# Edited Book Proposal: Advancing Information Systems Theories

The title of this planned Springer series of volumes on information systems (IS): "Advancing Information Systems Theories" is phrased in such way to emphasize its intended goal. The focus of this series of volumes is on "information systems (IS) theories" not just "theories in IS." In the context of the IS field, the phrasing implies significant differences. It is well known that the IS field has been debating the nature and role of theories for some time with intense debates regarding whether or not a theoretical core is necessary (King & Lyytinen, 2004; Lyytinen & King, 2004; Lyytinen & King, 2006; Weber, 2006), disagreements concerning whether or not the field can speak of native theories (Grover, et al., 2012; Straub, 2012), and what constitutes IS theory and the role of theories in IS (Avison & Malaurent, 2014; Bichler, et al., 2016; Gregor, 2014; Holmström & Truex, 2011; Lee, 2014; Markus, 2014). What is not up for debate is how the field undertakes its research using theories from its "reference disciplines." By borrowing from these reference disciplines "the theories and methods of these disciplines serve to set the standards by which the quality and maturity of IS research should be measured" (Baskerville & Myers, 2002, p. 1). Whether it is the theory of reasoned action (TRA) or its derivative, the theory of planned behavior, from social psychology, resource based view (RBV) and absorptive capacity theory from strategic management, game theory and transaction cost theory (TCT) from Economics, innovation diffusion theory (IDT) from communications, or social cognitive theory and activity theory from psychology, the IS field has consistently borrowed (Lim, et al., 2013), often uncritically (Hassan, 2011; Markus & Saunders, 2007) to legitimize its research. The goal of this series of volume is to advance IS research beyond this form of borrowed legitimization and derivative research towards fresh and original research that naturally comes from its own theories - information system theories. It is inconceivable for a field so relevant to the era of the hyper-connected society, disruptive technologies, Big Data, social media and "fake news" to not be brimming with its own theories.

To move the field forward, the foundations surrounding theory have to be unambiguously clear, for how can theory be advanced if theory itself is misunderstood? Any advancement of theory has to begin with some form of agreement with regard to IS theories from thought leaders of the IS community. Although much progress has been made (Gregor, 2006; Gregor & Jones, 2007; Hassan, 2014; Hassan & Lowry, 2015; Mueller & Urbach, 2013; Weber, 2012), many questions remain unanswered. The major questions that will be addressed include: What can we agree on with regard to theories? What constitutes theories and what doesn't? Why do we need theories? Why bother with theories? How can one go about developing theories? What does an IS theory look like? The answers to these kinds of questions will be discussed in this series of volumes on "Advancing IS Theories."

For purely demonstrative purposes, a tentative list of chapters and topics are provided below along with the names of authors who have either submitted abstracts to the editors or had presented at the Special Interest Group on Philosophy of IS (SIGPHIL@ICIS) workshop on "Advancing IS Theories" in San Francisco, on December 13-14, 2018. These authors have yet to submit their full chapters, which will in turn be reviewed, and we expect more chapters to be reviewed and added to all three volumes. We

expect these works to trigger other works of even higher quality that will eventually find their way into our top journals and help advance the field forward.

## Proposed title: Advancing Information Systems Theories-Theories and the Process of theorizing in IS

The first volume addresses what theories are and why bother with theories. Included in this volume is the process of theorizing itself because the process cannot be divorced from the product of that process. As Weick (1995) argues, the process of theorizing is what will help illuminate what theories are.

Introduction: Why theories? (Hassan, Gregor & Willcocks)	1
Theoretical and practical contributions in IS (Agerfalk)	20
Causality in IS theorizing (Markus and Rowe)	40
Causal mechanisms in theory building (Volkoff and Urquhart)	60
The art of crafting theory (Rivard)	80
IS theorizing as discursive practice (Hassan, Mathiassen & Lowry)	100
Philosophical and methodological approaches to concept analysis (Wynn)	120
Theorizing design science (Sjöström)	140
IS theorizing in strategy (Galliers, Moeini, Simeonova, Wilson)	160
Pluralist theory building (Mathiassen)	180

### Proposed title: Advancing Information Systems Theories-The Products of Theorizing in IS

The second volume concerns efforts that approach theories – what Weick (1995) calls "interim struggles." This volume comes out of the realization that the process of theorizing can be long and arduous and like all great things, will not be built in a day, much less in an edited volume. So, although they may not be called theories with a capital "T," they nevertheless approximate theory and should not be dismissed. They may be called "principles," "propositions," "models," "paradigms," "concepts," "frameworks" or what have you. They are the products of theorizing and are precursors to strong theory, and as long as they are fresh and original, they go a long way in advancing IS theories.

Introduction: The products of IS theorizing (Hassan, Mathiassen & Lowry)	1
Against paradigms? Reevaluating IS paradigms (Hassan & Mingers)	20
Theories and kernel philosophies (Haj-Bolouri)	40
Design principles in design science (Gregor and Hevner)	60
IS Concepts: Declaring IS to the world	80

Mapping an IS research framework	100
Models and contexts of discovery in IS	120
IS constructs and variables	140
A collection of IS propositions	160

## Advancing Information System Theories: Information Systems Theories

The third volume intends to showcase the IS theories themselves and what they might look like if one were to stumble upon them in the dark. Discussions on advancing existing IS theories such as media richness theory (MRT), media synchronicity theory (MST) and other theories developed within the IS field can be included in this volume. Purely based on the name of the field of study – Information Systems – and its history and origins, one would expect that some form of information theory or systems theory would qualify as an IS theory. Or, since systems relate to technology, some kind of theory of technology would be an imperative for the IS field. Or, the combination of information in the form of signs and with human cognitive processing as in semiotics, would qualify as an IS theory. We expect to see some of these theories in this volume. Thus far, theories related to information, systems, or technology have not made headlines within the IS field, and reference discipline theories from psychology, social psychology, communications, management and economics dominate and consume most of the energy of our best and brightest. If the struggles in existing journals are any indication, this third volume may be the riskiest of the three. However, that is the point pushing this effort in the form of a multi-volume book so as to collect as many works that even if they appear to be speculative, they represent original thinking at the highest quality of scholarship.

The shape of IS theories (Hassan, Gregor & Willcocks)	1
Indigenous IS theories (Grover & Lyytinen)	20
Against theory? A history of IS theories (Hirschheim and Hassan)	40
System theory foundations for IS theories	60
IS theories of technology	80
IS theories in sociomateriality (Cecez-Kecmanovic)	100
IS theories and semiotics (Mingers & Willcocks)	120
The shape of IS process theories (Niederman)	140
Mertonian middle-range theories in IS (Hassan and Lowry)	160
Information theories in the IS field (McKinney)	180
Systemic Complexity theory (Hassan)	200

## Publishing Schedule and Deadlines

This multi-volume text will be published on a rolling schedule. Each volume will be given its own submission, review and publishing schedule. To start, the schedule below refers only to the first volume. However, authors can submit earlier for later volumes to allow for simultaneous review and enable the editors to organize the submitted chapters into appropriate volumes based on their content. Please submit all full chapter drafts to both Nik R. Hassan (<a href="mailto:nhassan@d.umn.edu">nhassan@d.umn.edu</a>) and Leslie Willcocks (willcockslp@aol.com) before the date specified below. Authors may be asked to review chapters from other authors in their requested volume or other volumes. We also welcome abstracts, suggestions and expressions of interest for chapters in all volumes.

#### Theories and the Process of theorizing in IS

Submit first draft April 30, 2019
Submit final draft after review May 31, 2019
Expected published by: Aug 31, 2019

Formatting guidelines for chapters can be found on the Springer site at https://www.springer.com/gp/authors-editors/book-authors-editors/resources-guidelines/rights-permissions-licensing/manuscript-preparation/5636

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