Proposal for Collaboration on Data Science

The fast adoption of advanced technologies by research communities enables new ways for generating, processing, structuring, and collaborative use of data. This has not only significant impact on the amount of data produced, but also on the variety of data formats and the velocity of data generation and handling. Consequently, scientists and research organisations have to cope with organizational challenges to manage data effectively and efficiently to support excellent research. Furthermore the focus of information infrastructures shifts towards collaborations, which accelerate the development of decentralized, globally distributed data repositories and likewise distributed data analysis.

In essence, data has become a major research asset. Although this is well known to research institutions and communities, many struggle with meeting the growing requirements regarding methodologies, knowledge, and infrastructures. The implementation of data management policies is a prominent example. Many institutions specify such policies, but the execution remains challenging, and is, consequently, not well understood or implemented. This pertains, inter alia, to the realisation of data management plans, to the reliable long-term archiving of data, or to the reproducibility of data. It is therefore essential for research organisations to address these challenges and define a concept that incorporates scientific requirements and strategic demands. This includes method development, infrastructure and skill training.

A collaboration in HeKKSaGOn could consider the following aspects:

- Strategies for research data management at universities
- Methods for data management and analytics
- Research infrastructures for data management and analytics, e.g. in data-intensive computing or storage services for large scientific data
- Teaching and training on data science related topics
- Security, data privacy, legal and ethical questions

PI
Prof. Dr. Ramin Yahyapour
Chief Information Officer of University of Göttingen
Managing director of GWDG (a joint compute and IT competence center of the university and the Max Planck Society)
https://www.gwdg.de/about-us/organization/management/ramin-yahyapour

Contact person
Dr. Tanja Falkowski
Head of International Relations
University of Göttingen
Tanja.Falkowski@zvw.uni-goettingen.de