Knowledge management systems and organizational dynamics

The Special Issue “Knowledge Management Systems and Organizational Dynamics” emerges as an articulate contribution consistent with the scope and focus of Kybernetes. The international journal of cybernetics, systems and management sciences in that it connects the issues of social systems dynamics and knowledge management systems in an integrative framework. Nowadays, social systems are experiencing new and unprecedented challenges simultaneously driven by external influences and internal dynamics and, thus, a proper capitalization of knowledge management systems emerges as the leeway toward organizational effectiveness (Dominici, 2012; Bratianu and Bejinaru, 2019; Vătămănescu et al., 2018a). The rapid, yet substantial transformations that take place within the organizational realms have consistently reverberated into the focus of both academia and practice, the issue of knowledge management systems immersing into various fields and disciplines (Bratianu and Vătămănescu, 2017). What was once thought to be a fashionable approach on organizational phenomena has progressively grown into a multilevel reality – either approached from a macro or a micro angle, the imperative for designing and developing knowledge-based strategies and flows has become topical and compelling (Vătămănescu et al., 2018b; Vătămănescu and Pinzaru, 2018).

While leading scholars constantly investigate multifactor models and methods to capture the influence of systemic knowledge harnessing on organizational dynamics and further on organizations’ effectiveness, performance and innovation, decision-makers display a more intensive propensity toward harvesting, storing, generating and leveraging both existing and novel (re)sources of knowledge (Vătămănescu et al., 2016, 2018c). In this vein, adapting knowledge management systems to specific organizational contexts is liable to lead to sustainable business models, subsequently enhancing the capacity of societies, communities, organizations and individuals to wisely use and benefit from knowledge (Dominici, 2015; Vătămănescu et al., 2018b).

The keen interest in the knowledge management systems and the opportunity for in-depth and fine-grained perspectives are supported by the growing number of specialized journals on the topic (and the indexation of more and more journals in the field in prestigious international databases as the Emerging Sources Citation Index, for instance), the yearly organization of thematic conferences on knowledge management and intellectual capital issues for more than 15 years, by highly-cited papers on connected topics, by specialized tracks, roundtables and workshops organized within the scope of conferences and symposiums on management topics.

Giving credit to a systemic approach to organizational phenomena, the SI envisaged to shed light on knowledge management strategies and practices which reshape the organization’s processes and flows at all levels. Even through the importance and relevance of knowledge management principles and actions are widely acknowledged among both researchers and practitioners, a multifold perspective on their capitalization in various fields and industries is likely to bring new insights into their practical and social implications. Here, the integration of knowledge management systems and organizational dynamics into an overall framework would enrich the current approaches by including novel factors and relationships conducive to organizational effectiveness, performance and innovation. Its aim is to foster a comprehensive outlook on topical organizational phenomena through the lens
of the knowledge management systems, from a threefold perspective: operational, tactical and strategic.

The current SI emerges as an inter- and trans-disciplinary kernel of knowledge consisting of both conceptual and empirical studies (i.e. three conceptual contributions, respectively seven empirical contributions), both quantitative and qualitative designs (i.e. five quantitative designs, respectively two qualitative designs), employing diverse methods (questionnaire-based and interview-based surveys) and techniques (structural equation modeling, cluster analysis, social network analysis, etc.). The papers are authored by scholars coming from different corners of the world (China, Cyprus, Brazil, Finland, Greece, Hungary, India, Italy, Poland, Portugal, Romania, Russia, Spain, United Arab Emirates, the USA). Most of the authors are experts in Knowledge Management and occupy editorial positions (AEs and GEs mostly) for well-reputed journals in the field or in connected areas.

In particular, the conceptual paper advanced by Constantin Bratianu and Ruxandra Bejinaru examines the knowledge dynamics process based on the energy metaphor and the thermodynamics framework. Knowledge dynamics is analyzed as a transformational process which goes beyond the Newtonian logic used so far. Knowledge is conceived as a field, composed of three fundamental forms: rational knowledge, emotional knowledge and spiritual knowledge. Each form of knowledge can be transformed into another, generating an iterative and interactive dynamics. In this vein, understanding knowledge dynamics as a transformational process helps managers in their decision-making and strategies implementation in their organizations in that the process is fundamental in learning and unlearning mechanisms, and in stimulating innovation.

The second paper, elaborated by Ulrich Schmitt, proposes the psycho-social notion of generativity which has recently stimulated contributions in technology and innovation for a holistic systemic knowledge management (KM) review. The KM perspective prioritizes a decentralizing agenda benefiting knowledge workers while also aiming to foster a fruitful co-evolution with traditional organizational KM approaches. In the process, Nonaka’s renowned SECI/Ba model is repurposed and extended to present a complementing novel SICEE workflow embedded in distinct digital ecosystems fully aligned to the diversity of the generative attributes introduced.

Remaining in the conceptual realms, the contribution of Stavros Sindakis, Sakshi Aggarwal and Charles Chen revolves around the cooperative dynamics and inter-organizational knowledge flows among venture capital firms. Venture capital (VC) firms are deemed as a highly essential component of the environment that gives birth to entrepreneurial ventures, helping them to grow profoundly. Here, interorganizational collaborations facilitate VC firms to be a beneficial partner because, except for providing funding, they also possess knowledge-based resources to support the new business. Overall, the paper adds to the existing theoretical evidence by linking inter-firm knowledge flows and new venture development, on the one hand, and by examining the dynamics between VC firms and the collective contribution for the growth of start-ups, on the other.

Shifting the focus toward the empirical grounds, the paper co-authored by an international team of researchers (Vlad-Andrei Alexandru, Ettore Bolisani, Andreia Gabriela Andrei, Juan Gabriel Cegarra-Navarro, Aurora Martínez Martínez, Marco Paiola, Enrico Scarso, Elena-Mădălina Vătămănescu, Malgorzata Zieba) aims to categorize the approaches to knowledge management by companies, singling out the variegated features that characterize the implementation of KM by small- and medium-sized enterprises (SMEs) having different characteristics. A cluster analysis was employed to detect the possible distinct traits of companies, the unit of analysis being represented by small- and medium-sized knowledge-intensive business services (KIBS) firms. Three clusters were identified:
(1) companies showing a relative “unconscious” attention to KM and implementing KM practices without particular awareness;

(2) companies adopting a more conscious approach, and using a significant number of KM practices; and

(3) companies with a marginal propensity toward KM.

Based on four European countries scrutiny, the work advances a multi-contextual investigation, that makes it possible to highlight the transversality of KM approaches across different countries or sectors.

The fifth paper in the SI, developed by Meenu Chopra and Vikas Gupta, envisages to link knowledge management practices to organizational performance using the balanced scorecard approach. Via a research sample formed of Indian knowledge-intensive organizations, the study shows that the knowledge sharing culture and knowledge-based human resource management have a highly significant effect on all the aspects of organizational performance; strategy and leadership positively and significantly affect only learning and growth and internal process, but do not have any significant effect on the other two, i.e. customer satisfaction and financial performance. Overall, the proposed model uncovers the dynamics of individual relationships between KM practices and measures of performance (proposed by balanced scorecard outcomes) in comparison to existing models which have mainly focused on the overall effect.

Gliding from the organizational framework toward the network-based one, the contribution of Ricardo Vinicius Dias Jordão, Jorge Novas and Vipin Gupta focuses on the role of knowledge-based networks in the intellectual capital and organizational performance of Brazilian SMEs. The findings showed that the k-network plays a crucial role in the generation of the IC and improvements in organizational performance in SMEs. In addition, the results revealed the strategic relevance of the relationship between people and enterprises to master the process of creation and sharing information and knowledge in the analyzed network. Taken as a whole, the conclusions demonstrated the establishment of IC (in its three dimensions) as a consequence of the strategic association of SMEs in k-network, as well as the mediation role of IC as a way to promote improvements in organizational performance, considering the observed amelioration in financial results, marketing growth, efficiency, efficacy, innovation and competitiveness.

The paper co-authored by Malgorzata Zieba and Paweł Kończyński aims to explore the topic of client co-production in Polish knowledge-intensive business services. The examination results in the clarification of what a successful client-KIBS firm cooperation should look like and what kind of actions KIBS firms should undertake to provide it. As the analysis shows, to perceive client-KIBS firm cooperation as successful, customers desire on hand immediate effects that would justify and compensate their time and money investments (e.g. new clients or brand recognition) and on the other hand, some of them desire positive changes in longer term, which tangible form is associated with the newly obtained knowledge and more importantly, freshly developed and written strategy. Among the factors that influence the co-production process, one can list teamwork, trust, communication and knowledge flows. The study adds to the literature on KIBS firms, especially in the scarce area of practical mechanics of their cooperation with customers.

Further, the contribution of Nóra Obermayer and Viktória Érika Toth aims to study the individual and organizational factors that influence the knowledge sharing behavior within Hungarian organizations by means of a quantitative approach. Among individual factors, significant relationships have been identified regarding the generation and position of individuals, and knowledge sharing behavior, while gender and education failed to play a
significant role. With respect to organizational factors, the size of the organization and the
tenure of individuals were found to be significant. The outcome of this research is liable to
support the design of managerial and organizational processes and incentives that will
potentially facilitate knowledge sharing in a more efficient and effective manner. Such
improved knowledge sharing is likely to improve the overall performance of knowledge-
tensive organizations.

Moving from the for-profit organizations toward the non-profit sector, the last two
papers in the SI tackle the cases of NGOs and academia, laying emphasis on the human
dimension from a knowledge-based standpoint. In this vein, the paper elaborated by
Alexandra Zbuchea, Loredana Ivan, Sotiris Petropoulos and Florina Pînzaru delves into the
way the human dimension influences the adoption and usage of the knowledge transfer in
non-profit organizations (NGOs). The analysis goes beyond the multiplying effect of the
organizational and technical factors in the development of knowledge transfer, and
investigates the impact of human beliefs and actions on the practices of knowledge sharing
in the NGOs. Based on a cross-cultural conducted in Romania and Greece, the findings
emphasize the importance of the human dimension in the practice of the knowledge sharing
of the non-profit organizations, proving that the adoption of such practices depends on the
beliefs of the NGOs employees on the topic, and on their degree of exposure to international
activities.

Last, but not least, the empirical undertaking developed by Elena Veretennik and Aino
Kianto intends to provide an understanding of how two types of informal social networks –
those related with instrumental purposes of information sharing and those related with
expressive purposes of interpersonal trust – impact Russian teachers’ job satisfaction. By
means of a social network analysis, the study partially confirms the positive effect of
teachers’ position in instrumental and expressive networks on job satisfaction. More
centrally positioned teachers were more satisfied with peers and colleagues. They felt more
secure regarding job security, given the unique and multi-faceted knowledge they possess.
Structural diversity of the network, as well as the category of a teacher (core subject or
vocational subject), are found to explain the uneven evolution of network size. The
authors argue that the decrease in network size can be treated as a positive externality of
changes in an informal network. The variation in teachers’ experience seems to explain both
job satisfaction and network composition. By identifying focal employees and their attitude
toward school, one receives an opportunity to prevent structural holes, organizational
conflicts and uneven distribution of workload.

To sum up the brief presentation of the papers composing the current SI, it can be
contented that multidimensional methods and models are employed for a proper assessment
of knowledge management systems which go beyond unidirectional and monolithic
approaches and standpoints. The SI thus provides added value to both current specialized
literature and to organizational best practices challenged by unprecedented external
influences and internal pressures: managerial mindset transformations, technological
disruptions, digitization, competitiveness, sustainability and agility imperatives.

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References


