

Call for Papers

Journal of the Association for Information Systems (JAIS) - MISQ Executive (MISQE) Joint Special Issue on **Artificial Intelligence in Organizations: Opportunities for Management and Implications for IS Research**

Guest Editors:

Hind Benbya, Montpellier Business School, h.benbya@montpellier-bs.com

Stella Pachidi, Cambridge University, s.pachidi@jbs.cam.ac.uk

Tom Davenport, Babson College, tdavenport@babson.edu

Sirkka Jarvenpaa, University of Texas, Sirkka.Jarvenpaa@mcombs.utexas.edu

Introduction

Artificial Intelligence (AI) is emerging as a fundamental, pervasive economic and organizational phenomenon that holds many theoretical and practical opportunities and challenges for management and information systems scholars. Recent advances in AI have given rise to a diverse set of technologies able to perform human-like tasks such as complex decision-making, reasoning and learning, sophisticated analytics and pattern recognition, visual acuity, speech recognition and language translation as well as emotion detection (Anderson, Rainie and Luchsinger, 2018).

Today, companies across industries increasingly rely on AI technologies to automate structured and repetitive work processes, gain insights through extensive analysis of large datasets and engage with customers and employees in new ways (Davenport, 2018).

Firms also combine different AI technologies to perform tasks as diverse as selecting suitable applicants for organizational positions, advising clients on financial products, performing financial transactions, deciding which customers to insure, scheduling complex logistics, diagnosing patients and suggesting therapies, and forecasting technological developments.

As the adoption of AI technologies across organizations is increasing, AI may alter working and organizing in significant ways. Current debate centers on the extent to which AI technologies would substitute or complement humans in the workforce (Larson, 2010; Aleksander, 2017). Research is required into the effects of AI technologies including transforming expertise in organizations (Beane, 2018), offering novel forms of coordination and control (Faraj, Pachidi and Sayegh, 2018), and changing the nature and the future of work (Schwartz et al. 2019). The conditions under which new human-machine configurations can or cannot have effects such as amplify human ability, perform key processes autonomously, contribute to innovativeness and affect both short-term and sustained competitive advantage remain to be explored (Benbya and Leidner, 2018; Yan et al. 2018).

The experiences of early adopters of AI technologies demonstrate that such technologies may produce no, unknown, or unexpected outcomes, raising new challenges and concerns about the long-term impact of investments in AI in organizations. Emerging challenges include addressing ethical concerns such as AI bias, trust, and transparency (Daugherty et al. 2018); altering how people and things are valued (Tegmark 2017); and eroding expertise and occupational boundaries (Faraj et al. 2018).

It is therefore important to improve our understanding about the potential effects of AI technologies in organizations (such as transforming dynamics, patterns and structure of organizations, management), and the broader societal, legal, and ethical implications of AI. Advancing both practitioner and academic work in these areas is of key importance at this particular moment in time, as practitioners and academics are just beginning to understand the transformative potential of AI technologies.

This joint JAIS-MISQE special issue seeks original research on “Artificial Intelligence in Organizations: Opportunities for Management and Implications for IS Research.”

Some of the topics of interest of this joint special issue include (but are not limited to):

- Transformative effects of AI technologies
- Emergence of new configurations of human-machine interactions and their impact on working and organizing
- Failures and errors with AI technologies
- Usage and consequences of different AI technologies (e.g., robotics, machine learning, chatbots, digital twins, etc.) across industries
- Unintended consequences of AI implementation and use
- Psychological, social and cultural aspects of human computer and robot interactions
- Organizational, societal and ethical implications of AI
- Challenges of AI for decision making
- Impact of AI use on knowledge and expertise
- Design approaches combining human-machine capabilities to elevate performance
- Paradoxical effects of algorithmic technologies
- Embedding smart machines into products, services, strategies, cultures and behaviors

Rationale for the JAIS-MISQE Joint Special issue

A major mission of the information systems discipline is to produce knowledge that is both academically rigorous and applicable to IS managers. To bridge the research-practice divide, the editors and guest-editors of this joint *MISQ Executive* and the *Journal of the Association of Information Systems* special issue, offer IS scholars a unique opportunity to develop both a theoretical contribution (targeted at *JAIS*) and practical implications (targeted at *MISQE*) on the topic of Artificial Intelligence in Work and Organizations.

To be considered for the joint SI, authors are invited to use the same cases or data sets to develop two papers: a theoretical contribution for *JAIS* and a practical contribution for *MISQE*. The special issue is open to any type of research and methodological approach and encourages innovative research methods and designs that allow both rigor and relevance into this phenomenon.

There will be opportunity for interested authors to discuss their research plans with members of the editorial team of the special issue at the pre-ICIS 2019 workshop in Munich. Participation in this event is highly recommended and requires sending an email with an

extended abstract of the research to one of the editors by September 1th 2019. This summary should include: key phenomena and research question, methods and case material, plan for the *JAIS* submission (e.g. theoretical and conceptual framing and expected contributions), plan for the *MISQE* submission (e.g., conceptual framework, unique insights and lessons learned). Logistical details regarding location and timing for the Munich session will be provided to the participants in due course. While submission to the workshop is not a requirement, prospective authors are encouraged to send their extended abstracts to the Special Issue editors for development feedback before submission.

Deadlines

- Extended Abstracts submission for the joint JAIS-MISQE SI- **September 1, 2019** (Pre-ICIS workshop)

MISQE

- MISQE full paper submission deadline - **March 1, 2020**
- First editorial review sent to authors - **May 1, 2020**
- Paper resubmission based on editor feedback deadline - **July 1, 2020**
- Second editorial review, decision and suggestions to authors - **August 1, 2020**
- Final submission of accepted papers deadline - **September 15, 2020**
MISQE publication - **December 2020**

JAIS

- JAIS full paper submission deadline - **February 1, 2020**
- First editorial review sent to authors - **April 1, 2020**
- Paper resubmission based on editor feedback deadline – **June 1, 2020**
- Second editorial review, decision and suggestions to authors - **July 15, 2020**
- Final submission of accepted papers deadline - **October 1, 2020**
JAIS publication – **December 2020**

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