PROSPECTS OF ARTIFICIAL INTELLIGENCE USE IN ANTI-CORRUPTION POLICY

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In the paper, authors examine the prospects for the artificial intelligence introduction in anti-corruption policy, based on foreign experience, and also identify the difficulties of using such technology in Russia. This article discusses the possible risks when using Artificial Intelligence, as well as the specifics of Russian legislation in the field of information space regulation.

Keywords: Artificial Intelligence; anti-corruption policy; neural network; corruption; crime; technology

Introduction

Digitalization has permeated all areas of human life; the world of technology not only simplifies domestic aspects but also applies to more specialized areas such as medicine, economics, or law. Human society is no longer conceivable without technology; the development of science and technology leads to new ways of creating crime, but it also finds new ways of combating crime. Methods of solving corruption are no exception.

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It is not a secret that corruption has entered all sectors of public and state life. In 2021, 24,500 crimes of corruption were detected, according to the Prosecutor General's Office, "most of the half was bribes" (General Prosecutor's Office of the Russian Federation).

But a large proportion of corruption offences are outside the statistics because they have a hidden form. The scale and consequences of corruption make the fight against this type of crime a high priority.

**Literature review**

Artificial Intelligence could be a possible way of combating corruption. It cannot be bribed, its decisions are driven by a clear algorithm that cannot be influenced by personal factors, and it is extremely difficult to change the program.

This article uses work on the application of Artificial Intelligence in China, Brazil and Indonesia. As well as Big Data and crypto currency data, as well as statistical information on the number of corruption offences for the available period of 2021.

Digitalization is the introduction of digital technology into different areas of human life. Artificial Intelligence is the ability of computer systems to perform creative and analytical functions that are traditionally regarded as human.

Corruption is abuse of power, bribery, and acceptance of bribes, commercial bribery or other unlawful use of an official position for personal gain.

**The research**

Artificial Intelligence using in anti-corruption policies can speed up and facilitate the detection of financial irregularities. With the help of innovative technology, it is possible to monitor inappropriate spending. Enquiries to agencies, verification of declarations can be transferred to artificial intelligence, speeding up the process, and when an official exceeds the money limits, a signal is sent to the relevant service and a decision on verification is taken at another level.

Also, according to the AI for good foundation concept, a project has been developed as part of an effort to improve artificial intelligence, which consists of tracking government deliveries (United Nations Office on Drugs and Crime).

The use of new technologies can make a positive influence on the public sector. Artificial Intelligence can be used to predict corruption offences. By processing vast amounts of data, the network can identify a pattern that hints at the possibility of corrupt behavior.

As World Bank Blogs notes, "the neuro-net can enable the tracking of links in the bidding patterns of winning and losing bidders, as well as tracking the location, use of shell companies, offshore jurisdictions and banking information of bidders to eliminate potential problems" (World Bank Blogs). The Spanish corruption prediction system, for example, confirms that if the same party remains in power for more than one year, the likelihood of a corruption offence is increased.

To adopt modern technologies in anti-corruption policy in the Russian Federation, it is important to track foreign experience to have an overview of the program as well as to be aware of possible shortcomings.

For example, China has long used the Zero Trust program, which has access to government data (China shuts down overly-cool AI-based anti-corruption system, 2019).
neural network monitors the work and social life of officials, correlates costs with work done, and calculates strange transactions. For example, the system will sound the alarm if a small official suddenly buys an expensive car. The program had been in operation for six years, but China scrapped it, citing employee discomfort in the workplace. The Zero Trust system is excellent at detecting typical offences, e.g., illegal transfer of property rights, participation in a company tender by relatives of the official in charge.

Of course, Zero Trust as well as any other artificial intelligence does not exclude technical errors that are why parallel work is conducted by operator. The human operator has the final word, but the use of Artificial Intelligence speeds up the process considerably, allowing the officer to focus on the important details that indicate the presence of a corruption offence. The system's algorithm is based on a loaded database of regional and federal levels, so the more data loaded into the network; the more accurate the artificial intelligence will be in making decisions.

The Artificial Intelligence system also makes use of bank account data as more and more funds are no longer in cash. A common corruption crime scheme involves bank account fraud. Artificial Intelligence can track the transactions of a person of interest, providing the operator with relevant information, bypassing the process of making a request to the relevant agency, speeding up the process.

To apply such a method in Russia, it is necessary to revise existing legislation, for example, according to the Federal Law "On Banks and Banking Activities", the Bank of Russia guarantees secrecy of deposits and correspondent accounts (Federal Law of RF, 1990). But with the introduction of Artificial Intelligence into the Russian Federation, it is possible to create additional, effective mechanisms to combat corruption.

Russia has a cyber-threat data exchange platform consisting of 70 financial institutions, creating the basis for the possible use of Artificial Intelligence. The use of such a platform would help the state and non-state sectors, as well as give more investigative leverage to internal affairs agencies, as a large amount of necessary information would be uploaded into a single database, minimizing the risk of third-party interference.

From all the above, we can conclude that the use of Artificial Intelligence solves the following problems:

- Preventing corruption crimes. As the neural network has access to employees' personal bank accounts as well as to databases at various levels, based on the information received, the artificial intelligence can detect suspicious activity; send a request for possible wrongdoing to the necessary agency, thus preventing the crime in its "infancy".
- Providing for the rapid collection of information necessary to detect and predict corruption, as well as the immediate forwarding of information on a possible offence to the relevant agency. The speed of tracking transfers and enquiries to the agency is increased by having single access to the accounts of persons of interest and multi-level information.
- Creating a mechanism that is the least human-dependent. Human beings play a key role in all areas of society where corruption is pervasive. The use of artificial intelligence in anti-corruption policies reduces dependence on human influence; it is difficult to change a neural network program, and without knowledge in this area, an ordinary person would not be able to do it (Larina & Akimov, 2020).

Talking about the adoption of a neural network in the fight against crime, it is necessary to consider the possible disadvantages of this system:
Creating new criminal routes. The move into the digital space creates the conditions for digital currency manipulation. One of the properties of crypto currency is the complete anonymity of transactions, hence electronic money manipulation is almost impossible to trace (Voronczov et al., 2021). Also, there is no clear legal definition of cyber corruption and digital forms of corruption crime.

- The risk of leakage of big data collected for the information base of artificial intelligence. The information collected for the neural network should only be used to investigate corruption offences, without infringing on the freedom and rights of citizens.

It is impossible to ensure full transparency in the investigation of a corruption offence. For example, according to Article 6 of the Federal Law on "Operative - Investigative Activity" the activities carried out have different degrees of secrecy (Federal Law of RF, 1995).

The possibility of an offence based on digital content, i.e., the use, distribution, production of information of a secret or forbidden nature (Hlatshwayo et al., 2018).

Late development of legal system in the format of corruption offences in the digital space.

The openness of the internet and the frequency of corruption offences reported in the media play a huge role in the work of Artificial Intelligence.

In Indonesia, for example, a program was developed that collected information on corruption from news sites and then compiled the data into a geographical Google API map. The resulting data was ranked by severity and the most corrupt regions were displayed on a map of the area. For a detailed report, you could expand each province and obtain data on the annual or monthly number of corrupt crimes in that province. The web-based application is called the Corruption Map of Indonesia, which can be used to develop a more effective anti-corruption system tailored to the region, and this corruption matrix can help track analytics in real time.

As for tracking public sector expenditure, the experience of Brazil and the use of DDM (distributed data mining)/KDD (knowledge discovery in data bases) and MES (multi-agent systems) programmers can be used to identify potential forms of corruption. With the first program it is possible to obtain primary information, while with the second program, it is possible to group the agents involved, thereby tracing corrupt correlations.

This methodology has been used in Brazil to track public procurement, and initially public auditors were used to track the public sector, but their work was complicated by the volume of information as well as by the different strategies that companies employed to hide their expenditures. In implementing these programmers in one state, for nine public procurements, the programmer was able to identify two companies that had won every tender.

The programmer tracked information on the losing companies and the researchers then concluded that the losing company was no longer participating in any tender and was therefore acting as a "competitor" to the winning organizations. It is likely that the shell company was set up to simulate competition in a public procurement tender. This situation shows that the system is not only capable of aggregating data, but also of identifying hidden mechanisms that are capable of simulating competition for their own benefit.
PROSPECTS OF ARTIFICIAL INTELLIGENCE USE

Conclusion

The digitalization of public services reduces the amount of direct contact between citizens and public sector employees, the automation of financial transactions and the publicity of government actions contributes to the detection and prevention of corruption. An important factor in detecting corruption offences is the feedback from public institutions. There are digital platforms for citizens to report corruption offences in the public sector. This platform can be effective due to its ease of use, guarantee of anonymity, high prevalence and effectiveness.

Focusing on the forms of anti-corruption in today's digital world, two aspects can be highlighted.

First, the using of technology to ensure the operation of a unified strategy in the international arena in the forms and methods of fighting corruption shaped by the experiences of the countries that lead Transparency International's rankings.

Second, forms of resistance based on new types of corruption. Improving anti-corruption legislation, using Big Data and machine learning systems to further predict corruption could be one way.

Integration of Artificial Intelligence into anti-corruption policy will help to concentrate efforts in those regions where this crime is most likely to occur and to significantly increase the effectiveness of anti-corruption measures, but this effect is only possible with a comprehensive approach, taking into account possible risks.

The introduction of Artificial Intelligence into the state anti-corruption policy is possible with the combined application of technological and socio-economic measures, ensuring information security of an individual, society and the state, as well as detecting conflicts of interest with the help of a neural network.

Digital technologies should not be seen as the only possible way to fight corruption crimes, in isolation from the state direction and regulation of this sphere artificial intelligence in anti-corruption policy may work in the opposite direction.

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