Editorial

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Biographical notes: Robert Huggins is Director of the Centre for International Competitiveness at the Cardiff School of Management, University of Wales Institute, Cardiff. As the Co-Founder of the World Knowledge Competitiveness Index and Originator of the European Competitiveness Index and UK Competitiveness Index, his research aims to inform corporate strategy and public policy, especially actions aimed at improving global competitiveness. His key areas of interest include the study of competitiveness, firm and organisational networks and the flow of knowledge across organisations.

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Intellectual Capital (IC), or the 'stock' of knowledge-based equity firms hold, is now recognised as a key contributor to their competitiveness (Bontis et al., 1999). The knowledge-based view of the firm has highlighted knowledge as the key competitive asset of firms, emphasising the capacity to integrate tacit knowledge or 'knowing how', as distinct from explicit knowledge or 'knowing about' (Grant, 1996; Mowery

et al., 1996). Alongside this firm-based view of knowledge and IC, the field of regional development has begun to make the link between the mobilisation of IC at a spatial level and the economic development of spaces and places (Bounfour and Edvinsson, 2005). It is argued that firms and organisations located in a contextual geographic environment rich in relevant knowledge sources can take competitive advantage of the colocation of other knowledge actors. The knowledge or IC-base of a region consists of the capacity and capability to create and innovate new ideas, thoughts, processes and products and to translate these into economic value and wealth (Huggins and Izushi, 2007). Regional IC, therefore, includes the cumulative stock of information and skills that can result in doing business in new ways.

Discourse concerning the knowledge-based economy can be traced to Schumpeter's (1934) work, which recognised the significance of large corporations and the systematic research and development carried out within them. Within this approach, innovation is considered key to developing a knowledge economy, consisting of the relative capabilities of local innovation systems in acquiring and using new knowledge. Knowledge workers are necessarily crucial to these systems, since without them innovation cannot take place. Therefore, knowledge economy theory argues that the factors leading to the concentration of such workers are also important in determining where innovation takes place. Knowledge economy theorists consider that innovative firms cluster in places that are better at learning, with the possession of adaptable innovation systems and a high quantity of qualified, knowledgeable and mobile labour creating regional learning systems (Cooke et al., 2004; Rutten and Boekema, 2007).

Knowledge, as Drucker (1989) argues, is information that changes something or somebody, either by becoming grounds for action or by making an individual or an institution capable of different or more effective action. Endogenous economic growth theory views the stock of knowledge as a key source of long-run economic growth, and acknowledges the creation of knowledge by private-sector firms, through 'Schumpeterian competition' (i.e. a temporary monopoly of economic gains deriving from new knowledge by its inventor), as an internal (i.e. endogenous) factor. The knowledge-based economy, therefore, can be defined as the sphere and nexus of activities and resources centred on and geared towards innovation. The key to winning the super competitive race in the knowledge-based economy is investment in the future, such as research and development and education and training. It is clear, that the majority of high performing regional economies across the globe have a knowledge competitive edge over their less knowledge and IC intensive counterparts (Huggins and Izushi, 2007). Over time, however, the stock of knowledge will depreciate if it is not renewed, highlighting the requirement for sustained investment in and development of such stocks (Nelson and Winter, 1982).

In general, regions are attracting growing attention as an economic unit of analysis, with firms increasingly locating their functions in select regions within the global space. The focus on regions also reflects the growing consensus that regions are the primary spatial unit at which knowledge is circulated and transferred, resulting in agglomerations or clusters (Cooke et al., 2004; Porter, 1990, 1998). The unequal effects of IC development are very noticeable among regions, as well as among nations. A range of literature provides empirical evidence concerning interregional inequality in labour productivity. In almost any nation there is an unequal distribution of wealth among its regions. For instance, in UK this is manifested in the 'North-South Divide': while regions in the southern half of the country, in particular London and South East of

England, are seen as the nation's core economic drivers, northern regions have suffered higher unemployment rates and lower income levels (Huggins and Day, 2006). Similarly, Silicon Valley's IC strength allows it to maintain its position as the 'Hollywood of innovation' (Huggins and Izushi, 2007).

A theory which has recently come to the fore is that of the 'creative class', proposed by Florida (2002), which is defined as those people whose 'economic function is to create new ideas, technology and/or creative content' (p.8). This includes people working in science and technology, architecture and design, music and the arts and entertainment. Florida also includes creative professionals in business, finance and law whose work involves independent judgements and requires high levels of education or human capital. Traditional thought holds that people will move to where the jobs are, but in his research Florida argues that this is decreasingly the case. He finds that in the US people consider a whole range of economic and lifestyle factors when deciding to locate in a specific place or region, and asserts that 'regional economic growth is driven by the location choices of creative people…who prefer places that are diverse, tolerant and open to new ideas' (Florida, 2002, p.223). In other words, economic growth is more likely to occur in regions that are centres of IC.

Given the heightened focus on IC as a means of catalysing regional development, policymakers are increasingly establishing explicit regional strategies aimed at further developing their knowledge economies. These strategies mainly consist of support for areas of economic activity that have an increasing reliance on skills and knowledge in the production process and a more extensive use of specialist abilities and knowledge transfer (Huggins and Izushi, 2007). Knowledge economy strategies usually include a wide variety of actors and key participants and influencers, such as industry representatives, universities, research institutions, chambers of commerce and economic development agencies. In almost all cases, they are built upon public–private partnership. This underlines the growing prominence of IC development activities across the field of regional development.

This Special Issue on Intellectual Capital and Regional Development contains five papers contributed by researchers and practitioners from Finland, Italy and UK. These papers were all originally presented at the 2007 International Forum of Knowledge Assets convened by Giovanni Schiuma and JC Spender, which took place at the University of Basilicata, Matera, Italy. The papers cover a broad range of contributions including approaches: to examine how an organisation is able to use its knowledge resources for learning and innovation; to apply multidimensional perspectives of regional development based on the notion of value creation; a simulation to study the influence of two proximity dimensions between gatekeepers and local actors and on district innovative capability; to investigate the ability of local food producers to take advantage of the elements of regional IC; and to investigate the current status of the IC management in Finnish companies. The normal *IJIRD* review guidelines were followed. Below, we provide a brief overview of the papers appearing in this issue.

The paper 'Assessing organisational renewal capability', by Kianto, proposes that the field of IC would benefit from including aspects of renewal and development more fully in its frameworks. She argues that most of the current IC metrics and measures employ relatively easily available numeric data, and depict either inputs or outputs to the knowledge processes of the firm (inputs include for example human capital factors such as educational level; outputs include for example patents and brands). This paper examines what organisational renewal capability is and how it can be assessed.

The model proposes that organisational renewal capability consists of six key elements: strategic capability; leadership; exploiting time; connectivity; managing knowledge; and learning orientation. Finally, a measurement tool, Organisational Renewal Capability Inventory (ORCI), based on a survey instrument for measuring organisational renewal capability is presented. This paper contributes to the literature on IC by developing a novel theoretical concept, renewal capability, and providing a survey instrument for understanding and assessing organisational capability to create, modify and change its intangibles.

Lerro and Schiuma in their paper, 'The impact of IC on regional development: an RCA application', examine differences in existing definitions of IC. They interpret IC as a group of knowledge assets attributed to a region that most significantly drive regional value creation mechanisms. The authors present four main arguments. Firstly, our knowledge to date is contained in anecdotal and case-study evidences (see, e.g. Bounfour and Edvinsson, 2005) that rarely demonstate how strategic knowledge assets enhance regional development. Secondly, there is an objective difficulty to measuring knowledge assets within the regional context. Thirdly, most studies have examined each regional development measure separately and, thus, do not capture the simultaneity embedded in the multidimensionality of regional development. Fourthly, very little has been done to empirically test the relationship between IC and regional development through the adoption of rigorous statistical approaches. This is particularly problematic in view of the increasing recognition among researchers, policy-makers and managers alike of the importance of IC strategic management for creating and delivering value within region. This study on the role of IC for regional development attempts to overcome some of the limitations of the previous studies by adopting a multivariate approach in which knowledge assets are examined for their simultaneous effects on several measures of regional development. Their study is an empirical application of some of the theoretical foundations of Intellectual Capital Management at regional level. Their criticism regarding the shortcomings of empirical evidences is addressed by an operationalisation of IC and regional development with 'solid' indicators. Finally, findings on their paper show the existence of positive and significant relationships between knowledge assets and regional development.

The paper 'Intellectual capital management practices in Finnish companies', by Lönnqvist, Kujansivu and Sillanpää, investigates the current status of ICM in Finnish companies, addressing how managers wish to develop IC in their companies and what kind of ICM tools are most desired. The authors claim that there is a lack of knowledge regarding managerial practices and needs related to dealing with IC-related factors. Their study indicates that many Finnish companies are measuring customer satisfaction, the working environment, as well as processes and competences. However, documented information and relationships with stakeholders other than customers are measured less often. While some objective measures are used, the majority of measures are subjective. Finally, their study provides some practical implications resulting from their research. It appears that while current ICM models can be useful and potentially beneficial for companies who are interested in obtaining a holistic view of their IC, they are sometimes detached from managerial needs.

The paper 'Knowledge gatekeepers and technology districts development: a system dynamics modelling' by Dangelico, Garavelli and Petruzzelli investigates the role played by a specific economic actor, namely the knowledge gatekeeper, to improve the innovative capability of technology districts. In their paper, system dynamics modelling

has been used to describe and formalise the role of the knowledge gatekeeper and proximity dimensions in the knowledge creation and innovation processes taking place in a technology district. The authors provide a review of the main concepts relating to technology districts, knowledge gatekeepers and proximity and system dynamics theory. They then describe the system dynamics model they have developed, outlining the variables in terms of type (stock, flow and auxiliary), unit of measure and meaning, as well as the relationships among them. Finally, a simulation has been carried out to evaluate how different values of organisational and technological proximity between district actors and the gatekeeper can affect innovation processes and the level of technological knowledge in a high technology district. Their results show that when organisational and technological proximities are equally exploited and characterised by medium values, the level of technological knowledge inside the district reaches its highest value.

Massa and Testa in their paper ‘‘Localness’ is good for business? An intellectual capital-based perspective in the Italian food industry’ investigate the ability of local food producers to exploit the elements of regional IC embedded in local food systems in order to gain a competitive advantage. Their paper examines two case studies of Italian SMEs operating in the local food sector. The analysis takes into consideration the IC of the regions where the two firms are located, including the human, structural and relational capital of the firms themselves. Their study shows how SMEs in the same industry can take advantage of IC (both firm and regional) in different ways and gain different results in terms of innovation capability and economic results. This paper analyses how the appropriate use of elements of regional IC, combined with organisational IC, can increase firms’ competitive advantage. The paper focuses on the interaction between regional IC and organisational IC, so as to reach a higher collective competitiveness yield, that is, an IC multiplier effect. Empirical evidence from the cases is discussed and, finally, some conclusions are drawn. Their study raises a number of issues about the opportunity for small food producers to exploit elements of regional IC embedded in local food systems in order to gain competitive advantage.

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