## Editorial: Evolving nature of knowledge-based urban development

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The idea of knowledge-based urban development (KBUD) has emerged as a means of systematically examining the role of knowledge and networks as key components of urban economic evolution (Knight, 1995; Kunzmann, 2009; Yigitcanlar and Lonnqvist, 2013; Carrillo et al., 2014). The paradigm of KBUD has started to become highly popular during the last years of the 20th century considering the impacts of the global knowledge economy on urban localities and societies (Yigitcanlar, 2011). The following are among the commonly accepted views on how KBUD is perceived through time – presented in chronological order:

- In 1995, Knight published his illuminating article, 'Knowledge-based development: policy and planning implications for cities', arguing the need and emergence of a new approach to city development focusing on KBUD. He defined: "knowledge-based [urban] development [as] the transformation of knowledge resources into local development [which] could provide a basis for sustainable development" [Knight, (1995), pp.225–226].
- In 2000, KBUD is seen as a crucial set of strategies for achieving quality of life. According to AEUB (2000, p.1), the aim of KBUD is "to develop urban settlements that are gradually evolved to [become] more in line with sustainability objectives and improve [their] quality of life [by accommodating] knowledge-based urban development strategies as opposed to [exclusively] physical resource-based strategies".
- Although not directly referred exactly as KBUD, since the beginning of the 21st century, OECD (2001) has been adopting knowledge management frameworks in its strategic directions regarding to glocal (i.e., global and local) development, and this strategy strongly indicates that a link to be urgently established between knowledge management and urban development. The end result of this linkage is KBUD.
- Later on in 2004, KBUD was emphasised as a fundamental medium for the development of knowledge cities. As for ENTOVATION (2004, p.2), KBUD is "the perfect new medium in which to grow more liveable, stimulating, cleaner, intelligent, enlightened, tolerant and meaningful communities world-wide...[and] the knowledge city is the first new urban formation tailored for the needs of a knowledge economy where ideas rule and there are infinite recipes for innovation and new wealth creation".

- Mid 2000s was the period that KBUD was coined as an emerging urban and regional development phenomenon and started to be widely seen as a development strategy tool for enhancing the competitiveness of cities within the context of expanding knowledge-based economy and society, and forming prosperous knowledge cities. Yigitcanlar (2005, p.3) stated that "[t]he significant increase of the knowledge-based development strategies for the pursuit of metropolitan competitiveness of regions is encouraging city administrations to adopt these strategies for moving towards and establishing knowledge cities".
- Along with the increasing popularity of knowledge cities, from mid 2000s onwards the term KBUD has started to receive larger attention and gained wider recognition. In late 2000s, KBUD has, for the first time, started to be seen as a development process rather than solely a development strategy and defined as not only "a powerful strategy for economic growth and the post-industrial development of cities and to participate in the knowledge economy, [but also] a strategic management approach, applicable to creative urban regions" [Yigitcanlar et al., (2008), p.10].
- In addition to the abovementioned views, Carrillo (2014, p.416) elucidated the
  evolution of KBUD and defined it as: "the collective identification and enhancement
  of the value set whose dynamic balance furthers the viability and transcendence of a
  given community".
- The most recent view on KBUD is that it is a process with a set of policies "targeting of building a place to form perfect 'climates' for 'business, people, space/place and governance', and emphasise on the balance and integration of these climates" [Yigitcanlar, (2014), p.5550]. In other words, it is the new development paradigm of the global knowledge economy era that aims to bring economic prosperity, environmental sustainability, a just socio-spatial order, and good governance to cities, and produces a prosperous knowledge city.

This issue of the *International Journal of Knowledge-Based Development* contains five papers that are looking at the knowledge issue from various angles in order to provide a further understanding of the complex nature of knowledge-based development in the age of global knowledge economy and cities.

Following this editorial introduction, the issue commences with a paper (paper 1: 'Universities and knowledge-based development: a literature review') by Ingi Runar Edvardsson and Susanne Durst that focuses on the knowledge-based development and tertiary education institute symbiosis issue. This paper aims to review research on universities and knowledge-based development in order to identify gaps in our current understanding. The findings generate insights on the knowledge transfer from universities to industry, universities as component of knowledge city design, universities and knowledge-based development, and university-industry collaboration.

Paper 2 of the issue by Marco Bontje Sako Musterd and Bart Sleutjes ('Skills and cities: knowledge workers in Northwest-European cities') focuses on the knowledge work and workers issues of cities. This paper concentrates on investigating the debate of what attracts and retains knowledge workers in cities. The research undertakes an empirical exploration of knowledge workers in the city-regions of Amsterdam and Eindhoven from the Netherlands. The results make clear that knowledge workers are a highly diverse category in which it is required to distinguish sub-groups with quite

contrasting residential preferences. At the conclusion of the paper, the authors state that these preferences should be met to retain them to the area they settled in.

Next, in paper 3 by Antti Lönnqvist and Harri Laihonen ('Management of knowledge-intensive organisations: what do we know after 20 years of research?') focuses on the knowledge management issues of corporations. This study synthesises the discussion on the management of knowledge-intensive organisations trough a through review of the literature. The findings make a contribution by forming a comprehensive view of the key issues involved in managing knowledge-intensive organisations, and provide a managerial checklist that helps to recognise some of the key aspects that are relevant in managing knowledge-intensive organisations.

In paper 4 ('Creative clusters? Analysis of the video game industry in Brisbane, Australia (1980s–2014)') by Sébastien Darchen focuses on the issue of creative clusters in cities. This paper explores the evolution of the video game industry in Brisbane. This paper aims to determine if agglomerations of video game companies have necessarily the attributes of creative clusters. The results of the analysis reveal that the video game hub in Brisbane has become specialised in mobile phone games, and it functions more like a networked community rather than as a spatially bounded industry cluster. The paper highlights that the recent spread of co-working spaces in Brisbane appears as an adequate policy answer in the context a mid-sized city.

The last contribution of the issue, paper 5 by S. Martin Taylor and Joanna Ochocka ('Advancing community-based research in Canada') focuses on the community-based research issue in the context of Canada. This paper observes and investigates the effectiveness of community-based research that supports a national network of university and community researchers working on a broad range of projects addressing issues of high priority on the research and societal agendas in Canada. The findings contribute to address ways in which the quality of community-based research work can be assessed, advanced and deliver the desired societal outcomes.

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