

# ARTIFICIALLY INTELLIGENT NATURE OF THE FIRM: A PROBLEM-SOLVING PERSPECTIVE

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## ABSTRACT

Firms adopt various governance modes to organize complex problem-solving effectively. Yet, little is known about how artificial intelligence (AI) shapes organizational design and the choice of governance modes. This paper argues that AI refines value creation and capture in problem-solving, influencing the capacity of governance modes to support solution search. The authors conceptualize three AI roles in interorganizational relationships: a substitute for managers, a complement to them, and an oversight mechanism. Their framework explains how these roles influence governance by challenging core behavioral assumptions—bounded rationality and opportunism, and the hazards associated with problem-solving. Moreover, the theorizing highlights how these three AI roles impact governance efficiency based on problem complexity. This work contributes to governance and interorganizational literature in marketing by integrating AI into problem-solving at intra- and interorganizational levels.

*Keywords: artificial intelligence, problem-solving, governance*

*Track: Business-To-Business Marketing & Supply Chain Management*