Organized Complexity of Digital Business Strategy: A Configurational Perspective

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Date: 23 July 2018 (Monday)
Time: 10:30 am - 12:00 noon
Venue: Conference Room 5047, LSK Business Building

Abstract: How should firms configure organizational capabilities to achieve competitive advantage in complex digital environments? To answer this question, we investigate causal recipes to produce parsimonious configurations from complex interdependencies among capabilities that achieve high firm performance. We adopt a configurational perspective accompanied by a fuzzy-set qualitative comparative analysis (fsQCA) to deal with the challenges of organized complexity and explicate conjunctural, equifinal, asymmetric relationships in configurations of capabilities.

Our analyses using a rare and unique dataset of 376 observations for organizations in multiple economic sectors, including healthcare, education, manufacturing, and service in the United States reveal three key findings. First, we uncover a few parsimonious configurations emergent from complex nonlinear interactions among six organizational capabilities. Interestingly, we find that six capabilities as parts of a system are often interrelated into the whole configuration with the isomorphic structure to produce both high financial and customer performance simultaneously, and the configurational structures are different across economic sectors that vary in the extent of digitization and environmental turbulence. Second, the findings explicate the multifaceted roles of information analytics capabilities across economic sectors, varying from an enabling role in most contexts, but no role or a counterproductive role in some contexts. Furthermore, we show IT-enabled information analytics capability alone is neither necessary nor sufficient in any configuration for achieving high performance but is an important part of the configurations in which it may complement, substitute, or suppress other capabilities to produce high performance. Third, the structures of configurations for high performance differ from those for not-high performance, suggesting an asymmetric view of complexity that underpins organizational performance. Together, these findings explicate complex nonlinear relationships among the six capabilities in the form of conjunctural, equifinal, and asymmetric causation, from which we develop new prescriptive causal recipes to build parsimonious configurations for firm performance in digital environments characterized by organized complexity. We discuss implications of the findings for the complexity theory in digital business strategy, and managerial implications. (Joint work with YoungKi Park)

Bio: Sunil Mithas is the Ralph J. Tyser Professor of Information Systems in the Robert H. Smith School of Business at the University of Maryland, where he is Co-Director of the Center for Digital Innovation, Technology and Strategy and the Center for Excellence in Service. He is the author of the books Digital Intelligence: What Every Smart Manager Must Have for Success in an Information Age and Dancing Elephants and Leaping Jaguars: How to Excel, Innovate, and Transform Your Organization the Tata Way. He earned his PhD from the Ross School of Business at the University of Michigan and an engineering degree from IIT Roorkee. Identified as an MSI Young Scholar by the Marketing Science Institute, Sunil is a frequent speaker at industry events for senior leaders. He has worked on research or consulting assignments with organizations such as A. T. Kearney, Ernst & Young, Johnson & Johnson, Lear, the Social Security Administration, the Tata Group, and the U.S. Census Bureau. His papers have won best-paper awards, and have been featured in practice-oriented publications such as MIT Sloan Management Review, Bloomberg, and CIO.com.