

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 January 9th 2023.
- The number of on-site 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

The seminar will take place in a hybrid form. Include information whether you would like to participate online or on site.

Graz University of Technology BWL Seminar Room (NT02100) Kopernikusgasse 24, 2nd 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: <u>bernd.zunk(at)tugraz.at</u>



Techno-Economic Research Methods

Methods are considered crucial to every scientific discipline as they **ensure rationality and verifia-bility 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, both abstract methods and models used to reproduce complex economic realities in a simplified way are indispensable in Business Economics/ Techno Economics/ Management Science.



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: 27.01.2023

European Professors of Industrial Engineering

and Management - EPIEM



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**, **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

Friday, January 27th 2023

Session 1-2 (9:30am to 11:00am)

- Research Philosophies and Research Methods in General
- Overview of when to use Polynomials, SEM, NCA, World Cafe and Delphi, Part I

Session 3 (11:15am to 12:00pm)

• Overview of when to use Polynomials, SEM, NCA, World Cafe and Delphi, Part II

Lunch

Session 4-5 (1:00pm to 2:30pm)

• Choosing two Methods and work out the first Method of Choice (Theory and Exercise)

Session 6 (2:45pm to 3:30pm)

• Work out the second Method of Choice (Theory and Exercise)

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.