By implementing a centralised management platform, cities could create more value for business, citizens and investors. But they’ll have to reinvent their management approach.

“The internet of things” seems to create a new, seamless customer experience every day. Companies have become adept at integrating multiple aspects of a customer’s journey across multiple touch points and platforms, making lives a breeze. However, when it comes to cities management is still happening in silos, despite most city services being highly interdependent. Not only are city institutions difficult to deal with, their lack of coordination can also mean duplicate investments, suboptimal resource management and at worst fumbled and disjointed responses to crises.

Delivering more efficiency at a city level will require a new governance structure and better coordinated city management based on new technologies. The advantages will come to those able to obtain real-time awareness of a city situation with advanced analytics, enabling them to make more informed decisions to support urban sustainability.

The good news is that technical solutions are rapidly becoming available that will enable a “city management platform”, integrating all the urban components to support systemic management of a city. The systemic management of a whole city is more efficient than the sum of the managements of its departments. In most cases, even if one department works well independently, it can still achieve more if it has more information from other departments.

Singapore paved the way in centralised city management by announcing in October 2014 that it was launching a “City Platform” to support its “Smart Nation Programme”. Many more cities in the Middle East, India and Asia are expected to follow, supporting their platforms using technology which has evolved significantly over the past years.

Optimising spending

Integrating systems will help cities optimise both capital and operating expenditure. For example, the integrated management of utilities inside a building using a Building Management System (BMS) could reduce operating expenses by 20 to 30 percent. This could be further enhanced when 100 buildings are integrated together. In Mexico City, criminality has dropped by a third since 2009 thanks to its new centralised police command centre. Today, half of all stolen cars are recovered within 72 hours, cutting insurance fees by a third, and increasing operational efficiency five-fold. Integration of systems and operations inside one management centre has demonstrated value creation.
The potential for cost savings is even larger. Examples include the reduction of duplicated investments across all departments (urban equipment and sensors); optimisation of resource management during operations; using the “internet of things” to keep updated on the environment to enable more efficient response; improvement of urban operations (with integrated Concept of Operations across silos); as well as effective prospective planning based on more numerous and accurate urban data.

For investors in urban developments, the use of a city platform in a project should be a signal of a sound investment. City platforms are planned in mature urban projects, which are leveraging the latest technology and promoting the integration of “systems of systems” by the development of shared operations and supervision centres.

However, all the technology in the world still needs good management to be effective. And, in the case of cities, better management. Departments are going to have to collaborate more closely and coordinate operations. Implementing systemic urban management will require a new type of urban governance.

In practice, cities will need to innovate their governance: in island-countries and city-states this could be the creation of an organisation across departments reporting to the Prime Minister, and operating the centralised platform. At a city level, the team could report to the mayor (or to the CEO of the city when cities become privately owned). New concepts of operations will need to be defined to manage cross-departmental operations, and a new holistic investment strategy will need to be planned at the city level. For these reasons each city needs to define its own identity and vision before framing its development strategy. Defining a city’s fundamental needs will then help to design the functionalities of the city platform with all the consequences on the urban departments (legal, missions, scope, responsibilities, budget allocation, human resource management).

**Generation of new revenues**

A city platform will aggregate and make data coming from many different silos (transportation, energy, security, environment, tourism, etc.) more widely available. This will open up an almost limitless field of real-time urban applications providing brand new value creation services for government entities, businesses, residents and visitors. Whereas today applications are developed using the data from one silo, in the future applications will be developed using data from multiple silos sharing data through the city platform’s Information System. Innovative business models could revolutionise the cost structures and revenue models of urban stakeholders when benefiting from real-time urban information.

Cities with their own platform could also provide “city management as a service” to metropolises which can not, thereby helping the economic growth of surrounding cities and contributing to the sustainable development of an entire region. The opportunities of value capture from this futuristic platform are twofold. Systemic urban management creates value in future cities because it creates an environment to optimise investments and generate new revenues for city stakeholders.

Moving from segmented city management to systemic urban management using a city platform will create value through a combination of enhanced city characteristics. These will include more efficient resource management and demand management, business intelligence, better quality of services across departments, and an increased number of city dwellers. In addition, city platforms will help to decrease energy consumption, pollution (GHG, air, noise), response time between departments, and damages in case of incident, crisis or catastrophe.

Philippe Bouvier, Managing Partner, Urban Value Creation Consulting, located in Dubai, which aims to improve the management of urban services in brownfield and greenfield cities. Philippe has a PhD with Honors from Paris 7 University and an Executive MBA from INSEAD Singapore. His PhD is in urban studies (urbanism and city management) and the title of his thesis is “From segmented management in modern cities to systemic governance in sustainable cities”.

Follow INSEAD Knowledge on Twitter and Facebook

Find article at https://knowledge.insead.edu/blog/insead-blog/cities-can-capture-more-value-4591