

Discipline: Business Information Systems & Engineering

1 Title

Theory and Theorizing in Information Systems Research (TnT.IS)

2 Language

English: This course and all of the readings and materials used in the course will be in English. Also, students are expected to complete all assignments and pre-class preparation in English too.

3 Lecturer

Prof. Dr. **Benjamin Mueller**
Chair of Digital Business
Faculty of Business and Economics
University of Bremen

✉ muellerb@uni-bremen.de

🌐 <https://www.linkedin.com/in/benjaminmueller>



Benjamin Mueller is the Professor for Digital Business at the University of Bremen, Germany, and an Associate Researcher at the Karlsruhe Institute of Technology, Germany. He received his PhD from the EBS Business School in 2010 and holds master's degrees in Business and Information Systems from EBS Business School (Oestrich-Winkel, Germany) and Georgia State University (Atlanta, GA, USA). Benjamin's research focuses on how advanced information and communication technologies transform organizations. He pays particular attention to mechanisms through which individuals use technology to innovate in their work and the corresponding organizational benefits. Complementary to that, he explores ethical and societal implications of digitalization and contributes the ongoing debate on theory and theorizing in IS. Benjamin has published over 90 peer-reviewed papers in outlets such as, for example, MIS Quarterly, the Journal of Management Information Systems, the Journal of the Association for Information Systems, or the Journal of Business Research and the IS community's various conferences. Benjamin currently serves as a senior editor for the Journal of the Association for Information Systems and as an associate editor for the Journal of Responsible Technology.

In relation to theory and theorizing, Benjamin is passionate about conceptual papers and reflecting on the practice of theorizing in the IS field. Benjamin also co-chaired of the "Foundations of IS Research: Theory, Methods, and Philosophy" track at ICIS 2017, the "Advancing Theories and Theorizing in IS Research" track at ECIS (2014-2016), and the "Informing Research" mini-track at HICSS (since 2020).

4 Date and Platform

The course is designed as a fully virtual seminar, organized around a series of live online sessions. We will be using a combination of **Zoom** and **Slack** as a platform to host the live sessions and to enable continued engagement around the seminar’s topics outside of the live interactions. I will be providing the team space and the necessary backend.

In comparison with a traditional on-premise seminar, the online version of the seminar differs in two regards: (1) The live sessions are slightly more focused to keep a reasonable limit to screen time on each seminar day. But to fully leverage the affordances of the online format, we will be continuing key debates from the live sessions in the Slack space outside the core class hours. This will allow you to participate in the class more flexibly. (2) The seminar is spread out across more dates, but each day will be a setup of two 90 minutes sessions grouped around the lunch break. The course’s three content 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.

All the course sessions are hosted around the lunch break on the Fridays in October and November 2023 (except for October 15).

	October 06	October 13	October 20	October 27
11:00 - 12:30	Opening session and introductions	Module 1.1	Module 2.1	Module 2.3
13:30 - 15:00	Module 1.1	Module 1.2	Module 2.2	Module 2.x
	November 03	November 10	November 17	November 24
11:00 - 12:30	Module 2.4	Module 2.6	Module 3.1	Module 3.3
13:30 - 15:00	Module 2.5	Guest lecture	Module 3.2	Module 3.4
Backup dates (please block in your schedules):			December 01	December 08

As the course progresses, we might selectively leverage additional tools / formats; specific instructions on these will be released in time.

5 Course Description

5.1 Abstract and Learning Objectives

The generation of knowledge is often seen as one of the key contributions of any science. Consequently, scholars often emphasize the centrality of theories for any scientific endeavor – a thought widely reflected in many disciplines from the natural to the social sciences. While 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 special issues, journal sections, and conference tracks dedicated to advancing theory and theorizing in IS research just as much as in many authors' experiences during the reviews of their work.

The course "Theory and Theorizing in Information Systems Research" invites you to join the ongoing discourse on theories and theorizing in the Business and Information Systems Engineering (BISE) and Information Systems (IS) research communities. It is designed to help you build and extend your understanding of the nature and role of theory in BISE and IS research. Through discussions and analyses of current theoretical developments in the BISE and IS discipline, and some of its main reference disciplines, you will engage with theory and advance your skills of building your own theoretical contributions.

The course aims to achieve the following learning objectives: It is designed to help you ...

- (1) ... build a foundational understanding of what theory is and what role it plays in research
- (2) ... develop basic theorizing skills and become familiar with extant theorizing strategies
- (3) ... understand the current state-of-the-art in theory and theorizing along with its limitations
- (4) ... develop strategies to publish your own theoretical contributions
- (5) ... build a network of peers to help you develop your own theoretical contributions

Overall, the course is designed to facilitate the advancement of your understanding of theory and theorizing in the BISE / IS discipline and to enhance your theorizing skills related to your own research and thesis work.

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 encouraging and empowering you to carefully pay attention to your own theoretical contribution and your engagement with the extant knowledge in the field. To do so, the course introduces and reviews the necessary foundations as well as current trends in the extant literature. This explicitly includes a critical reflection on the current state of theory in the IS and BISE field in order to help you advance the current debates on the nature and role of theory and theorizing.

5.2 Contents

The course “Theory and Theorizing in Information Systems Research” is organized around three main modules. **Module 1** introduces you to the foundations of theory by reflecting on and discussing seminal contributions in this context – from within the BISE/IS discipline as well as some of the discipline’s reference fields. We also look at different forms of theory and other refinements of the concept. **Module 2** focuses on the process of theorizing by contrasting different approaches to working with theory. This module also offers you insights into a number of current debates on theory and theorizing in the BISE/IS discipline by analyzing current discourses. This provides you with an opportunity to better understand trends and potential future directions and will sensitize you toward opportunities for and approaches to crafting your own theoretical contributions beyond well-trodden paths. **Module 3** reflects on developing, conducting, writing up, and reviewing theory-oriented research to complement and round off the course.

Please be advised: While the workload required to prepare for class is intense – especially in the weeks before the first live session – students are initially only required to prepare the **foundational readings printed in blue** below. Please make sure that you allow yourselves enough time to prepare these readings. Shortly before class, registered students are provided with an additional list of **papers printed in red** that provide input for the modules with only exemplary contents listed below. Not everyone will read all the **red papers** (assignment to be mailed out before class) and the total number of red papers is contingent on the number of students who sign up for the class.

For your orientation: When this class was taught last, each student was required to read a total of **38 papers** in preparation for and across the weeks of the seminar.

Module 1 - *the WHAT of theories* (15 foundational readings)

	Content	Readings and exemplary topics
Module 1 – the WHAT of theories	1.1 Constituents and forms	<ul style="list-style-type: none"> • Bacharach (1989) • Bichler et al. (2016) • Burton-Jones et al. (2021) • DiMaggio (1995) • Lee (2014) • Mueller and Urbach (2017) • Suddaby (2010) • Sutton and Staw (1995) • Weber (2003)
	1.2 Refined perspectives	<ul style="list-style-type: none"> • Burton-Jones et al. (2015) • Gioia and Pitre (1990) • Gregor (2006) • Klein et al. (1994) • Niederman and March (2019) • Shapira (2011)

Module 2 - **The HOW of theorizing** (05 foundational readings and approx. 6-8 red papers to prepare)

	Content	Readings and exemplary topics
Module 2 – The HOW of theorizing	2.1 Theorizing at a glance	<ul style="list-style-type: none"> • Mueller (2021) • Ochara (2013) • Rivard (2021) • Shepherd and Suddaby (2017) • Weick (1995)
	2.2 Objects of theorizing	<ul style="list-style-type: none"> • Constructs • Causality • Hypotheses • Parts and wholes • Mechanisms
	2.3 Theorizing revisited	<ul style="list-style-type: none"> • Intension and extension • Different products of theorizing • Different forms of theoretical contribution • Theory building • Challenges for theorizing
	2.4 Literature reviews	<ul style="list-style-type: none"> • Systematicity issue • Corpus definition • Review types • Theorizing in reviews
	2.5 Theorizing reloaded	<ul style="list-style-type: none"> • Big data • Categorization • Futures • Inductive theorizing • “Pure” theory manuscripts
Module 2 – The HOW of theorizing	2.6 Theorizing debates (please choose one topic you would like to discuss, we will select a subset of these before the session)	Limits of the status quo <ul style="list-style-type: none"> • Scripts of theorizing • Philosophical foundations • Cultural issues • Lack of societal impact • Open theorizing • Big data • Machine learning Theory as blinders <ul style="list-style-type: none"> • Discourse perspective • Self-fulfilling • Theory obsession The long tail of theorizing <ul style="list-style-type: none"> • Knowledge fragmentation • Construct convergence • Theory consolidation

Module 2 - **The HOW of theorizing** (cont.)

	2.x Theorizing strategies	<ul style="list-style-type: none"> • Participants will be provided with a wide selection of possible theorizing strategies to choose from; each learner will be assigned an individual paper
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Module 3 – **Making contributions** (10 foundational readings and approx. 1-2 red papers to prepare)

	Content	Readings
Module 3 – Strategies for contribution	3.1 Theoretical contribution	<ul style="list-style-type: none"> • Ågerfalk (2014) • Corley and Gioia (2011) • Locke and Golden-Biddle (1997) • Rai (2017) • Whetten (1989)
	3.2 Making a contribution	<ul style="list-style-type: none"> • Participants will each be assigned an individual paper discussing various aspects of theoretical contributions, which we will then attempt to synthesize in the group.
	3.3 Writing up theory	<ul style="list-style-type: none"> • We will be reviewing a small set of papers discussing academic writing from different viewpoints.
	3.4 Publishing theory	<ul style="list-style-type: none"> • Harley et al. (2014) • Lyytinen et al. (2007) • Rai (2019) • Rindova (2008) • Straub (2009)

5.3 Course format and assessment

Across the course, you will be actively involved through a variety of teaching formats. These include (but are not limited to) activities such as working on and presenting small in-class exercises (both individually as well as in small groups), presenting a small number of seminal papers from the list of readings, participating in ad-hoc discussion rounds as subject-matter experts on the literature you prepared prior to class, or sharing insights and experiences from your own work. Presentation formats and the roles you will be asked to play during discussion might differ to allow for variation in the teaching and interaction formats. This will help you foster critical engagement with theory and advance your understanding of how to craft and evaluate theoretical contributions – both your own as well as those of others.

To make this course format work, your preparation before class is essential. Most of this preparation will involve reading a set of papers assigned to each participant that need to be prepared before class. Through this preparation, a large portion of the workload for the course will occur **in the weeks before the actual course dates** (but keep in mind that the virtual format

stretches the course across multiple weeks). You will also be asked to prepare other things as well, such as short handouts or small presentations and a poster. Details on how to prepare are sketched out below and more specific instructions for all of the preparation necessary will be distributed in time before class.

Throughout the course, you will also be given an opportunity to reflect on the theoretical setup of your own research and to actively involve others into the discourse that is essential to the art and craft of making theoretical contributions.

Assessment is based on presentations of the **red** papers prepared before class and general class participation. If you are required by your doctoral program to obtain a grade (i.e., “Leistungsnachweis”), you will be given the opportunity to participate in a small take-home assignment after class. All students will be presented with a certificate of participation (i.e., “Teilnahmebescheinigung”). Both certificates list the workload and explain that this is considered equivalent to 6 ECTS.

6 Preparation and Literature

6.1 Prerequisites

The course does not come with any specific prerequisites, but a basic understanding of the research process in business and/or the social sciences is helpful.

The course welcomes doctoral students at all levels of their research and thesis projects and is open to students from any subject area or discipline. While most of the course’s readings and discussions focus on business and information systems engineering, management, and organization studies as subject areas, these only provide exemplary context. The course’s core tenets translate to any discipline of business research.

6.2 Essential Reading Materials

All participants are expected to **read and prepare the assigned materials before class** (including both the **blue papers** as well as the **red papers**). The list of modules presented in 5.2 above indicates the required readings that are regarded as essential for each of the modules (to be extended with pertinent **red papers** in time before class). Full bibliographic details on the respective articles are provided at the end of this syllabus. For copyright reasons, you must obtain copies of these articles through your home institutions’ database or journal subscriptions or through the general Internet. In case any article is not available that way, please contact the lecturer in due time so that alternative solutions can be found.

Paper assignments and more detailed instructions will be distributed to you via e-mail in time before class. Before the red papers are assigned, please start preparing the blue papers.

On an encouraging note: Due to the explicit focus on theory and theorizing, both aspects often treated rather implicitly in many scholarly papers, some of the assigned readings will be a bit difficult to read at first. Please do not be discouraged by this. During a previous year, one of the participants observed:

“The reading beforehand was quite difficult for me; it often felt like I was watching a Chinese movie [the student in question not speaking any Chinese]. [...] Now that we are done [i.e., on the last day of the course], I feel as if I have been handed the subtitles to that movie to help me make sense of the language and plot.”

Accordingly, engage with every paper to the best of your ability (and with a critical eye on the time assigned for reading) and feel free to bring open issues and struggles to class – chances are that these will form an excellent basis for our discussion.

Of course, you are encouraged to look at all the papers before class, but a deeper engagement and preparation is only required as per the instructions above.

6.3 Additional Reading Material

During the course, we will come across additional recommendations on relevant literature that will help you advance and deepen your understanding of theory and theorizing in the business and information systems engineering discipline and beyond. You are not required to work with these additional materials as part of this class. I will also be highlighting a couple of textbooks on more general aspects of academic writing. These, too, are voluntary expansions of your learning experience.

7 Administration

7.1 Maximum number of participants: 16

7.2 Assignments

Across the course, you are expected to conduct in-class presentations of the mandatory readings assigned to you. Presentation formats may vary, detailed instructions will be provided in time before the course takes place. You are required to prepare 1-page summaries of the red readings assigned to you which can be distributed in class later (more details will be provided).

On top of this, you will engage in small in-class exercises and present the results to the class. For instance, you may be asked to draw out the most important theoretical schools / streams of theoretical discourse in your research domain and present the result to the class.

7.3 Exam (if required)

After class, students who must obtain a grade (i.e., “Leistungsnachweis”) will be assigned a take-home assignment to be completed within four weeks of the last day of the course. The exact format and content of this assignment will be revealed to students who have to obtain a grade on the last day of the course.

As discussed previously, this examination is only required if students must obtain a grade for the course (“Leistungsnachweis”). In cases where doctoral programs do not require a grade, students can also opt to obtain a certificate for participation (“Teilnahmebescheinigung”). Given the substantial workload for the course, any documentation will always identify the ECTS credits the course is worth.

7.4 Workload and credits: the workload in this course corresponds to **6 ECTS**

Activities	Hours
<i>Reading and preparation of assigned literature</i>	120
<i>Preparation of handouts, presentations, and posters</i>	32
<i>Active participation in the live sessions</i>	24
<i>Presentation of papers (based on handouts and posters)</i>	4
Total	180

8 Detailed Bibliography (blue papers only)

Ågerfalk, P. J. (2014). Insufficient theoretical contribution: a conclusive rationale for rejection? *European Journal of Information Systems*, 23(6), 593-599.
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<https://doi.org/https://doi.org/10.1177/0268396220967671>
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