

Gener(AI)ting the future

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TOWARDS AN EQUITABLE GLOBAL DIGITAL TRANSFORMATION



Audrey Plonk is responsible for the OECD's portfolio of work on digital policy, which includes data governance and data flows, artificial intelligence and emerging technologies, security and safety online, and connectivity and infrastructure. She plays a leading role in overseeing and advancing evidence-based policy analysis on the drivers, opportunities, and challenges of digital transformation in collaboration with policy communities and stakeholders. She also supports and represents the OECD in related international initiatives.



THE ROLE OF GENERATIVE AI

What role do you see for generative AI in the economy?

Venture capital (VC) investments in generative AI start-ups have boomed since 2022. In the first half of 2023 alone, the estimated global VC investment in generative AI was \$12 billion. That is a big economic shift.

The rapid development of generative AI has significant implications for the economy. This technology is already being used to create individualized content at scale, automate tasks, and improve productivity in key sectors, including education, healthcare, arts, and software development. At the same time, it has put a strain on resources, increasing demand for high-end computing resources to build and train models.

Generative AI also has the potential to change labor markets. We are still working out how best to use it. It's a supplement to human experience and knowledge, not a replacement thereof. Practical policy solutions, including upskilling and reskilling, will be important to leverage

the benefits of this technology while mitigating its risks. Despite some initial backlash, I see generative AI becoming part of school and university curricula. Our report on *Initial policy considerations* for generative artificial intelligence covers some of the transformative impacts of generative AI across sectors and includes recommendations to support policymakers in addressing them.²



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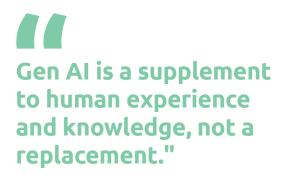
OECD.AI Policy Observatory (2024), using data from Preqin. Available at: www.oecd.ai/en/data?selectedArea=investments-in-ai-and-data.

Lorenz, P., K. Perset and J. Berryhill (2023), "Initial policy considerations for generative artificial intelligence", OECD Artificial Intelligence Papers, No. 1, OECD Publishing, Paris, https://doi.org/10.1787/fae2d1e6-en.

Con ver sa tions

Executive Conversations

On the sustainability front, as a general-purpose technology with applications across sectors, AI can create efficiencies that decrease environmental impacts and lower emissions. At the same time, the training and use of large-scale AI systems also require massive amounts of "AI computing," including processing power, memory, networking, storage, and other resources. The environmental impacts of AI compute and applications should be further measured and better understood to fully grasp their net effects on the economy and the planet. Our report on *Measuring the environmental impacts of artificial intelligence compute and applications* provides a comprehensive overview of the issue at hand, including policy priorities going forward. ³



Could you elaborate on how some countries are harnessing generative AI while others face challenges?

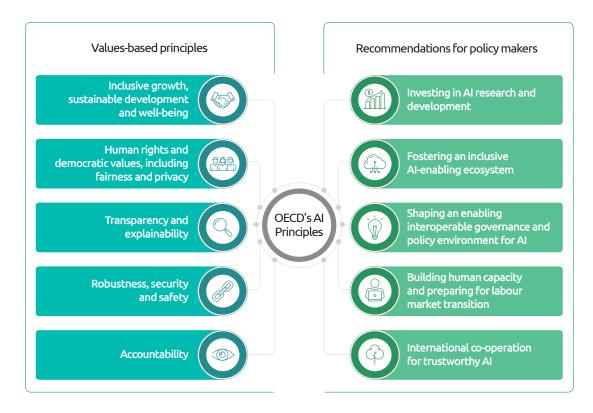
Open data policy is likely to have a big impact on generative AI. There is a big push, including in OECD member countries, for governments to democratize access to high-quality data to build algorithmic models.

There is an increased focus on investments in research in new technologies, particularly AI. Governments are rethinking resource allocation and are putting incentives in place. They are increasingly focused on the domestic ability to build, use, and diffuse AI. They aim to create efficient businesses, supported by innovative product solutions and enhanced problem-solving capabilities. As a result, there are many dynamic startup communities in the AI space.

There needs to be a collective, coordinated global approach to standardization and policy alignment around AI development, deployment, and governance. The OECD AI Principles are a key standard in this area, guiding AI actors in their efforts to develop trustworthy AI, and promoting interoperability in AI policy frameworks.

 OECD (2022), "Measuring the environmental impacts of artificial intelligence compute and applications: The AI footprint", OECD Digital Economy Papers, No. 341, OECD Publishing, Paris, https://doi.org/10.1787/7babf571-en.





Source: OECD - https://oecd.ai/en/ai-principles





ALLEVIATING ETHICAL CONCERNS

What are your thoughts on copyright issues and misuse of personal data with implementation of generative AI?

The discussion around copyright is extremely important but also difficult. We see countries taking different approaches as they navigate the trade-offs between enabling access to training data to spur innovation, and minimizing the risks of harm to content owners. For example, Japan has removed all copyright protections from generative AI training, which is an interesting approach. Meanwhile, in the US, several generative AI lawsuits are underway. The concept of "fair use" is likely to be a prominent topic of discussion going forward.

In this context, data privacy considerations are a key aspect that organizations and individuals are exploring extensively. There is a lot of work to be done to improve transparency and determine what data sources should be used to train AI models. It is essential to put the appropriate safeguards in place, including data protection considerations. In the coming months, we expect an OECD report on AI and intellectual property rights, focusing on policy considerations and potential policy solutions related to copyright and data scraping challenges.



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A NEED FOR MORE INCLUSIVE ACCESS TO TECHNOLOGIES

How realistic is the goal of an equitable global digital transformation?

Promoting digital inclusion across countries and population groups, including genders, age groups, and income levels, is essential to ensure a human-centric digital transformation. Digitalization can help bridge digital divides, but it can also exacerbate existing inequalities.

To use gender as an example: in 2023, more than twice as many men than women at the OECD, on average, wrote a computer code.⁴ More broadly, girls show lower enrollment rates in disciplines crucial for success in a digital landscape, like STEM and ICT. This has downstream effects on the participation of women in scientific discovery. For instance, only 8% of AI journal articles in 2023 were written exclusively by women, compared with almost half (41%) written exclusively by men.⁵

To foster an inclusive and sustainable digital economy, individuals of all backgrounds need to be well-equipped to make the most of digital technologies. This includes, for instance, having access to high-speed, high-quality, and affordable connectivity, as well as having the necessary skills to reap the benefits of digital transformation. Policies that promote such initiatives, as well as positive multistakeholder collaboration, are necessary to address inequalities in the digital age.





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- 4. OECD Going Digital Toolkit
- "Live Data from OECD.AI OECD.AI." 2024. Oecd.ai. 2024. https://oecd.ai/en/data?selectedArea=ai-research&selectedVisualization=ai-research-publications-exclusively-by-gender.





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