Chapter 33

From the Smart City to the People–Friendly City:
Usability of Tools and Data in Urban Planning

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ABSTRACT

This chapter addresses the smart city concept as a first step towards the formulation of a new socially-improved urban concept which may be defined as that of the "people-friendly city". This new task involves the employment of IT tools, but using new methods and pursuing different goals other than mere numerical information. In terms of the urban environment, this means that cities should be designed for people, and planning practitioners should be able to understand citizens' needs, communicate with them and involve them in a collaborative process. Therefore, an overview of the implications of smart cities for urban planning is followed by a more detailed analysis of Planning Support Systems (PSS) as innovative tools for enhancing the process of delivering a more inclusive and people-friendly urban environment. The lessons learnt from the application of the PSS tool is then illustrated in order to define the potentialities and key points for the development of similar tools.

INTRODUCTION

Over the last few years, the rapid development of Information Technologies (IT) has created new opportunities for the sustainable growth of cities. Nowadays, cities are being approached as complex systems which increasingly attract people who wish to work and live in them. For this reason, cities have to

deal with various problems, such as traffic congestion, noise and air pollution, energy efficiency, high densities, the lack of green space and an increasing demand for services. In this context, IT can provide strong support and enable a scientific approach to the management and planning of urban areas to be adopted. Sensors and digital-control technologies can gather data from citizens' behaviour and provide a new way of reading the workings of the city system, therefore transforming the city into an "open-air computer" (Biderman, 2013) that automatically collects and calculates data. This new integration of IT in urban areas has generated the concept of "smart city".

Consequently, smart cities are based on a wide range of information tools to be used in urban contexts. This opens up new frontiers in the study of city systems, although it also generates certain fresh obstacles to understanding the real reasons behind the human need to live in cities. First of all, the computerized quantitative approach clashes with the social and qualitative origins of urban co-living. Secondly, until now tools have mainly been employed to gather data rather than to provide real applications aimed at improving the Quality of Life (QoL) of citizens. Cities are full of video-cameras and sensors constantly collecting data that can be rarely used by citizens to improve their own quality of life.

As a result, citizens are a long way off benefitting from the utilization of smart technologies in urban areas. Nowadays the debate is finally shifting from a technology-driven vision towards a more human dimension, introducing the concepts of people friendliness and a human-to-human approach, where the user is the central focus of the whole system, and its needs and specificities are the central theme.

In this chapter, the authors will address the smart city concept as a first step towards achieving a new social-improved urban concept which may be termed the "people-friendly city". This new task involves the use of IT tools, but also the adoption of new methods and the pursuit of wider goals than that of simple numerical information. In terms of the urban environment, this means the cities should be designed for everybody, and planners need to be able to understand citizens' needs, communicate with them and involve them in a collaborative process, in order to meet their requirements through appropriate spatial planning. The people-friendly city will be based on communication and social interaction as a way of satisfying the real needs of people.

Therefore, an overview of the implications of smart cities on urban planning will be followed by an examination of Planning Support Systems (PSS) as innovative tools for enhancing the process of delivering a more inclusive and people-friendly urban environment. A rapid outline of PSS will analyse their operating framework, usability and effectiveness. The chapter will then illustrate the lessons learnt from the application of a PSS tool, in order to define the potential and key points for the development of similar tools.

BACKGROUND

From the Smart City…

In recent years the concept of smart city has become increasingly popular in the policy arena, attracting the interest both of policymakers, who are struggling to achieve the desired international ranking of smart cities in order to be more "competitive", and of private industry which is looking for places to test and develop new technologies, thus opening up a new market in the innovative services field. However, the question is: what is a smart city today, and who are its beneficiaries?

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