

## Mini-Track Introduction: Strategy, Information, Technology, Economics, and Society (SITES)

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The 2023 edition of the SITES Mini-Track contains four research contributions in a single session. An overarching theme across all papers is the observation that frictions in the exchange of information do exist, which should be taken into account, and that through endogenous effort they can sometimes be *modulated*. The analyses offered go well beyond the (by now) classical problems with asymmetric information that manifest themselves, for instance, in market failures when there is “adverse selection” (e.g., in a market for ‘lemons’), or in limited rents when there is hidden information, so the uninformed party may resort to designing a menu of options (“screening”) that provides incentives for information revelation. The standard panoply of these informational imperfections also includes the possibility of “signaling” where the informed party takes actions to convince the other party of the purity of her motives. Finally, there is the well-known situation with a hidden action (or “moral hazard”), which brings the need for incentive contracts to share risk across parties, rewarding the probabilistic effects of the usually unobservable efforts.

The informational challenges discussed in this year’s four papers are in many ways more intricate than those classical themes of adverse selection, screening, signaling, and moral hazard. Two of them, namely the first and the last, have to do with the use of information technology and the reuse of creative work, while the other two are concerned with unwanted leakage of information and limited attention by market participants. We thus find, intertwined into informational imperfections, substantial concerns for systemic effects such as (i) the combination of volatility, uncertainty, complexity, and ambiguity (often summarized as “VUCA”) in financial markets, (ii) the second-order side effects of information poaching on platforms and the ensuing privacy concerns, (iii) the rational inattention of investors on a crowdfunding platform, or (iv) the potential social benefits in the reuse of innovation. In each of these discussions, there is an apprehension about something bigger than the immediate transaction at hand. This reflects a pervasive trend of our time: Driven, for example, by the very apparent collective resource constraints, market and nonmarket mechanisms need to be evaluated not only in how well they perform directly (i.e., classically), but also indirectly (i.e., systemically) through the intricate mechanisms of shadow costs across the ambient system.

The first paper addresses the effect of an improved information interchange between firms on the noise in the system: “Within and Beyond Firm Boundaries: Can Strategic Digitalization and Cross-Firm Information Integration Lessen Complex Uncertainty?” In this paper, Xiaotong Li, Robert J. Kauffman, and Kwansoo Kim discuss the question of why strategic digitalization may be crucial for the performance of inter-firm alliances. The reasons, among others, include that an informational alignment drives a harmonization of decision processes across forms, and may thus allow for a better joint response. Over time the need for contracts is likely to diminish due to an increased trust between parties leading to an increase in the value of the relationship going forward. The latter discourages misbehavior by all parties. As illustration, the authors provide several examples in the context of financial markets, which features a marked systemic uncertainty by the very nature of common connections and shared boundary conditions. For example, a better integrated payment system allows for an improved fraud prevention, reducing one form of complex uncertainty. An improved remittance system has the potential to increase the volume of transactions substantially, and thus to transform the underlying overseas-transfers business model. Finally, by adopting digital money a central bank may forestall illegal money transfers and laundering, and at the same time improve the people’s access to the financial transaction system.

In “Privacy Policy and Host’s Concerns on Accommodation Sharing Platforms,” Jiang Hu, Jennifer Jie Zhang, and Huigang Liang examine the impacts of unwanted information leakage on the supply side in collaborative housing markets. Data from web-based surveys suggest that the platform’s privacy policy may be ineffective at alleviating hosts’ concerns about privacy violations by their guests, in the sense that details of the residential property (e.g., its location, stored material goods, or access) could be divulged or misused by platform users for purposes other than the intended stay. On the other hand, the authors’ empirical observations indicate that platforms can effectively address those privacy concerns pertaining to the host-platform relationship directly. Given the hosts’ unaddressed privacy concerns, which may limit the supply of accommodation sharing, the authors point to the role of a policy maker, who through regulation may induce a socially more efficient outcome.

The third paper, by Lin Hu, Kun Li, Zhenhua Wu, and Bin Gu, on “Investor Attention and Crowdfunding Performance,” develops an analytical model to explain how investor distraction relates to the success of a crowd-fundraising campaign. Distraction in this context can be measured empirically by a “news pressure” variable. In a two-period setting, investors that perceive a higher value for a given venture invest early. At the same time, the authors find that the crowdfunding performance overall increases as early-stage distractions go up, since the early-stage investors will be more optimistic on average and observational learning by late backers is limited. At the late stage, however, the crowdfunding performance decreases in late-stage distractions, since the remaining moderately enthusiastic investors tend to forego the acquisition of a (privately) informative signal when the costs of doing so go up. The authors’ model illustrates well how external noise can influence, in both directions, the investors’ propensity to support a venture. In this particular context, a platform operator (or the project venture itself) may find benefits in thinking about how to draw more attention at key moments of the fundraising campaign to increase its likelihood of success. Among this year’s selection, we nominated this paper for the best-paper award, due to its innovative use of the rational-inattention literature in the field of information systems, and the interesting combination of modeling insights with empirical findings, all in the scarce space of a conference paper.

The final paper in this year’s mini-track, entitled “Discontinuous Technological Change and Relaxations of Regulatory Restrictions to Achieve Societal Objectives for the Environment, with Focus on IP Protections,” is coauthored by Eric K. Clemons and Maximilian Schreieck. It provides ample food for thought. In the authors’ model costless innovation produces a windfall for a monopolist through a decrease in the levy a regulator applies to discourage output of an environmentally harmful product. Thus, if the innovation decreases the harmfulness, the socially optimal tax decreases as well. While the authors do not specifically discuss the public benefits of the tax revenues, the underlying question is an interesting one: Should intellectual property rights be extended to technologies that provide a greater benefit to society? Is patent protection in need of being redesigned in areas where the systemic impact of the likely inventions can be great, and where in particular an early reuse of inventions may lead to an apparent increase of social welfare? The authors’ discussion is informed by a broad discussion of extant literature. Somewhat left out is perhaps the question of how intellectual property protection affects innovation incentives *ex ante*. A positive effect on the incentive to create provides the traditional eco-

nomic rationale for the protection of intellectual property. If economic rents loom large enough in the minds of inventors, then these creative individuals may be content with investing their time and effort, despite the initially only sketchy prospects of success and the very real possibility of close to zero payoffs. The question of how a relaxation of intellectual property protection plays out on balance in terms of impact on society is probably an empirical one. The present paper provides an interesting starting point for a discussion and perhaps for a rethinking of what an optimal bundle of incentives should consist of at the system level so as to encourage innovation for the greater public good without necessarily curtailing the immediate reuse and continuous improvement of useful products.

Concluding this introduction, it is noted with great pleasure that this year is the 36<sup>th</sup> anniversary of the SITES Mini-Track, which has seen many hundreds of contributions over the years. At the same time, it is with a touch of melancholy we hasten to add that its days are numbered and 2023 also marks its final edition at HICSS. We wish to express our gratitude to the mini-track founder, Eric Clemons, for his foresight to initiate it in 1987, when no comparable forum existed in the world. Eric has been a terrific colleague and mentor over the years. In terms of SITES, the times have changed, and after 6x6 years, much of the excitement connected with the use of information (be it tactical or strategic) in markets, and for the improvement of society, can no longer be contained in this mini-track. The concerns have diffused into the mainstream, fueling many other mini-tracks at HICSS, as well as many other specialized conference venues. We interpret this as a great success. The ideas pursued over many years in the SITES mini-track proved powerful enough to infuse many other mini-tracks and conferences on the use of information in various domains. In a similar vein, the Workshop on Information Systems and Economics (WISE) goes back to 1989, with a comparable impetus.

We are indebted to many individuals. Above all, we warmly appreciate Vladimir Zwass’ unwavering long-term support of SITES through its quasi-annual JMIS special issues and sections, which provide an archive for the ample flow of research interest we were able to generate over the years. Later in 2023, we will guest edit and publish a valedictory special issue (VSI) in JMIS, to wrap up our cycle of work and collaborative contributions. We also extend our thanks for the great help we received along the way from Ralph Sprague, Sandra Laney, Robert Schwartz, Bruce Weber, Hugh Watson, Dorothy Leidner, Tung Bui, and Thayanan Phuaphantong. We have no doubt that the intellectual excitement will live on through many others at HICSS and elsewhere in the coming years!