

A Proposal of a Strategic Framework for the Development of Smart Cities: The Argentinian Case

Authors : Luis Castiella, Mariano Rueda, Catalina Palacio

Abstract : The world's rapid urbanisation represents an excellent opportunity to implement initiatives that are oriented towards a country's general development. However, this phenomenon has created considerable pressure on current urban models, pushing them nearer to a crisis. As a result, several factors usually associated with underdevelopment have been steadily rising. Moreover, actions taken by public authorities have not been able to keep up with the speed of urbanisation, which has impeded them from meeting the demands of society, responding with reactionary policies instead of with coordinated, organised efforts. In contrast, the concept of a Smart City which emerged around two decades ago, in principle, represents a city that utilises innovative technologies to remedy the everyday issues of the citizen, empowering them with the newest available technology and information. This concept has come to adopt a wider meaning, including human and social capital, as well as productivity, economic growth, quality of life, environment and participative governance. These developments have also disrupted the management of institutions such as academia, which have become key in generating scientific advancements that can solve pressing problems, and in forming a specialised class that is able to follow up on these breakthroughs. In this light, the Ministry of Modernisation of the Argentinian Nation has created a model that is rooted in the concept of a 'Smart City'. This effort considered all the dimensions that are at play in an urban environment, with careful monitoring of each sub-dimensions in order to establish the government's priorities and improving the effectiveness of its operations. In an attempt to ameliorate the overall efficiency of the country's economic and social development, these focused initiatives have also encouraged citizen participation and the cooperation of the private sector: replacing short-sighted policies with some that are coherent and organised. This process was developed gradually. The first stage consisted in building the model's structure; the second, at applying the method created on specific case studies and verifying that the mechanisms used respected the desired technical and social aspects. Finally, the third stage consists in the repetition and subsequent comparison of this experiment in order to measure the effects on the 'treatment group' over time. The first trial was conducted on 717 municipalities and evaluated the dimension of Governance. Results showed that levels of governmental maturity varied sharply with relation to size: cities with less than 150.000 people had a strikingly lower level of governmental maturity than cities with more than 150.000 people. With the help of this analysis, some important trends and target population were made apparent, which enabled the public administration to focus its efforts and increase its probability of being successful. It also permitted to cut costs, time, and create a dynamic framework in tune with the population's demands, improving quality of life with sustained efforts to develop social and economic conditions within the territorial structure.

Keywords : composite index, comprehensive model, smart cities, strategic framework

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