Foundations of Theory Building in Information Systems Research

COURSE SYLLABUS

1   Course Description

The generation of knowledge can be seen as one of the key contributions of any science. Consequently, many scholars emphasize the centrality of theories for any scientific endeavor – a thought widely reflected in many disciplines from the natural to the social sciences. While a corresponding attention to theoretical work has been at the heart of the Information Systems (IS) discipline for a long time, the focus on theoretical debates and genuine conceptual contributions has been picking up recently. This is reflected by a number of journal sections and conference tracks dedicated to advancing theory and theorizing in IS research just as much as in many authors' experiences during the review processes of their work.

The course *Foundations of Theory Building in Information Systems Research* invites participants to join the ongoing discourse on theories and theorizing in the Information Systems (IS) research community. It helps participants to build a foundational understanding of what theory and theorizing are. Through discussions and analyses of foundational theoretical developments in the IS discipline and some of its main reference disciplines, participants engage with the concept of theory and advance their skills of building their own theoretical contributions.

The course is designed to achieve the following high-level learning objectives:

(1) Build a foundational understanding of what theory is and what role it plays in research

(2) Become familiar with basic theorizing skills and approaches

In terms of teaching formats, the course uses a mixture of formats and approaches – from traditional lectures to interactive elements and seminar-style discussions. To make this work, participants are encouraged to prepare the mandatory readings identified in this syllabus prior to the start of this class. Through this preparation, most the workload for the course will occur in the weeks before the actual course date.

Be advised that the course is not intended to be a comprehensive or normative prescription of how to engage with theory and theorizing in research. It is rather aimed at providing a basic introduction to theory and theorizing to participants. This, in turn, provides enablement to employ basic theory and theorizing skills and encouragement to carefully pay attention to participants' own theoretical contribution and their engagement with the extant knowledge in the field.

2   Lecturer

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Benjamin Mueller is an is an Assistant Professor of Information Systems and Change Management at the University of Groningen, the Netherlands, and an Associate Researcher at the Karlsruhe Institute of Technology, Germany. His research and teaching focus on how advanced information and communication technologies transform organizations. He pays particular attention to mechanisms through which individuals augment their work with technology and the corresponding organizational benefits. His research is published in, for example, the Journal of Management Information Systems, the Journal of the Association for Information Systems, Business & Information Systems Engineering, or Information & Management.

In relation to theory and theorizing, Benjamin is a current member of the Journal of the Association for Information Systems' editorial board. In the recent past, Benjamin served as a co-chair of the "Foundations of IS Research: Theory, Methods, and Philosophy" track at ICIS 2017 and as a co-chair of the "Advancing Theories and Theorizing in IS Research" track at ECIS (2014-2016).

3   Date and Location

17. and 18.01.2019 @ KIT, further details to be announced

4   Course Details

4.1   Contents

The course *Foundations of Theory Building in Information Systems Research* is organized around two main modules. The first module introduces participants to the foundations of what theory is. This module is based on select seminal sources in this context – from within the IS discipline as well as some of the discipline's reference fields. Module two focuses on the process of theorizing by contrasting different approaches to working with theory.

<u>Please be advised</u>: While the workload required to prepare for class is relatively high, students are not expected to have read all of the materials listed below prior to class. Only the foundational readings **printed in blue** are mandatory literature for everyone. The papers **printed in red** are distributed to participants prior to class. Please see the instructions following the module tables below for details.

The remaining papers, **printed in black**, will be introduced by the lecturer in class so that participants can follow up on them after class themselves. Also be advised that some of the papers are rather short editorials only and should be easy enough to read.

	Content	Readings
Module 1 – the WHAT of theories	1.1 Constituents and forms	• Bacharach (1989) • Bichler et al. (2016) • DiMaggio (1995) • Lee (2014) • Shapira (2011) • Steinfield and Fulk (1990) • Suddaby (2010) • Sutton and Staw (1995) • Weber (2003) • Whetten (1989)
	1.2 Refined perspectives	Theoretical perspectives • Burton-Jones et al. (2015) Types of theory • Gregor (2006) Theory and levels • Hitt et al. (2007); esp. pp. 1385-1390 • Klein et al. (1994) • Zhang and Gable (2017)
Module 2 – The HOW of theorizing	2.1 Introduction to theorizing	• Colquitt and Zapata-Phelan (2007) • Weber (2012) • Reasoning (Ochara 2013) • Concepts (Osigweh 1989) • Causality (Durand and Vaara 2009)
	2.2 Theorizing and design	• Gregor and Jones (2007) • Hovorka and Gregor (2012) • Kuechler and Vaishnavi (2012) • Lee et al. (2011) • Mueller and Olbrich (2011)

The list of modules presented above indicates the required readings that are regarded as essential for each of the modules. Full bibliographic details on the respective articles are provided at the end of this syllabus. For copyright reasons, students are expected to obtain copies of these articles through their home institutions' database or journal subscriptions or through the general Internet. In case any of the articles that are supposed to be prepared is not available that way, please contact the lecturer in due time so that alternative solutions can be found.

Given the breadth of the reading materials, <u>students are not expected to read all the papers listed above</u>. Please read the following instructions carefully in order to prepare for class:

Readings that require your attention prior to class fall in two categories: mandatory literature for all participants (printed in blue) and articles that will be distributed across participants (printed in red). While everyone is expected to read all of the blue papers (7), each student will have to prepare only 1 of the red papers to present in class. The corresponding presentations are supposed to introduce the key issues from the readings to the rest of the class. In the subsequent discussions, students are expected to act as "subject matter experts" on those readings they prepared to help highlight how each reading advances theory and theorizing and to lead and facilitate the discussion on what their specific paper contributes to the respective module.

Based on feedback from previous years, students are expected to develop a one-page handout for each of the red readings assigned to them. These handouts should provide other course participants with a brief summary and overview of the paper as well as the key lesson learned in terms of theory and theorizing. The handouts' design should also support students' presentation of the materials in class and help facilitate the discussion of these materials. All **handouts must be submitted to the lecturer before class** (January 15, 2019).Because the red papers will always be assigned to at least two people, please feel free to get in touch and jointly develop the one pager to be handed out. One file per team will be sufficient.

4.2   Tentative schedule

The course modules are tentatively allocated across the course days as follows. Adjustments in the allocation of these modules across the days might be necessary depending on group interests, speed, and level of interaction.

	Day 1	*Day 2*
Morning session 1	Opening session and introductions	Module 1.2 Refined perspectives
Morning session 2	Motivating the role of theory in IS research	Module 2.1 Introduction to theorizing
Lunch break		
Afternoon session 1	Module 1.1 Constituents and forms of theory	Module 2.2 Theorizing and design
Afternoon session 2		Summary and reflection
End of class		
Evening	Informal get-together (optional)	

4.3   Course format and assessment

Across the course modules, participants will be actively involved through presenting a small number of seminal papers from the list of readings as well as the results of small in-class exercises. Presentation formats and roles students are asked to play during discussion might differ to allow for some variation in the teaching and interaction formats. This will foster critical engagement with theory.

Assessment is based on the presentations of the red papers prepared before class and general class participation. The former consists of a "one pager" prepared and submitted before class and the presentation made in class when called upon.

5   Bibliography

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