

The Digital Design Department of CAIS

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Motivation

Design and designing can be broadly characterised by activities that lead to new states or configurations of the world. Design and designing are a concern in multiple academic and practical domains and have been a core focus of information systems (IS) research since the formative years of the IS discipline. In more recent times, IS research has been concerned with design and designing in two overlapping but distinct approaches.

The first approach, *design science research*, is one of scientific *problem solving* (Simon, 1996) and embraces engineering and sociotechnical perspectives with technical and operational solutions as a foundation of IS scholarship (Bostrom & Heinen, 1977). The focus is on the synthesis of novel solutions through iteratively mobilizing and integrating scientific knowledge into “shaping artefacts and events to create a more desirable future” (Boland, 2004, p. 106). Procedurally, it emphasizes scientific methods, engineering, and construction of sociotechnical artefacts as a way of knowledge construction, dissemination and transfer (Hevner, March, Park, & Ram, 2004; Peffers, Tuunanen, Rothenberger, & Chatterjee, 2007; Winter, 2008).

A second approach, *design studies*, focuses on designing activities as open and forward-looking pathways toward as-yet-unknown creations (Cross, 2001; Germonprez, Hovorka, & Collopy, 2007; Hirschheim & Newman, 1991). This approach shifts the focus to the social processes and *anticipatory foresight* (Ingold, 2013) in which designers improvise a passage between imagination and recalcitrant materials in alignment with “what technology can do for people, the places it will go and the needs it will address” (Dourish & Bell, 2011, p. 4). Although artefacts may be produced, this approach focuses on social and organizational configurations, practices, and on developing correspondence between actions, values, and material things.

The discourse surrounding these distinct approaches is one illustration that the IS field has a complicated relationship with design. For instance, we have witnessed debates during the inception and evolution of design science research regarding knowledge creation, theorization, and the centrality of the artefact (Gregor & Hevner, 2013; Nunamaker Jr, Chen, & Purdin, 1991; Peffers et al., 2007; Pries-Heje & Baskerville, 2008; Venable, 2006). Past and present editorial commentaries about how design might form contributions welcomed by IS journals (Baskerville, Lyytinen, Sambamurthy, & Straub, 2010; Österle et al., 2010; Peffers, Tuunanen, & Niehaves, 2018; Rai, 2017) demonstrate that this long-lasting discussion has not lost valence, intensity, or relevance to our community.

In response, the *Communications of the Association for Information Systems* has established the Department on Digital Design as a venue for IS researchers focusing on “design and designing” to share their work with the IS community. We envisage this department to be a forum for exchange, a distribution channel for novel ideas about design, for new approaches, new findings, new artefacts, and new discussions.

Scope of the Department

In line with the overall mission of the *Communications of the Association for Information Systems* (<https://aisel.aisnet.org/cais/about.html>) we envisage this department to be a standing outlet for academic discourse on digital design that is *open, inclusive* and with a *broad purview*.

With being *open* we mean that we welcome submissions that discuss design in a variety of forms:

1. **Design as an outcome.** We welcome contributions focusing on design as an outcome, i.e., as a form of human-made, purposefully constructed, 'new-to-the-world' socio-technical or digital artefacts (Hevner et al., 2004; Peffers et al., 2007; Sein, Henfridsson, Purao, Rossi, & Lindgren, 2011). We provide an outlet for researchers doing novel artefact driven research in IS and related fields. We welcome all genres and types of socio-technical artefacts (Lee, Thomas, & Baskerville, 2015). To maximise the contribution and impact potential of their digital design work, we further encourage potential authors to consider how they could - in the spirit of *open science* (Doyle, Luczak-Roesch, & Mittal, 2019) - make parts or the whole of their artefact(s) accessible to the widest possible audience using our journal as an electronic medium beyond what they would (or could) include in a traditional academic paper.

What we do not seek are contributions where the artefact central to the design outcome is either socially (e.g., a procedural model in isolation) or technologically (e.g., an algorithm in isolation) dominant.

2. **Designing human activity.** We welcome contributions focusing on digital designing as an activity that reconfigures human accomplishments in multiple environments. We provide a destination for scholars interested in how digital design as a phenomenon occurs in relation to IS phenomena, such as in computer-assisted design (Groover & Zimmer, 1984), routines (Pentland & Feldman, 2008), performative uncertainty (Scott & Orlikowski, 2014), and tinkering/bricolage (Hovorka & Germonprez, 2010).

What we do not seek are contributions where the design activity as the focal phenomenon does not occur in technology-embodied or digital settings (e.g., arts and craft design). We seek substantive attention to IS knowledge in the formulation of the research objectives and contribution. We also encourage papers that draw on design(ing)-related literature from other disciplines in order to make novel and substantive IS knowledge contributions.

3. **Design as a mode of knowledge construction and transfer.** We welcome contributions that place emphasis on design as a way to construct, disseminate or transfer scientific knowledge. With this emphasis we encourage work on design theory (Baskerville & Pries-Heje, 2010; Germonprez et al., 2007; Gregor & Jones, 2007; Hooker, 2004) and design theorizing (Drechsler & Hevner, 2018), ways to use digital design artefacts for dissemination or transfer of scientific knowledge (Drechsler, 2015; Gregor & Hevner, 2013), the impact of design research (De Leoz & Petter, 2018;

Lukyanenko, Evermann, & Parsons, 2014), and meta research (Ioannidis, Fanelli, Drunne, & Goodman, 2015) on methods and practices in design-centric research in IS.

What we do not seek are contributions that do not extend our body of knowledge on design theories or theorizing design practices. Other types of theorising efforts such as explanation and/or prediction, model development and testing can be submitted to other departments at our journals or processed as regular submissions.

With being *inclusive* we mean that we are open to a variety of paper styles, genres and topics as long as design or designing (as a noun, activity, or mode of knowledge construction) in the IS context remains the salient and dominant focus. We welcome research articles, conceptual papers, and other contributions that in some form present or demonstrate artefacts; we also welcome critiques, reviews, commentary, philosophical and historical accounts.

What we do not seek are types of papers that have been rejected at multiple traditional venues; we seek original papers that may apply also non-traditional styles and genres.

With having a *broad purview* we mean that we do not want labels and scripts associated with traditional IS paradigms of behavioural, design, economic, and organizational perspectives to constrain how socio-technical design phenomena are investigated, and we welcome mixed, multi and cross-paradigmatic approaches that can generate novel insights.

What we do not seek are contributions where the emphasis is on description, explanation, prediction, or participation, but without a salient focus on design. For example, we welcome action design research but not action research *per se*; we welcome prediction-centric design artefacts but not predictive methods *per se*, we welcome studies on design activities in the digital context, but not regular qualitative or quantitative studies of design *per se*.

Submission Instructions

Authors must submit via the CAIS ScholarOne site (<http://mc.manuscriptcentral.com/cais>) and choose the “Digital Design” Department. The submission should be accompanied by a cover letter that includes the background and motivation of the research. One of the department editors will be the default Associate Editor for submissions, but authors have the right to provide alternative suggestions where applicable in their cover letter. Optional reviewer nominations can be made. If necessary, authors are encouraged to contact the department editors prior to submission to determine whether the paper is appropriate for consideration in this department.

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