

Upgrading urban commerce

How businesses can compete in the smart cities of tomorrow

What do businesses have to gain from smart-city development? For technology companies, the answers may seem obvious. The smart-city programmes managed under city government auspices often mean public contracts for hardware, software or digital change consultancy of one form or another. Such programmes can lead tech firms to set up innovation labs in a city which helps them attract the best digital talent available locally. Tech firms can use local initiatives to test new products and services that can then be rolled out elsewhere.

But a city's business sector consists of much more than technology providers. Supermarkets and small grocery shops, accounting firms and law offices, banks and investment advisers, department stores and clothing boutiques, car dealerships and auto parts stores—these and many other types of businesses have a stake in the success of the smart-city initiatives being pursued where they operate. The priorities for smart-city development voiced by business executives in a survey by The Economist Intelligence Unit, sponsored by Nutanix, vary from city to city, but they all relate directly or indirectly to business competitiveness.¹

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¹ In summer and autumn 2019, The Economist Intelligence Unit surveyed 6,746 citizens and 969 business executives in Amsterdam, Copenhagen, Dubai, Frankfurt, Hong Kong, Johannesburg, London, Los Angeles, Mumbai, New York, Paris, Riyadh, San Francisco, São Paulo, Singapore, Stockholm, Sydney, Tokyo and Zurich. The analysis in this article is based on the survey responses of business executives only. For more details on the survey demographics, see <http://bit.ly/urbanintelligence>



Efficiency is central to a city government's primary commitment to its businesses and its citizenry.

*Lev Kushner,
Department of Here*

A rainbow of priorities

Of all the attributes of a business operating environment, it's hard to overstate the importance of reliability and efficiency to hard-nosed managers. If transport services such as trains and buses operate with chronic delays, or if power supply is unpredictable, businesses themselves cannot operate efficiently. In developing-world cities such as Johannesburg, power outages damage local businesses on a recurring basis.²

It should come as little surprise, then, that the most frequently-cited benefit executives want smart cities to provide is more efficient and reliable services such as public transport and utilities. Hong Kong managers are particularly vocal about this, with over half (55%) selecting it as their top priority among many. More than 40% of those in Dubai, Zurich, Frankfurt and Tokyo do the same.

Figure 1: Array of benefits

The main benefits businesses want from smart-city initiatives

(top response in each city)

Country	Efficiency / reliability of services (eg transport, utilities)	Environmental sustainability	Internet connectivity	Innovation environment	Affordability of operations (eg rents, taxes, fees)	Affordability of living for you and your employees	Workforce quality
Amsterdam	x						
Copenhagen				x			
Dubai	x						
Frankfurt	x						
Hong Kong	x						
Johannesburg			x				
London			x				
Los Angeles					x		
Mumbai					x		
New York							x
Paris	x						
Riyadh			x				
San Francisco		x				x	
São Paulo		x					
Singapore	x						
Stockholm					x		
Sydney				x			
Tokyo	x						
Zurich	x						

Source: The Economist Intelligence Unit

² See, for example, Prinesha Naidoo, "How South Africa's Blackouts Are Crippling Businesses", *Bloomberg*, February 15th 2019, and Thea Schoeman, "The impact of power outages on small businesses in the City of Johannesburg" (conference paper), November 2018.



Over 40% of Hong Kong and London respondents point to connectivity as the most desired benefit of smart cities.

According to Lev Kushner, founding partner of Department of Here, a San Francisco-based civic and economic development consultancy, efficiency is central to a city government's primary commitment to its businesses and its citizenry: to provide stable and well-functioning infrastructure and services.

Fast, reliable internet connections are also critical to competitiveness. Even in developed cities, connectivity cannot be taken for granted: over 40% of Hong Kong and London respondents, for example, point to this as the most desired benefit of smart cities.

What may seem less intuitive in a business context is the importance of enhanced environmental sustainability, voiced by executives in almost all 19 cities. Cited by 34% of respondents overall and by as many as 44% in São Paulo, the demand for a greener environment is also manifest in a strong emphasis on the need for better air and water quality as a means of attracting talent to a city.

Perhaps of more immediate concern is the cost of housing, which again has a direct impact on the number of skilled workers living in any given city. Although not as vital in most executives' eyes as a cleaner environment, over 40% of executives in San Francisco look to smart city initiatives to help redress what Mr Kushner terms the "excruciating problem" of housing shortages (along with the related blight of homelessness).

Levelling up

Technology companies in a city may reap the most direct fruits of a vibrant innovation environment, whether in terms of ideas for new digital products and services,

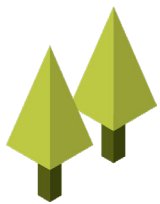
new recruits, or start-up acquisition opportunities. But other firms also benefit from the digital talent that universities, incubators and innovation labs in such environments produce. When asked how smart-city initiatives can aid innovation most effectively, 35% point to the facilitation of deeper research and development collaboration between universities and business, and 33% to supporting the growth of tech start-ups.

Another major contribution smart cities can make to innovation, according to 35% of respondents overall (and over 40% in São Paulo, Riyadh, Mumbai and Amsterdam) is to help attract large technology companies to set up local operations. The respondents' thinking may be that the tech giants' activities will give impetus to collaborative innovation projects that other local firms can take part in, or will help fuel start-up growth.

A notable exception to the hopes surrounding big tech is San Francisco, where just 16% of business respondents think attracting it should be a priority for smart-city programmes. This could be a manifestation of the criticism levelled at the tech sector in recent years for its failure to help alleviate the acute housing and social problems afflicting the city and the wider Bay Area.³ "The sector has become something of a scapegoat for many of San Francisco's ills," says Mr Kushner.

The open-data challenge

In our main report on smart-city expectations,⁴ we discussed the importance that the surveyed executives attach to open-government data. Seven in ten (70%) say the



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³ See, for example, Andrew Marantz, "Silicon Valley's Crisis of Conscience", *The New Yorker*, August 19th 2019.

⁴ *Accelerating urban intelligence: People, business and the cities of tomorrow*, The Economist Intelligence Unit, 2020.

ability to access such data on open platforms is vital to their business. Some of these aim to use such data to help refine their marketing strategies, for example. Many hope to use it to create new products or services.

Yet evidence in some cities indicates that open data is not yet generating hoped-for gains for businesses in terms of new products and services that spur economic development.⁵ Sluggish government efforts to make data available to businesses and the public on open platforms may be one

reason. But even where voluminous datasets are made available, poor formatting and other errors often make the data unusable.

Businesses should hope that as smart-city programmes and teams mature and gain in professionalism, they will help improve the scope and quality of their governments' data-sharing efforts. Spurring economic development through expanded business activity may not be the primary mission of smart cities, but it would certainly be a valuable one if accomplished.

Figure 2: Innovating in the urban jungle

Main ways business executives want smart-city initiatives to improve the innovation environment

(top response in each city)

Country	Facilitating greater research and development collaboration between universities and businesses	Attracting large technology companies to establish operations in the city	Supporting the growth of technology start-ups	Deploying ultra-high-speed broadband networks (eg, fibre and/or 5G mobile)	Increasing the use of conferences or hackathons to develop technology-enabled solutions to urban challenges	Expanding the use of digital platforms to share government data	Workforce quality
Amsterdam		x					
Copenhagen						x	
Dubai			x				
Frankfurt				x			
Hong Kong					x		
Johannesburg			x				
London				x			
Los Angeles		x					
Mumbai		x					
New York	x						x
Paris	x						
Riyadh		x					
San Francisco (tie)	x			x			
São Paulo		x					
Singapore			x				
Stockholm	x						
Sydney					x		
Tokyo				x			
Zurich	x						

Source: The Economist Intelligence Unit

⁵ See, for example, Valentina Romei, "Governments fail to capitalise on swaths of open data", *Financial Times*, November 1st 2018.