

POLYMATH

What needs to happen for broader security token adoption

Industry experts weigh in

Security tokens have clear benefits

Over the last few years, security tokens have gone from a promising concept to a hot-topic issue. These digital securities have been shown to provide significant benefits over traditional processes and institutions are becoming increasingly interested.

Increased efficiency

Blockchain can reduce costs associated with bond issuance by almost 90% and can significantly reduce costs associated with other processes (i.e. corporate actions, reconciliation) through automation and transparent record keeping.

Improved liquidity

There is \$4 trillion locked in private equity and trillions in real estate. Tokenization opens assets up to a global investor pool, provides a way to trade previously illiquid assets, and stands to narrow the 20-30% illiquidity discount currently levied against private companies.

Increased transparency


Security tokens give issuers, investors, and agents access to the same source of truth, which helps the cap table stay up-to-date and reduces disputes around record keeping.

Reduced compliance cost

The financial industry spends \$181b per year on compliance and this is expected to increase as rules grow in scope and complexity. On blockchain, rules are programmed directly into the security token, which reduces the risk of error and makes it 30-50% cheaper to manage complex compliance requirements.

Facilitated innovation

Outdated financial infrastructure and manual processing requirements limit the type, scale, and availability of product and service offerings. Programmable contracts and a shared ledger open the door to fractionalized real estate, liquid revenue share agreements, dynamic ETFs, and other previously unmanageable offerings.



Despite these benefits, security token adoption is still in its infancy and there is a way to go before the technology becomes the norm.

In this book, experts in the space weigh in on what needs to happen in order for security tokens to be embraced more broadly.

Read on to learn about their views →

We need to stop arguing over the fine print



Commentary from
Jonathan Galea,
CEO of BCAS

For too long the industry has been hung up on two obstacles. Firstly, understanding the nitty-gritty of the technological underpinnings of blockchain technology. Secondly, whittling out the fine details and differences between types of tokens such as ‘utility’ and ‘security’ tokens. Hundreds of presentations on these topics have been given to the right people in the wrong way.

At the end of the day, is it really so important to know how elliptic curve cryptography works, and is it vital to structure a token in such a way that it does not qualify as a security? The answer to both is ‘no’.

First of all, it’s enough to know and understand blockchain as an enabling technology, and if one

can grasp its benefits, one can help further its uses. Second, we should be focusing on creating value, irrespective of the legal classification of a particular token.

If a token can present proper value to its users, then its classification is of secondary importance. Likewise, if the use of blockchain makes sense for a particular asset, then understanding the high-level advantages derived therefrom is enough, without needing to go into the technical details.

If we keep going to traditional institutions and entities to convince them to implement blockchain technology by flooding them with unnecessary information and worries, we’ll impede the path towards mainstream adoption.

Regulation needs to catch up and big players need to get on board



Commentary from
Claus Skaaning,
CEO of Digishares

I actually believe the pieces are falling into place. 2020 has seen massive interest in digital assets from issuers, and I expect that 2021 will see a massive increase in tokenization projects.

They're recognizing that tokenization can be handled not by adding new legislation but by slightly modifying and updating existing legislation.

One of the missing pieces has been regulation. Now we're seeing more and more jurisdictions clarifying legislation related to tokenization, adopting the

stance that a "tokenized security" is just a digital security that exists as a token on the blockchain.

They're also recognizing that tokenization can be handled not by adding new legislation but by slightly modifying and updating existing legislation to support digitized processes and documents.

Also, we're increasingly seeing banks interested in what we're doing. Swiss banks are now becoming digital asset custodians and the first Swiss bank has announced their own tokenization platform. Some digital asset custodians are extending their services to cover fiat, essentially becoming neobanks. All of this makes it easier for investors to be onboarded into the world of digital assets.

Intermediaries need the right infrastructure to support security tokens



Commentary from
Mike Kessler,
CEO and Founder of Tokenise

For all the talk of disintermediation through blockchain, financial intermediaries still play an integral role. CSDs, for example, are a critical piece of the legacy financial system in large part because there are several jurisdictions, including throughout Europe, in the US, and the Caribbean, where you have to use a CSD if you're trading on a regulated securities exchange.

That's not to say that their operations don't stand to benefit from blockchain technology. Today, CSD processes are manual and broadly inefficient, both in terms of transaction processing and compliance verification. CSDs also keep a changeable (rather than immutable) record and that changeable record, obviously, is subject to potential interference.

There are currently no CSDs that operate on a blockchain, and if there were it could drive huge efficiency across the market and hopefully encourage wider adoption of digital securities.

What's interesting is that as CSD processes become more efficient and transparent, they also become more suitable for a broader swath of asset classes. I see no reason why any physical asset that has some form of registration requirement cannot be recorded in a CSD on the blockchain. But the implications there are enormous, in terms of having a golden source of truth held by a regulatory agency.

We need dedicated funds to drive up volume



Commentary from
Ultan Miller,
Managing Partner of Saxon Advisors

We need to see new funds being created with objectives that are mindful of the opportunities in tokenization and blockchain. If you look at the success that crypto funds investing in unregulated digital assets have had, they've been able to generate VC-style returns and have then had public market liquidity.

Crypto funds are able to place many more bets than a VC, and I think if we can introduce something similar around digital securities it'll be possible for investors to make more bets given that there's a clearer path to liquidity. The hybrid hedge fund/VC strategy that many crypto funds deploy is one we could see new funds using with proper liquidity around digital securities.

At the moment, it's still a bit of a chicken and egg scenario, because you want to have good quality deals and liquidity to attract investors, but STOs have struggled to offer this so far because those investors aren't really there.

I do see that we're slowly building awareness and what's exciting for me about being involved is helping to create those conditions. We can educate VCs and investors about the new possibilities and hopefully create this new market where blockchain plays a much greater role.

Securities requirements need to be built into the core of the chain



Commentary from
James Byrne,
CTO of Digivault

For security tokens, blockchains need the capability to encode the business rules required by the security token. This has previously been done by specific code written for each security token, known as a smart contract.

In this model, each security token has its own separate smart contract holding all the business logic and the blockchain has no customisation to assist with this. Great care must be taken to ensure that every separate smart contract enforces the correct regulatory rules.

To improve on that approach, common requirements and business logic for securities can be moved from the smart contracts into the blockchain software. This cannot be done with a generic blockchain

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Specifically, in relation to custody, custodians need reliable and enterprise-grade blockchain software to provide a reliable connection to the blockchain. Software features such as performance instrumentation and clustered deployments are needed.

We need to make it easier for investors



Commentary from
Martin Kreitmair,
Managing Director of Tangany

We're still in the early days of tokenization; it's about at the stage e-commerce was in 1994, when Amazon was founded. Custody of security tokens has to be as easy as it is for traditional assets, and we're not yet there.

The question about how assets can be securely stored shouldn't be the focus for token holders. Whoever wants to invest in security tokens (or crypto-assets in general) should be able to do so without any knowledge of blockchain and without the need to spend several weeks preparing everything. That is the usability and value we as digital asset custodians are adding to the market by providing simplification.

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Unlike traditional assets, security tokens often come with in-built technical security functionalities, yet it is still up to the custodian to develop asset-specific security solutions for all kinds of crypto-assets. That is also something investors shouldn't have to worry about.

We need purpose-built infrastructure



Commentary from
Adam Dossa,
CTO of Polymath

In many ways, the situation we are facing right now is not that different from one we faced 30 years ago with the internet. Home internet was initially run using existing phone lines. Intended just to carry voice, speed was severely capped and content delivery had to follow very strict rules.

In 1991, phone lines could handle 14.4 kilobytes per second. 7 years and millions of dollars of R&D later speed had increased by four times—and the connection was still painfully slow. The industry was constrained by legacy infrastructure that prevented new services to be delivered, or even imagined. Much like the early internet, attempting to use a pervasive but not fit-for-purpose infrastructure provides slow incremental benefits to securities operations, but leaves the true transformative potential on the table.

To manage security tokens on a general purpose blockchain, there is a need for:

- Identity on top of a chain that was built for pseudonymity
- Compliance on top of a chain that was built for censorship resistance
- Confidentiality and privacy on top of a chain built for transparency
- Deterministic finality on top of a chain that relies on probabilistic settlement finality

Instead of going through that painful phase of small incremental improvements, transitioning to purpose built blockchain for regulated assets enables innovation and gives custodians and other market participants the right tools to get in front of the growing security token market.

POLYMATH

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About Polymath

Polymath makes it easy to create, issue, and manage security tokens on the blockchain. Over 200 tokens have been deployed using our Ethereum-based solution and we are now in the midst of launching Polymesh, an institutional-grade blockchain built specifically for regulated assets. It streamlines antiquated processes and opens the door to new financial instruments by solving the inherent challenges with public infrastructure around identity, compliance, confidentiality, and governance.

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