International Legal Regulation of Blockchain Technologies Bobur

Mukumov

Tashkent State University of Law, bmuqumov@gmail.com

ABSTRACT

In recent years, there has been an active development of digital technologies in the world, which are used, among other things, to create and promote virtual acts - the so-called cryptocurrencies.

Cryptocurrency trading is carried out by users in digital form with a high degree of anonymity. Bitcoins can be exchanged (bought or sold) for US dollars, euros and other fiat (legal) or virtual currencies.

In this regard, the study of this issue becomes very relevant.

KEYWORDS: International standards, anti-corruption, innovative systems, virtual assets, blockchain.

Information and communication technologies (ICT) Increasingly, Governments and civil society are seen as important tools to promote transparency and accountability, as well as to identify and reduce corruption. New technologies in the form of websites, mobile phones, applications, etc. are used to facilitate reporting on corruption and access to official information, to monitor the effectiveness and integrity of social services and the political life of the country, as well as to increase the transparency of financial information. ICTs can also support campaign efforts and help mobilize people to fight corruption. Over the past decade, Governments have put forward an increasing number of e-government initiatives aimed at improving the efficiency and transparency of public administration and improving interaction with citizens.

Despite these important developments, there is only a limited amount of research on the impact of new technologies on corruption.

There is a broad consensus that ICTs have the potential to make a significant contribution to the fight against corruption. By facilitating the exchange of information between government agencies, between government and citizens, new technologies can promote transparency, accountability and civic participation.¹ There are many ways in which ICTs can bring about positive changes: by reducing the asymmetry of information between government officials and citizens; by limiting the freedom of action of government officials; automation of processes, elimination of intermediaries and reduction of bureaucratic red tape and bureaucracy. The Swedish OT Program in Developing Regions (Spider) has developed a list of possible areas in which OT can help in the fight against corruption:

- > Automation, which can reduce the possibility of corruption in repetitive operations.
- > Transparency that can help reduce discretion space;
- > Detection during operations to detect anomalies, outliers, and underperformance.
- Proactive detection by monitoring networks and individuals;

¹ B.A. Shokhnazarov Legal regulation of the use of blockchain technologies in cross-border relations and cross-border settlements using digital assets // International cooperation of Eurasian states: politics, economics, law. 2019 - No. 5. p.14



- Raising awareness in order to empower the public and inform them of their right to resist arbitrary treatment;
- Reporting to create complaint channels that can lead to concrete actions and help punish violations and close loopholes;
- > Deterrence by disseminating information about reported cases of corruption;
- > Promotion of ethical views through public engagement and online discussions.²

Advances in technology have led to unprecedented rapid access to a huge amount of data about society, the economy and the environment. To keep up with this, governments, organizations and citizens are in a new state of experimentation, innovation and adaptation. The "data revolution", which refers to both the amount of data available and technological innovation, can solve key problems of society, including corruption.

Access to information and transparency are not only prerequisites for democracy, but also key tools in the fight against corruption, which lead to openness and equal conditions for both governments and markets. The emergence of these tools can help advance the anti-corruption agenda through revolutionary methods of detecting, preventing and analyzing corruption.³

Big data. Technologies are used to ensure transparency in organizations by increasing automation, accuracy and frequency of processes. International organizations are at the forefront of this revolution, developing innovative software to detect and prevent fraud and collusion.

As the United Nations has determined, more accessible and better data will lead to better policy decisions and greater accountability, and several of their recent reports show how the data revolution will be incorporated into sustainable development commitments. This includes sharing technology and innovation through tools such as big data, advanced networks, and data-related infrastructure to improve efficiency, address bandwidth issues, identify critical gaps, enhance collaboration, and create incentives for innovation for the common good. Big data is mainly used in the fields of public health, commerce and taxation, where predictive analysis and visualization, which identify trends, patterns and relationships in huge amounts of data, are used to obtain valuable information. An example of this is the Australian Taxation Office using big data to search through a huge number of records to find evidence of the use of tax havens, and collating data to identify small online stores that are not meeting their compliance obligations.⁴

Digitalization and the popularity of big data have led to the emergence of new data management methods to prevent fraud and abuse in the public sector. Fraud analytics can now detect patterns of suspicious transactions in areas such as taxation and healthcare, and thanks to real-time detection, agencies can detect, stop and eliminate fraud, resulting in potential savings of billions of dollars. Countries are also developing new methods of data development and exchange, such as the "Worldwide Statistical Cloud", which aims to improve the quality of information and reduce the cost of producing publicly available data.

Data mining. Multilateral development banks (MDBs) are following this example by offering a number of innovative tools for monitoring and overseeing processes. In public procurement, data mining is used for auditing to track when governments place bids and identify alarms, collusion



² Jabbar, K.; and Bjørn, P. Permeability, interoperability, and velocity: Entangled dimensions of infrastructural grind at the intersection of blockchain and shipping. ACM Transactions on Social Computing, 1, 3 (2018), 1–22.

³ Kushbakov D.M. Features of criminal liability of legal entities // Academic research in educational sciences. – 2021. – No. 5. – p. 1030

⁴ Abdulaziz Rasulev, Bahodir Ismailov Organizational and legal aspects of the use of digital technologies in combating corruption: foreign experience of law enforcement practice. 2020 – inScience issue – 1, No.02 2020 p.308

patterns and false information. It is also used to identify "corrupt intentions" in payments or transactions through data visualization.

Researchers from the Corruption Research Center in Budapest studied huge volumes of datasets on public procurement procedures in EU countries, identifying anomalous patterns, such as exceptionally short bidding periods or unusual results (for example, lack of competition for a winning bid or bids repeatedly won by the same company).

Anti-corruption software tools are developed specifically to detect and respond to fraud, including "intelligent analysis" of data sets and administrative procedures. Both the European Commission and Transparency International have developed data analysis software that cross-checks data from various public and private institutions. This software helps identify projects that are at risk of fraud, conflict of interest or violations, as well as data mining tools using open source monitoring and procurement analytics portals. Effective integration of these tools into the practice of e-governance and e-procurement of the government will not only improve the decision-making process, but also provide greater transparency by simplifying processes.

Mobile applications. Mobile technologies and applications are used to collect data and get information faster. In developing countries, this technology is being used to empower citizens in remote areas by making information more accessible, and there is no reason why the success of this technology could not be used in the fight against corruption.

Examples of this include the creation of applications and websites to detect and prevent corruption, which prompted the World Bank to create its own version. The Integrity app is designed to provide citizens with access to projects funded by the World Bank and the ability to immediately report cases of fraud and corruption. Through the app, users can directly send information related to bank-funded projects, such as photos of an unfinished school or a record of a bribe.

In the future, there will also be functions to determine the exact location of these projects and QR tags to provide specific information about the costs and deadlines for the completion of the project. In areas where smartphones are less common, a separate mechanism will allow anyone with a regular mobile phone to contact the bank's integrity department for free. Mobile phones are also used in Integrity (INT) fraud and corruption investigations in projects funded by the World Bank, and the hotline reportedly receives 26,000 calls a year. Last year, 370 cases were directly related to projects financed by the Bank, and this led to 34 sanctions against firms and individuals, the prevention of numerous unfair contracts before they were awarded and the development of precautionary measures for high-risk projects.Антикоррупционные инструменты.

The UN Sustainable Development Goals (SDGs) have stimulated increased investment in improving data for monitoring and accountability. To exchange innovations and technologies for the common good, the UN proposed the creation of a global "Network of Information Innovation Networks", which would bring together organizations and experts to promote the implementation of best practices in monitoring and improving efficiency.⁵

In the public and private sectors, judicial tools for auditors, such as self-monitoring, analysis and reporting (SMART) technology, are used to combat corruption risks. Along with technological advances, these tools are becoming increasingly sophisticated to process data at speed, as they can include real-time transaction analysis, predictive modeling, anomaly detection, and risk assessment algorithms seeking to flag or stop potentially illegal payments much earlier when they are made by payment processes.

https://documents1.worldbank.org/curated/pt/905371507533659005/pdf/120298-WBAR-v1-PUBLIC.pdf



⁵ World Bank Document 2017 Annual Report //

To strengthen internal processes and prevent fraud, data analytics can periodically investigate transactions in purchasing and payment models, check for anomalies and quickly identify suspicious transactions such as illegal financial flows. Other advantages of technologies that lead to detection and prevention include automation of processes that exclude human factors, for example, officials entering into contracts, and the possibility of corruption from procurement operations⁶. This is aimed at reducing bribery in operations and can be used in any system . At the country level, governments are moving to open data, which deprives freedom of action (for example, in Moldova). The goal is not only to make the processes more transparent, but also to reduce the reputational risk for the government.

These technologies can create unprecedented opportunities for transparency and the fight against corruption. However, technology is not a quick fix. To truly exploit these trends, Governments and organizations must adapt and act quickly. In some cases, financial and technical investments in innovation at all levels will be required for these changes to occur, combined with public and private sector cooperation to help authorized individuals and institutions make the leap to new technologies.⁷

E-government has gained popularity in recent years, when many countries have resorted to information and communication technologies to modernize the government, increase efficiency and improve the provision of public services. It is expected that, as an additional advantage, ICTs will reduce corruption by ensuring transparency, opening government data to public view and automating government processes, limiting the freedom of action of officials and limiting the interaction of citizens with gatekeepers to access key services. Despite these high expectations and large-scale investments in e-government, evidence of impact is mixed and limited, and there is a high failure rate of e-government projects due to contextual factors as well as the type of ICT intervention.

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