

Ethical principles of Artificial Intelligence

Common views by representatives of parliamentary parties

Throughout history, technological changes, such as the proliferation of cars or centralized generation of electricity, have brought about opportunities and risks that merit both ethical and technological consideration. Artificial intelligence (AI), similar to those previous changes, promises to reshape our daily lives and accelerate social change.

Increased use of AI in private and public sectors is a positive development with big potential — for example, many current jobs will become easier and medical diagnoses more accurate. In developing regulation, it is important to think about the society we want to build and seek identify the biggest risks. Ethical principles have been sought after as a basis for ongoing political and legislative discussion, both nationally and internationally.

The European Commission is developing European-wide legislation, in particular for high-risk artificial intelligence applications, and has published a White Paper on artificial intelligence as part of EU's digital strategy. In Finland, the Constitutional Law Committee and the Parliamentary Ombudsman have drawn attention to, for example, the automated decision-making of the tax administration, the Social Insurance Institution and the Finnish Immigration Service. To remedy the shortcomings identified, the Ministry of Justice is preparing general administrative legislation on automatic decision-making. In Finland, there is also a need for a broader debate on what kind of regulation automatic decision-making and artificial intelligence will require in the future. By being active, Finland can influence EU policies and global development.

Human rights apply in the world of artificial intelligence. There must be complied with and decisions based on artificial intelligence must be subject to the same legal processes and tenants of good public administration as normal. Fairness and prevention of harm must be pursued when using artificial intelligence and personal data protected.

What is new is that systems utilizing artificial intelligence are able to learn when making decisions. A key principle in considering legislation of artificial intelligence is accountability, i.e. human agency and oversight of the use of AI. In public administration official responsibility must always be well defined, but similar clear accountability is merited also in the private sector, especially for high-risk applications.

Artificial intelligence needs to be looked at more broadly than just from a technological point of view. Large-scale collaboration is needed at various levels, including between the legislator, developers of AI, users, and the research community. Self-regulation by industry is an important starting point, but it needs to be supported by an EU-wide risk-based regulatory framework to ensure a clear and predictable operating environment. Legislation should encourage organizations of all sizes to develop and use artificial intelligence.

All representatives of parliamentary parties consider promotion and use of artificial intelligence to be important in society and see it as a significant positive force for change, just like railways,

telephone lines or centralized electricity generation. What is needed now is consensus on the ethical principles of artificial intelligence.

The principle of respect for human autonomy

Artificial intelligence systems must not manipulate or otherwise subordinate, coerce, deceive, condition or herd humans. Artificial intelligence can guide people to the most appropriate service or provide useful information when assessing the suitability of products and services. Our society is built on the idea of autonomous individuals who are able to make decisions and participate in democratic processes, the market and civic life.

Human sovereignty and the realization of fundamental and human rights must be taken into account throughout the life cycle of the design and use of artificial intelligence. Artificial intelligence systems should be designed to complement and strengthen human cognitive, social and cultural skills and to adhere to the principles of human-centredness. Work processes and operational control must ensure genuine human control and real human control.

The right to control the use of personal data (informational sovereignty) is a human right in the digital age. The individual determines who has the right to use their data. Data is a factor of production in the information society in the same way as labor or capital a hundred years ago. It is necessary to strengthen the individual's ability to utilize his or her own data and to control how it is collected and used. Once granted, access to the data must be easily revocable. Data must also be erasable and portable, as this ensures human autonomy and the proper functioning of the market mechanism. A person has the right to receive the basic societal services from both the private and public sectors without needing to disclose personal data that is not necessary for the operation of the service. The service received must also not be significantly inferior, for example in terms of quality or price.

The principle of prevention of harm

Artificial intelligence systems must not cause or exacerbate harm or otherwise adversely affect human beings, animals or the environment. Both mental and physical integrity must be protected. Artificial intelligence systems and the environments in which they operate must be safe and secure. Special attention should be paid to less privileged groups and, where possible, they should also be involved in the development and deployment of artificial intelligence systems. In addition, separate solutions must be sought for the challenges of under-represented groups. No one should be discriminated against on personal grounds. Human oversight of AI is needed to ensure non-discrimination and fulfilment of accepted ethical guidelines, even as the application evolves over time.

When AI utilizes personal data, special care must be taken with regard to data security and privacy, with heightened awareness of the sensitivity of the processed data. Particular attention should be paid to data protection in higher-risk areas, such as healthcare or functioning of the judiciary, with usage of data of a highly personal nature.

The principle of fairness

Special attention must be paid to the fairness decisions and sources of decision must be traceable to the beginning of the decision-making chain. Citizens need to have confidence in the workings of AI and decisions must be identifiable and decision making processes explicable. The systems must be designed with access to remedy in mind, should any problems arise, for example, with regards to fairness of decisions made.

In terms of trust in the public sector, Finland is one of the strongest in the world and this forms the basis for usage of AI. There is a substantive dimension to fairness, where benefits and costs are justly distributed between citizens, businesses, NGOs and the state. Justice is ultimately built on trust.

The principle of explicability and accountability

Automatic decision-making does not remove the responsibility of the decision-maker and must not reduce transparency. People must be able to get acquainted to, in an understandable form, with the reasons behind the decision made by artificial intelligence. Artificial intelligence is able to develop new rules that guide its actions - which may be ethically sustainable or unsustainable - in order to achieve the goals set for it or to solve problems.

The realization of consumer protection, legal protection and non-discrimination presupposes that the subject of automatic decision-making has access to remedy against unjust decisions and to influence decisions concerning him or herself in the future. Therefore, automatic decisions must be able to be explained to those directly or indirectly affected, and the individual must normally have the ability to challenge and appeal a decision made by artificial intelligence. An erroneous decision cannot be properly challenged without an explanation regarding the background of the decision and a clear responsible party that must be human, not artificial intelligence.

Next steps

- Finland has a great opportunity to benefit from artificial intelligence. The starting point must be maximization of benefits and minimization of risks. This requires smart regulation.
- Artificial intelligence is constantly evolving and therefore any regulation must be able to evolve over time. It is important for Finland's approach to be aligned with the European Union's, while actively influencing it.
- In order to achieve smart regulation that both encourages the use of artificial intelligence and is grounded in solid ethical principles, close cooperation between the public and private sectors is essential. Compared to many other countries, Finland has a low threshold for co-operation between organizations. Finland should build on its strength when considering smart regulation of artificial intelligence.
- The use of self-learning AI in the public sector can be foreseen and legislation should catch up to this development. Alongside the ongoing regulatory initiative on automated

decision-making, a recommendation on the use of machine-learning systems in public administration should be prepared. The ongoing preparation of general legislation for the administration of automatic decision-making meets current needs and, for the sake of simplicity, only applies to rule-based (non-learning) systems. In order to avoid problems with regard to the use of artificial intelligence, we must establish a solid basis for the use of artificial intelligence.

- It is advisable to take a risk-based approach to any regulation of artificial intelligence, with stricter requirements for higher-risk applications such as defense or healthcare. However, the ethical principles described above apply to sectors and applications and form the ethical basis for the regulation of artificial intelligence.