
Editorial: Advancing the knowledge-based development agenda

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The *IJKBD* purpose is to serve as a global platform for research on knowledge-based development. Scientific journals, together with specialised conferences and professional associations constitute the three most visible pillars of institutionalised scientific disciplines. Along the new millennium, all three aspects have shown a consistent vitality and interdependence around KBD. A number of annual conferences dedicated to knowledge-based development – notably the Knowledge Cities World Summit – or to closely related topics such as intangible geography, collective intellectual capital, urban innovation, knowledge economy and post-industrial culture provide the grounds for socialising concepts, methods and practices. Several professional associations deliberately aiming at furthering the field of KBD, such as the World Capital Institute and the Ibero-American Community for Knowledge Systems, together with many others in closely interrelated areas help academicians and practitioners collaborate in research and application efforts throughout the world.

Such diverse and fertile ecosystem contributes to advance the field of knowledge-based development. At its core, KBD aims at founding viable societies on the untapped potential of knowledge-based value creation, that is, human activity systems relying prominently on intangible, or intellectual, or knowledge-based capital. Betting on the leveraging potential of knowledge capital is grounded on the clear evidence about the qualitative difference between physical and intellectual capital and the way economic constraints in physical production can be overcome. However, the transition from an industrial to a knowledge society entails not only a functional addition or subtraction of production factors. It also entails the examination and substitution of the axiological framework on which the economic establishment is based as well as the very meaning of progress or development. The definition of KBD compromises both sides of the equation: the sense of purpose and the factors of development.

The research program able to tackle these issues is huge. Several foundational elements required for this undertaking are not available yet, including a comprehensive epistemology able to assimilate advances in the sciences of knowledge as well as the critical and postmodern insights that contribute to question the soundness and viability of the industrial capitalist economy. Also, a clear mapping of the dimensions and properties of intellectual capital has yet to be articulated (a periodic table of capitals, as it were), beyond the incomplete and inconsistent IC drafts still in use. Above all, the axiological coordinates for a viable knowledge economy and society are required for the proper grounding of KBD as a discipline.

However, advances from several fronts are also evident. Capital systems allow the integrated representation, valuation and balance of all basic forms of capital, both traditional physical and financial plus intangible one. Knowledge-based urban innovation such as that bursting in the form of knowledge markets provide encouraging examples of highly creative and effective micro-economies built upon more viable principles and practices. The concept of knowledge cities as a visible label for knowledge-based urban development (KBUD) is being grasped as those communities that deliberately aim at founding a viable future on the basis of balancing their collective capital system. Whereas there is much to be done, the interdependent work of professional associations, dedicated conferences and journals consonant with *IJKBD* keep advancing the field.

The papers included in this, the fourth and last issue of volume 6, are a clear indication of the kind of research furthering the scope of KBD. The paper by Secundo, del Vecchio and Passiante tackles the need to create a new entrepreneurial mindset committed to increasing overall social and economic value. For that purpose, they developed an entrepreneurship curriculum for scientist and engineers, put into practice through five projects carried out in a technological district from Southern Italy. Hence, this study aims at understanding and managing the processes and approaches required for participating students as well as local stakeholders to engage in such entrepreneurship mindset. Their conclusions stress the benefits of spreading knowledge-based entrepreneurship education and practice.

The second paper, by Roose and Lepik, looks at the evolution of joint Estonian-Finnish spatial KBUD planning of the twin cities of Tallinn and Helsinki. Based on three cross-border case studies as knowledge transfer practices, this work appraises the shared trans-national development policies related to spatial planning, mobility, commuting and policy integration. The empirical analysis is drawn from the Estonian-Finnish ESPON cooperation, the EU HTTransplan programme and the OECD cross-border regional innovation policy background report 2013. Study results exhibit the asymmetries underlying the tiers and domains between these twin cities and concludes the need to strengthen strategic planning for trans-urban KBD.

Next, the paper by van Hemert and Iske looks at absorptive capacity as a key factor for KBUD of the Limburg region in the Netherlands. The authors develop a model where regional performance is seen as an aggregate function of the quality level of regional aspects including institutional, social, economic, environmental and absorptive capacity ones. From this model, the authors examine available evidence that may help establish the relative quality of each aspect in the Limburg region, integrated through a SWOT analysis. Their work stresses the most prominent weaknesses and threats faced by this region. Moreover, this study makes the case for the role of absorptive capacity in the development of innovation and knowledge-intensive regions.

Finally, the work by Fachinelli, Giacomello and Larentis applies the capital system taxonomy of integrated tangible and intangible value categories. Further prior research on the application of the capital system to a number of city-regions in Southern Brazil, the authors undertake a correlation study between this taxonomy and the human development index (HDI) of 150 cities around the whole country. A multivariate linear regression was used to determine indicator loadings. According to their results, all but one of the 150 cities did fit the resulting statistical model, allowing the predicted HDI to be calculated for each city. Moreover, the results contribute to identify the capital categories having the greatest impact on HDI, as well as specific cross-categories interdependence. These results add to the evidence coming from the application of the capital systems taxonomy to the cases built for the annual study carried out to determine the Most Admired Knowledge City Award (MAKCi).

While these studies contribute to advance the KBD field, it is evident that much more needs to be done to have a substantial impact upon policy-makers and the still prevailing industrial worldview at large. As I write these pages, the final agreement from the Paris COP21 Summit is being released. One cannot help an ambivalence by acknowledging that an agreement has been reached, albeit a rather feeble one. On the one hand, it constitutes a historic landmark in setting the end of the industrial culture. On the other hand, it still leaves an uncertain fossil fuel future, until the painful and unavoidable policies that are required to move into an altogether new energy, matter and knowledge economy are actually enacted by all countries. A balanced and viable capital system based on sound economic practices as a responsible legacy to succeeding generations.

With this issue, the third bi-annual editorship period concludes and with it, the first whole cycle of rotation for this role between my colleagues Tan Yigitcanlar who will take over now and Kostas Metaxiotis who shall succeed him in two years time, and myself. Somehow, this also marks the closing of an initial stage, where *IJKBD* has managed to position itself as a journal deliberately focused on the understanding and capitalisation of knowledge-based value at the social scale, with special reference to knowledge city-regions. It is now time that the journal moves into a position of higher scientific relevance by reaching top quality standards. This shall be possible with a continuous flow of submissions, the generous collaboration of reviewers, the continued support from the Inderscience team and the critical and creative engagement of our readers.