

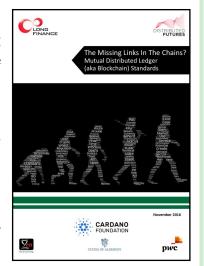
# The Missing Links In The Chains? Mutual Distributed Ledgers (aka Blockchain) Standards

Mutual distributed ledger (MDL, aka blockchain) technology has captured a great deal of attention. As with any new technology, MDLs expose organisations to new risks. Where do existing standards cover the risks and where might new standards be necessary?

#### Overview

The most well-known application of MDL technology is in supporting cryptocurrency transactions, and one of the most significant benefits of MDLs is disintermediation. But there are now thousands of Bitcoin lookalikes, and the structures in which blockchain MDLs have been embedded have not proven so robust. Regulators have responsibility for protecting consumers and overseeing the integrity of markets.

To date, MDL applications have focused around four themes: transactions, records, identity, and internet-of-things. This study looks at a voluntary standards market regulator framework for the use of MDL technology. The

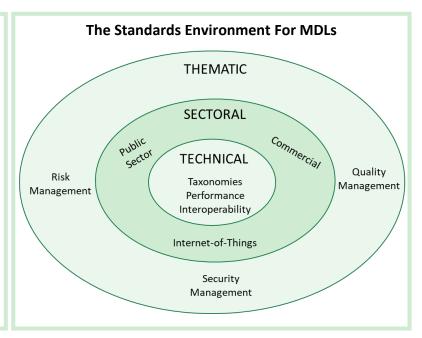


study was developed by a process of interviews, supplemented by a workshop, and webinar, and three issues were consistently rated as having high significance: taxonomies and performance, data governance and liability, and commercial governance and liability.

The report looks at these (and other) issues in detail and identifies three levels at which regulatory standards can be applied to MDLs: thematic, sectoral, and technical. For each level, the report evaluates whether existing regulation is sufficient or whether new standards need to be created, and if so, the potential routes for creating them.

#### **Report Extracts**

A voluntary standards market is "a commercial system in which actual and potential buyers and suppliers of products and services rely on conformity assessments". Conformity assessments are carried out against standards and can consist of self-certification, second party and third party independent verification, and certification. Voluntary standards are typically developed on the basis of consensus of all interested parties, are subject to unrestricted open consultation, and undergo systematic review to ensure their continued validity.

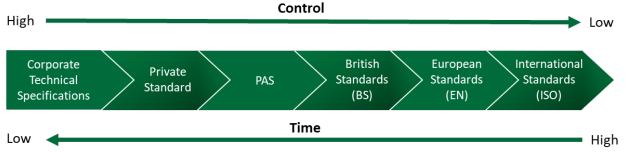


## **Report Extracts (Continued)**

## **Comparative Advantages & Disadvantages Of Regulation & Standards**

|                        | Advantages  | Disadvantages   |
|------------------------|---|---|
| Regulation             | <ul> <li>Necessitates corporate buy-in</li> <li>Standardisation</li> <li>Certainty</li> <li>Level playing field—no free riders</li> <li>Comparability</li> <li>Legal certainty</li> </ul>   | <ul> <li>Knowledge gaps between regulators and industry can result in poorly constructed regulation</li> <li>One size rarely fits all</li> <li>Places constraints on innovation</li> <li>Constrains efficiency and competitiveness</li> <li>Lack of flexibility in the face of change and complexity</li> </ul> |
| Voluntary<br>Standards | <ul> <li>Flexibility—appropriate for a range of sectors and sizes</li> <li>Proximity—industry derived standards are efficient and effective</li> <li>Transparency—standard and compliance in public</li> <li>Efficient—costs of auditing, verification, and accreditation borne by industry</li> <li>Comparability/competitive advantage</li> </ul> | <ul> <li>Credibility of standard</li> <li>Management buy-in required</li> <li>Competition between standards—race to the bottom?</li> <li>Resource intensive</li> <li>Sanction free</li> </ul>   |

#### **Types & Evolution Of Standards**



#### **Conclusions**

Given that MDLs are another form of database, a specialized MDL professional qualification is not necessary at this time. The consensus from interviewees was that MDLs would benefit from the development of a voluntary standards market and that technical standards dealing with performance and interoperability will emerge naturally. In regards to thematic standards, existing frameworks such as ISO 9000 or ISO 31000 are flexible enough to be adapted for use with MDLs. However, for sector-specific standards, significant voluntary standards market development could be supported in three areas: taxonomies and performance standards, data governance and liability standards, and commercial governance and liability standards.

## To learn more about this and other Distributed Futures projects

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