Editorial

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Biographical notes: Daniela Carlucci, Eng. Meng., PhD in Business Management, is an Associate Professor at the University of Basilicata, Italy. Her research interests include knowledge management, intellectual capital and value creation, performance measurement and management, decision support methods and mapping as tools for management, digital transformation, innovation management, and arts for organisational development.

The papers included in this issue explore various facets of knowledge-based development, ranging from education, knowledge management, leadership, innovation capability, and strategic foresight, all within the context of rapidly evolving global challenges.

In the first paper, Jin Yan, Meng Li, Xiaoyan Ma and Junmian Wang delve into the optimisation of educational processes through advanced algorithmic approaches. In particular, they design an information-based teaching management system incorporating an association rule mining algorithm. They conducted a lot of experiments to prove the effectiveness of the algorithm and present a case study of the algorithm. According to the authors, the use of association rules from data mining technology to manage scheduling conflicts and improve scheduling efficiency and accuracy represents an innovative method that can enhance the use of educational resources and make planning more intelligent.

The second paper investigates the relationship between knowledge-oriented leadership (KOL) conflict and knowledge-hiding (KH) behaviour. Authors Nam Nguyễn Kim and Nga Nguyễn Thị Hằng into the relationship between conflict and KH behaviour in the banking sector in Vietnam. Especially, they employ a structural equation model to examine the links between KOL and KH through the lens of relationship and task conflicts within the context of collective culture in Vietnam. The research demonstrates an indirect relationship between KOL and KH through the mediating role of conflict. Moreover, it highlights that in collectivist cultural contexts, the relationships between leaders and employees tend to be family-like, and employees are inclined to follow their leader's guidance. This results in a reduction of task and relationship conflicts in the presence of knowledge-oriented leaders. According to the authors, it is essential in KM within the banking sector not to overlook KOL in minimising task and relationship conflicts. Additionally, knowledge-oriented leaders should promote open exchanges, foster communication channels, improve interpersonal relationships, and develop the skills necessary for discussing tasks.

The third paper shifts the focus to the broader economic impact of the pandemic. Özlem Özsoy and Metin Gürler examine how COVID-19 has influenced the innovation

capability of high-tech exporting countries, affecting their ability to compete. The manuscript examines breakpoints for COVID-19 cases, deaths, vaccination rates, normalised EIS scores, and high-tech exports. The statistical tests show distinct patterns among these five data series, with vaccination seeming to reverse negative trends. Through their analysis, the authors highlight that high-tech exports and innovation capabilities diverge significantly among EU member states, indicating a technology creation gap.

In the fourth paper, the discussion expands to a geopolitical perspective. Evgeniya K. Karpunina, Elena A. Yakovleva, Olga S. Shurupova, Tigran L. Oganesyan and Olga N. Gorbunova propose a comprehensive approach to assessing the scientific and educational potential of the BRICS member countries and determining the possibilities for their advanced development based on knowledge and the achievement of digital leadership. They calculate the integral indicator of the scientific and educational potential of the BRICS countries and differentiate the countries into 'locomotive countries' and 'catching up countries'. They then propose tools to strengthen the scientific and educational potential of both types of countries and to enable their development based on knowledge and digital leadership.

Finally, Morteza Soltani, Mohammad Ehsan Souri, Bahman Hajipour, Hamidreza Yazdani and Shib Sankar Sana investigate how mental representation can impact the success of strategies in VUCA environments. The study employed a survey to examine the relationship between representational complexity and strategic foresight. The authors identified two key variables: representational complexity and environmental conditions as predictors of strategic foresight. The target population consisted of 37 high-level managers from diverse Fintech, Tourism, E-commerce, Education, and Artificial Intelligence sectors. Through Rough Set theory the authors identified correlations between representational complexity and strategic foresight efficacy. They found that while simpler models are advantageous in uncertain and ambiguous contexts, complex visualisation methods, modelling, statistical calculations, and other things emitted from an external source (external representation) are more beneficial in volatile and complex business environments.

I would like to express my gratitude to all the anonymous reviewers who contributed to the peer review of each submitted paper. I am also deeply thankful to the Journal's Associate Editors for their valuable collaboration and effective contributions.