WASHINGTON, D.C. – The private sector is fast developing cutting-edge technologies to help cities get smarter in meeting the needs of their citizens, but most cities are not yet in a position to purchase those technologies on a large scale, according to a report released jointly today by the Brookings Metropolitan Policy Program and Barcelona’s ESADE Business School.

“Getting Smarter about Smart Cities” makes the point that cities, taking initial steps to be “smart,” do not have tangible plans in place to guide implementation of massive, citywide information and communications technologies. And while manufacturers of these products are eager to build what is projected to be a trillion-dollar industry, cities without comprehensive strategies to manage their built environments will not be able to take full advantage of what these products have to offer.

“For all the recent hype, smart cities have not yet lived up to their promise,” said Adie Tomer, Brookings senior research associate and associate fellow, and coauthor of the report. “Most smart city projects are small in scale right now, and that’s because cities have not set long-term goals and priorities that will make them smarter in growing their economies, providing jobs, offering a higher quality of life and protecting the environment in the years to come. And so smart cities, driven by technology that actually changes people’s lives, are far from commonplace around the world.”

The report is the product of a recent international workshop sponsored by the Brookings Metropolitan Policy Program and the ESADE Business School during which officials from cities throughout Europe, Canada and the United States gathered to discuss how the public sector can contribute to advancing smart cities around the world.
The report identifies five steps that cities must take to achieve “smart” status.

1. **Craft an economic vision that includes a specific role for technology:** Smart cities must conduct thorough assessments of their strengths and weaknesses and plan future growth around their key assets and areas for improvement. Edmonton, for example, uses its City Vision 2040 program as a guide for all major decisions.

2. **Use technology to promote a healthy economy:** Once a city establishes an economic vision, technology must address the three drivers of a healthy economy.
   
   - Improved productivity – New York City, for example, is using technology to both grow private industries—through major investments like the Applied Science campuses—and to create more efficient government operations.
   - A more inclusive economy – An inclusive economy includes opportunities for all citizens and businesses, whether it is through improving digital literacy for underserved populations or promoting open data protocols to foster civic-minded businesses.
   - A more resilient economy – Cities and their dense populations make them especially susceptible to environmental challenges, and technology like advanced stormwater management can help mitigate those concerns.

In addition, citywide broadband, the electricity of the 21st century, is a required element of any well-mapped economic vision and is essential to all industries and households reaching their potential.

3. **Include an empowered municipal technology executive:** City governments must realign their internal structures around new or redefined leaders—whether known as a chief technology, innovation, information or sustainability officer—who collaborate with others in the process of implementing their economic visions.

4. **Balance project size and appetite for risk:** Smart cities should design projects that fit their political and cultural environment. Smaller scale projects that focus on innovative industries have proven to be particularly attractive opportunities to roll out smart city technologies. These innovation districts, like that in Boston, are able to generate public support, boost local businesses, and serve as a model for future investments. Scale applies to financing, too. Spreading risk across the public and private sectors can create stronger support for major tech investments and help reduce sticker shock that may scare away top city leaders.

5. **Strengthen networks and improve communication tools:** Networking among city leaders is an invaluable way to share information about what worked (and what didn’t) in other markets. Communication with the community is also essential to building support for often expensive capital projects.
“By 2050, 75% of the world's population will live in cities, putting pressure on city infrastructure that is already stretched to capacity, so there is much at stake,” said Robert Puentes, Brookings senior fellow and the report’s other coauthor. “While there are many examples of how cities around the world are beginning to put in place a variety of smart technologies, such as energy-efficient buildings and intelligent transport networks, we still have a long way to go in making smart cities the norm rather than the exception.”

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