<table>
<thead>
<tr>
<th>Reference</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>5</td>
</tr>
<tr>
<td>What is Blockchain?</td>
<td>6</td>
</tr>
<tr>
<td>How does it work?</td>
<td>6</td>
</tr>
<tr>
<td>Beyond Transfer of Currency and the Birth of Ethereum</td>
<td>7</td>
</tr>
<tr>
<td>Public and Private Blockchains</td>
<td>8</td>
</tr>
<tr>
<td>Case Study: Trust - A ConsenSys Formation</td>
<td>9</td>
</tr>
<tr>
<td>Case Study: TruSet - A ConsenSys Formation</td>
<td>10</td>
</tr>
<tr>
<td>Case Study: Mata Capital</td>
<td>11</td>
</tr>
<tr>
<td>Case Study: Art of the Possible - FundsDLT</td>
<td>12</td>
</tr>
<tr>
<td>Code/short</td>
<td>13</td>
</tr>
<tr>
<td>Case Study: Maia Capital</td>
<td>14</td>
</tr>
<tr>
<td>The Digital Asset Manager</td>
<td>15</td>
</tr>
<tr>
<td>What is a Security Token Offering?</td>
<td>16</td>
</tr>
<tr>
<td>What is a Security Token Offering?</td>
<td>17</td>
</tr>
<tr>
<td>The Digital Asset Custodian</td>
<td>18</td>
</tr>
<tr>
<td>Corporate Actions</td>
<td>19</td>
</tr>
<tr>
<td>Case Study: TruSet - A ConsenSys Formation</td>
<td>20</td>
</tr>
<tr>
<td>Fund Administration &amp; Transfer Agency Reimagined</td>
<td>21</td>
</tr>
<tr>
<td>Reporting with blockchain</td>
<td>22</td>
</tr>
<tr>
<td>Reporting on blockchain</td>
<td>23</td>
</tr>
<tr>
<td>Know Your Customer (KYC)</td>
<td>24</td>
</tr>
<tr>
<td>What is fund administration</td>
<td>25</td>
</tr>
</tbody>
</table>
Executive Summary

This paper is the first in a series of papers on the future of the asset management industry and the key role we see blockchain playing in this evolution, now, and in the years to come.

Blockchain is a new technology with the potential to transform many industries, including the asset management industry. Efforts are already underway to integrate blockchain into various business models and processes. Some applications and products are already live and many more are in the development pipeline. This report provides an overview of the potential blockchain offers to the asset management industry, along with real-life examples of early innovators in these areas, in the hopes that they will be able to inform policymakers and stakeholders about the potential benefits blockchain can bring to the asset management industry.

The report then examines a variety of use cases where blockchain can be transformative, including:

1. Impact on the Asset Servicing Industry
2. Impact on the Asset Manager
3. Impact of Tokenisation
4. Impact on the Custodian Bank
5. Impact on Fund Administration

The report also provides a framework for understanding how blockchain can revolutionise the asset management industry, with the role of the asset servicer seeing the biggest impact.

Lory Kehoe
Managing Director, ConsenSys
What is Blockchain?

Blockchain is a distributed, global ledger of transactions that records the movement of digital assets such as money. It is a decentralized database that records information in blocks, which are linked together in a chain. Each block contains a record of transactions that have occurred on the blockchain, and once a block is added to the blockchain, it cannot be altered or deleted.

The blockchain is maintained by a network of computers, known as nodes, which validate transactions and add them to the blockchain. Each node on the network maintains a copy of the entire blockchain, ensuring that the network is resilient to failures and attacks.

Blockchain technology is used in a variety of applications, including cryptocurrency, supply chain management, and voting systems. It offers a number of advantages over traditional centralized systems, such as increased security, efficiency, and transparency.
The original Bitcoin blockchain, as well as Ethereum's Mainnet, are both examples of what are known as public blockchains. This means that anybody in the world with access to the Internet and appropriate hardware can access the shared ledger, store a copy of it on their machine, and begin to modify it through using their computing power to validate transactions.

While public blockchains are extremely powerful in ensuring true distribution of the network and transparency, they are not always suitable for enterprises which may want to control the access and permissions of users on their chain. This is where private or consortium blockchains are useful, and many of the enterprise blockchain applications currently in production in the Financial Services industry are hosted on a private or consortium chain.

A private blockchain is one where a central authority controls the right to access or post transactions to the ledger, which are verified through proof-of-authority. These chains can be incorporated into enterprises alongside their existing systems and provide an encrypted audit trail of transactions between members of the enterprise or group of enterprises.

### Enterprise Private Blockchains

JP Morgan, along with the Enterprise Ethereum Alliance and ConsenSys, created an enterprise-focused Ethereum version called Quorum which tries to improve blockchain technology with its own solution. The objective behind this is to provide a permissioned implementation of Ethereum which supports transactions and contract privacy. Here is how Quorum differs from the Ethereum blockchain:

- Network and peer permissions management
- Voting-based consensus mechanisms
- Enhanced transaction and contract privacy
- Security and data confidentiality
- Secure and dependable permissioning
- Vendor support by PegaSys engineers
- Fully integrated with the rest of the enterprise

Hyperledger Besu is an open source enterprise blockchain client built in Java, created by the PegaSys team within ConsenSys. Hyperledger Besu is mainnet-compatible, and includes features like consensus algorithms that are applicable to enterprise use. Hyperledger Besu provides the following benefits for enterprise clients:

- Built from the ground up with enterprise-friendly licensing
- Vendor supported by PegaSys engineers
- Secure and dependable permissioning and privacy features
- Stable consensus that enables fast, reliable transactions

A consortium blockchain is one which is open to the public, but where only certain data is visible to participants. Users are assigned permissions and blocks are validated based on pre-determined rules, often proof-of-authority. Consortium blockchains can therefore be said to be "partly decentralised". In order to be a consortium and not a private chain, the participating companies must be equally involved in the consensus and decision-making processes of the chain.

A good example of a private blockchain in production today is komgo, a commodity trade financing platform built on Enterprise Ethereum in partnership with ConsenSys. Komgo is an independent company, backed by 15 industry leaders, including banks, trading companies, an inspection company and an energy major. Komgo digitizes the trade and commodities sector through a blockchain-based open platform that brings documentary exchange for KYC, issuance of letters of credit, stand-by letter of credit, receivable discounting and other financing tools.
Blockchain is a new technology that “has quickly become a fixation in the financial services industry” due to its potential for disintermediation, improved reconciliation of data, and the efficient transformation of business models. This statement rings true for the asset management industry, where the technology has been spoken about with high praise for a number of years. While we see blockchain causing major disruption in the management of assets and the role of the asset manager in the coming years, we will only briefly touch on this topic in this paper. For this paper, we will focus on the engine room of the European funds industry, the little-praised but crucial back and middle office role which is called asset servicing. There will be another report to follow in this series specifically focused on the future of asset management, in which we will delve deeper into the role of blockchain for the asset manager.

What is Asset Servicing?

Custodians and fund administrators are the two key parties associated with asset servicing. There are a number of key players associated with this process, including custodians, fund administrators, fund accounting and tax advisors, and legal counsel. The custodian is the party which holds the various assets held by the asset manager on their behalf. The fund administrator is a third-party service provider who performs the “back office” functions on behalf of a fund manager. A transfer agent is an institution assigned by a corporation for the purposes of maintaining an investor’s financial records and tracking their account balance. Asset servicing involves the management of all of these functions, as well as any additional services required by the fund manager.

The Custodian

The custodian is the party which holds the various assets held by the asset manager on their behalf. This includes the safekeeping of the assets, as well as any other services required by the asset manager, such as reconciliation and reporting. The custodian is responsible for ensuring that the assets are kept safe and secure, and that any financial transactions associated with the assets are handled accurately and efficiently.

The Fund Administrator

The fund administrator is a third-party service provider who performs the “back office” functions on behalf of a fund manager. This includes tasks such as fund accounting, regulatory compliance, and client support. The fund administrator is responsible for ensuring that all of the fund’s financial transactions are handled accurately and efficiently, as well as ensuring that the fund is in compliance with all relevant regulatory requirements.

The Transfer Agent

A transfer agent is an institution assigned by a corporation for the purposes of maintaining an investor’s financial records and tracking their account balance. This includes tasks such as the processing of fund transfers, the distribution of dividends, and the administration of the fund’s investments. The transfer agent is responsible for ensuring that all of the fund’s financial transactions are handled accurately and efficiently, as well as ensuring that the fund is in compliance with all relevant regulatory requirements.

Asset Servicing Value Chain

The asset servicing value chain is a series of processes and functions that are involved in the management of an asset. These processes and functions include:

- Custody
- Fund Administration
- Transfer Agency
- Compliance
- Global Custody
- Trade Support & Middle Office
- Compliance & Reporting
- Fund Accounting & NAV
- Transfer Agency
- Compliance
- Global Custody
- Trade Support & Middle Office
- Compliance
- Fund Accounting & NAV
- Transfer Agency
- Compliance
- Global Custody
- Trade Support & Middle Office
- Compliance
- Fund Accounting & NAV
The role of the asset manager has never been more under the spotlight as it is today, with Invesco Chief Executive Martin Flanagan going as far as to say that one in three asset management firms could disappear in the next 5 years.

With this sentiment in mind, there has never been a bigger impetus on asset managers to not only reimagine how they deliver their services, but also question what new services they could potentially introduce. Furthermore, claims such as “blockchain can save asset managers up to $2.7 billion a year” have really shone a spotlight on the potential role that blockchain and other disruptive technologies can play in helping asset managers gain the upper hand on competitors.

An asset manager is a company which invests assets on behalf of their clients for financial gain. An example of an asset manager would be BlackRock, who have approximately $6 billion assets under management (AUM). The role of the asset manager is one of managing the investment of other people’s money.

The role of the asset manager has never been more under the spotlight as it is today, with Invesco Chief Executive Martin Flanagan going as far as to say that one in three asset management firms could disappear in the next 5 years.

We contend that an area that will prove to be of significant interest to asset managers moving forward is the area of tokenisation, which is enabled through blockchain technology.
WHAT IS TOKENISATION?

Blockchain enables tokenisation, in which tokens are created on the blockchain as a digital representation of a unit of value. This unit of value can be assigned to anything deemed valuable by society, be it digital assets or digital representations of real-world assets. Therefore, the possibilities for asset managers are essentially endless, as tokens could represent everything of value – physical assets, real estate, creative productions (works of art, music, etc), service leases and timeshares, securities, and a whole lot more.

The type of tokens most relevant for an asset manager is a security token, however they are not the only type as we see below.

The different types of tokens:

**Security Tokens:**
Tokens that are backed by tradable assets, ranging from coins redeemable for precious metals, to tokens backed by real estate. A great example of this is Mata Capital which we will look at in our case study.

**Equity Tokens:**
A subcategory of security tokens that represent ownership of an asset, such as debt or company stock.

**Utility Tokens:**
Also called App Coins or User Tokens, provide users with future access to a product or service. A good example of a Utility token is the Storj token which is used to pay for cloud storage on the network.

WHAT IS A SECURITY TOKEN OFFERING?

Similar to an ICO, an STO is a process whereby security tokens are created which represent a tradable asset. Security tokens can represent shares in companies, precious goods like metals or fine art, or even the ownership of real estate. As such, these STO events open up the presence of a secondary market for the tokens, which is a new potential revenue stream for asset managers.

STOs can present asset managers with a number of key benefits, including:

- **Secondary market creation**: STOs can present asset managers with a number of key benefits, including.

- **Access to new customers**: The introduction of the secondary market can bring increased liquidity, which is a positive way to attract new investors, as the traditionally high minimum investments would not need to be upheld.

- **Lower cost base**: As token transfers can be automatically filled and executed via smart contracts, this provides the marketplace with a lower cost base and more accessible marketplace than the traditional asset market.

We will delve deeper into all of these topics in greater detail in our next paper in this series, dedicated to the impact of blockchain on asset management.

CODEFi

The Blockchain Operating System for Global Commerce and Finance.

ConsenSys have built a platform to act as the operating system for the future of commerce and finance. The next page is an overview of the Codefi platform and some of its key features.
Mata Capital, an independent player in the management of real estate investment funds with around 600 million euros of assets under management, recently announced the launch of a new platform designed for the real estate market. The company, founded as a subsidiary of ConsenSys in 2019, is a leader in the development of blockchain-based products and services. Mata Capital has been working with ConsenSys to develop its blockchain operating system for global Commerce and Finance.

### Why ConsenSys Codefi?

ConsenSys is one of the world's largest blockchain companies, building the tools, infrastructure, and applications that power the Ethereum network. Since 2014, we have tokenized billions of dollars in digital assets, including a wide range of consumer products, stablecoins, real estate, and financial instruments, powering tens of billions of dollars in blockchain-based financial instruments, powering tens of billions of dollars in blockchain-based transactions. Our solutions not only navigate but also help shape regulation and public policy. As the official blockchain partner of the EU Blockchain Observatory and Forum, and a founding member of Global Digital Finance and The Brooklyn Project, we are equipped to navigate and deploy blockchain-based software in the most complex of regulatory environments. Across our strategic engagements, we have optimized assets and business processes within large multinational corporations in traditional financial markets and commercial networks, to realize cost savings of 20 to 80%.

Our solutions not only navigate but also help shape regulation and public policy. As the official blockchain partner of the EU Blockchain Observatory and Forum, and a founding member of Global Digital Finance and The Brooklyn Project, we are equipped to navigate and deploy blockchain-based software in the most complex of regulatory environments. Across our strategic engagements, we have optimized assets and business processes within large multinational corporations in traditional financial markets and commercial networks, to realize cost savings of 20 to 80%.

Mata Capital, in partnership with ConsenSys and Screeb, deploys a blockchain platform for the future of real estate management, with a primary focus on the secondary market. This groundbreaking development from Mata Capital is testament to the fact that blockchain technology has the potential to fully revolutionize the real estate sector. The project is a notary platform that supports innovative projects in the real estate sector, a nod to the development of blockchain solutions to catalyze new markets.

**CASE STUDY: Mata Capital**

**Leverage the pioneering innovation**

Leverage the pioneering innovation of ConsenSys Codefi to create and grow markets with on-chain and scalable, customizable software. Our solutions not only navigate but also help shape regulation and public policy. ConsenSys is one of the world's largest blockchain companies, building the tools, infrastructure, and applications that power the Ethereum network. Since 2014, we have tokenized billions of dollars in digital assets, including a wide range of consumer products, stablecoins, real estate, and financial instruments, powering tens of billions of dollars in blockchain-based transactions. Our solutions not only navigate but also help shape regulation and public policy. As the official blockchain partner of the EU Blockchain Observatory and Forum, and a founding member of Global Digital Finance and The Brooklyn Project, we are equipped to navigate and deploy blockchain-based software in the most complex of regulatory environments. Across our strategic engagements, we have optimized assets and business processes within large multinational corporations in traditional financial markets and commercial networks, to realize cost savings of 20 to 80%.

Mata Capital, an independent player in the management of real estate investment funds with around 600 million euros of assets under management, recently announced the launch of a new platform designed for the real estate market. The project is a notary platform that supports innovative projects in the real estate sector, a nod to the development of blockchain solutions to catalyze new markets.

**Create and grow markets with**

Incorporate blockchain-native authenticity, correctness and provenance into real estate transactions, thus increasing transparency and accountability. Our solutions not only navigate but also help shape regulation and public policy. ConsenSys is one of the world's largest blockchain companies, building the tools, infrastructure, and applications that power the Ethereum network. Since 2014, we have tokenized billions of dollars in digital assets, including a wide range of consumer products, stablecoins, real estate, and financial instruments, powering tens of billions of dollars in blockchain-based transactions. Our solutions not only navigate but also help shape regulation and public policy. As the official blockchain partner of the EU Blockchain Observatory and Forum, and a founding member of Global Digital Finance and The Brooklyn Project, we are equipped to navigate and deploy blockchain-based software in the most complex of regulatory environments. Across our strategic engagements, we have optimized assets and business processes within large multinational corporations in traditional financial markets and commercial networks, to realize cost savings of 20 to 80%.

Mata Capital, an independent player in the management of real estate investment funds with around 600 million euros of assets under management, recently announced the launch of a new platform designed for the real estate market. The project is a notary platform that supports innovative projects in the real estate sector, a nod to the development of blockchain solutions to catalyze new markets.
The Digital Asset Custodian

As the custodian of digital assets, the Digital Asset Custodian has three primary functions: cash monitoring, asset oversight, and safe-keeping.

Cash Monitoring

Cash monitoring involves ensuring that funds are properly managed and that any transactions are recorded accurately. This includes monitoring the cash flow of the fund and ensuring that it is invested in accordance with the fund's investment policies.

Asset Oversight

Asset oversight involves monitoring the performance of the fund's assets. This includes tracking the performance of the assets and ensuring that they are invested in accordance with the fund's investment policies. It also involves ensuring that the assets are properly valued and that any transactions are recorded accurately.

Safe-keeping

Safe-keeping involves ensuring that the fund's assets are properly safeguarded. This includes ensuring that the assets are stored in a secure location and that they are protected from loss or theft. It also involves ensuring that the assets are properly insured and that any transactions are recorded accurately.

These three functions are essential for the proper operation of a fund and are critical to ensuring that the fund's investors receive the best possible return on their investment.
TruSet is revolutionising the process of collecting and validating trusted, accurate data with their Ethereum based platform. TruSet is creating multi-sided marketplaces for users to collect, validate, publish, and commercialize business-critical data without the intervention of vendors or service providers. The concept behind users taking better control of their data turns the existing reference data collection process on its head.

Some key benefits of the platform:
- **Trust** - Reference data is cryptographically embedded on the Ethereum blockchain
- **Quality** - Data is validated by actual market participants, enabling increased confidence in the accuracy of the data
- **Efficiency** - TruSet’s consensus mechanism reduces the back office expenditure by enabling users to manage data as a community
- **Rewards** - TruSet rewards contributors for publishing and validating data for the community

TruSet’s platform presents the opportunity for Custodians to not only streamline and improve the current processes for traditional financial assets, but also provides them with the opportunity to move into the digital asset (or token) markets, which could be a key differentiator.

For the purposes of this paper, we will focus on traditional financial assets platform, which is nearing its launch.
The storage of digital assets can be done in two ways, hot storage and cold storage.

### HOT STORAGE

- Accessible via internet
- More accessible
- High risk of attacks
- Less secure

### COLD STORAGE

- Not connected to the internet
- Less accessible
- More secure
- Vulnerable to attacks

---

**Example:**
- **MyEtherWallet**
- **Hot Storage:**
  - Online and not connected to the internet
- **Cold Storage:**
  - Private key stored

---

**Nano Ledger S**

**Security:**
- Compliant with ledger security standards
- Encrypted database
- Accessible to everyone simultaneously, ensuring that reference data sets stay in sync.

**Updating the data for corporate actions also becomes easier and more trusted. The custodian, platform, custodians know that the data they are looking at has been validated as accurate by the community.**

**Example:**
- **TruSet community**

**Example:**
- **NEM Foundation**

---

**Go beyond regulatory requirements and maintain stable digital assets**

The challenge is exacerbated by the corporate actions that impact the fundamental data about each security. Keeping asset reference data up to date and in sync while incorporating changes caused by corporate actions means the challenge of cleansing and utilizing reference data never goes away.

**Figures:**
- **BNY Mellon**
- **Custodian**

**Accessibility:**
- COLD STORAGE
- HOT STORAGE
- Valuable to the market for a traditional, established custodian to provide custody of cryptocurrencies. Given the role custodians play for traditional securities, we see the potential for them to play a similar role for digital assets.

**Security:**
- The custodian is the key to offering digital assets.
- The custodian needs to ensure the data is accurate, up to date, and secure.

**Validation:**
- The custodian needs to validate the data and ensure it is accurate.

**Data Sharing:**
- The custodian needs to be able to share the data with other parties.

**Reference Data:**
- The custodian needs to have access to reference data.

**TruSet:**
- A community-driven platform for digital assets.
- TruSet provides a solution for custody and reference data.

**Benefits:**
- Provides a trusted, machine-readable reference data set.
- Allows for automated processes.
- Reduces reconciliation issues.

**Conclusion:**
- The potential of blockchain to improve processes and disintermediate value chains in the securities market is significant.

---

**References:**

**Nano Ledger S**

**Security:**
- Compliant with ledger security standards
- Encrypted database
- Accessible to everyone simultaneously, ensuring that reference data sets stay in sync.

**Updating the data for corporate actions also becomes easier and more trusted. The custodian, platform, custodians know that the data they are looking at has been validated as accurate by the community.**

**Example:**
- **TruSet community**

**Example:**
- **NEM Foundation**

---

**Go beyond regulatory requirements and maintain stable digital assets**

The challenge is exacerbated by the corporate actions that impact the fundamental data about each security. Keeping asset reference data up to date and in sync while incorporating changes caused by corporate actions means the challenge of cleansing and utilizing reference data never goes away.

**Figures:**
- **BNY Mellon**
- **Custodian**

**Accessibility:**
- COLD STORAGE
- HOT STORAGE
- Valuable to the market for a traditional, established custodian to provide custody of cryptocurrencies. Given the role custodians play for traditional securities, we see the potential for them to play a similar role for digital assets.

**Security:**
- The custodian is the key to offering digital assets.
- The custodian needs to ensure the data is accurate, up to date, and secure.

**Validation:**
- The custodian needs to validate the data and ensure it is accurate.

**Data Sharing:**
- The custodian needs to be able to share the data with other parties.

**Reference Data:**
- The custodian needs to have access to reference data.

**TruSet:**
- A community-driven platform for digital assets.
- TruSet provides a solution for custody and reference data.

**Benefits:**
- Provides a trusted, machine-readable reference data set.
- Allows for automated processes.
- Reduces reconciliation issues.

**Conclusion:**
- The potential of blockchain to improve processes and disintermediate value chains in the securities market is significant.

---

**References:**
CASE STUDY: TRUSTOLOGY

Trustology is a company that offers custody services for personal, business & institutional clients. Trustology made the news last year when they launched their market leading TrustVault personal account product in the UK. The product, initially focused on Ether holdings of UK clients, aims to offer the highest level of crypto asset security on the market, coupled with excellent performance. By using a mix of customised hardware security modules held in data centres, coupled with innovative use of the secure enclave in iPhones, Trustology launched a product which is truly unique to the crypto custody space. An interesting avenue for Custodians is the TrustVault-as-a-service also offered by the company, which provides all of the same innovative features, but with the added benefit of Trustology operating client accounts on behalf of financial institutions.

“We are extremely excited to launch a service that truly solves one of the largest problems in the blockchain industry - how to conveniently manage crypto assets without compromising on speed or security,” says Alex Batlin, Trustology’s founder and CEO. “Upcoming, Trustology will work to support additional cryptocurrencies such as Binance and ERC-20 tokens as well as a geographic expansion and launch of TrustVault Business Accounts.”


How this could work in practice is that a shared ledger would exist on which investors who hold their KYC documentation on a blockchain-based platform can access it. The blockchain platform would allow access to the documents on a shared ledger, which could then be secured using encryption techniques. Any institution or intermediary that requires access to the documents can access them through a shared blockchain ledger. These institutions would be able to access the documents stored on the shared ledger by using cryptographic keys, which would allow them to decrypt the documents and view the information stored within them.

Key customer (KYC)

Blockchain KYC Utility

FUTURE STATE

CURRENT FLOW

INVESTOR

Know your customer (KYC)
Reporting on Blockchain

The current operating model for reporting in the financial industry involves manual processes and a high risk of errors, delays, and manual adjustments. This process is labor-intensive, and the manner in which information is gathered can be quite complex, leading to errors and inconsistencies. The regulator needs to have real-time access to the data to ensure compliance with regulations.

Blockchain can be used to improve the reporting process by automating the reporting and verification process. By using smart contracts, regulatory reporting can be automated, reducing the risk of errors and delays. The regulator can access the data on a consistent basis, ensuring compliance with regulations.

Blockchain can also be used to create a tamper-proof system for regulatory reporting. By using a blockchain-based system, the regulator can access the data on a consistent basis, ensuring compliance with regulations.

FUTURE STATE

The current operating model for reporting in the financial industry involves manual processes and a high risk of errors, delays, and manual adjustments. This process is labor-intensive, and the manner in which information is gathered can be quite complex, leading to errors and inconsistencies. The regulator needs to have real-time access to the data to ensure compliance with regulations.

Blockchain can be used to improve the reporting process by automating the reporting and verification process. By using smart contracts, regulatory reporting can be automated, reducing the risk of errors and delays. The regulator can access the data on a consistent basis, ensuring compliance with regulations.

Blockchain can also be used to create a tamper-proof system for regulatory reporting. By using a blockchain-based system, the regulator can access the data on a consistent basis, ensuring compliance with regulations.
While many of the use cases discussed to this point in the paper have focused on siloed processes and value chains, there is the potential for industry-wide platforms which could revolutionise the asset management industry as we know it. We have seen success with this in other industries, for example the case study of komgo for commodity trade finance mentioned earlier in this paper. We feel there is the potential to adopt these kinds of industry initiatives in the asset management industry, which could transform, or even in some cases eradicate, the roles of asset servicing entities. One of these platforms for asset management which made the news earlier this year, when Credit Suisse successfully processed a full fund transaction, is that of FundsDLT, the Luxembourg based company.

It was said by Claude Metz, head of shareholder services, Credit Suisse Fund Services (Luxembourg) SA at the time that "Blockchain technology in connection with potential mutualised KYC (know your client) servicing will be a game changer for the investment funds business." The FundsDLT blockchain platform brings all industry participants onto a single network to interact and transact in real time. Different modules and smart contracts manage certain fund administration tasks such as onboarding/KYC, net asset value (NAV) calculation, reporting, and trade/order processing and routing. By having all of these traditionally siloed tasks on one platform, it creates a network effect of participants while also mutualising the information shared. Industry platforms such as FundsDLT, which serve in many ways as industry utilities, have the potential to harness the true benefits of blockchain technology by creating a decentralised marketplace infrastructure which could transform both business models and the entire industry as we know them today.

---

30 Transforming Asset Servicing | A ConsenSys Insights Report


Blockchain has the potential to totally revolutionise the asset servicing industry as we know it.

Conclusion

Blockchain has the potential to totally revolutionise the asset servicing industry as we know it. The ability to break down data silos and move toward decentralization of information and power will save on costs and time while improving data quality. Smart contracts and oracles will allow new products to be developed that will better serve the needs of investors and asset servicing firms alike while also enabling the automation of many current, labour-intensive processes such as KYC & regulatory reporting as we have seen.

For the asset management sector to unlock the benefits of blockchain technology, the following points should be considered:

1. Collaboration and partnerships will be absolutely crucial.
2. Asset managers will more and more be expected to quickly send and receive information in a way which is not possible through traditional means.
3. Imagine new products as well as automated services when assessing the potential impact of blockchain technology.
4. The full benefits of blockchain technology will appear when asset servicers, custodians, and other firms are engaged and see the benefits for their own organisations.

This report only provides a taster of the potential impact blockchain is playing and will play in the asset servicing industry by showcasing use cases across all of the key areas of Custodian Bank, Fund Administration, and Transfer Agent. We also briefly covered the impact on the asset management, which we will cover in more detail in our next paper in this series.

Examples of implementation demonstrate the speed at which theory is becoming practice and the role that some important asset servicing firms are already playing in this space. Asset servicers in Ireland and elsewhere can gain from engaging with blockchain technology.

To discuss how blockchain can be leveraged by your organisation, reach out to ConsenSys in Dublin through one of the contacts below.
About the Authors

This report was produced by the ConsenSys Dublin Innovation Studio. ConsenSys is Ireland and the world’s biggest dedicated blockchain company. The Dublin Innovation Studio is ConsenSys’s global delivery centre, with a highly skilled team focused on delivering the highest quality blockchain products. The Dublin Innovation Studio is ConsenSys’s global delivery centre, with a highly skilled team focused on delivering the highest quality blockchain products.

Lory Kehoe - Managing Director
Lory leads ConsenSys’ Ireland hub. Prior to ConsenSys, Lory was a Director with Deloitte where he founded, set up and led Deloitte’s Europe Middle East and Africa blockchain Lab. Lory has led blockchain corporate and governmental strategy projects, including production / live, pilot and POC projects. With the IDA in Ireland (Industrial Development Authority), Lory was the founding member of the Dublin EMEA Blockchain Lab, a project focused on building the most innovative blockchain ecosystem in Europe. Lory has also helped to build blockchain events and conferences for the past five years, engaging with blockchain enthusiasts and experts globally. Lory is a true blockchain pioneer and is a driving force behind the growth of blockchain adoption globally.

John Hallahan - Senior Consultant
John joined the ConsenSys Dublin Innovation Studio team in April 2018. Within solutions, John’s main focus is working with governments, enterprises, and consortia to assist them in identifying, designing and building products and platforms. John has experience as a business analyst on blockchain engagements ranging from Proof of Concept to Production and has helped to build and scale blockchain solutions for large global banks and governments. Prior to working in ConsenSys, John was a founding member of the Deloitte EMEA Blockchain Lab in Dublin and also sat on the Deloitte EMEA FinTech taskforce. John’s role within the taskforce was focused primarily on connecting startups to established clients to build FinTech solutions across a number of technology verticals including AI, blockchain & big data.

Claire Fitzpatrick - Strategy Director
Claire has over 20 years’ experience working for large multinationals (telecommunications, FMCG), two Big 4 consultancy firms, and as founder of a successful start-up acquired by a Big 4 firm. Claire leads the scaling of ConsenSys’ Ireland. Prior to ConsenSys, Claire was a founder of Red Planet a consultancy bringing outside-in start-up innovation to large corporates. Claire sold Red Planet to Deloitte in 2017. Prior to that, Claire was CFO for Wayra Ireland, a start-up accelerator successfully invested seed capital across a wide range of digital start-up entities and successfully scaled a proven revenue-focused commercial acceleration programme.

Eoin Connolly - Technology Director
Eoin’s skills are in solution integration, relational databases and data migration, bespoke corporate solutions, large project budgeting and business case validation. Eoin is a former Technical Architect for the Deloitte EMEA Blockchain Lab with over 18 years of experience as a technologist delivering development projects for financial, corporate and government clients. Eoin’s current focus is continuing to learn more about Ethereum’s capabilities in the enterprise space and the delivery of enterprise-class blockchain solutions in the enterprise space and the delivery of meaningful business value.

Contacts

Claire Fitzgerald - Strategy Director
John Hallahan - Senior Consultant
Lory Kehoe - Managing Director
Eoin Connolly - Technology Director

The Dublin Innovation Studio is ConsenSys’s global delivery centre, with a highly skilled team focused on delivering the highest quality blockchain products. The Dublin Innovation Studio is ConsenSys’s global delivery centre, with a highly skilled team focused on delivering the highest quality blockchain products.
Sources
1. Dave Nuernberg and Angus Champion de Crespigny, Blockchain in Insurance: Applications and Pursuing a Path to Adoption (New York: EY, 2017)
Blockchain has the potential to totally revolutionise the asset servicing industry as we know it.”