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GREEN DEAL, SUSTAINABLE TRADE AND TURKIYE'S INTEGRATION

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IS AI SERVING HUMANITY OR THE PLANET?

Prof. Dr. Rana ATABAY KUŞÇU

Artificial Intelligence (AI) is reshaping our world at an unprecedented pace, touching everything from how we shop to how we receive medical care. But as we marvel at these advancements, a pressing question emerges: Is AI being developed with humans at the center, or does it consider the broader ecological system?

Historically, technology has been anthropocentric - designed to meet human needs and desires. AI is no exception. From personalized recommendations on streaming platforms to advanced diagnostic tools in healthcare, AI primarily aims to enhance human experiences and solve human-centric problems. Companies invest heavily in AI to improve user satisfaction, boost profits, and stay ahead in competitive markets.

Yet, there's a growing recognition of AI's environmental impact. Training large AI models consumes vast amounts of energy, contributing to carbon emissions. Some studies suggest that training a single AI model can emit as much carbon as five cars over their lifetimes. This realization is prompting a shift towards developing more energy-efficient algorithms and sustainable computing practices.

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On the flip side, AI holds immense potential for promoting ecological well-being. Applications in environmental monitoring, wildlife conservation, and climate modeling are rising. AI-powered systems can predict climate change impacts, aiding in mitigation efforts that benefit both humans and the environment. AI enables precision farming in agriculture, reducing resource consumption and minimizing environmental footprints.

This intersection of AI and sustainability raises the concept of ecocentrism—the idea that all ecological entities have intrinsic value. While many environmental AI applications still have underlying human motives (like preserving resources for future human use), there's a subtle shift toward acknowledging nature's intrinsic worth. AI is beginning to support initiatives prioritizing ecological health, sometimes independent of direct human benefit.

Ethical guidelines in AI are also evolving. While initial frameworks focused on human rights and fairness, there's a growing advocacy for incorporating environmental sustainability. The AI community is increasingly aware of the need to balance technological advancement with environmental stewardship.

So, is AI anthropocentric or eco-centric? Currently, it's predominantly anthropocentric. Most AI development revolves around enhancing human life, often overlooking environmental costs. However, the tides are slowly turning. The integration of sustainability into AI signifies a budding eco-centric perspective, recognizing that human well-being is intertwined with the health of our planet.

A holistic approach is essential for AI to truly serve humanity and the environment. This means reimagining AI development to incorporate sustainability at every stage, from designing energy-efficient algorithms to applying AI to honor the intrinsic value of all ecological entities.

By embracing this dual focus, AI can evolve from a tool that solely serves human interests to one that fosters a harmonious relationship between people and the planet. After all, the future of AI doesn't just belong to us—it belongs to the Earth we all share.



A Sustainable Future with Artificial Intelligence

Prof. Dr. Gökhan SİLAHTAROĞLU

Dean of Business School, İstanbul Medipol University



It is highly likely that the future will be shaped by a world focused on sustainability, where artificial intelligence and robots are fully integrated into our lives, transforming the workforce. This world may be a place where some elite people work only in certain areas, while the rest lead a prosperous life, where artificial intelligence takes over all the heavy and complex work. However, the sustainability of this utopia depends on a strong state authority. With a weak administration, this order can quickly descend into chaos. Whether AI will be a boon or a threat to humanity depends on how societal structures are managed.

Artificial intelligence is a powerful tool for humanity. As a technology that makes life easier and undertakes complex tasks, it is at the service of people rather than replacing them. Artificial intelligence will ease the burden of people in jobs where they previously spent their time, allowing them to engage in more creative and meaningful work. For example, when robots are working in factories or service sectors, humans will be involved in managing or developing these systems. Thus, human labor will not be spent on less strenuous work, but the sustainability of this order seems to depend on a strong management system.

In this world, people can freely use all the possibilities offered by nature, while natural resources will be managed and recycled more effectively with the efficiency brought by artificial intelligence. For example, the scrap of a degraded device will be recycled and reusable by robots without human touch. People will lead a sustainable life in a world where even the wastes of the resources they consume in daily life are reintroduced to society. This will also contribute to the establishment of an order that does not harm nature and does not waste resources. That is, artificial intelligence can optimize not only the workforce, but also the use of natural resources.



As a more specific example, people no longer use their cars, nor will they do the washing themselves. AI-powered systems will take care of the maintenance of vehicles; But beyond that, the water used after the car is washed will be filtered by artificial intelligence and collected to be used for cleaning purposes again. This process is a system that will make it possible to use resources repeatedly while minimizing the effects on nature. This example is an indication of how, in the future, AI can not only facilitate human work, but also ensure environmental sustainability.

However, the continuity of this seemingly flawless order depends on a strong state authority. The state must ensure that these resources are distributed fairly and ensure that artificial intelligence and robotics are used equally by all segments of society. A strong state can prevent technology from being concentrated in the hands of only a certain group and thus prevent social inequalities. If state authority is weakened, this order can quickly turn into a dystopia. While the rich can benefit from the opportunities offered by artificial intelligence without limits, the poor can stay out of this order. This, in turn, leads to social unrest and even chaos.

Apart from that, it is certain that using AI in the future will become mandatory for both individuals and businesses. Individuals who cannot keep up with technological developments and do not learn the use of artificial intelligence will be quickly eliminated from the business world. Artificial intelligence systems, which will take over the bulk of the workforce, will help businesses become more efficient and competitive. However, people who do not have the knowledge to manage these systems will be left behind in the job market. In short, artificial intelligence will be a differentiating factor in the labor market in the short term; Those who can use technology will survive, and those who cannot use it will be pushed out of the system.

Artificial intelligence is not a threat, but a powerful tool for humanity. However, seizing the opportunities offered by this tool and benefiting from it depends on people's ability to adapt to technology. A strong state structure regulates the distribution of wealth fairly, ensuring that these technologies are used for the benefit of all. A weak government can undermine this order and plunge society into chaos. As a final word, this world of advanced technology offered by artificial intelligence will only be sustainable with strong governance and social justice.



CALL FOR PROPOSALS

EU-Türkiye Climate Change Grant Programme (EU-TR CCGP)

The call for proposals for the “EU-Turkey Climate Change Grant Programme” to be implemented within the scope of the IPA III period “EU Partnership for Local Climate Action in Turkey Project”, whose beneficiary is the Climate Change Presidency, has been published. The grant program, which will be implemented with the support of the United Nations Development Programme (UNDP), aims to improve and increase the planning, implementation and implementation of climate change adaptation and mitigation solutions at the local level.

The total budget of the programme is 14,706,000 Euros. Within the scope of the program, a minimum of 250 thousand and a maximum of 750 thousand Euros of grant support will be provided to projects jointly developed by municipalities, local governments, universities, research institutions/centers and development agencies, civil society organizations, non-profit unions, cooperatives, chambers and professional organizations.

Project applications must be submitted to the Ministry of Environment, Urbanization and Climate Change, General Directorate of EU and Foreign Relations, Department of EU Investments by 15:30 on December 16, 2024.



[For More Information](#)



Human Rights and artificial intelligence (CDDH-IA)



AI systems hold the promise of advancing the protection of human rights, reinforcing democratic values, and upholding the rule of law. Yet, they also carry considerable risks, including the potential for discrimination, exacerbation of gender inequality, interference with democratic processes, and threats to personal dignity and autonomy. Additionally, AI technologies may be misused by governments for oppressive purposes, posing a risk of violating international human rights standards.

Recognizing these dual impacts, the Council of Europe has consistently addressed the ethical and legal issues associated with digital and AI technologies. The Council remains committed to ensuring that the development and use of AI are consistent with fundamental human rights principles.

To support this aim, the Committee of Ministers has tasked the Steering Committee for Human Rights (CDDH) with further exploring these critical issues. In response, the CDDH has formed the Drafting Group on Human Rights and Artificial Intelligence (CDDH-IA), specifically dedicated to creating a comprehensive Handbook on Human Rights and AI. This forthcoming Handbook will serve as an essential resource, providing actionable guidelines for safeguarding human rights in the AI era. By offering practical, clear advice, it will address the complex overlap between AI applications and human rights obligations. The CDDH anticipates completing and adopting the Handbook by late 2025.

[For more detail](#)



The European Artificial Intelligence Act (AI Act)

The European Union Artificial Intelligence Act (AI Act) entered into force on August 1, 2024. Aiming to promote the responsible development and application of AI across the EU, the law was first proposed by the European Commission in April 2021 and adopted by the European Parliament and the Council in December 2023. The AI Act provides clear obligations and requirements for developers and users while taking measures against potential risks to citizens' health, safety and fundamental rights and alleviating administrative and financial burdens for businesses.



This regulation establishes a uniform framework for the implementation of AI across EU countries, built on a risk-based and forward-looking definition:

Minimal risk: There are no obligations for low-risk systems, such as spam filters or AI-enabled video games, but businesses can voluntarily comply with additional ethical rules for these systems.

Special transparency risk: Systems that interact with users, such as chatbots, must inform users that they are communicating with a machine. Similarly, certain AI-enabled content must be labeled.

High risk: High-risk applications, such as medical software or AI systems used in recruitment processes, must comply with strict requirements such as risk reduction systems, high quality of data sets, user information and human oversight.

Unacceptable risk: Systems that allow social scoring by governments or companies are prohibited because they threaten the fundamental rights of individuals.

The EU aims to be a global leader in security in AI. By creating a strong regulatory framework based on human rights and fundamental values, the aim is to develop an AI ecosystem that benefits all segments. In this framework, the quality of healthcare, safer and more environmentally friendly transportation, and improved public services for citizens are highlighted. Innovative products and services are being developed in the areas of energy, security and health, while more efficient production processes and increased productivity are envisaged for businesses. In addition, governments are expected to benefit from more sustainable and cost-effective services in areas such as transportation, energy and waste management. The Commission recently launched a consultation process on the development of a Code of Practice for providers of general-purpose artificial intelligence (GPAI) models. This Code, envisaged under the AI Act, will cover critical areas such as transparency, copyright regulations and risk management. EU-based GPAI providers, businesses, civil society representatives, rights holders and academic experts are invited to submit their views and findings to contribute to the Commission's draft Code of Practice on GPAI models. The provisions on GPAI will be implemented after a 12-month transition period. The Commission aims to complete the Code of Practice by April 2025. In addition, feedback from this consultation process will inform the work of the Artificial Intelligence Office, which will ensure the implementation and monitoring of the AI Act rules on GPAI.

[For more detail](#)



AI & Sustainable Trade

AI technology has significant potential in the field of sustainability, and this potential is increasingly attracting in many industries. Artificial intelligence algorithms, big data analytics, and machine learning applications can facilitate the achievement of environmental, social, and economic sustainability goals. The use of artificial intelligence, especially in sectors such as energy, agriculture, transportation and waste management, contributes to increasing resource efficiency, reducing carbon emissions and minimizing environmental impacts.

The possibilities offered by artificial intelligence in terms of sustainability are wide-ranging and this technology is used effectively in new sustainable applications every day. The impact of artificial intelligence on sustainability practices ensures that it has an increasing role in trade and industrial policies. Artificial intelligence makes critical contributions to sustainable trade in areas such as reducing environmental impact, improving supply chains, and compliance with sustainability standards. As in many other areas, artificial intelligence, which has the capacity to offer innovative opportunities to achieve sustainable trade targets, contributes to the development of more transparent and environmentally friendly processes in global trade, supporting the transformation of global trade into an environmentally friendly structure, as well as allowing businesses to maintain and even increase their competitive advantage.

Increasing consumer demand for sustainable products makes it necessary for businesses to develop and transform their product ranges and applications to meet this demand. AI-powered data analytics make it possible to reduce environmental impact by optimizing resource utilization in the trade chain. Big data analytics and machine learning methods can be used to reduce waste and carbon emissions in the supply chain. For example, logistics processes optimized with artificial intelligence make transport routes more efficient, reducing fuel consumption and thus reducing the carbon footprint. This directly contributes to the targets to reduce carbon emissions in global trade. In addition, AI-based applications provide the opportunity to monitor the product life cycle and control the sustainability of processes and products in the supply chain, which also allows sustainable trade standards to be maintained and businesses to optimize costs.

In the field of sustainable trade, the use of AI not only makes business transactions and supply chains more environmentally responsible, but also encourages trade to be conducted in accordance with sustainability principles such as transparency, traceability, and compliance. It is possible that the impact of artificial intelligence technology in this area will become more pronounced, as the widespread adoption of AI-based sustainable trade solutions in order to comply with mandatory standards will be facilitated by many countries strengthening legal regulations soon.

Gülsena SAMSUNLU
Project Team
Medipol Business
School, Research
Assistant





WHAT WE HAVE DONE SO FAR?



On October 10, Istanbul Medipol University hosted an effective event titled **Sustainability 101 Trainings "Artificial intelligence and sustainability in production"**.

Led by **Dr. Adem Kayar**, the event provided a crucial framework for understanding the European Union's sustainability and environmental policies. Resource Management and Optimization, Waste Reduction and Recycling, Less Carbon Emission, Product Life Cycle and Design were discussed at events on these topics.

This event underscored the importance of collaborative efforts in promoting sustainable development and environmental protection within the EU and beyond.



Dear guest Assoc.Prof. Hatice Deniz Genç What is the EU? EU aims? The EU gave information about the goal of becoming the first net zero continent. In the course where the EU's policies to reduce carbon emissions by 55% by 2030 and to become the first carbon neutral continent in 2050 were discussed; EU policies in the fight against climate change and the developments emerging after the United Nations Framework Convention on Climate Change in the EU and the world, which has a large share in global emissions, were evaluated.



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eustrade.medipol.edu.tr



eustrade@medipol.edu.tr