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BIG DATA IN MODERN WORLD – CURRENT REGULATION AND NEAR PERSPECTIVES

Abstract. Big Data is one of the hyped topics that attract much attention from different perspectives including value for business, IT-solutions and legal aspects of use. Today having data means being able to provide consumers with goods on cost-effective model, to offer more personalised services or even to save lives. Despite keen interest thereto, it remains poorly-explored as a concept, which obstructs its theoretical and practical development.

The purpose of this article is to describe certain legal approaches towards Big Data regulation, estimate their influence and reflect possible trends in further development of Big Data as a concept.

Key words: BIG DATA, DATA PROTECTION, PRIVACY, CYBERSEQURITY, PROFILING, INTERNATIONAL PRIVATE LAW.

The subject of this research is normative legal acts of different jurisdictions, including the Republic of Belarus, Russian Federation and European Union (hereinafter – EU), documents of international organisations, doctrinal sources.

The purpose of the research is to find out the peculiarities of the Big Data legal regulation, describe possible trends that may influence the use of Big Data in the future. The article also triggers broad discussion regarding future research challenges and opportunities in theory and practice.

Research methods: descriptive method, method of study and generalisation, modeling method, formal-logical method, system-structural method, method of comparative analysis.

The object of the research are the social relations evolving during the use of Big Data.

The scientific novelty is defined by the complex analysis of the privacy regulations from the Big Data use perspective with special attention to the laws of the Republic of Belarus, which is emerging as the Silicon Valley of Eastern Europe.

1.   GENERAL OVERVIEW

There is no agreed-upon definition of Big Data. The term is usually characterized as an amount of information, which is usually described through particular distinctive features (also known as triple V): high volume, large variety and velocity. Currently, most countries do not have complex Big Data regulatory framework, which constitutes the main problem for the legal qualification of Big Data and its use. The laws provide for the fragmentary regulations that may be applicable to Big Data:

- personal data protection;
- law of copyright;
- commercial secrets;
- advertisement regulation;
- antitrust laws;
- other special / sectoral regulatory framework (e.g. consumer protection, bank secrecy, telecommunication laws, law enforcement support system).

The most comprehensive regulation of Big Data is provided by legislation on personal data protection, since it regulates one of the core element in the Big Data use – automated processing of personal data. The founding act regulating personal data protection is the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data (hereinafter – Convention No. 108), adopted by the Council of Europe on 28 January 1981, subsequently supplemented by the protocol regarding supervisory authorities and transborder data flows. In October 2018 the Convention No. 108 have been amended by the

second protocol, aimed to modernise and improve the Convention No. 108, taking into account the new challenges to the protection of individuals connected with processing of personal data which have emerged since it was adopted in 1981.

Based on the provisions of Convention No. 108, the countries of Europe have adopted separate laws on the regulation of personal data at the national level. The leading role in the personal data protection regulation is designated to the Regulation (EU) 2016/679 General Data Protection Regulation (hereinafter – GDPR)[1], which replaced the Data Protection Directive 95/46/EC.

Due to the GDPR exterritorial effect, it has revolutionary effect both on business processes of the organisations around the world and development of data protection laws at the national level.[2]

2.   BIG DATA AND DATA PROTECTION LAWS: CURRENT STOPPERS FOR DEVELOPMENT

Both GDPR and Federal Law "On Personal Data" dated 27 July 2006 No. 152-FZ (hereinafter – Russian PD law) contain a number of principles of personal data protection and processing, including:

- Consent of data subject as a lawful ground for processing;

- Processing is allowed only for purposes which data subject gave its consent;

- Obligation to delete data upon the cease of the purposes such data were collected for;

- Concept of "make identifiable"; etc.

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[1] Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC. Online access: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0679&from=EN

[2] 13 March 2019 the Council of Ministers of the Republic of Belarus (executive branch) has introduced draft law "On the Personal Data" to the Parliament. The draft law reflects main approaches of GDPR, including with regard to grounds for processing (including informed consent), processing for particular purposes, right to be informed etc.

The opportunities created by the Big Data technologies are in direct contradiction with these principles and, in general, challenge the adequacy and effectiveness of personal data legislation in its current form in relation to the latest technological realities. Certain researchers have already made categorical conclusion that the right to privacy and "Big Data" are incompatible with each other.[3]

3. POSSIBLE REGULATORY SOLUTIONS FOR DEVELOPMENT OF BIG DATA

In order to organise and stimulate the growth of economic effect of the Big Data use, currently states are keen to elaborate complex legal regulation of the concept. Below you can see certain attempts to the Big Data regulation and promotion of use.

3.1. Regulation of Big Data at the national laws level

Republic of Belarus

21 December 2017 President of the Republic of Belarus signed Decree "On the Development of the Digital Economy" fixing progressive and unique regulation in the IT sphere on a global scale. The innovations came into force on 28 March 2018 and relate to the changes in the functioning of the High Tech Park (hereinafter – HTP).

Special HTP regime was introduced in order to provide favorable conditions in order to increase competitive branches of the economy of the Republic of Belarus based on new and high technologies, further improving organisational, economic and social conditions for developing modern technologies and increasing their exports, attracting this area for domestic and foreign investment.

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[3] Савельев А. И. Проблемы применения законодательства о персональных данных в эпоху «Больших данных» (Big Data) //Право. Журнал Высшей школы экономики. – 2015. – №. 1, page 53.

HTP as a legal regime operates on the principle of extraterritoriality, which means that a legal entity or an individual entrepreneur that meets the requirements of the HTP can become a resident and apply benefits regardless of where they are located in the territory of the Republic of Belarus.

Generally, an applicant shall carry out (plan to carry out) the type of activity expressly indicated in Regulations on HTP to obtain the status of an HTP resident. Among other, Regulations on HTP provide the type of activity related to the development and use of artificial intelligence (neural networks and other algorithms).[4]

Russian Federation

In the end of October 2018 a bill has been submitted to the State Duma that obliges Big Data operators to obtain user consent for Big Data collecting and processing. According to the authors, big data is a collection of information that does not contain personal data on individuals and their traces in the Internet: shopping in online stores, geolocation marks, etc.

3.2.   Advanced accountability

Since data reuse is more powerful in the era of Big Data, the most important principle of confidentiality (allowing people to decide for themselves who has the right to process their personal data) should be revised. When using digital technology, this rule takes shape of "notice and consent" system.

In order to boost the development of the Big Data technology we suggest to move beyond the centric data subject confidentiality management approach and replace it with advanced accountability principle. According to the advanced accountability principle processor can process personal data without consent of data subject. Instead it shall estimate potential risks of personal data processing

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[4] The literal wording is "creation, training of neural networks and other algorithms in specialised sections of artificial intelligence and the implementation of the results of this activity".

without explicit consent and ensure adequate level of data protection. Processor may process data only if the level of threat is low. Otherwise, as well as in case of unjustified personal data use, processor may be subject to liability for damages incurred.

The practice of liability for damages application is important. The value of the individual responsibility decreases if the bringing of subjects to responsibility for their actions is replaced by measures to reduce risks.[5]

Such approach is more effective because subjects processing the data know better than others what such data will be used for.

3.3.   Abolishment of the obligation to delete personal data

Further step for Big Data development should be the abolishment of the obligation to delete personal data after the end of the processing in line with the initial purposes. Privacy laws need this change, because only by revealing the hidden value of data modern information companies can work with data effectively for their own and public benefit.

The aim of the changes is to balance the benefits of data reuse and the risks posed by their wide sharing.

4.   CONCLUSION

This article has demonstrated the conflicting state of Big Data technologies with personal data legislation. In case where the collection of information about users is huge, even the most innocuous piece of such information (like information on the search in Google) being combined with other similar information can give much more information about an individual than the personal data which identify data subject directly. Considering such specificity, national legislators should

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[5] Майер-Шенбергер В., Кукьер К. Большие данные. Революция, которая изменит то, как мы живем, работаем и мыслим. М.: Манн, Иванов и Фербер, 2014. 240 с., page 184.

elaborate complex regulatory framework at the national level, exempting Big Data from the general fragmentary regulations (e.g. general regulation on personal data).