Written by
NUTANIX™

Research Conducted by
The Economist INTELLIGENCE UNIT

Riyadh: Laying the Foundation of a Smart City

Riyadh, the capital of Saudi Arabia and its political and administrative center, is the largest city on the Arabian Peninsula, with close to 7 million inhabitants. It faces an array of social, political, and environmental challenges, and currently ranks near the bottom of the IESE Cities in Motion Index--164th out of a total of 174 cities. The Saudi government is nevertheless heavily investing in the creation of smart cities, including Riyadh, as part of the Vision 2030 initiative, which aspires to elevate at least three of its cities into the top 100 worldwide. To this end, Riyadh has launched multiple large scale smart city initiatives, including setting up a smart ecosystem in the Olaya district, and the construction of Al Widyan, which they hope will "unobtrusively incorporate advanced technology to provide a sustainable and high quality of life and experiences for its residents, visitors, and businesses."

In a survey exploring smart city expectations, conducted by The Economist Intelligence Unit (EIU) and sponsored by Nutanix, researchers found both citizens and business executives in Riyadh have high hopes for the benefits of smart city initiatives. They expect smart city initiatives to improve fundamental quality of life and work challenges--citizens expect better education and job opportunities, while business executives expect better internet connectivity, efficiency of services (such as transport and utilities), innovation environment, and workforce quality. 86% of executives believe that smart city development will make Riyadh a more appealing place to do business, while 88% of citizens think these initiatives will make Riyadh a more appealing place to live.

Citizen Priorities: Better Education, Better Jobs

42%

When asked about the benefits that they hope smart city projects will deliver, 42% of respondents cited improved education--more than any other city included in this survey--and 28% cited higher quality employment opportunities.

31%

In fact, respondents believe that the best way for smart city initiatives to improve job opportunities is to provide targeted improvements in education. 31% cited expanding digital-skills training in primary and secondary schools, while 29% prioritized expanding training on advanced technologies in higher education.

35%

Another top priority for citizens is improving roads. 35% singled out improving road safety as a top smart city priority for improving personal health and safety, while 31% named reducing road congestion through more efficient traffic management for greater environmental sustainability.
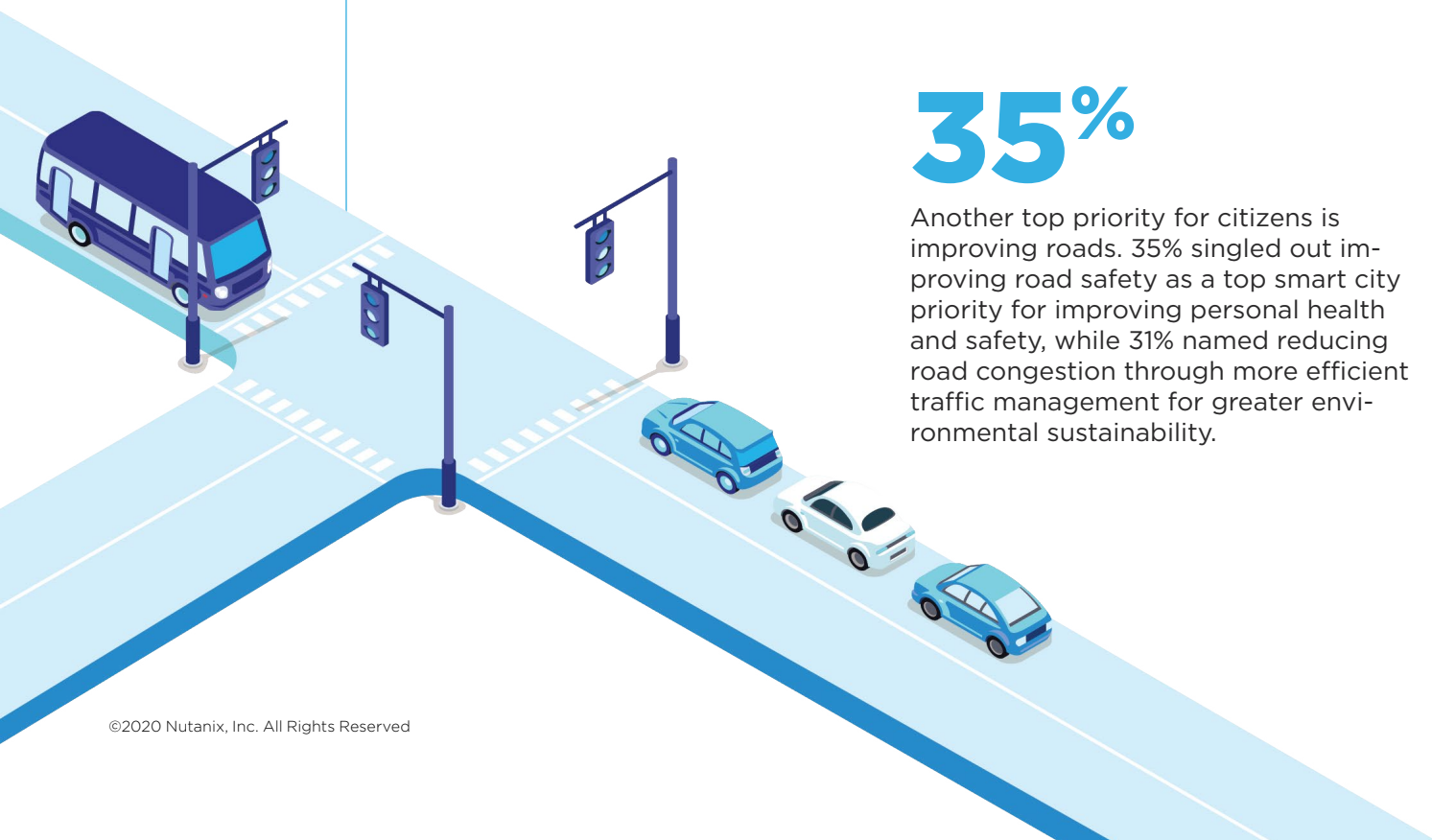
82%

In fact, 82% of respondents said that they would be comfortable with their city government using their personal data as part of smart city initiatives that help reduce road and transport congestion by predicting travel patterns.

32%

32% cited improving the efficiency of waste recovery (such as recycling) as a way that smart city initiatives could improve environmental sustainability.

36%

When asked about how smart city initiatives could improve Riyadh's affordability, 36% pointed to expanding the availability of free internet access in public spaces.

1 in 3

1 in 3 recommended improving the ability of energy and water utilities to vary pricing according to usage.

Business Priorities: Better Connectivity, Services, and Workers

Executives in Riyadh believe that smart city initiatives have a role to play in improving core conditions for business.

44%

44% named internet connectivity as a top priority, more than any other city surveyed globally.

36%

36% cited improving the efficiency and reliability of services (such as transport and utilities) as a priority, while nearly a third cited improving workforce quality as a key issue.

34%

Executives share their fellow citizens' belief that education is key to addressing workforce challenges. When asked about how these initiatives could improve availability of talent for their organizations, 34% cited expanding training on advanced technologies in higher education, and 28% cited doing the same at vocational institutions.

½

Nearly 1/2 of surveyed executives believe smart cities can improve the innovation environment in Riyadh by attracting large technology companies to establish operations in the city — second only to Sao Paulo of all cities surveyed.

40%

40% believe that facilitating greater research and development collaboration between universities and businesses will help improve innovation in Riyadh, and should be a top priority.
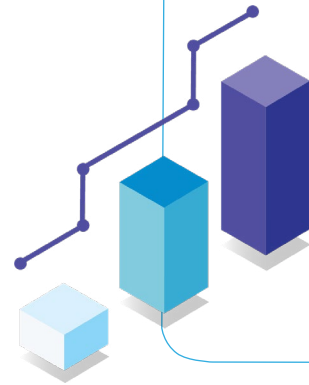
46%

Given Riyadh's location on the Arabian peninsula, it may come as no surprise that 46% of business executives cited improving the energy efficiency of buildings as a priority for improving the city's affordability.

34%

34% cited improving the ability of transport providers to vary fares according to demand or time of day--another acknowledgement of the extent to which traffic is top of mind for those who live and work in Riyadh.

48%

48% of business executives see partnering with large technology companies in the city as the chief market opportunity they expect to come from smart-city initiatives (second only to Mumbai globally).

38%

38% believe smart city projects should make use of open-government data to develop new products or services to bring about more opportunities.
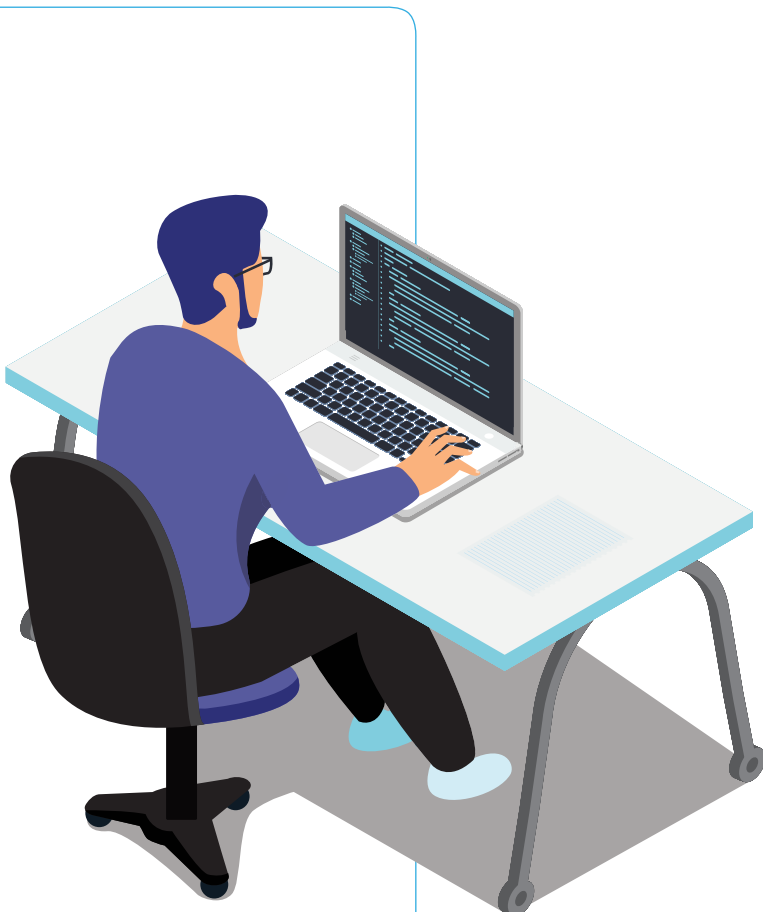
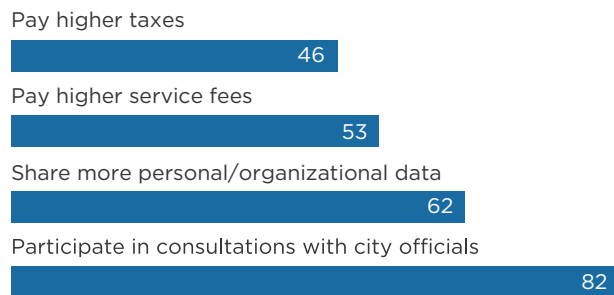## Trade-offs: Citizens and Business Executives Are on Board!

Riyadh appears to have been successful in communicating the value of smart city projects--perhaps because these projects have been tied to the larger Vision 2030 initiative.

Riyadh's citizens and business executives say they are quite familiar with their city's initiatives, 63% and 80% respectively, far outstripping global averages. And 74% of business executives agree that Riyadh has taken a proactive role in including the business community in the development of its smart city initiatives.
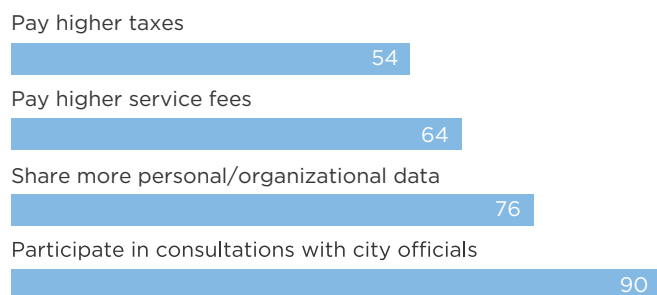
The degree of citizen and business executive buy-in can be seen in their willingness to pay for these benefits with money, data, or time.

In exchange for benefits of smart city initiatives, are you or
your organization willing to . . .
(% of respondants)

Citizens

Pay higher taxes

46

Pay higher service fees

53

Share more personal/organizational data

62

Participate in consultations with city officials

82

Business Executives

Pay higher taxes

54

Pay higher service fees

64

Share more personal/organizational data

76

Participate in consultations with city officials

90

All of these responses are higher than regional and global averages.

Finally, we can see that Riyadh's citizens and business executives trust their city to use their data from smart city initiatives for the greater social good.

69% of citizens believe that the benefits of smart city projects outweigh the loss of personal privacy--second only to Mumbai globally. 78% of citizens believe that using data from facial recognition to fight crime will do more good than harm.

When business executives were asked if it would be risky to share too much of their organization's data with the city as a means of helping them develop smart city solutions, 34% disagreed--more than any other city surveyed.

Key Takeaway: Riyadh's citizens and business executives believe they have everything to gain from smart city initiatives--they express among the highest enthusiasm and optimism of all the cities surveyed. However, these initiatives are still very recent, so it's possible disenchantment may set in at some point in the future. For now, the city appears to have done a good job selling the promise of the smart city to these key constituencies.