

Knowledge Sharing and Sustainable Development

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As the knowledge and data-intensive economy continues to evolve, in view of the continuously accelerating technological revolutions and pressures from ecological threats and the COVID-19 pandemic (e.g., [1–3]), knowledge and data management is being recognized as a key business asset and a crucial component of national, organizational, and individual strategies [4]. With growing pressure from customers and regulators toward environmental and social issues, companies are increasingly expected to shoulder greater responsibility for making sustainable development a swift reality (e.g., [3]). Moreover, sustainable economic development is facing a complex and paradoxical milieu [5], while it becomes obviously clear that economic growth alone is not an acceptable economic, social, and environmental solution at the present time (e.g., [6]). The need for a circular and agile economy at every scale (e.g., regional, national, and global) and for sustainable development has never been more acutely evident (e.g., [3]). This requires policymakers, planners, and management to balance economic, business, social, and environmental concerns, and outcomes. For this to happen, leaders need to quantify the relationships of all those aspects across different time horizons and link their organizational knowledge base to strategy and outcomes, so they can consider the tradeoffs of different alternatives (e.g., [7]).

Therefore, the ability to share knowledge is quickly becoming vital to secure and maintain organizational survival and success. Moreover, artificial intelligence, digitalization, platformization, and data management are changing the landscape of knowledge and social and human capital management, creating new strategic opportunities and threats while enabling new venues and ventures (e.g., [8,9]). To support sustainable development while also taking into consideration the continuous technological revolutions of AI/machine technologies within that changing landscape (at the meta-system level), an updated model of knowledge management (KM) was recently proposed by Russ [3]. The functioning of the new KM model is framed by the following key aspects of the new *Padkos* milieu [3]:

1. Continuous co-evolution and co-development of the adjoining spheres of society, economy, environment, and knowledge/science.
2. A few of those spheres are ‘hitting’ dangerous, acting on the edge constraints of their system.
3. Dynamic boundary management between and within the spheres is becoming increasingly complex.
4. Decision-making and learning processes of humans and machines are currently fundamentally intertwined.
5. The half-life of knowledge is continuously shrinking and in some areas is as short as 18–24 months.
6. Finally, the currently ongoing COVID-19 pandemic is only accelerating the trends listed above [10] and the need for a new model of sustainable development [11].

For this Special Issue, sustainable development was defined as economic and social development that meets the economic, social, and environmental needs of the present generation without conceding the ability of future generations to meet their own needs [12],



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and also as “a plan of action for people, planet and prosperity” devised to “shift the world onto a sustainable and resilient path” [13] (p. 1). The agenda, consistent with earlier definitions of sustainability and the Triple Bottom Line [14,15] (as well as this model), has three segments: social, environmental, and economic, including seventeen Sustainable Development Goals (SDGs).

Additionally, for this Special Issue, knowledge management was recognized as a socio-technical phenomenon in which the basic social constituents, such as person, team, and organization, require interaction with ICT applications to support strategy and add value to the organization, while improving the economic, social, and environmental sustainability of an ecosystem (e.g., [16]). In this context, knowledge sharing (KS) will be defined as an activity through which knowledge is exchanged among, within, or between agents [17].

To support such an agenda, this Special Issue called for papers that encourage an interdisciplinary fusion between diverse disciplines. Specifically, the call for papers solicited articles from a multidisciplinary array of scholars, including economic development, financial, systems–networks, IT/IS data/analytics, behavioral, social, environmental ecosystems, governance systems, and other related (e.g., NGOs) ecosystems. Multi-level and multi-discipline chapters that synthesize diverse bodies of knowledge were strongly encouraged. When appropriate, a plurality of empirical methods from diverse disciplines that could enhance the building of a holistic theory of knowledge sharing for sustainable development was also encouraged.

In this Special Issue on “Knowledge Sharing and Sustainable Development” *Sustainability* 13, five papers were recently published covering diverse subjects related to sustainable development and knowledge sharing. The papers included three theoretical, conceptual papers and two exploratory studies. Naturally, since the focus was on knowledge sharing, all papers emphasized distinctive processes and two of the five focused on capabilities. Moreover, four of the five papers discussed multi-level constructs.

In conclusion, the papers illustrate the complexity and diversity of the subjects that need to be included in the conversation of the application of knowledge sharing for sustainable development, and illuminate the barriers and the opportunities in the transition to a sustainable and agile economy and society.

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