

## Introduction to the Design and Appropriation of Knowledge and AI Systems Minitrack

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The objective of this minitrack is to contribute to the body of knowledge that helps scholars and practitioners increase their collective understanding of

- (1) how knowledge and artificial intelligence (AI) systems are planned, designed, built, implemented, used, evaluated, supported, upgraded, and evolved;
- (2) how knowledge and AI systems impact the context in which they are embedded; and
- (3) the human behaviors reflected within and induced through both (1) and (2).

By knowledge and AI systems, we mean systems in which human participants and/or machines perform work (processes and activities) related to the creation, retention, transfer and/or application of knowledge using information, technology, and other resources to produce informational products and/or services for internal or external customers. Such systems may include, but are not limited to, knowledge management systems, decision systems, social media, expert systems, machine learning systems, and other AI systems as well as any other IT-enabled knowledge processes.

It is the ninth year of the minitrack. We received seven papers this year and after a rigorous review process, we accepted three for publication in the proceedings and online presentation at the conference.

The first paper, co-authored by Ali Intezari, Morteza Namvar, and Ramin Taghinejad, aims at providing a theoretical framework that explains the complexity of knowledge in an organizational context, and how knowledge management (KM) can be integrated into an organization's existing enterprise system. To do so, the authors introduce the concept of knowledge identity (KI) that refers to the collective construal that an organization's members have about their previous, current and future knowledge needs. They also provide a critical perspective about the assumptions that underline organizations' practice of KM and argue how these assumptions influence KI.

In the second paper, which is nominated for the HICSS-54 2021 Best Paper Award, Camille Grange and Alain Pinsonneault develop a theoretical framework that emphasizes the socio-ethical factors surrounding the decision made by organizations to deploy a highly automated decision-making system. Previous literature on adoption and intention to adopt omits inquiring whether the adoption decision or the process leading to the decision is socially responsible. Thus, in developing their framework, the authors specify a new set of constructs to reflect the phenomenon and introduce the theoretical logic underlying the relationships between these constructs.

The third paper, co-authored by Peter Hofmann, Philipp Stähle, Christoph Buck, and Harald Thorwarth, addresses the lack of guidance on the development and application of data-driven applications fostering an organization's absorptive capacity. Based on a structured literature review, the authors derive seven data-driven application capabilities and match them with an established conceptualization of absorptive capacity. While previous literature did not allow for a specific analysis, the authors' functional representation concretely demonstrates how data-driven applications composed of separate capabilities can foster absorptive capacity in different ways.

We wish to thank all of the authors who submitted work for consideration in this minitrack. We also thank the dedicated reviewers for the time and effort they invested in reviewing the papers. We believe that the accepted papers contribute to furthering our understanding on the creation and appropriation of knowledge and AI systems. All author teams provide presentation slides and/or a presentation video that could be accessed during the conference in January 2021. We hope that all provided materials (papers, slides, videos) inspire discussions, networking, and new ideas and research endeavors.