EDITOR'S COMMENTS

Qualitative Research Methods in Information Systems: A Call for Phenomenon-Focused Problematization

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As outlined in our March 2022 editorial, we are using this year's editorials to help authors and reviewers understand what *MISQ* editors consider when handling certain types of manuscripts, or when considering issues within them.[1] This one is dedicated to *qualitative IS research.* There are many views on this topic, and we hope the editorial spurs further dialogue.

Compared to relatively stable phenomena that some fields study, a defining aspect of information systems (IS) phenomena is that they are inherently *emerging*, i.e., they dynamically evolve and mutate during our engagements with them (Bailey et al., 2022).[2] To keep pace with such emerging IS phenomena, we must be ever ready to evolve our use of research methods. In this endeavor, qualitative methods have played a key role throughout our field's history, helping researchers to appreciate revelatory cases, build grounded theories, and coin new concepts to describe emerging phenomena, such as informating (Zuboff, 1988) and boundary objects (Star & Ruhlender, 1996). Our goal in this editorial is to honor the legacy of qualitative research methods in the IS field and extend it even further by asking how authors and reviewers might revise their thinking and expand their use of qualitative methods going forward.

There are already many published guidelines for qualitative research, both within and outside the IS field. Table 1 lists a sample of such sources. Our goal is not to repeat this material. They are valuable resources. Our goal instead is to stress the need to go beyond such guidelines and focus on being open to reflexivity and creativity. We wish to emphasize the vital role that this openness plays in producing original contributions from qualitative IS research in contrast to the growing tendency toward script-following or check-box behavior by authors and reviewers that runs *counter* to the spirit of qualitative inquiry. We join those who call for more focus on creativity and less focus on scripts (Pratt et al., 2022, Köhler et al., 2022, and Gioia et al., 2022), and we contribute specific ideas for how IS researchers can do so.

Table 1. Selected publications within and outside the IS Field on Aspects of Qualitative Methods

Authors	Aspect of qualitative method	Outlet
Eisenhardt, 1989	Case study methods	*AMR*
Walsham, 1995	Interpretive case studies	*EJIS*
Langley, 1999	Strategies for theorizing from process data	*AMR*
Suddaby, 2006	Underscoring the abductive aspects of qualitative data analysis	*AMJ*
Myers & Newman, 2007	The qualitative interview	*I&O*
Klein and Myers, 1999	Principles of interpretive field studies	*MISQ*
Urquhart et al., 2010	Grounded theory guidelines for conceptualization and theory scope	*ISJ*
Birks et al., 2013	Presenting key elements and concerns with grounded theory methods	*EJIS*
Gioia et al., 2013	Guidelines on applying the "Gioia Methodology" for inductive theorizing	*ORM*
Sarker et al., 2018	Making explicit the varying assumptions comprising qualitative methods	*JAIS*
Levina, 2021	Arguing the general applicability of grounded theory methods	*MISQ*
Howard-Grenville et al., 2021	Coherence, consistency and fit when employing qualitative methods	*AMJ*

[1] For each editorial, we follow a three-stage process. The Editor-in-Chief (Andrew Burton-Jones) first selects a subset of experienced editors to run a masterclass for our board. The same group then runs an online knowledge-sharing session for authors. We then incorporate the learning from both sessions into this editorial. These editorials are not intended to provide the "one true view" of the topic; they simply reflect the views of a subset of editors at the time of writing.

[2] The terms used for such emerging IS phenomena change over time. The terms "digital phenomena" and "emerging technologies" are now commonly used in IS and neighboring fields, and we use the terms interchangeably. This editorial addresses qualitative research studying any such technologies.

In this editorial, we offer insights to help authors and reviewers perform and assess qualitative research on IS phenomena. We call out a creeping conservatism that is narrowing the remit of qualitative research (Cornelissen, 2017), fueled by the overly literal interpretation of guidelines and templates. In contrast to the ethos of qualitative inquiry, which is to take an open and reflexive approach to understanding how phenomena are constituted (Silverman, 2006), too many qualitative researchers and reviewers adopt a reductive mindset, mirroring traditional norms in quantitative research (Cornelissen, 2017).

For example, as editors, we are concerned that grounded theory methods, originally designed to be broad and epistemically flexible (Levina, 2021), are being recast as a "factor-analytic approach," where "large amounts of qualitative data collected from observation, interviews, etc." are transformed "into meaningful 'factors' that better explain the data while potentially providing transferable explanations of other contexts" (Bluhm et al., 2011, p. 1868). Ironically, when qualitative researchers use grounded theory methods in this way, it often leads them to adopt styles of theorizing and writing that align with "abstract models and linear causal effects that is characteristic of quantitative research" (Cornelissen, 2017, p. 369), rather than leveraging the unique value of qualitative methods.

As authors and editors of qualitative research, we can attest that the inadvertent narrowing of qualitative methods toward a factor-analytic approach is observable across IS journals, including *MISQ*. Researchers in organization studies face a similar risk, where the hallmark of qualitative research—grappling with rich, complex situations without prematurely reducing, formalizing, and simplifying them—is "under pressure" (Cornelissen, 2017, p. 369). Not only does this trend make it harder to *do* good qualitative research, it also means that the seemingly successful cases might have been *even stronger* had they not been shackled by conformist scripts. Rather than placing inappropriate demands on scholars, we need to be encouraging *more* and *richer* qualitative research at this point in our field's development.

MISQ regularly underlines its longstanding position on methodological plurality (Markus & Lee, 1999), yet it receives far fewer qualitative submissions than quantitative ones, and this flows through to the publication's output: out of the 71 papers published in *MISQ* in 2021, only 7 were qualitative.[3] Given the value that qualitative methods offer, indicated by 37% of the last three decades of *MISQ* "Paper of the Year" awards,[4] submissions and publications rates for qualitative papers are far too low. By going beyond factor-analytic approaches, and encouraging more diverse qualitative approaches, we hope to attract a higher number of submissions to prominent IS outlets including *MISQ*.

Indeed, we hope to offer more than words of encouragement to IS qualitative researchers. Our message is that qualitative sensibilities are vital to the critical intellectual apparatus needed to extend the frontiers of knowledge going forward (Tanweer et al., 2021) and that qualitative IS research is uniquely well-equipped for the challenges ahead. We are confident in making this claim because, as IS researchers, identifying emerging digital phenomena with a view to better understanding them is what we do (Levina, 2021). We bring methodological openness and reflexivity to the process of understanding digital innovation and its consequences. As earnestly as some disciplines hold fast to the same techniques and tools over time, producing original insight through qualitative scholarship entails the ongoing evaluation of assumptions, experiences, and relationships shaping our research practices. Here, we suggest that the conditions and characteristics of emerging digital phenomena call upon us to engage in what we term *phenomenon-focused problematization*. This move accentuates the processual, reflective engagement that has characterized IS qualitative scholarship in the past and encourages further openness and reflexivity going forward.

We adapt phenomenon-focused problematization from Gkeredakis and Constantinides (2019). Problematization itself is not a new concept. Seminal papers on problematization include Locke and Golden-Biddle (1997) and Alvesson and Sandberg (2011). Problematization can be viewed very broadly, e.g., "thinking differently about what we already know" (Lindebaum & Jordon, 2012, p. 1027) and can be applied to any element of research, whether phenomenon, theory, or method. For example, whereas we apply it here to qualitative empirical studies, Alvesson and Sandberg (2020) show how it can even be applied in nonempirical studies such as literature reviews. Our focus here is expressly on the *phenomenon-focused* problematization of emerging IS phenomena with the purpose of laying out a broad IS research approach for their study.

Leveraging phenomenon-focused problematization in the analysis of novel encounters with emerging digital phenomena requires both the fine-grained sociotechnical insight that has come to define IS research and a willingness to be methodologically responsive, i.e., incorporating the strength of our current methods while being open to revising what we do and how we do it in the pursuit of original theorizing. As we have just mentioned, revising our existing frames of meaning may be needed because emerging IS phenomena make us question the explanatory power and usefulness of the extant theory and assumptions. This resonates deeply with longstanding calls in IS scholarship to challenge taken-for-granted assumptions

[3] We excluded mixed methods papers, conceptual papers, commentaries, and editorials from this calculation. We also recognize that some other IS journals (particularly those associated with British and European connections) publish many more qualitative papers.
[4] https://misq.umn.edu/awards-paper-year

(Markus, 1997). It is a form of "thinking outside of the box" that supports fresh lines of enquiry and as such is well-suited to meeting the unprecedented challenges generated by emerging IS phenomena.

Phenomenon-focused problematization asks how particular assumptions have come to dominate practices on the ground, why those assumptions might be challenged, and where the outcomes of this process are being experienced. This is especially important with emerging technologies. For example, the rise of digital platform ecosystems has challenged our assumptions about firms' boundaries and how economic activities are organized (Constantinides et al., 2018), as well as how our worlds are configured through inscrutable algorithms (Orlikowski & Scott, 2015). These developments have inspired qualitative IS researchers to theorize how customers, products, and physical machines have become reframed as "data objects" (Alaimo & Kallinikos, 2022). Digital data collected and scrutinized through remote sensors and smart devices (Monteiro & Parmiggiani, 2019), robots performing surgery (Sergeeva et al., 2020), and AI applications assessing medical images (Lebovitz et al., 2021) are challenging our assumptions about coordination, knowledge sharing, and the establishment of "ground truth" in machine learning (ML). Thus, by advancing a discussion of phenomenon-focused problematization, we hope to help IS authors and reviewers to think of ways they might move beyond scripts and templates with a view to supporting the next-generation of original contributions from qualitative research.

History of Qualitative Methods in IS Research: An Ongoing Intellectual Project

To set the stage for where we should go, let us briefly examine where we have come from. Born out of 20th-century reactions in the social sciences to a growing hegemony of logical positivism, qualitative methods have deep philosophical roots (see Husserl, 1970 and for historic accounts targeted at IS research, see e.g., Hirschheim et al., 1995), the unpacking of which would take us significantly beyond the limits of this editorial.

The central tenets of qualitative methods in the IS field have been developed over time in response to perceived shortcomings of or outright frustration with dominant approaches (Markus, 1997). Discussing the challenges involved in framing IS phenomena and deliberating methods has formed part of what we regard as the ongoing intellectual project of information systems. At IFIP WG8.2 meetings in Manchester (1984) and Copenhagen (1990), qualitative researchers demonstrated how their methods and approach could contribute to areas such as IS failure and user resistance where computer science and engineering paradigms had struggled to explain outcomes. These researchers demonstrated how working with different root assumptions could productively inform the design, analysis, implementation, and management of information systems. Fresh lines of questioning were opened, and the conceptual insights generated became part of next generation thinking on the ground among practitioners and academics.

Thus, a tradition began in IS qualitative research of engaging in a dialogical relationship with the practices of those we study alongside an ongoing reconfiguration of the research practices in our field, including our methods and mode of theorizing. As Walsham (1993) says, qualitative scholars use theory as a "scaffold," to be discarded when no longer needed, on the grounds that there is no such thing as the "best theory," only different ways of seeing the world. This imbues our intellectual project with renewed urgency as it means striving to theorize in ways that enable us to understand ever more complex emergent phenomena (Orlikowski, 2000). In a plenary for IFIP WG8.2, Markus (1997) stated, "we should never forget that new research problems may necessitate methodological innovations," a call that remains valid today.

We invoke the notion of an ongoing intellectual project in qualitative IS research not to unduly elevate our efforts but to allay concerns that methodological innovation is a distraction. There is value in learning to work with different conceptual framings and foundational theories, just as there is value in learning multiple spoken languages (Markus, 1997). Each framing can support different concepts, bringing insightful perspectives, and shifting priorities in ways that help us construct more effective accounts of emerging phenomena. This has been the trajectory of qualitative research in IS over the years even if much of this effort has slipped from view. Using the image of a sports page, Markus suggests that in our collective memories "the past is largely forgotten except for epic victories and defeats, but yesterday's game and future contests are thoroughly critiqued" (Markus, 1997, p.12).

Framings are not neutral and where they are significantly different, difficulties and conflict arise (Constantinides & Slavova, 2020). But as we engage in making sense of new framings, new opportunities arise for which qualitative IS practice is uniquely suited. Methodological innovation offers the opportunity not only to produce interesting and useful academic accounts but to inform practices, help anticipate outcomes, and come to terms with the widespread call for responsible information systems. Just as previous generations have done, we hope to make our research journey explicit and invite others to participate in working out "what next?'

In the next section, we examine how the intellectual project of qualitative methods might be strengthened by a turn to phenomenon-focused problematization, a distinctive process of questioning and challenging data with theoretical resources. Problematization involves defamiliarizing taken-for-granted outcomes about the phenomena we see and the perceived common sense through which those outcomes have been reproduced. To provide context for that discussion, it is helpful to appreciate how phenomenon-focused problematization has actually been a constant thread in qualitative research throughout our field's history, even if not discussed in those terms. In particular, we discuss below a selection of historic insights that mark out the contours of the intellectual project of IS qualitative methods to date: contextualizing research puzzles, unpacking the (unintended) consequences of action, and focusing on the constitution of emerging phenomena. Looking back, these efforts can be viewed as historically important episodes of phenomenon-focused problematization.

Contextualizing Research Puzzles

The history of IS qualitative methods demonstrates a longstanding commitment to grounding and contextualizing research puzzles with a view to questioning the assumptions dominating the extant literature (Markus, 1997). Examples of empirical problems where this approach has made contributions include conflicts in IT standardization (Markus et al., 2006; Hanseth et al., 2006), resistance to change and IT implementation (Lapointe & Rivard, 2005), and the challenges of technology diffusion in work transformation (Barrett & Walsham, 1999; Sergeeva et al., 2020). Many of these insights would not be achievable using macrolevel analyses into emerging phenomena because they require immersion in empirical settings. For example, macrolevel observations like the "productivity paradox" (i.e., the lack of statistical correlation between investments in digital technologies and measured productivity gains) have not been able to convey the complex appropriations of technology in specific settings and the influence of such practices on organizational outcomes. Unlike macroeconomic studies on IT productivity, IT transformation, or related phenomena, qualitative researchers have revealed how the appropriation of technology—now understood to be a prerequisite for productivity gains—are sociotechnical processes of negotiation between the many actors and stakeholders implicated. Such negotiations give rise to varied outcomes due to stakeholders' diverse perceptions, preferences, and experiences.

Taking seriously a stakeholder-centric approach to technology appropriation in organizations has several methodological implications. To begin with, it implies that accounting for the divergent perceptions around the product and process of digitalization is a *sine qua non* for qualitative methods (Klein & Myers, 1999). It is also a reminder that the researcher is part of, not above, the research setting or field. The researcher inevitably comes with perspectives that need to be acknowledged and accounted for in the research process. Qualitative researchers never enter a field as "clean slates" that can merely rely on the data; they always bring their own experience. A pedagogic analogy, which is often used as an entry point into this perspective on data and meaning making, is a gestalt picture, i.e., a visual image that depends on the viewer toggling between either of two ways of seeing the image. While the sensory input (the data) remains constant, the difference is how our cognitive apparatus becomes constitutive of meaning, reflexively engaging with and building upon our experiences with previous images. Thus, this historic qualitative methods insight counters recent claims within data-driven approaches that "all" is given by data; that there is "no theory," only correlation. Clearly, the focus on data in emerging technologies such as machine learning must not lose sight of the contextual nature of data and resist treating it as "given" or neutral. This insight has fueled growing recognition of the role that qualitative scholars can play in sensemaking processes during the development of data-driven approaches (Tanweer et al., 2021).

Unpacking the (Unintended) Consequences of Action

The methodological commitment of other IS approaches to identify variables and factors "up front" has led to a strong focus on intended, purposeful, and strategic aspects of digitalization (Bharadwaj et al., 2013) in many areas of IS research. Working in parallel, but from a very different tradition, IS qualitative researchers have increased our understanding of a more diverse range of distributed and unintended consequences. These insights have been supported by a series of theoretical turns that embrace emergence. As this theme of theorizing has progressed, qualitative studies have been able to illustrate how the actions associated with the development, introduction, and uptake of digital technologies in organizations have complex and often unanticipated outcomes resulting from the "overflow" of action (Callon, 1998), i.e., the way action always does more than was intended. Several implications follow from this insight.

One implication is the inherent capacity of action—thus by implication also strategies, plans, and projects—to surprise us. Qualitative researchers tend to keep a keen eye on the consequences of actions such as technology use. For instance, in her classic study, Orlikowski (1996) discovered that the unintended consequences of introducing digital technology in organizations were as important as the intended ones. She found that a groupware technology, intended to digitize the tracking

of technical support calls, resulted in multiple emergent changes over time that slowly but significantly transformed an organization's work practices and coordination structures.

Another implication is the diverse nature characterizing processes of emergence. Because the actions of interest are often distributed and collective, the sites, situations, and processes implicated in organizational action cannot be determined a priori but rather become open-ended (Braa et al., 2004). By way of illustration, consider how the seemingly rudimentary category of an organization, or "firm," is often treated as a fixed, delineated entity in many conventional studies of IT. In contrast, Weick (1979, p. 358) pointed out the emergent nature of this concept:

> *The word, organization, is a noun and it is also a myth. If one looks for an organization one will not find it. What will be found is that there are events, linked together, that transpire within concrete walls and these sequences, their pathways, their timing, are the forms we erroneously make into substances when we talk about an organization.*

The timing and placing of consequential outcomes are unpredictable (Bowker & Star, 2000), an insight that has transformed how we approach the management of information systems. For example, qualitative scholars have challenged traditional mechanistic and functional forms of IS evaluation which they argued were problematic (Symons, 1991; Jones & Hughes, 2001), inspiring scholars and practitioners to take a situated and processual approach focused on *when* and *how* to evaluate. Indeed, critical qualitative studies have continued to challenge the notion of a "successful" digitalization effort, calling upon us to ask not only *for whom* we regard projects as a success but *when* they are a success (Star & Ruhleder, 1996, Cecez-Kecmanovic et al., 2014). Over time, it has been argued that the underappreciation of the diverse, distributed nature of action and intervention, including those that make up digitalization efforts, has resulted in underestimating the cumulative, long-term corollary effects of digitalization (Scott & Orlikowski, 2022).

Focusing on how Emerging Phenomena are Constituted

Another important achievement of IS qualitative researchers has been revealing what makes up, or constitutes, the IS phenomena we study. For example, two decades ago, in a watershed article, Orlikowski (2000) used structuration theory and practice theory to offer a new way of thinking about how technology is constituted in use and hence problematize what technology "is" at any given moment (e.g., an enacted structure in use).

This focus on understanding how IS phenomena are constituted continues to be a mainstay of qualitative IS research. An important question today, for instance, is what constitutes data, and how data constitutes phenomena. The intense interest in data-driven, computational, AI-based methods (Berente et al., 2019) has brought data to the foreground. Data is hyped as the "new oil" fueling organizations, often accompanied by a naive epistemological assumption that access to "big data" is equivalent to definitive forms of "knowing." However, when "all" is turned into data, which is surely the implication of ongoing datafication, theorizing what data entail takes on a renewed urgency (Alaimo & Kallinikos, 2022).

As we see a proliferation of models, matrices, ML methods, quantified measures, and indicators being woven into programs of digitalization all around us, taking a *critical* approach to understanding the constitutive role of data is key. Indeed, we would argue that rather than being a lofty philosophical indulgence, understanding a constitutive perspective is increasingly urgent if we are to come to terms with the consequences of emerging digital phenomena in our everyday private and professional lives. Fortunately, qualitative IS research has produced a wealth of theoretical perspectives over time with which to overcome the inadvertently naive assumption that data practices are neutral and without consequence. Researchers exploring this constitutive view have shown that digital technologies such as ML and the models underlying data practices should be understood as both shaping and conveying meaning. In a seminal article exemplifying this view, MacKenzie and Millo (2003) explicitly set out to demonstrate how the Black-Scholes model became constitutive of trading practices that went on to dominate and define the financial options market. As a result, MacKenzie and Millo (2003, p. 107) note: "Option pricing theory ... succeeded empirically not because it discovered pre-existing price patterns but because markets changed in ways that made its assumptions more accurate and because the theory was used in arbitrage."

Qualitative researchers exploring this theoretical lens in their studies of digital innovation have shown how "algorithmic practices" (Orlikowski & Scott, 2014) and "synthetic situations" (Knorr Cetina, 2009) actively produce phenomena through ongoing processes; these phenomena are not given a priori, static and waiting to be captured. What this implies methodologically and theoretically is that we cannot assume any given, stable meaning of digital phenomena simply by their reference to objects, data or, indeed, technologies. We need to instead focus on what digital phenomena such as ML models, robots, and the Internet of Things *do*: how they perform and the outcomes this produces.

Phenomenon-Focused Problematization for IS Qualitative Research

Phenomenon-focused problematization builds upon these historic insights and complements them. Emerging phenomena have always captured the attention of qualitative IS researchers, from early workplace technologies such as Lotus Notes (Orlikowski, 1995) to more recent applications of ML algorithms and robotic technologies (Sergeeva et al., 2020). We want existing approaches within the qualitative IS research tradition to grow and strengthen[5] while offering a further approach to its repertoire.

Being phenomenon-focused means engaging in a critical yet experimental dialogue with the prevalent assumptions and practices constituting a digital phenomenon. Problematization is a process of questioning the taken-for-granted. This means challenging the way a phenomenon is being framed, the vocabulary used to describe it, and the practices through which it is being enacted. Whereas other approaches may take more a parsimonious view on engaging with other constituencies, such as consultants, other academics, students, and policy makers, here they become part of an open and reflexive analysis process with the aim of developing more original and creative ways to think about an emerging digital phenomenon.

Qualitative research often involves an iterative process of bottom-up, inductive theorizing from the data while navigating top-down, deductive impulses from theory. Rather than pursuing an inductive approach that seeks to confirm findings with a high number of instances within a large body of empirical material, phenomenon-focused problematization encourages us to pursue controversies, instances that run counter to commonly accepted wisdom, or unexplained anomalies. Phenomenon-focused problematization involves *abduction* (Timmermans & Savory, 2021), a long-established form of reasoning that starts with observations and systematically works toward plausible explanation. It builds upon the epistemological position that "the contribution of social science does not lie in validated knowledge, but rather in the suggestion of relationships and connections that had not previously been suspected, relationships that change actions and perspectives" (Weick, 1989, p. 524). Phenomenon-focused problematization encourages the pursuit of trustworthy findings and plausible explanations inspired by anomalies rather than always seeking statistical significance from a mass of empirical material.

In turn, the challenge for qualitative research that we focus on in this editorial is a tendency towards commodification, approaching data analysis with *"*a neurotic overemphasis on coding*"* (Suddaby, 2006, p. 638), where each step in the coding and interpretation process "is a "box" that must be ritualistically "checked off" prior to publication*"* (Suddaby, 2006, p. 639). Review processes driven by this mindset are unproductive and certainly uninspiring. We urge researchers to resist a tendency toward "factor-analytic approaches" (Cornelissen, 2017) and instead embrace the phenomenon-focused problematization that generates a spark of creative insight.

It is one thing to ask researchers to engage in phenomenon-focused problematization, but another thing to suggest *how* they might do so. Prior research has offered excellent accounts of how researchers might do so in general (i.e., not necessarily specific to IS research). For instance, Alvesson and Sandberg (2011) identified a range of assumptions that researchers could target in their problematization efforts, and they followed this up with suggestions for how to engage in "metaphorical reflexivity" to develop new ideas and perspectives (Alvesson & Sandberg, 2021). We contribute to such efforts here by articulating four *sensibilities* that we believe are particularly helpful for phenomenon-focused problematizing in IS research. We derived these sensibilities by reflexively considering the achievements of past qualitative research in IS (as outlined above) along with the opportunities that contemporary IS phenomena present.

Accordingly, we articulate below a set of sensibilities for phenomenon-based problematization in qualitative IS research.

Four Sensibilities

First, engage in a dialogue with the empirical setting. Rather than take a phenomenon as given, researchers should ask: What is surprising or interesting here? What is unaccounted for in the extant literature and current practice? How might this inspire further phases of exploration and a different approach to engagement in this empirical setting? This entails entering into a dialogue with the data, not merely looking for consistency and fit with constructs and concepts. It involves problematizing different theories, concepts, or metaphors while empirically engaging with the phenomenon and may often involve new research activities, including different types of data collection and analysis.

[5] Given our interest in *emerging* digital phenomena, a reader might ask if this editorial is also relevant for researchers studying more established phenomena. Our view is that the technology of the day is related in many ways to the technology of the past and future in a genealogical sense. In this view, there is no clear line between what is new vs. old. We simply emphasize emerging digital phenomena because so many organizations are grappling with them and, as scholars, we need to develop fresh approaches to analyzing them.

For example, in studying how ImageNet has become the standard library for training ML algorithms in image processing, it would be too easy to take ImageNet as unproblematic. Fortunately, qualitative researchers have problematized it by revealing the need to take into account that there are Amazon Turk crowdsourcing workers that label the data and that this labeling process is based on the work of the WordNet Consortium of researchers (Crawford & Paglen, 2019), but also that there are many other communities such as radiologists and oncologists that have used ImageNet to train algorithms in medical settings. All these communities and their distinct (epistemic) objects and perspectives invite different data collection activities, each infused with renewed concepts and metaphors. Thus, by engaging in a dialogue with the empirical setting, qualitative researchers have begun a process of accounting for research puzzles and opposing perspectives.

Second, challenge assumptions by looking for plausible explanations that overturn commonly accepted wisdom. Assumptions can be domain-specific root metaphors (e.g., coordination is achieved through task interdependencies), ideological (e.g., politically motivated assumptions about perfect markets), or methodological (e.g., epistemological beliefs about which forms of data are valid) (Alvesson & Sandberg, 2011). Assumptions are tentative and, to paraphrase Weick, to be held lightly. For example, IS used to be designed and deployed based on local, organizational requirements. Now this practice is contested, as the training and validation of ML systems occur elsewhere, across networks of epistemic communities, as ImageNet shows (Crawford & Paglen, 2019). Yet such distant, distributed practices develop standards that inform the development of ML systems in specific organizational settings (e.g., applying ImageNet and WordNet classification in medical imaging). Researchers can use empirical data about these emerging phenomena to deconstruct problematic assumptions and reflect on the lack of correspondence with current theory.

Third, ask how did we get here? Historians of technology have consistently argued that there is no such thing as autonomous technological progress evolving free from nuanced, culturally conditioned, historical contexts (Hecht & Allen, 2001). For example, the recent development of Web 3.0 technologies builds and extends on earlier efforts to establish distributed protocols and standards that date back to the early internet (Abbate, 2000) and the World Wide Web (Berners-Lee et al., 1994). Far too much of the hyperbole surrounding emerging technologies would have us believe that these innovations spontaneously burst out of a vacuum. Closely studying the historicity of technological practices provides a more complex picture. In this view, Web 3.0 is better characterized as a resurfacing, a process that has some overlapping commonalities but also marks a significant departure from the original principles of distributed infrastructures. Turning our attention to histories (and their processes, deviations, versions, and circumstances) helps us to counter the "new technological determinism" that flavors so many contemporary commentaries of digital transformation. Historical analysis is an established but ever-more timely social science method that we can use to offer IS-informed insights designed to better understand current phenomena.

Fourth, make the invisible visible. Hegemonic perspectives, especially when taken for granted or internalized as standard methodologies, entrain our analytical gaze in ways that render invisible, mute, or marginalize critical issues such as slavery and corruption. Intersectionality requires us to think and see differently, disrupting methodological arguments to remake the boundaries of social science and produce innovative research designs capable of critical theorizing. We must work with more nuanced understandings of oppression and relationality to surface multiple forms of difference. It is not only about what is left out or lies outside of existing categorizations, unaddressed by current research, but *how* complex power relations intersect, numbing us to the possibility of seeing and acting differently. Taking yet again the example of ImageNet, critical scholars have uncovered institutionalized biases at work in the seemingly neutral task of labeling training sets for ML algorithms, reinforcing racial, gender, and sexual stereotypes (Crawford & Paglen, 2019).

Enacting The Sensibilities of Phenomenon-Focused Problematization

One way to understand the four outlined sensibilities of phenomenon-focused problematization is to think of them in relation to lines of questioning and here we will consider three modes of inquiry: *what* phenomenon is being examined, as well as *when* and *where* it is constituted. When studying emerging phenomena such as ML algorithms, blockchain technologies, and the Internet of Things (IoT), it is often helpful to augment interview and observational data by engaging further with technologies and questioning how they are constructed; thus, we need to ask *what* constitutes the phenomena we study? These phenomena evolve over extended time frames, so we therefore need to ask *when* something is a phenomenon? Finally, these phenomena are decentered across space; thus, we need to ask *where* are emerging phenomena constituted? Accordingly, in Table 2, we map what, when, and where questions to the four sensibilities of phenomenon-focused problematization.

We are not suggesting that researchers should attempt to incorporate all these sensibilities and questions in a comprehensive or mechanistic way. Rather, we offer Table 2 to inspire more diverse approaches to qualitative IS research and to serve as a summary of our proposed approach to phenomenon-focused problematization. We encourage scholars to select, adapt, and improvise, elaborating on the sensibilities that best suit the focus of their research.

Table 2. Phenomenon-Focused Problematization in IS Research			
Sensibilities	***What***	***When***	***Where***
Engage in a dialogue with the empirical setting	Open up to new types of data, e.g., algorithmic and forum data (Mohlmann et al., 2021)	Examine historical empirical material using creative framings and perspectives, e.g., biographies (Glaser et al., 2021)	Follow the digital phenomenon across multiple and/or distributed sites of action, e.g., comparing less visible relations (Robey & Sahay, 1996)
Challenge assumptions	Inquire into data involved in the constitution of reality, e.g., synthetic realities (Monteiro & Parmiggiani, 2019)	Explore how tracing practices over time makes sense of (or overturns) dominant assumptions, e.g., defamiliarizing taken-for-granted domain wisdom (Shaikh & Vaast, 2016)	Seek to unpack how the collective nature of the change process, e.g., redefining the boundaries of influential venues and actors (Pollock & Williams, 2008)
Ask how did we get here?	Examine processes of data construction, e.g., their "ground truth" (Lebovitz et al., 2021)	Motivate studies with controversies and/or anomalies in the present, e.g., problematize current-day conditions of possibility (Scott & Orlikowski, 2022)	Explore how present-day boundary-crossing practices are materializing on the ground, e.g., locating accountability (Karunakaran et al., 2022)
Make the invisible visible	Uncover data that provides insight into the politics of the phenomenon under study, e.g., identify marginalized groups (Zuboff, 2019)	Produce accounts of the phenomenon that have been routinely neglected and/or historically under-studied, e.g., corruption (Addo & Avgerou, 2020)	Examine how and where consequential outcomes arise beyond assumed focal sites of action, e.g., distance of marginalized from design (Crawford & Paglen, 2019)

What Constitutes the Emerging IS Phenomena We Study?

Earlier, we described important historical achievements in qualitative IS research, ending with a discussion of how IS researchers have long examined the constitution of emerging phenomena. We start here with this question because we believe this issue is only growing in importance as we face the digitalization of reality all around us.

Many IS researchers who have studied constitutive processes have used ethnographic methods. For instance, workplace ethnographies (Orlikowski, 1996; Schultze, 2000; van den Broek et al., 2021) exemplify qualitative research that seeks to understand how people make sense of emerging phenomena in their everyday lives. In such ethnographies, researchers immerse themselves in a social setting and engage with the field's participants. There is an expectation that the researcher will remain present in the field for an extended time (e.g., one year), relying on firsthand, in-situ participant observation for data collection. Broadly speaking, workplace ethnographies are marked by thick description, detailed records documenting the lived experience and life worlds of those in the field, including the researcher.

Ethnographic methodologies assume that data is never straightforwardly given. There is acknowledgment that considerable backstage work is needed to arrive at the actual data collection. Schultze (2000, p. 10) gives a telling example through the lens of gender:

> *Gender and the nature of the work the groups were doing were key determinants of my membership role. Being a woman meant that I established an easier rapport and closer relationships with the women in the field than I did with the men … For instance, as a single, 30 year old woman, I could uninhibitedly ask other women to go out to lunch; however, asking the men, most of whom were also older than me, was not as comfortable and seemed to require more of a justification.*

Establishing rapport with organizational members and becoming familiar with a field of study are key data practices in qualitative research. This is true in any research field, not just in IS research. However, getting to the data that constitutes emerging phenomena will often require going further to *engage in a dialogue with the empirical setting,* immersing oneself into a deeper understanding of the digital technology and questioning the data that constitute it. As experienced by Monteiro and Parmiggiani (2019) in their study of IoT-based marine environmental monitoring in the Arctic, physical objects (e.g., the marine environment) are synthetically represented in data-driven, algorithmic visualizations. The Arctic floor becomes a blur

of data collected from IoT sensors and the algorithmic visualizations of what human experts (engineers, marine acoustics experts, environmental advisors) expect to see or selectively choose to see. Thus, in addition to interviews and field observations, Monteiro and Parmiggiani (2019) collect data on IoT sensor calibration and algorithm manipulation to unpack the constitution of the phenomenon under study. In doing so, they generate significant insights about data interpretations across different communities of practice.

Qualitative research in more distributed, everyday settings has produced accounts of how algorithmic manipulation is constituting emerging phenomena and overcoming corporate control. For example, when Möhlmann et al. (2021) encountered the unanticipated practice of Uber drivers exchanging information on how algorithms had been programmed to alert them about possible rides, they revised their research design. By complementing their interview and observation protocols with data on driver interactions on the UberPeople.net forum, they revealed how drivers found ways to switch platforms to their advantage. This data collection enabled Möhlmann et al. (2021) to *challenge assumptions* about algorithmic management. They showed Uber drivers' collective resistance and "organization-like behavior" in manipulating the algorithms to fit their preferred work practices. By extension, unlike previous literature that related algorithmic management to platform marketplaces, Möhlmann et al. (2021) showed how making sense of the bottom-up, collective, and dynamic response of Uber drivers necessitates reframing some platforms as organizations.

As the above examples illustrate, examining what constitutes emerging phenomena requires qualitative researchers to *engage in a dialogue with the empirical setting* by being open to new types of data that can help shed light on the phenomena under study. It also asks qualitative researchers to *challenge assumptions* about the phenomena under study. We are increasingly immersed in synthetic realities that are simulated by algorithms and other digital technologies; therefore, our data practices must adapt and become attuned to them.

Qualitative research also needs to be sensitive to *how we got to where we are*. For instance, whether the Arctic floor is ripe for oil and gas exploration—given sensor readings, including additional historical data from surface sampling stations (Monteiro & Parmiggiani, 2019)—or whether Uber constructs an optimal marketplace, given supply and demand projections (Möhlmann et al., 2021), is only part of what constitutes those phenomena. Data on the longitudinal appropriations of technology over time are equally important in understanding those phenomena.

Finally, qualitative research needs to *make the invisible visible* by collecting data that bring the politics of emerging phenomena to the foreground. As other qualitative researchers have noted (Zuboff, 2019, Crawford & Paglen, 2019), we are often presented with digital technology solutions ready-to-hand—an Amazon Echo, an iPhone, a video game on Unity—that are meant to capture the complexity around us and provide "solutions" to everyday chores. Indeed, companies like Meta and Unity are constructing digital twins of our worlds with synthetic data to capture ever-evolving, complex interactions between people, objects, and their environments. A straightforward and uncritical reaction to such developments is that using synthetic data can help address (and avoid) privacy concerns while providing the ground for fairer Web 3.0 practices. Synthetic data is, of course, not apolitical and it is no surprise that it is companies like Unity and Meta that can leverage such data to build digital twins of everything because of their market and technology concentration. Beyond market power and privacy concerns, whether built on the behavioral data of user interactions or synthetic data on simulated environments, we need to question the choices made by these dominant actors and how those choices transform the lived experience.

When are Emerging IS Phenomena Constituted?

We have a long and rich tradition of longitudinal studies in qualitative IS research, and we need more. However, at the same time, we call for the creative *expansion* of this category to address the challenges our societies now face. Digital technologies are continuously updated, extended, and modified across the numerous versions that make up their lifecycle (Glaser et al., 2021). This makes the paucity of longer time frames in recent IS qualitative studies highly problematic (though some exceptions include Essén & Värlander, 2019; Trauth & Connolly, 2021). Digital technologies like smartphone applications require constant upgrades and change, often to improve functionality and service but also because of changes made in interacting software (e.g., operating systems). Longitudinal studies can help explain how and why changes are made to software in the same context, but also how software evolves as it flows from one context to another (Williams & Pollock, 2012).

However, we find that in IS, more often than not, the time frame of study is limited to some months or at most a year or so. Historical studies, on the other hand, can stretch many years and even decades. The aim of such work is to create a "narrative construction … where historical reality is discursively produced" (Gill et al., 2018, p. 192). Historians revisit archival documents and examine them in order to build a distinctive narrative. The historical narratives that are produced need to be

understood not as "an objectivised empiricist enterprise, but rather as a literary project which must self-reflexively take account of the imposition by historians of a particular narrative form on the past" (Munslow, 2006, p. 3).

IS research has taken a somewhat liberal understanding of historical studies (see Porra et al., 2014). For example, we often place longitudinal case studies, ethnographies, field studies, and in-depth case studies as historical studies alongside genealogies and biographies in this category. Each of these research design choices has distinctive characteristics, differing in terms of the period covered, the type of empirical material used to analyze the world, and in their timing of the use of theory. More traditional historical studies may extend over long periods and base their analysis exclusively on archival data (Porra et al., 2014). For historians, theory does not drive the inquiry, it is empirical evidence that is questioned by the researcher. Historical studies make it possible to *engage in a dialogue with the empirical setting* where data becomes focal (see e.g., Goyal et al., 2018) and the prevailing theory is secondary. Theories (multiple) are introduced only at a later stage to examine empirical material for novel relationships (Munslow, 2006). It is the practice of analyzing empirical material through an ongoing process of questioning where historical studies (Munslow, 2006) overlap with the sensitivities of phenomenon-focused problematization.

We illustrate this with recent studies on AI that emphasize and prioritize engagement with empirical material. Beginning with the seemingly straightforward question of how AI categorizes photos and recognizes images, Crawford and Paglen (2019) urge us to follow the various categories that dictate and form a basis for algorithmic design. Why are certain images put into one category over another? Questioning the origin of their labeling helps to make sense of the data sets that are used to train ML algorithms. As such algorithms act over time, they dictate what is seen as relevant by us through pattern matching. This leads to claims that, if certain patterns become dominant, they must necessarily indicate something important. However, the process of ongoing questioning characterizing problematization compels us to be critical of patterns determined by algorithms to be relevant. Researchers map the empirical material at hand to make sense of the processes and politics involved in the creation of algorithms and their context of use.

History, with its roots in the humanities, has a profoundly different tradition of "doing" methods. In contrast to conventions in many organizational studies—a significant influence for IS research—the account of research methods in history is implicit rather than explicit. Instead of listing data collection and data analysis, the study is immersed in the context. A helpful way of thinking about historical method is to remember that it is governed by a "show not tell" ethos. Method is inferred from how researchers present their narrative. Methods appropriated by historical studies vary significantly, but there is an emphasis on archival data (Rowlinson et al., 2014) with which "to interpret existing organizational structures not as determined by laws, but as the result of decisions in past choice opportunities" (Kieser, 1994, p. 611). This is not to assume that history is path dependent, but rather that it is "generating a series of specific moments of choice, each of which creates multiple paths of different historical trajectories or outcomes" (Suddaby et al., 2014, p. 108).

Given that historic accounts are rare in IS research, there is an opportunity to break new ground by developing historically attuned qualitative methodologies for emerging phenomena. The time scale and potential richness of empirical materials used in historical studies offer us a different basis from which to *challenge assumptions* in our current theories and build new and more explanatory theories to explain the changing nature of emerging phenomena. For example, mapping different digital applications that are used by open source developers to create collective software, Shaikh and Vaast (2016) overturned the assumption that these applications were "just tools." While each application performed an individual tool-like function, when harnessed together the applications created "digital folds." Thus, in what was widely assumed to be a collaborative space, private working enclaves existed, allowing specific developers to work away from other developers.

Historical studies draw on documents and archival material to understand how we arrived at our current understanding of emerging phenomena in use, giving us the opportunity to question *how did we get here*? Historical studies have been used to follow the current digital technology backwards to make sense of change (Porra et al., 2014) as well as breaks or radical variation in the artifact (see Porra et al., 2005). Studying the outsourcing of IT functions at Texaco over a 40-year period allowed Porra et al. (2005) to make sense of how and why the decision to outsource was in fact a poor one. More recently, genealogies have been used (Hultin et al., 2021; Scott & Orlikowski, 2022) to trace the "historical conditions of existence upon which present-day practices depend" (Garland, 2014, p. 373). For example, in their genealogical study of the book publishing industry over five decades, Scott and Orlikowski (2022) map the continuities and discontinuities of the ISBN standard to make sense of the crisis experienced by the standard in the present day, a historical process producing a "digital undertow."

Our understanding of how different kinds of algorithms, software development communities, and practices shape and are being shaped by technological trajectories have been advanced by innovative historical analyses (see Pollock & Williams, 2008). Such accounts nudge us to ask questions about underlying power struggles, marginalization, and inequalities (Lapointe

& Rivard, 2005). The rise in misinformation, fake news, polarization of views, and echo chambers (Kitchens et al., 2020) makes mapping the design, intentions, and biases of emerging phenomena increasingly important. With this in mind, we need to embrace the ability of historical analyses to help *make the invisible visible*. For example, when technology was used to counter corruption in customs clearance in Ghana, Addo and Avgerou (2020) found that there was little change in the level of petty corruption. Their study, covering a 35-year period, made visible the innovative corrupt workarounds practiced by street-level customs officers. These practices are embedded within a social, political, and cultural system that supported certain corruption while mitigating other corrupt actions.

Research tends to be organized into time-constrained projects, such as the duration of a Ph.D. or of a funding source. For such practical reasons, studies of IS phenomena often cover limited periods (Pollock & Williams, 2008). Despite these challenges, we argue that expanding the repertoire of historical analyses in IS qualitative research would generate valuable and transferable research insights informing some of the most urgent research questions of our time.

Where are Emerging IS Phenomena Constituted?

One of the ways in which phenomenon-focused problematization enriches our understanding is by estranging the familiar, allowing researchers to revisit their data in ways that lead to creative theorizing and productive research outcomes. This is a challenge for most of us because our efforts are always situated and thereby constrained by our current frames of reference. Working out *where* it would be most productive and insightful to engage with empirical settings is influenced by assumptions about what researchers believe to be the most urgent and timely research questions. When researchers describe what motivated them to take their research in an original direction in the face of institutional and normative methodological pressures, we find that it was often propelled by a powerful curiosity at "an opportune but unexpected moment" (Merton & Barbar, 2004). In qualitative research, this combines with iteration of the research question and incremental revision of the research design. Rather than isolating the research question up front, we take inspiration from both the literature and encounters with empirical phenomena, and we refine research questions as our analysis deepens.

In a classic qualitative IS study, Robey and Sahay (1996) undertook a detailed empirical examination of how the technology was interpreted by "social actors" engaged in its development and use. In their research design, they took the site of their study to be two organizations in which a GIS project was taking place. The primary data they chose to work with took the form of on-site interviews with known "social groups" involved in the GIS projects. Their data handling involved coding this data and forming themes that would become the basis for their grounded theorizing. The research design powering this study is remarkable for its epistemological coherence, for pushing against the prevailing norm that qualitative IS work would be a single-site case study, and for producing a counterintuitive research surprise (bigger changes could be achieved with smaller steps) that inspired a wave of further research. This study, informed by the social construction of technology, shared a commitment to *engage in a dialogue with the empirical setting* by understanding how human action shapes technology and how IS use is embedded in a local social context.

While it was common in the time of Robey and Sahay (1996) to locate qualitative studies inside organizations, many qualitative researchers now study IS phenomena beyond such boundaries and they have revised their research designs accordingly. For instance, in a move that *challenged many long-held assumptions*, Pollock and Williams (2008) addressed the genesis and career of so-called package solutions by tracing and comparing their "biographies." Using ethnographic and longitudinal research across multiple sites, they shifted attention from single-site implementation studies, to one that followed software as it evolved, matured, and crossed organizational boundaries. In so doing, they coined a new vocabulary for the dynamics that surround standardized software and informed the theme of local/global in IS research. Their work helped to reveal how actors' encounters with technology are not merely instances of human-computer interaction but the product of a much larger, concerted, distributed achievement.

One of the ways that Pollock and Williams (2008) redrew the boundaries of their inquiry was to bring new and different actors such as industry analysts into view, changing what we had previously taken to be the "context" of our studies. This marked a distinctive shift in the foundational assumptions of research design which used to straightforwardly focus on self-contained entities, organizations, people, and technologies that influence each other. As the earlier Uber example illustrates, we may well encounter emerging phenomena in practice, in the flow of life, rather than going inside an organization to directly observe it. Indeed, we would often miss some of the most important characteristics and outcomes of currently emerging phenomena if we tried to force them into separate entities or look for discrete implementation events and only studied them using outdated empirical categories such as "users."

We need only look around us to realize that the outcomes of emerging phenomena are materializing far quicker than our analytical narratives about them. We need to reflect on *how we got here*. An important part of this is questioning how present-day outcomes came to be constituted and where they have materialized on the ground. For example, Karunakaran et al. (2022) note that with the rise of social media commentaries, organizations are being held to account in new and challenging ways. For an extended period, programs of conventional accountability exerted isomorphic pressures and produced reactivity within and across organizations. Explicit and well-specified evaluative criteria have become institutionalized, manifesting as scorecards, metrics, rankings, and campaigns. The Karunakaran et al. (2022) study asks: How did we get here, where crowds of dispersed and pseudonymous reviewers using unclear, unspecified, and in-flux evaluative criteria manifesting as flows of posts and images are producing new forms of accountability?

This kind of distributed phenomenon may seem challenging to study using qualitative methods but Karunakaran et al. (2022) manage this question by providing insights not at scale, as quantitative scholars might seek to do, but *with scale* (Barrett & Orlikowski, 2021). They provide an account of recalibrating risk, redeploying resources, and redefining service in the core practices of front-line and back-line work in ways that are producing uncertain organizational outcomes across sectors. They theorize that with social media commentary, organizational responses shift from convergent reactivity (conformity to evaluative criteria) to diffractive reactivity (fragmented responses to equivocal demands) and conclude that we are witnessing the reconfiguring of organizational accountability from stakeholder-based to crowd-based accountability. In so doing they give voice to front-line and back-line workers experiencing these new forms of accountability.

An important way in which qualitative IS work can contribute is *in making the invisible visible*. Redefining who and what we treat as the "relevant actors," being attuned to boundaries within and across groups so that our research attends to where systems of inequalities produced by multiple forms of injustice "intersect" to create unique dynamics and effects. Part of our goal needs to be ensuring that these insights inform the development of research designs capable of giving voice to those affected by technological change, particularly where they would not normally have one.

This may mean that *where* we regard our research site to be may shift over time in novel ways, as consequences surface in different times and places. This means that review teams need to be open to—and show patience with—doing qualitative research. This may mean showing a willingness to engage with fresh theorizing or taking the time to understand how they are developing a novel focal point or method of analysis. We need to reach out to reviewers willing to work with different framings and theorizing in an open-minded way rather than seeking deeper conformity with established frameworks and templates.

Conclusion

In this editorial, we call out the inadvertent narrowing of qualitative methods that IS authors, reviewers, editors, and doctoral students currently face. Similar calls have recently been made in organization and management science (see e.g., Pratt et al., 2022, Köhler et al., 2022, Gioia et al.2022), but such needed voices are less evident in IS. For IS, phenomenon-focused problematization lies at the heart of such a move. We draw attention to how it builds upon the strengths of existing IS research and make the case for adding it to our repertoire of approaches. The four sensibilities identified are offered as helpful cues or resources. Our agenda is to encourage more ways of "doing" qualitative methods, inspired by a concern that, too often, we have imposed upon qualitative researchers restrictive demands to follow templates. While existing templates and guidelines for qualitative researchers can help, they can also inadvertently narrow and control the kind of research being performed and published. While we encourage the *mindful* use of such guidelines, our main aim here has been to inspire an expanded palette of doing qualitative methods, which we hope will attract different authors and different formats of qualitative work in the future. Our intention is not to suggest any particular way or mode of theorizing; we are seeking a healthy, generative variety. Indeed, we, the team behind this editorial, represent a diverse collection of scholars engaged in distinct and different ways of "doing" qualitative research.

Our aims are simple: to encourage greater use of qualitative methods in IS research and to get more qualitative submissions and publications in *MISQ*. We also address questions that editors and reviewers may have about where to look for originality in qualitative submissions and how to guide the process of eliciting important implications from qualitative studies as they go through the review process. The unique strength of qualitative methods for IS research lies in their generative ability to tease out theoretical yet grounded concepts produced using trustworthy processes, making them transferable (and thus generalizable) to other settings. Given the complex IS phenomena we are facing, this strength has never been more important.

Over the last half-century, the ongoing intellectual project of qualitative IS research has helped us to account for the ongoing reconfiguration of IS phenomena we see around us. Are we ready for the sociotechnical changes to come? Our hope is that in bringing the sensibilities and questions that we have discussed to the foreground, authors and reviewers will be well-placed

to account for these concerns. Advancing the intellectual project of qualitative IS research requires respect for the values and methods that have gone before and the ability to approach the future with openness.

Authors and reviewers are both wrestling with how to produce systematic, informed contributions developed from new and different research designs, new and different theory, and with new and different consequences. In our positions as editors, we have observed authors and reviewers responding to such pressures by narrowing the criteria used for assessing qualitative work. If we do not actively manage this situation, researchers working on the leading, innovative edge will not submit to our journals. As a Big Tent journal, *MISQ* has a Big Canvas: one that can be rolled out and used to support the development of practices that are more inclusive, innovative, and welcoming.

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Editorial Board Changes for 2022/2023

The following editors complete their terms on the *MISQ* editorial board in December 2022. We thank them for their dedicated service and their significant contributions to authors and the field.

Associate Editors

Ning Nan, University of British Columbia
Min-Seok Pang, Temple University
Israr Qureshi, Australian National University
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The following editors join the board in 2023. We are thrilled to have such exceptional scholars join our team. We know they look forward to serving.

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Awards

Each year, we offer awards for exceptional reviewing and editing and for outstanding research. In 2022, we awarded the following scholars with *MISQ* awards. Congratulations to all.

Reviewer of the Year for 2021
Hilal Atasoy, Rutgers University
Gene Moo Lee, Sauder School of Business
Shachar Reichman, Tel Aviv University

Outstanding Associate Editor for 2021
Adela Chen, Colorado State University
John Dong, Nanyang Technological University
Jing Wang, Hong Kong University of Science and Technology

Paper of the Year for 2021
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*(3), 1501-1526.

***MISQ* Impact Award**[6]

Leonardi, P. M. (2011). When flexible routines meet flexible technologies: Affordance, constraint, and the imbrication of human and material agencies. *MIS Quarterly*, *35*(1), 147-167.

[6] Because this is still a new award, we briefly note the terms of reference. This award honors the paper published a decade earlier with a sliding three-year window (i.e., for 2022, the sliding window is 2011-2013) that the selection committee deems to have had: (1) the most significant and sustained scholarly impact, as shown by citations, by how it led to a change in thinking in the field, and by its prescience in identifying an important issue today, and (2) a real or potential impact beyond academia, especially through how it influences the way our field engages in an important real-world domain. The selection committee includes the current and past two *MISQ* EICs and two representatives nominated by the *MISQ* Policy Committee.