

Spotlight EYE ON AI

HIGHLIGHTS OF SAUDI ARABIA'S ACHIEVEMENTS IN AI IN 2024



Saudi Arabia launches 'GenAI for All' initiative for Digital Cooperation Organization members under ICAIRE umbrella.



Google Cloud expanded operations in Saudi Arabia, offering AI tools for predictive analytics in the banking, financial services and insurance sector.



Saudi Arabia's Ministry of Media signed a memorandum of understanding with Microsoft in Riyadh on Tuesday covering several areas of cooperation.



Microsoft launched a cloud-based AI platform for healthcare and logistics sectors in Saudi Arabia, enhancing efficiency and service delivery.

14 regulations and policies related to data and AI published by SDAIA

10 supercomputers established in Saudi Arabia, 8 of which are ranked among the top 500 globally (Top500, 2024)

75%

of the Saudi population is knowledgeable about the concept of AI and 64% are knowledgeable about AI use cases and their applications. (SDAIA Public Awareness Survey, 2024)

39% of Saudi government bodies use or are experimenting with AI (SDAIA Readiness & Adoption Survey, 2024)

Saudi Arabia's Public Investment Fund entered a strategic partnership with Google Cloud to establish an advanced artificial intelligence hub in the Eastern Province.



The world's first fully robotic heart transplant was performed at King Faisal Specialist Hospital and Research Center in Riyadh.



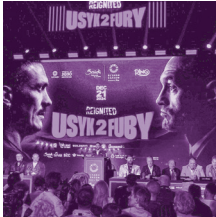
Saudi Arabia launched a \$100 billion AI initiative to position the kingdom as a global tech hub.



Saudi Arabia ranked 14th in the Global AI Index, and first for government strategy.



The boxing rematch between Oleksandr Usyk and Tyson Fury in Riyadh on Dec. 21 will feature an experimental fourth judge powered by AI, aiming to eliminate bias and human error in scoring.



SAUDI ARABIA

A defining year for innovation

AI events and initiatives throughout 2024 cemented Saudi Arabia's reputation as a regional tech leader

Sulafa Alkhunaizi Riyadh

Saudi Arabia has enjoyed a fruitful year advancing artificial intelligence, propelling the Kingdom to the 14th position in the Global AI Index and 1st in the Arab world.

Recently, Saudi Arabia ranked third globally in the OECD AI Policy Observatory, behind the US and the UK. The "State of AI in Saudi Arabia" report, unveiled by Abdullah bin Sharaf Al-Ghamdi, president of the Saudi Data and Artificial Intelligence Authority, detailed

the Kingdom's advancements from 2019-23 during the Global AI Summit in Riyadh. The report highlighted SDAIA's role in driving digital transformation and predicted AI would contribute \$15.6 trillion to the global economy by 2030 and create 98 million jobs by 2025. It also emphasized the importance of building a robust AI ecosystem, fostering local talent, and encouraging cross-sector collaboration. Mohammed Al-Qarni, an academic and AI consultant, believes the Kingdom's AI adoption has come at "a critical time." "Saudi Arabia's Vision

2030 ambition to be a globally competitive nation means we must proactively utilize the latest technology to our advantage," he said. "How rapidly we advance in AI adoption will significantly impact these ambitions." Al-Qarni highlighted the Riyadh Declaration, announced during the 19th Internet Governance Forum hosted by Saudi Arabia, which emphasizes AI's role in enhancing digital access, knowledge, and economic value. "It asserts Saudi global leadership in AI and focuses on AI's inclusive, innovative, and transformative potential," he said. The Kingdom recently

DID YOU KNOW?

1 Riyadh Declaration focused on AI's transformative potential, enhancing digital access, literacy and global challenges.

2 Project Transcendence is a \$100 billion initiative led by Saudi Arabia and Google to support startups and create jobs.

3 Generative AI research at KAUST aims to pioneer innovation and address global challenges through training and upskilling.

launched a \$100 billion AI initiative, "Project Transcendence," led by the Public Investment Fund in collaboration with Google. The initiative aims to support startups, create jobs, and foster global tech partnerships. It also seeks to establish Saudi Arabia as a global hub for AI-driven innovation and development. AI is already impacting various sectors, from sports to healthcare. During the boxing rematch between Oleksandr Usyk and Tyson Fury in Riyadh, an experimental AI-powered fourth judge was introduced to reduce scoring bias. In healthcare, Saudi Arabia achieved the world's first fully

robotic heart transplant on a 16-year-old patient at King Faisal Specialist Hospital and Research Center. Dr. Feras Khaliel, head of cardiac surgery, led the team after practicing virtually. King Abdullah University of Science and Technology is accelerating AI research through its Center of Excellence on Generative AI, focusing on talent training, addressing the GenAI skills gap, and collaborating with global partners to drive innovation. As Saudi Arabia enters 2025, it is well-positioned to continue its rise as an AI leader, leveraging innovation across sectors for national and global impact.

The need for overhaul of digital and energy infrastructure

LINA TAYARA

Artificial intelligence is reshaping modern life, influencing humanity, creativity, and culture, while raising concerns about preserving human identity and values. As we develop complex knowledge systems, it's essential to regulate them for human control. This oped highlights AI's rapid adoption, the massive data generation, rising demand for data centers, and the substantial energy required to support exponential computing. Establishing robust digital and energy infrastructures amid the ongoing climate crisis is a costly but urgent necessity. Data growth began modestly in 2010 with social media, expanded with

streaming and content creation in 2015, and skyrocketed with ChatGPT's launch in 2022. AI is now embedded in many applications, and the energy demands of advanced AI models are becoming more apparent. For example, while a Google search consumes a baseline of energy, Language AI like ChatGPT uses 10 times that, Image AI like DALL-E 320 times, and Video AI like Sora uses 10,000 times more. This underscores the need for a complete digital and energy infrastructure overhaul. Amazon's global capital expenditure is projected to exceed \$50 billion this year, and Meta is increasing its spending to support rising usage across its apps, including WhatsApp,



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Facebook, and Instagram. WhatsApp alone has over 2.8 billion users, with video content driving adoption. AI's high costs are justified by its potential to solve complex problems, including addressing disease and climate change. A report by Google and Boston Consulting Group suggests AI could reduce global greenhouse gas emissions by 5 to 10 percent by 2030, through innovations like optimizing fuel-efficient routes and reducing airplane contrail pollution. However, skeptics in the finance sector argue that the promised economic benefits are overstated, serving Big Tech's interests, and warn that AI has 18 months to deliver before investors lose faith. As the competition for AI dominance

grows, the need for digital infrastructure is paramount. Energy is a key factor driving tech companies to seek new locations with abundant power and green energy. The Nordic region, with its cool climate and renewable resources, holds a significant advantage. With limited investors capable of supporting the trillion-dollar digital transformation, development will likely be concentrated among a few private and public funds. Hyperscalers like Meta, Amazon, Microsoft, and Google are set to invest over \$1 trillion in data and energy infrastructure, with Saudi Arabia's Project Transcendence aiming for \$100 billion to position the Kingdom as a hub for AI-driven infrastructure growth.