

Statement

The Influence of Narrow Artificial Intelligence on the Achievement of Social Development Goals. Positive and Negative Perspectives

by Associate Professor Dr. Mariana Todorova,
representing the Bulgarian Academy of Sciences

Before considering the impact of Artificial intelligence on the UN's development goals, it is necessary to provide a working definition of currently available technology, which is “narrow artificial intelligence”. It is so called because it is designed to address limited, single tasks. Many of the currently functioning artificial intelligence systems are narrow artificial intelligence that fulfills clearly defined goals. It is a technology that allows high-performance systems to replicate and even surpass human capabilities in terms of assigned tasks. Any software that uses advances such as: data mining, machine learning, pattern recognition, and natural language processing to perform simple solutions autonomously can be perceived as narrow artificial intelligence. We must always keep in mind, however, that artificial intelligence will evolve and could (self)emerge as “artificial general intelligence”. It would describe systems with understanding and cognitive abilities that make it indistinguishable from humans, although speed and ability of data processing will be much faster and with incomparable volume and capacity. Such artificial intelligence will make systematic summaries, reason, and learn from experience as it accomplishes goals. But even if it remains only at its current level, artificial narrow intelligence can affect any of the 17 goals.

With regard to Goal 1: "No poverty", narrow artificial intelligence can participate in smart solutions such as building "smart countries", "smart cities", "smart agriculture" that effectively manage all available resources - material and human, so to significantly reduce poverty. At the same time, robotics, automation and the entry of artificial intelligence into the labor market and the transformation of occupations can take many jobs and lead to inequalities and poverty of a new type and to the search for income opportunities that are not generated by employment. In relation to Goal 3: "Good health and well-being", we can think of many platforms based on AI, which, following various indicators, through the so-called “wearables”, mobile applications or "smart mirrors" analyze breath, sweat, blood pressure and heart rate and could diagnose over 300 diseases, even without verifying them with a human doctor. In very poor countries, this is a quick and cheap way to quality health care, which, although deficient, is better than no health

system at all. The so-called devices “insideables” will be able to perform "surveillance under the skin", according to Yuval Harari (in “Homo Deus. A Brief History of Tomorrow”) . In the distant future, people will be genetically profiled, and this information can be used by future employers, social and health funds as a certificate of “fitness”. Then, the legitimate pressure could be the forced imposition of human enhancement through the implementation of multiple technologies. Such technological solutions could lead to a new type of discrimination; the conversion of classes into races, that is, material well-being to automatically ensure human improvement, and so on.

If we discuss Goals 4 and 5, in a joint perspective we can say that the technological unemployment will seriously affect the next decade. The profile of the professions that AI will affect - from the low-skilled (supplier, security guard, pharmacist, office assistant) to those requiring good education such as lawyers, doctors, there is no clear gender difference. But women will be affected by their smaller skills in the STEM sector, that is, in highly skilled occupations that will not disappear, but will be significantly transformed by AI. Women will have difficulty when professions begin to be algorithmized and transformed and should be prepared for that. Unfortunately, education systems are not adapted to these upcoming changes. With regard to Goal 16, if we specifically discuss “justice” as an important case, we can draw attention to the fact that AI is already used for legal due diligence, conducting research and processing the data obtained from it, valuing working hours, etc. Estonia is also considering the introduction of the first artificial intelligence judge (who will "judge" only for small claims under 7 thousand Euros. Here, AI comes to the aid of objective and independent legal discussion, but at the same time software is deprived of the ability to comprehensively analyze the rich human communication and empathy.

These few examples, concerning some of the SDGs, only show that technology and AI in particular would provide many of the solutions sought, but at the same time would create problems and challenges of a new type that we have not encountered so far and we must be especially careful about the balance between the benefits and harms of them.