

## Putting the IS Back into IS Research

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The interdisciplinary nature of the information systems (IS) field has opened it up to various theoretical perspectives, methodologies and contexts since its inception. While the Information Systems Journal (ISJ) has consistently encouraged “*submissions that reflect the wide and interdisciplinary nature of the subject and articles that integrate technological disciplines with social, context, and management issues*”<sup>1</sup>, an increasing number of submitted manuscripts does not meet the objectives of the journal in terms of having a clear IS element. Such an element, however, is crucial for research that positions itself in this field. In this editorial, we explore what an IS element entails, and how authors could better highlight the IS-ness of their research.

To provide a basic definition of what an IS element is, we first briefly describe how the IS discipline differs from others. In our view, scholars in the IS discipline study “*the human, social, and technological phenomena associated with the design, construction, implementation, and use of computer-based information systems by individuals, organizations, and societies*” (Tarafdar & Davison, 2018, p.525). Hence, IS research is explicitly concerned with the interplay amongst information technologies (IT), data, information, actors, and the associated social contexts, examining the development and influence of IT (Grover & Lyytinen, 2015) through various levels of interactivity. Compared to, for instance, the broader management or organization studies disciplines, the focus in the IS discipline is not on improving our understanding of organizations or management *per se*, but on advancing the design and utilization of IT, as well as their implications for different aspects of society, within and around particular contexts. Such contexts may involve organizations, but could equally involve individuals, the environment, and other entities. Aiming to further realize this goal, the ISJ has been open to both qualitative and quantitative studies that incorporate IT use, governance, and design approaches, which can provide rich implications to both IS theory and practice.

Whilst the description and definition of the field has often been discussed extensively, the IS element has received significantly less attention, due to its interdisciplinary but also elusive nature. IS can be defined as systems in which people and/or machines produce informational products and/or services through the use of IT, information, and other resources (Alter, 2008). Hence, IT is a component of IS. Consequently, an IS element is not fixed or standardized, and can be a specific technology or a combination of technologies, influenced by or influencing human actions. It can, thus, involve practices that entangle new with old technologies or technologies with people (Baskerville et al., 2014). Although the IS element can also be materialized as an IS context (e.g., an online community, or a knowledge sharing platform), such a context in itself is not sufficient for positioning a manuscript as IS research. Thus, the context of interest (e.g., organizational, personal, environmental) should be influenced by or influence an IS element. If proposed models, propositions or theories remain unchanged when the proposed IS element is removed, this is not sufficient for publication in the ISJ. Hence, the IS element should at least represent a major part of the research question and/or the research model. Ultimately, IS should play a *significant* and *valuable* role in the

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<sup>1</sup> The full text is available here:

<https://onlinelibrary.wiley.com/page/journal/13652575/homepage/productinformation.html>

paper, if it is to be considered for publication in the ISJ. By *significant* we mean that the role of the IS element in the study should be clear, having a leading role in the manuscript; it should substantially influence, or be influenced by, another element. For instance, media synchronicity theory (MST) conceptualizes the capability of media and devices to support synchronicity in a communication process, and subsequently determines their communication performance (Dennis et al., 2008). MST, therefore, provides a solid theoretical foundation for investigating the deployment of various information and communication technologies, their characteristics, and their impacts in the associated work system. Drawing upon MST, thus, one could capture the use of communication tools in buyer-seller interactions, and their effects on interactivity and social presence in buyer-seller communication processes on online marketplaces (e.g., Ou et al., 2014). The IS element of such a study would be clear, and well-posed for an IS journal.

Occasionally, papers are submitted to the ISJ that appear to have no link to IS at all, while in others it does not seem to matter whether the proposed model includes IS or not; the outcome would most likely be the same if the IS element is substituted with another (organizational) one. We suggest that the IS element in the paper should also be *valuable* in the sense that its role should make a theoretical contribution to ongoing and recent discussions in the field. Manuscripts that apply, for instance, the IS success model or the technology acceptance model without offering novel theoretical contributions are as uninspiring for IS scholars as those that do not incorporate an IS element. The same applies to manuscripts that are purely technical or mathematical and rely heavily on data analysis, but lack theoretical depth (McBride, 2018): it is a common misconception that crunching large datasets is equal to having an IS contribution. In reality, such manuscripts often fail to provide clear broader implications for both research and practice in the field (Davison & Tarafdar, 2018).

We, therefore, suggest that authors should start with a critical reflection on whether their study actually revolves around IS, and ask: *Do the results of this work significantly depend on or influence an IS element? Is there a significant, novel theoretical and practical contribution that is linked to the role of an IS element?* As reflected in prior ISJ editorials (e.g., Chatterjee & Davison, 2021; Davison, 2019), it is essential to write a manuscript with a specific audience and journal in mind. The problem statement and introduction of the manuscript should appeal primarily to IS scholars and practitioners, yet also be understandable and relevant for a broader audience. Authors can, for instance, consider adopting a sociotechnical perspective as a good start for making an IS-specific contribution (Sarker et al., 2019). An obvious way to ensure a link to the field is to cite contemporary and relevant IS literature, and contribute to a recent and ongoing discussion. After all, academic publications are the home for ongoing dialogues amongst academics interested in a specific topic. Then, it is important to highlight the theoretical and practical contribution of the manuscript, in terms of the value of the IS element. In other words; *what would the world miss if your manuscript was never published? What would other IS scholars get wrong if they never read your paper?* We suggest that the IS element should play a key role in answering these questions. In fact, we believe that developing an enhanced understanding of the IS element on its own can provide many avenues for future research in the field. Finally, the cover letter for the editorial team and many sections of the manuscript can offer a great opportunity for authors to elaborate on the IS element, and convince the editors as well as the team of reviewers that the manuscript has a fit with the ISJ.

The recommendations we lay out here do not suggest that we need to narrow down the IS discipline or make it restricted. On the contrary, the ability to offer interdisciplinary perspectives can bring much value to the field, and IS journals should welcome work from non-IS scholars, who conduct research that involves an IS element, from traditional fields such as medicine. Hence, we point out that IS research should have a clear IS element that is theoretically and practically *significant* and *valuable*, and can be appealing to, and

understandable by a broader audience. In this way, we can ensure that the discipline will remain relevant and will become increasingly influential for practitioners and scholars alike.

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In the first of five papers in this issue, Soliman and Tuunainen (2022) explore IS discontinuance, a challenge facing most digital services and platforms, yet one that remains one of the least understood user behaviours, especially for volitionally adopted IS (i.e., information systems adopted, used and discontinued at the user's discretion). To gain deeper insights, the authors adopt a narrative approach to explore the users' perspective about their discontinuance process with respect to a popular crowdsourcing platform. Their enquiry led to the development of a stage model demonstrating the main steps that users go through from initial use to the final abandonment of the system.

In the second paper, Fang, Neufeld and Zhang (2022) report on a qualitative case study that applied Carlile's knowledge management framework and examined the day-to-day technology practices of two highly dispersed teams. Knowledge coordination in these virtual teams involves the continuous production and reproduction of digital artifacts through three paired modes: "presenting-accessing", "representing-adding" and "molding-challenging". An unexpected fourth pair of technology practices, "withholding-ignoring", is found to exert a complex effect on certain knowledge coordination processes. The authors contribute to both the knowledge coordination literature and the practical application of digital artifacts in virtual teams.

In the third paper, Shao, Li, and Wang (2022) examine digital creativity (DC) at the individual level: employees' generation of useful and fresh ideas through the use of digital technologies. Triangulating insights from five informal interviews and survey data from 221 frontline employees who used a similar version of internet-of-things in their daily work, the authors find that exploitative use mediates the influences of technology digital affordance and digital knowledge on DC only for women; explorative use mediates the influences of digital affordance and task variety on DC only for men. The findings demonstrate that digital technologies have substantially changed the traditional thinking of employee creativity within organizations, and that classic theories like the tripartite view of technology use and social role theory need to be revisited in the digital age.

In the fourth paper, Davison, Martinsons and Wong (2022) aim to raise awareness and understanding about the ethics of how action research (AR) is planned, conducted and reported. Drawing on an extensive review of the AR literature in information systems, they identify and discuss four issues of concern that merit specific ethical attention when conducting AR: collaboration, competence, persistence, and consent. They draw on these four issues in an analysis that augments the five principles and 47 criteria for canonical AR (Davison et al. 2004, 2012), recently reified as Integrated AR (Davison et al. 2021). Their guidance includes an additional principle of AR and ten associated criteria that address the ethics of AR participation.

In the fifth paper, Kunst, Ringberg and Vatrapu (2022) empirically explore the concept of electronic word of behavior (eWOB), behavioral information indicating a product's popularity such as number of past purchases for a product or number of people listening to a specific artist on a music streaming service. An assessment of eWOB is assumed to guide users to more efficient decision-making in an ever-more cluttered digital world. The authors nuance

and extend this understanding of eWOB by exploring how users actually act upon and derive meaning from eWOB. Through a means-end chain approach and the theoretical lens of basic psychological needs they demonstrate how eWOB provides users with opportunities for action and rich meaning-making that reach far beyond its assumed guidance to popular products. In fact, when integrated with respect for user privacy and control, eWOB can influence the sense of self and instill a positive stimulation of the basic psychological needs for competence and relatedness. The authors derive seven design principles for integrating eWOB on content-based digital platforms, and offer directions for further research that can enhance our understanding of the effects of observable digital traces of behaviors.

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