Foreword

I was delighted to be asked to write a foreword to Bob Travica’s *Examining the Informing View of Organization: Applying Theoretical and Managerial Approaches*. I have long been a fan of his contributions to the transdiscipline known as informing science, which has become my central research focus. In this brief commentary, I hope to explain why and where the Informing View of Organization (IVO) fits within my own favorite topic: the impact of complexity on the nature of our research.

**CONFUSING RIGOR WITH HABIT IN A COMPLEX WORLD**

It will take the typical reader little more than a glance to recognize one of the defining characteristics of *Informing View of Organization*: its extraordinary ambition. The scope of research examined is immense and incorporates ideas ranging from information science, information systems, sociology, psychology, political science, philosophy, education, and a host of other disciplines. Given that the trend among researchers today is to focus on ever-narrowing topics, we need to ask ourselves if such a treatment can really be rigorous.

As it turns out, the question of rigor is a difficult one to address since, paradoxically, the term is often used but rarely defined. In my 2010 book, *Informing Business: Research and Education on Rugged Landscape*, I concluded that true rigor involves three key elements: being *systematic* in inquiry, employing an *appropriate research design* for the questions being addressed, and asking *challenging* questions.

Unfortunately, when we seek to understand behaviors and outcomes in a complex environment, true rigor is hard to come by. Yesterday, I was in a seminar with one of the seven founders of Infosys, who asked whether people, money, or materials was most critical to a business. Drawing upon an old Indian proverb, he likened the problem to a three-legged stool. Asking which leg is most critical is not a sensible question, since the loss of any one leg causes the stool to fail. The analogy that I personally use is that of a recipe. What is the contribution of baking powder to the overall fitness of the cake? In one sense, it is 100%, since its absence will produce a product better suited for building material than human consumption. And yet, is baking powder more critical than the flour or the eggs or the sugar? In other words, as complexity grows, we need to focus our attention on how ingredients work in combination, not on their individual contributions.

If you believe that the world of organizations and information systems is complex—as I do, for many reasons that I have elaborated upon elsewhere—then looking at narrowing research questions tends to violate all the criteria for true rigor. When an observed phenomenon results from a complex phenomenon, attempting to isolate a single cause is the exact opposite of being systematic. Trying to frame questions
in the form of very specific testable hypotheses with three possible results (confirmed, contradicted, and
indeterminate) seems like a very inappropriate design. Moreover, where the relationship being studied is
part of a complex interaction, we can more or less predict our eventual conclusions: it depends.... Altem-
atively, we can limit ourselves to studying phenomena where we believe the relationships are so direct
that complex interactions can be discounted. Unfortunately, these relationships tend to be so obvious
that most organizational participants would accept them without proof. For example, literally hundreds
of papers have tested whether or not the intention to use an information systems precedes its actual use.
In what possible universe would this fail to be the case? Where is the challenge in such research?

Unfortunately, the vast majority of outlets that matter to researchers in management are content to
publish articles and books based upon research methods that make sense only if the object of study is
not particularly complex. Popular quantitative techniques, such as significance testing, multivariate
statistics, factor analysis, and path analysis all fall apart when complex interactions are present in the
data. Researchers and reviewers accept these techniques and their underlying assumptions without much
objection, however, since they have long done so. The famous economist Thorstein Veblen referred to
this phenomenon as “trained incapacity.” A less colorful description is habit. Ironically, it is research
that violates our prevailing patterns—however nonsensical they may actually be—whose rigor is most
likely to be questioned.

My expressed concerns regarding many of our existing research protocols should not be taken as
an assertion that I do not value research. Rather, to meet the demands of rigor, we need to adjust our
techniques to make them appropriate to the domain that we are studying. Here is where the IVO model
can be most useful.

SYNTHESIS AND THE IVO MODEL

When dealing with complex environments, a single perspective rarely suffices for all situations. Care
should always be taken in generalizing findings from one context to another. The rules for baking a
cake are different from preparing roast beef, although they may share some rules in common (e.g., pre-
heating the oven). For this reason, we need to develop a collection of conceptual schemes—referred to as
“theories” by some—that can be applied in different contexts. For these schemes to be useful, however,
they must be collected and synthesized. Only then can they be employed by a decision maker facing
the complex environment. This is another way of saying without synthesis there is little chance that our
research will have any practical impact.

Travica’s IVO model represents the type of synthesis that we desperately need if we want our re-
search to matter. It begins by avoiding the trap of posing the sterile agent often proposed by fields such
as economics and finance—sometimes referred to as homo economicus. Instead, it proposes the far
richer homo informaticus, an agent whose behaviors are subject to all the supposed irrationalities that
have been identified in fields such as psychology and decision theory. The processes by which these
agents inform and become informed are central to the treatment; the absurd economic notion of “perfect
information” plays no part in the analysis.

Travica then proceeds to analyze two key levels: the group and the organization. At each of these
levels, he avoids the trap of imagining that the behavior of the collective can be treated as the sum of its
individual components. This is not the way complex systems work. While individual agents and com-
ponents certainly influence the behavior of the system as a whole, what makes complex adaptive systems
truly interesting is the behaviors that emerge, unpredicted, from the interactions. The book recognizes this and presents a rich set of models that can be used to think about these activities.

The heart of the book focuses on looking at the impact of informing within the organization from a variety of perspectives: structural, cultural, economic, and evolutionary lifecycle. Here, an extensive body of work is presented, explained, and synthesized into a rich framework that can be employed in understanding and analyzing organizations.

The careful reader will walk away from this book with a far deeper understanding of complex organizational phenomena and the critical role played by informing processes.

_T. Grandon Gill_
**University of South Florida, USA**
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_T. Grandon Gill_ is a Professor in the Information Systems and Decision Sciences Department at the University of South Florida. He holds a Doctorate in Management Information Systems from Harvard Business School, where he also received his M.B.A. His principal research areas are the impacts of complexity on decision-making and IS education, and he has published many articles describing how technologies and innovative pedagogies can be combined to increase the effectiveness of teaching across a broad range of IS topics. Currently, he is Editor-in-Chief of Informing Science: The International Journal of an Emerging Transdiscipline and an Editor of the Journal of IT Education.