

Societal intelligence

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Societal Intelligence image | Image for Societal Intelligence cover of Artificial Intelligence in Society

Seventy years ago, scientist Alan Turing philosophically asked whether machines could think. Coined in 1956, the terms artificial intelligence and AI are now everywhere. Since 2011, breakthroughs in "machine learning"–an AI subset that uses a statistical approach–has dramatically improved the ability of machines to make predictions. A machine learning technique called "neural networks", as well as large datasets and computing power, are fueling AI's rapid expansion.

This expansion gives rise to all sorts of (mis)interpretations, hopes and fears. Can AI improve the likes of well-being, productivity or the environment? Or is it a vehicle for inequality and power struggles of the future?

This OECD report sets out to help us build a clearer understanding of AI for society in the present and near term.

First, it clarifies what AI is and proposes a taxonomy to help policy makers better understand AI trends and issues. It then examines the AI landscape, showing how it is transforming societies and economies. In 2016 alone, between US\$26 and 39 billion were invested in AI around the world.

The report explores ten areas where AI applications are blooming: transport, agriculture, finance, marketing and advertising, science, healthcare, criminal justice, security, the public sector, as well as augmented and virtual reality. For instance, AI applications in agriculture help monitor crop and soil health to strengthen yields.

Yet, as AI applications are adopted worldwide, their use raises challenges related to human values, fairness, human determination, privacy, safety and accountability. No one has all the answers to these challenges. We need international co-operation and responses from across society to harness AI and make sure it is used for the wider good.

This report draws on the work of an AI experts' group formed in 2018 to scope principles to facilitate innovation, adoption and trust in AI. Their debates inspired the OECD Principles on Artificial Intelligence, adopted in May 2019 (see Recommendation of the Council on Artificial Intelligence).

The report is a timely contribution to inform and improve policy as AI's impacts permeate our societies in ever more diverse, promising and concerning ways.

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References

OECD (2019), Artificial Intelligence in Society, OECD Publishing, Paris. https://doi.org/10.1787/eedfee77-en http://dx.doi.org/10.1787/eedfee77