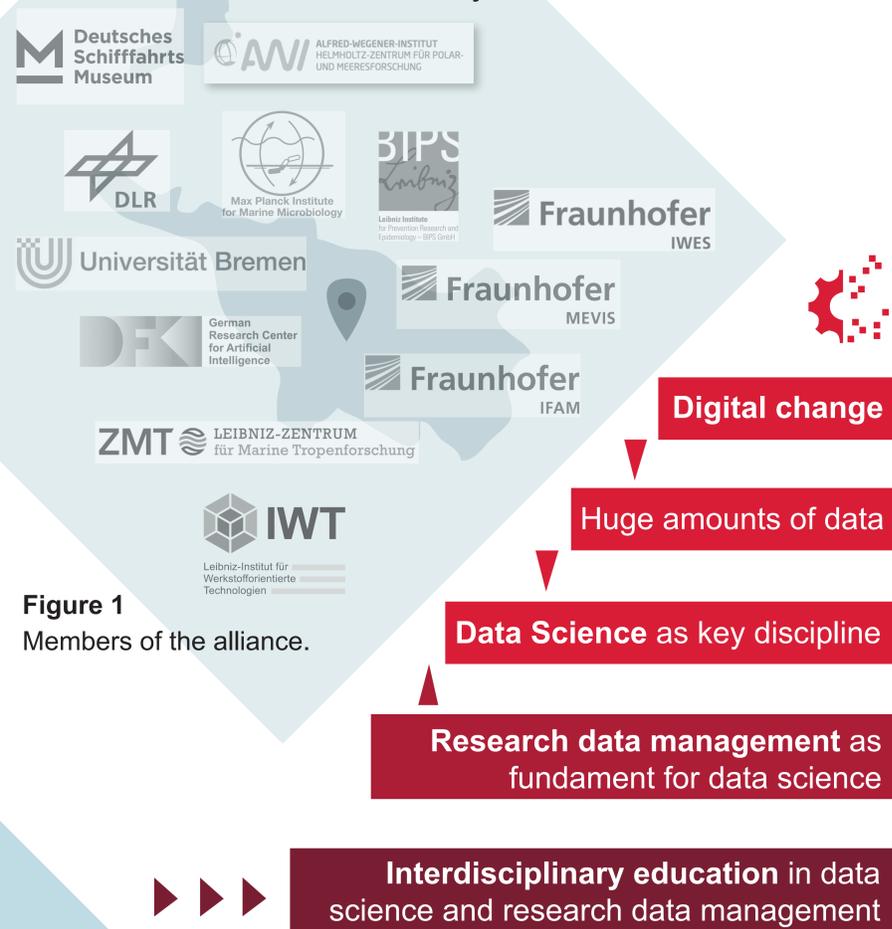


Initiative of the U Bremen Research Alliance: Interdisciplinary Graduate Program focusing on Research Data Management and Data Science

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1. U Bremen Research Alliance

The U Bremen Research Alliance (www.uni-bremen.de/research-alliance/) comprises the University of Bremen and eleven non-university research institutes in Bremen and Bremerhaven (see Figure 1). The alliance offers an excellent infrastructure and combines competencies of different disciplines which fosters creativity and innovative ideas. The network benefits from joint activities. Apart from other projects, an interdisciplinary graduate program focusing on research data management and data science is currently initiated.



2. Demand for doctoral training and education in research data management and data science

As part of the digital change a novel discipline has been developed – Data Science – which is applied in all research fields and therefore, often termed as a new key discipline (Society of Informatics e.V., 2019). Without an open data culture (Nosek et al., 2015), a good stewardship of data (Wilkinson et al., 2016) and a profound knowledge about the analytical methods, Data Science applications are not feasible nor reliable. A recent investigation by the Council for Information Infrastructure (RfII) showed that quality (and hence quality control) of scientific data needs to be enhanced in Germany.

In order to strengthen the skills and competencies in data science, data management and data literacy the U Bremen Research Alliance initiated a discipline-overarching education program for doctoral students (see Figure 2).

Interdisciplinary education in data science and research data management

Figure 2 Demand for education in data science and research data management.

3. Curriculum and Outlook

The multidisciplinary working group “Data Science” established as part of the U Bremen Research Alliance, accompanies the development of a curriculum for the graduate program. In order to consider individual perspectives and needs a feasibility analysis is conducted within the alliance.

“The only constant is change!”

Data science and research data management are highly dynamic and rapidly developing fields. The selection of innovative relevant topics will be assured through continuous cooperation and exchange within the international community (see Figure 3). A preliminary timeline is given in Figure 4.



Figure 3 Strategy for developing the curriculum.



Figure 4 Timeline for the years 2020 and 2021.

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