

This issue of our newsletter covers meetings, workshops, webinars, publications, and milestone events from October to December 2024.

The 8th Saudi Standards Forum

Under the patronage of HE Minister of Commerce Dr Majid bin Abdullah Al-Qasabi, Dr Basma AlBuhairan, Managing Director of C4IR Saudi Arabia, moderated a panel discussion at the 8th Saudi Standards Forum 2024, focusing on ‘The Crucial Role of Standards in Supporting Industry through Advanced Technologies (3D Printing).’

The session discussed the applications of 3D printing across various sectors, including construction, pharmaceuticals, the private sector, and manufacturing, as well as localizing 3D printing in industries.

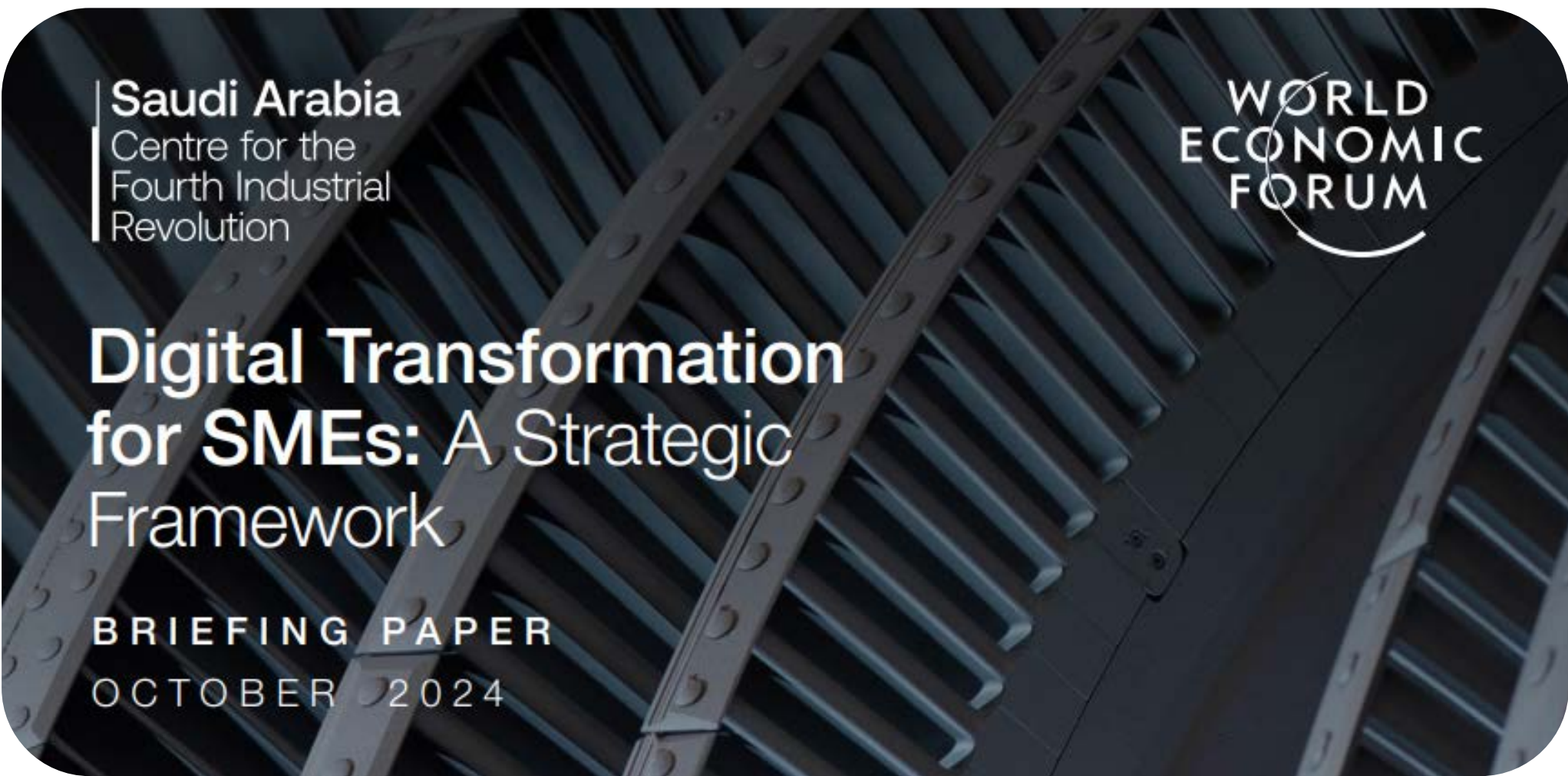


World Economic Forum's Urban Transformation Summit

Centre Head, Dr Basma AlBuhairan, spoke at the Summit in a session on Unlocking Green Procurement in Cities, where she commented, “Given that over \$6 trillion was spent globally in 2021 on procurement, which was 8% of the global GDP, green procurement can integrate sustainability across supplier and logistics operations. Emerging technologies, such as IoT

infrastructure, support cities, suppliers, and logistics operations in managing energy efficiency and reducing waste.” Dr AlBuhairan also shared her expertise on inclusive practices for urbanization in a session on Enabling Shared Economic Opportunity.

Publications



The Centre published this briefing paper in collaboration with the World Economic Forum for the project Accelerating the Impact of IIoT for SMEs. The paper provides actionable insights on how SMEs can leverage the Industrial Internet of Things (IIoT) to drive digital transformation, enhance efficiency, and unlock new growth opportunities.



This community paper, published by the Centre in collaboration with stc, explores the transformative potential of private 5G networks for industries. It covers key deployment options, technical and financial evaluations, and use cases across various sectors.

Read more to discover how private 5G can drive digital transformation and boost connectivity, security, and efficiency.

AVIATE Saudi Arabia's 1st Workshop

The Centre hosted the first AVIATE for Saudi Arabia workshop in partnership with the World Economic Forum. AVIATE, a multi-stakeholder initiative advances the responsible implementation of advanced air mobility (AAM) and autonomous aviation. The workshop covered a range of objectives, such as collaboration between regulators and policymakers, identifying regional challenges, exploring AAM use cases, developing strategies to overcome barriers, and establishing enablers to accelerate social impact.



Annual Meeting of the Global Future Councils (AMGFC)

More than 500 global experts from multidisciplinary knowledge networks, government, industry, and civil society convened at the AMGFC to address global challenges through transformative ideas. During the meeting, the Centre's Managing Director, Dr Basma AlBuhairan, shared valuable insights on manufacturing and value chain trends for future decades. The sessions focused on inclusive growth, climate change, nature protection, and energy transition. Dr AlBuhairan continues to play an active role in the Global Future Council of Advanced Manufacturing and Value Chains and the Global Barometer Advisory Board.



World Economic Forum Visit to C4IR Saudi Arabia

Fernando Gomez, Head of the Resource Systems and Resilience Program at the World Economic Forum's Centre for Nature and Climate, Sadaf Hosseini, Head of Growth, Partnerships & Innovation Ecosystems at Uplink, and Anis Nassar, Lead of Resource Circularity, discussed a strategic collaboration between the Centre and Uplink. The discussions centered around the Quantum for Society Challenge, as well as the innovation ecosystem in the Kingdom of Saudi Arabia.

Industry Tech Talk Webinar Series

The Centre hosted the monthly webinars with the King Abdullah University of Science and Technology (KAUST) and the Saudi Industrial Development Fund (SIDF) for professionals, decision-makers, SMEs and stakeholders.



The webinar discussed the history of electric vehicles, market structures, key systems in battery electric vehicles, and the implications for the 4IR.



Through the webinar, participants discovered how 3D printing technology impacts the industry's future, which was beneficial for those looking to stay ahead of technological trends.

World Economic Forum Visit

Sebastian Buckup, Head of Network and Partnerships, and Melisa Atassi, Head of Engagement at the World Economic Forum (WEF), visited the Centre, strengthening collaborative efforts between the C4IR Saudi Arabia and WEF, as well as discussed strategies for growth. The visitors participated in the Centre's Executive Committee meeting, engaging with leadership on strategic priorities and future initiatives.



4IR Saudi Horizons Series

Industry professionals and experts participated in the 4IR Saudi Horizons series, 'Saudi Arabia and the Future of Smart Education'. The series, jointly hosted by the Centre and Oliver Wyman, addressed 4IR technologies in education. Dr. Basma AlBuhairan gave a keynote address and articulated that education should cultivate essential soft skills above skilling and reskilling. Drawing from the 2024 World Economic Forum briefing paper on jobs and skills, she highlighted critical attributes such as resilience, flexibility, curiosity, empathy, and lifelong learning as indispensable for the modern workforce. The intersection of 4IR and education promises personalized and engaging learning and aligns with global efforts to bridge skill gaps and promote equity and sustainable growth.





Transformative Urban Regeneration Insights

At the World Economic Forum session of COP16, ‘From Sand to Soil: Nature-Positive Approaches to Urban Desertification,’ H.E Munir Eldesouki, president of the King Abdulaziz City for Science and Technology (KACST), and Dr Basma AlBuhairan, the Centre’s Managing Director, presented progressive approaches to urban regeneration. She highlighted projects such as the Wadi Hanifa Rehabilitation Project and AlUla Vision, demonstrating how nature-based solutions and urban regeneration can foster inclusive and resilient communities.

The challenges of gentrification and balancing environmental restoration with equitable growth were addressed, as well as multi-stakeholder dialogue, collaboration, and community engagement for transformation, inclusivity, and sustainability.

Visit from C4IR Network Head

The Centre welcomed Jeremy Jurgens, Managing Director of the World Economic Forum’s global C4IR Network. Enhancing collaboration within the 4IR network and exploring opportunities to further innovation in the Kingdom and globally were among the discussion points. The Centre has remained committed to strengthening such partnerships.



Talent for the Future: Strategic Planning for the Gifted and Creative Workforce

The Global Conference for Giftedness and Creativity in Riyadh, featured the Centre's Managing Director, Dr Basma AlBuhairan, who participated as a panelist. She shared insights on giftedness as a societal asset and outlined the necessity of supporting emotional intelligence and intellectual aptitude at home and school. She further highlighted that the private sector and government should further develop giftedness through partnerships, mentorships, and innovation hubs. Global trends, such as tech companies hiring neurodiverse individuals and leveraging their cognitive strengths as an advantage, were also elaborated upon.



The Quantum Economy Blueprint – A Roadmap for Saudi Arabia's National Quantum Strategy

In collaboration with KAUST Innovation and the Saudi Industrial Development Fund (SIDF), the Centre hosted another engaging webinar, 'The Quantum Economy Blueprint: A Roadmap for National Quantum Strategy in Saudi Arabia.' Participants discovered how quantum technologies can transform industries, and the strategic framework developed to advance the quantum economy in the Kingdom.



Quantum for Society Challenge

C4IR Saudi Arabia, in collaboration with @WEFUpLink, launched the Quantum for Society Challenge, which sought groundbreaking solutions in climate, manufacturing, healthcare, agriculture, and freshwater systems. Innovators have the opportunity to submit their solutions using quantum technology that are impactful and focused on addressing challenges in climate, materials & manufacturing, healthcare, agriculture, food systems, and freshwater systems.