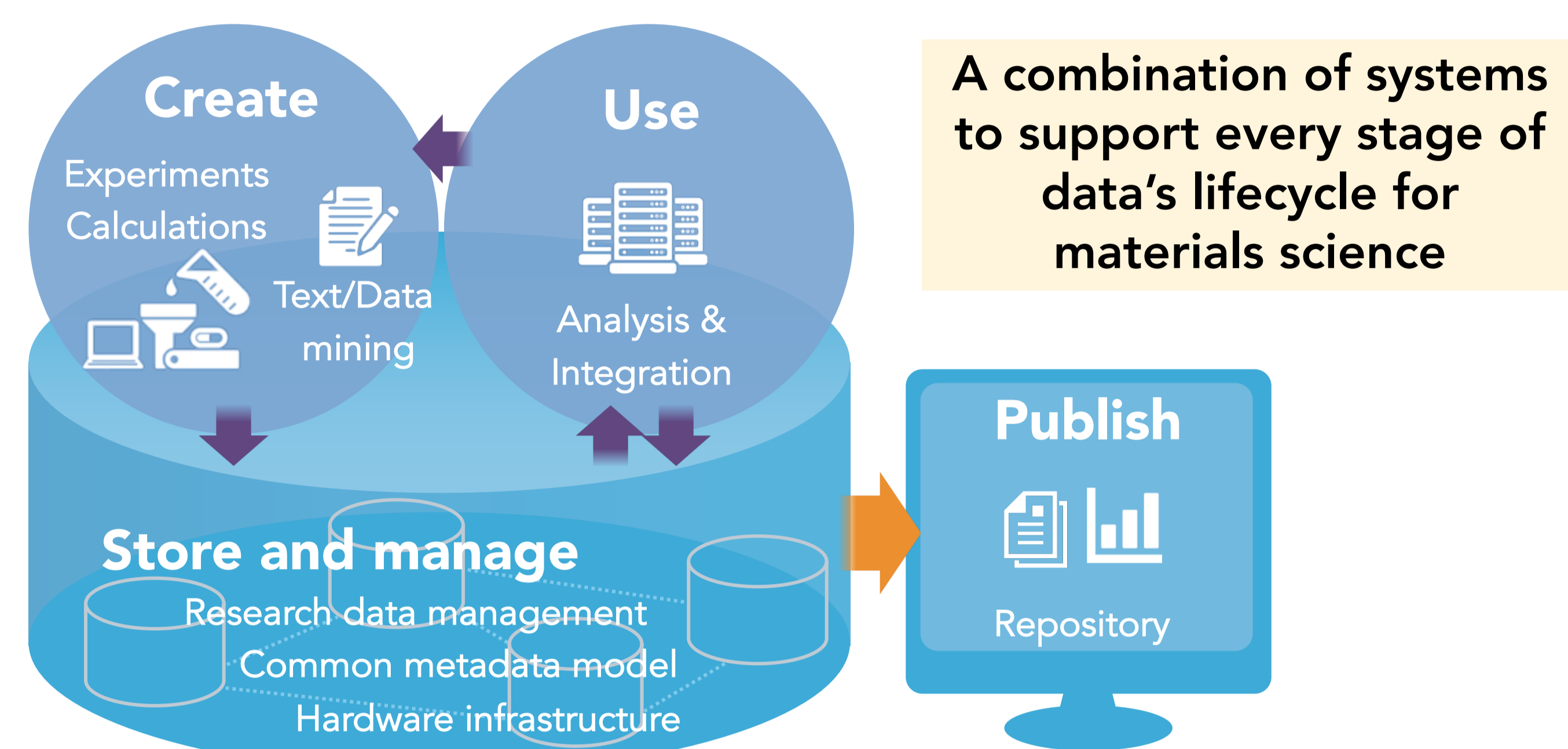


Materials metadata: as a custom schema, as directories, or in a data package

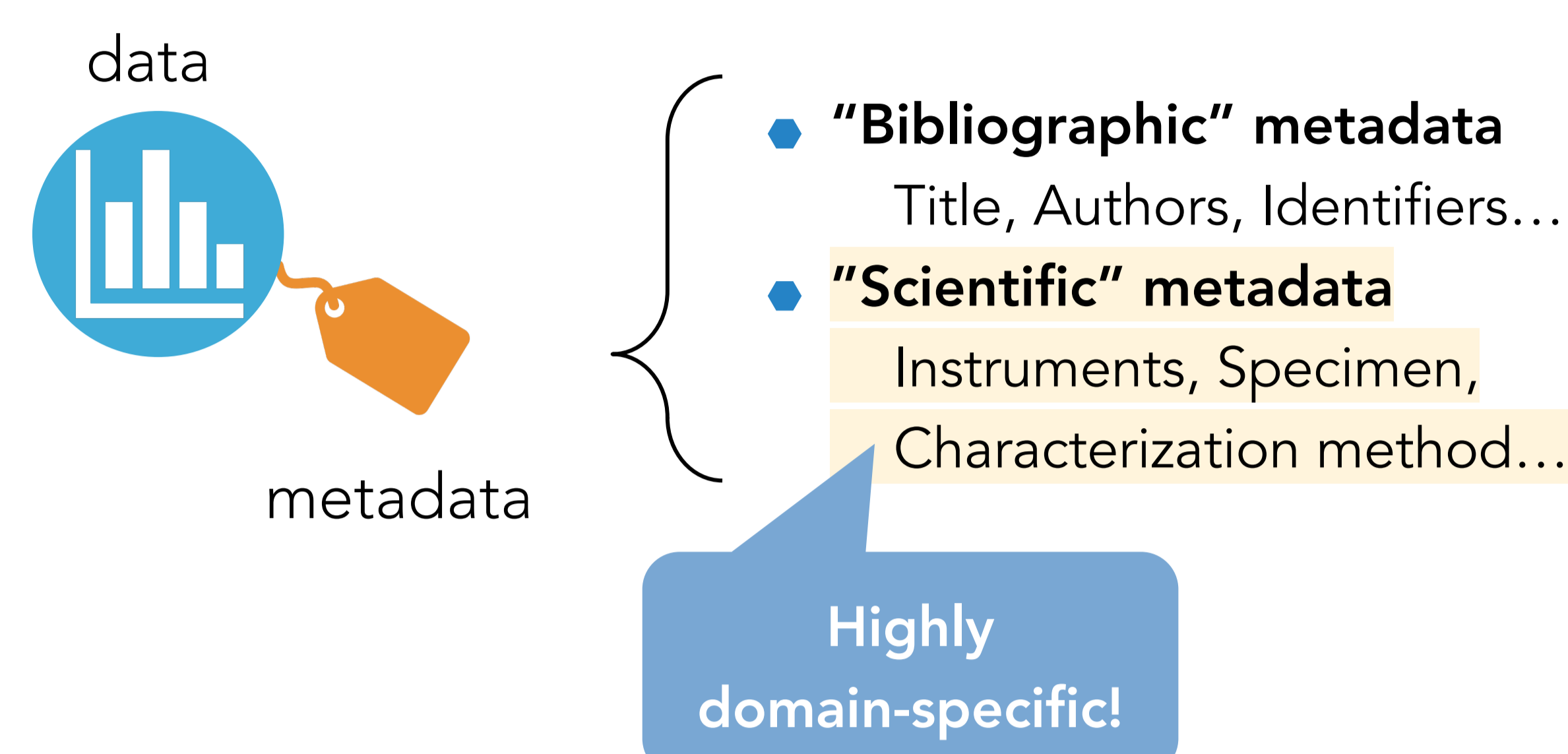
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Materials Data and Integrated System (MaDIS), National Institute for Materials Science (NIMS), Japan

We are developing a materials data platform

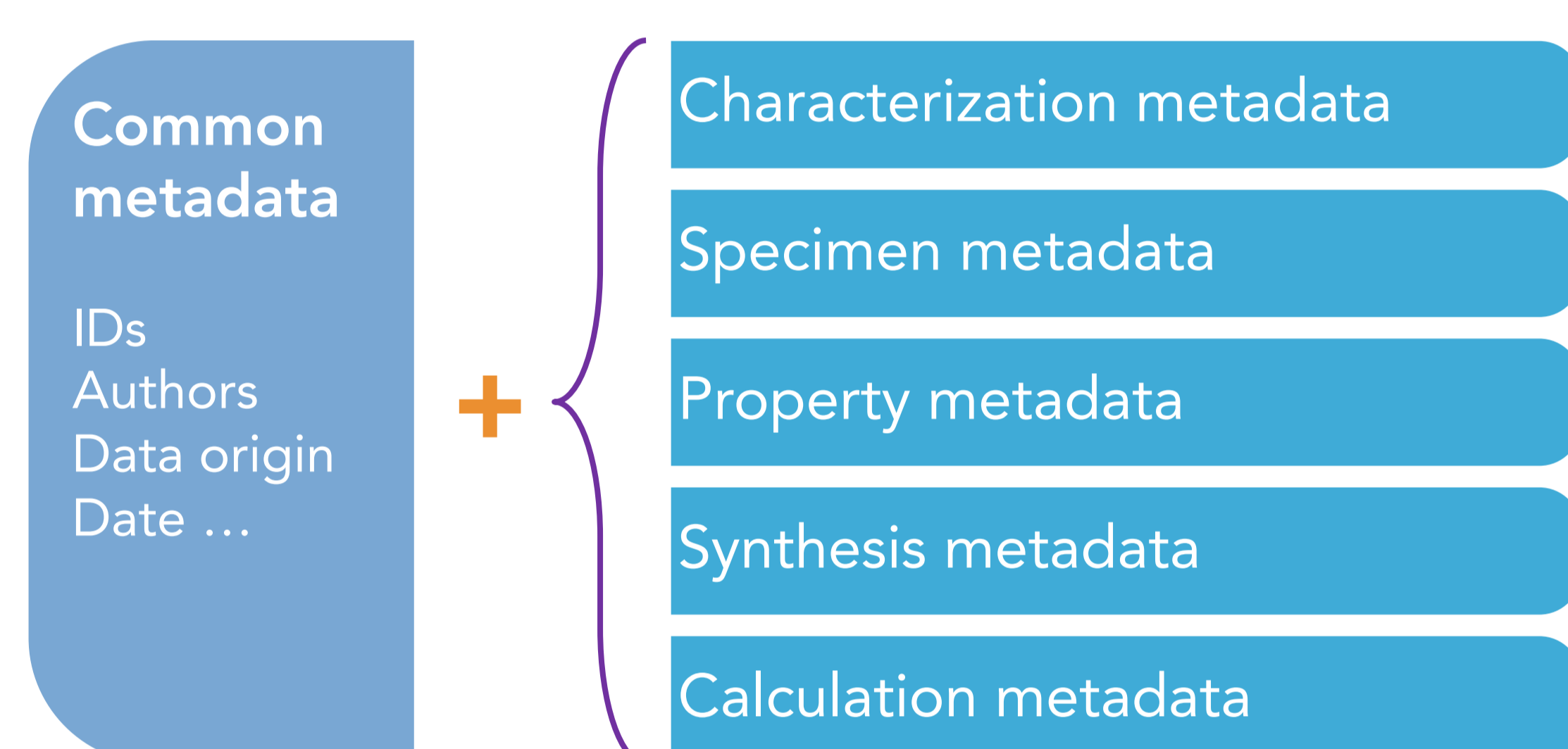


Metadata for materials data



1: Metadata as a custom schema

"One JSON schema to rule them all"?

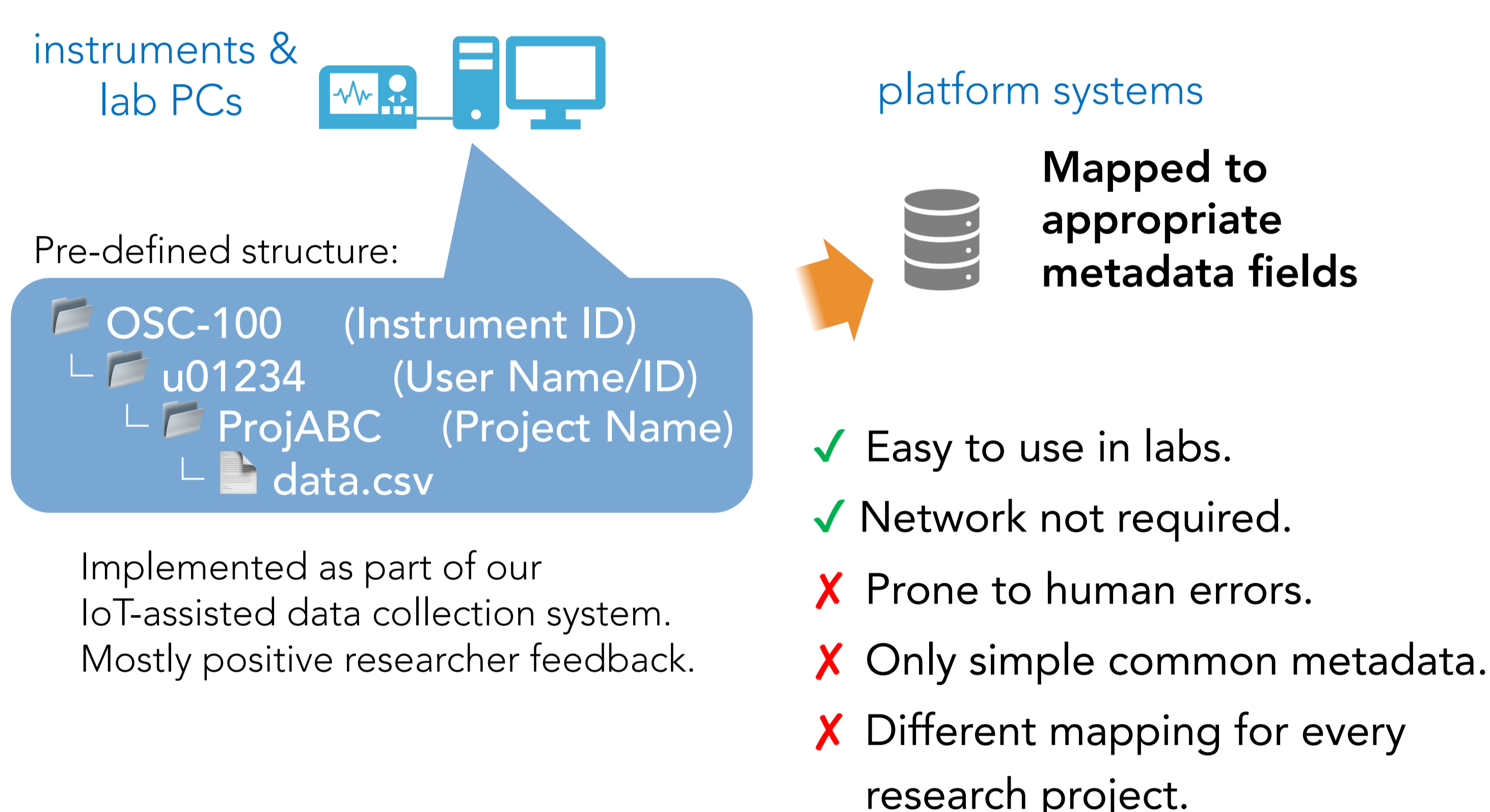


- ✗ Difficulties in implementing a complex structure.
- ✗ Massive edit forms → Users were overwhelmed.



2: Metadata as directories

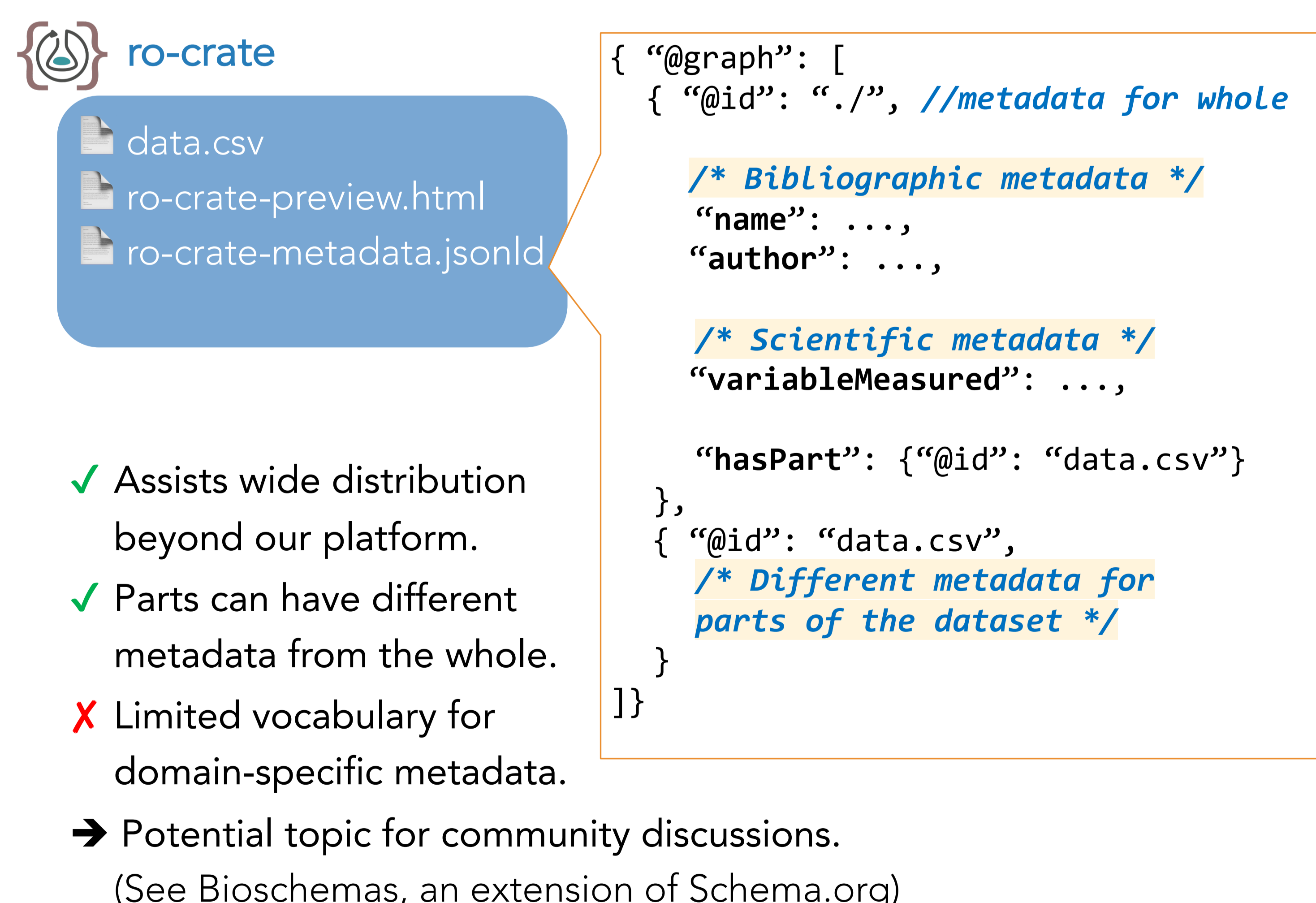
Researchers already manage their data using folders.



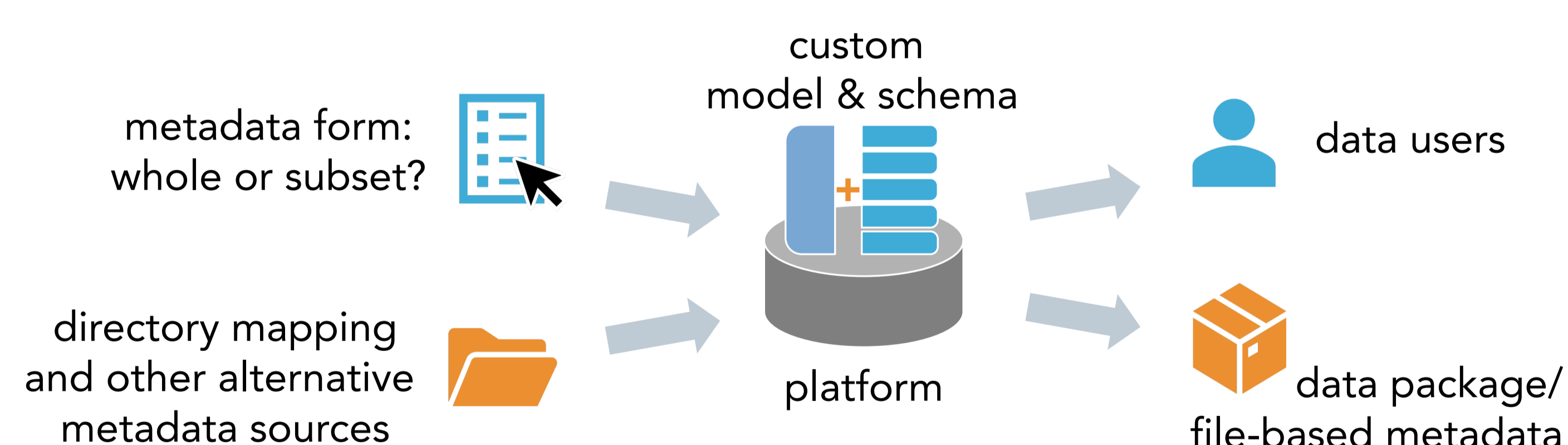
3: Metadata in a data package

Making full use of package metadata files.

Data packaging:
Making data self-documenting and self-contained. RO-Crate, BagIt, etc.



Thoughts



- Bibliographic metadata are well standardized, while domain-specific scientific metadata require discussions in respective communities.
- Dealing with heterogeneous data requires a common metadata schema, but it's not always a good idea to expose the whole to the users.
- There's more than one way to deal with metadata. Look for a practical combination of methods.