

*Welcome to Morgan Creek Digital's weekly digital asset update. It is comprised of a thought piece from our team followed by a summary of what we consider the most compelling digital asset news during the last week. We hope you find this content interesting. Please let us know if you have any comments or questions or if you would like to speak to a member of the [Morgan Creek Digital team](#).*

## **What is Blockchain Intelligence?**

Blockchain Intelligence represents, as the term suggests, the convergence of Blockchain and Artificial Intelligence (AI) technologies. Blockchain represents a major step forward in the way data is processed as well as stored and is likely to enhance database architecture, which, in turn, is likely to lead to safer information processing and storage. Adding an intelligence layer, like machine learning or computer vision to a Blockchain, can be the next true data innovation by reducing errors, optimizing data processing, and even providing predictive analytics.

At present, most enterprise database architecture exists within a closed, centralized, permissioned hierarchy, typically with a single or limited number of administrators (depending on the size of the enterprise). These administrators are also responsible for writing business rules for everything from data integrity to record security. Yet, database information is still limited by human firewalls. Password sharing, email phishing, or simply losing information from transitioning employees places systems at great risk. With Blockchain technology, information is packaged using a block structure that appends to other network blocks forming a chain, which must be validated through a majority of consenting nodes using either mathematical computations or significant financial stakes by validators. The immutable record is appended to the Blockchain and carries both current and historical data that moves in a lossless and unchanged manner throughout a network and its associated participants. This system architecture forms the backbone of what could become an entirely new database infrastructure that spares the reliance on a potentially flawed group of administrators or common single-entry-based points of attacks or failure.

Blockchain as the new database version 2.0 however, still requires optimizations to make it perform in enterprise settings. Smart contracts, for example, provide an automated method for executing tasks after meeting a series of conditions, but these conditions can trigger an unintentional domino if the underlying systems linked to the smart contract have flaws in their system architecture or programming. Blockchain protocols designed to execute their series of smart contracts are challenged by a missing feedback loop necessary to identify a bug or outdated code buried in the innards of an external network partner, which the Blockchain depends upon to execute the automated actions of a smart contract. Once a smart contract is put into production, the immutable nature of Blockchain technology makes it almost impossible to change the code of the smart contract.

Consequently, uncaught defects in the smart contract code represent a potential high risk to enterprises. Blockchain Intelligence can produce smarter and more optimized Blockchain networks, which can ultimately improve database architecture. Blockchains can utilize an intelligence layer, like machine learning—giving a smart contract the ability to both self-diagnose and self-repair errors in its downstream commands or partners. Today, an admin user would have to rely upon a ticketing system or debugger to identify coding errors followed by code review or, in the event of an external partner error, commands may fail to execute outright. We believe that once machine learning can utilize their data training sets, systems can evolve from just self-diagnosis to full-blown predictions on future optimizations.

Another example of emerging Blockchain Intelligence involves computer vision (CV), an AI discipline where computers are trained to recognize images and objects, which can bolster security for Non-Fungible Tokens (NFT) protocols. CV can recognize imperceptible watermarks, digital signatures, or even physical brushstrokes that can identify images as authentic or duplicates. Since NFTs seek to tokenize collectibles, antiques, and artwork, CV can automate what is now a manual trust network, or one that fundamentally accepts the good-faith agreement between groups that make authenticity claims for objects they bring onto the chain. By combining CV and NFT, security and reliability stands to improve and ultimately grow the popularity of the assets themselves through increased trading, trust, and legitimacy.

Blockchain Intelligence represents the next phase for Blockchain protocols, which collectively can rearchitect databases creating the next wave of data innovation. The current limitations of database architecture are already giving rise to the next great set of Blockchain Intelligence companies.

## **RUNDOWN**

**Biden Administration to Probe Crypto Use in Ransomware Attacks** : U.S. President Joe Biden wants the federal response to a recent spate of ransomware attacks to focus on the use of cryptocurrency, a spokesperson said. Meat producer JBS confirmed on Sunday, May 30, it was suffering from a ransomware incident and faced a demand from a “criminal organization,” Deputy Press Secretary Karine Jean-Pierre told reporters. In response, the White House wants to better evaluate ransomware attacks and track crypto payments to threat actors. [Read more.](#)

**PayPal Will Let Customers Withdraw Crypto, Exec Says** : Global payments giant PayPal plans to let users withdraw cryptocurrency to third-party wallets, its blockchain lead said. Speaking at CoinDesk’s Consensus 2021 conference at the end of May, Jose Fernandez da Ponte told moderator Jeff John Roberts that a withdrawal function is in the works. At present, PayPal does not let users move cryptocurrency holdings off-platform, though it has let customers buy bitcoin and other cryptocurrencies since October 2020. [Read more.](#)

**U.K. Must Hasten Crypto Rules to Win Business, Lobby Group Says** : Britain must speed up protections for cryptoassets that are exposing retail consumers to volatile markets, according to TheCityUK, a lobby group for the U.K. finance industry. Firms marketing crypto to consumers need to be authorized and regulated, the group said in a recent report, noting that nearly 10 million people in Britain owned digital assets this year, up 558% from 2018. A nimble and nuanced response will help attract more of the companies and transactions involved in the nascent asset class to London. [Read more.](#)

**HSBC CEO Says Bank ‘Not Into Bitcoin’ Due to Concerns Over Volatility:** HSBC CEO Noel Quinn said the bank has no plans to start a cryptocurrency trading desk or offer digital assets to its customers because the asset class is too volatile. According to a report by Reuters, the bank is not promoting bitcoin and other cryptocurrencies within its wealth management business. Quinn’s stance contrasts with that of other major global investment banks, such as Goldman Sachs, which earlier this year relaunched its crypto trading desk three years after shelving the idea in 2018. [Read more.](#)

**Huobi Stops Crypto Miner Hosting in China:** Cryptocurrency exchange Huobi has stopped its miner hosting services on mainland China and is scaling back services and products in some markets following warnings from the Chinese government that it would crack down on cryptocurrency mining, Coindesk reported, citing a company statement. [Read more.](#)

**Musk Tweets He Supports Crypto in Battle Against Fiat Currencies:** Elon Musk is again tweeting about technology and cryptocurrencies, and this time he’s clear on where his support is at. In a thread started by Musk himself comparing magic to technology where someone asked what he thought about people “who are angry at you because of crypto,” the Tesla Inc. CEO tweeted that the “true battle is between fiat & crypto. On balance, I support the latter.” [Read more.](#)

**Goldman’s Crypto Chief Worries About Fraud, but Not Cryptocurrency’s Future:** The Global Head of Digital Assets at Goldman Sachs said in a Q&A published in the firm’s May 21 Global Macro Research newsletter that the cryptocurrency space, “particularly as it relates to hot storage,” was “only one big fraud away from a very negative impact on the market.” Addressing a question about risks to the industry, Mathew McDermott, who was expressing his own views and not those of the research team, also noted that “inconsistent regulatory actions” worldwide could “impede the further development of the crypto space.” [Read more.](#)

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