INNOVATION AND SMART MANAGEMENT

COMPETITIVE, SUSTAINABLE CITIES

JOAN E. RICART
Professor of strategic management, IESE

PASCUAL BERRONE
Associate professor of strategic management, IESE

Rapid urban growth and digitalization are two major trends that are transforming cities worldwide. These changes inspire smart management, which aims to ensure the competitiveness and sustainability of cities.

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Experts call the 21st century "the century of cities." There are many good reasons for this, but two major trends currently shaping the future are particularly notable.

Firstly, there is the major challenge of lightning-speed urbanization. Some statistics predict that we will go from an urban population of 50 percent worldwide in 2008 to around 70 percent in 2050. Keeping in mind expected population growth, this means that around three billion people will move into urban areas over the course of 40 years. This is the same as the total number of city dwellers that have existed over the course of human history until the present day. This trend has different effects in the more urbanized developed world than in emerging countries, which are undergoing tremendous urban growth.

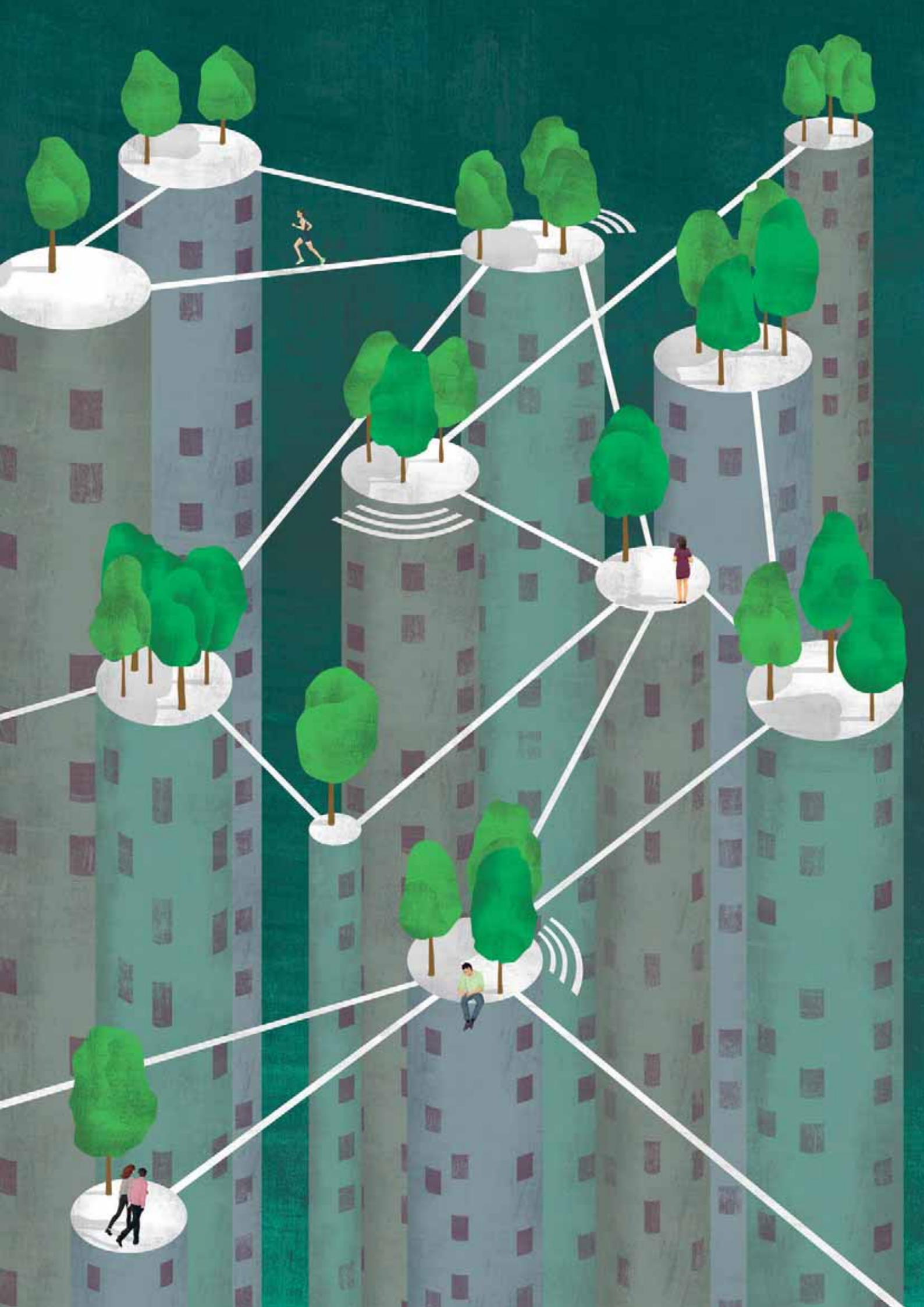
The other big game changer is digitalization. Greater connectivity brings with it a massive increase in digital density and inspires new business models in all areas, including cities. Technology allows us to do things better and more efficiently, challenging us to build smart cities through smart management.

Urbanization and digitalization converge in a unique opportunity to use smart management to ensure cities' competitiveness and sustainability. Cities have to be competitive, offering their citizens educational and employment opportunities, social and economic prosperity, and improvements in their quality of life. Otherwise, their citizens will look for alternative locations.

With urbanization under way, cities also have to be sustainable, because traditional city management will not be able to handle the projected urban growth. The indiscriminate use of energy, increasing pollution and growing inequality (among other "urban ills") demonstrate that we need a new city management model, so that cities become more socially inclusive, more economically competitive, and more environmentally sustainable – a tremendous challenge. How can management help?

STRATEGY FOR THE FUTURE

In order to develop a good strategy, city managers need to understand their starting point. In our research through the IESE Cities in Motion platform[1], we have developed a synthetic index to evaluate cities on 10 key dimensions. This year, the third annual edition evaluates 181 cities on the basis of 77 indicators[2]. The main objective of the study is to provide cities with an instrument for evaluating themselves



EVERY CITY SHOULD DEVELOP ITS OWN VISION OR MODEL THROUGH DIALOGUE WITH STAKEHOLDERS

and for comparing themselves with other cities. They can also identify model cities and emulate facets of their strategies[3].

One conclusion of this comparative city study is that there is no single model of success. This means that each city needs to develop its own vision or model through dialogue with stakeholders; this is an essential step in strategic planning. Dialogue is a challenge because periodic elections shift the playing field and stakeholders often have competing interests. Still, it is essential for building a smart city based on a shared vision of sustainability, inclusiveness and prosperity.

In addition, smart governance requires integration, taking advantage of interdependencies inside and outside city halls. Often, integration is difficult for historical reasons, so eliminating barriers to city-based or regional collaboration requires a conscious effort. Cities need a strategy for integration, beyond traditional long-term planning for infrastructure investment. The core of the strategy is to develop a comprehensive vision for the city and outline the steps for realizing it, or at least for moving in that direction.

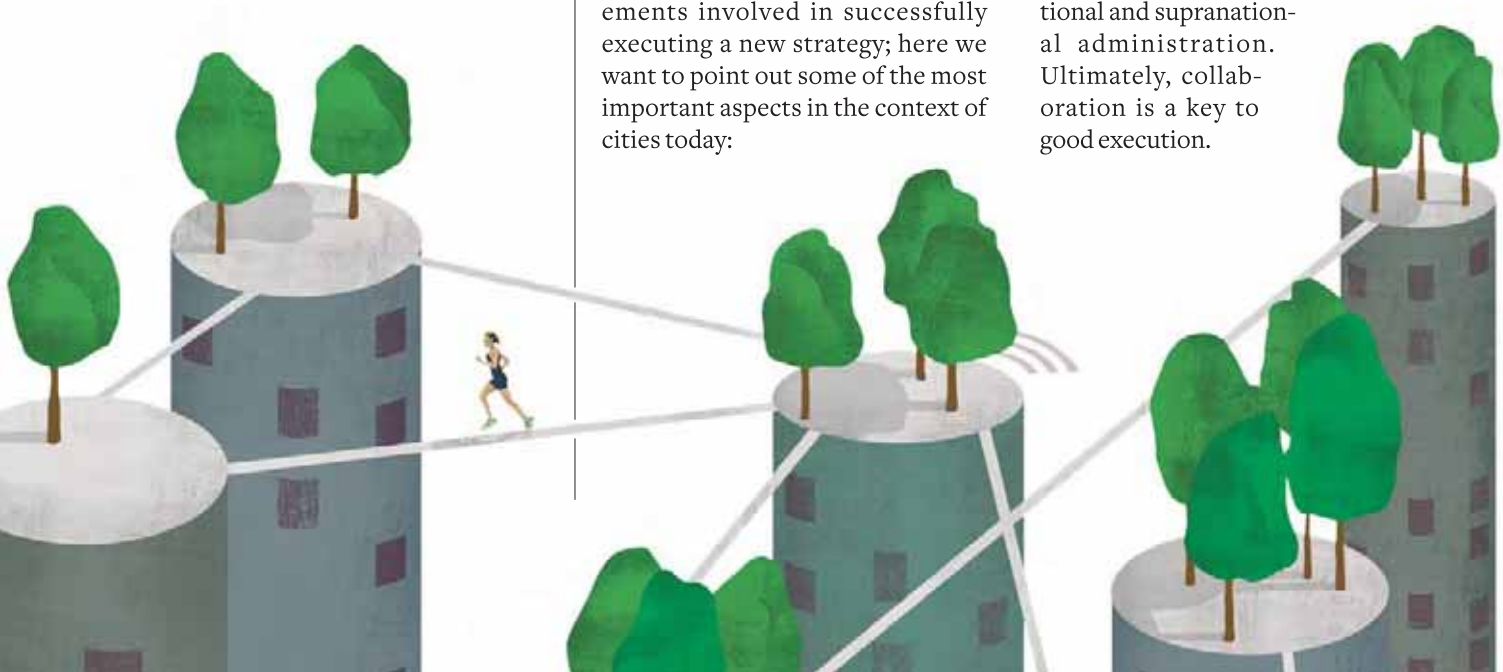
The most difficult thing about strategic management in organizations (and also cities) is turning a strategy into reality; execution, in short. Strategy becomes reality through people, teams, organizational structures and management systems. There are multiple elements involved in successfully executing a new strategy; here we want to point out some of the most important aspects in the context of cities today:

1 Collaborating to turn strategy into reality

A vital aspect of strategic execution in cities is collaboration. Cities participate in different forms of public-private partnerships (PPPs). Through such agreements, infrastructures and public services can benefit from the funding, efficiency and competitiveness of a private company, while still retaining public management and regulation. Because the individual should be part of the solution to community problems, collaboration should also include citizens, entrepreneurs and new sources of innovation, such as the collaborative economy.

Even if stakeholder involvement is already an important part of a city's strategy, execution is essential. Private partnership is necessary at all levels, but it is especially useful in solving public problems. That's why IESE supported the launching of the United Nations' International Centre of Excellence on PPPs[4], which encourages cities around the world to use this form of partnership to face their enormous future challenges.

Additionally, it should be said that collaboration doesn't end with companies or with citizens; it should also include government itself. Collaboration needs to take place within the different areas of city hall (remember the importance of integration); between municipal governments of the same metropolitan area or region; and even between different levels of local, regional, national and supranational administration. Ultimately, collaboration is a key to good execution.



2 Getting smart

The second key aspect of execution is understanding the impact of digitalization and the need to implement essential ICT sensor systems and connectivity infrastructures. This requires making new investments and building relationships with technology companies that sell solutions. This already complex panorama becomes even more so when it comes to developing a business model based on new technology, a model that will allow us to do things differently. Without the business idea, it is hard to know what technology is needed, but without the technology, it's hard to know which new business model to launch. Even when the answers to these questions seem clear, it can seem too risky to put ideas into practice. This chicken-and-egg problem is a major barrier to the development of smart cities.

For some time, cities have experimented with "smart" initiatives, normally for problem-solving. Initiatives like smart traffic management and efficiency in public lighting are relatively simple to put into place because, in most cities, a clear chain of command is responsible for these services, making it easy to implement change from above. Thus, a city can substitute incandescent lighting for LED technology and save over 40 percent in energy consumption, and even more if, at the same time, it installs movement detection sensors so that the lights only come on when a vehicle or pedestrian is present. This may not seem like a particularly "smart" solution, but it adds up to great savings for municipal governments with seriously limited budgets.

Many city halls add funding formulas with a service provider: the provider installs equipment in exchange for a part of the savings. In this way, the city can implement change without increasing its indebtedness.

Open data is another important trend in new impact initiatives. The movement toward opening access to public data has pushed municipal governments to use technology more effectively and to offer services electronically[5]. In addition, it has also allowed the emergence of new business models and applications developed by entrepreneurs that spread quickly from city to city. We now have apps that help us look for parking, tell us how safe a neighborhood is, categorize restaurants according to cleanliness or find a suitable location for our business.

New business models that don't depend directly on open data also benefit from this context. Car-sharing and car-pooling models and apps like Uber or Airbnb revolutionize how we organize our activities in cities. These collaborative tools show us that the more we harness technology's potential to support smart government, the more change becomes possible. Soon we may be witnessing electric driverless cars and sharing models that revolutionize mobility in cities.

BUILDING COMPETITIVE, SUSTAINABLE CITIES

The combination of ambitious strategy, collaborative execution and reliable technological support facilitates innovation in cities. Innovation is essential for developing competitive, sustainable cities. We need to do things differently if we want different outcomes. This is the only way to work towards the cities that we need now and the ones that we will need in the future.

In short, the way forward is to develop cities through smart management[6]. This proposal has great potential, but it also faces daunting obstacles. Each city needs a shared vision and a plan for using integration, along with a good degree of collaboration to realize it. This requires infrastructure and new business models that make change feasible. Are we ready for the smart management that we need? Maybe as citizens we should think about how to choose the right leaders for this challenge. At IESE, we will keep working to develop and support this positive leadership.

THE COMBINATION OF AMBITIOUS STRATEGY, COLLABORATIVE EXECUTION AND RELIABLE TECHNOLOGICAL SUPPORT FACILITATES INNOVATION IN CITIES

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