

ICT and Societal Challenges

Guest Editors

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Summary

Information and communication technology (ICT) has been recognized as an important catalyst for national progress and social transformation, an insight that motivated early 20th century telecom regulations ensuring universal access for all citizens. More recently, we have witnessed how governments, nongovernmental organizations, and organic social movements can use ICT to create increased participation, transparency, and accountability for previously voiceless people in the developing nations of the Middle East, Africa, and Asia. But, as Rob Kling (1996) reminded us, ICT's consequences are not universally positive: ICT can contribute to unemployment and increased economic disparity, as well as labor and financial market instability and a host of other social problems.

The time has come to assess the evidence about ICT's social consequences and to develop better theories about the precise nature of the role of ICT in complex social problems and the ecosystems that perpetuate the problems. Toward this aim, we invite papers that examine the role of ICT in complex social problems. This role may be

- Enabling—augmenting, catalyzing, or supporting solutions for complex social problems, or
- Constraining—worsening existing social problems, creating new problems, or diverting attention and resources from needed social change.

By complex social problems, we mean social challenges that are shaped by dynamic and interdependent factors; that cannot be “solved” by simple interventions; about which little evidence or agreement about effective solutions exists; and that respond unpredictably to policy interventions, often beyond the political life spans of policy makers (Gardner 2011). Solving these problems typically requires the support of coalitions of political and financial advocates, execution by skilled and pragmatic actors, and an enabling ICT infrastructure (Shen et al. 2007). Examples include unemployment, financial exploitation, pollution and climate change, poverty, homelessness, illiteracy, crime, corruption, and addiction (Wareham and Sonne 2008).

For this special issue, authors should examine the role of ICT in enabling or inhibiting complex social problems and their solutions. This examination should have particular characteristics. First, we are particularly interested in novel affordances and constraints of ICT (Gibson 1977; Leonardi 2011; Majchrzak and Markus 2013; Zammuto et al 2007). Thus, the focus should not primarily be on the features of ICT but rather on the uses of ICT that are *afforded* or inhibited by those features. Second, the social context of use within the social problem, including the range of users and other stakeholders, should be considered (Markus et al. 2002). Third, we particularly encourage research with a focus expanded beyond a simple two-party system of service deliverer and recipient to include aspects of the social and institutional ecosystem that sustains the social problem and how competing ecosystems of ICT may be harmful or helpful. The role of ICT in promoting participation, enabling new discourse and vocabularies, and increasing transparency and discussion are all of interest in this special issue, along with the role of ICT in problem creation or maintenance. While no paper needs to take all of these issues into account, too much abstraction risks oversimplifying the enabling and constraining roles of ICT.

Theories and methodologies outside the traditional mainstream IS literature are welcomed (as are insightful established theories). For example, approaches not commonly seen include systems dynamics modeling, simulation studies, action research, chaos modeling techniques, meta-analysis, event-based retrospectives, interpretive methods, and combinations of qualitative and quantitative analysis at various levels of analysis. Journalistic descriptions of ICT use in complex social problems as well as papers that present simple surveys of social service recipients are unlikely to provide convincing empirical evidence or sufficient insight into the phenomenon's complexity. Quantitative work that delves deeply into societal reactions to ICT is, however, very much encouraged. The gap in the research on societal issues is not a methodological gap as we see it. It is essentially a theoretical gap.

Papers will be evaluated using rigorous criteria associated with high quality academic research, recognizing that we are encouraging scholars to take risks in both the content and methods they use (Burrell and Toyama 2009). Papers in this special issue will form a body of literature concerning the role of ICT in complex social problems, consisting of both theory and data. Ideally, the papers will also describe how the consideration of such complexity informs the broader domain of IS research. Pure theory papers will be considered, provided that they demonstrate the novelty of the theory in real-world applications.

Possible topics of the special issue include, but are not limited to

- Affordances and constraints of ICT that create or worsen complex social problems
- ICT uses for managing or disrupting the tensions, contradictions and paradox in complex social problems
- Uses of ICT to promote citizen participation or democratization
- ICT's role in exploitation and marginalization
- ICT-enabled business models for social entrepreneurship and social problems
- How ICT-enabled platforms help NGOs complete social missions
- National ICT policies and how they shape the societal environment for ICT acceptance and diffusion

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