Editorial: Smart city, knowledge city, sustainable city – the brand soup of contemporary cities

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The sustainability concept has become a prevalent policy underpinning both developed and developing countries' planning agendas. This is mainly the result of externalities – e.g., climate change, non-renewable resource depletion, air, water and land pollution, rapid and sprawling urbanisation, and social inequalities (Yigitcanlar et al., 2007, 2008) – that are often not considered until they reach the level, where disregarding consequences of these externalities may jeopardise the overall wealth and wellbeing of the citizens. The trend of growing urban population and associated citizen needs has highlighted the importance of actions, which should be taken to reach the goals of sustainable communities (Yigitcanlar, 2010a, 2010b).

Popularity of the sustainability concept has led to the formation of a new development type, sustainable urban development. The sustainable urban development term is actually a self-contradictory one consisting of words that have completely different meanings – an oxymoron. Sustainability refers to maintaining the existence of the ecosystem and its services, while also providing for human needs, whereas, in contrast, urban development refers to any activity that improves the quality of life by depleting natural resources and devastating natural areas (Yigitcanlar and Dur, 2010; Yigitcanlar et al., 2015). However, while urban development cannot be fully sustainable, in general sustainable urban development refers to a less harmful or intrusive development type to the natural ecosystems (Dizdaroglu and Yigitcanlar, 2016).

With the raising environmental concerns, particularly since 1970s, sustainable urban development of cities in the world is perceived as improving the quality of life in a city, including ecological, cultural, political, institutional, social and economic components without leaving a burden, and thus forming the sustainable city (Yigitcanlar and Dizdaroglu, 2015). This has led to the coining a new and popular term as a city brand – i.e., sustainable city, – where particularly in 1990s and early 2000s this brand was adopted by many cities of the world (Dizdaroglu and Yigitcanlar, 2014; Goonetilleke et al., 2014).

From the late 1990s onwards, many scholars started to raise the critical issue of dealing with the development challenges requiring a knowledge-base for cities and their citizens, which can only be achieved through knowledge-based development (Carrillo et al., 2014). Knowledge-based development has become a prevalent policy especially during the last two decades, offering cities and regions a multidimensional and balanced development opportunity to achieve viable economies, social justice, environmental sustainability and good governance (Yigitcanlar, 2010c; Lönnqvist et al., 2014).

The issues of globalisation and the ongoing transformation of advanced economies from manufacturing to services and then to knowledge-based activities has also engendered the knowledge society, which has influenced urban planning, development and mainly spatial aspects of cities (Baum et al., 2009). The rise of knowledge-based economy is also seen as the main driver of global and local economic development. The increasingly important transition into the knowledge-based economy requires conditions and environment, which are very different from those of the declining community-based economy. In this context, the aim of urban planning and development in the era of knowledge-based economy focused on achieving a sustainable development by creating a strong urban core, harnessing its economic strength, addressing social exclusion and avoiding physical dereliction. The popularity of knowledge-based development – or knowledge-based urban development – has led to cities formulating development strategies for their knowledge-based development (Sarimin and Yigitcanlar, 2012).

The consequential outcome of knowledge-based urban development is the formation of knowledge cities (Yigitcanlar et al., 2012). A knowledge city is defined as a city that searches for the creation of value in all its areas and develops high standards of life, cultural support and economic development, among other aspects including higher level of income, education, training and research, at the same time it is a regional knowledge economy driven locality with high value-added exports created through research, technology, and brainpower and purposefully designed to encourage the nurturing of knowledge (Carrillo et al., 2014). This brand remained highly popular between the late 1990s and the early 2010s; many cities of the world adopted this brand (Yigitcanlar and Bulu, 2015).

During the last decade, at the dawn of the catastrophic global climate change era, advance information and communication technologies are started to be seen as a potential panacea to, somehow, reverse or ease the impacts of our ill urbanisation, industrialisation and consumerism practices (Yigitcanlar, 2016). Particularly, advance information and communication technology applications' potentials in environmental decision making is widely recognised (Yigitcanlar, 2009). Due to the technological offerings many governments – at local, regional, state, national, and supra national levels – all across the globe jumped on the technology solution bandwagon (Yigitcanlar, 2006) – this has given birth to the smart city concept.

Over the past decade smart urban technologies, as part of the smart city agenda, have begun to blanket our cities with an aim of forming the backbone of a large and intelligent infrastructure (Lee et al., 2008). Along with this development, dissemination of the sustainability ideology has had a significant imprint on the planning and development of our cities (Trindade et al., 2017). Today, the smart city concept is viewed as a vision, manifesto or promise aiming to constitute the 21st century's sustainable and ideal city form. In other words, smart city is an efficient, technologically advanced, green and socially inclusive city (Lara et al., 2016). This is to say, smart city applications place a particular technology focus at the forefront of generating solutions for ecological, societal, economic, and management challenges (Yigitcanlar, 2015).

Today, being smart is on the urban agenda of many cities all across the globe with a strong support from global technology and development companies – e.g., IBM, Cisco, Samsung, LG, ARUP, Schneider Electric, Siemens, Microsoft, Hitachi, Huawei, Ericsson, Toshiba, and Oracle (Yigitcanlar, 2016). This makes smart city brand the most popular one for cities. However, smart cities primary focus mostly being exclusive to technology also has been heavily criticised by a number of scholars. Despite the

criticisms of smart city sceptics of this type of urban form and development practice, there is a general sense among the scholars that rethinking our cities' planning and development paradigms and processes in the age of digital disruption and climate change is a good thing (Yigitcanlar and Lee, 2014).

During the last few decades, at least three strong urban brands prevailed – i.e., sustainable city, knowledge city, and smart city; we can also add creative city, intelligent city, entrepreneur city, and eco-city to the list. Scholarly discussions, in the recent years, focused on the question of whether these city models could really bring the desired outcomes to our cities or whether they are just a branding hoax or a neoliberal ideology. Probably before this question is adequately addressed, another new brand will come to the urban scene – perhaps, future city, cyber city, or autonomous city – to be added to the brand soup of contemporary cities.

This first issue of the *International Journal of Knowledge-Based Development* for 2018 (volume 9) contains four papers. These papers investigate the knowledge-based development phenomenon from various angles (i.e., citizen perspectives, intellectual capital, productivity, and smart specialisation) – in order to provide a further understanding of the complex nature of the concept.

Following this editorial introduction, the issue commences with a Paper 1 'Knowledge-based development from the citizen's perspective: a study from Southern Brazil' by Daniele Nespolo, Ana Cristina Fachinelli, Valter Marcos Monteiro Fortes, Gabriel Sperandio Milan and Maria Emilia Camargo that focuses on citizen perspectives for achieving a knowledge-based development. The paper aims to analyse the relation between personality of cities and knowledge citizenship in the context of the municipalities of Southern Brazil. Personal knowledge-based development focus of the paper identifies and explores the competence of citizens in the development of their ability, as knowledge citizens, to better utilise community assets aiming a knowledge-driven local development. The paper reports a survey that was carried out with young citizens, where various statistical techniques were used for data analysis. The results indicate a positive correlation between the personality of cities and knowledge citizenship.

Paper 2 of the issue by Romilda Mazzotta 'The communication of intellectual capital in healthcare organisations: what is disclosed and how?' focuses on the intellectual capital issues of the healthcare sector. The paper aims to analyse the communication of intellectual capital, or the disclosure of an organisations intellectual capital assets through annual reports and supplementary corporate disclosure, in healthcare organisations. The study poses two research questions: what are the main components of intellectual capital disclosure in a healthcare organisation? How do these organisations disclose or communicate their intellectual capital? In order to answer these questions, the paper analyses the case of an Italian healthcare organisation applying a qualitative research method. The findings reveal that the organisation changes its intellectual capital communication slowly over time, the most important aspects of intellectual capital in this sector is structural capital, and the form of communication is mainly narrative, although it is possible to highlight differences in the three areas of intellectual capital.

Next, in Paper 3 Ilpo Laitinen, Tony Kinder and Jari Stenvall 'Local public service productivity and performance measurement' focuses on the information technology-supported social entrepreneurship issues. Authors suggest that a premise of new public management is that productivity in public services is lower than the private

sector, justifying the transfer of tools and techniques born in private sector manufacturing. The paper, hence, focuses on public service effectiveness. The study advocates that attention to effectiveness will grow since new public governances including the service management perspective are likely to result in new performance metrics including innovative ways of cross-departmental and inter-organisational working to deliver integrated services. The paper aims to develop a new performance framework for evaluating local public service productivity and performance – efficiency and effectiveness by rejecting the reduction of performance simply to financial metrics. The findings suggest ways in which public value as a metric of performance can be measured by socially and contextually migrating public values into performance value.

The final contribution of the issue, Paper 4, by Katharina Fellnhofer 'Visualised bibliometric mapping on smart specialisation: a co-citation analysis', focuses on the smart specialisation issue. The paper applies a bibliometric analysis technique to systematically explore the multidisciplinary, multilevel and multi-contextual dimensions of smart specialisation strategies from the literature. Quantitatively based co-citation analyses, including qualitative aspects, are used to map the emerging and multifaceted smart specialisation phenomenon. Data is collected from Web of Science and Scopus academic publication data portals. The paper analyses peer-reviewed documents, cited references, co-cited sources, co-cited authors, organisations and countries. Additionally, co-authorship and bibliographic coupling maps are illustrated in the paper to generate insights. The findings emphasise the need for more research in the smart specialisation discipline area to improve the familiarity with relevant strategies.

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