IBM Institute for Business Value

Smarter cities for smarter growth

How cities can optimize their systems for the talent-based economy

More than ever before, the traditional “bricks-and-mortar” drivers of economic growth are giving way to an economy based on “brains and creativity,” where the skills, aptitude, knowledge, creativity and innovation of a workforce are becoming increasingly important drivers of economic growth and activity. Cities are the focal points for this transformation.

Forward-looking civic leaders will alter their investment strategies to optimize city services around highly skilled, innovative citizens and communities, as well as knowledge-intensive businesses. Cities can achieve improvements in their current service delivery capabilities, as well as lay the foundation for new and expanded services, by making their core systems “smarter.” This requires a shift from appealing to mass audiences to appealing to individual citizens en masse (see Figure).

Cities need to focus initially on four high-impact areas of improvement:

- Reduce congestion in transport systems.
- Improve public safety by reducing crime and emergency response time.
- Streamline and tailor services for the citizen, including a heavy emphasis on education and training.
- Enable appropriate access to healthcare data for better quality of care, early disease detection and prevention.
Challenges cities face in their core systems – as well as improvements made to such systems – are interconnected. For example, a reliable, well-run transport system does not just reduce congestion. It improves the health of a city’s citizenry by reducing carbon dioxide emissions, stress and vehicular accidents. As such, forward-looking cities that want to fully leverage the improvements in efficiency and effectiveness from smarter core systems must adopt crucial principles of systems thinking.

The application of advanced information technology can help cities better understand, predict and intelligently respond to patterns of behavior and events. Leveraging the power of real-world data generated by cities’ systems of services requires:

- Collection and management of the right kind of data
- Integration and analysis of the data
- Optimization of systems to achieve desired systems behavior based on insights gained through advanced data analysis.¹

Cities that adopt this systems thinking and make wise investments to build a smarter city can position themselves to thrive. Those that continue to invest in traditional infrastructure improvements designed for a mass population are very likely to struggle.
How can IBM help?

- **Business Consulting and Delivery Services**: IBM helps clients in the public sector formulate, implement and operationalize citizen-centric programs, including business models, organizational structures and practices and performance models.
- **Business Analytics and Optimization**: IBM provides new intelligence services through deep, information-centric and mathematics-enabled business analytics capabilities.
- **IBM Global Location Strategies – Smarter City Assessment Tool**: This tool measures a city’s performance for each city system, allows benchmarking of a city’s overall capabilities against peer locations and best practice, and identifies where improvements can be made.

To request a full version of this paper, e-mail us at iibv@us.ibm.com
Reference