

---

## Editorial

---

### Tan Yigitcanlar\*

School of Urban Development,  
Queensland University of Technology,  
2 George Street, 4001, Brisbane, QLD 4001, Australia  
E-mail: tan.yigitcanlar@qut.edu.au  
\*Corresponding author

### Francisco Javier Carrillo

Center for Knowledge Systems,  
Monterrey University of Technology,  
E. Garza Sada 2501 Sur, 64849, Monterrey, N.L., Mexico  
E-mail: fjcarrillo@itesm.mx

### Kostas Metaxiotis

Department of Informatics,  
University of Piraeus,  
80, Karaoli and Dimitriou, str. 18534, Piraeus, Greece  
E-mail: kmetax@unipi.gr

### Kostas Ergazakis

School of Electrical and Computer Engineering,  
National Technical University of Athens,  
9, Iroon Polytechniou str., Zografou 15773, Athens, Greece  
E-mail: kergaz@epu.ntua.gr

**Biographical notes:** Tan Yigitcanlar is an Associate Professor at the School of Urban Development, Queensland University of Technology, Brisbane, Australia. The main foci of his research are advocating and promoting knowledge-based urban development and sustainable urban, infrastructure and transport development in city-regions. He is one of the leading researchers in the field of 'knowledge-based and sustainable urban development', and he has been responsible for research, teaching, training and capacity building programmes on urban and regional planning, transport modelling, environmental science, policy analysis and information and communication technologies in respected Turkish, Japanese and Australian universities. He is Editor-in-Chief of the *International Journal of Knowledge-Based Development*, Chair of the World Capital Institute Events Program and Global Chair of the Knowledge Cities World Summits.

Francisco Javier Carrillo is International Consultant and Professor of Knowledge Management at the Monterrey University of Technology, where he founded the Center for Knowledge Systems in 1992. He developed the capital systems model which has been applied in consultancy projects in several

countries and is basis of an extensive knowledge management graduate curriculum. He is President of the World Capital Institute as well as of Mexico's ADIAT Knowledge Management Commission, founding member of the New Club of Paris, and seats on the editorial boards of several international journals and knowledge management-related professional organisations. He is an Associate Editor of the *International Journal of Knowledge-Based Development*.

Kostas Metaxiotis is an Assistant Professor at the University of Piraeus. Since 2004, he has been undertaking a senior advisor role at the Secretary for the Information Society, Greek Ministry of Economy and Finance. He has extensive experience in the fields of knowledge management, artificial intelligence, enterprise information systems, and e-government. Since 1996, he has been participating in numerous European Commission-funded projects as Senior Information and Communication Technology Consultant and Manager. He is an Associate Editor of the *International Journal of Knowledge-Based Development* and Chair of the World Capital Institute Editorial Program.

Kostas Ergazakis is an Electrical and Computer Engineer at the National Technical University of Athens. He holds a PhD in Knowledge Management and Decision Support Systems. He has an extensive professional experience as Consultant and Project Manager for projects funded by EU and Greek national bodies in different fields: formulation of digital/knowledge cities strategies, e-participation, e-organisation techniques, monitoring and evaluation, design and development of management information systems, business development activities. He has published extensively in scientific journals and presented his research outcomes in international conferences. He is an Associate Editor of the *International Journal of Knowledge-Based Development*.

---

During the last two decades, we have witnessed the rise of knowledge-based economy as main driver of global and local economic development (Yigitcanlar, 2009). Carrillo (2006) has identified the 21st century as the 'century of knowledge cities' since urban regions and knowledge cities have become centres of knowledge generation, knowledge-based economy and knowledge-based development. In the context of the new knowledge area, concepts of knowledge, innovation and creativity have become primary factors of production and development (Durmaz et al., 2008). In this context, 'knowledge-based urban development' has gained popularity as a powerful strategy for sustainable economic, social and urban growth, and for the post-industrial development of cities (Yigitcanlar and Velibeyoglu, 2008).

The knowledge-based development field is in a state of full progress nowadays and this is apparent from the volume of research work as well as from the number of practical cases of cities and regions adopting knowledge-based development approaches (Yigitcanlar et al., forthcoming). However, the process of planning and implementing knowledge-based development approaches is neither quick nor simple. This seems to be already understood by the research community, which the last few years has begun to concentrate its efforts in order to develop appropriate frameworks, methodologies, tools, systems, metrics, etc., so as to evolve the whole knowledge-based development field. In this respect, there are currently many research efforts as well practical approaches which are in progress and, consequently, create many pending issues to be addressed in relation to the knowledge-based development field (Metaxiotis et al., 2010).

Consequently, an important requirement for the further evolution of the knowledge-based development field is the assessment issue. At present, the need to develop assessment methodologies and respective metrics and benchmarks so as to evaluate and measure knowledge-based development approaches seems to be more than urgent (Ergazakis and Metaxiotis, forthcoming).

In this respect, the first two papers of this issue focus on to the measurement and assessment of knowledge-based development approaches: the first paper, 'Measuring knowledge-based development: an overview of models and methodological issues' by Carlos J. García Meza, presents a useful overview of the models and indices for the measurement of the knowledge-based development. After an analysis of the importance of measuring knowledge-economy performance, the author focuses on the presentation of well-known and established models and frameworks concerning the measurement and assessment of knowledge-based development. In addition, the paper discusses some of the key methodological issues relate to the production and use of indicators.

The second paper of the issue, 'Measuring competitiveness of cities: Turkish experience' by Melih Bulu, presents the development and application process in Turkey cities of the city competitiveness index. The author firstly describes the methodology and process for the development of the city competitiveness index (developed by a Turkey research institute) by presenting the logic behind the selection of its variables, specific weights, and other principal components. The paper also presents the main findings of the city competitiveness index exercise covering major Turkish cities (20 cities in total), for the period of 2007–2010, followed by concluding with overall findings and remarks.

The third paper of the issue, 'Knowledge sharing through informal networking: an overview and agenda' by Michael Schwartz and Christoph Hornyeh, focuses on the importance of informal networks as a channel of knowledge transfer. The authors firstly review the fragmented academic discussion of the notion of informal networking and they provide an updated overview of the most important and recent studies regarding to the scope of research on informal networking. The main outcome of this review paper is the compilation of an agenda comprising important research questions regarding to informal networking, which according to the authors, deserve a deeper investigation.

The fourth of the issue, 'Knowledge cities through 'open design studio' educational projects: the case study of Jeddah City' by Khaled A. Youssef and Amro A. Taibah, presents the knowledge cities 'open design studio' model and the process of its formation and development. Through the use of this model, the authors investigate the capabilities of the Jeddah city to become a prosperous knowledge city. The paper particularly focuses on the capabilities of educational projects to catalyse the concept of knowledge cities.

The fifth and final paper of the issue, 'Local action to support knowledge-based development' by Anne Badenhorst and Charlotte Scarf, introduces a conceptual framework of a learning region that was applied to a regional development programme in the Northern metropolitan region of Melbourne. The authors demonstrate how the framework supports the identification of policy gaps and programme needs, drawing on case data from Melbourne's North. The paper concludes by arguing a focus on networked governance is needed to improve cooperation between relatively autonomous local learning networks and different levels of government in order to achieve the broader goals of knowledge cities.

## References

- Carrillo, F.J. (Ed.) (2006) *Knowledge Cities*, Butterworth-Heinemann, New York, NY, USA.
- Durmaz, B., Yigitcanlar, T. and Velibeyoglu, K. (2008) 'Creative cities and the film industry', *The Open Urban Studies Journal*, Vol. 1, No. 1, pp.1–10.
- Ergazakis, K. and Metaxiotis, K. (forthcoming) 'The knowledge-based development agenda: a perspective for 2010–2020', *VINE: The Journal of Information and Knowledge Management Systems*.
- Metaxiotis, K., Carrillo, F.J. and Yigitcanlar, T. (Eds.) (2010) 'Knowledge-based development for cities and societies: an integrated multi-level approach', *Information Science Reference*, Hershey, PA, USA.
- Yigitcanlar, T. (2009) 'Planning for knowledge-based urban development: global perspectives', *Journal of Knowledge Management*, Vol. 13, No. 5, pp.228–242.
- Yigitcanlar, T. and Velibeyoglu, K. (2008) 'Knowledge-based strategic planning', Paper presented at the *3rd International Forum on Knowledge Asset Dynamics*, Matera, Italy, pp.296–306.
- Yigitcanlar, T., Metaxiotis, K., and Carrillo, F.J. (Eds.) (forthcoming) *Building Prosperous Knowledge Cities: Policies, Plans and Metrics*, Edward Elgar Publishing, London, UK.