PROPOSED NISO WORK ITEM: Assess Video and Audio Metadata Recommendations and Standards for Academic, Research and Professional Information

Proposal for Consideration by the NISO Voting Membership

Approval Ballot Period: March 14-April 12, 2019

The following proposed work item is submitted by:
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Approved by the NISO Information Content & Curation Topic Committee: March 8, 2019

BACKGROUND AND PROBLEM STATEMENT

In today’s academic, research and professional information industry, video and audio are growing in popularity and volume and, with the rapid progress of streaming technology, in global reach. Libraries are seeing higher demand from their patrons, publishers are developing their media offerings, and software developers and other vendors are improving support for media assets in their products and systems - whether those assets be video abstracts, outreach and advocacy videos, supplemental or best practice materials, podcasts, conferences and lectures, courses, or primary content.

However, clear, mutually accepted recommendations do not exist for the academic, research and professional information community to consistently and precisely identify and describe media assets, similar to metadata standards that are in place for text-based materials such as journals and books. There do exist many types of metadata that can be applied to media assets, whether exclusively or not, but none encompass the full range of properties that would be needed to allow for extensive collaboration and interoperability between organizations and systems. Instead, current practices are inconsistent and undocumented. This impedes the dissemination, discoverability and indexability of video and audio content, and creates an undue burden on all stakeholders: publishers are having to make up ad hoc, often insufficient models; libraries are forced to absorb inconsistent metadata; and software vendors are having difficulties in fully integrating media assets into their solutions. Last, but not least, the lack of clear metadata standards for media assets directly impacts their compliance with web accessibility standards, which require specific tagging that is rarely being applied.

For example:

- A medical publishing organization who wishes to publish high-quality, peer-reviewed surgery videos alongside its journal offerings does not currently have access to clear recommendations to design a rich metadata model that would be compatible with indexing databases, publishing platforms and learning management systems, and that would allow it to create efficient cross-linking with other content formats such as articles and book chapters.
A discovery service who wishes to index media assets provided by a wide variety of providers who do not have access to and follow established metadata modeling recommendations will have to spend considerable resources normalizing, completing and mapping incoming metadata.

A media librarian who manages content produced by faculty, streaming collection products provided by a handful of established video licensing vendors, and other expert content provided by independent publishing organizations will need to cope with a variety of metadata models that make it difficult to create efficient discovery tools for the library and ensure that all the content can be accessed by faculty and students.

Industry veterans have commented:

Barbara Chen, Modern Language Association, on the MLA International Bibliography:
“Since acknowledged scholarly output is no longer confined to books, journal and websites, subject databases like the MLA International Bibliography have recognized the need to expand publication formats to be indexed. Videos are the natural next medium to be included and the MLA and other producers are looking for guidance as to what elements are critical for findability.”

Marti Heyman, OCLC Executive Director, Metadata Strategy and Operations:
“OCLC recognizes the need to provide best-practice guidance to metadata professionals managing video content to support preservation, management, discovery and delivery. Certainly, NISO is the key organization to bring our communities together to establish and share the state of the art.”

STATEMENT OF WORK:

We propose that a NISO Working Group be created to establish guidelines for metadata for video and audio assets, presumably in the form of a Recommended Practice, ideally incorporating existing standards rather than creating new ones, and covering the following categories of properties:

- Administrative metadata (e.g., dates, versions, and identifiers)
- Semantic metadata (e.g., subject classifications and keywords)
- Technical metadata (e.g., media type, encoding, and bitrate)
- Rights metadata (e.g., rights owner, licensor, and embargo information)
- Accessibility metadata (e.g., accessibility features and access modes)

To be able to establish comprehensive guidelines, we envision that the Working Group will take on at least the following tasks:

1. Refine the scope of the project to clearly identify its stakeholders, including types of organizations and roles within those organizations;
2. Collect feedback from stakeholders through a review of existing documentation, as well as interviews and/or surveys;
3. Develop use cases;
4. Assess existing standards and models (including but not limited to IPTC Video Metadata Hub, PBCore, JATS/BITS, METS/MODS, schema.org or EPUB) and their relevance and usefulness to address the stated problem;
5. Select a framework for the guidelines, following the analysis of existing practices and standards;
6. Complement the framework with new or adapted elements and vocabularies;
7. Develop a NISO Recommended Practice document.
PARTNERS AND PARTICIPATION:
The Working Group will require the participation of representatives from a range of organizations:

- Libraries (research and academic libraries)
- Publishers (scholarly societies, professional associations, publishers, university presses, IGOs/NGOs)
- Software developers (discovery services, platform vendors, other vendors who offer products that support or use media assets)

The Working Group should be composed of participants who collectively possess the following skills:

- Understanding of the various use cases for media in the information industry;
- Experience with technical difficulties caused by the lack of consistent metadata across systems and organizations;
- Technical expertise with video and audio, including streaming technology;
- Knowledge of standards and metadata models across the information industry;
- Knowledge of standards and metadata models specific to media assets.

TIMELINE:
The expected timeline for this project is 18 months from the approval of the Work Item:

<table>
<thead>
<tr>
<th>Event</th>
<th>Duration</th>
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<tbody>
<tr>
<td>Appointment of Working Group</td>
<td>Month 1</td>
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<tr>
<td>Approval of initial Work Plan</td>
<td>Month 2</td>
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<td>Completion of Information Gathering</td>
<td>Months 3-7</td>
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<td>Completion of Initial Draft</td>
<td>Months 8-9</td>
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<td>Public test/comment period &amp; Completion of Final Draft</td>
<td>Months 10-16</td>
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<tr>
<td>Responses to comments and completion of final recommended practices document</td>
<td>Month 18</td>
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FUNDING:
It is not anticipated that this Work Item will require funding, as working group members will volunteer their participation.