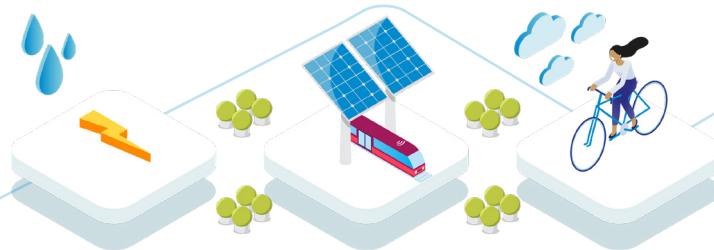


# Tokyo: Smart urban resilience

The natural and man-made disasters that have hit Tokyo throughout its history have underscored the city's need for urban resilience. In particular, the fallout following the 2011 Fukushima earthquake and tsunami prompted the city to deploy a smart power grid by 2025.<sup>1</sup> Due to measures like these, Tokyo sits atop The Economist Intelligence Unit's Safe City Index, which assesses urban security and resilience.<sup>2</sup> Tokyo's advancement as a smart city has also been recognised by Barcelona-based IESE Business School, which ranks it sixth out of 174 cities and first out of 24 cities in Asia in a study of smart-city development.<sup>3</sup>

Tokyo's focus on urban resilience is reflected in the priorities and expectations of its residents and businesses with regard to smart-city development, according to an Economist Intelligence Unit study sponsored by Nutanix.<sup>4</sup> Improving the efficiency and reliability of public services like utilities and transportation is the top priority for both surveyed parties. Interestingly, relative to other cities, neither executives nor residents in Tokyo feel especially strongly that smart initiatives will add to the city's appeal. This may be because Tokyo is already a technologically-advanced city, or potentially because much of its recent urban development has been designed to maintain the status quo in the event of a disaster.



Sponsored by

**NUTANIX**<sup>™</sup>

<sup>1</sup> Fang Dong and Randall Wong, "Inside Japan: Visiting Tokyo As Part Of The Smart City Innovation Tour", *Medium*, July 10th 2019.

<sup>2</sup> *Safe Cities Index*, The Economist Intelligence Unit, 2019.

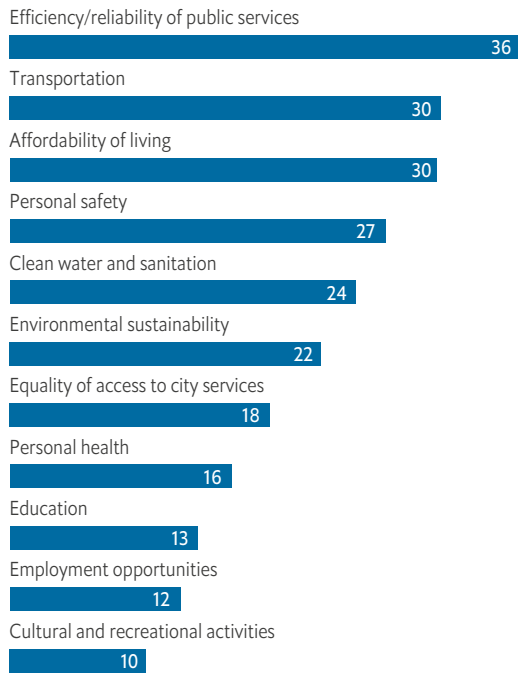
<sup>3</sup> *IESE Cities in Motion Index*, IESE Business School, 2019.

<sup>4</sup> In summer and autumn 2019, The Economist Intelligence Unit surveyed 389 citizens and 53 business executives in Tokyo as part of a larger survey of 6,746 citizens and 969 executives in 19 cities around the world; the full research is available at <http://bit.ly/urbanintelligence>

### Akihabara dreaming

Chief benefits sought by smart-city initiatives, Tokyo citizens and businesses  
(% of respondents)

#### Citizens



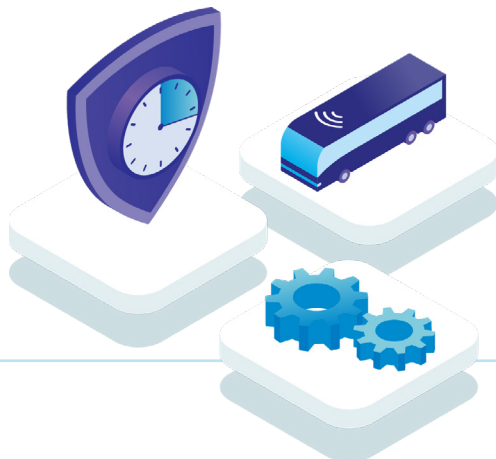
#### Businesses



Source: The Economist Intelligence Unit

### Citizen priorities: Efficiency, reliability and affordability

The ability of innovative technologies to enhance the **efficiency and dependability of public services** is key for residents, especially if it also augments Tokyo's resilience to natural disasters.

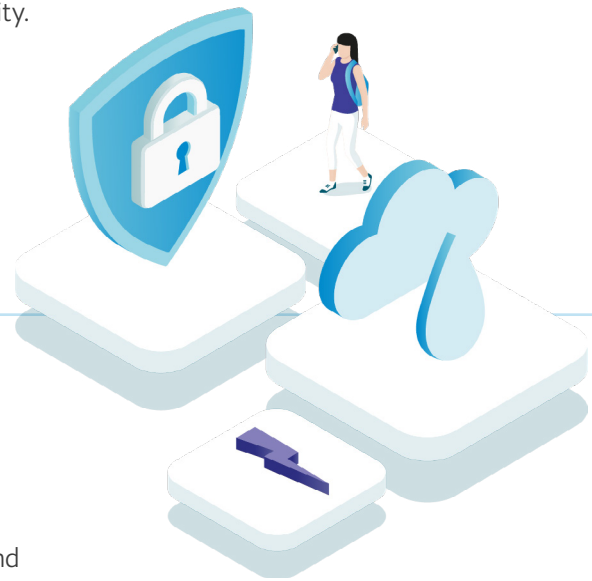


# 1 in 3

More than any other benefit, Tokyo citizens look to smart-city development to make the city's public services more efficient and reliable, cited by over one in three (36%) respondents.

# 34%

When it comes to personal health and safety, 34% of residents in Tokyo—the largest share of any city—say safeguarding against natural disasters is the top priority.



For Tokyo citizens, **improving the city's transportation** system goes hand-in-hand with making the city more affordable

# 30%

At 30%, equal shares of residents point to the city's affordability and transport networks as priority areas for smart programmes.



# 39%

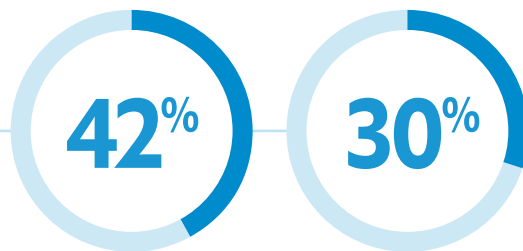
Regarding affordability, more citizens (39%) believe smart-city initiatives should focus on developing low-cost transport options compared with other outcomes

# 33%

Beyond expanding the availability of renewable energy sources, improving the efficiency of public transport is most important to making the city more environmentally sustainable, cited by 33% of Tokyo residents.

### Business priorities: Efficiency, reliability and safety

Along with citizens, business executives in Tokyo also hope smart-city programmes will make a measurable impact in areas that contribute to the **city's resilience**.



More efficient and reliable services are the top priority, cited by 42% of executives, followed by improving personal safety (30%).



# 1 in 4

One in four (26%) executives emphasise strengthening the city's physical infrastructure.

Improving the city's **innovation landscape** also features prominently among business executives' priorities for smart-city development.



# 1 in 4

One in four (26%) say enhancing the city's innovation ecosystem should be a key focus of smart initiatives.

# 43%

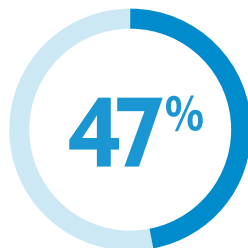
To do so, 43% of executives—the largest share of any city after Frankfurt and alongside Johannesburg—believe deploying ultra-high speed broadband networks will be critical.

# 2 in 5

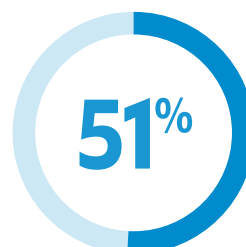
Nearly two in five (38%) say developing new marketing strategies through the utilisation of open-government data will create market opportunities for their business.

## Trade-offs: Business and citizen reluctance

Businesses and residents in Tokyo are generally **less willing than those elsewhere** to make compromises for smart-city benefits.



Just under half (47%) of executives in Tokyo say they are ready to pay more in taxes or in service fees—lower than the global average of about three in five respondents (52% and 60%, respectively).



Only half (51%, among the lowest rate of all cities) are willing to share more of their organisation's data to secure such benefits.

Residents of Tokyo are even **less keen** on trade-offs than executives, and they are especially wary about conceding their personal privacy.

# 31%

Just 31% of residents are willing to pay higher taxes for smart-city benefits, and just 36% would agree to higher service fees.

# 39%

Only 39% would share their personal data—far lower than the regional average of 59%.



# 52%

Just over half of residents (52%, the smallest share of all cities) would be comfortable with the use of personal data for preventing or solving crimes through technologies like facial recognition.