

## BOOK REVIEW

# Smart City: How to Create Public and Economic Value with High Technology in Urban Space

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*Smart City. How to Create Public and Economic Value with High Technology in Urban Space*

*Dameri, R. P. and Rosenthal-Sabroux (Eds)  
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In a moment of high expectations and accolades about “smart cities” initiatives around the world, the collection of definitions, concepts, studies and methodologies provided by the book entitled “Smart City. How to Create Public and Economic Value with High Technology in Urban Space” is a welcomed effort to clarify a structure of a complex ideal of a mega project like smart city.

This edited piece from a group of European researchers and cases represents an ambitious work towards the need to define, organize and build structure on an embryonic topic in different fields that today has no roadmap or clear direction about its definition and boundaries.

Although the book focuses on Europe’s cases of smart cities, it entails a valuable set of four features and advantages for those who attempt to dominate a complex animal with thousand heads: (1) relevant cases of smart city initiatives in Europe, (2) interdisciplinary perspective, (3) definitions and descriptions of smart city, (4) value creation and impact measurements of smart city projects.

One feature of this book is that focuses on germane studies and cases of smart cities in Europe. The chapter of Thorne and Griffith provides details about the London Smart City development. Zuccardi Merli and Bonollo test their theoretical model for performance measurement on a set of Italian and European smart city cases. In Dameri’s chapter, a comparative study between the cases of Amsterdam Smart City and Genova Smart City was conducted to examine key empirical aspects of implementation of these two smart strategies: role of players, programs and governance. Thorne and Griffiths study the case of London, the Digital City Exchange, by examining the relationships among

enablers and the implementation environment in which they were embedded. The chapters of Fontana and Zuccardi and Bonollo analyze the smart city phenomenon in a number of large and medium-size Italian cities. Baccane, Mechant and Schuurman examined the process of value creation process in the case of Ghent Smart City in Belgium. Finally, the case of Alcotra innovation living lab in a cross-border cooperation program between Italy and France was documented by Cossetta and Palumbo.

The European breeding ground of smart city's cases provided a wonderful lab to combine multidisciplinary perspectives that not only involves urban planning, mathematics, computer science and engineering but social studies, political science and economics, among other fields. Every chapter of the book is evidence of this cross-road among fields and disciplinary lenses. The smart city framework proposed and tested by Thorne and Griffiths in the Digital City Exchange of London is a clear exposition of the multidisciplinary and cross-sectional nature of existing models and frameworks to study of smart city. Another example of the multidisciplinary approach to study smart cities is the smart city model for the creation of public value applied by Fontana in Italian cities; the conceptual ecosystem framework of Baccane, Mechant and Schuurman analyzed in a Belgian case; the logical structure of a smart security integrated system described by Di Bella, Odone, Corsi, Sillitti and Breu; or the proposal of a new performance measurement model developed and examined by Zuccardi and Bonollo. All these models imply multidisciplinary collaboration and sharing cross-roads among fields.

Another useful characteristic of this book is that many of its chapters dedicate a great amount of effort and space in disentangling the moody-concept of smart city in theory and in practice.

The chapter of Dameri and Rosenthal-Sabroux offers a connection of the concept not only with the expected technological ingredient but with the public value creation process. The definition of smart city proposed by these authors is extended with a vision of a smart

city initiative that needs people, technology and governance combined into a process of creating public value for different stakeholders: citizens, companies, non-for-profit-organizations, governments, among others. At the end, Dameri and Rosenthal-Sabroux derived a conceptual framework for smart city governance that embraces all these components for a successful adoption of smart projects. The discussion brought by Cocchia's chapter clarifies the disagreement between academics and practitioners perspectives about what is a successful smart city. Generally speaking, Cocchia uncovers the natural dissonance between an ideal of smart city from the scholarly view and what it is useful to drive the implementation and to measure the obtained results of this type of projects from the empirical perspective. Based on this dichotomous definition, smart city for academics is more an intellectual capital created by more educated, innovative and profitable oriented individuals, companies and governments while smart city for practitioners is more about technological assets combined by different applications, infrastructures, data and innovations. Dameri conducted a systematic literature review of the terms smart city and digital city across different bodies of research. The result is not a common or shared definition, but the basis to identify elementary characteristics of the "smartness" of a city starting from core components found in a multiple definitions and concepts: land, infrastructures, people and government. This author also proposes a definition of smartness in terms of three main aspects: effectiveness, environment consideration, and innovation (see Dameri's chapter for further details of these concepts that built upon "smartness"). Di Bella, Odone, Corsi, Sillitti and Breu developed in their chapter a comprehensive smart framework for the realization of smart security systems to improve the safety and security in urban areas. In the chapter of Carrabs, Cerulli and Sciomachen, the smart city framework was applied from the logistic perspective in the case of public goods distribution in urban spaces. Their proposal entails a mathematical programming model to face and solve public

goods delivery, vehicle optimization, and traffic and pollution reduction as ultimate goals of a smart city strategy.

Along with the discussion of what is a smart city initiative comes the argumentation of how to measure the impact of this kind of projects. In the core of the analysis of many chapters in this book there are different dialogues about public value of smart city enterprises. According to Dameri and Rosenthal-Sabroux's chapter, the benefits and impact of smart city projects can only be evaluated based on a strategic vision and public value creation. A successful smart program involves several dimensions of public value that are balanced according to their strategic goals and actions. These authors also acknowledge the lack of robust key performance indicators and a measurement framework to evaluate the effectiveness of smart actions. Cochia's chapter provides an insightful revision of smart city definitions that derived into different dimensions of how to evaluate the public value of any smart city. From one perspective, smart city initiatives can be evaluated by the intellectual capital creation while from the empirical view the technological aspect is a core element for evaluating its performance. In the chapter of Dameri, it is emphasized the need to measure smartness of cities by addressing the concept of public value and its dimensions of quality of life, stakeholders and economic and social values. Negree and Sabroux confront in their chapter the dilemma of prioritizing smart initiatives and actions in a context of scarce financial resources and complex citizens' needs and expectations. Fontana's chapter describes a more sustainable model for evaluating the smart city strategies when these committed plans are associated with the creation of public value. In particular, if the vision of the smart project and the value creation process is participative among different stakeholders, such as citizens, companies, public authorities and non-for-profit organizations. Specifically, the chapter of Cossetta and Palumbo raises the importance of

citizen participation for creating value out of social and open innovations in the context of smart cities. Their study examines the expectations and ideas from citizens using living labs in order to guarantee a better co-production of public values in smart city projects. Zuccardi Merli and Bonollo investigate specifically the performance measurement not only for the smartness of a city as Dameri conceptualizes it, but in a way a city has the capacity to deliver a better quality of life to different stakeholders. These authors also agree with the idea of citizen involvement, the role of stakeholders and the need to develop a measurement model for smart city performance. Baccane, Mechant and Schuurman analyse the created value in a smart city case in Belgium by examining the level of sustainability of some smart programs over time. They found that many of the smart programs are really pilot tests that need to overcome their initial phases into a more real sustainable value smart projects.

In summary, the book is wonderful collection of working-process efforts to conceptualize smart city initiatives and their core elements (i.e. technological, cultural and environmental aspects, among others). Across chapters several arguments excel as common claims. First, most of smart city initiatives are pilot projects in process of design or implementation phases. Second, in spite that smart enterprises are undergo and presumably conducted on the name of a better quality of citizens, there is no citizen participation or consultation in any of these projects. Third, smart city developments present a critical lack of vision of what component should be more important or leading element of the equation: technology, culture or environment, to mention some of them. Finally, the main argument proposal from this book is that defining the smart city vision and to align it with all the smart actions and desired outcomes as the public value orientation should be one of the first steps to implement a successful smart city program.