

A Metadata Assessment Framework for Systematic Evaluations of Metadata Schemas

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@metadataguy

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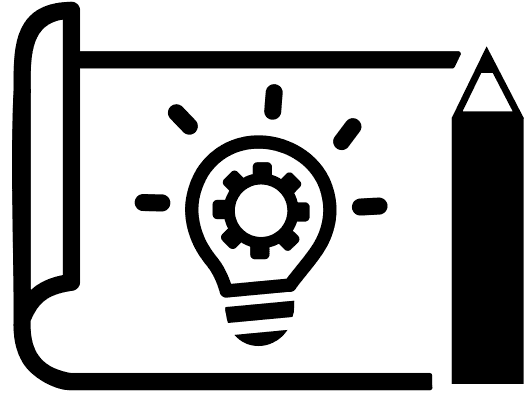
Coordinator of Metadata
The University of Alabama



@metacate13

Metadata Schema Assessment Framework can be found at: [//bit.ly/CoreMSAF](https://bit.ly/CoreMSAF)

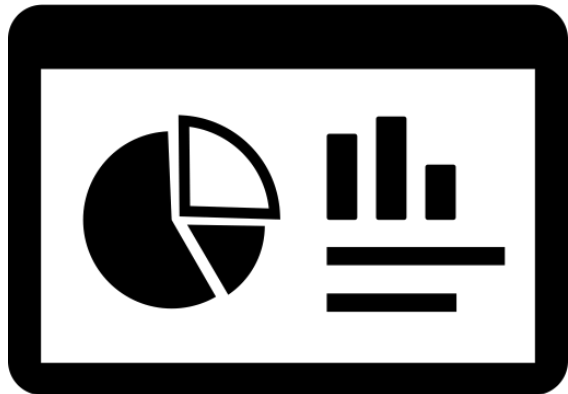
Project Scope



- 2018 - ALCTS/LITA Metadata Standards Committee began developing a framework that evaluates metadata schemas to determine best fit for repositories, projects, or institutional needs
- 2019 - Committee decided to develop framework in the form of a rubric
- 2020 - Work continued throughout the CORE merger
- 2022 - Draft of Metadata Schema Assessment Framework released for public comment

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Preparation to Build Framework



- **FAIR Principles**

Wilkinson, M. D., Dumontier, M., Aalbersberg, I. *et al.* (2016). The FAIR Guiding Principles for scientific data management and stewardship. *Scientific data*, 3. <https://doi.org/10.1038/sdata.2016.18>.

- **MODAL (Metadata Objectives and principles, Domains, and Architectural Layout)**

Greenberg, J. (2005). Understanding metadata and metadata schemes. *Cataloging & classification quarterly*, 40(3-4), 17-36.

- **Quality Assurance Framework (QAF)**

Johanis, P. (2002, March). *Assessing the Quality of Metadata: The Next Challenge* [Paper presentation]. Conference of European Statisticians: Joint UNECE/Eurostat Work Session on Statistical Metadata, Luxembourg.

- **Data Quality Assessment**

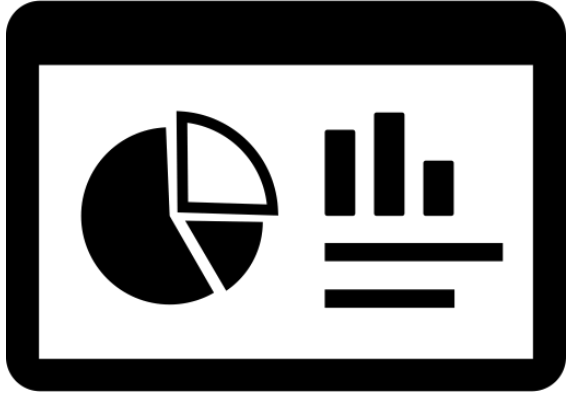
Pipino, L. L., Lee, Y. W., & Wang, R. Y. (2002). Data quality assessment. *Communications of the ACM*, 45(4), 211-218.

- **Levels of Digital Preservation Version 2.0**

Kussmann, C., Alliance, D. S., Graham, W., Atkins, W., & Reich, A. (2019, April 25). Levels of Digital Preservation Version 2.0. <https://doi.org/10.17605/OSF.IO/QGZ98>.

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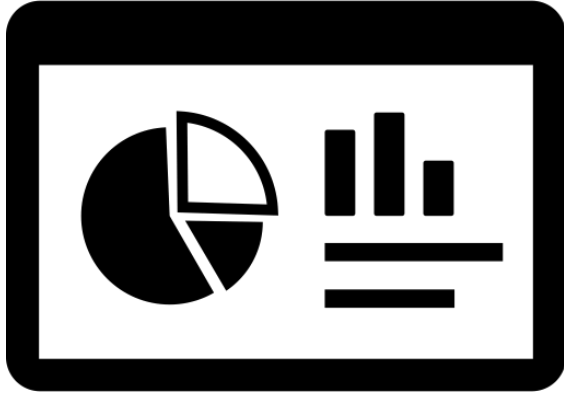
Preparation to Build Framework (2)



- Accessibility
- Appropriate Amount of data
- Believability
- Completeness
- Concise representation
- Ease of manipulation
- Free of error
- Interoperability
- Objectivity
- Relevancy
- Reputation
- Security
- Timeliness
- Understandability
- Value-added

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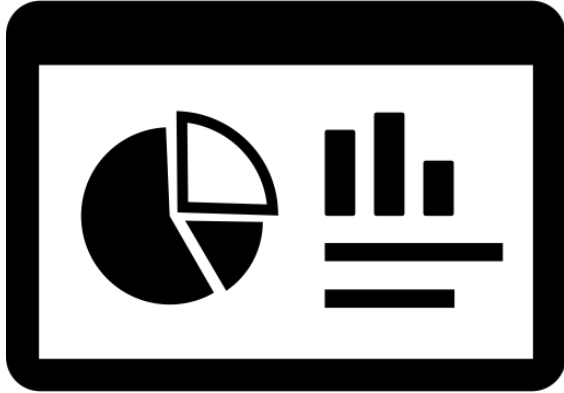
Metadata Schema Assessment Framework Themes



- **Applicability:** The extent to which the metadata schema is appropriate for the task(s) at hand
- **Completeness:** The extent to which a metadata schema is of sufficient breadth and depth for the schema's stated purpose
- **Consistent Representation:** The extent to which a metadata schema is presented uniformly
- **Ease of Access:** The extent to which the metadata schema and related information is reliably available, or easily and quickly retrievable

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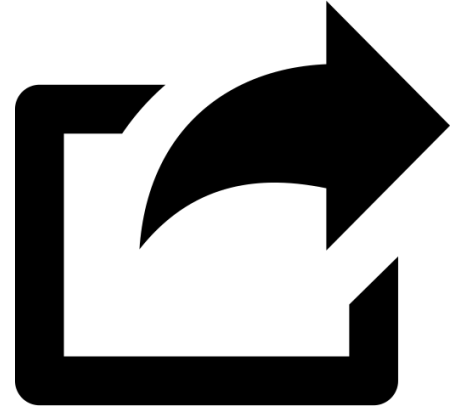
Metadata Schema Assessment Framework Themes (2)



- **Interoperability:** Ability of two or more systems or components to exchange data about things, and to interpret the data that has been exchanged in a way that is consistent with the interpretation of the creator of the data
- **Maintenance:** The level of sustaining activity to support the continuity, review, and adaptability of the schema
- **Rate of Adoption:** The extent to which the metadata schema is in use
- **Understandability:** The degree to which metadata has attributes that enable it to be read and interpreted by users, and are expressed in appropriate languages, symbols and units in a specific context of use
- **Transparency, Bias, & Engagement:** Extent to which metadata schema acknowledges and documents possible bias

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Next Steps



- Revise framework based on community feedback
- Begin collecting real-world use cases
- Seek opportunities for collaboration with other professional groups
- Maintain and review framework

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Project Contributors

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