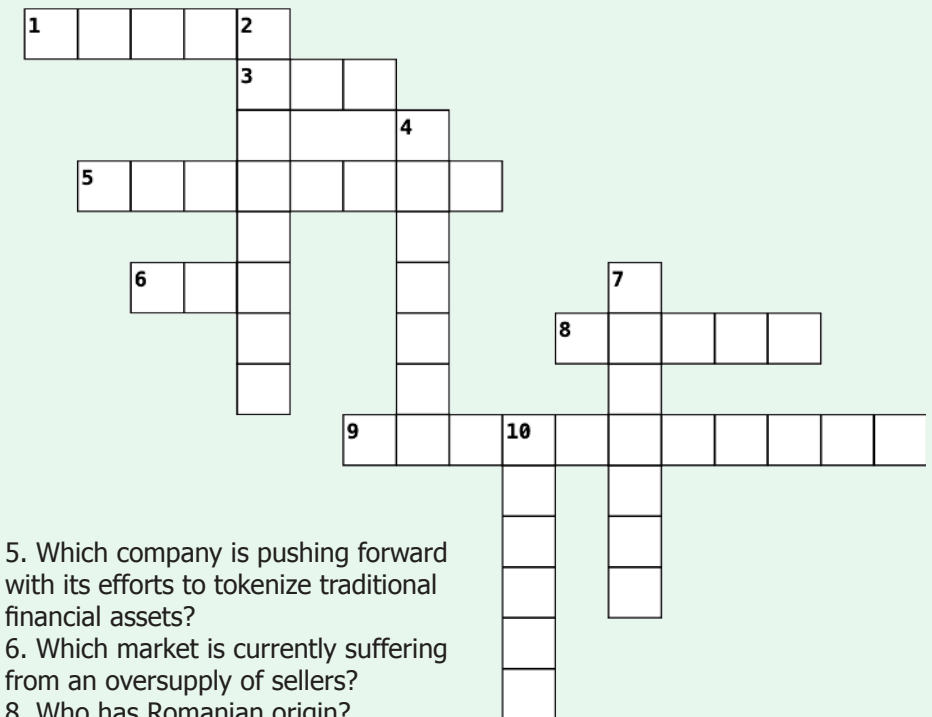First read the news and try to complete our SCL crossword puzzle!
Send us the solutions to gregoire.pretat@uzh.ch to find out if your answers are correct!

Down
2. Which company is actively searching for crypto experts?
4. Where are hacked and verified crypto accounts sold?
7. Who is the ECB Executive Board member?
10. What is the portable service developed by Farzati Tech called?

Across
1. What parameter do fraudulent websites use?
3. what is the computing environment of the Ethereum blockchain?
5. Which company is pushing forward with its efforts to tokenize traditional financial assets?
6. Which market is currently suffering from an oversupply of sellers?
8. Who has Romanian origin?
9. What could take over the function of money?

References

https://about.linkedin.com/?trk=homepage-basic_directory_aboutUrl

https://cointelegraph.com/news/deloitte-on-a-crypto-hiring-spree-reveals-linkedin-job-postings

https://mainstaydigital.com/verticals/articles/deloittes-crypto-hiring-spree-over-300-job-openings-on-linkedin-signal-commitment-to-web3-and-crypto/

https://cointelegraph.com/news/robinhood-launches-fiat-to-crypto-on-ramp-for-self-custody-wallets-and-dapps

https://decrypt.co/138150/robinhood-launches-connect-to-link-native-crypto-wallet-to-defi-apps

https://cryptosaurus.tech/polygon-achieves-new-milestone-with-pos-bridge-for-zkevm/

https://decrypt.co/resources/what-is-zkevm

https://www.coindesk.com/consensus-magazine/2023/05/01/bitcoin-set-new-record-of-daily-transactions-the-same-day-the-us-government-quietly-engineered-a-bank-buyout/

https://cryptonews.com/news/jpmorgan-pursues-tokenization-plans-despite-crypto-downturn-regulatory-hurdles.htm

https://docs.safe.global/learn/gnosis-safe/eoas-vs.-contract-accounts

https://hackernoon.com/what-is-account-abstraction-and-why-is-everyone-talking-about-it

https://beincrypto.com/learn/erc-4337/#h-the-idea-behind-account-abstraction-eoas-vs-contract-accounts

https://bitcoin-2go.de/smart-accounts-live-auf-ethereum/

https://ethereum.org/en/roadmap/account-abstraction/

https://cointelegraph.com/news/darknet-hackers-are-selling-crypto-accounts-for-as-low-as-30-a-pop

https://www.cryptotimes.io/blackhat-hackers-selling-verified-hacked-crypto-accounts-for-just-30/

https://decrypt.co/137684/digital-euro-will-have-maximum-level-of-privacy-but-not-as-much-as-cash-ecb-board-member

https://tvpworld.com/69418938/ecb-says-it-has-entered-final-stage-of-investigation-phase-of-digital-euro

https://www.ecb.europa.eu/press/pr/date/2023/html/ecb.pr230424_1~395626f0d9.en.html

https://www.coindesk.com/policy/2023/04/24/lawmakers-could-still-nix-digital-euro-ecbs-panetta-says/

https://www.retailbankerinternational.com/comment/cbdc-benefits-blockchain-regulated-currencies/

https://cvj.ch/aktuell/koepfe/thomas-moser-zu-kryptowaehrungen-blockchain-und-cbdc-bemuehungen-der-snb/

https://www.bis.org/about/bisih/topics/cbdc/helvetia.htm

https://www.bis.org/about/bisih/topics/cbdc/jura.htm

https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-central-bank-digital-currency-cbdc

https://www.bis.org/about/bisih/topics/cbdc/tourbillon.htm

https://www.bis.org/fsi/publ/insights41.htm

https://blockchain.news/news/google-ads-used-in-4m-crypto-phishing-scam

https://cointelegraph.com/news/google-ads-data-4m-stolen-through-crypto-phishing-urls

https://tokenist.com/crypto-scammers-used-google-search-ads-to-steal-4m-report/

https://drops.scamsniffer.io/post/4-million-stolen-due-to-google-search-ad-phishing/

https://www.coindesk.com/policy/2023/05/02/white-house-pushes-for-punitive-tax-on-crypto-mining/

https://cryptosaurus.tech/how-will-pending-uk-regulation-change-the-crypto-market-compared-to-the-eu/

https://www.ledgerinsights.com/china-digital-yuan-cbdc-government-wages/

https://edition.cnn.com/2023/04/24/economy/china-digital-yuan-government-salary-intl-hnk/index.html

https://decrypt.co/137622/cbdc-salary-china-chinese-workers-digital-yuan-renminbi

https://decrypt.co/138071/franklin-templeton-bets-big-on-ethereum-by-putting-fund-on-polygon

https://fr.cryptonews.com/exclusives/institution-financiere-premier-plan-etend-fonds-dinvestissement-polygon.htm

https://cointelegraph.com/news/jack-dorsey-s-nano-bitcoin-mining-chip-heads-to-prototype

https://www.cryptotimes.io/jack-dorseys-bitcoin-mining-chip-prototype-design-completed/

https://www.thecoinrepublic.com/2023/05/01/jack-dorseys-5nm-bitcoin-mining-chip-will-soon-be-a-reality/

https://www.coindesk.com/business/2023/05/03/sui-mainnet-goes-live-token-trades-at-133/

https://cointelegraph.com/news/sui-mainnet-goes-live-as-token-sees-immediate-action-on-binance-okx-others

https://www.bqprime.com/pti/ka-crypto-finance-minister

https://decrypt.co/138551/coinbase-international-exchange-btc-and-eth-perpetual-futures

https://www.reuters.com/technology/coinbase-launches-international-crypto-derivatives-exchange-2023-05-02/

https://www.avvenire.it/economia/pagine/il-pecorino-toscano-piu-garantito-con-la-tecnologia-blockchain

https://cvj.ch/en/focus/blockchain/italian-advocacy-group-federitaly-uses-blockchain-for-verification-processes/#:~:text=Through%20the%20use%20of%20the,comprehensive%20verification%20process%20by%20FEDERITALY

https://medium.com/dfinity/icp-blockchain-technology-revolutionizes-authentication-and-digital-certification-of-real-products-84ce58892e8f

https://swissfederalism.ch/en/brand-federitaly-100-made-in-italy-dfinity-foundation/

https://cryptoslate.com/canadian-province-new-brunswick-has-denied-energy-to-crypto-miners-for-months/

https://www.cbc.ca/news/canada/new-brunswick/nbpower-crytpo-electricty-smr-1.6826126

https://www.bitcoininsider.org/article/213738/canadian-province-new-brunswick-has-denied-energy-crypto-miners-months

https://www.bitcoininsider.org/article/213738/canadian-province-new-brunswick-has-denied-energy-crypto-miners-months

https://cointelegraph.com/news/consensus-2023-businesses-show-interest-in-web3-despite-u-s-regulatory-challenges

https://www.coindesk.com/consensus-magazine/2023/04/28/3-giga-brained-ideas-from-consensus-day-2/

https://consensus.coindesk.com

https://www.coindesk.com/consensus-magazine/2023/04/28/5-consensus-2023-takeaways/

https://www.coindesk.com/sponsored-content/near-foundation-launches-near-horizon/

https://consensus.coindesk.com/overview/

https://vendelux.com/consensus-2023/

https://near.org/blog/what-the-near-foundation-does/