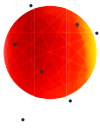


alGOVrithms

THE USAGE OF AUTOMATED
DECISION MAKING

POLICY RECOMMENDATIONS
FOR DECISION MAKERS



alGOVrithms

THE USAGE OF AUTOMATED DECISION MAKING

POLICY RECOMMENDATIONS FOR DECISION MAKERS

Author (on the basis of the report *alGOVrithms – State of Play*): Krzysztof Izdebski

Proofreading: Gill Davis

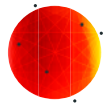
Project Coordination: Marta Skotnicka

Graphic Design: Jakub Waluchowski, Kontrabanda

Font: Azo Sans by Rui Abreu



The project is co-financed by the Governments of Czechia, Hungary, Poland and Slovakia through Visegrad Grants from International Visegrad Fund. The mission of the fund is to advance ideas for sustainable regional cooperation in Central Europe.



We are presenting policy recommendations which are the result of extensive research performed in Czechia, Georgia, Hungary, Poland, Serbia and Slovakia compiled by ePaństwo Foundation and published in the report *alGOVrithms - the State of Play*.

The report consists of data and analysis gathered by researchers from ePaństwo Foundation, KohoVolit.eu for Czechia and Slovakia, IDFI, K-Monitor and CRTA between November 2018 and April 2019.

We have detected automated decision making in a large number of spheres including speed control, allocation of judges and other public officials, choosing batches for conducting controls and inspections, distributing social benefits, detecting frauds and even preselection of contractors in public procurements.

We see our role as those who should find some answers where possible and detect specific black holes within the system. We have separately prepared Policy Recommendations to address these emerging problems to policy and decision makers.

We see an urgent need to discuss and implement the following recommendations as the usage of algorithms in government-citizen relations is on the rise and it soon may be too late to build an effective and secure system of automated decision making. Governments have not introduced any independent mechanisms on the control of algorithms, no ethical standards are in place and the public is restricted from knowledge on how specific automated decision making works.

Unlike some Western countries, only in one case of the researched institutions, have we found examples of Artificial Intelligence implementations or other forms of machine learning solutions. However, this does not mean that there are no potential risks connected with the impact of algorithms on human rights, including the right to a fair trial.

Findings

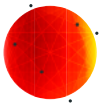
We have not identified an existing overall state's policy on the implementation of alGOVrithms in any of the countries participating in the research. While some of the countries such as Poland¹ or collectively V4 member states² work on the Artificial Intelligence strategies, none of them introduced any comprehensive documents regulating the transparency and accountability of automated decision making. The report is probably the first document describing the broad perspective of this phenomenon and we hope that our policy recommendations will be taken into consideration by decision-makers working on the implementation of such tools in the future. In Poland, neither the Ministry of Digital Affairs nor Chancellery of the Prime Minister worked on the topic. **We haven't found any examples of ethical frameworks being introduced in any of the countries that were subjects of the research.**

Neither have we found any examples of the existence of the legal framework comprehensively describing the rights and obligations of the states and citizens in this regard. If some legal documents exist they refer to some aspect of examples of alGOVrithms such as allocating judges to specific court cases. This is the case in Georgia where Organic Law of Georgia on Common Courts was amended³, Poland where Regulation of the Minister of Justice of 28 December 2017 amended the Regulation – Rules for the operation of common courts was introduced or Serbia regulating its system of selection of judges in The Court Rules of Procedure (2009).⁴

A general but still not comprehensive regulation of automated decision making can be found in Hungary where "The legislation on decision-making in general public administration procedures" includes regulation on automated decision making in decisions on requests by clients.

In European Union countries, general rules on automated decision making were introduced thanks to the General Data Protection Regulation (GDPR) implementation in May 2018.⁵ According to the art 22.1 of GDPR, "the data subject shall have the right not to be subject to a decision based solely on automated processing, including profiling, which produces legal effects concerning him or her or similarly significantly affects him or her." It seems that this provision is not relevant in most of the cases as there is a "human factor" involved or the algorithm has no direct impact on a citizen's situation. It seems also, that fully automated systems of speed measurement identified in all countries are not subject to these provisions as it was explained on the example of Prague, Czechia "all

1. https://www.gov.pl/documents/31305/436699/Za%C5%82o%C5%B4cenia_do_strategii_AI_w_Polsce_-_raport.pdf/a03eb166-0ce5-e53c-52a4-3bfb903edf0a
2. https://www.vlada.cz/assets/evropske-zalezitosti/umela-inteligence/V4_NON_PAPER_ON_AI_09_04_2018.pdf
3. <https://matsne.gov.ge/ka/document/view/90676?publication=33>
4. The Court Rules of Procedure (2009) arhiva.mpravde.gov.rs/images/Court%20Rulles%20of%20Procedure_180411.pdf
5. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32016R0679>



the decisions should be overviewed first by a human (a member of the Municipal police)”⁶.

We have found that algorithms used in software created for automated decision making are not subject to transparency and access to the algorithms or the source code which includes them is not possible. In Poland, the Minister of Justice refused to provide the information requested by the ePaństwo Foundation and pointed out that the algorithm on Random Allocation of Judges System consists of technical information and is not public information within the meaning of the Polish Act on Access to Public Information, and therefore is not subject to disclosure. According to provisions of the Act Amending Certain Acts in Order to Counteract the Use of the Financial Sector to Committing Tax Frauds which introduces STIR – Clearance Chamber ICT System⁷ the access to the algorithm describing its operation is not public due to security reasons.

Access to the source code of similar solutions in other countries was also denied due to security or copyright reasons. Sometimes the product is owned by an external company, as was the case of the tool for the Judiciary Council in Slovakia where the Council informed the researcher that it is not in possession of the source code. In Czechia generally, the codes of the algorithms are not public. They are under copyright not owned by the public body (with exception of procedures defined directly in the law).

We have also not detected any case of a single institution which oversees or even possess comprehensive knowledge on which automated decision-making systems exist in the country. In every researched country the situation is the same as in Georgia where the researcher noted there isn't any public institution, which is directly responsible for adopting and implementing policies regarding algorithm usage in the public sector. On the contrary, each government organization can develop any software according to their needs and programs.

Apart from the case of Serbian system of allocating the judges to cases, where the donor (EU) has audited the system, **no external and independent audits are set in place in order to monitor the accuracy and fairness of algorithmic operations.**

Recommendations

It is high time to elaborate and implement consistent policies on automated decision making. We propose that they will consist of the following principles:

• Introducing policies on algorithm implementation

As discovered during the research the coordinating authorities like Prime Ministers have no idea that algorithms have already been introduced by their dependent entities, not to mention other public institutions. Governments should introduce complementary policies including ethical guidelines to make sure that algorithms are not created in silos and the system is synergic. The policy should also introduce obligatory audits of systems performed by external and independent bodies. To begin, we recommend:

– Setting up a coordination body within the government

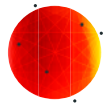
Although the topic is hugely important we do not yet see the need for creating the new independent body responsible for implementing ADM policies and controlling their execution. However, we see a strong need of identifying, among the existing public bodies, an institution which will be responsible for coordinating ADM implementation, including coordination of the process of AMD creation and knowledge of existing tools and their performance.

– Implementing a clear and possibly complex legal framework on automated decisions making.

Existing provisions together with the old fashioned public administration systems are not sufficiently responding to challenges connected with ADM. The legal framework should describe the definition of ADM, bearing in mind its complex nature and multiple spheres where it can be used. The legal framework should also introduce general rules on the transparency of the source code of algorithms together with the clear obligation of their explicability. The latter should include information on what kind of data is being processed and what other factors are taken into account. Law should also introduce the need for preparing Algorithmic Impact Assessments before the actual creation of the algorithm and impose the obligation not to implement the algorithms before preparing ethical guidelines.

6. See also: S Wachter, B Mittelstadt, and L Floridi, 'Why a Right to Explanation of Automated Decision-Making Does Not Exist in the General Data Protection Regulation' (2017) 7 IDPL 76.

7. www.dziennikustaw.gov.pl/du/2017/2491/D2017000249101.pdf



– Ethical Guidelines

These documents should be prepared as part of the general principles such as non-discrimination, respect of the rights of individuals including the right to be informed which and how the data are processed. We also see the need for documenting ethical concerns in each case of ADM creation as a part of Algorithmic Impact Assessments.

– Engaging civil society representatives and external experts during the whole process of creating alGOVrithms

The multidisciplinary approach in the process of creating algorithms is – because of their complicated nature – a must. Limiting collaboration only to public officials and IT companies or IT departments increases the risk of the negative impact of algorithms on society. Human rights organizations play an important role in providing expertise on social inclusion and equality, prevention of discrimination and transparency of governments. There is also a growing civic tech community which can support governments in creating tools which are truly aimed at supporting citizens and public interest rather than comforting authorities and wrongly understood “effectiveness” of public institutions. There is also a growing range of experts from the fields of IT, ethics or law who already have gained wide experience in the field. The engagement should be a part of a general debate on ADMs implementation, as well as in the process of consulting creation of the specific algorithm. Civil Society and external experts should also be involved in the auditing and monitoring of the performance of the tool, as well as in the process of evaluating whether its outcomes are in line with initial assumptions.

– Introducing Algorithmic Impact Assessments

We see the need for introducing Algorithmic Impact Assessments (AIA) based on the systems created in the area of law-making like Regulatory Impact Assessments. When the Algorithmic Impact Assessments are an obligatory part of implementing any similar technological solutions into the state-citizen relations, we would know what the government or its entity want to achieve, how it will measure the success, what groups are impacted or what risks can occur and by which means they can be prevented. The AIA should also provide the grounds for refusing the implementation of algorithms when risks are higher than benefits. AIA also gives the opportunity to explain how the algorithm will work, what data will be used and what is a desirable outcome.

– Introducing transparency clauses in contracts with companies delivering the software and open access to the source code.

In the vast majority of cases, there is no access to the source code based on the copyright clause or other reasons. In some countries, the source code is not considered public information. The access to the source code should be given by default and only when explicitly justified (for example based on state security) the public entity can refuse to reveal the technical aspects of algorithms. In all cases, external service providers should submit all information on the system to respective public offices and officers who will be working directly with the system.

Service providers should also hold regular meetings, also in the form of workshops, with public officials actually using the tool to hear their feedback on problems, risks and other challenges connected with the tools’ operation.

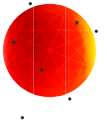
– Issuing guidelines explaining the operation of algorithms

The guidelines are needed not only for the wider public but also for public officials directly or indirectly working with the tool consisting of an algorithm. This will support the process of explaining how the algorithm works and what the potential risks are. This will also support courts when they will rule on the cases where the citizen is confronting the decision which was made directly or indirectly through automated processes. The guidelines should also be regularly updated with feedback from the actual system operation.

– Elaborating the review and remedy system.

In all of the researched countries, there is only a general right to undermine the automated decision making by submitting the case to the court. This should be treated as a last resort. Public administration should guarantee that in the case of any mistakes or other irregularities connected with the operation of the alGOVrithms the review (audit) and remedy systems are in place. It shall also contain the precise information as to who at the specific public office is responsible for the accuracy and fairness of the algorithm. It is also advised to consider changes in criminal law to include sanctions for implementation of algorithms that violate privacy, fair and equal treatment of citizens.

We also see the need for regular inspections into specific algorithms’ operation. Inspections should be conducted by a group of external experts who will check the fairness and accuracy of a tool. The results of the inspection should be published on the website of the relevant public institution.



The Policy Recommendations have been developed within the project supported by the International Visegrad Fund (Visegrad Grant No. 21820296): alGOVrithms. Are citizens governed by computer programs?

PROJECT SUPPORTED BY:

-
- Visegrad Fund
-
-

PROJECT PARTNERS:



The digital version of the Policy Recommendations is available at:
<https://epf.org.pl/en/projects/algovrithms/>



#algorithms

2019