

# **Essays on Sociomateriality**

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## **Abstract**

The pervasiveness of ICT has made it inseparable from people and social agency. Although there is a shift in practice, where social and technological entities (and their agencies) are gradually becoming increasingly related to and inseparable from each other, a commensurate shift in information systems (IS) research in viewing such entanglement is far from extensive. Theory of Sociomateriality (ToS) provides us with the ability to focus on the relationality of social (humans) and material (ICT) agencies (entities). In contemporary business and social phenomena, where ICT is increasingly ubiquitous, there is a need to bring forth insights that can yield new perspectives for research as well as for practice. In this dissertation, we explore three different phenomena – where we identify gaps in the extant understanding of the mechanisms underlying their emergence – to produce rich insights relevant to contemporary IS theory and practice. Through these multi-method and trans-disciplinary studies, we highlight that ICT (material) and humans (social) inseparably engage in mutual transformation (positive or negative) or emergence through the enactment of their relationships in practice. The social agency does not merely receive and use the passive ICT; instead, they continuously influence each other and themselves (performativity) in practice. Such emergent processes produce various outcomes, both desirable and undesirable, which have short-term and long-term consequences. The three studies in this dissertation allow us to shed light on some of these emergent phenomena, their short- and long-term consequences, and their underlying

mechanisms by shifting our attention to sociomaterial relationships rather than the analytical objective entities.

In the first essay, titled “*The Balancing Act of Social Enterprise: An IT Emergence Perspective*”, the significance of IT in the context of non-digital social enterprises (SEs) and its influence on the viability of such SEs is examined. This is a far less studied theme in IS research but a highly critical aspect of the business world, especially in the emerging market context. In the era of ubiquitous IT, non-digital SEs increasingly perceive the ever-dynamic technological domain as a global pressure that is difficult to cope with, while governed by the double or triple bottom-line principles. Only a few understand its significance and complementarity to their goal. Qualitative data from a single revelatory case of Jaipur Rugs (JR), an SE situated in an emerging market context (India), is used to fathom the peculiarities of the SEs with a focus on the sociomaterial phenomena of IT emergence. Using the three fundamental pillars of ToS (relationality, performativity, and practice), this interpretive study understands the mechanisms underlying the SE’s attempt to balance its financial and social sustainability goals. Through the innovative use of IT, the SE establishes and maintains a shared value, yielding stability and efficiency to the business (financial viability) while simultaneously ensuring scalability and effectiveness of its social impact. This study strengthens the pivotal role of IT as an emergent phenomenon in non-digital SEs. It fills a gap in organizational literature by examining a rich phenomenon in an equally rich context. Also, it identifies that achieving the balance between dual goals is increasingly dependent on non-human (IT) agents and their entanglement with humans.

The second study, titled “*A Sociomaterial Approach to ICT and Development*”, questions the theoretical foundation of existing Information Communication Technology for Development (ICT4D) research and practice, which primarily focuses on how a suitable ICT intervention can lead to the economic and social development of target user groups. The ICT4D research

domain has been criticized for ignoring the active role of the material agency of ICT. Many researchers prefer the construct ICTD (ICT and Development) instead of ICT4D to highlight the capabilities and agency of ICT and their significance in the process or phenomenon of development. Moreover, with the increasing ubiquity of ICT and blurring boundaries between the material and social entities/agencies, it is a challenge to conceive impactful development programs primarily centred around social agents. A plausible reason for the high failure rate of ICT4D interventions lies in the ontological misbelief that ICT is an external tool that drives human development. The present practice of ubiquitous ICT demands that we acknowledge the entwined development of ICT and humans and adopt an epistemology that facilitates an explanation of their interdependence devoid of biases towards the social aspect of development. Drawing upon the critical realist notion of the theory, we present a Sociomaterial Approach to ICT and Development (SmAID). We build upon the ICT4D value chain – a popular pragmatic approach – and demonstrate the nature of development process as sociomaterial. A revisit to the well-documented M-PESA case helps establish empirical validity of SmAID, where we show that this approach enables researchers and practitioners to focus on dynamic sociomaterial relationships and affordances rather than independent individual entities and impacts. We argue that such an approach yields insights quite different from the traditional linear models of ICT4D and can help design better development programs.

The third essay of this dissertation, titled “*Caste-based Platformed Discrimination: The Material-discursive Practice of Blue Badge*”, argues that in the present practice of social media, where personhoods seem to translate to socioeconomic value, various forms of discrimination (platformed discrimination) take place and reinforce themselves through ICT, which is majorly unexplained and unchecked. Many governments are grappling with the issue of platformed discrimination and often find themselves ill-equipped to negotiate with large multinational organizations (social media platforms). Research across disciplines has already

established that social injustice has been reinforced in many ways by these platforms primarily due to their ability to transcend spatiotemporal boundaries. Despite that, there remain gaps in our understanding of the how and why aspects of the reinforcement process. Through a synthesis of the literature on social media characteristics, an in-depth analysis of the case of caste-based discrimination highlighted by Blue Badge of Twitter in India, and drawing upon the material-discursivity of practice offered by the sociomateriality lens, this study provides a coherent framework for understanding the mechanisms that drive platformed discrimination. We find that the performative relationship between discourse (social) and materiality (ICT) demolished the old caste boundaries and replaced them with new ones. Such new boundaries are created by disparate associations of ICT artefacts (like Twitter's Blue Badge) with India's upper and lower caste groups. Our findings and resultant framework contribute to information systems research on platformed discrimination and the larger sociomateriality domain in understanding the dynamic relationship between humans and ICT. In practice, it serves to influence the organizational policies of social media and platform firms.

Thus, the dissertation contributes to theory and practice in multiple ways. The three essays together highlight the insights that can be gained through adopting a sociomaterial lens in a variety of phenomena, such as in the case of social enterprises, development-centred ICT projects, and the modern phenomenon of discrimination through social media. The first study presented a rich context to examine the opportunities that arise from ubiquitous IT for SEs. In practice, SEs' responses through increasing IT capabilities can enable them to balance social impact and financial sustainability. The contribution in the second essay arises from the novel framework of SmAID and the revised definition of development. We show that development happens due to the dynamic nature of sociomaterial relationships yielding new affordances and producing desired outcomes in terms of enhanced capabilities or empowerment of social and material agencies. The third essay underlines the sociomateriality of any platformed

discrimination phenomenon in the era of ubiquitous ICT, where the agency of dominant groups emerges out of various types of human-ICT associations and (re)enactments that are founded on several performative intra-actions in the material-discursive practices inherent to social media. Also, a key theoretical contribution of the dissertation lies in adapting different aspects of sociomateriality for each phenomenon studied. While in the first essay, we adopt a reconciled version of sociomateriality to demonstrate the phenomenon of ICT emergence in an ignored context of SEs; in the second essay, we draw upon the retroductive logic of the critical realist notion of sociomateriality to emphasize the need to understand entwinement between social and material aspects of development process. Lastly, the third essay uses agential realist notion of sociomateriality to explain how inseparability of the two agencies in the material-discursive practice of social media reinforces discrimination.