Introduction: Theory and Information Systems

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1. Introduction

Theory is generally considered to be a primary goal of academic research. The "Theoretical Approaches to IS Research" minitrack (Organizational Systems and Technology Track) was established at HICSS by Scott Schneberger and Michael Wade to provide a discourse both of theories-in-use and theorizing itself in IS. This early recognition of the importance of theory was later reflected in the special editorial in the MIS Quarterly (2007) which highlighted the need for greater focus on IS theories and theoretical development. In the editorial the editors specifically called for more purely theoretical papers and in the following years many venues continued to call for greater theoretical focus and explication in research.

As noted on the "Theories Used in IS Research Wiki" (http://is.theorizeit.org/wiki/ Main_Page), as of 2015 at least 100 theories have appeared in in the literature of the IS field. Some theories have originated within the IS field, while others have been drawn from complementary disciplines such as psychology, sociology, management, economics, biology and mathematics. IS research has drawn upon or developed theory to examine a broad range of IS phenomenon, has incorporated economic, social, technical, and political factors and has surfaced critical metaphysical assumptions. The resulting proliferation of theories strengthen the breadth of IS research but has also resulted in a confounding array of theories and constructs which have redundancies, overlaps, and span disciplinary boundaries.

Five years ago the mini-track chairs Dirk S. Hovorka and Kai Larsen recognised that theory papers had become ubiquitous across the tracks at HICSS and there was no longer a need for a mini-track 'home' for theory papers. Rather than a dearth of theoretical insight, there is now an abundance of theory but a greater difficulty in making sense of or applying a

multitude of similar, intersecting or contradictory theory. The focus on theory development and extension had resulted in new questions and a need to develop frameworks and ontologies that organize theories used in IS research. The renamed "Theory and Information Systems" minitrack highlights forms of meta-analysis for IS theories as well as approaches to theory integration within and between disciplines and identifying the boundaries of theories in IS and related disciplines. The minitrack invites submissions that review, integrate, or utilize meta-analytic approaches to building cumulative theory, frameworks, and categorizations of constructs, variables and relationships used in IS research. Areas of interest include but are not limited to:

- Dependencies of constructs and the nomological networks which define them
- Transdisciplinary theoretical ties between IS research and research-in other disciplines
- Theoretical integration and aggregation
- The use of natural language processing, data mining, and predictive analytics to better understand and interrogate theories
- Discussion of the roles of theories used to explain, approaches used to predict (e.g. neural nets and big data), and of theories of understanding

Though theory reviews, meta-analysis, theory integration, and application of computational approaches, the minitrack aims to produce meta-theory and ontological frameworks to increase our understanding of the relationships among theories within IS and related fields. One goal of this minitrack is to provide social and behavioral sciences research with a better grasp of fundamental IS-relevant theories, help organize our theories to be accessible to practice, and increase our understanding of the philosophical commitments represented in their use.

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