OPPORTUNITY

UNCERTAINTIES

Technology, Values

MEGATRENDS

Boundless, Multidimensional data

TRENDS

Advanced connectivity Artificial Intelligence Human–Machine International Collaboration Mobilising Innovation

SECTORS IMPACTED

Chemicals & Petrochemicals Communication Technologies & Systems Consumer Goods, Services & Retail Cyber & Information Security Data Science, AI & Machine Learning **Digital Goods & Services** Education **Financial Services & Investment** Government Services Health & Healthcare Immersive Technologies Insurance & Reinsurance Logistics, Shipping & Freight Manufacturing Materials & Biotechnology Art, Media & Entertainment Professional Services Utilities



SCOPE (WITHIN REACH

What if (part) of artificial intelligence (AI) was a public good?

'PUBLIC' AI

A framework and toolkit for AI as a public good that specifically addresses the challenges of sustainability and on-going performance applied to specific use cases related to global challenges from climate and food security to healthcare and sustainable development.





WHY IT MATTERS TODAY

United States

The CREATE AI Act aims to establish a national online source for AI research accessible to academics, researchers, and start-ups

Sweden

is funding the development of a large language model in Swedish and other major languages in the Nordic region

UAE

The Technology Innovation Institute launched Falcon, an open-source generative large language model for business and research use Al is on its way to becoming ubiquitous in daily life.⁵⁴⁶ Al can enable automated preparedness and relief planning⁵⁴⁷ and has already provided innovations in predictive healthcare and adaptive education.⁵⁴⁸ Al can also discover new materials, supercharging technological breakthroughs.⁵⁴⁹

By 2030, Al is projected to add as much as \$15.7 trillion to the world economy,⁵⁵⁰ surpassing the combined current economic output of China and India, with 42% coming from enhanced productivity and 58% from consumer advantages.⁵⁵¹ However, technological advances in the past have had uneven impacts on the economy and the same is the case with Al. From concerns related to potential job losses and implications for workers' rights,⁵⁵² making Al's benefits universally available is challenging, particularly because of uneven connectivity and digital literacy.⁵⁵³ In addition, there is a shortage of skilled talent and issues related to funding, cybersecurity, regulation, compliance, and ethics.⁵⁵⁴

Public goods are typically funded by governments and are generally not driven by profit motives.⁵⁵⁵ A public good is non-exclusionary and its use by some does not diminish its availability to others.⁵⁵⁶ The broader internet and generative AI, for example, can only partially be considered as public goods because they can be exclusive and their benefits may be limited by access and connectivity. Cross-sectoral international partnerships such as AI for Good⁵⁵⁷ try to ensure that access to AI is ubiquitous worldwide, reducing digital divides, sparking innovative solutions to local challenges, and contributing to the social progress of humanity with access to AI offline.⁵⁵⁸

In 2022, Google's philanthropy arm committed to the UN's Sustainable Development Goals (SDGs) of the United Nations, inviting Al innovators and funding 15 projects, each receiving up to \$3 million.⁵⁵⁹ Google announced a \$25 million grant in 2023, focusing on Al's social impact.⁵⁶⁰ These projects include innovative Al applications such as a machine learning toolkit for rural midwives, satellite imagery analysis for wetland knowledge, and an Al learning coach for children in India.⁵⁶¹

In the United States, the CREATE AI Act has been introduced to establish a national online source for AI research accessible to academics, researchers, and start-ups⁵⁶². Sweden is funding the development of a large language model in Swedish and other major languages in the Nordic region.⁵⁶³ And in the UAE, the Technology Innovation Institute (TII) launched Falcon, an open-source generative large language model for business and research use.⁵⁶⁴

OPPORTUNITY

While there are efforts to deploy Al 'for good',⁵⁶⁵ Al is generally not –at least not yet – a good candidate for a public good because of broader implications. These include significant ongoing funding required for managing its diminishing effectiveness through ongoing tuning and support. Given Al's trajectory and expected impact, however, it is important to use it, where relevant, for the public good.

An alternative to making all of AI a public good would be to design a framework and toolkit for AI as a public good⁵⁶⁶ that specifically deals with the challenges of sustainability and on-going performance that can be replicated for specific use cases. Such an approach would help harness AI's potential, along with a creative approach to funding and support as a public good. Use cases include climate action, food security, and health⁵⁶⁷ to maximise its public benefit when and if needed.

BENEFITS

With some aspects considered a public good, AI can enhance the everyday professional and personal lives of people around the world. RISKS

Rising costs and funding challenges make AI – as a public good – unsustainable. Intended goals are unmet because of ongoing access inequalities, infrastructure issues, and a persistent digital divide.

By 2030, Al is projected to add as much as

\$15.7 trillion



to the world economy, surpassing the combined current economic output of China and India

The Global 50 (2024)