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DISTRIBUTED IT GOVERNANCE: AN ORGANIZATIONAL-ECONOMIC PERSPECTIVE

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Abstract

Distributed information technology (DIT) assumes a broader role both within the firm and in interorganizational relationships between firms. With organizations increasingly seeking relationships with suppliers, customers, and competitors, the impact of the DIT function is a key factor for survival and success in the competitive marketplace (Henderson and Venkatraman 1993). Prior empirical evidence points to the marginal role information technology in general has played in improving organizational productivity (Brynjolfsson 1992). In spite of this disappointing evidence, the effective governance of DIT has been charged with being instrumental in securing maximum value-addition and other benefits for organizations (Loh 1993).

The emergence of distributed information technology (DIT) as a critical determinant of organizational productivity entails a fundamental need to align and manage the DIT strategy with the corporate strategy. A direct consequence of this is the choice and means of governing the DIT function. This paper builds and empirically tests an integrated governance model of distributed information technology at both the organizational and economic levels. Further, it expands the traditional boundaries of organizational economics to develop new and emerging domains such as exchange costs, resource costs, bureaucracy costs, and information processing costs. Also, key constructs and relevant measures for each cost domain are developed and tested within the DIT management domain.

This paper proposes an organizational-economic perspective on governance mechanisms for the DIT context. The study is designed to answer the following research questions:

1. What are the various organizational and economic factors that impact DIT governance?
2. Do organizational and economic factors have any relationship with DIT governance?
3. What is the overall impact of the set of organizational and economic factors on DIT governance?
4. Does the proposed operational model have a good fit on the data?

The paper proposes an integrated framework for DIT governance using variance-theory determinants (Mohr 1982) dealing with transactions at the exchange level (i.e., an economic level between the partnership organizations involved in the DIT relationship) and an organizational level (i.e., a firm level of the user). Extending the conventional anchors of agency theory (Jensen and Meckling 1976) and transactional cost economics (Williamson 1975) in analyzing governance choices, this paper proposes and tests various constructs based on other new but critical components of organizational economics such as exchange costs, bureaucracy costs, information processing costs, and resource costs.

In order to test our hypothesis, an operational model is constructed with economic costs and organizational costs as second-order constructs. The first-order constructs are the various individualized items under each cost category. Since the covariances of the first-order constructs are explained in terms of the second-order constructs, we can examine the covariation of the various components of DIT governance in a parsimonious manner.

Preliminary results of the study suggest that both economic costs and organizational costs are equally important in their impact on DIT governance. However, final results of the individual hypotheses tests and the validity of the model are yet to emerge at this point.
REFERENCES


