

## 1 Title of the Special Issue

Intellectual Capital and R&D management

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## 3 Background

Over the past fifteen years, the perspectives on a firm's intangible assets and their mobilisation have drawn global attention. The OECD, the European Commission, the World Bank, METI (Japan) and DIIS (Australia) are some amongst many that have emphasised the importance of Intellectual Capital (IC) in fostering innovation and in promoting firm competitiveness in the current knowledge-intensive economy. Indeed, organisational performance is increasingly dependent on intangible resources and how they are managed (Kianto et al., 2014). IC can be described as the stock of such intangible resources that include a firm's intellectual property, processes, organisational culture (structural capital), its links with external stakeholders, such as customers, suppliers, competitors, authorities (relational capital), and the knowledge, competencies, experience and motivation owned by its human resources (human capital). These key components (Edvinsson and Malone, 1997; Harris, 2000) determine the competitiveness of organisations, their capability to innovate, and their relevance in their innovation ecosystems. The relevance of these issues has not escaped academics either, as an epistemic community flourishes around the IC theory, and as scholars are increasingly producing rich evidence on the importance of IC – both inside and outside the IC epistemic community (Bellucci et al., 2020).

However, despite the increasing attention of scholars, further research is needed. A recent review indicates that four major research areas still call for significant contributions (Bellucci et al., 2020, p. 1925):

- intellectual capital research in universities, education and the public sector;
- reporting and disclosure of intellectual capital;
- intellectual capital, financial performance, and market value;
- and knowledge management and intellectual capital.

In the light of the revealed lack of research on these aspects, it also becomes evident that very little is said about IC in connection to R&D Management, R&D projects, and R&D operations – including aspects such as open knowledge creation and management across the internal and external boundaries of the organisation (including collaboration with public sector actors) and the related value generation. However, it can be argued that in the current knowledge-intensive economy, intellectual

capital rather refers to idiosyncratic internal and external knowledge-related assets created through R&D and orchestrated in open innovation processes. These ideas await further theorising and development.

Recent IC research has taken steps toward this direction. In the IC literature, several antecedents of innovation performance have been covered (Stewart, 1997; Grindley and Teece, 1997; Klein and Prusak, 1999), including issues on internal relationships and trust (Cabrilo et al., 2020), structural capital (Oliveira et al., 2020), and social capital (Cappiello et al., 2020). Likewise, some contextual factors influencing the effects of IC on innovation performance have been recently investigated (Buenechea-Elberdin et al., 2018). Increasing interest is being drawn to the role of IC in R&D organisations, such as universities (Cricelli et al., 2018) and literature reviews have discussed the role of IC in small and medium-sized enterprises' performance (Demartini and Beretta, 2020) as well as managers' use of IC as an opportunity to innovate and transfer knowledge (Paoloni et al., 2020). Furthermore, IC has been recently studied utilising the insights from the open innovation paradigm (Barrena-Martínez et al., 2020) that has a strong focus on inter-organisational collaborations – a form of relational capital. From another side, providing input into the IC research, the open innovation literature has also contributed to unveil the role of intangible resources in determining innovation performance, including the human factors (Ahn et al., 2017; Bogers et al., 2018) and an organisation's intellectual property protection strategies and corporate culture (Mortara and Minshall, 2011; Aloini et al., 2017; Brunswicker and Chesbrough, 2018).

Yet, these studies still tend to emerge as separate advances rather than something that produces a coherent and comprehensive view on IC in the contemporary R&D and innovation environments. Indeed, aside the past evidence on the positive outcomes of IC in terms of firms' innovation and economic performance, the link with R&D practices, R&D projects and R&D institutions has been under-investigated so far. Recent exceptions include Ren and Song's (2020) investigation on the effect of IC on R&D investments; Cricelli et al.'s (2018) research on

IC on Colombian universities' performance; Loyarte et al.'s (2018) IC valuation model to support the managers of research centres, and Lu et al.'s (2014) study on the impact of IC on R&D efficiency.

Hence, this special issue aims to unveil *how IC is related to R&D Management, R&D projects, and R&D operations*.

#### **4 Description**

Leveraging on theoretical foundations in management research such as Resource-Based-View (Wernerfelt, 1984), dynamic capabilities (Teece et al., 1997), problemistic search (Cyert and March, 1963), transaction costs theory (Williamson, 1979), and institutional theory (Meyer and Rowan, 1977), the papers submitted to the special issue should demonstrate an understanding of the main streams in the relevant academic literature, including the role played by appropriability (Di Minin and Bianchi, 2011; Stefan and Bengtsson, 2017), absorptive capacity (Ritala and Hurmelinna-Laukkanen, 2013; Aliasghar et al., 2019), and human resources (Kianto et al., 2017; Meijerink and Bondarouk, 2018; Bogers et al., 2018), as well as the IC peculiarities of innovation networks (Hurmelinna-Laukkanen and Nätti, 2018) or ecosystems (Rohrbeck et al., 2009; Radziwon and Bogers, 2019).

Perspectives on issues such as IC – innovation connection (Buenechea-Elberdin, 2017), IC disclosure (Cuozzo et al., 2017) or generating IC (Pedro et al., 2018), as seen in the context of R&D Management, R&D projects, and R&D operations, will be particularly welcomed.

The special issue welcomes topics related, but not restricted to the following:

- What kind of connections and relationships can be observed between IC and R&D Management, R&D projects, and R&D operations?
- How IC in R&D organisations can be measured and how is it linked with performance?
- How can the IC theory help to better understand the intra- and inter-organisational dynamics concerning R&D?
- How is knowledge-intensive product and process innovation related to the typical constructs of IC?
- How do frontier or exemplary firms leverage their IC through R&D practices?
- How do open and collaborative innovation platforms manage IC for co-creation and co-production?
- Which are the characteristics of IC stemming from crowdsourcing and how can it be leveraged by a firm in its R&D activities?
- What kind of roles IC may play in R&D during economic recession/expansion?
- How can policy influence firms' approach to IC when searching for desirable outcomes for the society?
- How IC, R&D management and open innovation come together in contemporary contexts characterised by digitalisation?
- Which is the role of IC in innovation ecosystems?
- How IC emerges in the R&D activities of public sector organisations?
- What kind of new frameworks and models are useful for understanding management and development of IC through R&D?
- What kind of contextualising allows capturing the interconnections between innovation, knowledge management theories and IC?
- Is IC in R&D subject to external turbulences (e.g. crisis, major political discontinuities, etc.) and how IC resilience can be built?

We are interested in studies that are theoretically grounded. Therefore, conceptual papers that develop theory are also welcomed in addition to rigorous empirical studies conducted with accustomed, or more novel methodologies. Submission of descriptive studies or empirical studies with a very narrow focus and without remarkable theoretical implications for bridging IC and R&D management will not suit this call.

## **5 Important dates**

**Submission open from 01/09/2021 until 31/10/2021**

We anticipate that this issue will be published in the course of 2022. However, your paper will be published in advance on-line viewing on the R&D Management website as soon as the review process is completed and therefore it might appear earlier.

## **6 Submission Process Details**

Paper development sessions or meet-the-guest-editors sessions for the Special Issue will be proposed to international conferences such as the following: R&D management conference,

World Open Innovation Conference, Academy of Management, Academy of Innovation, Entrepreneurship, and Knowledge, EURAM, and ISPIM.

## 7. Submission Guidelines

Submissions should be made through the Scholar One submission system: <https://mc.manuscriptcentral.com/rndm>

Please answer ‘yes’ to the question, ‘is this submission for a special issue?’, and indicate that the manuscript is to be considered for ‘Intellectual Capital and R&D Management’ when prompted at Step 1.

For formatting information you are encouraged to follow the author guidelines at: <https://onlinelibrary.wiley.com/page/journal/14679310/homepage/forauthors.html>

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