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Is IT Changing the World? Conceptions of Causality for Information Systems Theorizing

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Abstract

Whatever answer one gives to the question "Is information technology changing the world?," the answer contains reasoning about causality. Causal reasoning is central to IS theorizing. This paper focuses on the concept of causal structure, defined by Markus and Robey (1988) as a theorist's assumptions about causal influences in IS phenomena, and proposes a framework of causal structure, warranted by philosophy and social theory, specialized for the needs of Information Systems scholars. The three dimensions of the framework concern the theorist's views about the reality and meaning of causation (causal ontology), about that which is changed in causation (causal trajectory), and about the role of humans and/or technology in bringing about the change (causal autonomy). On each dimension, mutually exclusive alternative positions are described, backed by authoritative warrants, and illustrated with IS examples. The framework aims to offer useful insights into the nature of IS theory and the conundrum of theoretical contribution.

Keywords: Causality, theory building, social theory, philosophy of knowledge, philosophy of action

Markus, M. L., and Robey, D. 1988. "Information Technology and Organizational Change: Causal Structure in Theory and Research," *Management Science* (34:5), pp. 583-598.