EBSCO

FAIR Data Principles

In 2020, there will be around **40 trillion gigabytes** of data...or 40 zettabytes. As we capture more and more data, good data management principles will be key to not becoming overwhelmed.

- https://techjury.net/stats-about/big-data-statistics/#gref

FAIR is a set of guiding data management principles created by a diverse community of scholars, librarians, archivists, publishers and research funders who sought to facilitate change towards improved knowledge creation and sharing.

The FAIR data principles were created to support the reuse of scholarly data through good data management, particularly through enhancing the ability of machines to automatically find and use data.

> **Good data management is not a goal in itself**, but rather is the key conduit leading to knowledge discovery and innovation, and to subsequent data and knowledge integration and reuse by the community after the data publication process.

- The FAIR Guiding Principles for scientific data management and stewardship, Mark D. Wilkinson et al.#, March 2016

The four guiding principals of FAIR are:

FINDABLE

Data and metadata should be easily findable by both humans and machines. This includes being assigned a unique identifier, described with rich metadata and indexed correctly.

ACCESSIBLE

The data not only needs to be findable, it also needs to be accessible; this could include everything from accessing immediately through to details of how to gain authentication or authorization where required.

INTEROPERABLE

Data should be interoperable, using a formal, accessible, shared, and broadly applicable language for knowledge representation. If data is siloed, then elements of it can be inaccessible or take a long time to access.

REUSABLE

Ensuring data is reusable (and with clear guidelines on its usage) means that those who need to access it later on can do so easily and efficiently (and with confidence that it is accurate) regardless of how long, or in what format it has been stored.

Why is FAIR so important?

- **Clarity** on what good data management looks like and who is responsible for it
- **Maximize** the value obtained from your data
- **Visibility and accessibility** of data for those who need it, particularly in the case of those who fund research
- **Long-term care** and stewardship of data
- A major outcome from FAIR will be the **improvement in the quality** of digital publications

Find out more about how EBSCO & Perpetua by Arkivum can help you follow the FAIR principles

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