# Seminar at Chair of Statistics & Econometrics, JLU Gießen SS 2021

## **TOPIC:**

# Business Forecasting based on advanced analytics: One corner stone in a data-driven economy

#### Lecturer:

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What is Machine Learning? And what is AI? Automated processes, robots and artificial intelligence will remain and become more and more important. Nerds' and data specialists are the new heroes of our days.

To make you part of the play and to enable you to shape the future of data-driven decision making in companies and across society, the seminar will deal with business forecasting as one central element in digital transformation.

We will examine the relevance of forecasting using advanced analytics – e.g. machine learning and AI - for firms and the economy. You as a participant will present your own (empirical) work. The aim of the seminar is to enable the participants to

- understand data: its importance and the handling (cleansing, pre-processing, preparation)
- deal with / handle methods from the field of predictive analytics
- train presentation of D&A exercises for management communication

Not everyone has to be or become a data scientist, but a future (digital) leader should understand the difference between business intelligence/reporting and advanced analytics.

# 1. Organizational information

### **Important Dates:**

- Kick-off to be announced: Topic Presentation & Allocation
   Location: Licher Straße 68 or WebEx / Meet Session Dial in details will be provided in this
   case by email
- Presentation of students' work to be announced
  Location: Licher Straße 64 or WebEx / Meet Session Dial in details will be provided in this case by email
- Final deadline for seminar paper submission to be announced

### Organization & Grading:

- Topics will be allocated to the students during the kick-off session.
- Students will be graded based on these four parts of the coursework:
  - o (1) a written seminar paper (65%) as well as
  - o (2) an oral presentation of the written paper, and the co-presentation (35%).
- During the Kickoff meeting we will also allocate co-presentations

#### Guide for written work:

- Language: English, German
- There are word or LaTex templates available. (Please find them here: <a href="https://www.uni-giessen.de/fbz/fb02/fb/professuren/vwl/albert/LehreVWLVI/dokumente/Leitfaden">https://www.uni-giessen.de/fbz/fb02/fb/professuren/vwl/albert/LehreVWLVI/dokumente/Leitfaden</a>)
- It is recommended to use a citation manager, such as Mendeley, Citavi, Zotero, etc.
- The paper should have at least 10, but no more than 15 pages.
- Revising the paper after the presentation is allowed and encouraged. However, it must be handed in at the day of the final deadline.
- When handing in your work, include a pdf-Version of the written paper and the R files (if applicable).
- You should hand in your paper via Mail to Frauke Schleer-van Gellecom and Elena Tönjes (see contact details below).

### Guide for the presentation of the written paper:

- For your presentation, you have 25 30 min. The co-presentation can last from 5 to 10 minutes. The discussion may take 10 to 15 mins.
- The presentation must be either in English or German.
- Before the presentation date, please send your slides to Frauke Schleer-van Gellecom or Elena Tönjes.

#### **Contact details:**

• For questions, please refer to Dr. Frauke Schleer-van Gellecom (frauke.schleer-van.gellecom@de.pwc.com) or Elena Tönjes, (Elena.Toenjes@wirtschaft.uni-giessen.de)