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# COOPERATION AMONG TECHNICAL SPECIALISTS IN A DISTRIBUTED COMPUTING ENVIRONMENT

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Distributed computing environments, exemplified by client/server computing, place more power in the hands of end-users. So, as organizations move to distribute their computing, they must also move technical specialists closer to these users. This leads to a situation where the distributed technical specialists, while close to their user, are isolated from each other. This isolation from others' expertise may lead some specialists to "reinvent the wheel" unless they establish cooperative relationships with other distributed specialists.

This study examines the cooperative behaviors of the distributed computer support personnel at one site. The goal of this research is twofold. The first goal is to understand the differences and interactions between formal and natural cooperation. The second goal is to elaborate and extend present theories through in-depth exploration of previously identified theoretical antecedents to cooperative behaviors (Smith, Carroll and Ashford 1995).

A motivation for this work was our disappointment with present research on "cooperation." It tends to be variance-driven and atemporal, with little appreciation for external validity or how the situatedness of the actions becomes a critical factor. The present set of cooperation antecedents have little relationship with each other and have no temporal attachment. That is, what the present theory asserts is not often observable.

Our work extends beyond exploratory research in that we seek to amplify and extend the present literature on cooperation in organizations. Thus, we use theory elaboration, a method to inspect and amplify current theory (in this case theories about cooperation and its antecedents) in a research context (Vaughn 1992). This theory-elaboration adds to the present literature in two ways: (1) as a synthesis and (2) to highlight current weaknesses.

To pursue these goals, we are engaged in a longitudinal, field-based, observation of the cooperation activities of the distributed computer support personnel within the client/server computing environment of a medium-size university. The longitudinal perspective of our work provides a mechanism to see if cooperation is an emergent process. For example, we are elaborating on whether the existence of antecedents is "necessary and sufficient" for cooperation to occur, or if antecedents combine with each other and with chance in some time-ordered manner to foster cooperation (e.g., Mohr 1982; Markus and Robey 1988).

Analysis of the interview, observation and document contents is concurrent with their collection. This is a central aspect of theory elaboration (Vaughn 1992). It allows for reflection on the present theory as the research is conducted. This means that follow-up interviews, additional observation, and more document collection can be used, as needed, to clarify findings as they emerge (Bogdan 1972). The researchers will also use text analysis to synthesize the data drawn from the interviews, observations and electronic forum messages (Miles 1990).

The broader research program is to continue exploring cooperative behavior, and their antecedents, in different research settings with two goals. The first goal is to work toward a more comprehensive and generalizable theory of cooperation. The second goal is to inform practice on how to encourage and sustain cooperative relationships.

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