

House of Computing and Data Science at Universität Hamburg

Setting the Stage for Research Software Engineering

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Agenda



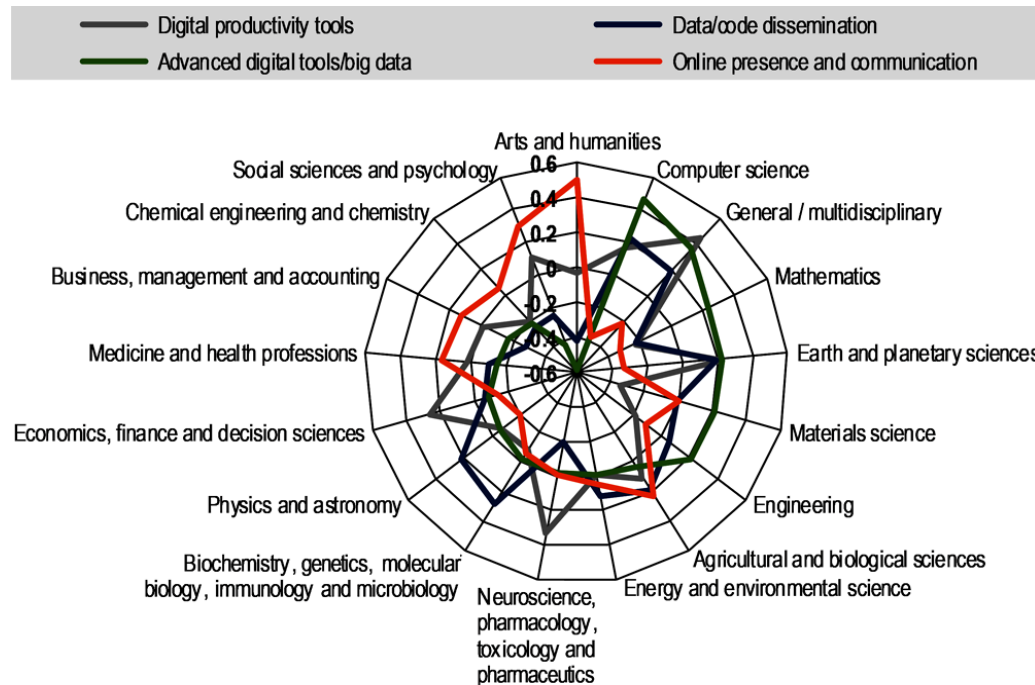
- 1 Motivation
- 2 Structure and Embedding
- 3 Portfolio

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Motivation



Digital transformation happens heterogeneously



Notes: This is an experimental indicator. This figure presents average scores for four latent factors representing different facets of digitalisation for each scientific field. The factor analysis is based on responses by scientists to 36 questions relating to digital or digitally enabled practices. These are combined in four synthetic indicators that have been normalised to have overall zero average and identical variance.

How to read this figure: computer science's highest score for the factor representing use of advanced digital tools (green line) represents high relative intensity on this facet. Conversely, a low relative intensity is seen on the digital facet representing online presence and communication (red line) for scientists in this area.

Source: Bello, M., & Galindo-Rueda, F. (2020). *Charting the digital transformation of science: Findings from the 2018 OECD International Survey of Scientific Authors (ISSA2)*. OECD. <https://doi.org/10.1787/1b06c47c-en>

StatLink <https://doi.org/10.1787/888934075906>

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Structure and Embedding

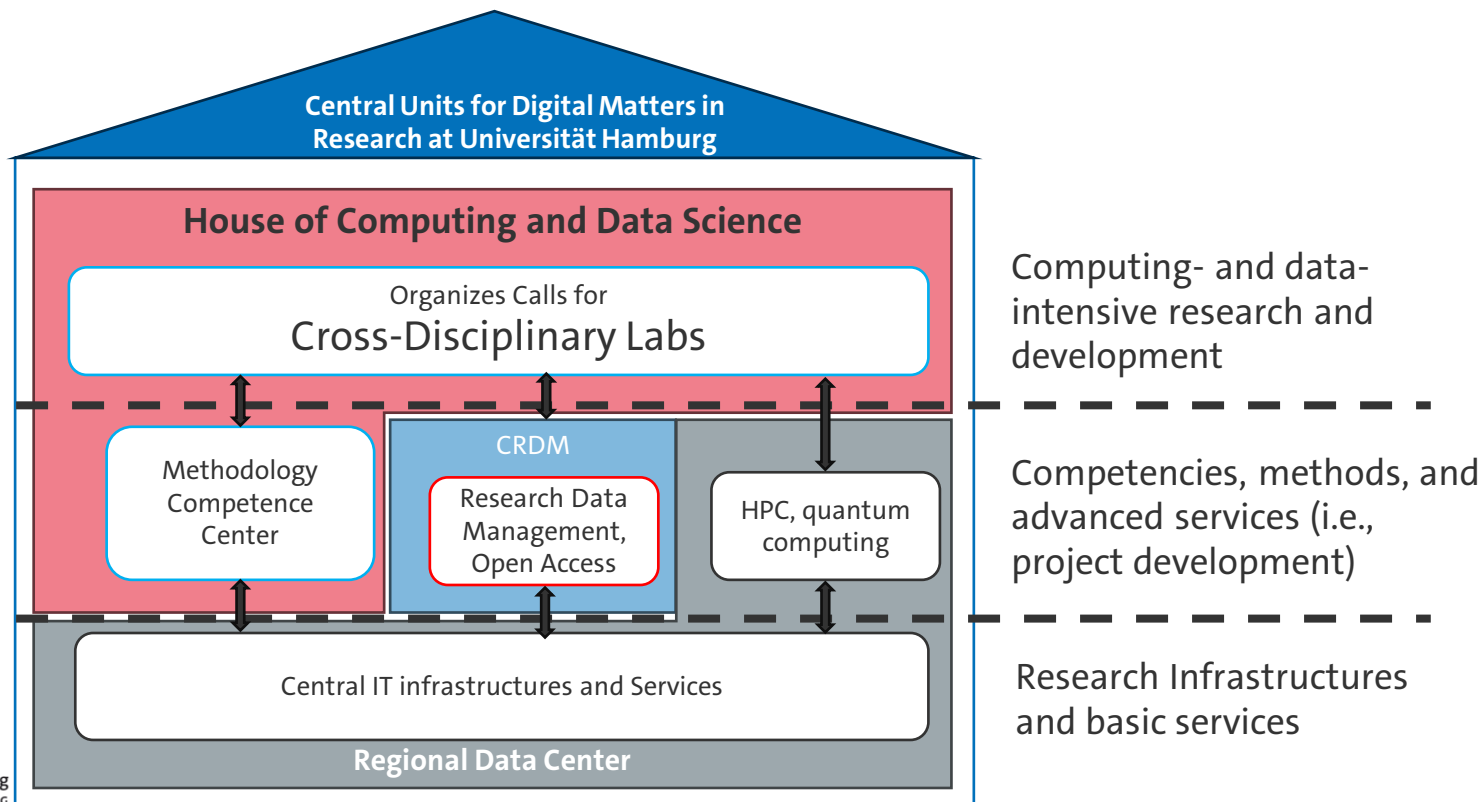


House of Computing and Data Science as Solution



- central unit of the Universität Hamburg
- supports interdisciplinary research and application of innovative digital methods
- coordinates and supports the implementation of the digital strategy in research at the Universität Hamburg
- fuels adoption, use, and research of digital methods with Methodology Competence Centre
- offer a forum for the exchange of information and collaboration at the interface between methodological sciences and applied sciences in the Cross-Disciplinary Labs

Structure of the House of Computing and Data Science



Methodology Competence Centre



Python / Gitlab
for everyone

- Teaching in the field of AI / ML / Software Engineering etc.
- Consulting for application of digital methods
- Implementation and conceptualization of research software
- Application of data science as a service

Musicology:
scraping of song
texts from the
internet

Quantitative law
studies: chains of
citations in court
rulings

3

Portfolio



Consulting in the Methodology Competence Centre

- Clarification of research subject
- Methodological state of the art in the application domain
- Outline of requirements and pointing to potential solutions

01

Offerings of HCDS

Service- & Third-Party Funded Projects

- Systematic development of projects based on consulting
 - Check for potential of co-financing & third-party funding
 - Systematic project development with application discipline
- „Digital knowledge sociological discourse analysis“
cooperation with emp. Cultural studies

02

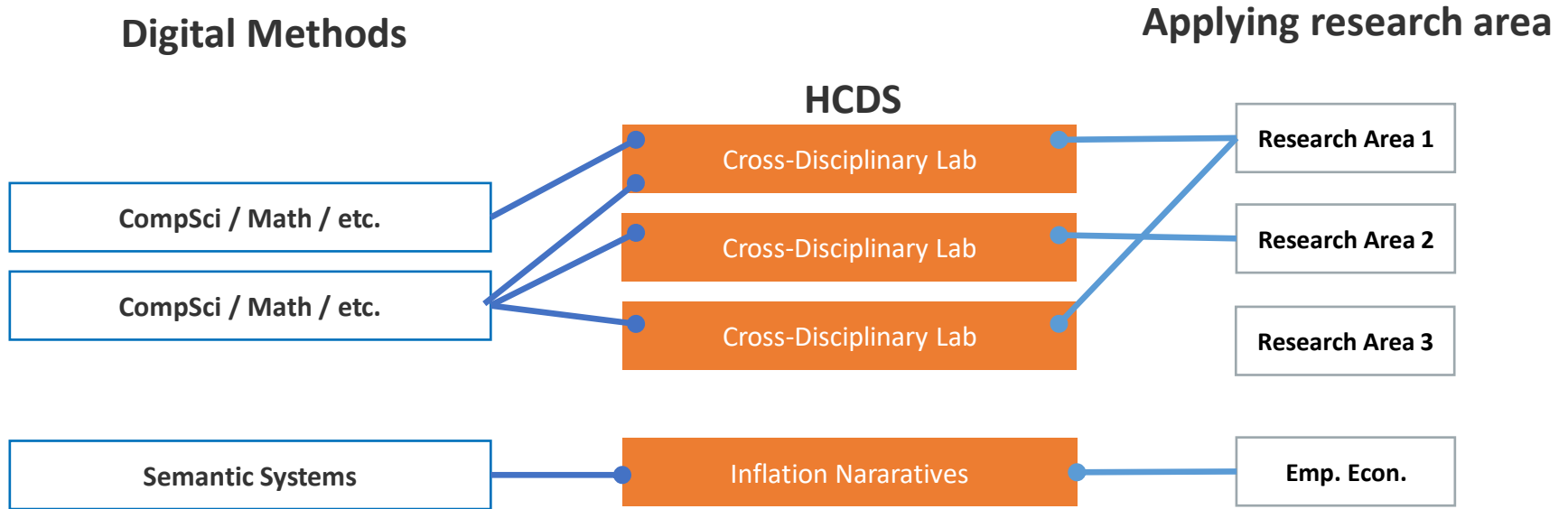
Offerings of HCDS

Cross-Disciplinary Lab

- Interdisciplinarity on par
- Aim for long-lasting, interdisciplinary cooperation
- Aim of knowledge generation in application discipline and methodological discipline
- Feedback in methodology competence centre

03

Cross Disciplinary Labs (CDLs) – Interdisciplinary cooperation on equal terms



Predicting COVID-19 Vaccination Uptake from Public Discourse

A Machine Learning Approach

Cooperation Partners

- Hamburg Center for Health Economics, Faculty of Business Administration
- English Department, Faculty of Humanities



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