AIATSIS

PBC resources
Metadata

Metadata

What is metadata?

Metadata is often described as data about data. It is the information that describes or helps you use any kind of data.[1] This can be hardcopy books, reports, photos or born digital information including video recordings, word documents, databases or internet searches. Metadata can be of several types and gives you a snapshot of particular data. The type can be descriptive (title, keywords), structural (type, versions) and administrative (creator, permissions). Metadata makes it easier for you to find, understand and organise any data.[2] For example any google search will check metadata of websites to provide results for your keyword search.

Some metadata is automatically generated by computer programs, databases and applications.[3] For example digital cameras automatically embed metadata into each photo you take. These include a time stamp, camera and lens model, exposure mode, focal length and aperture value. A word document has the information on size, page numbers, word count, created, last modified, author etc. Metadata can also be manually created, updated and revised to keep its accuracy or to provide instruction on the use of the data. Some metadata is meant to help internal processes of an organisation, such as the location where a file can be found on the network. Other metadata is meant for external users, such as which organisation is the source of the data.

Different types of metadata

According to different characteristics and functions of metadata regarding native title resources, it can be divided into four types:[4]

Table 1: Types of metadata relating to native title collections

Types of metadata	Characteristics	Functions	Examples
Descriptive metadata (Figure 1)	Describing a collection, its sub-divisions, arrangements and resources.	Internal and external use. Helps users discover, identify, distinguish and choose the suitable collection items.	Labels identifying land claims. Containers could include: • Photos • Maps • Interview notes • Questionnaires • Ethics clearances • Consent forms
Rights metadata (Figure 2)	Relates to copyright and intellectual property rights, including Indigenous Cultural and Intellectual Property (ICIP), ethical protocols and standards, licensing and rights.	Internal and external use. Helps users clarify intellectual property rights of collections.	• Rights: copyright • Access and use: anyone can use and alter • Consent: is implied when attributing CC labels
Administrative metadata (Figure 3)	Showing general management information about collections	Internal use. Managing and administering collections and information resources	• Call number • Collection name • Collection date • Content
Technical metadata (Figure 4)	Including preservation metadata, digital file format information, file validation and permanency	Internal use guaranteeing that this information part of resources can be resurrected and updated in the future	• Title • Mimetype • EXIF • Resolution • Tags • Date created • Validity period • Location info

Figure 1: Descriptive metadata

Figure 2: Rights metadata
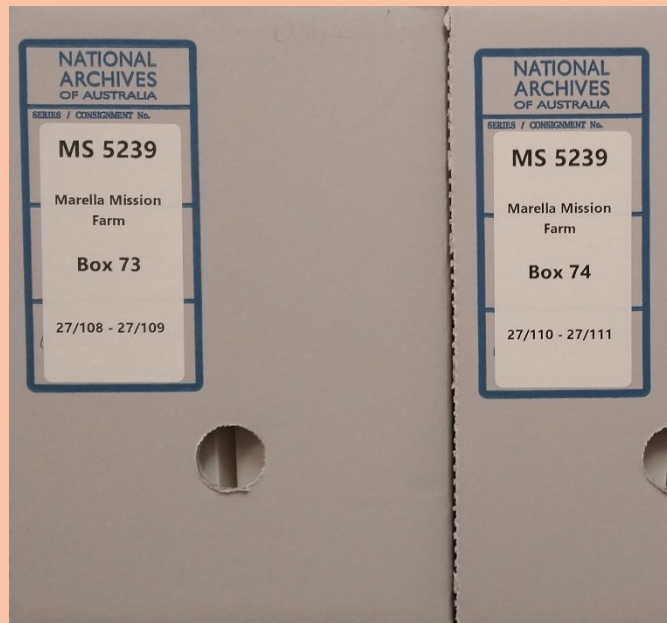
Figure 3: Administrative metadata

Figure 4: Technical metadata

Why do we need metadata?

Metadata is important because it is indexing data and resources. Imagine you want to buy spaghetti in a supermarket. The signs above the aisles tell you where you can find pasta, while the description on the various spaghetti packages and the price tag helps you decide which one you want to buy. All the metadata, namely aisle information, branding, tags, pictures, price and expiry dates provide references for you to find, decide and buy spaghetti. Similarly, facing vast collections on native title, metadata helps the owners and researchers organise, manage, preserve, find and re-access these materials.

Using metadata has the following advantages: [5]

- **Discovering resources:** As shown in the examples above (Figure 1), metadata offers the basic information of collections which helps you identify resources, compare them to other resources and distinguish one from another.
- **Organising and managing resources:** Defining them by criteria, metadata can group resources according to their different characteristics. This also makes it possible for you to create management lists, conservation plans and statistical data based on these different groups.
- **Preserving resources:** Playing a vital role in resource conservation and archiving, metadata enables you to track the basic information of collections such as the current preservation conditions and environment, the rights of use and the validation dates. All of these metadata elements make it an efficient use of resources.
- **Promoting future use:** With the help of standardised metadata, you and computer databases can identify and manage collections. This reduces the difficulty of managing these resources and increases their accessibility to your community. By doing so, timely metadata updates can be also easier via electronic platforms.

Metadata is the backbone of managing collections. Without it items might be irretrievable, unidentifiable or unusable.

How do we create metadata and keep it consistent?

Metadata generally contains some basic elements such as title, time, location, creator and brief description. To guarantee that information can be well searched and found in different situations or by different platforms, metadata is usually applied in a structured framework, called 'metadata schema'.[6] This is a standard way to describe metadata with specific rules and elements (e.g. a date mode, YYYYMMDD or DDMMYYYY). In collection management, usually more than one schema is developed to meet the needs of different element attributes. Based on these schemata, a standard Digital Asset Management (DAM), Collection Management System (CMS) or collection catalogue can be created. Sometimes a guide or application profile is used to help you understand and use the specific schema of an organisation.

What else should we be aware of when we use metadata?

When dealing with sensitive resources, ethical issues or copyright, you might want to add metadata about the use and protection of these resources. Some examples of what you could add to documents are:

- Please do not use, alter or circulate this document/photo/recording without the permission of name XX, telephone XX, email xy@soandso.com (details for copyright holder and ICIP holder).

- This document contains sensitive information only to be viewed by men/ women/ elders…

- This is a confidential document, please do not use, alter or circulate….

AIATSIS has produced a separate guide to metadata for digital media files[7] including photos, audio and video recording. This guide shows you how you can add metadata to digital files.

References

[1] Cambridge English Dictionary, *Metadata*, n.d., viewed 6 December 2020, <https://dictionary.cambridge.org/dictionary/english/metadata>.

[2] P Kononow, *What is Metadata*, 2018, viewed 24 November 2020, <https://dataedo.com/kb/data-glossary/what-is-metadata>.

[3] AB Zhang & D Gourley, 'The knowledge and skills required for creating digital collections', in *Creating digital collections: A practical guide*, Chandos Information Professional Series, Chandos Publishing, 2009, pp. 189–195, viewed 6 December 2020, <http://www.sciencedirect.com/science/article/pii/B9781843343967500122>.

[4] M Note, 'Metadata and information management', in *Managing image collections: A practical guide*, Chandos Information Professional Series, Chandos Publishing, 2011, pp. 107–133, viewed 7 December 2020, <http://www.sciencedirect.com/science/article/pii/B9781843345992500052>.

[5] 'Metadata and its importance in a data driven world', *Villanova University*, 24 October 2019, viewed 6 December 2020, <https://www.villanovau.com/resources/bi/metadata-importance-in-data-driven-world/>.

[6] S Higgins, 'What are Metadata Standards', *Digital Curation Centre*, 2007, viewed 23 April 2021, <https://www.dcc.ac.uk/guidance/briefing-papers/standards-watch-papers/what-are-metadata-standards>.

[7] AIATSIS, *Guide to Metadata and digital media files*, 2021.

Other resources

Opendatasoft, How to choose and describe metadata: The white paper, Opendatasoft, n.d., viewed 2 March 2021, <https://www.opendatasoft.com/hubfs/Guides_and_Whitepapers/14_white-paper-metadata/EN/white-paper_metadata_en.pdf?hsCtaTracking=81462116-a393-45d8-bec3-518483d7e17a%7C3a8d7c6c-1bd0-45b0-914d-3be4c7094d17>.

Creating metadata, Stanford Libraries, n.d., viewed 27 April 2021, <https://library.stanford.edu/research/data-management-services/data-best-practices/creating-metadata>.