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Six blockchain and cryptoasset predictions for 2020

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In 2019, leading organizations across industries moved blockchain and cryptoassets beyond the hype phase and migrated these technologies into the adoption phase. With the arrival of 2020, those organizations taking an innovative approach to data and digital asset exchanges and protection—using blockchain infrastructure and developing crypto custody capabilities—will not only gain first-mover advantage and differentiate themselves among the competition, but will likely see increased revenue and customer loyalty, among other benefits.

"Business executives are leveraging the capabilities of blockchain and tokenized assets to spur an unprecedented level of innovation, differentiate themselves, drive new revenue models and retain market share, as well as to advance their strategies, systems and processes," said Arun Ghosh, U.S. Blockchain Leader at KPMG. "In 2020, we anticipate adoption at scale given its ubiquitous and wide availability as organizations embed enterprise blockchain in their digital strategy and investments."

We expect the following blockchain and cryptoasset trends to emerge in 2020:

Advancements in cryptoasset custody technology will create new market opportunities.

One of the greatest barriers to the widespread adoption of cryptoassets is the concept of custody—how digital assets are owned, stored, secured, transferred and accessed in a decentralized environment. Until recently, there has been a lack of both technology solutions and regulatory frameworks addressing custody challenges, but new capabilities are on the rise. Multiparty computation (MPC) technology is ready for prime time and is enabling secure, highly-available wallet infrastructure for high-frequency traders and asset managers requiring instant access to their funds. In 2020, we will see more third-party technology providers and systems integrators enabling efficient adoption of MPC and other custody solutions, opening the door for new business opportunities.

New technology frameworks and scaled adoption of cryptoassets will be driven by the public sector.

The race to integrate crypto into existing global financial institutions is very real. Globally, governments are anticipating the launch of central bank digital currencies (CBDC) to realize strategic and competitive advantages within the global trade system. Central banks in Asia and Europe, for example, are in the final stages of launching digital currencies for future payment systems and cross-border transactions. In 2020, we at KPMG expect to assist regional and central banks in the development of well-defined technology frameworks that can anchor private sector initiatives. Accounting standards for valuation and reporting will also likely emerge.

A shift from private-permissioned to interoperable blockchain implementations.

With many private blockchain implementations coming to fruition, the next step is interoperability—integrating private and public blockchains to become ecosystems and trade networks. This will create greater efficiency across supply chains, enabling the integration of middle- and back-office processes, payment layers and more. And, given that blockchain is a cloud-first technology, this configuration of new, commercially-available distributed ledgers can serve as a 'trust layer' for existing and new data; drive accountability, reliability and traceability across ecosystems by validating and protecting stored data; and improve compliance.

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Early blockchain adopters will see more success when scaling the technology with a converged artificial intelligence (AI) framework—and better results when initializing their AI investments.

The convergence of these two technologies allows for blockchain to enable trusted AI, and vice versa. Blockchain authenticates and authorizes data models and outputs by offering an end-to-end workflow of automation and decision engines, as well as by ensuring content and data input authenticity. With maturation of machine learning and AI investments, business and IT sponsors looking for an end-to-end path of trust and verifiability can ensure their data models are protected. Beyond encrypting and authorizing access, mechanisms are also able to authenticate perspectives driven by AI. The idea is to ensure that decision making is supported by trusted data, and that models were never tampered with and were built without bad actors or poor decision inputs. Once the model processes the data, the outputs are trusted and upheld as sacrosanct.

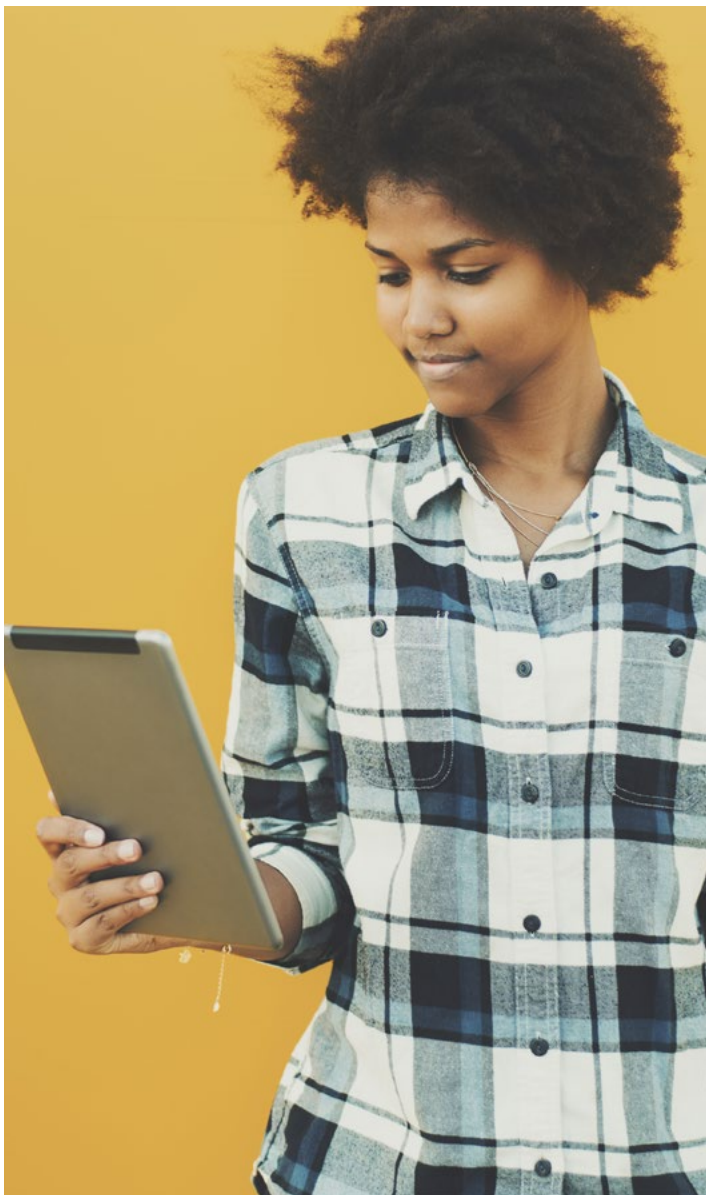
The convergence of AI, blockchain, and Internet of Things (IoT) will be used to manage climate change.

The convergence of these technologies is enabling organizations to accelerate environmental governance, with blockchain's chain of custody being deployed as a central component to driving sustainability. Decentralized, transparent data models enabled by blockchain—which houses data transferred via IoT that is measurable using advanced analytic techniques—can be visible to a vast number of countries and regulators that are jointly monitoring and reporting on carbon emissions, rising sea levels and the remediation of toxic waste, among other applications.

Zero-knowledge systems will enable new forms of self-sovereignty.

Rapid advances in cryptography are enabling the emergence of zero-knowledge trust systems, unlocking the potential for advanced data privacy use cases and for the creation of digital identities. Zero-knowledge systems and zero-knowledge proof cryptography are allowing participants of a network to control and verify or "prove" their data, identity or other characteristics without exposing underlying information. These 2020 advances will lay the foundation for the build-out of future infrastructure to support decentralized, trusted commerce models in the years ahead.

With the hype around blockchain subsiding, and new use cases quickly demonstrating their value, now is the time for executives to consider how they will adopt this—and related—technologies to differentiate their organizations from competitors.



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