

Norwegian Ministry of Local Government and Modernisation

Strategy

National Strategy for Artificial Intelligence



Foreword



It is difficult to predict the future, but we know that Norway will be affected by the age wave, climate change and increasing globalisation, and that in the coming years we must work smarter and more efficiently to remain competitive and maintain the same level of welfare. Digitalisation and new technologies are the key to achieving this, and artificial intelligence will be a vital component.

Artificial intelligence represents vast opportunities for us as individuals, for business and industry, and for the public sector. If used in the right way, technology can contribute to achieving the Sustainable Development Goals – not just in Norway, but globally.

There are many good examples of AI in use in Norway, and in the coming years we will likely see many more, especially in business and industry and the public sector. While the United States and China have come far with consumer-oriented applications, our strength lies in the fact that our industry, business and public sector are more technologically advanced and digitalised than in most other countries. Norway is world-leading in the process industry, green shipping, aquaculture and petroleum activities. We have one of the most digitalised public sectors in the world. We must continue to build on these advantages in our development and use of artificial intelligence.

Norwegian society is characterised by trust and respect for fundamental values such as human rights and privacy. This is something we perhaps take for granted in Norway, but leading the way in developing human-friendly and trustworthy artificial intelligence may prove a key advantage in today's global competition.

There is no denying the fact that AI also presents some difficult questions. Who is responsible for the consequences of a decision that is made by AI? What happens when autonomous systems make decisions which we disagree with and which, in a worst-case scenario, cause harm? And how do we make sure that the technology does not intentionally or unintentionally perpetuate and reinforce discrimination and prejudice? When faced with dilemmas like these, it can be useful to have some fundamental principles to turn to for guidance: transparency, explainability and cautious testing. These principles must also be applied when we develop and use solutions built on artificial intelligence.

While working on this strategy I have had opportunities to meet people who work on artificial intelligence in academia, business and industry, and the public sector. I have had meetings with employer and employee organisations who see that artificial intelligence will impact the labour market in the time ahead. An overview of most of these meetings is available at www.regjeringen.no/ki-strategi, along with all the written input I received. I would like to thank everyone who shared their engagement and insights.

I hope this strategy can serve as a framework for both public and private entities seeking to develop and use artificial intelligence. Together we will explore the potential that lies in this exciting technology!

Vikolui 8

Nikolai Astrup Minister of Digitalisation

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Artificial intelligence will not only enable us to perform tasks in increasingly better ways; it will also enable us to perform them in completely new ways. The Government wants Norway to take the lead in developing and using AI that respects individuals' rights and freedoms.

Introduction and summary

Artificial intelligence (AI) represents vast opportunities for us as individuals and for society at large. AI can lead to new, more effective business models and to effective, user-centric services in the public sector.

Norway is well positioned for succeeding with artificial intelligence. We have:

- a high level of public trust in both the business and public sectors
- a population and business sector that are digitally competent
- An excellent infrastructure and high-quality registry data that span over many decades
- well developed e-governance and public agencies that have come a long way with digitalisation and that have the capacity and expertise to experiment with new technologies
- tripartite cooperation between employers, unions and government, which facilitates cooperation when restructuring is necessary

Technology will not only enable us to perform tasks in increasingly better ways; it will also enable us to perform them in completely new ways. But development and use of AI can also present challenges.

Norwegian society is characterised by trust and respect for fundamental values such as human rights and privacy. The Government wants Norway to lead the way in