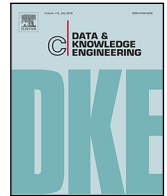Contents lists available at ScienceDirect

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Preface to the Data and Knowledge Engineering Special Issue on selected papers from RCIS 2021

Welcome to this special issue that contains extended versions of five selected papers from the 15th International Conference on Research Challenges in Information Science (RCIS 2021), held online on 11–14 May 2021 [1]. RCIS brings together scientists, researchers, engineers, and practitioners from the whole spectrum of information science and provides opportunities for knowledge sharing and dissemination.

The scope of RCIS 2021 is summarized by the following eight thematic areas: (i) Information Systems and their Engineering, (ii) User-Oriented Approaches, (iii) Data and Information Management, (iv) Business Process Management, (v) Domain-Specific Information Systems Engineering, (vi) Data Science, (vii) Information Infrastructures, and (viii) Reflective Research and Practice.

The special theme we proposed for RCIS 2021 is "Information Science and global crisis". Global crises, such as the COVID pandemic, natural disasters, wars, and international political crises, are challenging Information Science to help build effective management solutions, to learn from previous experience how to prevent them, and to support humans in performing core activities, such as education and communication.

The selected papers provide some methods and tools that could be exploited in the analysis of crises through both data evolution and knowledge capitalization. They focus on the following topics: a new temporal graph modelling solution to support data evolution; a case study applying a data mining process to support decision-making in financial services; developing an ontology-based approach to support decision-making in library conservation and restoration; a graph grammar-based approach to build correct taxonomies; and an approach using data mining techniques to systematize the detection of causalities in Strategy Maps.

Acknowledgments

References

[1] S. Cherfi, A. Perini, S. Nurcan, Research Challenges in Information Science: 15th International Conference, RCIS 2021, Limassol, Cyprus, May 11–14, 2021, Proceedings, Vol. 415. Springer Nature, 2021.

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