

Spatial Data Infrastructure as Socio-technical System: Unpacking the Box to look into Politics

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ABSTRACT

In recent years, a growing body of literature has argued for a view of spatial data infrastructure (SDI) as a socio-technical system (Budhathoki and Nedovic-Budic 2007; deMan 2006; Georgiadou et al. 2005). This literature underscores a shift in research focus from 'technical' to the '-' in 'socio-technical', i.e. to understand the interactions between technical and social factors that exist in an SDI development and implementation environment. While this is an encouraging first step, the notion of 'socio-technical' is too encompassing to offer practical guidance for SDIs.

In this paper, we use Kling's (2000) conception of a socio-technical model to examine a land information system, a vital SDI component, in Nepal. Kling's socio-technical model has about a dozen elements. Considering them all, at once, may not provide a deeper understanding of an SDI. Instead, we focus here on 'politics', one crucial element from the model.

Both rational and political realities affect organizational life (Farrel and Petersen 1982). Among the limited studies of SDIs from an organizational perspective, few consider the political aspects. In this paper, we use documents, interview data, and a focus group discussion from the Nepalese land information system to show the central role that politics plays in the development and implementation of an SDI. We argue that recognizing and productively utilizing politics is crucial to understanding and building SDIs.

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