9 Theses

on opportunities and risks, democratic legitimacy and constitutional control in the algorithmization of administration

Preamble

On 12 October 2018, experts from various disciplines from science and practice exchanged views in a symposium and a subsequent panel discussion on the intersection of technology and law at Hamburg City Hall. The two signatories have formulated the following 9 theses on this basis in order to provide impetus for further discussions on digitisation in administration.

Theses

1. There is great potential for supporting administrative decisions through systems based on algorithmic data processing. Behind the misleading term "artificial intelligence" lie increases in system performance with regard to classification, optimization, anomaly detection and prediction. The administrative process can be made more effective and efficient by using such systems.

2. In the development and implementation of technical systems in administration, the oversight by administrative courts must also be considered. This does not preclude the use of systems based on machine learning and neural networks, but places requirements above all on traceability, clarification, inspection and transparency.
3. Principles of the rule of law, the need for democratic legitimacy and the limits drawn by fundamental rights should already be taken into account when designing the systems ("Rule of Law by Design"). This becomes all the more important as the technical systems act autonomously. Respective certifications could help to build new projects based on good practices developed elsewhere. This also includes the quality assurance of datasets used for machine learning.

4. The entire socio-technical system is crucial for the legal assessment of the inclusion of algorithms. The fact that - as is often demanded - it is a person who ultimately makes a decision only changes the quality of the decision if he or she can actually make an independent decision in the process. The introduction of new technologies should also be constantly reflected upon from the perspective of (professional) ethics.

5. Before any introduction of systems that use artificial intelligence, a field-specific impact assessment should take place, which should be published and later regularly compared with the actual development.

6. In the development of systems, the administration, as the customer, has the possibility to increase the bandwidth of alternative systems available on the market, thus reducing path dependencies and bequests. The cooperation with the startup scene can provide helpful impulses.

7. A court decision cannot be made independently by technical systems for legal reasons. The reflected assistance of technical systems can, however, be an answer to the increase in complexity of judicial activity with a growing need for quick decisions.

8. The introduction of systems in administration and administrative jurisdiction presupposes corresponding knowledge; this also concerns the legislator, who creates the basis for action. Model projects should therefore promote knowledge partnerships between administration, administrative jurisdiction, science and business. The experimental testing of new rules (e.g. through "sandboxing") should be part of this.

9. The optimisation of the use of technical systems with regard to legal requirements is an ongoing interdisciplinary process. It presupposes, however, that within the fields of application it is also possible to learn comprehensively. Because of its experience with cooperation across the boundaries of disciplines and of theory and practice, Hamburg is an ideal platform for this.

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