C4 TRENDS
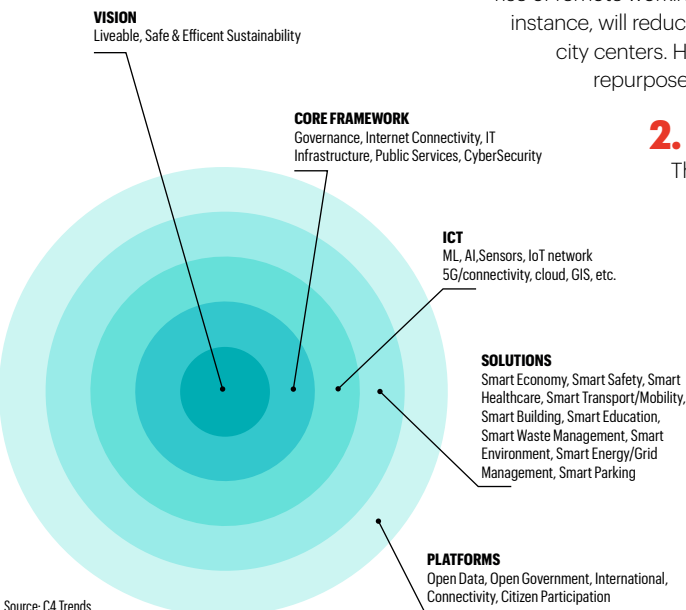
Re-imagining Smart Cities

Smart city initiatives promise to make cities more connected, efficient and sustainable.

COVID-19 tested the resilience of cities. Over half of the world's population today lives in urban centers, and that is expected to jump to 68% by 2050, per the UN. Smart cities include technologies for scalable implementations such as 5G, artificial intelligence (AI) and blockchain. Working together these technologies can hyper-connect a city for greater efficiencies and sustainability based on data integration and analytics, cybersecurity and citizen engagement.

Post-pandemic, these parameters encompass collecting and contextualizing ICT (Information and Communications Technologies) as well as connecting physical devices using IoT (internet of things) networks and geographical information systems (GIS) — for greater endurance and more equitable communities.

COVID-19 was a wake-up call around the globe. The pandemic accentuated how ill-equipped cities were. Many municipalities barely functioned, lacked agile and efficient management and had inadequate infrastructures, datapoints and funding to deal with the situation. The resulting upheaval underscored that communities need to be better prepared for shorter-term catastrophes and other extreme events.

Three Trends for Reimagining Urbanization

Opportunities related to smart city startups worldwide will reach $39 billion in 2021, according to Statista. AksjeBloggen.com is projecting that smart city startups worldwide will generate $110.7 billion in revenue by 2025, a trifold increase in five years. Many lessons were learned from the pandemic, here are a few:

1. Rethinking Neighborhoods

With restricted mobility, people stayed within their neighborhoods. This is reigniting interest in the "15-minute city" by urban managers. It's based on livable and self-sufficient neighborhoods within a city that are pedestrian-friendly. Some cities are developing more car-free thoroughfares. The reduced need to commute to the office and the rise of remote working and online shopping, for instance, will reduce the demand for space in city centers. How will this space be repurposed?

2. Public Space: Redefined

The trend towards greener cities took on new meaning, with a resurging interest in the outdoors. Urban planners are thinking differently about street space and considering the playbook of their European counterparts, focused on squares, gardens, and pedestrian-focused street designs. While some U.S. cities created bike lanes other cities like New York experimented with pedestrian promenades or slow streets. As a consequence of the pandemic limiting indoor restaurant capacity, cities expanded sidewalks to house parklets or 'terrace zones' for outdoor dining reminiscent of Paris bistros.

3. Mobility

There also was an uptake in 'active transportation' with walking, biking, e-scooters and other micro-mobility options. Less driving resulted in reduced carbon emissions and improved air quality, accelerating discussions about sustainability, lower emissions and pollutants. Ford recently announced plans to invest $30 billion in vehicle electrification efforts by 2025, and the company anticipates that 40% of its global sales by 2030 will be fully electric vehicles. Overall, there is a global movement towards increasing the safety and easy flow of transportation — whether for e-mobility, autonomous transport, communications and intelligent transport systems. While reducing car use was trending pre-pandemic – an emerging question is, will shared mobility survive the pandemic?

Urban Retrofitting

Instead of starting from scratch to build new cities — urban retrofitting is emerging as an alternative solution but the path towards smart cities will be manifold. The pandemic underscored the need for public-private partnerships between government and communities with business, academia, the tech industry and fast-moving startups. Smart cities require integrated frameworks, systems and solutions that enable efficient customizable responsiveness to localized context, cultures and communities. Plus, private sector investments are often required by cash-strapped cities.

New infrastructures need to be built with innovative solutions to make cities smarter and responsive to the needs of its citizens in ordinary times and under crisis. ■

VISION
Liveable, Safe & Efficent Sustainability

CORE FRAMEWORK
Governance, Internet Connectivity, IT Infrastructure, Public Services, CyberSecurity

ICT
ML, AI,Sensors, IoT network 5G/connectivity, cloud, GIS, etc.

SOLUTIONS
Smart Economy, Smart Safety, Smart Healthcare, Smart Transport/Mobility, Smart Building, Smart Education, Smart Waste Management, Smart Environment, Smart Energy/Grid Management, Smart Parking

PLATFORMS
Open Data, Open Government, International, Connectivity, Citizen Participation

Source: C4 Trends

CONTACT: Reach Susan at
susan@c4trends.com