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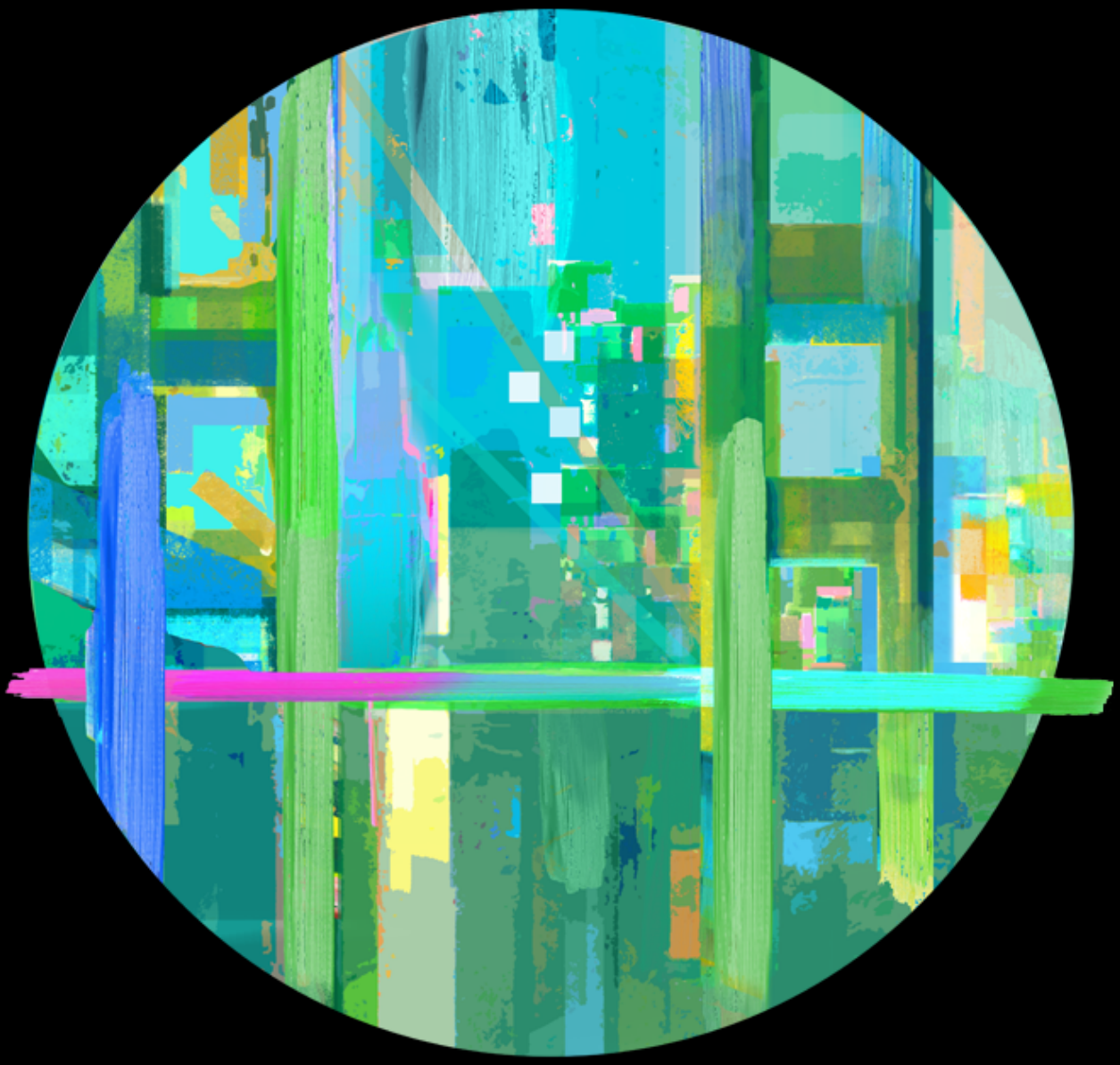

How blockchain can enhance PE operations

As adopters take early steps, the technology's potential comes into focus

If you are a private equity (PE) firm, imagine replacing paper-based agreements with secure and programmable digital contracts that are current and capture matters necessary for operationalization—cap table, deal or fee terms, and key information on parties involved, such as verified tax status and banking information—coded directly into agreements and ready for use in finance and accounting systems.

In addition, tokenization of limited partner (LP) interests and shares in private equity funds can allow for quicker, more reliable verification of ownership, faster and more liquid secondary markets, easier use of private investments as collateral, and less expensive customization of investments.

It may take many technology applications to achieve the above, but the backbone is there: blockchain, the distributed ledger technology that solves for reliability, security, and continuous accessibility of up-to-date information.

Blockchain-based technologies are becoming more established as a solution to the complex data sourcing, management, and distribution problems today's financial service businesses are facing. While many associate blockchain with cryptocurrency, the use cases for blockchain technology go well beyond payments and currency trading. A wide range of organizations are already adopting blockchain-powered solutions to add efficiency and security across all areas of data management, including client onboarding, identity management, and transaction processing.

Early proofs of concept have demonstrated that blockchain technology can deliver results. By enabling multiple parties to access, read, and edit a single source of data in real time, blockchain solutions can dramatically simplify a wide range of business processes, including supply chain management, medical records, anti-money laundering, and debt issuance and servicing. An interoperable digital money platform known as Regulated Liability Network[1] has demonstrated the efficacy of blockchain technology to support transactions across a wide range of financial institutions. Blockchain already facilitates instant money transfers across currencies and banks, capital markets transactions, and smart insurance contracts, and the tokenization of traditional assets is creating new systems for investment transactions and record-keeping. It stands to reason PE firms can use the same utility for many of their own needs. But what is the reality? Is it possible for a PE firm to use blockchain to "tokenize its world"?

Cautious early steps

Today, several PE firms have experimented with blockchain beachheads on a small scale. But the industry standard is what it has been for generations: paper agreements that represent ownership in companies, often out of date, with multiple amendments that are near impossible to track, or side-letter agreements that often don't make their way to finance and accounting systems. Paper has to be created and updated manually, stored and distributed physically (even if on a local network), and kept consistent for each recipient and user. Such process guarantees delay, ties up capital in settlement, and invites error.

Nevertheless, paper is the standard everyone in PE has grown up using. Replacing it with anything else, no matter how promising, represents a big step. That's why, and understandably so, some of the industry's first steps to embrace blockchain have been measured and tentative.

The caution that surrounds blockchain may have less to do with doubt in the technology itself and more to do with recognizing the lack—so far—of industry-wide standards. Think of the way railroads relied on more than operable steam engines to take root in the 19th century; they also needed consensus on the gauge of the rails. And when that consensus eventually developed, growth followed. There are many public, private, and hybrid blockchains that are vying to become the standard on which all solutions can be built. It is to be seen whether one will emerge as a winner or if interoperability solutions between blockchains can bridge the gap. In either case, it will likely take consensus among traditional industry leaders.

As it stands, many PE and venture capital firms have committed to blockchain through significant investments in portfolio companies operating in the blockchain ecosystem. And some have launched investment funds for which ownership is provided through a digital security token. Tokenization of private equity funds is more than an alternative mechanism for keeping track of data on LP interests. While it certainly can help firms avoid the pitfalls of manual paper processing, it also creates value for clients by allowing for lower investment minimums, fractional investing, and increased secondary liquidity.

Tokenization private funds, including real estate as well as private equity, are underway both in Europe and Asia. While these early examples are significant by themselves, it's also worth noting that in each case and each jurisdiction, regulators have appeared willing to let the test cases go on without preemptive interference. So far, however, most blockchain implementations are working in parallel with, rather than as a replacement to, traditional processes. But as regulators and practitioners increase their comfort with blockchain technology, this "belt and suspenders" approach is likely to give way to fully blockchain-driven solutions.

From possibility to implementation

The promise of widely available, secure, always up-to-date information—using digital credentials that reside on interoperable blockchains and can be used across the ecosystem—can solve fundamental problems that have been part of the industry's day-to-day operations for years: someone's always missing something. There isn't a complete ownership detail for one of the portfolio companies. An investor's tax status is not known. A distribution check bounced due to inaccurate account detail. None of those problems are insurmountable—but taken together, they represent sand in the gears.

Blockchain can speed the sharing of information, boost accuracy and timeliness, or enhance security and verifiability—or all three:

- *A more efficient transaction flow*, both on the deal and investor side. Currently, paper-based agreements require navigation through the maze of version control and verification and manual authorizations from all parties. Cash settlement depends on wire instructions, which makes it tedious and slow, and things become even more challenging if a deal gets split among several funds and timing of capital calls is a moving target. Call notices may experience dated email addresses, and slow cash receipts may necessitate the use of credit lines. Blockchain permits the use of smart contracts that are up to date and can be executed based on a predetermined ruleset among already verified parties (on-chain identity management). Couple that with a stablecoin or a comparable on-chain fiat equivalent to replace cash, and the current process can be at minimum expedited, if not fully automated.

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- *Deal document operationalization and maintenance*. Among the elements that paper-based agreements don't provide is structured data—who owns what, how much, and under what terms (i.e., cap table). With a smart contract residing on blockchain, the information is up to date and integrated with finance and accounting systems that make it possible to, for example, automate calculation of preferred return. Parties can create rules around actionable items like distribution payments on specified dates, and they can track ownership, execute amendments, and facilitate voting more efficiently. Blockchain also offers a trusted source from which to retrieve verified participant information, such as a digital ID card.

- *Carried interest calculations*. More complicated and with a direct impact on a PE firm's pockets, provisions in the governing documents are often complex and require interpretation before being turned into a calculation by the finance department. A digitized provision expressed as a plug-and-play waterfall model that a PE firm and its investors can test avoids the ambiguity and implementation challenges present in today's manual spreadsheets. For something of such importance, the current dominance of Excel spreadsheets is primed for an update.

- *Investor identity verification*. Investor acceptance, anti-money laundering compliance, and onboarding can be extremely time-consuming, especially for individual investors, requiring paper documentation to be collected, transcribed, and analyzed for each new investor in a fund. From the investors' perspective, onerous and repetitive processes often have to be repeated for each investment they make, even when working with the same PE firm. Blockchain solutions can enable digital, instantly verifiable identification of clients, and can be associated with records confirming their eligibility to invest in alternative investment (AI) or qualified purchaser (QP) vehicles. For individual private equity managers, this can streamline processes and reduce errors; and for the industry as a whole, it suggests a future in which shared standards for investor identity verification reduce time-consuming paperwork and accelerate investor onboarding.

New frontiers for clients

Beyond the operational benefits that can simplify and streamline data management for general partners, blockchain-driven recordkeeping solutions and tokenized fund interests also offer significant benefits for investors in PE funds. Tokenizing a fund doesn't require the fund to be invested in cryptocurrencies or any other digital asset—in fact, most tokenized funds that have been launched to date invest in traditional securities or real-world equity. Instead, tokenization changes the way ownership in the fund is accounted for, by recording LP interests as records on a blockchain. In some cases, this blockchain may be publicly available, enabling instant confirmation of ownership of LP interests by anyone with an internet connection. In other cases, private blockchains can be used to restrict interaction with the ledger to approved and vetted participants. But in either case, investors in tokenized funds can expect to realize a number of benefits:

- *Deeper and more liquid secondary markets*. The secondary market for interests in PE funds is inefficient, lacks visibility, and is generally accessible only for investors that meet investment minimums. To consummate a transaction, parties have to work through a significant administrative burden that may sometimes not be worth the effort. Options such as partial ownership or low investment minimums face similar challenges. With a tokenized interest and on-chain credentials, evidence of ownership is verified, and secondary transactions can be initiated and recorded by investors themselves, through direct interaction with the blockchain.

- *Allowing the use of private investments as collateral*. It is difficult to verify that a paper agreement indeed evidences ownership of the investment it says it does and it isn't stale or even fake. In addition, it is near impossible to do that on a contivnued basis, which is critical for an investment to serve as collateral. Blockchain enables digitized ownership, and rules can be set to limit or block transactability or monitor movement of collateral as desired.

- *Customization of investments*. Commercially, it may be attractive to customize individual investment terms to a specific party. Administratively, it's usually too complex and costly a headache to be worthwhile. When the terms can be operationalized and blockchain keeps the details straight and available to all, customized investments are less cost-prohibitive, which opens up new possibilities. For a PE fund, this is true both for deal-level and investor-level arrangements.

Recognizing the potential challenges

The potential benefits of blockchain technology require foundational steps before they can take their place in everyday PE operations. At the most basic level, more participants need to buy in to the idea of blockchain before it achieves the critical mass that will make people confident "turning off the lights" on older systems. Agreeing on common data and other standards will be a big part of earning that buy-in.

Adopting blockchain also carries some basic questions. Starting with: Who will own it? Should firms develop private blockchains to exercise full control over who reads and edits their data, or develop their solutions within public blockchains to enable broader verification of their data and participation in transactions? If there are transaction fees associated with its use, who will earn them? What means of digital payments—a stablecoin or comparable fiat equivalent—will the system adopt, and how can it be made interoperable for all parties in all situations? Of course, privacy and data confidentiality are also step-one concerns to address. The fact that security is part of blockchain's architectural reason for existing doesn't mean it happens all by itself.

Within specific function areas, other challenges will arise. For example, what kind of standard, perhaps on a permissioned blockchain,[2] will make it possible to verify that an investor is accredited and to safely record investors' eligibility without publishing their sensitive personal information? These questions aren't insurmountable, but it's important to recognize and address them so that blockchain in PE can continue past its first steps and move toward meaningfully broad adoption that serves the entire industry.

Building a future

PE runs on data, but it's in business to create value. It makes good on that promise when the information flow is quick, accurate, and secure as it can be. Moving from paper to blockchain doesn't represent a change in the spirit of diligence that characterizes the industry; that commitment is already strong. But the adoption of this new technology, at the appropriate pace, arms PE to take that commitment to an even higher standard, with greater potential rewards for all.

How Deloitte can help

With more than 10 years' experience helping large organizations obtain an understanding of and implement blockchain and digital assets, Deloitte has established itself as a trusted adviser in helping companies throughout the financial sector put these new tools to productive and reliable use. Our team of more than 650 blockchain and digital asset professionals is the vanguard of a practice that combines leading technology capabilities; established leadership in the PE, M&A, and investment industries; and a global view of the fast-evolving policy, regulatory, and collaborative ecosystem. In particular, we have established relationships with the largest PE firms in the United States.

Endnotes

1. Deloitte, "U.S. financial services industry study demonstrates feasibility of a regulated digital asset settlement platform supported by shared ledger technology," press release, July 6, 2023.
2. Canton Network, "New blockchain network of networks for financial market participants and institutional assets," press release, May 9, 2023.

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