

# Global citizens favor 'smart cities' and call for their hometowns to be sustainable

- Urban sustainability has become a consideration for citizens with 42% willing to leave their town due to pollution concerns
- Over a third of citizens are willing to pay for more enriched digital services
- Smart city initiatives are helping city officials manage the COVID-19 pandemic

Paris, July 27, 2020 – Today's city living is falling short of citizens' increased expectations in the digital age. This is according to a new report from the <u>Capgemini Research Institute</u> that explored responses from 10,000 citizens and over 300 city officials across 10 countries and 58 cities. It found that many citizens are frustrated with the current set up of the city in which they live and are prepared to show their opinion by leaving for a more digitally advanced city. On average, 40% of residents may leave their city in the future due to a variety of pain points including digital frustrations.

The report "<u>Street Smart: Putting the citizen at the center of Smart City initiatives</u>" reveals that more than half of citizens (58%) perceive smart cities as sustainable and that they provide a better quality of urban services (57%). That explains why more than a third of them (36%) are willing to pay more for this enriched urban existence. However, serious challenges to implementation exist, particularly in terms of data and funding.

Capgemini has found that only one in ten city officials say they are in the advanced stages of implementing a smart city<sup>1</sup> vision, and less than a quarter (only 22%) have begun implementing smart city initiatives – a particular challenge as two-thirds of the world's population is expected to live in a city by 2050, with the number of megacities<sup>2</sup> set to rise from 33 today to 43 by 2030<sup>3</sup>. Moreover, there is a considerable global desire for smart cities among citizens, meaning an accelerated approach would be well received.

# The key to unlocking an improved urban life

According to the report, sustainability is of increased importance for urbanites. Citizens find challenges such as pollution (42%) and of lack of sustainability initiatives (36%) a major concern and may leave their city as a result. However, over the past three years, 42% of city officials say that sustainability initiatives have lagged, and 41% say their cities becoming unsustainable over the next 5-10 years is one of the top five consequences of not adopting digital technology.

While smart city initiatives can lead to improvements across urban services, Capgemini has found that perception is key, and that the benefits aren't just limited to tangible outcomes. Citizens using smart city initiatives are happier with the quality of their city life. For example, 73% say they are happier with their quality of life in terms of health factors, such as air quality. However, this drops sharply to 56% among those who have not used a smart city initiative. More than a third of citizens (36%) are willing to pay to live in a smart city. This figure rises for younger

<sup>&</sup>lt;sup>1</sup> For this research Capgemini has used the United Nations Economic Commission for Europe definition of a smart city: "A smart sustainable city is an innovative city that uses information and communication technologies (ICTs) and other means to improve quality of life, efficiency of urban operation and services, and competitiveness, while ensuring that it meets the needs of present and future generations with respect to economic, social, cultural and environmental aspects".

<sup>&</sup>lt;sup>2</sup> A megacity is a very large city, especially one with more than 10 million people living in it.

<sup>&</sup>lt;sup>3</sup> "<u>68% of the world population projected to live in urban areas by 2050, says UN</u>", (UN, May 2018)



and richer citizens: 44% among millennials, 41% among Gen Z<sup>4</sup> respondents and 43% among those earning more than \$80,000.

# Data and funding are critical implementation challenges

Although smart cities can solve some of the traditional pain points experienced in cities, such as public transport and security, serious challenges to implementation exist. Data is central to smart city optimization, yet 63% of global citizens say the privacy of their personal data is more important than superior urban services. Meanwhile, almost 70% of city officials say that funding their budget is a major challenge, and 68% of officials say they struggle to access and build the digital platforms needed to develop smart city initiatives. From a citizens' perspective, 54% think BigTech firms would provide better urban services than those currently in place.

Matthias Wieckmann, Head of Digital Strategy, City of Hamburg, says: "When considering a smart city initiative, it is best to start with small uses cases that can be tested before expanding and securing visibility and viability for funding. For city officials early in their journey, smaller solutions will help pave the way faster rather than starting with a big overall solution. It is also easier to find acceptance, support and finance for projects this way."

## Smart city initiatives help to manage the COVID-19 crisis

Smart Cities can help to address pandemics, Capgemini has found that as the world tackles COVID-19, city officials are using technology to address some of the challenges faced. 68% of city officials have found that digital initiatives like apps which connect people to healthcare facilities or provide remote patient monitoring are helping them to manage the crisis. The city of Bengaluru, India, repurposed its command center into a 'war room' to follow patients and draw up containment plans using heat mapping technologies<sup>5</sup>. In Rome, airport staff are using smart helmets with augmented reality and thermal scanners to screen multiple visitors simultaneously while maintaining a safe distance<sup>6</sup>.

#### Accelerating implementation requires close collaboration between key stakeholders

Innovative technology – and the funds to innovate and deliver – will not in themselves create a smart city. Collaboration between stakeholders like local government officials, citizens, and third parties including start-ups, academic institutes or venture capital funds is key. To that extent, Capgemini recommends a three-phased approach for city officials:

- Create a smart city vision with sustainability and resilience as cornerstones.
- Empower city officials to act as entrepreneurs and at the same time ensure data protection and trust
- Build a culture of innovation and collaboration with citizens and external entities

Pierre-Adrien Hanania, Capgemini's Global Offer Leader for AI in the Public Sector, says: "Smart city perception and status have become an important differentiator for citizens. It has become crucial for city planners and officials to realize that the citizens are the smartest asset a city has and to put them at the center of smart city initiatives. City officials must work to ensure that technology-led interventions give people the experience and quality of life that they want and need. By doing so, cities will avoid their inhabitants leaving for another city and will enhance their digitization pathway, benefiting of the willingness of citizen to invest in their home. Furthermore, smart initiatives allow cities to be more resilient to challenges like COVID-19 but to achieve that, it is key to federate both

<sup>&</sup>lt;sup>4</sup> Millennials (also known as Generation Y) include all those born between the early 1980s and the late 1990s. It succeeds generation X and precedes generation Z beginning in the year 2000.

<sup>&</sup>lt;sup>5</sup> "45 smart city command and control centers turn into COVID-19 war rooms", The Economic Times, March 2020

<sup>&</sup>lt;sup>6</sup> "<u>Italian airport leads Europe in adopting AR thermal scanning helmets</u>", Venturebeat, May 2020



the data environment and the city's stakeholders in order to shape the blueprint of their city together - putting sustainability, data privacy and the city's DNA at its core."

To read a full copy of the report and its recommendations, click here.

# **Research methodology**

The Capgemini Research Institute conducted an extensive consumer survey of more than 10,000 citizens and an executive survey of 310 city officials spread across 10 countries and 58 cities, including the US, the UK, France, Germany, Netherlands, Italy, Spain, Sweden, India, and Singapore.

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