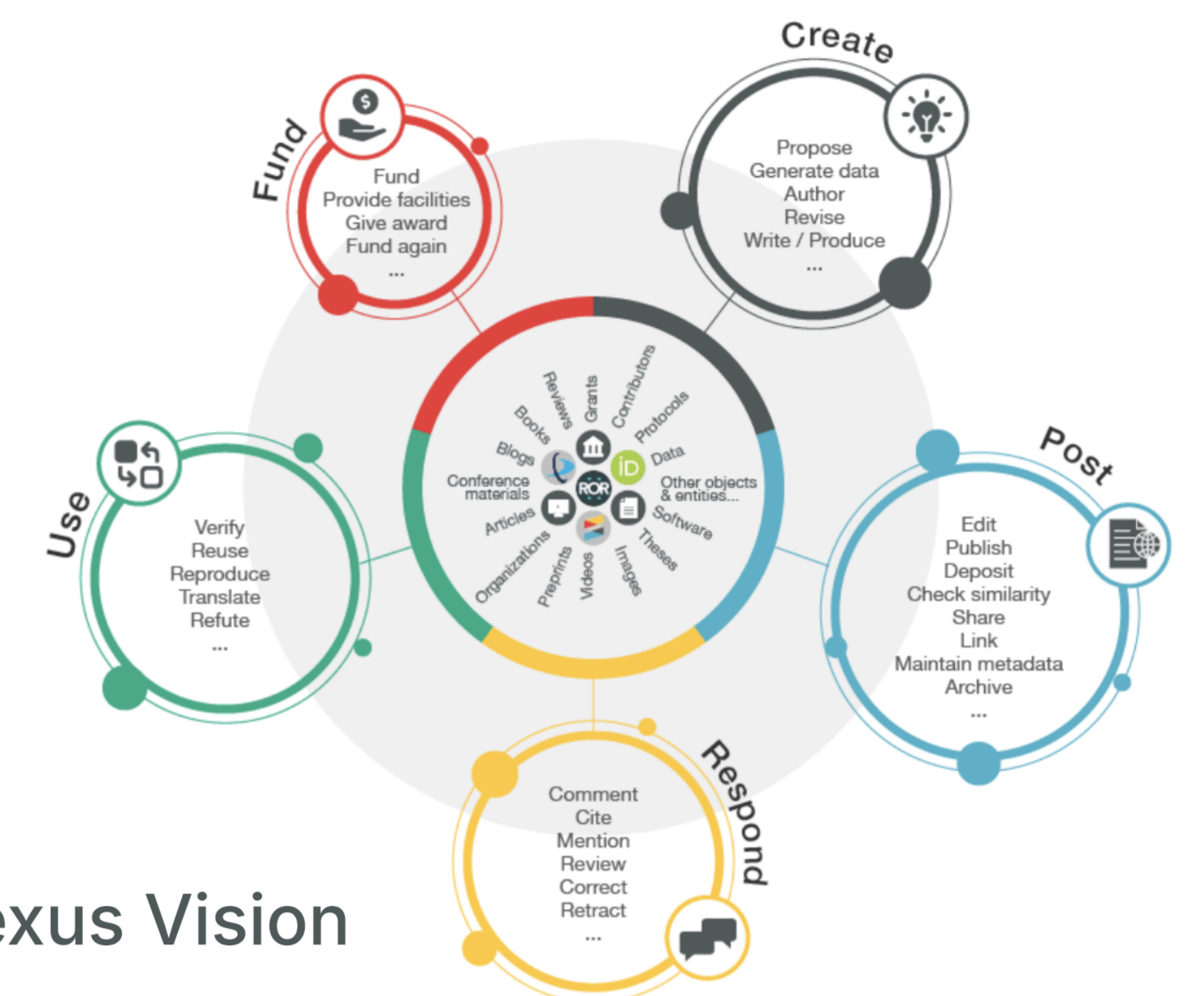


# Supporting discoverability and research integrity with best metadata practices

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Scholarly metadata is data about scholarly outputs. It plays a key role in increasing the discoverability of research outputs and can also act as signals about the trustworthiness of these outputs. Metadata forms the foundation of the research nexus, which is a rich and reusable open network of relationships connecting research organisations, people, things and actions. Crossref provides open infrastructure that enables its members to provide metadata, including DOIs, about scholarly outputs. Registering content with Crossref enables work to be discovered and used. Thousands of downstream services and tools use Crossref metadata. Therefore, the richer your metadata records are, the more visibility and more context there is likely to be of the work published by you.



Crossref Research Nexus Vision

## Which metadata elements are considered best practices?

### Abstracts

- Are the summary of a research work.
- Open abstracts can be used for detecting integrity issues at scale.
- Discovery systems use them to boost the work.
- Can be registered as a metadata element for almost all record types.
- If your content has multiple abstracts (e.g. different languages), provide them as separate abstracts and use the language tag to identify the language of each abstract.

### References

- Registering references means submitting reference lists as part of metadata records.
- References help users to find content, and this increases the chances of the content being read and used.
- References can be used to identify self-citations and citation manipulation.
- Supply DOIs with your references.
- Cite data, software, and other materials that support the content being registered.

### Affiliations and affiliation IDs

- Refer to the institution or organisation of the contributors of research outputs.
- Can be used to identify conflict of interest and track research output of organisations.
- Use ROR IDs as best practice to disambiguate affiliations.

### Funding metadata

- Can capture identifier (ROR ID) of funding organisation, award number or grant DOI, and name of funder.
- Establishes clear link between funding, research outputs, people, and organisations.
- Promotes transparency, increasing trust in published work, and can help identify conflict of interest.
- Publishers can include Crossref grant DOIs in their articles to connect publications with grants.

## What's new in the version 5.4.0 metadata schema?

- **Publication typing for citations:** members can now provide a "type" with the citations that they provide, to identify data, software, and other citations. This will help downstream users to identify these citations.
- **Versions:** members can now supply a version number to several record types (journal article, proceedings paper, posted content, dataset, dissertation, and more). The versioning update also includes an optional description field, and is repeatable to support multiple language versions.
- **Preprint status:** new status field that allows preprint to be flagged as "withdrawn" or "removed".

☀️ Want to begin using this schema? Take a look at the [transition guide](#) and more information [here](#) ☀️



Check your Participation Report to view how good is your metadata: <https://crossref.org/members/prep/>  
Follow this link to access the guide "Why metadata matters for research integrity and how to contribute"