
Editorial: Evolving definition of knowledge cities

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The last few decades witnessed the rise of knowledge economy as the main driver of global and local economic development. During this period, the notion of ‘knowledge city’ has evolved from similar concepts such as ‘knowledge clusters’ (Arbonies and Moso, 2002; Huggins, 2008), ‘ideopolis’ (Garcia, 2004), ‘technopolis’ (Smilor et al., 1988; Scott, 1993), ‘science city’ (Anttiroiko, 2004), ‘learning city’ (Larsen, 1999), ‘intelligent city’ (Komninos, 2000), ‘sustainable city’ (Camagni et al., 1998), and ‘smart city’ (Yigitcanlar, 2016). The earliest reference on knowledge cities dates back to 1990 to a report prepared by the Institute for Spatial Organisation of the Netherlands Organisation for Applied Scientific Research (TNO-INRO, 1990). With only about three and half decades of research and practice, knowledge city is still a relatively new concept with no clear definition that is fully agreed on by scholars. The followings are among the most commonly accepted views on how knowledge cities are seen – presented in chronological order:

- According to Ihlanfeldt (1995, p.129), knowledge cities are “hypothesized to expedite the transfer of knowledge and the creation of knowledge that affects the growth factors identified by the neoclassical model, in particular the quality of labour and technical change...[these] dense urban environments can lead to unexpected combinations of seemingly unrelated ideas that may provide important leaps forward in knowledge”.
- Dvir (2006, p.245) frames the knowledge city from an individual’s point of view as “a milieu, which triggers and enables an intensive, ongoing, rich, diverse, and complex flow of knowledge moments...[where] a knowledge moment is a spontaneous or planned human experience in which knowledge is discovered, created, nourished, exchanged, and transformed into a new form”.
- As for Edvinsson (2006, p.6), a knowledge city is “purposely designed for encouraging and nourishing the collective knowledge, i.e., intellectual capital, as capabilities to shape efficient and sustainable actions of welfare over time”.
- Ergazakis et al. (2006, p.4) underline the concept of knowledge city as a broad one referring to all aspects of social, economic, and cultural life of a city, and state “a knowledge city aims at a knowledge-based [urban] development by encouraging the continuous creation, sharing, evaluation, renewal and update of knowledge. This can [only] be achieved through the continuous interaction” with all stakeholders, including citizens.

- Musterd and Deurloo (2006, p.92) view knowledge cities as “cities that create the right conditions that act as a magnet for research institutes and highly-educated knowledge workers, not only by offering an attractive working environment, but also by creating a favourable living environment, one that attracts and manages to retain creative talent. Places where talented employees are found – pools of creative talent – are becoming increasingly decisive in determining where businesses choose to locate”.
- Yigitcanlar (2009, p.239) sees knowledge cities as localities that are “tailored for the needs of a knowledge economy where ideas rule and there are infinite recipes for innovation and wealth creation. Their growth is based on the generation of value using common assets with the purpose of achieving sustainability”.
- Carrillo (2015, p.1) perceives knowledge cities as the engines of innovation and growth, and states, “the association of the terms ‘knowledge’ and ‘city’ conveys the conglomeration of technological, academic, cultural, scientific, and innovation capabilities in cities and regions operating as engines of economic growth”.
- As for Yigitcanlar (2015, p.7484), knowledge city is 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”.

Today, knowledge city is a widely adopted policy across many developed and developing country cities. Besides, many cities without using this deliberate brand are also working towards achieving a knowledge-based urban development. From Europe, a number of cities, including Birmingham and Manchester from the UK, Dublin from Ireland, Valencia and Madrid from Spain, Vienna from Austria, have been characterising their post-industrial image as a knowledge city (Carrillo et al., 2014). In the North American context, Austin, Boston and San Francisco from the USA, Montreal, Ottawa, Toronto and Vancouver from Canada, and Monterrey from Mexico are among the exemplar cities with high knowledge cities ambitions. In the South American context, examples include Curitiba and Rio de Janeiro from Brazil. In the Middle Eastern context, Doha from Qatar, Dubai and Abu Dhabi from the UAE are preparing their economies and cities to the post-oil era by emerging as knowledge cities. In the Asian context, Bangalore and Hyderabad from India, Kuala Lumpur from Malaysia, Seoul from Korea, Shenzhen from China, and Singapore are in a large pool of cities with different levels of invested interests in knowledge city transformation. Melbourne, Sydney and Brisbane from Australia and Auckland from New Zealand are among the cities either established themselves as a knowledge city or emerging as one from the Oceania context.

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 activities and development in the age of global knowledge economy and cities.

Following this editorial introduction, the issue commences with a paper (paper 1: Investing in human capital: an analysis of the mismatch between theoretical claim and managerial behaviour) by Stefania Veltri and Antonella Silvestri that that focuses on the

human capital issue. This paper aims to expand our understanding on the question of whether the managers' attitude towards the investments in human capital varies in relation to the financial healthiness of firms. The paper investigates the association between the investments in human capital and the financial healthiness of companies – while most research focus on profitability. The findings from an empirical study with a number of European firms belonging to the European Monetary Union confirm the hypothesised association between investments in human capital and the financial healthiness of the firms.

Paper 2 of the issue by Amina Yagoubi and Diane-Gabrielle Tremblay (Cooperation and knowledge exchanges in creative careers: network support for fashion designers' careers) focuses on the knowledge sharing issue in a creative industry. This paper investigates the changes brought to the fashion design industry as a result of the transition from Fordism to a service-oriented economy. The paper highlights the role of the collective actors, networks and organisations in supporting designers in access to knowledge and career development. This paper reveals that branding of fashion designers takes new routes, and a subculture that is resistant to standardisation and proposes niche markets supported by networks and new intermediary actors.

Next, in paper 3, Luís Carvalho and Willem van Winden (Planned knowledge locations in cities: studying emergence and change) focus on the locational aspects of knowledge generation. This paper puts forward a conceptual framework to analyse emergence and the development of planned knowledge and innovation locations in cities. The paper argues that the study and the practice of developing these precincts can benefit from explicitly considering the broader territorial context, the time dynamics and the co-evolutionary processes through which they unfold. This paper illustrates the advantages of such framework in two European knowledge location cases of Arabianranta from Finland and Biocant from Portugal.

Paper 4 (Self-reports of organisational citizenship behaviour: a researchers' dilemma) by P. Vijayalakshmi and M.V. Supriya focuses on the issue of measuring organisational citizenship behaviour. This paper explores if there are similarities in research results irrespective of whether self-reports or other reports were used. The findings of the analysis reveal no strong evidence to prove that self-report bias was strong enough to impact the research results negatively. The paper indicates acknowledging the uniqueness, self-reports can be considered as the best source for measuring organisational citizenship behaviour.

The last contribution of the issue, paper 5 by Anna Hansen and Henrik Zipsane (The challenge of professionalism and institutional self-understanding: a short communication) focuses on the professionalism issue in the context of museums. This paper argues the critical role of museum educators for the public, school groups and other visitors. Earlier research, however, indicates that in the context of Nordic and Baltic countries many museum educators lack formal education within the fields of pedagogical theory or learning. The paper discusses the potential implications of this lack of formal education and knowledge for museums as institutions as well as for the museum educators.

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