Chapter 67

Competitive Smart Cities through Healthy Decision-Making

Ori Gudes
Curtin University, Australia

Tan Yigitcanlar
Queensland University of Technology, Australia

Sarah Jane Edwards
The University of Western Australia, Australia

Virendra Pathak
Uttar Pradesh Technical University, India

ABSTRACT

This chapter examines the challenges and opportunities associated with planning for competitive, smart and healthy cities. The chapter is based on the assumptions that a healthy city is an important prerequisite for a competitive city and a fundamental outcome of smart cities. One of the major decision support systems to support healthy cities is e-health. This chapter focuses on the role of e-health planning, by utilising web-based geographic decision support systems. The chapter proposes the implementation of a novel decision system which would provide a powerful and effective platform for stakeholders to support access online information. This would also provide for better decision-making as well as empower community participation. The chapter highlights the need for a comprehensive conceptual framework to guide the decision process of planning for cities in association with opportunities and limitations. This chapter provides critical insights into using information science-based frameworks.

INTRODUCTION

This chapter looks at a new method of how to achieve competitive and healthy smart cities. There are a number of future city visions that contain different focuses on health such as competitive cities, smart cities, healthy cities, resilient cities, knowledge cities, creative cities, green cities and ubiquitous cities. For example, excellent health service delivery, healthy built environments and a high level of health in the population are integral to achieving competitive cities. This is because the qualities that reflect health can make a 'location' more attractive and, therefore, competitive in comparison to global standards. Smart cities, on the other hand, focus on developing urban systems integrated through technology, which

leads to the achievement of healthier cities by enabling improved health qualities. Therefore health is an outcome of creating a smart city. For the past few decades, there has been emerging evidence of a close relationship between health and place. This is displayed in the Healthy Cities movement (WHO, 1999) which reflects the amount of work going into creating environments that promote both health and wellbeing. Healthy Cities was officially introduced in 1986 by Ilona Kickbusch at a conference of the World Health Organisation (WHO) in Copenhagen, Denmark. This movement has been very popular with over 3000 cities, towns and villages joining the movement from 1985 to 2010 (Healthy Cities Illawarra, 2010). *Johnson argues that* a healthy community is a critical component of a competitive city (Johnson, 2002). Smart cities include "important ingredients for a healthier environment and for improved quality of life and well-being of city dwellers" (Boulos & Al-Shorbaji, 2014, p.5).

There is evidence that planners require a new approach to enable them to respond to this agenda. Specifically, they need timely access to local information, collaborative planning processes and mechanisms for engaging the public in decision-making. The WHO has concluded that e-Health systems hold great promise for both low- and high-income countries. The benefits of an online approach to health planning apply not only to effective and efficient health-care delivery, but also to public health governance, finance, education, research, and health-related economic activities (WHO, 2008). The purpose of this chapter is to examine an online approach to planning that can respond to the call for healthy, smart and competitive cities. In this chapter, we will first review competitive cities in the context of health. Then we will review smart cities in the context of health. Next, the chapter will explore e-health decision support systems in the context of collaborative health planning practice. This will be followed by the conceptual framework for planning healthy, smart and competitive cities. Lastly, we will introduce a participatory model for implementing collaborative health planning and apply the conceptual framework in practice. In summary, we conclude that e-health Geographical Information System (GIS) based Decision Support System (DSS) can contribute to the development of healthy, smart and competitive cities, particularly if the challenges presented by an online environment can be addressed.

BACKGROUND

The term 'competitiveness' has been well defined by Webster and Muller (2000, p. 1): "The ability of an urban region to produce and market a set of products (goods and services) that represent good value (not necessarily lowest price) in relation to comparable products of other urban regions. Non-tradeables, e.g., local services, are part of the competitiveness equation. An urban economy that produces goods and services for local people of high value relative to price, supports the export economy of the city, making it more competitive, as well as directly raising the quality of life and standard of living for people living in the urban region". Thus, like the healthy cities movement, the call for competitive cities is based on the notion of better city lifestyles. The economic competitiveness of a city is defined by the prosperity of its citizens. A competitive city is known as a city of opportunities for families, lifestyle and business. Similarly, a healthy city is "one that is continually creating and improving [its] physical and social environments and strengthening the community resources which enable people to mutually support each other in performing all the functions of life and achieving their maximum potential" (Flynn, 1996, p. 300). It is not surprising, that the task of applying knowledge to the process of building a healthy and competitive city has become an important focus for urban planners. One of the recent, approaches that encourage this is the Smart City approach.

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