

Axiomatic Design and Organization Design: Opportunities and Challenges in Transferring Axiomatic Design to the Social Sciences

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Abstract : Axiomatic design (AD) has mainly been applied to support the design of physical products and software solutions. However, it was intended as a general design approach that would also be applicable to the design of social systems, including organizations (i.e., organization design). In this article, we consider how AD may be successfully transferred to the field of organizational design. On the one hand, it provides a much-needed pragmatic approach that can help leaders clarify the link between the purpose and structure of their organizations, identify ineffective organizational structures, and increase the chance of achieving strategic goals. On the other hand, there are four conceptual challenges that may create uncertainty and resistance among scholars and practitioners educated in the social sciences: 1) The exclusive focus in AD on negative interdependencies ('coupling'); 2) No obvious way of representing the need for integration across design parameters (DPs); 3) A lack of principles for handling control processes that seem to require 'deliberate coupling' of FRs; and 4) A lack of principles for handling situations where conflicting FRs (i.e., coupling) might require integration rather than separation. We discuss alternative options for handling these challenges so that scholars and practitioners can make use of AD for organization design.

Keywords : axiomatic design, organization design, social systems, concept definitions

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