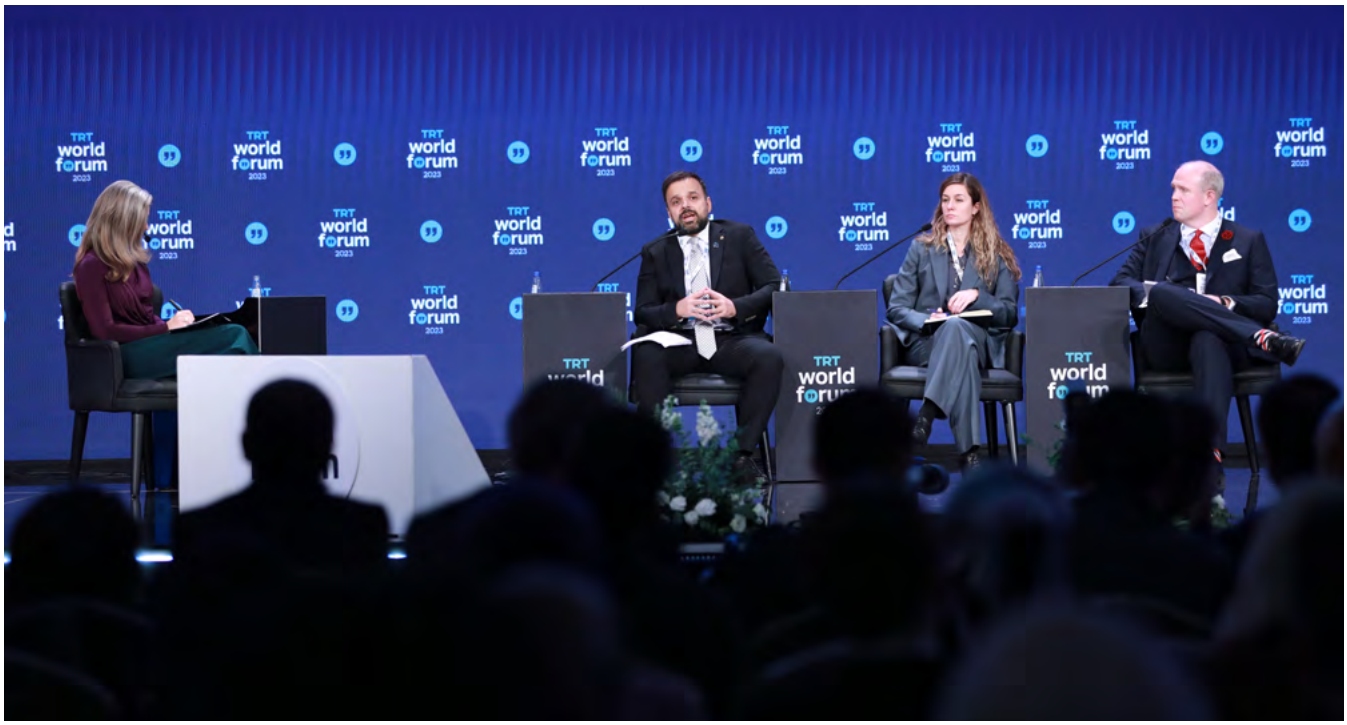
Session 6

All-Knowing AI: Creative Potential or Disruptive Evil?



Moderator

Andrea Sanke, Presenter, TRT World

Keynote Speaker

Mehmet Fath Kacır, Minister of Industry and Technology, Republic of Türkiye

Speakers

Ali Taha Koç, CEO, Turkcell

Kalev Hannes Leetaru, Founder, GDELT Project

Elena Contioso-Fleming, Interim Regional Director South, EIT Digital

Key Takeaways

- Despite the promises of AI, there are significant risks and challenges. These include the spread of misinformation, job displacement, and the potential misuse of AI in warfare and conflict, posing ethical and societal dilemmas.
- The rapid advancement of AI technology outpaces regulatory frameworks, necessitating careful monitoring and governance to mitigate risks such as biassed data and the proliferation of false information.
- There is a substantial digital skills gap across Europe, with less than one-third of citizens possessing skills beyond basic digital literacy. Addressing this gap is crucial to ensure equitable access to opportunities and prevent widening societal disparities.
- Europe excels in AI research but lags behind in private investment and adoption by businesses compared to global competitors. This discrepancy raises concerns about data ownership and power dynamics in the AI landscape.
- While AI offers significant capabilities, it currently lacks genuine reasoning abilities. Human oversight is essential to ensure the accuracy and ethical use of AI-generated content, as blind trust in AI tools poses risks of misinformation and manipulation.

Summary of the Session

The session titled "All-Knowing AI: Creative Potential or Disruptive Evil?" delved into the complex dynamics surrounding the emergence of AI technology, exploring both its promising possibilities and concerning implications.

The dialogue commenced with a fundamental query: whether AI heralds a future of innovation or poses a threat of destruction. Amidst varied perspectives, the moderator raised pertinent questions regarding the integration of AI into society and its regulation. While acknowledging the benefits AI brings to diverse domains, such as enhancing productivity and decision-making, concerns lingered regarding its potential misuse and the challenge of governance lagging behind technological advancements.

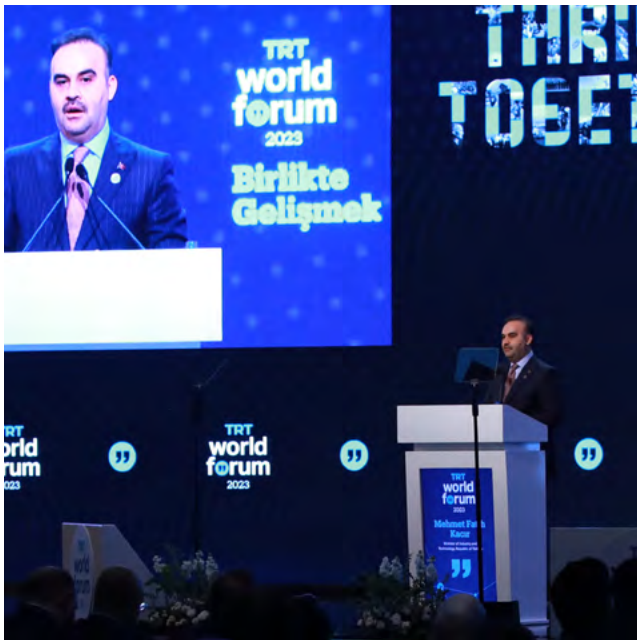
Participants discussed the pervasive issue of misinformation and disinformation amplified by AI, exacerbating societal vulnerabilities and raising questions about safeguarding against manipulation. Governmental response and regulatory frameworks were scrutinised, highlighting the intricate task of balancing innovation with accountability.

Furthermore, deliberations extended to the socioeconomic repercussions of AI adoption, including its impact on employment landscapes and educational paradigms. As AI continues to evolve rapidly, the session underscored the imperative for institutions to adapt swiftly, navigating the transformative landscape whilst mitigating disparities.

Ultimately, the session probed the existential question of whether AI, endowed with superior intelligence, could serve as a bulwark against human fallibility or potentially exacerbate societal divides, leaving the audience pondering the delicate balance between innovation and ethical stewardship in an AI-driven era.

Keynote Speech by Mehmet Fatih Kacır

Minister of Industry and Technology, Republic of Türkiye



The technologies of the future are close at hand. Windows of opportunity that open to completely different worlds, stand before us. In all areas, from social life to business, production models to consumer behaviour, value creation is being reshaped with innovative data-based approaches. Tremendous trends are happening, particularly in digital technologies. One of those fields is undoubtedly artificial intelligence. 65 years ago, when Turkish professor Cahit Arif asked if a machine thought he was also shedding light on today's world. Today, AI forms the core of many smart systems used in all sectors, from communication to aerospace, medicine to defence. With AI, our data lives are becoming easier, faster and more efficient. For example, voice assistants in our smartphones and speech recognition technologies help us manage our daily tasks. Autonomous vehicle guidance systems increase traffic safety, making our travel much more comfortable. In healthcare, AI is making significant contributions to the diagnosis and treatment process. Chatbots can understand the language we use, create explanatory texts, write programs in different programming languages, and even detect errors.

Expectations are quite high for the future. Innovative technologies led by AI will contribute more than $10 trillion to the global economy by 2030, achieving a 14% growth in the global economy. Developed countries are in a race for research and technology development to gain a larger share of this tremendous market. However, along with this growth and potential advantages, it should not be forgotten that AI also harbours vulnerabilities such as ethics, security, reliability and privacy. Biases fuelled by AI can create negative effects on social justice and equality, posing a risk to social peace. Similarly, deepfake technology also carries a significant risk of disinformation. With its ability to produce realistic images and sounds, this technology can shake the foundation of trust in societies. The new questions and challenges brought by AI applications are testing the limits of the current legal framework, especially in terms of data protection, privacy, ethics, responsibility, and security. The rapid development of AI applications requires laws

Innovative technologies led by AI will contribute more than $10 trillion to the global economy by 2030, achieving a 14% growth in the global economy. Developed countries are in a race for research and technology development to gain a larger share of this tremendous market. However, along with this growth and potential advantages, it should not be forgotten that AI also harbours vulnerabilities such as ethics, security, reliability and privacy. Biases fuelled by AI can create negative effects on social justice and equality, posing a risk to social peace.

to be continuously updated and adapted to those near technological advancements.

I would like to remind you of three important observations that I consider significant. AI is not developing in isolation, but rather in conjunction with deep technologies such as quantum, computing and biotechnology. Thus, its current and potential impacts are increasing exponentially. AI development activities are being conducted more by companies focusing on maximising profits, rather than by state or academic actors that bear direct responsibilities towards societies. In this field, where the United States and China are widening the gap with the rest of the world and view it as a new hegemony craze, there is no strong sign of a global consensus framework that limits developers, implementers and products. I think I can summarise the current situation in this matter. With the wider integration of AI and related technologies into our daily lives, a decrease in the need for certain job fields and service sectors is inevitable. The history of technology and industry is filled with countless examples of the drops and emerging new ones. Therefore, rather than resisting technological change, embracing and effectively managing this transformation is a must rather than a choice for our country. This approach is in line with our National Technology Initiative, aiming to increase Türkiye's global competitive power and ensure economic and technological independence.

The rapidly growing volume of data is making supercomputers one of the leading technologies of digital transformation. We are launching our new supercomputer at our national centre, which provides high-performance computing and data storage. We see the emergence of AI Startups in our country as critical for exploring the broad potential offered by AI, and for applying this technology to various industries. Today, we have an entrepreneurship ecosystem that is referred to as the Star of Europe, having produced seven Turkish unicorns we are calling them Turcoins and data obtained in the first three quarters of this year show that AI is the second most funded vertical in our Startup ecosystem, pointing to the great potential of Turkish AI Startups.

With this goal in mind, we have launched our National Artificial Intelligence Strategy in 2021. We have focussed our efforts on creating the necessary research infrastructure and strengthening human capital. We have identified comprehensive policies and projects that will position our country not just as a market for AI technologies and applications, but as their developer and producer. To activate Türkiye's growing AI ecosystem and strengthen collaboration among stakeholders, we have established the AI Institute within TUBITAK. We boost efficiency, increase profitability and elevate quality across various sectors by leveraging AI. We prioritise the widespread use of AI in industry and public institutions in our country and increase the specialised workforce in this field. Under the TUBITAK scholarship and support programs, in the last 21 years, we have supported more than 3700 projects in the field of AI and provided financial assistance of nearly 7 billion TRY to over 1300 individuals. At Techno Fest, the world's largest aerospace and technology festival, we organise competitions in various fields to support our use in working on future technologies. Today, more than 2300 companies at our Techno parks and 200 R&D centres in our country are conducting AI projects. A crucial factor for advancing AI is data and data processing infrastructures.

The rapidly growing volume of data is making supercomputers one of the leading technologies of digital transformation. We are launching our new supercomputer at our national centre, which provides high-performance computing and data storage. We see the emergence of AI Startups in our country as critical for exploring the broad potential offered by AI, and for applying this technology to various industries. Today, we have an entrepreneurship ecosystem that is referred to as the Star of Europe, having produced seven Turkish unicorns we are calling them Turcoins and data obtained in the first three quarters of this year show that AI is the second most funded vertical in our Startup ecosystem, pointing to the great potential of Turkish AI Startups. In addition, we play an active role in international collaborations for the development and responsible use of AI technologies. This year, with our participation in the Digital Europe program, we will provide access to supercomputers and open data spaces. Our country also joined the Global Partnership on Artificial Intelligence last year. As part of our GPI membership, our active participation in international projects conducted in critical areas such as responsible AI, the future of professions, innovation and commercialisation and data governance will help us enhance the positive impacts of those technologies on society. Such collaborations will help us in our efforts to position our country as a centre of innovation and high tech.

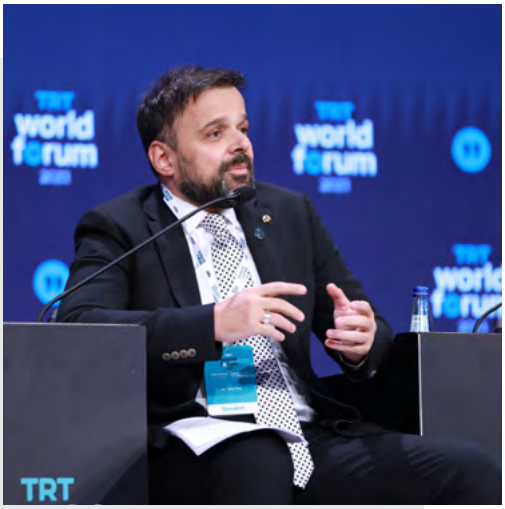
We are seizing the momentum of change and transformation within the digital world ecosystem through AI. We aim to develop and operate AI systems in alignment with our shared values. We contribute to the transformation driven by AI technologies on behalf of humanity and ensure our country benefits from this process. To make the second century of our republic the centre of Türkiye, we will continue to work and strive with all our might in line with our National Technology Initiative goals.

As I conclude my words, I would like to share my final assessment regarding the title of this panel. We are at one of the turning points in world history. We are at a stage where almost none of the actors and elements of the order established after the Second World War are functional. We are at a moment where humanity is making groundbreaking advances in fields such as AI, quantum computing and biotechnology. History shows us numerous examples that technological capabilities lacking in moral norms have only brought disasters to humankind. Even this sentence is insufficient. Perhaps I should have phrased this sentence as follows: The Israeli oppression we witness in Palestine shows us the stark reality of how technological capability without moral norms is destroying humanity again and again, every day, every moment and the lawless world order that allows this crime does not promise a bright future for what is coming next. Our world lacks a system capable of kerbing the profit-driven motives of big giant technology monopoles, as well as restraining those who exploit technological advancements for their distorted ideologies or power-driven goals that could endanger humanity. There is an absence of universal agreement on moral values, a consensus that should be embraced by all of humanity. In this situation, humanity's most urgent need is to reach a moral alliance based on justice and compassion. Otherwise, despite the added value it creates, the economic scale it builds, or all the prosperity it brings, every technology will lead humanity to near disasters, just like it has until today.

Highlights

Ali Taha Koç

PhD; CEO, Turkcell



Dr. Ali Taha Koç, Turkcell's CEO, earned a full scholarship for his undergraduate degree in Electrical and Electronics Engineering at Bilkent University in 2001. He pursued his master's and doctorate in the U.S. at Dallas Texas University with a scholarship. Joining Intel's R&D team in 2006, he contributed 61 patents and 23 articles, earning recognition as a top global engineer in 2013. Returning to Türkiye in 2014, he advised the Prime Ministry and later led the Presidency of Information Technologies, overseeing the establishment of the State Information Coordination Center. Appointed President of the Presidential Digital Transformation Office on September 12, 2018, he also served on Turksat's board. Since October 13, 2023, Dr. Koç has been Turkcell's CEO while teaching at Bilkent University. Additionally, he holds a pilot's licence.

- The essence of AI lies in its ability to emulate human-like behaviour within computers or software. However, it's crucial to recognise that while AI may mimic human traits, it will never truly replicate human consciousness. Therefore, we must approach its integration with caution, always mindful of its role as a tool for humanity. There's a prevalent debate about whether artificial intelligence will supplant human beings. The answer is unequivocal: it won't. Instead, humans who leverage artificial intelligence will outpace those who do not.

- Governments are striving to keep pace with advancing technology. However, it's a perennial challenge as technology often outpaces regulatory frameworks. Nevertheless, the overarching improvement stems from the abundance of data. With the proliferation of digitisation, vast amounts of data are generated daily. For instance, every day, we process an astounding 250 billion lines of data, reflecting the widespread engagement with social media platforms, with approximately 40 million subscribers. Amidst this data deluge, caution is paramount in determining what to process, as indiscriminate handling may encroach upon personal data privacy, posing risks for both operators and governmental bodies.

- Ensuring data quality is paramount, extending beyond mere error-free datasets to address biases. Biassed data, even if technically accurate, undermines the integrity of insights derived. Thus, establishing a robust set of principles becomes imperative. Data must not only be error-free but also devoid of biases. Transparency is key; every stakeholder, including government entities and users, should have access to algorithmic processes instead of operating within opaque "black box" mechanisms. This transparency fosters accountability and trust in the use of AI technologies.

- Technology ought to serve as a societal tool, benefiting humanity. Presently, AI predominantly functions as a sophisticated digital personal assistant, with limitations in reasoning capabilities. While it aids us presently, its potential as a transformative force is constrained. However, to harness its full potential, human oversight is indispensable. Algorithms must undergo scrutiny by humans to ensure accuracy and relevance. Machines excel at generating vast quantities of content, yet without reasoning abilities, much of it becomes irrelevant. Therefore, human intervention is vital to discern valuable insights from the noise. However, a significant challenge lies in the scarcity of human resources to cross-check the vast datasets generated by AI systems. Addressing this scarcity will be a pivotal challenge in maximising the efficacy of AI technologies in the future.

Kalev Hannes Leetaru

PhD; Founder, GDELT Project

One of Foreign Policy Magazine's Top 100 Global Thinkers of 2013, Dr. Kalev Hannes Leetaru is a global advisor to governments, NGOs and the world's largest corporations to help them solve tomorrow's greatest challenges in an ever more uncertain world. His GDELT Project fundamentally transformed modern global risk forecasting, becoming one of the most iconic and largest real-time open graphs over Planet Earth. For more than a quarter-century, his landmark studies have been at the forefront of reimagining how we understand our world through some of the largest datasets and computing platforms on the planet.

- AI has been part of our lives for decades now, aiding us in various tasks like driving, providing directions, and optimising supply chains. What's new is that AI is no longer just transforming processes; it's actively generating new content and solutions. Unlike before, it's now visible and accessible to consumers. In my work, we utilise AI daily to analyse global media across multiple languages and platforms, monitoring global risks and summarising events like the situation in Gaza or Ukraine across different media outlets. This accessibility to AI presents immense opportunities for innovation and understanding.

- However, amidst the potential, there are significant risks to consider. Currently, much of what we hear about AI is hyped, driven by companies investing heavily in its development and promotion. This initial wave of generative AI brings drawbacks, such as the phenomenon of hallucination, where AI fabricates information. Job displacement poses another concern, especially as white-collar roles face automation, prompting reevaluation of the impacts of globalisation. Yet, one of the gravest perils lies in AI's role in warfare and conflict. As someone who closely examines this area, I'm deeply concerned about scenarios where AI-generated content is used to manipulate perceptions, potentially leading to accusations of war crimes or the dissemination of personalised disinformation during elections. The proliferation of generative AI exacerbates these risks.

- It's essential to distinguish between the beneficial applications of AI, such as those employed by Turkcell and other companies to enhance customer service and optimise operations, and the societal implications, particularly in media, that I focus on. While AI excels in tasks like generating imagery and coding, it currently struggles with text due to its requirement for reasoning and comprehension. My work primarily addresses the societal impact of AI, especially in mitigating disinformation and misinformation in the media landscape.

- AI has the potential to act as an equaliser, much like the digital divide we currently observe. Just as access to high-speed internet determines opportunities, AI may amplify existing disparities. However, this presents governments with an opportunity to intervene and bridge these gaps, akin to efforts to expand broadband access in the US. Addressing these challenges could unlock significant potential for societal advancement.

- Presently, AI tools lack the ability to think autonomously; they primarily function as autocomplete engines. However, they can serve a crucial role in combating misinformation, particularly during crises like natural disasters. As AI increasingly dominates information spaces, there's a growing need for AI-powered solutions to counter falsehoods propagated by malicious actors. Leveraging AI to scale up efforts against misinformation presents significant opportunities for positive impact.

- Presently, the AI available to us excels as personal systems, adept at tasks like ideation, creation, and serving as personal assistants. The question remains: how long until we develop AI capable of genuine thought? Yet, even now, these tools can create the illusion of thinking, leading people to trust them unquestioningly. This blind trust in tools that lack genuine understanding poses a significant danger.

Elena Contioso-Fleming

Interim Regional Director South, EIT Digital

Elena Contioso-Fleming, MSc. in Telecommunications Engineering from the University of Seville studied abroad at the University of Technology, Business Design Konstanz. In 2011, she took the Management Development Programme for International Centres of Excellence at the EOI Business School.

Before being appointed as Interim Regional Director South Elena was the Ecosystem Lead for Southern Europe based in Spain. She joined EIT Digital Digital as the Madrid Co-Location Centre Manager in 2018.

She started her career with startups simultaneously working as an entrepreneur in Germany. Prior to joining EIT Digital, she worked as General Manager at FIUS, the Research Foundation of the University of Seville. At the International Campus of Excellence Andalucía TECH, she was accountable for the execution, operations, and budgetary control. Over the last decade and a half, she has held management roles in the domains of technology transfer, research and innovation.

- Europe leads in AI research, matching global competitors, but lags in private investment and AI adoption by businesses. This discrepancy raises critical questions about data ownership and power dynamics.

- The European Commission anticipates that artificial intelligence will enhance citizens' lives, a sentiment I share. AI is poised to drive improvements across various sectors, bolstering the economy and society through advancements in healthcare, transportation, and public administration. Existing AI applications have already demonstrated their capacity to assist in decision-making, previously the realm of highly trained professionals. This has yielded notable advancements, such as the ability to predict the occurrence and timing of natural disasters like earthquakes, as well as the capability to analyse medical images and identify cancerous cells.

- According to data from Eurostat: less than one-third of citizens in Europe possess digital skills beyond the basics. In simpler terms, two-thirds of Europeans are limited to tasks like sending emails and navigating simple software or the internet. This digital skills gap is concerning, especially as technology advances, increasing the demand for digital talent. Addressing this gap is crucial, as disparities between societies will widen if left unattended.