“Metadata is structured information associated with an object for purposes of discovery, description, use, management, and preservation”

(National Information Standards Organization, 2008)

METADATA IS UBIQUITOUS AND PROLIFERATIVE

METADATA IS EMBEDDED OR SUPPLEMENTAL

METADATA RESULT FROM AUTOMATIC OR MANUAL INPUT

INTEROPERABILITY IS BASED ON METADATA

● Technical metadata
  [ex. version of producing device]

● Administrative metadata
  [ex. publishing date, rights and licenses]

● Use metadata
  [ex. number of downloads]

● Descriptive metadata
  [ex. title, author, keywords]

● Preservation metadata
  [ex. last checksum date]

From Excel to databases and semantic web knowledge bases, the more metadata you have, the better data management system you need.

FAIR data, good quality linked [open]data, mainly relies on rich, detailed, qualified, shared, standardized metadata.

HOW TO?
1. Be systematic, adopt rules, use controlled values
2. Describe your data completely and consistently
3. Use standards

Metadata and metadata standards creation, adoption and maintenance is a JOINT EFFORT within and between interest-based communities.

TOOLS TO BUILD YOUR OWN STRONG METADATA

FORMAT, TECHNICAL, INTERCHANGE STANDARDS: exif, IPTC, instrumentation specific standards...

VALUE NORMS, STANDARDS AND REFERENCES: ISO 8601, ISO 639-1, ISO 3166-1, thesauri, vocabularies, lists of authorities...


STRUCTURE STANDARDS AND SCHEMAS: INSPIRE, SDMX, Darwin Core, Dublin Core, PROV model, Datacite

More resources
http://www.dcc.ac.uk/resources/metadata-standards/list
http://rd-alliance.github.io/metadata-directory/standards

Contact and info researchdata.epfl.ch researchdata@epfl.ch