





# Registration

- The participation in this seminar is free of charge, as the seminar costs will be covered by the Institute of Business Economics and Industrial Sociology as well as the Faculty of Mechanical Engineering and Economic Sciences of TU Graz.
- Registration is open from now until December 20th 2021.
- The number of participants is limited to the max. of 12 persons. The "first registration - first serve" principle will be applied, as long as the participants fit into the target group.
- Registration is managed by Amila Omazic, BSc. MSc. E-mail: <u>amila.omazic(at)tugraz.at</u>

#### Venue

Graz University of Technology BWL Seminar Room (NT02100) Kopernikusgasse 24, 2<sup>nd</sup> Floor 8010 Graz, Austria

# Organisation

Graz University of Technology Working Group "Industrial Marketing, Purchasing and Supply Management" of the Institute of Business Economics and Industrial Sociology

For any questions regarding the seminar please do not hesitate and contact

Prof. Dr. Bernd M. Zunk

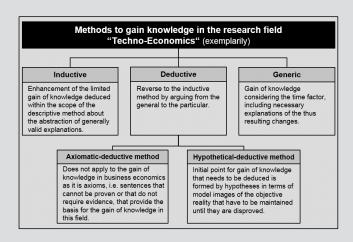
E-Mail: bernd.zunk(at)tugraz.at



# Techno-Economic Research Methods

Methods are considered crucial to every scientific discipline as they ensure rationality and verifiability of scientific findings.

At a glance, the following figure illustrates a selection of the **key methods** within Business Economics (and, thus, of Techno-Economics and Management Science). Of course, in Business Economics/Techno Economics/ Management Science not only abstract methods but also models that reproduce complex economic realities in a simplified way are indispensable.



This might give you a short impression on why this research seminar could be useful for your future research and teaching career.





# Inter-University Research Seminar



Date: 27. & 28.01.2022

Three Austrian Universities of Technology One Force - United Through Excellence

#### Goal of this Seminar

Gaining insights into...

- ... **NCA** (Necessary Condition Analysis) and comparing the outcomes with **OLS** (Ordinary Least Squares). The participants will be initially instructed on the rationale and will work on the data in the rest of the workshop. The results of NCA and OLS are compared and interpreted.
- ... polynomial regression with response surface analysis. The participants will be instructed on the rationale and will work on the data in the rest of the workshop. The results of the polynomial regression will be interpreted.
- ... qualitative measurements to detect future patterns. The participants will be again instructed on the rationale and will work on the data in the rest of the workshop. The outcomes of the World Cafés and Delphi's are shown for interpretation.

# **Target Group**

This seminar is designed for **IEM scholars** as well as **Master students** in their **last year**, **PhD students**, **early-stage researchers or experienced faculty** who are planning to apply the presented knowledge in their social science research projects and teaching.

### Schedule

Day 1: Thursday, January 27th 2022

Session 1-3 (9:30am to 12:15am)\*

 NCA (Necessary Condition Analysis) and OLS (Ordinary Least Squares)

#### Lunch

**Session 4-7** (1:30pm to 5:30pm)\*

• Polynomial regression and surface analysis

Day 2: Friday, January 28th 2022

Session 8-10 (9:30am to 12:15am)\*

- "Wrap-up" quantitative measurements
- Introduction to qualitative measurements, World Cafés and Delphi studies

#### Lunch

Session 11-14 (1:30pm to 5:30pm)\*

 World Cafés and Delphi studies practical examples and interpretations

\*Note:There will be a 15 minute break after each session.

### Lecturer

Dr. Klaas Stek is an assistant professor at the Faculty of Behavioural, Management and Social Sciences at the Department of Entrepreneurship and Technology Management of the University Twente (UT) in Enschede,



(The Netherlands).

Klaas Stek obtained his PhD in 2021 on competences of purchasing and supply managers in innovation sourcing. Klaas Stek is a trail blazer of the **European Lab for Innovative Purchasing and Supply Education** (ELIPSE) at the UT. He is a member of several European research projects in which he utilised quantitative and qualitative research methods.

# Teaching Experience

Dr. Klaas Stek is a lecturer and coordinator in the Industrial Engineering and Management (IEM) Master's programme and the course Purchasing Management at UT. He lectures Bachelor students in the International Business Administration (IBA) and the IEM track. Furthermore, he is a Master thesis supervisor in the IEM and IBA track at UT.