

Foreword

This book aims to help build a shared understanding of artificial intelligence (AI) in the present and near term. The book maps the economic and social impacts of AI technologies and applications and their policy implications, presenting evidence and policy options. It is also intended to help co-ordination and consistency with discussions in other international fora, notably the G7, the G20, the European Union and the United Nations.

The book builds on the OECD October 2017 Conference “AI: Intelligent Machines, Smart Policies” (<http://oe.cd/ai2017>); on the activities and discussions of the AI Group of experts at the OECD (AIGO) from September 2018 through February 2019; and on the OECD *Recommendation of the Council on Artificial Intelligence*. In turn, it has contributed to the OECD Going Digital project and the OECD’s publication *Going Digital: Shaping Policies, Improving Lives*.

Chapter 1, “The AI technical landscape”, provides a historical overview of AI’s evolution from the development of symbolic AI in the 1950’s to recent achievements in machine learning. It presents the work of the OECD’s AI Group of Experts (AIGO) to describe AI systems – that predict, recommend or decide an outcome to influence the environment – and their lifecycle. The chapter also proposes a research taxonomy to help policy makers understand AI trends and identify policy issues.

Chapter 2, “The AI economic landscape”, discusses AI’s role as a new general-purpose technology that can lower the cost of prediction and enable better decisions. Complementary investments in data, skills and digitalised workflows are required, as is the capacity to adapt organisational processes. The chapter also reviews trends in private equity investment in AI start-ups.

Chapter 3, “AI applications”, considers ten areas that are experiencing rapid uptake of AI technologies – transport, agriculture, finance, marketing and advertising, science, health, criminal justice, security, the public sector and augmented/virtual reality. Benefits of AI use in these areas include improving the efficiency of decision making, saving costs and enabling better resource allocation.

Chapter 4, “Public policy considerations”, reviews salient policy issues that accompany the diffusion of AI. The chapter supports the OECD AI Principles adopted in May 2019, first in terms of values: inclusive growth, sustainable development and well-being; human-centred values and fairness; transparency and explainability; robustness, security and safety; and accountability. Secondly, it outlines national policies to promote trustworthy AI systems: investing in responsible AI research and development; fostering a digital ecosystem for AI; shaping an enabling policy environment for AI; preparing people for job transformation and building skills; and measuring progress.

Chapter 5, “AI policies and initiatives”, illustrates the growing importance of AI in the policy agendas of stakeholders at both national and international levels. All stakeholder groups – governments and inter-governmental organisations, as well as companies, technical organisations, academia, civil society and trade unions – are actively engaged in discussions on how to steer AI development and deployment to serve all of society.

This book was declassified by the OECD Committee on Digital Economy Policy (CDEP) on 10 April 2019 by written procedure and prepared for publication by the OECD Secretariat.



From:
Artificial Intelligence in Society

Access the complete publication at:

<https://doi.org/10.1787/eedfee77-en>

Please cite this chapter as:

OECD (2019), "Foreword", in *Artificial Intelligence in Society*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/eee7181e-en>

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to rights@oecd.org. Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at info@copyright.com or the Centre français d'exploitation du droit de copie (CFC) at contact@cfcopies.com.