EDITOR'S COMMENTS I

Producing Significant Research I

By: Andrew Burton-Jones, Editor-in-Chief Peter Gray, Senior Editor Ann Majchrzak, Senior Editor

The purpose of this editorial is to provide background on the introduction of "significance statements" in MIS Quarterly's (MISQ's) review and publication process in 2023 and to situate them as part of ongoing efforts to encourage and enable authors to conduct the most significant research possible and to write up their research so that its significance is as compelling as possible.

Background

MISQ seeks to publish the finest information systems (IS) scholarship. As MISQ editors have always stressed, this involves a commitment to both rigor and relevance (Rai, 2019; Straub & Ang, 2011; Zmud, 1996), where relevance means applicability beyond academia. In this editorial, we treat rigor as given and focus on significance. We refer to "significance" rather than "relevance" because we seek to publish research that is not merely applicable but important beyond academia. Our field must produce such research because information systems are so deeply embedded in so many aspects of the world: in our personal and social lives, in the world of work, and in the dynamics of industries, markets, governments, and the environment. Our collective work has never been more vital.

IS scholars have long called for research that is more significant for external stakeholders (Klein & Lyytinen, 1985; Davenport & Markus, 1999; Ram & Goes, 2021), as have colleagues in neighboring disciplines (e.g., Peters, 1980; Hambrick, 1994). Rather than diminishing, such calls have only intensified. Recently, there have been many calls for scholars to produce more significant research, in economics (Akerlof, 2020), operations (Netessine, 2022; Akmal et al., 2022), management (Hideg et al., 2020; Harley & Fleming, 2021), accounting (Fraser et al., 2020), marketing (Jaakkola & Vargo, 2021; Chandy et al., 2021), and social science as a whole (Alvesson et al., 2017). Whether such research is called "significant" (Kuehne & Olden, 2015), "useful" (Co-founders of RRBM, 2017), or "impactful" (Ravenscroft et al., 2017), policymakers are also calling for more of it.¹

Given all these prior discussions, there is a risk that we might simply just repeat existing calls in this editorial or reenter hackneyed debates. A critical reader may even ask if anything new can be said about the topic. While we recognize such concerns, we must still push for progress. Accordingly, the goal of this editorial is to both describe an initiative—the introduction of "significance statements" at *MISQ*, as committed to at the start of the current editor-in-chief's term (Burton-Jones, 2021, p. vi)—and to offer guidance for authors and reviewers to help increase the production of significant IS research.

A significance statement, sometimes called a public significance statement,² is a concise articulation of why a paper is important for the world beyond academia. We give examples later, but for now, view them as encapsulations of a paper's practical motivation and practical implications. Clearly, any single paper can only offer limited significance. Substantial impacts typically require long programs of work rather than single papers (Nunamaker et al., 2017; Lee, 2009). We do not expect all papers to have a major short-term impact beyond academia. Moreover, being precise and humble about a paper's significance is a feature of good science (Tsui, 2022; McGrath, 1981). The new initiative to write significance statements at *MISQ* will oblige authors to articulate their paper's significance beyond academia, but it does not require that this significance be immediate and strong. Having said this, we

¹ This emphasis can be seen in international granting policies, e.g., in the USA, https://beta.nsf.gov/funding/learn/broader-impacts; the U.K., https://www.ukri.org/about-us/research-england/research-excellence/ref-impact/; Australia, https://www.arc.gov.au/evaluating-research/ei-assessment; and China, https://www.ugc.edu.hk/doc/eng/ugc/rae/2020/publication on im.pdf).

² https://www.apa.org/pubs/journals/resources/translational-messages

hope MISQ papers will increasingly have greater significance over time, and we offer advice in this editorial on how to get there.

As an MISQ editorial board member said to us, writing a significance statement is easy if your research is significant. Accordingly, if our goal was just to introduce significance statements for their sake alone, we would not need to write this editorial. But that is not our goal; our goal is to increase the significance of IS research. Accordingly, while we dedicate space below to the new requirement for significance statements, we give just as much attention to what we mean by significant research, various dimensions of significance one can address, and how authors can write up a paper so that its significance is compelling. Our goal is to encourage and enable authors to produce (and encourage and enable reviewers and editors to assess and help shape) this entire package: conducting significant research, writing it up effectively, and having a strong significance statement.

Long-time readers of MISQ may have a feeling of déjà vu when hearing about our introduction of significance statements. We therefore need to provide some history before we get into further details.

Some History: Executive Overviews at MISQ

MISQ was founded with the express goal of appealing to those both inside and outside academia (Dickson, 1977). In the late 1980s, MISQ editors became concerned that the journal was not accessible or relevant enough to practitioners and thus began publishing executive summaries. In Rai's (2016, p. iv-v) editorial, F. Warren McFarlan described how this began:

The major issue I addressed was making the Quarterly more accessible to practitioners. ... The academics, in short, were satisfied with how the publication had emerged and my first job was not to mess this up and keep this as the primary outlet for high-quality MIS academic work. The publication at that time was cosponsored by the Society of Information Management (SIM). They were not as comfortable with the publication, feeling it did not really relate to the job of a practicing CIO. [To address this problem,] I personally prepared a short "Executive Summary" for practitioners of each paper. The summary aimed at helping the practitioner understand what the important managerial takeaways from the paper were. ... This ... quelled the anxiety on the practitioner side.

In the same editorial (Rai, 2016, p. vi), Blake Ives explained how he continued this process in the early 1990s:

We quickly did several things to increase our relevance without diminishing our scholarship. Most notable was the inclusion of executive overviews, written by me, for each article and included in the first few pages of the journal.

Like any new initiative, this practice of writing executive overviews was not problem-free. In Rai's editorial, McFarlan acknowledged that he sometimes found it difficult to write them because some articles offered very few insights for managers. Ives also questioned their usefulness, noting that college promotion and tenure committees (whom many researchers felt were a more critical audience than practitioners at the time) were uninterested in them. Such difficulties and questions continued over the next decade, eventually resulting in *MISQ* ceasing the practice. Weber (2003, pp. vii-viii) summarized the decision:

Over the last few years, a number of senior colleagues have questioned the wisdom of our continuing to publish Executive Overviews in the MIS Quarterly. For a start, they have pointed out that SIM members no longer receive the MIS Quarterly as part of their membership services. This outcome occurred because SIM members increasingly experienced difficulties in bridging the gap between the research focus of our authors and their needs as practitioners. Thus, the clientele for whom the Executive Overviews were first devised no longer existed.

More salient, however, was the concern among some senior colleagues that the existence of Executive Overviews in the MIS Quarterly might send a wrong signal to important academic stakeholders about the nature of the journal. For instance, they surmised that some deans and members of promotion and tenure committees might mistakenly doubt the academic status of the MIS Quarterly when it contained content that was oriented primarily to practitioner readers.

For me, the turning point came when I was examining [how I search for papers] ... I do not want to have to access multiple files (e.g., the article file plus an executive overview file or the editor's comments file) to obtain a copy of and information about an article. This is especially the case if each access requires a separate payment (either by myself or

my library). Moreover, some electronic databases (e.g., ABI-Informs) provide access to articles on the basis of a topic area (e.g., they have a pointer from a topical index to articles on enterprise resource planning systems). The likelihood of these indexes pointing to any kind of summary that is not part of the article itself is small (if not zero). ... Thus, the usefulness of article summaries that are not part of the article itself will decline (perhaps rapidly) over time.

In our view, these concerns are not as relevant anymore. While we appreciate the difficulties that McFarlan, Ives, and Weber discussed, our view is that MISQ was ahead of its time in pursuing such an initiative, and that it is timely to revisit it. For instance, it is hard to imagine now that scholars would downgrade their view of the Proceedings of the National Academy of Science because it includes significance statements (Kuehne & Olden, 2015), or lower their view of the Academy of Management because it offers AOM Insights (https://aom.org/research/insights/about-aom-insights). Communicating why research has value beyond academia is just part and parcel of responsible research (Co-founders of RRBM, 2017). Likewise, the difficulties of accessing executive overviews via online databases seem less relevant in current search environments. As digital platforms for engagement (Rai, 2017a), journals now offer diverse content that can be consumed, curated, and communicated in myriad ways. Having well-written content communicating the value of research beyond academia would help any journal.

From Executive Overviews to Significance Statements: Similarities and Differences

A smaller but still important difference between significance statements and executive overviews lies in the name. Executive overviews were written for *executives* such as CIOs, as shown in McFarlan's quote earlier. This made sense given the centrality of organizational concerns in the IS field at that time. In the ensuing years, the IS field has broadened and organizational executives are now just one of many stakeholders of interest. This is especially the case when we think of issues of interest to the public and societal "grand challenges." The general term "significance statements" is therefore more appropriate.

Looking back at the history of executive overviews in MISQ, it is instructive to note that they were instituted as a method of communicating to practitioners. They were not written by authors but by editors, and they were written after the paper's acceptance, not as part of the review process. In this light, they served a similar role to journalistic summaries.

This goal of communicating and translating knowledge from academia to practice has long been discussed as something that journals do not do well (Akmal et al., 2022), including in the IS field (Moody, 2000). While this is a worthwhile goal and something we hope this initiative will assist, it is not the only goal or even main goal we see for significance statements.

In the literature on the science-practice gap, researchers typically describe two reasons for a lack of significance in scientific papers (Spencer et al., 2022; Hamet & Maurer, 2017; Straub & Ang, 2011): limitations in the *conduct* of research: (i.e., the research itself is not significant), and limitations in the *write-up* of research (i.e., the significance is obscured because it is poorly articulated). Requesting significance statements can help with both elements. If authors write significance statements and include them in their submissions from the first round, and if reviewers and editors must consider them in their reviews and assessments—as requested by this new policy—then this should increase authors' attention to significance when they conduct research they hope to submit to *MISQ*, and also increase their attention to how they write their papers so that the significance is clear and compelling.

Significance statements are important for communicating our research to practice but there will always be other ways this communication can occur. As Straub and Ang (2011) note, researchers mainly write academic papers for other academics, not practitioners, for they have many other ways of communicating to practice, such as in practitioner journal papers, textbooks, classrooms, white papers, and advisory boards. While some argue that journals should find additional ways to communicate directly to practitioners, and that significance statements will assist that effort (Akmal et al., 2022), we hold a more relaxed view. We will be delighted if practitioners read and benefit from these significance statements, but we will be equally delighted if they are read by academics who then discuss the research with practitioners in classrooms or other avenues. Perhaps someday, all the significance statements from research on a particular topic can be collated and sent to policymakers as policy decisions are made, evaluated, and revised. All that matters to us is that we publish the most significant research possible and that we enable pathways for that significance to be communicated to stakeholders.

Authors who publish research that matters to the world should feel proud of their accomplishments; significance statements enable them to call attention to their success in doing something that is an important part of being a scholar. As small but repeated reminders that we as a field collectively value and encourage research that matters beyond academia, reading others' significance statements might inspire some of us to devote even more energy toward increasing the significance of our own research.

The Timeliness of Now: Some Examples from Public Policy

A key reason to (re)introduce significance statements at *MISQ* lies in the wealth of significance that our field can produce. To reinforce this point, it may be helpful to offer examples. While not privileging one research domain over any other, we will use the world of public policy to illustrate some of the opportunities we see (Majchrzak & Markus, 2014; Niederman et al., 2017).

For example, in the U.S., President Biden issued an executive order (EO) in 2022 for the responsible development of digital assets. The EO ordered the creation of a forum for academics, industry, and federal agencies to exchange knowledge to inform regulations and standards, and tasked the NSF to "back research in socio-technical disciplines to ensure that digital asset ecosystems are ... usable, inclusive, equitable, and accessible."

Similar opportunities have arisen in Europe where the EU is drafting an AI Act, touted as the world's first national regulation on AI, which would offer a risk-oriented framework for assessing AI systems in the EU and ensuring they respect fundamental values.⁴ This act would complement the EU's existing Digital Services Act that seeks to provide a legal framework to ensure the safety of online users and maintain an open and fair online environment. Elsewhere in the world, UNESCO, the OECD, and the World Bank are all developing policies to ensure greater digital inclusion for individual well-being and productivity.⁵

Clearly, there is very high demand around the world right now for effective policy for digital environments, to both harness and control such environments. But our field's opportunities do not stop there because policymaking is itself also being disrupted by digital environments (Lindquist, 2022; Gilardi, 2022), as is the relationship between science and policy (Beck et al., 2022). Research is needed on these topics to help policymakers and scientific institutions respond appropriately.

In short, opportunities abound right now for IS researchers to inform both policy and policymaking. The process by which research can help policy and policymaking can be long and contentious (Majchrzak & Markus, 2014), but that should not deter us. For example, Duina (2021) found that 75% of European Commission staff regularly drew on academic research for at least some elements of policy work, with 71% accessing the research directly from journals. The timing is right, therefore, to continue to focus on the significance of IS research and how to best convey it to external stakeholders. And our discussion here has just focused on public policy. When we look more broadly, the opportunities and need for significant IS research are immense.

Advice for Conducting and Writing Up Significant Research

A significance statement is not just an add-on to a paper. It is part of a *package* of conducting and writing up significant research. The goal is to produce significant research, not just well-crafted significance statements. To help, we provide advice on how to conduct and write up more significant research and we then link this advice to the production of significance statements.

Conducting significant research

Earlier, we defined significance in terms of importance for the world outside academia, but we can flesh this out further by

³ https://www.whitehouse.gov/briefing-room/statements-releases/2022/09/16/fact-sheet-white-house-releases-first-ever-comprehensive-framework-for-responsible-development-of-digital-assets/

⁴ https://www.consilium.europa.eu/en/press/press-releases/2022/12/06/artificial-intelligence-act-council-calls-for-promoting-safe-ai-that-respects-fundamental-rights/

⁵ https://www.unesco.org/en/digital-policy-capacities-inclusion; https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0488; https://www.worldbank.org/en/topic/digitaldevelopment

considering for whom the research is significant, how the research is significant, and the temporal dimension of significance.

For whom is the research significant? The literature identifies many stakeholders who might find research significant. Wickert et al. (2021) differentiate between scholarly impact, practical impact, societal impact, policy impact, and educational impact. Tsui (2022) discusses multiple stakeholders such as society, consumers, employees, patients, firms, entrepreneurs, NGOs, governments, society, and/or marginalized peoples. Clarke and Davison (2020) distinguish between economic, environmental, and social impacts, and list stakeholders such as system sponsors, other organizations, employees, customers, economic regions, value chains, and the environment. They urge researchers to consider multiple perspectives, given that significance can vary across perspectives. Simsek et al. (2022) advise researchers to be precise when identifying stakeholders, for example, not just stating "managers" or "policymakers" but identifying the types of managers or policymakers. At the outset of their projects, researchers should therefore consider who can benefit from their work and try to broaden both the collection of such stakeholders and the benefits they might obtain.

Why/how is the research significant? At a high level, a paper's significance depends on its topic, as some topics are naturally more significant than others (Colquitt & George, 2011). This view has a long history in IS research, underpinning the annual SIM surveys that identify topics of interest to IS managers (Kappelman et al., 2022). Straub and Ang (2011, p. iv-v) argue that there may be a good overlap between the topics of interest to practice and those studied in IS research. However, we must ask why/how a study on a topic is significant. After all, a topic like "cybersecurity" may be relevant, but not all studies on it will be. Researchers should therefore be precise about why/how a paper is significant. For instance, researchers can seek to offer instrumental benefits (enabling stakeholders to change something for the better), conceptual benefits (providing new concepts to improve practitioners' understanding of an issue and so enable action more indirectly), and/or symbolic benefits (helping practitioners to legitimate something they are doing that lacked evidence by providing new evidence-based backing) (Simsek et al., 2022). They can also provide prevention-focused insights (helping practitioners to reduce risks) and/or gain-focused insights (helping practitioners to increase benefits) (Simsek et al., 2022). Researchers can also seek to improve the "change potential" of their work (in terms of relevance, magnitude, and breadth) and its accessibility (in terms of simplicity, clarity, and actionability) (Jaakkola & Vargo, 2021). Whatever approach researchers take, they should seek to maximize the significance of their work wherever possible.

When will the research be significant? Researchers should also consider the temporal dimensions of significance. For instance, they can consider how frequently an issue being studied occurs in practice, and whether advice for stakeholders should include sequencing issues (e.g., do x first/last, or before y) (Simsek et al., 2022). Researchers can also consider whether it is more significant to give stakeholders insights based on present or past evidence, or instead to imagine possible futures and help stakeholders prepare for or avoid them (Hovorka & Peter, 2021; Kane et al., 2021). Another temporal issue stems from generalization. For instance, a case/field study may have fairly immediate benefits for the case/field organizations examined in a study, but steps might need to occur over time to learn how those ideas can generalize to other organizations and be reapplied in their contexts. Sometimes, the greatest benefits will be immediate ones; other times, greater benefits may emerge over time.

A growing movement: Recently, many researchers have discussed the who, why, how, and when of research significance (Tsui, 2022; Netessine, 2022; Clarke & Davison, 2020; Harley and Fleming, 2021; Chandy et al., 2021; Tihanyi, 2020; Davison et al., 2022). The strong theme in this literature is the value of moving toward more problem-inspired rather than just literature-inspired research, more societal impact rather than just organizational impact, more actionable implications (instrumental benefits) rather than just improved understanding (conceptual benefits), and more alternative views rather than just one view on an issue.

We support this growing movement, despite the risks. One risk is underestimating the value of knowledge for its sake alone. History is full of examples of science that proceeded without concerns about usefulness only for it later to become very useful. Varadarajan (2020, p. 202) gives the example of Godfrey Hardy, who felt his own work on number theory was interesting despite being "useless," only for it to be found very useful 60 years later. Clearly, the same could occur in IS research. A theorist might find a more elegant way of modeling a concept, or an empiricist might discern a more reliable estimation of a relationship or spot an unexpected pattern in a dataset. *MISQ* has a proud history of supporting fundamental IS research and that will always continue. Placing immediate significance for external stakeholders as the sole criterion for acceptance would immediately and inappropriately exclude (even alienate) important genres of research (Agrawal et al., 2020).

A related risk is losing sight of IS-specific concepts. After all, significant real-world problems (e.g., human rights, global warming, and pandemics) tend to be interdisciplinary in nature. As a result, when studying these problems, it is natural to foreground the interdisciplinary problem and background the IS issues. However, if none of us foreground IS issues, we will fail to advance our

own field's intellectual platform. This would then reduce the practical value of IS research because most IS theories are ultimately developed to enable progress on practical issues (Burton-Jones et al., 2021a). To give just one of many examples, Jeff Parsons and colleagues have devised design principles that significantly improve data quality in domains such as tracking biodiversity (Parsons et al., 2011; Lukyanenko et al., 2019). While this work has great significance beyond academia, its significance only emerged after many years of highly theoretical work, focusing on IS-specific concepts (Parsons, 1996; Parsons & Wand, 2000).

The common theme with both risks is that a well-intentioned desire to "do good in the world" (here, MISQ's renewed focus on significance) can unintentionally backfire. A well-known contemporary example is the U.K.'s Research Excellence Framework, and similar programs in other countries like Australia, which incentivize high-quality, impact-oriented research. While such initiatives often seem laudable at first glance, they have led to a range of unintended negative consequences, such as marginalizing certain genres of research and increasing managerialism in the university sector (O'Connell et al., 2020; Arnold et al., 2021). One of the reasons for such unintended negative consequences is that policies are inevitably implemented by people who have preferences that lead to biases, even if unintended. For instance, a corporation or government entity that offered funding for research on a societal grand challenge may not support research that goes against that corporation's or government's own position. The funding, while seemingly well-intentioned, may therefore bias the resulting research. Likewise, if editors on an editorial board are generally skewed in a particular direction on certain questions of applied research, this could bias the types of research we encourage and accept, even if unintended.

Despite these risks, we still support this growing movement. Most IS researchers join academia to make a positive difference in the world, and we are all regularly urged not to forget this goal (Hirschheim & Klein, 2012; Lucas et al., 2013; Ram & Goes, 2021; Zhang et al., 2021). A recent survey of social science researchers found that almost all wanted to help the world beyond academia, but only a third felt their institutions shared that goal, with most believing their institutions merely sought top-journal publications (Haley & Jack, 2023). A recent study found that less than 3% of top journal papers focus on society's grand challenges (Harley & Fleming, 2021). Considering the grand challenges the world faces, the large investment that research requires—a top journal paper reflects a ~\$400K investment (Netessine, 2022), often from public sources—and scholars' desires to make a positive difference, it is incumbent upon a journal like *MISQ* to do its best to enhance the significance of the work it receives and publishes.

Another more mundane reason for agreeing with this general movement stems from our reflection on *why* we see research produced with little significance beyond academia. Most of the time, the instances of such research that we see across the field do not fall into the risk categories we mentioned above. Painstaking studies to produce credible knowledge for its own sake are undertaken, and fundamental theoretical analyses are also undertaken, and such research can be highly valuable. However, much research across the social sciences is more run-of-the-mill, produced because the engines and institutions of academia pressure academics to produce it (Alvesson et al., 2017). We need less of such research and more significant research in its place.⁶

Summing up, we urge readers of this editorial, in your roles as authors, reviewers, and/or editors, to consider how you can conduct more significant research and improve the significance of the research you have a chance to assess or help shape. You can enhance significance by thinking more deeply through the preceding *who*, *why*, *how*, and *when* questions, by seeking out important real-world problems, by striving for greater societal impact, not just organizational impact, by devising more actionable implications, and by seeking multiple alternative views of a situation rather than just one.

Writing Papers to Communicate Clear and Compelling Significance

Conducting significant research is half the battle; the other half is writing it up. Great writing is the difference between significant research and a significant paper.⁷ In our experience, a paper's significance will be clearer and more compelling if the writing is accessible, credible, and arresting.

⁶ This issue can be viewed in methodological terms too. For instance, we receive very few action research studies at *MISQ*, despite their great value in facilitating significant research. This is just one example of many where we believe there are opportunities for IS researchers to further their engagement in significant research. We know many researchers are committed to that effort, but even more could be. Innovations in processes of theorizing offer a related opportunity for improvement (e.g., Tremblay et al. 2021).

When we circulated a draft of this editorial, a colleague reminded us that communication in scientific articles goes beyond writing, e.g., it may include figures and infographics, and over time it could include interactive elements too (Weissgerber et al. 2016). We focus on writing alone for reasons of space, but we expect the three concepts discussed here to still be important in other forms of communication.

Accessible: A paper's significance is a function of the number of readers who will read it and be moved by its implications. Both are facilitated by simple, clear, direct writing. Overly dense, complex writing obscures significance. Too often, authors try to make their work appear novel or sophisticated by using new and complicated terms or the language of an in-group (Ragins, 2012). Rather than increasing a reader's perception of the authors' knowledge, this strategy typically just leads readers to doubt whether the authors know what they are trying to say (Gunning, 1968). Rather than increasing a paper's accessibility, this strategy also limits the audience to only those who know or care about that language. For instance, as prior EIC Arun Rai used to say, a paper that starts with its "identification strategy" may attract readers who care deeply about causality but may turn off many other readers.

Clear writing is particularly critical in a paper's discussion section. Many authors feel tempted in this section to write broad-sweeping statements (Bartunek & Rynes, 2010), such as when offering insights for "managers" or "policymakers." Disciplining yourself with precise language can help you to pinpoint more significant and realistic implications. For example, which managers or policymakers can benefit, how, why, when? Other authors fall into the opposite trap and talk only about the immediate problem without seeing the archetypal problem of which it is part and the larger community of interest (Kemerer, 2002). Rai (2017c) gives excellent advice on how to scale levels of abstraction so that larger groups of readers can see the relevance of a paper's work. Getting feedback from peers (including practitioners) can help identify many such problems, but the main solution is to write, rewrite, and rewrite, to make your points as simple and clear as possible (Zinsser, 2006; Leidner & Birth, 2023).

Credible: As you gain more grounding in a domain, you naturally gain a deeper sense of the underlying forces, the links between the phenomenon and its context, and the stakeholders and perspectives involved. While gaining credible knowledge and experience in a domain is vital to producing significant research, you also need to convey this credibility through your writing. As an author, you are an *author*ity. You convey your credibility not by claiming it directly, but indirectly through the examples you give, papers you cite, practical references such as policies or white papers you refer to, implications you discuss, and the boundaries and stakeholders you acknowledge (Beyer, 1997; Wickert et al., 2020). Readers will sense it. Papers that go beyond abstract conjectures to discuss how things actually work in context are not only more credible but also more interesting and compelling (Johns, 2001). You need to draw readers into the phenomenon and help them understand it. This will enhance your paper's significance because readers will better appreciate the problem space framed in the paper and have greater confidence in your approach to it.

Arresting: Ask yourself: "Can a reader address the problem this paper studies just as well by relying on prior knowledge, such as common sense, current best-practice, or prior research, rather than using the insight from this study?" If yes, the research is not very significant. Significant research is arresting, in that it is impossible to ignore. Writing it up requires at least three steps.

First, articulate the problem precisely (Weber, 2003; Rai, 2017b). Rather than merely highlighting a gap in the literature, explain how this is a real-world issue that must urgently be addressed (Kilduff, 2006; Davis, 2015; von Krogh et al., 2012; Tihanyi, 2020). If the problem is complex, you may need to break it into parts, distinguish between the problem and its solutions, and carefully structure the evidence that describes it and justifies its importance (Webster & Watson, 2002; Buckley et al., 2017; Majchrzak et al., 2016).

Second, explain the limits of current knowledge of the problem (or its solutions) and why scholars and external stakeholders would therefore be disadvantaged if they relied on it. While good advice on problematization already exists (Hollenbeck, 2008; Alvesson & Sandberg, 2011; Locke & Golden-Biddle, 1997), and we encourage you to consider it, one weakness with that advice is that it tends to problematize academic knowledge rather than practitioners' knowledge. The academic literature may sometimes provide a good description of practitioners' knowledge but not always. Significant research emerges from immersion in the phenomenon being studied (Johnson et al., 2019); you may therefore sometimes need to collect evidence directly from practice to substantiate the limits of practitioners' knowledge (e.g., from white papers, executive presentations, and/or interviews/surveys) and include this in your paper. It may take time to pinpoint these limits. For instance, researchers may be told that practitioners' approaches are reasonable, only to find after some time that different practitioners actually follow mutually incompatible approaches or that they are unaware of how their approaches vary in success across contexts (Pfeffer, 2005; McFowland et al., 2021).

Third, outline how external stakeholders should change their beliefs or practices based on the study's insights. Do not leave it up to the reader to draw this connection (Bartunek & Rynes, 2010). Instead, articulate the implications of your findings and how they address the limits of prior knowledge that you established earlier. This may involve providing real-world examples of how practitioners should alter their practice or how policymakers should develop new policies (Wickert et al., 2000). To convince readers that your recommendations apply broadly (Benbasat & Zmud, 1999; McGahan, 2007) and offer tangible improvements (Vermeulen, 2007), you can include the results from applicability checks (Rosemann & Vessey, 2008) or competitive benchmarking (Ketter et al., 2016). Even if your work merely gives practitioners a new way to think about an issue

(i.e., conceptual benefits), you can describe how that new thinking may enable them to act in new/better ways. Likewise, if your research merely justifies existing practices (i.e., offering symbolic benefits), you can explain how this helps to resolve ongoing conflict or doubt about that practice.

Encapsulating the Conduct and Write-Up of Significant Research: The Role of Significance Statements

While the requirement to submit significance statements at MISQ is new, authors are likely to have written such statements many times, even before writing the paper. The first version might be an elevator pitch for a study. Later versions may appear in funding applications. Whether written early in the research process or not, the incoming policy will request authors to submit a significance statement in their first submission and revise it in subsequent rounds. Guidance for writing such statements is widely available.9 The main theme in such advice is to just to state, simply, how a study matters for relevant stakeholders and issues beyond academia.

In Table 1, we provide example significance statements from the three most recent winners of the MISQ Paper of the Year. As you can see, they are short (required to be ≤90 words), much shorter than the traditional abstract. The policy to submit significance statements did not exist when these papers were submitted; we provide them here for illustrative purposes.

Using these examples, we can examine whether they address the points raised earlier. Regarding the *conduct* of research, do these statements address the who, why, how, and when of significance? Do they address major real-world problems, strive for societal impact, devise actionable implications, and investigate multiple alternative perspectives on a situation? Regarding the write-up of research, are the statements accessible, credible, and arresting? We would say "yes but mixed" for all three papers. ¹⁰ For instance, all three papers address major real-world problems, but not all of them emphasize societal concerns or alternative perspectives.

Table 1. Examples of Significance Statements			
Study	Academic abstract	Significance statement	
Lukyanenko et al., 2019	As crowdsourced user-generated content becomes an important source of data for organizations, a pressing question is how to ensure that data contributed by ordinary people outside of traditional organizational boundaries is of suitable quality to be useful for both known and unanticipated purposes. This research examines the impact of different information quality management strategies, and corresponding data collection design choices, on key dimensions of information quality in crowdsourced user-generated content. We conceptualize a contributor-centric information quality management approach focusing on instance-based data collection. We contrast it with the traditional consumer-centric fitness-for-use conceptualization of information quality that emphasizes class-based data collection. We present laboratory and field experiments conducted in a citizen science domain that demonstrate trade-offs between the quality dimensions of accuracy, completeness (including discoveries), and precision between the two information management approaches and their corresponding data collection designs. Specifically, we show that instance-based data collection results in higher accuracy, dataset completeness, and number of discoveries, but this comes at the expense of lower precision. We further validate the practical value of the	Organizations increasingly enlist the public (or, crowd) to collect data, but such data often lacks quality. The standard solution is to constrain crowd data collection processes, but these constraints limit the data that can be collected, thereby creating other quality problems, reducing the chance for unanticipated insights. This paper shows how crowd data can be collected more effectively, so that unanticipated insights are captured while maintaining data quality. We demonstrate the effectiveness of the approach in a citizen science context. (80 words)	

⁸ For example, https://beta.nsf.gov/science-matters/nsf-101-five-tips-your-broader-impacts-statement.

⁹ For example, Kuehne & Olden (2015); https://www.ametsoc.org/index.cfm/ams/publications/author-information/significance-statements/; https://www.apa.org/pubs/journals/resources/translational-messages

¹⁰ This is clearly not a criticism. These papers are all award-winning papers, submitted and accepted long before this policy was developed, and the authors wrote the significance statements at our request without reading the guidance in this editorial. Our goal here is not to showcase "perfect' significance statements (if such perfection was even possible), but just to provide examples for discussion. We thank the authors for helping us to do so.

	instance-based approach by conducting an applicability check with potential data consumers (scientists, in our context of citizen science). In a follow-up study, we show, using human experts and supervised machine learning techniques, that substantial precision gains on instance-based data can be achieved with post-processing. We conclude by discussing the benefits and limitations of different information quality and data collection design choices for information quality in crowdsourced user-generated content. (241 words)	
Kitchens et al., 2020	Echo chambers and filter bubbles are potent metaphors that encapsulate widespread public fear that the use of social media may limit the information that users encounter or consume online. Specifically, the concern is that social media algorithms combined with tendencies to interact with likeminded others both limits users' exposure to diverse viewpoints and encourages the adoption of more extreme ideological positions. Yet empirical evidence about how social media shapes information consumption is inconclusive. We articulate how characteristics of platform algorithms and users' online social networks may combine to shape user behavior. We bring greater conceptual clarity to this phenomenon by expanding beyond discussion of a binary presence or absence of echo chambers and filter bubbles to a richer set of outcomes incorporating changes in both diversity and slant of users' information sources. Using a data set with over four years of web browsing history for a representative panel of nearly 200,000 U.S. adults, we analyzed how individuals' social media usage was associated with changes in the information sources they chose to consume. We find differentiated impacts on news consumption by platform. Increased use of Facebook was associated with increased information source diversity and a shift toward more partisan sites in news consumption; increased use of Reddit with increased diversity and a shift toward more moderate sites; and increased use of Twitter with little to no change in either. Our results demonstrate the value of adopting a nuanced multidimensional view of how social media use may shape information consumption. (248 words)	Despite widespread societal concerns that online platforms bias the news and information that users read, evidence is lacking. Our analysis of the browsing behaviors of over 200,000 users shows that platforms vary greatly in how they impact news consumption. We provide a framework to explain how platforms' approaches to prioritizing content affect the diversity and polarization of users' news consumption. Our work improves public understanding of echo chambers and filter bubbles and reveals the power of platform design choices in shaping what users read. (84 words)
Lebovitz et al., 2021	Organizational decision-makers need to evaluate Al tools in light of increasing claims that such tools outperform human experts. Yet, measuring the quality of knowledge work is challenging, raising the question of how to evaluate Al performance in such contexts. We investigate this question through a field study of a major U.S. hospital, observing how managers evaluated five different machine-learning (ML) based Al tools. Each tool reported high performance according to standard Al accuracy measures, which were based on ground truth labels provided by qualified experts. Trying these tools out in practice, however, revealed that none of them met expectations. Searching for explanations, managers began confronting the high uncertainty of experts' know-what knowledge captured in ground truth labels used to train and validate ML models. In practice, experts address this uncertainty by drawing on rich know-how practices, which were not incorporated into these ML-based tools. Discovering the disconnect between Al's know-what and experts' know-how enabled managers to better understand the risks and benefits of each tool. This study shows dangers of treating ground truth labels used in ML models objectively when the underlying knowledge is uncertain. We outline implications of our study for developing, training, and evaluating Al for knowledge work. (200 words)	Al solutions are promoted as producing greater accuracy and efficiency than experts, even for knowledge-intensive decisions. Yet, organizations are often disappointed with their performance. To learn why, we studied how managers evaluated Al tools for medical diagnoses at a major hospital. We uncovered the importance of the data used to train and validate the tool, its ground truth, which may not always be "true." We provide a diligent Al evaluation process that organizations and regulators can use to assess the quality of Al tools and decrease their risk. (88 words)

Such results should be expected. It would be rare for a paper to satisfy all the points fully. They are markers of significance, not conditions for acceptance (or with these papers, conditions for an award). While we do not expect all papers to meet all the points fully, we do desire more of such work, and we hope this new policy will be one more nudge in that direction. Requesting significance statements when a paper is first submitted signals to researchers that we want such work, which we hope motivates them to consider if/how they might improve their paper's significance before submission. Likewise, requesting that reviewers and editors review the significance statement from the first round signals that they should consider the study's significance in their assessments. We expect good reviewers and editors to help identify how a study's significance can reasonably be improved during the review process—leading to more significant papers and better significance statements. *MISQ* can also account for their attention to significance when assigning reviewing and editing awards and making editorial board appointments.

While we recommend that authors, reviewers, and editors consider all the points we outlined regarding the conduct and write-up of research, a risk is that we provided too many points to consider. A short list of key points is sometimes more helpful than a long list. While it is hard to distill everything down, we offer three summary questions that can help with the search for significance¹²:

- 1. How does this paper address an unsolved challenge in a contemporary phenomenon?
- 2. How does the paper consider multiple perspectives on this challenge?
- 3. How do the paper's insights benefit society, broadly speaking?

For authors, we recommend that you consider such questions when you are planning research that you would like to submit to *MISQ*, when you write your papers, and when you write your significance statements. For reviewers and editors, we recommend that you consider such questions when you review papers, judge their significance, and recommend improvements.

Once again, we do not require every study to offer strong answers to all, or even any, of these questions. A paper may study a highly theoretical issue that, at first, has no clear link to a contemporary challenge, but may still make a strong theoretical contribution. In such a case, an author would just describe how the study's significance should be viewed, given its aims.

These three questions do not replace other traditional criteria, such as whether a paper contributes to an academic discourse. Rather, we see the answers to these questions as additive. Answering Question 1 (regarding unsolved challenges) offers a baseline for significance beyond academia. As each subsequent question is addressed, the paper's significance is likely to grow. Question 2 (regarding alternative perspectives) is helpful because different conclusions could be drawn about a finding by looking at it from the perspective of different stakeholders (especially marginalized ones). Question 3 (regarding societal benefits) is helpful because it orients us to consider whether/how a paper has implications for any of the large questions facing society, especially given the role of information systems in such issues (e.g., climate change, chronic disease, social justice, etc.).

If your research aligns poorly with these questions, we encourage you to consider adjusting your work to account for them; once again, bearing in mind our repeated caveats regarding the risks of pursuing significance alone.

Motivated by Question 1 (regarding unsolved challenges), if you have been using the academic literature alone to motivate your research, we encourage you to review the practitioner literature too, and spend time in practice to learn if and how the challenge you are studying might be reframed to address real issues experienced in practice. For instance, if you have been studying how electronic medical records can be used to improve healthcare outcomes (Kohli & Tan, 2016), we encourage you not only to draw

¹¹ While contributions beyond academia are not an explicit criterion of the MISQ Paper of the Year Award, they are explicitly mentioned in the terms of the MISQ Impact Award, which began in 2021 and celebrates long-term impact.

¹² While we believe that an open-ended (unstructured) significance statement is the best way to start this initiative, an alternative is to use a structured approach, using explicit questions like these, perhaps even with predefined answers from which authors select, e.g., to indicate that a study that can inform *policymakers*, or *managers*, or some other prespecified stakeholder. This could be implemented using checkboxes that authors complete. Another alternative could be a mixed model, in which an unstructured statement is accompanied by structured tags to facilitate searching/reporting (e.g., Which *MISQ* papers offer findings of use to policymakers?). We see the discussion of such alternatives as a natural next step for this initiative. The current format is just a first step, and we hope the initiative will be taken further as the journal and its digital platform evolve. A similar opportunity exists with *MISQ*'s transparency initiative; see the discussion of tags in Burton-Jones et al. (2021b, p. xii). Such initiatives fall into a larger class of initiatives that scientific journals need to consider (Larsen et al. 2020).

on the academic literature, but also spend time with health executives, clinicians, and patient representatives, to understand the real problems they face and the questions they are asking.

Motivated by Question 2 (regarding alternative perspectives), if you have been focusing on just one stakeholder's perspective in your research, consider alternative views. Try to learn which stakeholder groups are most relevant for your study and the outcomes that different groups find most meaningful (Aguinis et al., 2010; Rai, 2019). This may even require you to invest time to live in their worlds and grasp the logic of their practices (Sandberg & Tsoukas, 2011). Understanding a situation from the perspective of different stakeholders and constructively confronting alternative perspectives will help you to appreciate the situation more fully. You can use this strategy in many ways, including but not limited to understanding a relationship from both sides (as in studies of service quality; Jiang et al., 2002), revealing unintended consequences of one party's actions on another (as in studies of the effects of electronic medical records on providers vs. clinicians; Colicchio et al., 2019), learning the value of combining perspectives (as in studies of hybrid governance; Venkatesh et al., 2019), demonstrating how perspectives vary in appropriateness across contexts (as in studies that test insights from commercial platforms in non-profit platform contexts, Schreieck et al., 2017), and uncovering the marginalization of the powerless by the powerful (as in studies of ICT4D rollouts; Lin et al., 2015).

Motivated by Question 3 (regarding societal issues), if you have been taking an organizational perspective alone in your work, consider broadening your view toward larger societal issues. For instance, if you have been studying how hospitals can improve their efficiency through better use of electronic medical records, consider whether this work is ironically reinforcing the status quo of the industry (i.e., the power of hospitals in the healthcare sector) and whether such systems can be used to change the status quo by supporting healthcare beyond hospitals in the community, in line with societal needs (Canfell et al., 2021). In a classic description of how researchers choose problems to study, Webb (1961) refers to the importance of *dissatisfaction* with the state of knowledge in an area as a motivator for research. When we view the many grand challenges facing society (whether social, environmental, health, or economic), it is natural to feel *very* dissatisfied, and therefore *very* motivated to address them. In some cases, this will involve offering solutions, while in other cases it may involve offering a deeper understanding of the problem; both approaches offer benefits (Majchrzak et al., 2016). We are not suggesting that all researchers take all these steps in all their studies. Nevertheless, if more researchers take more of these steps over time, the significance of IS research beyond academia will increase.

Before we conclude, we need to acknowledge the issue of authors' time. Any request that a journal places on an author, such as writing a significance statement, takes time, and time is the one thing that academics lack the most. There seems to be no end to the pressures on researchers' time nowadays. While we acknowledge this issue, we believe the time cost of adding a significance statement is low. One way to reduce the cost even further would be to defer the request for the statement to the final stages of the review process, when the paper's acceptance is more assured. We have chosen to request it at initial submission, however, because of the importance we place on the issue. Our goal is to help authors to highlight the significance of their work and to give reviewers and editors the chance to grasp it and help authors improve it, from the start of the review process.

Conclusion

MISQ will always be committed to publishing the most significant research. This is reflected in MISQ's continued push to encourage and enable researchers to conduct more significant research and to write it up more effectively. It is also reflected in the additional initiatives that MISQ is pursuing over time, such as our author- and reviewer-development workshops, which help our authors and reviewers assess and improve the significance of research, our social media strategy, which helps us spread the significance of our research, our special issues on significant topics such as digital resilience and social justice, new awards such as the MISQ Impact Award, which celebrate significant publications, and our partnerships with relevant interdisciplinary groups such as RRBM.¹³

This new initiative to include significance statements is just another step in that effort. Though it is a small initiative, we hope it will serve as a helpful (and hopefully inspiring) nudge for authors, reviewers, and editors, thereby boosting ongoing efforts to attract more significant papers, assess and improve their significance in the review process, and celebrate and convey their significance effectively post-publication. We will be updating *MISQ* author instructions and templates over the coming months to support their introduction. We look forward to receiving your significant research and your significance statements!

¹³ https://www.rrbm.network/supporters/partners/

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References

- Agrawal, V., Khanna, P., & Singhal, K. (2020). The role of research in business schools and the synergy between its four subdomains. *Academy of Management Review*, 45(4), 896-912.
- Aguinis, H., Werner, S., Abbott, J.L., Angert, C., Park, J.H., & Kohlhausen, D. (2010). Customer-centric science: Reporting significant research results with rigor, relevance, and practical impact in mind. *Organizational Research Methods*, 13(3), 515-539.
- Akerlof, G. A. (2020). Sins of omission and the practice of economics. Journal of Economic Literature, 58(2), 405-418.
- Akmal, A., Gauld, R., Podgorodnichenko, N. (2022) The "Rules of the game": How business research journals discourage knowledge translation to practice and what needs to change. *Production Planning & Control*, https://doi.org/10.1080/09537287.2022.2144524
- Alvesson, M., Gabriel, Y., & Paulsen, R. (2017). Return to meaning: A social science that has something to say. Oxford University Press. Alvesson, M., & Sandberg, J. (2011). Generating research questions through problematization. Academy of Management Review, 36(2), 247-271.
- Alvesson, M., & Sandberg, J. (2014). Habitat and habitus: Boxed-in versus box-breaking research. Organization Studies, 35(7), 967-987.
- Arnold, J., Dries, N., & Gabriel, Y. (2021). Editorial—EJWOP special issue: Enhancing the social impact of research in work and organizational psychology: Beyond academia, *European Journal of Work and Organizational Psychology*. 30(3), 329-338.
- Bartunek, J. M., & Rynes, S. L. (2010). The construction and contributions of "implications for practice": What's in them and what might they offer. *Academy of Management Learning & Education*, 9(1), 100-117.
- Beck, S., Grimpe, C., Poetz, M., & Sauermann, H. (2022). Introduction to the special issue on open innovation in science, *Industry and Innovation*. 29(2), 131-135.
- Benbasat, I., & Zmud, R. W. (1999). Empirical research in information systems: The practice of relevance. MIS Quarterly, 23(1), 3-16. https://doi.org/10.2307/249403.
- Beyer, J. M. (1997). Research utilization: Bridging a cultural gap between communities. Journal of Management Inquiry, 6(1), 17-22.
- Buckley, P. O., Doh, J. P., & Benischke, M. (2017). Towards a renaissance in international business research? Big questions, grand challenges, and the future of IB scholarship. *Journal of International Business Studies*, 48, 1045-1064.
- Burton-Jones, A. (2021). Editor's comments: Continuing and extending the MIS Quarterly trifecta vision. MIS Quarterly, 45(1), iii-viii.
- Burton-Jones, A., Butler, B. S., Scott, S. V., & Xu, S. X. (2021a). Next-generation information systems theorizing: A call to action. *MIS Quarterly*, 45(1), 301-314.
- Burton-Jones, A., Boh, W. F., Oborn, E., & Padmanabhan, B. (2021b). Editor's comments: Advancing research transparency at MIS Quarterly: A pluralistic approach. MIS Quarterly, 45(2), iii-xviii.
- Canfell, O. J., Littlewood, R., Burton-Jones, A., & Sullivan, C. (2021). Digital health and precision prevention: Shifting from disease-centred care to consumer-centred health. *Australian Health Review*, 46(3), 279-283.
- Chandy, R. K., Johar, G. V., Moorman, C., & Roberts, J. H. (2021). Better marketing for a better world. Journal of Marketing, 85(3), 1-9.
- Clarke, R., & Davidson, R. M. (2020). Research perspective—Through whose eyes? The critical concept of researcher perspective. *Journal of the Association for Information Systems*, 21(2), 483-501.
- Co-founders of RRBM. (2017, revised 2020). A vision for responsible research in business and management: Striving for useful and credible knowledge (RRBM, position paper). www.rrbm.network
- Colicchio, T. K., Cimino, J. J., & Del Fiol, G. (2019). Unintended consequences of nationwide electronic health record adoption: Challenges and opportunities in the post-meaningful use era. *Journal of Medical Internet Research*, 21(6), Article e13313.
- Colquitt, J. A., & George, G. (2011). Publishing in AMJ—Part 1: Topic choice, Academy of Management Journal. 54(3), 432-435.
- Davenport, T. H. & Markus, M. L. (1999). Rigor vs. relevance revisited: Response to Benbasat and Zmud. MIS Quarterly, 23(1), 19-23.
- Davis, G. F. (2015). Celebrating organization theory: The after-party. Journal of Management Studies, 52, 309-319.
- Davison, R. M., Majchrzak, A., Hardin, A., & Ravishankar, M-N. (2022). Editorial: Special issue on responsible IS research for a better world. *Information Systems Journal*, 33(1), 1-7.
- Dickson, G. (1977). Editorial preview. MIS Quarterly, 1(1), iii.
- Duina, F. (2021). Do EU policymakers pay any attention to academic research? LSE European Politics and Policy (EUROPP) blog. https://blogs.lse.ac.uk/europpblog/2021/08/31/do-eu-policymakers-pay-any-attention-to-academic-research/

- Fraser, K., Deng, X., Bruno, F., & Rashid, T. A. (2020). Should academic research be relevant and useful to practitioners? The contrasting difference between three applied disciplines. *Studies in Higher Education*. 45(1), 129-144.
- Gilardi, F. (2022). Digital technologies, politics, and policy-making. Cambridge University Press.
- Gunning, R. (1968). The technique of clear writing. Mcgraw-Hill.
- Haley, U. C. V., & Jack, A. (2023). Measuring societal impact in business and management research: from challenges to change (White paper). SAGE. https://doi.org/10.4135/wp230103
- Hambrick, D. C. (1994). What if the academy actually mattered? Academy of Management Review, 19, 11-16
- Hamet, J., & Maurer, F. (2017). Is management research visible outside the academic community. M@n@gement, 20(5), 492-516.
- Harley, B., & Fleming, P. (2021). Not even trying to change the world: Why do elite management journals ignore the major problems facing humanity. *The Journal of Applied Behavioral Sciences*, 57(2), 133-152.
- Hideg, I., DeCelles, K. A., & Tihanyi, L. (2020). From the editors: Publishing practical and responsible research in AMJ. Academy of Management Journal, 636, 1681-1686.
- Hirschheim, R., & Klein, H. K. (2012). A glorious and not-so-short history of the information systems field. *Journal of the Association for Information Systems*, 13(4), 188-235.
- Hollenbeck, J. R. (2008). The role of editing in knowledge development: Consensus shifting and consensus creation. In Y. Baruch, A. M. Konrad, H. Aguinis, & W. H. Starbuck (Eds.), *Opening the black box of editorship* (pp. 16-26). Palgrave Macmillan. https://doi.org/10.1057/9780230582590 2.
- Hovorka, D. S., & Peter, S. (2021). Speculatively engaging future(s): Four theses. MIS Quarterly, 45(1), 461-466.
- Huntington, H. P. & Lackmann, G. M. (2020) Editorials: Stating the significance of our work. *Weather, Climate, and Society, 12,* https://doi.org/10.1175/WCAS-D-20-0066.1
- Jaakkola, E., & Vargo, S. L. (2021). Assessing and enhancing the impact potential of marketing articles. AMS Review, 11, 407-415.
- Jiang, J. J., Klein, G. K., & Carr, C. L. (2002). Measuring information systems service quality: SERVQUAL from the other side. MIS Quarterly, 26(2), 145-166.
- Johns, G. (2001). In praise of context: Commentary. Journal of Organizational Behavior, 22(1), 31-42.
- Johnson, S., Gray, P. & Sarker, S. (2019). Revisiting IS research practice in the era of big data. Information & Organization (29), 41-56.
- Kane, G. G., Young, A. G., Majchrzak, A., & Ransbotham, S. (2021). Avoiding an oppressive future of machine learning: A design theory for emancipatory assistants. *MIS Quarterly*, 45(1), 371-396.
- Kappelman, L., Torres, R., McLean, E. R., Maurer, C., Johnson, V.L., Snyder, M., & Guerra, K. (2022). The 2021 SIM IT issues and trends study. MIS Ouarterly Executive, 21(1), 75-115.
- Kemerer, C. F. (2002). Editorial Notes. Information Systems Research, 13(4), iii-iv.
- Ketter, W., Peters, M., Collins, J., & Gupta, A. (2016). Competitive benchmarking: An IS research approach to address wicked problems with big data and analytics. *MIS Quarterly*, 40(4), 1057-1080.
- Kilduff, M. (2006). Editor's comments: Publishing theory. Academy of Management Review, 31(2), 252-255 https://doi.org/10.5465/amr.2006.20208678
- Kitchens, B., Johnson, S.L., & Gray, P. (2020). Understanding echo chambers and filter bubbles: The impact of social media on diversification and partisan shifts in news consumption. *MIS Quarterly*, 44(4), 1619-1649.
- Klein, H. K., & Lyytinen, K. (1985). The poverty of scientism in information systems. In E. Mumford, R. A. Hirschheim, G. Fitzgerald, & A. T. Wood-Harper (Eds.) In *Research methods in information systems: Proceedings of the IFIP WG 8.2 Colloquium, Sept 1984* (pp. 131-161). North-Holland.
- Kohli, R., & Tan, S. S-L. (2016). Electronic health records: How can IS researchers contribute to transforming healthcare. *MIS Quarterly* 40(3), 553-574.
- Kuehne, L. M., & Olden, J. D. (2015). Opinion: Lay summaries needed to enhance science communication. *Proceedings of the National Academy of Science*, 112(12), 3585-3586. www.pnas.org/cgi/doi/10.1073/pnas.1500882112
- Larsen, K. R., Hekler, E. B., Paul, M. J. & Gibson, B. S. (2020). Improving usability of social and behavioral sciences' evidence: A call to action for a national infrastructure project for mining our knowledge. Communications of the Association for Information Systems, 46(1), 1-17.
- Lebovitz, S., Levina, N., & Lifshitz-Assaf, H. (2021). Is AI ground truth really true? The dangers of training and evaluating AI tools based on experts' know-what. *MIS Quarterly*, 45(3b), 1501-1525.
- Lee, T. W. (2009). The management professor. Academy of Management Review, 34(2), 196-199.
- Leidner, D. E., & Birth, M. (2023). On scholarly composition: From acceptable to exceptional. *Journal of the Association for Information Systems*, 24(1), 1-11.
- Lin, C. I. C., Kuo, F-Y., & Myers, M. D. (2015). Extending Ict4d studies: The value of critical resarch. MIS Quarerly, 39(3), 697-712.
- Lindquist, E.A. (2022). The digital era and public sector reforms: Transformation or new tools for competing values. *Canadian Public Administration*, 65, 547-568.
- Lipton, M., Emmerich, A.O., Schwartz, K.S., Niles, S.V., & D'Ginto, A.M. (2022). *Understanding the role of ESG and stakeholder governance within the framework of fiduciary duties*. Harvard Law School Forum on Corporate Governance. Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4294180.
- Locke, K. & Golden-Biddle, K. (1997). Constructing opportunities for contribution: structuring intertextual coherence and "problematizing" in organizational studies. *Academy of Management Journal*, 40(5), 1023-1062.

- Lucas, H. C., Agarwal, R., Clemons, E.K., El Sawy, O.A., & Weber, B. (2013) Impactful research on transformational information technology: An opportunity to inform new audiences. *MIS Quarterly*, 37(2), 371-382.
- Lukyanenko, R., Parsons, J., Wiersma, Y.F., & Maddah, M. (2019). Expecting the unexpected: Effects of data collection design choices on the quality of crowdsourced user-generated content. MIS Quarterly, 43(2), 623-648.
- Majchrzak, A., & Markus, M. L. (2014). Methods for policy research: Taking socially responsible action (Vol. 3). SAGE.
- Majchrzak, A., Markus, M.L., & Wareham, J.D. (2016). Designing for digital transformation: Lessons for information systems research from the study of ICT and societal challenges. MIS Quarterly, 40(2), 267-277.
- McFowland III, E., Gangarapu, S., Bapna, R. & Sun, T. (2021). A prescriptive analytics framework for optimal policy deployment using heterogeneous treatment effects. *MIS Quarterly*, 45(4), 1087-1832.
- McGahan, A. M. (2007). Academic research that matters to managers: On zebras, dogs, lemmings, hammers, and turnips. *Academy of Management Journal*, 50(4), pp. 748-753.
- McGrath, J. E. (1981). Dilemmatics: The study of research choices and dilemmas. American Behavioral Scientist, 25(2), 179-210.
- Medawar, P. B. (1979). Advice to a young scientist. Basic Books.
- Moody, D. (2000). Building links between IS research and professional practice: Improving the relevance and impact of IS research. *Proceedings of the International Conference on Information Systems*. https://aisel.aisnet.org/icis2000/32
- Netessine, S. (2022). OM forum: A vision of responsible research in operations management. *Manufacturing & Service Operations Management*, 24(6), 2799-2808.
- Niederman, F., Clarke, R., Applegate, L., King, J. L., Beck, R. & Majchrzak, A. (2017). IS research and policy: Notes from the 2015 ICIS Senior Scholar's Forum. Communications of the Association for Information Systems, 40(5), 82-92.
- Nunamaker, J. F., Twyman, N. W., Giboney, J.S., & Briggs, R.O. (2017). Creating high-value real-world impact through systematic programs of research. MIS Quarterly, 41(2), 335-351.
- O'Connell, B. T., De Lange, P., Stoner, G., & Sangster, A. (2020). Impact of research assessment exercises on research approaches and foci of accounting disciplines in Australia. *Accounting, Auditing and Accountability Journal* 33(6), 1277-1302.
- Parsons, J., Lukyanenko, R., & Wiersma, Y. (2011). Easier citizen science is better. *Nature*, 471(7336), 37-37.
- Parsons, J., & Wand, Y. (2000). Emancipating instances from the tyranny of classes in information modeling. ACM Transactions on Database Systems, 25(2), 228-268.
- Parsons, J. & Wand, Y. (2013). Extending classification principles from information modeling to other disciplines. *Journal of the Association for Information Systems*, 14, 245-273.
- Peters, W.H. (1980). The marketing professor-practitioner gap: A possible solution. Journal of Marketing Education, 2(2), 4-11.
- Pfeffer, J. (2005). Developing resource dependence theory: How theory is affected by its environment. In M. A. Hitt & K. G. Smith (Eds.), *Great minds in management: The process of theory development*, Oxford University Press, p. 436-459.
- Ragins, B. R. (2012). Editor's comments: Reflections on the craft of clear writing. Academy of Management Review, 37(4), 493-501.
- Rai, A. (2016). Editor's comments—Celebrating 40 years of MIS Quarterly: MISQ's history and future through the lenses of its editors-in-chief. MIS Quarterly, 40(4), iii-xvi.
- Rai, A. (2017a). Editor's comments: The MIS Quarterly as a Platform for Engagement. MIS Quarterly, 41(3), iii-vii.
- Rai, A. (2017b). Editor's comments—Avoiding Type III errors: Formulating IS research problems that matter. *MIS Quarterly*, 41(2), iii-vii. Rai, A. (2017c). Editor's comments: Seeing the forest for the trees. *MIS Quarterly*, 41(4), iii-vii.
- Rai, A. (2019). Editor's comments: Engaged scholarship: Research with practice for impact. MIS Quarterly, 43(2), iii-vii.
- Ram, S., & Goes, P. (2021). Focusing on programmatic, high impact information systems research, not theory, to address grand challenges. *MIS Quarterly*, 45(1), 479-483.
- Ravenscroft, J., Liakata, M., Clare, A., & Duma, D. (2017). Measuring scientific impact beyond academia: An assessment of existing impact metrics and proposed improvements. *PLoS ONE*, 12(3), Article e0173152.
- Rosemann, M. & Vessey, I. (2008). Toward improving the relevance of information systems research to practice: The role of applicability checks. *MIS Quarterly*, 32(1), 1-22.
- Sandberg, J., & Tsoukas, H. (2011). Grasping the logic of practice: Theorizing through practical rationality. *Academy of Management Review*, 36(2), 338-360.
- Schreieck, M., Wiesche, M., & Krcmar, H. (2017). Governing nonprofit platform ecosystems—An information platform for refugees. *Information Technology for Development*, 23(3), 618-643.
- Simsek, Z., Li, N., & Huang, J. L. (2022). Turbocharging practical implications in management studies. *Journal of Management*, 48(5), 1083-1102.
- Spencer, L., Anderson, L., & Ellwood, P. (2022). Interweaving scholarship and practice: A pathway to scholarly impact. *Academy of Management Learning and Education*, 21(3), 422-448.
- Straub, D. W., & Ang, S. (2011). Editor's comments—Rigor and relevance in IS research: Redefining the debate and a call for future research. *MIS Quarterly*, 35(1), iii-xi.
- Tihanyi, L. (2020). From the editors: From "that's interesting" to "that's important." Academy of Management Journal, 63(2), 329-331.
- Tremblay, M. C., Kohli, R., & Forsgren, N. (2021). Theories in flux: Reimagining theory building in the age of machine learning. MIS Ouarterly, 45(1), 455-459.
- Tsui, A.S. (2022). From traditional research to responsible research: The necessity of scientific freedom and scientific responsibility for better societies. *Annual Review of Organizational Psychology and Organizational Behavior*, 9, 1-32.

- Varadarajan, R. (2020). Relevance, rigor and impact of scholarly research in marketing, state of the discipline and outlook. *AMS Review*, 10, 199-205.
- Venkatesh, V., Sykes, T. A., Rai, A., & Setia, P. (2019). Governance and ICT4D initiative success: A longitudinal field study of ten villages in rural India. *MIS Quarterly*, 43(4), 1081-1104.
- Vermeulen, F. (2007). "I Shall not remain insignificant": Adding a second loop to matter more. *Academy of Management Journal*, 50(4), 754-761.
- von Krogh, G., Rossi-Lamastra, C., & Haefliger, S. (2012). Phenomenon-based research in management and organisation science: When is it rigorous and does it matter? *Long Range Planning*, 45, 277-298.
- Webb, W. B. (1961). The choice of the problem. American Psychologist, 16(5), 223-227.
- Weber, R. (2003). Editor's comment: The problem of the problem. MIS Quarterly, 27(1), iii-ix.
- Webster, J., & Watson, R. T. (2002). Analyzing the past to prepare for the future: Writing a literature review. MIS Quarterly, 26(2), xiii-xxiii.
- Weissgerber, T. L., Garovic, V. D., Savic, M., Winham, S. J., & Milic, N. M. (2016). From static to interactive: Transforming data visualization to improve transparency. *PLoS Biology*, 14(6), Article e1002484.
- Wickert, C., Post, C., Doh, J.P., Prescott, J.E., & Prencipe, A. (2021). Editorial—Management research that makes a difference: Broadening the meaning of impact. *Journal of Management Studies*, 58(2), 297-320.
- Zinsser, W. (2006). On writing well: The classic guide to writing nonfiction, (30th Anniversary Edition). Harper Collins.
- Zmud, R. (1996). Editor's comments: On rigor and relevancy. MIS Quarterly, 20(3), xxxvii-xxxix.