

# Master Thesis for Management Students

The purpose of a Master- or Diploma Thesis in Organization or Innovation is the science- based examination of an organization and/or innovation related subject and thereby the enhancement of organization and/or innovation related knowledge.

## Requirements

- The successful completion of the research seminar “MAN 721 Research Seminar Organization and Innovation” (with a grade of 3.0 or better) is formally required for the admission to the Master thesis.
- Parallel attendance at the master thesis colloquium, including presentation and discussion of your master thesis topic.
- Master-level knowledge on innovation and management.
- Familiarity with the principles and core techniques of econometric analyses.
- Interest in scientific research.

## Choice of Topic

Support through our teaching staff is provided throughout the thesis. For an overview of supervisors’ areas of expertise please consult the table and brief summaries below. We are open to discussing thesis topics with a connection to the academic fields of organization and/or innovation that fall outside of the described focus areas. Supervisors can propose topics, considering student preferences to the extent possible. Theses in cooperation with a company are possible, if scientifically relevant research questions are addressed.

<b>Supervisor</b>	<b>Topics</b>	<b>Approach</b>
Marc Lerchenmüller	<ul style="list-style-type: none"><li>• Technological innovation</li><li>• Economics and management of science</li></ul>	<ul style="list-style-type: none"><li>• Large archival data</li><li>• Surveys</li><li>• Theory construction</li></ul>
Lena Rudat	<ul style="list-style-type: none"><li>• Future of work<ul style="list-style-type: none"><li>○ Online labor (markets)</li><li>○ Virtual teams</li></ul></li><li>• Gender discrimination</li><li>• Diversity &amp; inclusion</li></ul>	<ul style="list-style-type: none"><li>• Text Analytics</li><li>• Experiments</li><li>• Large secondary data</li></ul>
Leo Schmallenbach	<ul style="list-style-type: none"><li>• Technological innovation</li><li>• Knowledge work</li><li>• Stars and teams</li><li>• Social categories</li></ul>	<ul style="list-style-type: none"><li>• Archival data</li><li>• Experiments</li><li>• Surveys</li></ul>
Nicola Schmitt	<ul style="list-style-type: none"><li>• Technological Innovation</li><li>• Artificial Intelligence in Organizations</li><li>• Organizational Behavior (incl. Gender Discrimination)</li></ul>	<ul style="list-style-type: none"><li>• Large secondary data</li><li>• Experiments</li><li>• Surveys</li></ul>
Nils Schweikard	<ul style="list-style-type: none"><li>• Teamwork</li><li>• Creativity</li><li>• Artificial Intelligence</li><li>• Digitalization</li></ul>	<ul style="list-style-type: none"><li>• Experiments</li><li>• Surveys</li><li>• Archival data</li></ul>

Himani Singh	<ul style="list-style-type: none"> <li>• Creativity and knowledge processes</li> <li>• Gender, diversity, and inclusion</li> <li>• Organizational behavior</li> </ul>	<ul style="list-style-type: none"> <li>• Experiments</li> <li>• Surveys</li> <li>• Qualitative methods (e.g., interviews)</li> </ul>
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### **Marc Lerchenmüller**

My primary stream of research pertains to the economics of innovation in general and technology development in particular, including ensuing entrepreneurial activity. I examine, for example, how individuals' and organizations' strategic adaptation to competitive conditions influences the pathway to innovation and entrepreneurial outcomes. My second stream of research is at the intersection of the management and sociology of science, with a focus on causes of the gender gap in science and scientific innovation more broadly.

I supervise Master theses on these topics and I am also open to suggestions in related areas. I supervise both theoretical theses as well as empirical theses with a focus on data science and large-scale archival data.

### **Lena Rudat**

I am interested in research on gender and the future of work. To this end, I work with data on online labor markets (e.g., Upwork) and study the role of gender in this context. Furthermore, I have designed and implemented a team experiment studying leadership in virtual teams. Methodologically, I have worked with experiments and big data. I am particularly interested in natural language processing (NLP) as a tool for answering pressing research questions.

I supervise Master theses in the realm of psychology, information technology and gender. I am also open to suggestions in related areas and look forward to your ideas. I supervise quantitative empirical theses based on large-scale datasets and experimental designs.

### **Leo Schmallenbach**

My personal research interests focus on the influence of social categories and processes on knowledge work at different levels of analysis. I examine, for example, the effect of star inventors on knowledge recombination in teams or the influence of mentors on early-career researchers. I am further interested in how teams and individuals behave in extreme situations characteristics by high psychological pressure or extraordinary circumstances. Beyond that I am fascinated by new technologies and trends that have the potential to change entire industries or influence the society as a whole.

I supervise Master theses at the intersection of psychology, sociology, and innovation management. I am also open to suggestions in related areas. I supervise quantitative empirical theses based on large-scale datasets and experimental designs.

## **Nicola Schmitt**

My primary stream of research focuses on the drivers and consequences of innovation, with particular emphasis on organizational adaptability and the design of innovation strategies in dynamic, uncertain, and technologically evolving environments, including times of crisis. Furthermore, I am interested in the organizational application of AI, specifically the role of human-AI collaboration in shaping outcomes at different organizational levels, such as the signaling effects of AI implementation on employees' perception of job security.

I supervise Master theses in these topics, and I am also open to suggestions in related areas. Methodologically, I supervise quantitative empirical theses based on datasets and experimental designs.

## **Nils Schweikard**

My research focusses on how new technologies influence (individual and team) work, with a focus on creative processes. For example, I investigate the impact of Generative AI on idea generation and evaluation processes, and the impact of decision-making structures on virtual teamwork. More broadly, I am interested in creativity and innovation, artificial intelligence, digitalization, the future of work, change management, and the pharmaceutical industry.

I supervise Master on these topics and am open to suggestions in related areas. I supervise mostly quantitative empirical theses based on experimental designs and datasets.

## **Himani Singh**

I'm interested in the dynamic construction of work, knowledge, and employment relationships in organizations. My research interests range from creativity and knowledge processes in teams to social and relational influences on performance. For instance, I examine what drives individual and team creativity in organizations, as well as the favorable evaluation of creative outputs. I'm also interested in the impact of new developments in the world of work, for instance, technological advancements, the rise of the gig economy, and greater flexibility in employment relationships.

I supervise Master theses on these topics, and I am also open to suggestions in related areas as well as broader topics of relevance to organizational behavior, particularly from a psychological perspective. I supervise both quantitative (e.g., surveys, experiments) and qualitative (e.g., interviews) empirical theses.

## **Access to data**

The chair routinely works with large scale datasets on patents and scientific publications that allow addressing research questions in the fields of innovation and organization. These data cater to the use of statistical programming, using packages like Stata, R, and Python. In addition, we have access to international survey data on innovators. The chair also supervises projects that involve primary data collection (e.g., through surveys and interviews). Collaborations with industry or research organizations (e.g., ZEW, Max Planck, Fraunhofer Institutes) to get access to relevant data are highly welcome.

## **Application**

At the Chair of Organization and Innovation applications for Master- and Diploma Theses can be submitted on the **first Wednesday of each semester's lecture period**.

## **Master Thesis Colloquium**

The Master-Colloquium allows students to present the outline and specific topics of their thesis and to discuss the contents with other master students and members of the chair. The aim is to support the thesis development process and to identify possible areas for further development. Participation and presentation in the colloquium are obligatory. The presentation is not graded.

By the end of the module students developed

- academic presentation skills
- strengthening of critical thinking with respect to scholarly work
- knowledge of important challenges within the research process.

The dates for the master thesis colloquia will be announced online and through interactions with your supervisor. Please approach your supervisor after one month of writing the thesis for setting up an appointment for your presentation. The contact person for questions regarding the procedure of the master thesis at our chair is *Prof. Marc Lerchenmüller*.

## **Guidelines for Scientific Research**

Seminar papers as well as diploma, bachelor and master theses must meet the formal guidelines for scientific research (see Guidelines for Scientific Research).

## **Confirmation of Submitted Master Thesis**

If you need a confirmation about your master thesis' submission, please use the respective document (*conformation submission*), which is available for download from our homepage, complement it, and bring two copies with you at the submission day.