







## Concept Note

# Arab-European Cities Dialogue - Forum for Local Action - 11 May 2025

**Building Resilient and Inclusive Smart Cities: Advancing Digital Transformation for** Sustainability, Innovation, and Quality of Life

#### **Background**

Digital transformation is no longer a distant vision but a present reality, reshaping urban functions and interactions. As hubs of economic activity, governance, and social life, cities are harnessing digital tools to enhance resilience, sustainability, and inclusivity. By integrating digital technologies into all aspects of urban life, cities can effectively address and mitigate emerging challenges.<sup>1</sup>

The transition toward Smart and Sustainable Cities (SSC) is not just about adopting new technologies but about integrating them into broader urban development strategies to address pressing challenges such as climate change, resource management, social equity, and quality of life. While cities worldwide are embracing digital transformation, their opportunities and challenges vary by context. Arab and European cities share common goals but navigate different socio-economic and technological landscapes. This session explores their differences, similarities, and best practices for sustainable urban development, with a focus on enhancing quality of life through smart solutions.

This shift is deeply intertwined with global sustainability frameworks. The 2030 Agenda's Sustainable Development Goal (SDG) 11 envisions cities as inclusive, safe, resilient, and sustainable hubs, driving progress in climate action, clean energy, and economic growth.<sup>2</sup> The New Urban Agenda, adopted in 2016, reinforces this vision by advocating for cities as centers of opportunity, innovation, and sustainability, emphasizing the role of technology, participatory governance, and social inclusion.<sup>3</sup> Building on these foundations, the Pact for the Future, adopted at the 2024 Summit of the Future, underscores the importance of digital transformation in urban development, calling for greater international cooperation and investment to create thriving, resilient, and equitable cities.<sup>4</sup>

At the core of smart and sustainable urban development is digitization, which enhances efficiency, responsiveness, and sustainability in urban systems, ultimately improving the quality of life for residents. Technologies such as the Internet of Things (IoT), Artificial Intelligence (AI), big data analytics, and blockchain are revolutionizing city functions, from optimizing resource management to strengthening transparency in governance. While digital innovations hold immense potential to drive economic growth, improve public services, and enhance urban resilience, they also present a paradox: the same transformation that promises greater inclusion and efficiency risks exacerbating inequalities if not designed with people at the core. The digital divide remains a critical barrier, with approximately 2.6 billion people worldwide still lacking affordable internet access as of 2024, and 39% of the global population not using the internet<sup>5</sup>. Without targeted interventions, digital advancements could deepen social and economic disparities, leaving marginalized communities further behind, and potentially limiting their access to the improved QoL that smart cities aim to offer.

<sup>&</sup>lt;sup>1</sup> Transformative urban governance: confronting urbanization challenges with geospatial technologies in Lagos, Nigeria GeoJournal

<sup>&</sup>lt;sup>2</sup> Transforming our world: the 2030 Agenda for Sustainable Development

<sup>&</sup>lt;sup>3</sup> The New Urban Agenda

<sup>&</sup>lt;sup>4</sup> Pact for the Future

<sup>&</sup>lt;sup>5</sup> World Smart Cities Outlook 2024, UN-Habitat









One of the most pressing challenges within this landscape is the gender digital divide, which restricts women and other marginalized groups from fully engaging in and benefiting from digital urbanization. As of 2023, only 65% of women globally had internet access, compared to 70% of men, with the gap widening to 10% in Africa and the Arab States. In low-income countries, digital access is even more constrained—only 20% of women use the internet, compared to 34% of men. Additionally, women are 13% less likely than men to own a smartphone globally, with this figure rising to 19% in developing economies. Structural barriers, such as the high cost of broadband—reaching up to 18.5% of gross national income per capita in some regions—and the lack of digital literacy programs tailored to women's needs, reinforce these inequalities.<sup>6</sup>

For smart cities to be inclusive and sustainable, they must be people-centered, ensuring that digital solutions are designed to meet the needs of people rather than simply advancing infrastructure. It requires a shift in governance and urban planning—placing people at the center of decision-making and ensuring that digital transformation aligns with local needs, rather than being driven solely by technological capabilities. Bridging the digital divide is not just a matter of expanding connectivity; it is about ensuring that digital transformation serves as a tool for inclusive urban development. Without intentional efforts to embed equity, security, and transparency in smart city initiatives, the promise of technology will remain unfulfilled. By embracing a people-centered approach, cities can harness the power of digital innovation to create environments where all residents can fully participate in and benefit from urban transformation.

Urban resilience is central to digital transformation, helping cities withstand and recover from shocks. There are key pillars of digital transformation for cities to consider. These include technologies, strategies and leadership for digital transformation, organizational change, skills development, funding, collaboration, engagement, and inclusivity. Smart technologies like IoT, AI, and data-driven systems enhance infrastructure, service delivery, and emergency response, while predictive analytics and real-time monitoring mitigate risks. However, successful transformation requires a clear vision, strategic roadmaps, and well-defined policies to guide cities in integrating digital solutions effectively. Smart cities must ensure equitable access to transportation, healthcare, and utilities while embedding resilience into urban planning. With a structured approach, smart and digital solutions and smart sustainable cities lead become a powerful tool for fostering urban resilience.

Many Arab cities are embracing digital transformation, with a focus on resilience that extends beyond infrastructure to digital inclusion. Amman's Smart City strategy enhances mobility and governance transparency through AI and big data, prioritizing accessibility for marginalized groups. Similarly, Al Madinah Smart City, part of Saudi Vision 2030, centralizes data exchange via the Raseel Platform and invests in digital tools for healthcare, transportation, and tourism while emphasizing sustainability and stakeholders' engagement through its Innovation Labs. In Europe, cities have focused on integrating smart solutions that prioritize sustainability and social well-being. A key example is the Citiverse concept, an initiative by the European Digital Infrastructure Consortium (EDIC), which is developing a European Union (EU) ecosystem of advanced AI solutions for cities. This approach champions transformative urban innovation by leveraging digital public infrastructure alongside technologies such as AI, virtual worlds, and open-source solutions to reimagine cities as inclusive, resilient, and sustainable hubs of progress. With 14 EU countries already on board—including France, Italy, Spain, and the Netherlands—this initiative is rapidly expanding, expecting to bring 100 cities together by 2026. Among the European Smart Cities, Zurich, owns a strategy that emphasizes people-centered urban development, ensuring that digital services

<sup>7</sup> <u>Municipalities and Digital Transformation in Arab Cities: An Institutional Development Perspective – Arab Urban Development Institute</u>

<sup>&</sup>lt;sup>6</sup> Ibid

<sup>&</sup>lt;sup>8</sup> Smart sustainable cities and smart digital solutions for urban resilience in the Arab region: Lessons from the pandemic

<sup>&</sup>lt;sup>9</sup> Al Madinah Smart City – Better Cities, Streets and Neighbourhoods

<sup>10</sup> CitiVERSE | Shaping Europe's digital future









improve public transportation, waste management, and governance accessibility.<sup>11</sup> The city's long-term vision aligns with its goal of achieving net zero by 2040, highlighting the intersection of smart solutions and environmental resilience. 12 Similarly, Helsinki, one of the first leading smart cities, has developed a city strategy for 2021-2025 which focuses on strengthening key sectors, including providing early childhood education services, developing strategies to mitigate climate change, offering youth and leisure activity programs, promoting equality in access to resources, and combating segregation across all of its activities, among other initiatives. 13

## **Objectives**

- Advancing Digital Transformation in Urban Development: Explore the role of digital transformation in advancing smart and sustainable cities, with a focus on improving the overall quality of life by enhancing urban services, infrastructure, and sustainability.
- Promoting Resilience and Inclusivity: Address resilience, inclusivity, and equitable urban development, ensuring that all residents experience an improved quality of life through more accessible and responsive urban systems.
- City-to-City Learning and Knowledge Sharing: Examine experiences from Arab and European cities, highlighting good practices, challenges, and opportunities for mutual learning through an inter-regional platform, with an emphasis on improving quality of life through shared solutions and innovations.
- Enhancing Urban Governance and Service Delivery: Discuss how digital tools can improve urban governance, service delivery, and citizen engagement, all of which directly contribute to an enhanced quality of life by making cities more efficient, transparent, and responsive to residents'
- Addressing the Digital Divide: Address the digital divide, particularly the gender digital gap, to ensure equitable access to digital technologies that enable improved living standards, opportunities, and quality of life for all communities.
- **People-Centered Smart City Strategies:** Promote strategies that prioritize accessibility, transparency, and social equity in smart cities, ensuring that digital transformations lead to tangible improvements in the quality of life, particularly for vulnerable and marginalized groups.
- Harnessing Digital Innovation for Sustainable Cities: Foster dialogue on leveraging digital innovation to create resilient, inclusive, and sustainable urban environments, driving improvements in quality of life by enhancing sustainability, reducing inequalities, and improving urban resilience.
- Strengthening Partnerships and Collaboration: Encourage the strengthening of partnerships and collaboration between cities, governments, the private sector, and civil society to drive digital transformation that fosters greater quality of life and addresses urban challenges effectively.
- Addressing Financing Challenges: Recognize the financing challenges faced by cities in implementing digital transformation and sustainable urban development and explore innovative financial solutions and partnerships to overcome these barriers.
- Aligning with Global Development Frameworks: Align discussions with global development frameworks such as the SDGs, the New Urban Agenda, and the Pact for the Future, all of which emphasize quality of life as a core principle for sustainable and inclusive urban development.

<sup>&</sup>lt;sup>11</sup> Zurich again crowned as the world's smartest city | Greater Zurich

<sup>&</sup>lt;sup>13</sup> helsinki-city-strategy-2021-2025.pdf









## **Guiding Questions**

- How can digital transformation enhance urban development in Arab cities, ensuring the transition to smart, sustainable, and inclusive cities that improve the quality of life for all residents?
- What are the key lessons from successful European smart governance models, and how can these
  be adapted to the local contexts of Arab cities to ensure relevance, inclusivity, and equitable
  outcomes?
- How does multi-level governance contribute to advancing digital transformation, particularly in smart, sustainable cities, and how can it promote equal access and opportunities for all citizens?
- In what ways can cities ensure equitable access to digital services and smart city solutions, particularly for marginalized groups, to bridge gaps and improve quality of life?
- What innovative financing mechanisms can support the implementation of digital innovation and smart, sustainable city solutions, while ensuring that these solutions are accessible and inclusive for all communities?
- How can partnerships and collaboration between cities, governments, the private sector, and civil
  society foster the adaptation of smart and digital solutions for urban resilience, and improve quality
  of life in cities?
- How can city-to-city learning, and knowledge sharing contribute to improving quality of life, especially through the exchange of best practices and solutions between Arab and European cities?
- What strategies can cities adopt to address the digital divide, particularly the gender digital gap, and ensure that all communities benefit from digital technologies that enhance their living standards and opportunities?
- How can the integration of digital innovation drive sustainable urban development and urban resilience, and how can it help improve the quality of life for residents in both Arab and European cities?
- How can cities align digital transformation strategies with global frameworks such as the SDGs, the New Urban Agenda, and the Pact for the Future, to ensure a shared vision for sustainable, inclusive, and quality-driven urban development?

#### **Partners**

- United Nations Economic and Social Commission for Western Asia (UNESCWA);
- Arab Urban Development Institute (AUDI)

#### **Scenario and Speakers**

The following is the scenario with UNESCWA moderating the session:

#### **Moderator:**

• Sukaina Al-Nasrawi, Lead of the Urban Development Portfolio, UNESCWA – Setting the stage by highlighting how building resilient and inclusive Smart Cities requires advancing digital transformation for sustainability, innovation, and quality of life









### **Speakers**

Keynote Address: Rania Hedeya, Acting Regional Representative at UN-Habitat's Regional
Office for Arab States – How People-Centered smart cities leverage technology to enhance
inclusivity, equity, and quality of life.

### • City Experiences:

- o **Ahmad Abu Laban, City Manager, Ramallah, Palestine** Turning digital innovations of resilience in the face of limited resources and complex realities.
- o **Faouzi Achbar, Vice-Mayor, Rotterdam, Netherlands -** No community left behind in digital transformations and creation of a smart, sustainable future for everyone.
- Sultan Al-Kharabsheh, Executive Director of ICT Directorate, Greater Amman Municipality, Jordan – Greater Amman Municipality's role in Amman being awarded the Arab Digital Capital for 2025.
- Claudius Lieven, Head of Digital-Twin Application Development, Ministry of Urban Development, Hamburg, Germany – Hamburg's digital twin technology's role in reshaping the way citizens co-create the city of tomorrow.
- Discussant: Marija de Wijn, Global Coordinator, Quality of Life Initiative, UN-Habitat, Kingdom of Saudi Arabia How inclusive and participatory digital transformation leads to improved urban quality of life.

#### **Closing Remarks:**

• Sukaina Al-Nasrawi, Lead of the Urban Development Portfolio, UNESCWA – Highlighting the importance of knowledge exchange and collaboration in advancing smart city development.