Blockchain is pioneering and more democratic

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Opinion

Blockchain could bring huge benefits for EU citizens, but the technology requires legal certainty, writes Eva Kaili.

Eva Kaili | *Photo credit: Natalie Hill*

An important vote in Parliament's industry committee on the blockchain resolution is only a few weeks away. All political families have expressed a positive view on this technology, and it's clear

Europe is determined to take on a dominant role on distributed ledgers and artificial intelligence, just as the US did in the internet era.

Blockchain has many of the characteristics we want to see in 'the Europe of the Future'. It is pioneering, forward- looking, less bureaucratic, more trusted, more democratic and gives control to the citizens. Blockchain applications are also economically efficient. They can remove intermediaries,

reduce transaction costs and hidden fees and allow peer-to-peer exchange markets to develop.

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In practice, blockchain is not simply technology - it is also infrastructure. It can be used to improve the quality of energy grids and the management of supply chains, to improve the verification of qualifications and digital identities that advance self-sovereignty.

Blockchain can improve labour market matching, reshape copyright and patent rules to make them more transparent and efficient and, using smart contract applications, it opens the possibilities for a quicker transition to the era of the Internet of Things.

The implications for SMEs and start-ups are also very important. Blockchain democratises both market access and financing procedures. Blockchain applications could lower market access costs by reducing transaction and contracting fees.

At the same time, the new tokenised crowdsourcing opportunities that initial coin offerings (ICOs) bring to the market, provide Europe with a powerful tool for improving the allocation of capital and risk in projects that are not directly bankable.

The incorporation of ICOs as a mainstream investment vehicle is expected to direct funding to innovative SMEs and accelerate technology transfer operations by supporting start-ups in a way that neither the banks nor traditional venture capital schemes have so far been able to support.

The benefits are clear. However, there are also challenges that we cannot ignore. The resolution stresses to need for legal certainty so that this technology can emerge and run on a sound, solid basis. Consumers and investors should be protected. SMEs and start-ups should be certain about best practices. Regulators are responsible for finding the best balance between innovation and security.

With this resolution, I want to stress that we cannot regulate a technology that is still evolving. To achieve this, I have followed two principles: technology neutrality and business model neutrality.

We aren't regulating the technology, but rather its uses and users. This can create legal certainty without killing the dynamics of innovation.

A good example is the case of tokenised values of both cryptocurrencies and ICOs. It is important to create a framework that will safeguard investors and users, inform them about the risks and benefits and prevent fraud and information asymmetries that lead to market failure and excess volatility triggered rumours rather than economic fundamentals.

In the blockchain resolution, I call on the Commission, European Central Bank and the European Securities and Markets Authority to collaborate and identify not only legal and systemic risks, but also the sources of volatility.

Yet as I have already noted, blockchain is much more than cryptocurrencies and ICOs. I have stressed

the importance of smart contracts. This is a mature concept within ITC, but it is not yet ready to be legally enforceable. We must take steps to recognise digital signatures, explore which parts of a contract need to be traditional and which ones can be smart, and introduce a set of standards to allow smart contracts to be operational and mutually recognised in the EU.

This brings us to another challenge: Standardisation in blockchain environments, interoperability and scalability. On standardisation, the resolution calls on the Commission to work with international standardisation bodies, like ISO, in the identification and taxonomy of blockchains and distributed ledger technologies, and create a common vocabulary and understanding. The technology is technically complex and we need to address this problem with mutually acceptable definitions.

Interoperability is another important aspect. We need to find ways to bring together permission-less blockchains, permission-less and permissioned blockchains and finally blockchains and legacy systems. This is a challenging task, but if we address it successfully, it will create synergies that will accelerate the scaling up and the interoperability of the infrastructures.

There is also the challenge of data privacy and GDPR compliance within blockchain, particularly in environments not requiring any permissions. To what extent are encrypted data on a permission-less blockchain GDPR-compliant?

They should be compliant, but this requires systematic work on the part of data protection authorities. Of course, we cannot ignore the issue of super- and quantocomputers. In a quanto-environment, blockchains are exposed, but it is still the possibility that quanto-encryption and quanto-cybersecurity applications will emerge.

Blockchain is here to stay. EU policymakers are following these technological developments closely, and as Parliament and the Commission have indicated, we will do our best to distribute the benefits of this technology in a way that is secure and responsible for all. Cooperation between the two institutions is strong, and we have already delivered robust outcomes. Blockchain could become one of those small-big victories to once again make the EU attractive for citizens.

About the author

Eva Kaili (S&D, EL) is Chair of Parliament's science and technology options assessment panel

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