The Securities Industry: A Digital Future Beckons

With some estimating a future market of $1,600 trillion, securities digitization represents a huge opportunity. Provided the challenges are addressed, the industry is poised to realize its potential.

While the securities industry has yet to experience the full force of digitization, ideas are beginning to emerge that could genuinely transform the market. However, a clear and objective assessment is vital to understand the benefits and risks that these proposed approaches present.

> Today's securities market has evolved considerably from where it was at the beginning of the last century, but true innovation has so far been lacking.

As with anything that has been around for a long time, it is often hard to step back and identify the ideas that could truly create something different and more effective. When such suggestions are introduced, they are often treated with suspicion and skepticism. While it is reasonable, of course, to insist that new ideas be thoroughly tested before wide adoption, automatic rejection of any fundamental change to the status quo deserves to be challenged too.

Today's security industry is in a situation not unlike that faced by the music industry in the 1990s, when it was struggling to imagine a successful innovative digital format for music sales. The market had evolved time and time again—from vinyl to 8-track to cassette to compact disc—but true innovation seemed beyond the scope of the industry until it was finally left with no choice but to take action. Initially the change was spurred by illegal file-sharing, which at the time threatened to strangle attempts to create a legal, commercially successful solution but ultimately turned out to be the catalyst.

Similarly, today's securities market has evolved considerably from where it was at the beginning of the last century, but true innovation—specifically a reimagining of how the market could work in the digital age—has so far been lacking. But there are significant drawbacks to continuing with the current model: a predominantly paper-based market is costly, slow, and risky to many participants.

Digitization of the securities market represents a huge opportunity for the industry, especially when we explode the myths surrounding the underlying technology—blockchain—that supports digitization (see sidebar on page 2: Busting the Myths). Certainly, there will be challenges to overcome, but the upside of a digital future is clear.

What Are Digital Securities?

Strictly speaking, securities today are nearly all digital: the vast majority of all tradable public and private securities are tracked and traded as uncertified securities using book entry accounting on computer networks; the ledger used for uncertified electronic securities is often an Excel spreadsheet in a lawyer's or broker's office. However, the digital securities, or security tokens, referenced in this paper go well beyond the current definition of digital. These securities leverage blockchain, or distributed ledger technology, to generate real advantages over traditionally managed securities, both electronic and paper.

Busting the Myths

In the short time since blockchain and digital securities have been in existence, misunderstandings have given rise to a number of myths. It is important to debunk these because inaccuracies and poor information can lead to less-than-optimal decision-making. Here are a few of the myths that have been making the rounds:

Digital securities are the same as bitcoin and cryptocurrency.
Digital securities do share characteristics with bitcoin and cryptocurrency in that they all run on blockchain technology. But unlike bitcoin or cryptocurrency, digital securities are simply a digital representation of ownership of an underlying asset. A digital security is the same as a paper share certificate, except that it is digital and programmable.

Anything that uses blockchains is the domain of criminals.
It's true that blockchain technology has been used for criminal activities, but this is true of all kinds of technology. In fact, investigators have been able to solve many of the criminal cases related to bitcoin and blockchain because blockchains keep an immutable record of all transactions.

Digital securities are noncompliant and/or plagued by regulatory uncertainty.
There have been instances—particularly during the initial coin offering craze—of digital securities that breached securities laws and other regulations. Digital securities can only be as compliant as the laws and regulations that are coded into their smart contracts. Compliance is also affected by the manner in which securities are offered and managed in their relevant jurisdictions. Issuers of any kind of security are responsible for maintaining compliance, which can be a costly and burdensome process. Digital securities that have been properly programmed to include all relevant regulations are actually less prone to human error and are a far more efficient way to handle compliance.

A stolen or lost digital security is gone forever.
Unlike cryptocurrencies such as bitcoin, digital securities that are managed with the appropriate smart contract are a digital representation of an underlying asset. If a digital security is lost or stolen, it can be burned (deleted), replaced by the issuer, and returned to the rightful owner.

There is no liquidity in security tokens.
Even though there are dramatically fewer marketplaces and outstanding shares for digital securities, they currently trade at only a slightly lower rate than traditional stocks. On average, 0.56 percent of the S&P 500 is traded daily, compared with 0.28 percent for BCAP, a security token trading in the secondary market.

What Is Blockchain?

Blockchain, or distributed ledger technology (DLT), has enjoyed significant global attention thanks to bitcoin and the high-flying Initial Coin Offering (ICO) markets of 2017. However, the technology is still misunderstood, both by the press and by the industries it is poised to impact. The confusion occurs mostly because DLT, coins, tokens, cryptocurrencies, and digital securities tend to get lumped into one "crypto" bucket.

Separating the underlying DLT from the services, such as bitcoin, that sit on top of it is key. It is similar to the distinction between Internet communications protocol and the websites that leverage it, some of which are a force for good and some of which are not.

Others have described DLT far more effectively than we have space to cover here, so for the sake of simplicity, let us just describe it as a single source of truth for all participants in a transaction that is efficient, verifiable, and immutable. Those characteristics are well-suited to many markets that need to trade assets. The one we are focusing on here is the trading of securities.

Digital Securities Today and Where They Are Headed

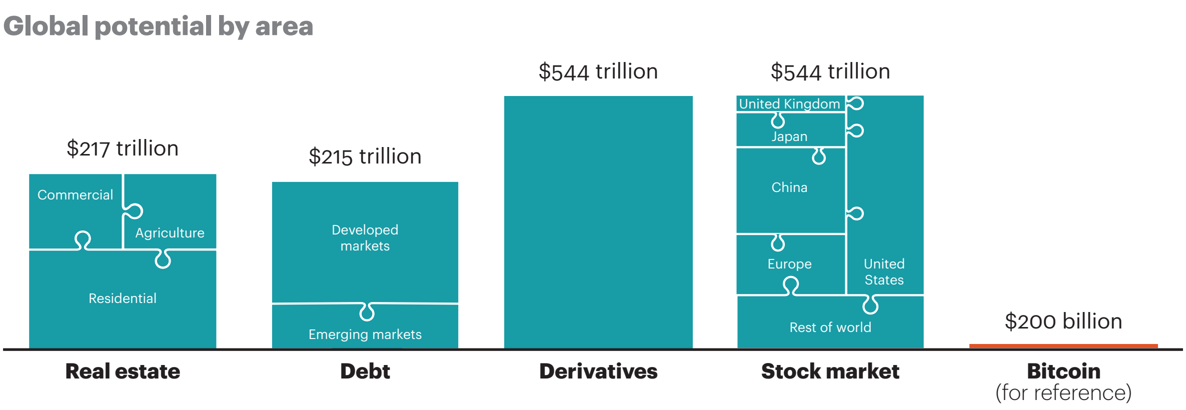
To appreciate the size of the addressable market for digital securities and to fully grasp their potential, it's important to understand the evolution of private markets and their inevitable trajectory toward a fully digitized state.

In the 1980s, ledgers were still paper-based, and they relied on duplicate share certificates and wet signatures to track ownership. Liquidity was managed by a network of brokers and informed by opaque data from disconnected sources. In the 2000s, registries became "digital," with the adoption of Excel spreadsheets and PDF documents—a format still used by the majority of registries today. Most registries are advisor-controlled and centralized and use electronic signatures. Secondary markets have now become more popular, thereby improving overall liquidity. Market data has also improved, but it remains primarily asymmetrical.

The next phase in securities evolution is digital securities, and some of these are already available. With digital securities, the registry is issuer-controlled and tracked with a single, transparent source of truth using a blockchain. These digital securities are traded on global marketplaces that offer transparent data for all parties and instant settlement with very low fees.

With more than a quarter billion dollars issued in digital securities in 2018 and more than $1 billion projected for 2019, the industry continues to grow. Some experts estimate it has the potential to become a $1,600 trillion market (see figure 1).

Figure 1
The long-term global potential for security tokens is in the hundreds of trillions of dollars



Sources: The Money Project; A.T. Kearney analysis

The initial movers in the digital securities space were venture funds with products that were very attractive but hard to access. Following in their wake were real estate companies and real estate funds. Most issuers in the space took a highly illiquid asset with multiple investors and converted the registry to digital securities that were tracked using a blockchain.

Typically, issuers today fall into one of three categories: blockchain companies that are investing in and supporting the technology, venture capital (VC) funds with a technology focus, and real estate projects looking to save on administrative costs and expand their investor base.

As digital securities evolve and the technology matures, new markets are being explored that show tremendous promise. One of these is the $100 trillion fixed-income market. It is estimated that the use of digital securities for this market could result in global cost savings as high as 33 percent. Trading volume in the fixed-income segment is over $700 billion daily (three times larger than the stock market's $200 billion daily volume), and it has more than tripled in the past 15 years.

Digitizing the value chain for the fixed-income market promises even more benefits for key players (see figure 2).

How Will Digitization Benefit the Securities Market?

Most financial products still exist on paper or are locked away in centralized databases that are slow to update and difficult to access, meaning that ownership is not always straightforward. Stocks, shares, debt—none of these have native digital assets.

But the advantages of having a digitized version of a real-world asset are clear:

- **Increased liquidity.** Digitized securities are liquid by design. Trades and settlement happen nearly instantaneously, and a real-time picture of the capitalization tables is maintained and accessible.

Figure 2
Benefits of digitizing the fixed-income value chain

Investors	Issuers	Brokers, dealers	Banks
• Highly efficient bond settlement process • Scalable deal participation and trade position management • Data ownership	• Highly efficient bond settlement process • Scalable issuance activity • Data ownership • Integrated platform to manage trade positions and treasury operations	• Highly efficient bond settlement process • Data ownership • Automatic data recovery	• Highly efficient bond settlement process • Integrated solution for end clients for trade positions and cash management • Automatic data recovery

Sources: Securitize; A.T. Kearney analysis

- **Efficiency and lower cost.** With digitally native tokens, maintenance and upkeep require a fraction of the cost and effort of a paper-based system. Thanks to regular software updates, there is far less disruption than there is with paper-based documents, particularly at tax and distribution time.
- **Coded compliance.** Digital securities are programmable, which means they can be designed to comply with the regulations of the jurisdiction in which they are being traded, facilitating cross-border trade (see sidebar on pages 6 and 7: The Legal and Regulatory Perspective).
- **Increased accessibility.** The reduced transaction costs of digital securities allow for lower minimum investment amounts and shorter periods, which opens the door to more investors on a global scale.

As more issuers recognize these benefits, there is likely to be an uptick in digital securities. Indeed, digital securities have already been used successfully in a number of situations (see sidebar: Digital Securities in Action).

Digital Securities in Action

St. Regis Aspen Resort

Situation
The owner of the St. Regis Aspen Resort in Colorado decided to sell part of the hotel to interested investors. He opted to explore an offering of digital securities since he had a lot of interest from overseas investors and needed a simple way for them to invest that was fully compliant with US capital-raising requirements. The owner decided to proceed by creating digital securities.

Benefits of the digital security offering

- Fully digital subscription process combined with the delivery of a digital asset to investors, which would be liquid after an initial one-year holding period
- Investor information tracked via online portal, which means investors are always both identifiable and reachable
- Online delivery of financial information
- Instant distributions of dividends via dollars or crypto as requested by the investors
- Liquidity via listing on secondary markets
- Automated compliance checks to control any transfers

SPiCE VC

Situation
The founders of SPiCE VC recognized the potential of compliant funding using blockchain technology and looked to disrupt VC by introducing a level of efficient liquidity and transparency that would be impossible with legacy technology.

Benefits of the digital security offering

- Liquidity: day 1 liquidity for all limited partners with instant settlement on globally accessible, regulated secondary marketplaces
- Transparency: all transactions recorded using a public blockchain; additionally, SPiCE VC publishes its NAV
- Inclusivity: growing pool of investors, due to lower risk and dramatically improved liquidity
- Access: globally available to all qualified investors
- Increased number of limited partners: decreasing costs for managing investors as a result of automation and real-time record keeping

The Legal and Regulatory Perspective

Legal classification
There is still disagreement among authorities in different jurisdictions about how to regulate digital assets. Digital assets can fall into several legal buckets, depending on their features.

Increasingly, if a digital asset has rights attached to it in a manner similar to shares, bonds, or structured products, then regulators will consider it a financial instrument. Examples include digital assets with profit-participating rights, rights of ownership, or derivative-like elements. In order to issue or buy and sell these digital assets, a regulatory license may be needed and relevant securities offering laws should be considered. Similarly, digital assets that allow for payment in relation to goods or services, may fall under the regulatory purview of the E-Money Directive or the Payment Services Directive.

The current preference of most regulators is not to create a new regime for digital assets, but rather to make sure current frameworks are capable of including them. We do not expect bespoke regulation of digital assets in the near to medium term since this would require a level of review that is more comprehensive and detailed that any that has been carried out to date.

Regulators, in particular the Financial Conduct Authority in the United Kingdom, are technology neutral. This means they consider the underlying activities that are or will be occurring, regardless of the technology used to enable them. This stance is sensible to a point, but it is becoming clearer that aspects of new technologies do not fit neatly (or in some cases, at all) into the existing regimens.

What activity is the entity performing?
Whether an entity needs to be regulated depends on the activity it is performing with the digital asset. A digital asset that has profit-participating elements or ownership rights akin to equity is likely to be classified as a financial instrument. Following is a brief summary of situations in which an entity or asset may be subject to different regulatory considerations and regulated:

- An exchange platform that allows third-party buyers and sellers to execute transactions would, in the European Union, be a trading venue (such as a multilateral trading facility or regulated market).
- An issuing entity, among other things:
  - Might be considered executing orders for clients if it directly sells the digital asset to investors (rather than via a regulated intermediary such as a broker-dealer)
  - Will have to consider whether it is creating a collective investment scheme or fund structure when issuing to multiple investors

Continued

Next Steps Toward the Digital Horizon

The securities industry is on the cusp of profound change brought on by digitization. The question is not whether digital securities will have a place in the industry's future, but how this will impact you. We recommend the following next steps:

For potential issuers: Get educated now. This industry is moving at breakneck speed with new developments on a near-daily basis. There is no substitute for speaking directly to the front-runners in the industry who can give you the most accurate picture of where the industry is and where it is going. The authors of this report represent the leading edge of the digital securities industry, and as this report suggests, they value educating all who are interested in the space. Gather your questions, and reach out to them.

Continued

- Will need to consider if it is carrying out any other regulated activities

- **Entities that hold private keys for public use need to consider whether they should be regulated as custodians.**
- **An entity that buys and sells for others would be (save for where there is an explicit exemption or otherwise) a broker–dealer.**

Similar issues need to be considered for debt instruments such as bonds, notes, structured products, and certificates.

Settlement

The establishment of an arrangement for investors to buy and sell digital assets requires consideration of how title will be held and transferred. For example, sales and purchases on a secondary market will need to be recorded and entitlements changed to reflect these market transactions.

Settlement systems for bonds and equities exist, allowing for market transactions to be executed electronically. Because this is not always the case for digital assets, there needs to be new thinking about how to carry out legal transfer. In the United Kingdom, the starting place is often the Law of Property Act 1925, which requires signatures to effect transfer.

Systems that record market transactions and carry out the transfer (by way of DLT) also need to address the issue of whether the system/arrangement requires regulation as a central securities depository (CSD) under the Central Securities Depositary Regulation. CREST is a CSD for equities, for example. Those performing a similar role for digital assets would require a similar license, unless structured differently.

Securities offering laws

Those who are marketing digital assets and related services need to consider whether their promotional activities are compliant with the relevant jurisdiction's securities-offering legislation. In some cases, marketing digital assets will be considered a financial promotion or an investment activity.

In particular, marketing digital assets is increasingly carried out within the current exemptions to relevant pieces of legislation such as the Prospectus Regulation (previously the Prospectus Directive) within Europe. This means that issuers and dealers of digital assets are marketing to professional investors, rather than retail investors, which might trigger a Prospectus Regulation requirement for the issuance.

Similar issues arise if the digital asset is considered a packaged retail investment or insurance product and is available to retail investors in Europe, in which case a key information document will need to be prepared and maintained.

For potential investors: Understand the upside. Investors stand to benefit most from digital securities as the experience is fundamentally better than anything that exists today. Becoming comfortable with the technology means you can evaluate opportunities based on traditional merits such as business fundamentals and deal structure rather than being distracted by uncertainty around the technology. Gather your questions, and start by reaching out to industry leaders such as the authors of this report.

For established companies: Ask your teams five questions to make sure they are prepared for the future of digital securities:

- At what point will natively digital securities become more attractive (cost, efficiency, and regulatory) for your business than traditional more analog systems? This change will come quicker than most people expect.

- What steps will you need to take to convert your system for managing capital formation and corporate action into a natively digital format such as digital securities? Will you need to hire or train people or reorganize?
- Which leaders in the digital securities space have viable solutions for you so you can get up to speed quickly when the time comes? Have you established contact with them?
- How can you take advantage of growing secondary markets that can quickly and inexpensively provide your company and its investors with liquidity?
- What impact will it have on your business if competitors move to digital securities before you do? How will the competitive landscape be affected?

Want to Learn More?

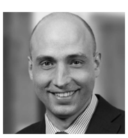
Following are some additional educational materials:

Interview with Issuance: an investor-marketing firm that specializes in digital securities

Interview with Carlos Domingo, Securitize CEO and Cofounder

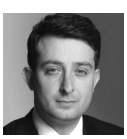
Interview with Open Finance Network: operating secondary marketplace for digital securities

Authors



Peter Hewlett,
partner, San Francisco
peter.hewlett@atkearney.com

Araby Patch,
securitize.io
araby@securitize.io



Abradat Kamalpour,
partner, Ashurst, London
abradat.kamalpour@ashurst.com

Tim Cant,
partner, Ashurst, London
timothy.cant@ashurst.com

Josh Hall,
consultant, San Francisco
joshua.hall@atkearney.com

About A.T. Kearney

A.T. Kearney is a leading global management consulting firm with offices in more than 40 countries. Since 1926, we have been trusted advisors to the world's foremost organizations. A.T. Kearney is a partner-owned firm, committed to helping clients achieve immediate impact and growing advantage on their most mission-critical issues. For more information, visit www.atkearney.com.

About Ashurst

Ashurst is a leading multinational law firm and trusted adviser to corporations, financial institutions, and governments worldwide.

About Securitize

Securitize is a compliance platform and protocol for issuing and managing digital securities on blockchain.

For more information, permission to reprint or translate this work, and all other correspondence, please email: insight@atkearney.com.