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Statement of Problem

Open and transparent research practices are increasingly recognised as an important component of research integrity, and changes in the digital landscape offer significant opportunities to support this. There has been an exponential increase in the diversity, size and speed of data being collected, and other research materials being generated across a broad range of disciplines and have a direct impact on the societal challenges we face.

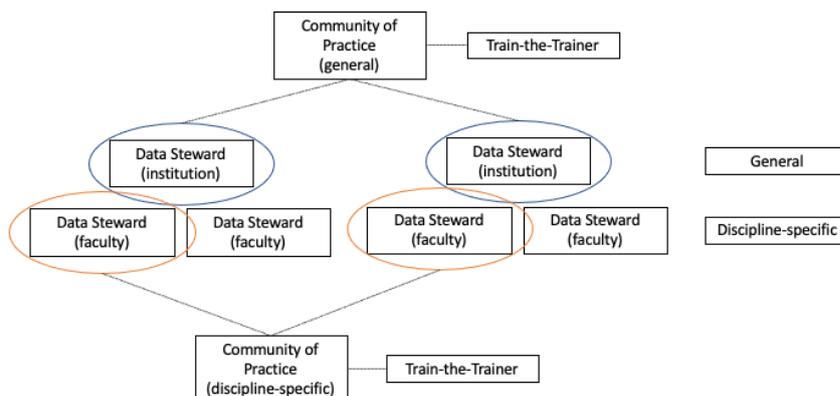
However, this growth has not been matched by a corresponding increase in the infrastructure, training and support available to researchers to ensure these various elements of the research process are produced to a high standard, and shared effectively and ethically. What is available varies between institutions, and is not well coordinated across these institutions.

There is therefore a clear need to reorganise the way UK Higher Education Institutions and Research Performing Organisations support and enable research transparency and integrity. This needs to be carried out in a coordinated fashion, with a degree of harmonisation of approaches to training and support across the UK (in a similar way to how degrees are accredited and evaluated).

This will require:

- Recognising the importance of key roles (e.g., Data Stewards and Research Software Engineers) in enabling reproducible, efficient and effective research.
- Creating structures to support these key roles at a general and discipline-specific level, and at a local and national level (see figure).
- Training researchers and managers to play their part in this and to enable them to make the most of this approach.
- Creating communities of practice - at various levels - to share effective practice, ensure application of FAIR principles, and support a common approach.
- Engaging with existing organisations and structures (e.g., the Society of Research Software Engineers) so that we can build and extend these networks.

Figure: A national structure to support research transparency and integrity



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