Editorial

Changes and challenges of human systems management during and after the pandemic

Prof. Anca Draghici

*Politehnica University of Timisoara, Romania; and President of the Ergonomics and Workplace Management
Society in Romania. E-mail: anca.draghici@upt.ro.*

The COVID-19 pandemic has disrupted all type of organizations and caused human resource managers to reconsider their roles. They need to support the implementation of protection measures and social distancing practices, and also being facilitators of new working methods such as teleworking and distance working from home, which apparently will be permanent. The changes in the working environment are probably beyond ones' prediction. For employees who are still working, human resource managers are trying to keep them productive, motivated, engaged and connected – all factors that are moving targets in the new normal.

To prevent the spread of the new coronavirus, most organizations have switched to a remote work model at a rate and scale they have never experienced. This applies for the current administrative working processes, including the management, for different types and content of project development and implementation, but also for teaching, training, learning, assessment and certification. As face-to-face collaboration is replaced with e-mail and videoconferencing, employees, managers and teachers must do difficult work under difficult circumstances.

In this context, this special-thematic issue focuses on different aspects related to the challenges the human resource and system management must face nowadays with emphasis on the organizational changes generated by the new coronavirus pandemic. The special issue has been supported by the scientific event ErgoWork 2020 - International Conference on Ergonomics and Workplace Management, held online by Politehnica University of Timisoara, Romania on 18-20 June 2020 (https://www.mpt.upt.ro/cercetare/conferinte/ergowork.html). Most of the contributions for this thematic issue have been presented at the conference. In addition, a large group of researchers from the International Institute of Inspiration Economy, Bahrain (https://www.inspirationeconomy.org/index.php) agree on sharing with us their recent results.

The words cloud generated using the brief description of each article (based on their abstracts) is very suggestive in terms of the topics covered by this collection of articles. From the Fig. 1, there could be seen that the research articles' common message is the need of a pandemic management in different areas as described by the research contexts.

At the end of this "journey" I would like to thank you very much to ALL ANONYMOUS REVIEWERS for their quick, fair, and professional analysis of the article proposals. I am very honoured that I have the opportunity to work with Prof. Nada Trunk Širca (the Editor-in-Chief of the journal) and Gabriela Ricci (Publication Manager for IOS Press). Thank you both for supporting my initiative and making my dream come truth.

Finally, I wish all the readers to enjoy the ideas presented in the collection of articles and to enjoy the knowledge sharing initiative of the Human Systems Management journal! Stay safe and healthy!
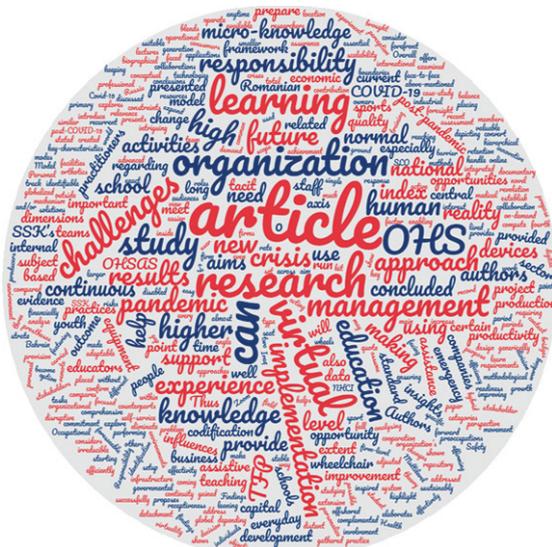
Fig. 1. The ideas behind the articles included in this special-thematic issue (created on Wordclouds.com software, a free online word cloud generator and tag cloud creator).

Brief content presentation

Coutts, C.E.; *et al.* Emergency remote education in Bahrain, Iraq, and Russia during the COVID-19 pandemic: A comparative case study.

The article explores the challenges educators faced during emergency remote learning so that others may learn from their experience. From the methodological point of view, a case-study based on the experience of educators compares how education continuity was provided in Bahrain, Iraq, and Russia. Personal insights gathered using Zoom, complemented by documentary evidence, explore the "lived experience" of the emergency changes made to teaching and learning provision. Authors concluded that the challenges facing the education sector fall into three main categories: crisis management and decision making, infrastructure readiness, and student receptiveness. A hybrid approach, which blends face-to-face with online learning, is the way forward in the "new normal" post-pandemic.

Ahmed, D.; *et al*. The "silver-lining" of youth future in the new normal (describing a new generation).

In this article, the outcome of a global study of youth perception about their future, the post-COVID-19 pandemic is carried out and discussed. The study helps to foresight for the coming youth generation in the "new normal" and to address their challenges and requirements in the "new normal" post-pandemic.

Popescu, S.; *et al.* A structured framework for identifying risks sources related to human resources in a 4.0 working environment perspective.

The research presented in the article is focused on companies that offshored their production and operate in the international business environment, in the current globalized world placed generically under the 4.0 index, inspired by the fourth industrial revolution. The research results provide support for easier and more comprehensive identification of work and human resources related risks in the above-mentioned context.

Caramidaru, I.; *et al.* A learning-by-doing based framework for micro-knowledge management in project contexts.

The paper aims to provide an operational conceptual framework for micro-knowledge management, depicting knowledge as created by individuals performing project activities. The study concluded that micro-knowledge management points to a recurrent assessment of the opportunity for micro-knowledge codification and/or staff retention based on tacit professional or biographical knowledge of the project team members. The framework offers a balance between the detachment of knowledge from the owners, in codification, and affirming the irreducible tacit and personal dimensions of learning-by-doing.

Bhargava, S. Virtuality and teams: Dealing with crises and catastrophes.

This article bridges the gap between theory and practice and elaborates, for practitioners, how to convert the COVID-19 and other similar crises into opportunities for keeping their business on track for growth. It shows how movement to virtual modes of working, especially virtual teams, can help practitioners meet the current crisis effectively and to prepare for future crisis efficiently. The article demonstrates how organizations can meet disruptive challenges successfully and also prepare for future challenges sustainably using virtuality as a starting point.

Dufour, C. *et al.* Occupational health and safety division of responsibility: A conceptual model for the implementation of the OHSAS 18001:2007 standard.

The article considers how Occupational Health and Safety (OHS) tasks can be addressed from the perspective of stakeholder management because of the recent COVID-19 pandemic that has brought this subject to the forefront of governmental and organizational preoccupations. The objective of the presented study was to consider the internal division of OHS

responsibility between the hierarchical strata and to introduce an OHS Responsibility Multilevel Model for an organization's internal responsibility system for the implementation of the OHSAS 18001:2007 standard. Overall, the research results propose a novel approach for improving stakeholders' involvement (commitment) and responsibility regarding OHS practices in organization. The research findings highlight that the OHSAS 18001:2007 standard proposes the organization as primary repository of OHS responsibility.

Hopp, M.; *et al.* A debate about implementing immersive technology for higher education.

In this article authors have examined if virtual reality can be a suitable option by placing lectures into a virtual setup. In the foreseeable future virtual reality will become a valuable teaching assistance in higher education. Authors stated that as the COVID-19 pandemic has shown, the need for innovative (digitalized) solutions is in high demand across almost every field of interest. The implementation of advanced technologies in higher education provides an intriguing opportunity to expand its scope by reaching new audiences as well as ensuring a high quality of learning outcome. Findings show that the response rate when training with virtual reality applications is much higher than to common studying methods.

Poth, A. *et al.* The implementation of a digital service approach to fostering team autonomy, distant collaboration, and knowledge scaling in large enterprises.

This article presents the design and implementation of a digital self-service kit (SSK) approach featuring high scalability, as well as a quality assurance and continuous improvement mechanism. As consumers, the teams within an organization can use these SSK's anytime and on-demand without any constraints in location, time, or quota. As producers (of knowledge and experience), they can also assume active roles in the extension and continuous improvement of the SSK's. The key insights gained from this experiment confirm the high relevance and effectivity of the approach especially during periods where distant collaborations are essential (e.g. during a pandemic crisis).

Tanveera, A.; *et al.* Impact of employees engagement and knowledge sharing on organizational performance: Study of HR challenges in COVID-19 pandemic.

The context of the research is determined by the current human resource management challenges created due to the COVID-19 pandemic: how to pursue the recruitment and selection process, employee's engagement, training and development activities, etc. This study pursued to examine the effect of employee's engagement on organizational performance through the mediating effect of knowledge sharing for employees of higher educational institutions. Authors concluded that COVID-19 pandemic is destroying global economies, but at the same time it is bringing different opportunities for organizations. Now organizations have to think about how to avail this opportunity. They are going virtually, and in this situation, it is the biggest challenge for the human resource managers to manage the employee effectively.

About the Guest Editor

Anca Draghici received the M.Sc. in Machine-Tools Design (1989, Transilvania University of Brasov, Romania) and B.Sc. in Business Management (2001, Babes-Bolyai University of Cluj-Napoca, Romania). In 2001, she achieves the PhD. degree in the research field of machine-tools ergonomics, at Transilvania University of Brasov, Romania. Now she is full professor (and PhD supervisor) at Politehnica University Timisoara, Romania, Faculty of Management in Production and Transportation. Her teaching subjects are related to Industrial Ergonomics, Human Resources Management, Occupational Health and Safety, Investments Management and Knowledge Management. Her research interests are linked with the impact of sustainability on organizational dynamics and business models. She regularly publishes and participates on international scientific conferences (she has more than 130 articles indexed in Clarivate Analytics database). In the last 10 years she was involved in different Erasmus+educational projects dedicated to sustainable development skills development and education (for higher education and vocational training). Anca Draghici is president of the Society for Ergonomics and Work Environment Management in Romania (ErgoWork, https://ergoworksociety.com/), member of the Member of Academic Management Society of Romania (SAMRO, https://samro.ro) and member of the European Certification and Qualification Association (ECQA, www.ecqa.org). As a recognition to her research achievements, Anca Draghici has acted as invited speaker in several international conferences.

About the conference: ErgoWork 2020

https://www.mpt.upt.ro/cercetare/conferinte/ergo
work.html

In September 2019, the Romanian Society on Ergonomics and Workplace Management (ErgoWork) has been legally established. During the first meeting of the Society Directory Board (October 25, 2019) there has been initiated the organization of the first international conference considering two aims simultaneously: (1) Creating a large national community of knowledge and exchange good and best practices from research and companies in the field of ergonomics and workplace management; (2) Increasing the visibility of Romanian ergonomist achievements by building "bridges of knowledge" with other Ergonomics associations worldwide, with Federation of European Ergonomics Societies (FEES) and the International Ergonomics Association (IEA).

ErgoWork 2020 is organized by the Romanian Society on Ergonomics and Workplace Management and:

- Politehnica University of Timisoara, Romania (www.upt.ro);
- Technical University of Cluj-Napoca, Romania (www.utcluj.ro);
- Romanian Association of Workplace and Facility Management (ROFMA, https://www.rofma.ro/);
- Hungarian Ergonomics Society (https://met. ergonomiavilaga.hu/index.html);
- Ergonomics Society of Serbia https://www. iriem.org/pro/memberdetail.aspx?ID=257);
- Croatian Ergonomics Society (https://www.h-e-d.hr/);
- Federation of European Ergonomics Societies (https://www.ergonomics-fees.eu/).

This was possible because of a strong education and research alliance Ergonomics and Human Factors Regional Educational CEEPUS Network (CIII-HU-1506-01-2021) that have been created through the Central European Exchange Program for University Studies (https://sites.google.com/view/ceepusergohf/home). ErgoWork 2020 has been designed to support sharing and dissemination of the interdisciplinary developments and achievements in the fields of ergonomics and workplace management. Researchers from universities and specialized institutes, but also, practitioners from industry and consulting and training companies were invited to join the community. Eleven topics have been defined as following:

1. Industrial Ergonomics (theoretical approaches and case studies; dissemination of industrial best practices)
2. Product and Process Ergonomics (design for ergonomics; occupational comfort improvement)
3. Workplace Aesthetics and Ergonomics (workplace design and modern architecture perspectives)
4. Biomechanics and Modelling in Ergonomics (physical ergonomics; safety and risk management with ergonomics; musculoskeletal disorders risks management; augmented human including use of robots and exoskeletons; wearable computers applications)
5. Cognitive Ergonomics (psychosociology perspectives in ergonomics studies)
6. Medical Sciences Contribution in Ergonomics
7. Special Application of Ergonomics (people with disabilities and aging population; improve accessibility and mobility through ergonomics improvements of professional systems and living spaces)
8. Ergonomics Support for Occupational Health and Safety Management (support safety culture; preventive measure with ergonomics; ergonomics risk management)
9. Ergonomics for Sustainable Workplaces (ergonomics approaches for workplace well-being)
10. Education and Training Programs in Ergonomics, Workplace Management and Occupational Health and Safety (dissemination of good practices and experiences; future learning environments)
11. Human Resources Management (including talent management, competencies management and intellectual capital management)

Besides the usual plenary and parallel sessions (presented virtually in this period!), the first day conference is dedicated to ErgoWork and ROFMA Industrial workshops having a large participation of practitioners from Romania and other foreign countries.