The Risks of 'Techtopia': Reviewing the Negative Lessons of Smart City Development

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Abstract : 'Smart cities' are not always as 'smart' as the term suggests, which is not often covered in the associated academic and public policy literatures. In what has become known as the smart city approach to urban planning, governments around the world are seeking to harness the power of information and communications technology with increasingly advanced data analytics to address major social, economic, and environmental issues reshaping the ways people live. The definitional and theoretical boundaries of the smart city framework are broad and at times ambiguous, as is empirical treatment of the topic. However, and for all the disparity, in investigating any number of institutional and policy prescriptions to the challenges faced by current and emerging metropoles, scholarly thought has hinged overwhelmingly on value-positive conceptions of informatics-centered design. From enhanced quality of services, to increased efficiency of resources, to improved communication between societal stakeholders, the smart city design is championed as a technological wellspring capable of providing answers to the systemic issues stymying a utopian image of the city. However, it is argued that this 'techtopia', has resulted in myopia within the discipline as to value-negative implications of such planning, such as weaknesses in practicality, scalability, social equity and affordability of solutions. In order to more carefully examine this observation - that 'stupid' represents an omitted variable bias in the study of 'smart' - this paper reviews critical cases of unsuccessful smart city developments. It is argued that also understanding the negative factors affiliated with the development processes is imperative for the advancement of theoretical foundations, policies, and strategies to further the smart city as an equitable, holistic urban innovation. What emerges from the process-tracing carried out in this study are distinctly negative lessons of smart city projects, the significance of which are vital for understanding how best to conceive smart urban planning in the 21st century.

Keywords : case study, city management, innovation system, negative lessons, smart city development