Foreword:

Understanding Digital Transformation: Programmatic Theory and Research to the Rescue

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The digital transformation does not have a beginning or an end. There is no specific date when the digital transformation began. And, there won't be a specific date when the transformation will end. Rather, the *digital transformation is an ongoing process* through which organizations embed digital technology throughout all systems including human resources, procurement, and customer relations, to name a few. In addition, the digital transformation is not specific to any given industry. On the contrary, as the different chapters in this book describe so eloquently, it is ubiquitous in healthcare, banking, manufacturing, fashion, entertainment, and many other industries. Moreover, the digital transformation affects not just individual jobs, but also how teams collaborate, how organizations function, and how entire industries create and deliver services as well as how they interact with customers.

This is an extremely timely book because understanding digital transformation requires an interdisciplinary approach. For example, it is not sufficient to describe digital transformation using an information systems perspective by answering the question of, for example, which specific tools and procedures are most efficient and why. It is also not sufficient to explain digital transformation by using an organizational behavior approach in attempting to learn which systems may be more or less motivating for the workforce. Similarly, it would not suffice to use a human resources perspective in trying to know what training and development interventions are necessary to enhance employee digital work performance. As yet one more example, it is not

sufficient to use a strategic management perspective to learn what specific firm-level routines and capabilities are necessary to create a digitally-based competitive advantage.

In contrast to approaches involving mostly a single discipline only, to gain a deeper and more comprehensive understanding of digital transformation, what we need is *programmatic* theory and research that integrates different disciplines (Aguinis & Cronin, 2022). Unit theories originate in specific fields and attempt to explain digital transformation usually with a single disciplinary lens. For example, as mentioned above, by using a predominantly information systems, organizational behavior, human resources, or strategic management theoretical foundation. Clearly, there are several important and meaningful unit theories that have originated in each of these domains and others as well. But, programmatic theory advances our understanding by organizing and synthesizing unit theories into a broader framework that allows us to explain: (a) how the unit theories relate to each other, (b) how to resolve inconsistencies across unit theories, and (c) how to identify boundary conditions (Cronin, Stouten, & van Knippenberg, 2021). To use the illustrations mentioned above, a programmatic theory would incorporate at least a few of the existing unit theories by addressing questions such as: Why are some tools most efficient in terms of enhancing employee motivation through employee skill development in turn leading to a firm's unique routines and capabilities resulting in a sustainable and inimitable competitive advantage?

But, to improve our understanding of digital transformation, it won't be sufficient to just propose a programmatic theory—that would be a *potentially* good programmatic theory.

Proposing programmatic theory is certainly a necessary first step. But, as a second and equally necessary step, what is needed is to test such potentially good programmatic theory empirically.

Given the multidisciplinary nature of programmatic theory, a multi-method empirical approach is

needed. Such approach takes advantage of both qualitative and quantitative ontological perspectives and tools. Moreover, adopting a multi-method approach requires that we collect data residing at different levels of analysis. It is not sufficient to collect data from just individuals, or just teams, or just firms (or higher levels of analysis such as industries, countries, and even economic blocs). Rather, a comprehensive test of a programmatic theory involves multi-level data collection and analysis using tools that, fortunately, are already available (e.g., Aguinis, & Molina-Azorin, 2015; Hill, Aguinis, Drewry, Patnaik, & Griffin, 2022).

As an exemplar of multidisciplinary, multi-method, and multi-level research with great potential to successfully result in the creation and testing of programmatic theory, this book includes contributions by scholars from several different divisions of the Academy of Management (AOM). Specifically, primarily from (a) Management Consulting, (b) Communication, Technology, and Organization, (c) Management Education and Development, and (d) Health Care Management. The impressively collective and collaborative work by the contributors to this volume began at the 2019 Academy of Management meetings in Boston. Then, it continued with two sessions related to AI at the 2020 and then again at the 2021 Academy of Management meetings. These four AOM divisions include scholars with different disciplinary, theoretical, and methodological backgrounds. This plurality is precisely what makes this book so timely, relevant, and important.

In closing, this book is about not just digital transformation but, again the process of digitally transforming. In other words, digitalization is ongoing and without an end. To understand and explain it, we need programmatic theory that integrates unit theories within broader and more comprehensive multi-disciplinary, multi-method, and multi-level frameworks. This book has done a wonderful job of taking important steps toward achieving this lofty goal.

References

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